

**A Revolution in the Heartland:
Changes in
Rural Culture, Family and Communities
1900–2000**

by

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with

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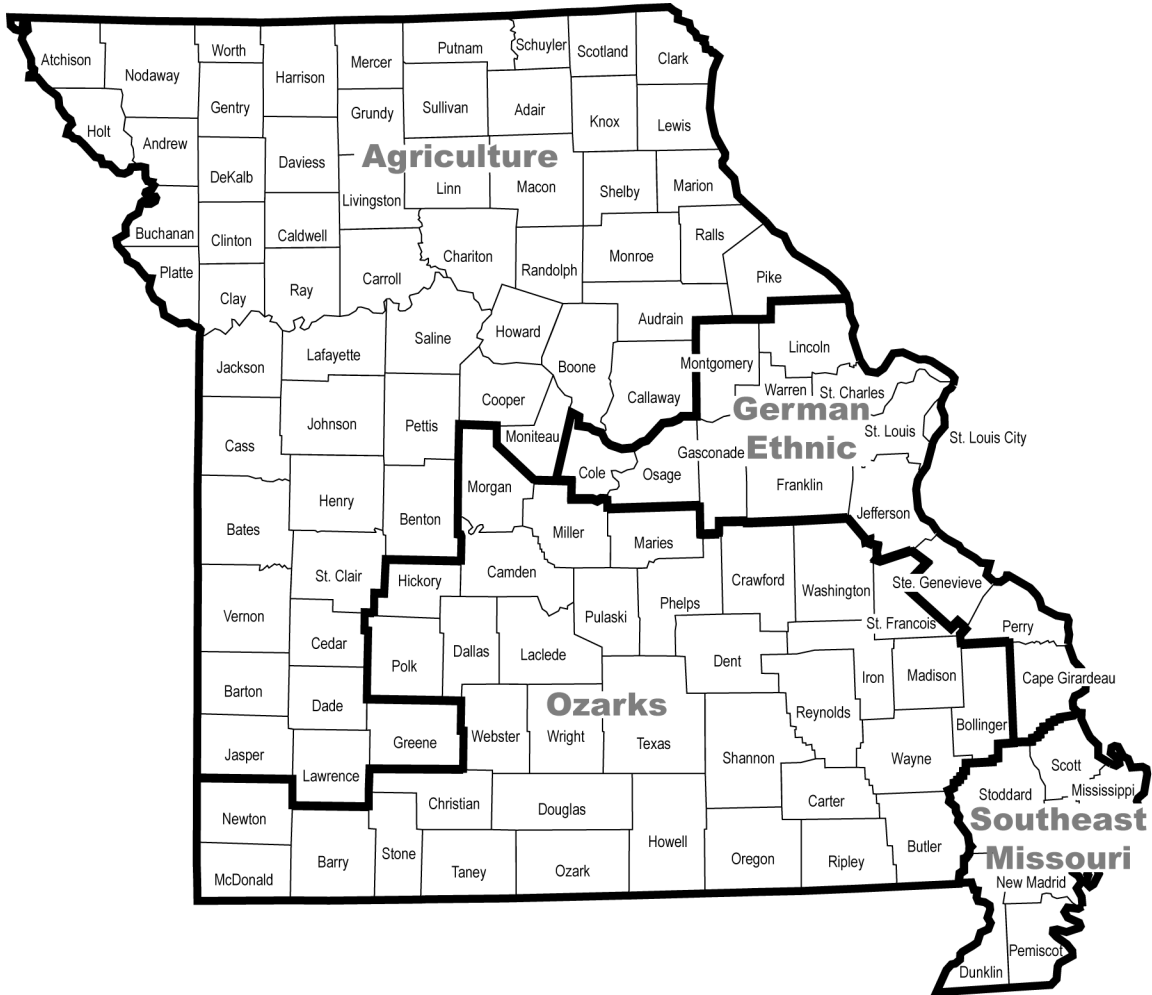
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A Revolution in the Heartland

<i>The century begins with...</i>	<i>The century ends with...</i>
Nickelodeons	IMAX theaters
Ward bosses	Political action committees
Ragtime	Hip hop
Mules	Tractors
Yellow journalism	Infotainment
Stickball	Playstation
Gramophones	CD players
Mark Twain	Stephen King
Wood-burning cookstoves	Microwave ovens
House calls	HMOs
Ticker tape	Online trading
Horseless carriages	Sport utility vehicles
Barnyards	Corporate farms
Outhouses	Automatic-flush toilets
Flying machines	Space shuttles
Front-porch visits	Online chat rooms
One-room schools	Distance learning
Corner stores	Hypermarts
Iron horses	18-wheelers
Dime stores	Dollar stores
Tuberculosis	AIDS
Main Street	Strip malls
Reality	Virtual reality
Local trade	Global trade
William McKinley	Bill Clinton

Dedication

The writing of this e-book is very similar to the remainder of my career. It would not have occurred with any degree of success without the tireless support and advice of my wife of more than forty-eight years. This book is dedicated with love and respect to my wife, Mary Campbell who has been my supporting foundation for all these years.

Acknowledgements

Rare, indeed, is a book that is the product of a single person. This e-book is not that exception. Much of the early materials in this e-book came from my parents, Phillip and Lucy Campbell, and the stories from their friends and neighbors. Herbert Lionberger and Robert McNamara were mentors and wise professors during my graduate training who urged me to read widely about rural Missouri history. During my more than forty years as a professor at Mizzou, I have had the privilege and pleasure of working with many, many talented colleagues and students from whom I have learned much about Missouri. Added to this list should be the organizations that funded more than forty grants. These enabled me to gain insights into the constantly changing rural Missouri.

I have written other hard-back printed books. I found that writing an e-book is very similar. The quality depends largely upon having skilled people to support my efforts. This was true for this e-book. The production of this e-book was made much better through the comments and suggestions of Coleen Hughes and Mary Campbell. Sara Campbell Meeks was the editor who took me to task for my often-scrambled southwest rural Missouri prose. As a result, the text is now much more readable. Glenn Rice converted the manuscript into e-format. To all of these, go my thanks.

However, the contents are from me, and any errors or omissions are unfortunately, from me. I welcome any comments or suggestions that the readers may have. One advantage an e-book has is that changes can be made at any time. Please send your comments to campbellr@missouri.edu.

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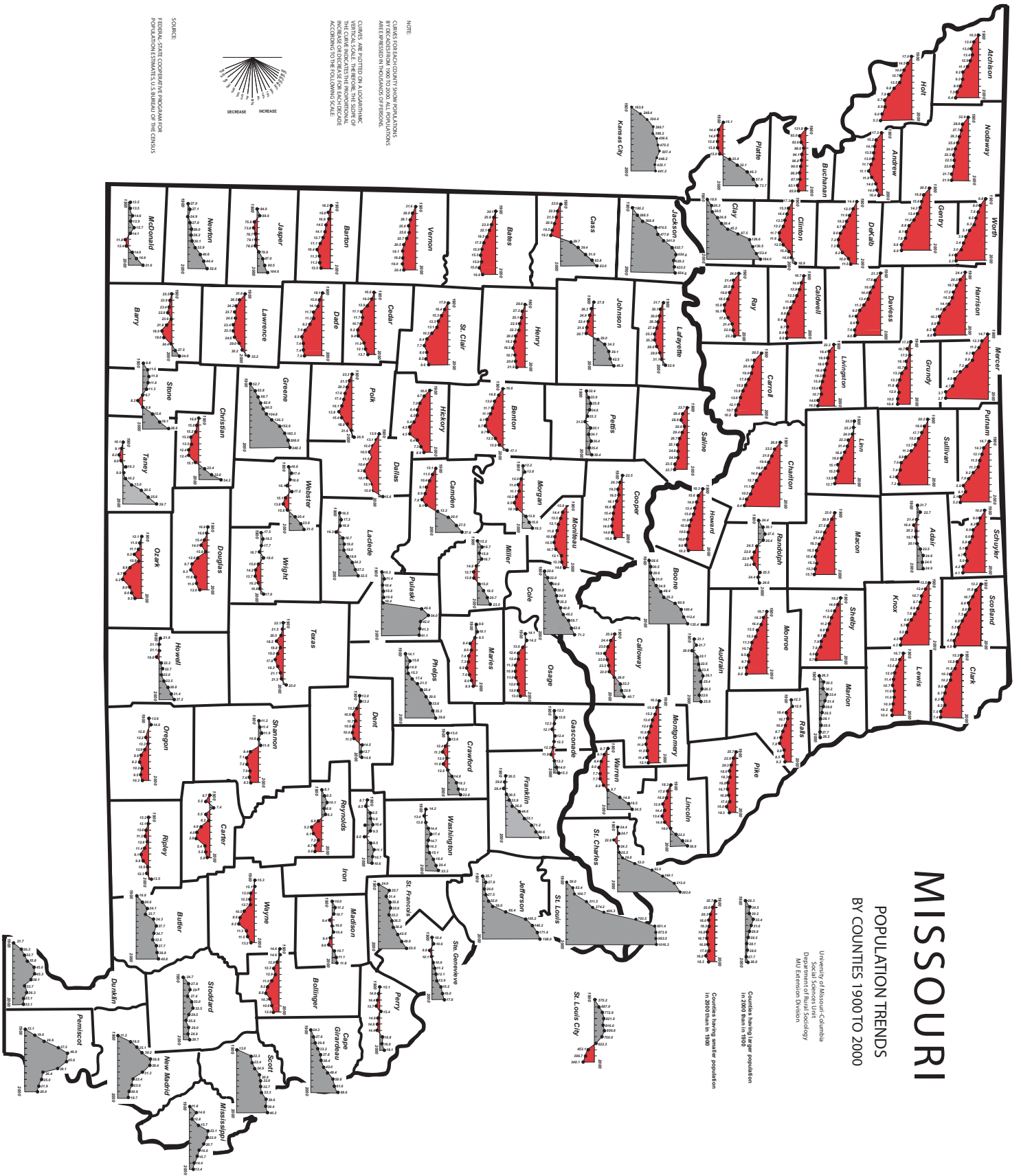
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MISSOURI

POPULATION TRENDS
BY COUNTIES 1900 TO 2000

University of Missouri-Columbia
Social Sciences Unit
Department of Rural Sociology
M.U. Extension Division

Counties having larger population
in 2000 than in 1900
in 2000 than in 1990
Counties having smaller population
in 2000 than in 1900



NOTE:
COUNTY DATA QUANTIFY SHOW POPULATIONS
BY DECISION FROM 1900 TO 2000. ALL POPULATIONS
ARE SHOWN IN THE SAME SCALE OF 1000.
COUNTS ARE ROUNDED ON A LOGARITHMIC
VERTICAL SCALE. THEREFORE, THE SCALE OF
INCREASE OR DECREASE IS NOT ACCURATE
ACCORDING TO THE FOLLOWING SCALE.



SOURCE:
FEDERAL GOVERNMENT BUREAU OF
POPULATION STATISTICS, U.S. BUREAU OF THE CENSUS

Chapter 1

Introduction

Every few hundred years in Western history there occurs a sharp transformation. Within a few short decades, society rearranges itself — its worldview; its basic values; its social and political structure; its arts; its key institutions. Fifty years later, there is a new world.

—Peter Drucker¹

100 years is double the time that Peter Drucker calls for to create a new world. Perhaps it is fair to say that two new worlds were created in the 20th century; one by 1950 and the next by 2000. As we will see, the 1950s were different from 1900, but the 2000 was very different from 1950 and, indeed, the level of farming technology in 1950 was closer to that in 1900 than to that in 2000

The 20th century opened in Missouri and the rest of the Midwest with large numbers of rural communities consisting of many small, self-sufficient farm families living in close proximity to each other. The communities were closely knit internally, but in semi-isolation from the outside world. The relatively few material needs of the farm families were met by small businesses, either open-country general stores or stores in nearby towns that could be easily reached by horse-drawn vehicles.

This was the pinnacle of numbers of small family farms and the pinnacle of rural culture from almost any perspective. In the United States, farmers represented 38 percent of the labor force and the farm population was 43 percent. In Missouri², more than two-thirds of the population lived on farms and earned their living from the land. St. Louis and Kansas City were far-away urban islands with little influence on the daily lives of most Missourians. A trip to the city was a once in a lifetime experience. A trip to the St. Louis Exposition in 1904 was a major event to be shared for many months and even years with the extended family and friends and neighbors.

1. Peter F. Drucker, **Post-Capitalist Society**, HarperBusiness, New York, 1993, p.1.

2. The primary focus of this book will be on Missouri, but the same innovations and changes occurred throughout much of the Midwest at about the same time. The differences, if any, are in amounts and timing of changes.

A Revolution in the Heartland

Most people were born and died in the same community. The late 19th century popular prints of rural life by Currier and Ives had at least some basis in reality. Large families were the norm.

The 20th century opened in Missouri with 284,886 farms, but closed with only 98,860 farms. The average farm size in 1900 was 119 acres. This rose to 292 acres by 1997. This same pattern of growth in size and declines in numbers was found throughout the Midwest.

The farmer's primary goals in 1900 were to produce enough food to supply the needs of the family, and to have enough left over to sell on the local markets and allow the family to buy essential goods such as flour, salt, sugar and fabrics for home-made clothing. Shoes, boots, and some coats were the only items of clothing purchased ready-made. Food from the garden and the farm was canned or otherwise preserved.

At the end of the century, the average family residing in the open country was not a farm family, but a two-wage-earner family commuting 20 to 30 minutes to their jobs. Their jobs covered almost the entire spectrum of possibilities, including physicians, schoolteachers, nurses, factory workers, mechanics and secretaries. If they were also farmers, most were residential farmers.³ More farming was done on the weekends than on any other days. Almost all foods came from the supermarket or the fast food chains, and much of everything else came from Wal-Mart. Many former farm fields are now growing up in cedar trees and brush while many of the remaining fields are now fescue pastures for cattle. "Planting houses" on former farmlands is now the best paying "crop".

The transition from small, self-sufficient farms at the beginning of the century to residential farms at the end of the century was slow, most often occurring between generations. The first major steps occurred at mid-century when part-time farming became a forced choice for many rural Missourians. The small farms could not produce enough to meet the rising need for cash income. The farmers, following the tradition of their fathers, would have preferred to be full time operators, but economic necessity forced off-farm work. Today, the large amount of capital, often in the millions of dollars, necessary for large-scale farming precludes most people from ever becoming full time farm operators. They have reluctantly accepted residential farming as a permanent substitute. In the minds of most 21st century residential farmers lives a dream that someday, someday, they may be able to be full-time farmers. Farming is still perceived as "the good life".

The 20th century closed in "rural" Missouri with urban sprawl, many residential farmers, and a few large corporate farms. Today, the United States is an urban nation and Missouri is an urban

3. *Throughout the book I will use the terms farmers and farm operators to include all types of farmers. The small-scale farming operations have been described in a variety of ways, with small or part-time being the most common. The term part-time, while accurate, suggests a purpose different than that which exists in most cases. I will use the term **residential farms and residential farmers** to describe those families operating small-scale operations in addition to holding other jobs.*

state composed largely of suburbs.⁴ Many of the latter still carry the label of “rural” or “country”; but not the substance of traditional “rural” communities.

Purpose of Book

The primary focus of the book will be a comparison of 1900 and 2000 rural families and communities and an exploration of the innovations in the intervening time periods. I will describe most of the major changes of rural families and communities and the causes of these changes. This will require looking closely at numerous technological and organizational innovations, including new federal and state government programs that spurred change in rural communities. Changes in individual behavior will be used as illustrations of community changes.

- **Part 1** of the book includes a description in some detail of rural life in Missouri in 1900.
- **Part 2** describes the decades of change and includes some of the more important technological and public policy innovations. Every twenty-five years, a summary of the changes in rural life is included.
- **Part 3** takes a more detailed look at rural life and rural communities in Missouri at the close of the century.
- **Part 4** briefly discusses some of the public change agents and looks into the future for rural Missouri communities.

In parts 2 and 3, the book will deal with first agricultural innovations, then innovations impacting the community and finally changes in governmental programs. The choice of which innovations to include and where to categorize them is somewhat arbitrary. For example, the automobile is a major innovation that involved numerous smaller inventions throughout the century and some that are still occurring. In 1900, automobiles were a novelty in most rural communities. For the first half of the century, automobiles and the road systems were suitable for occasional trips, but not routine daily commuting. It is only in the last few decades that the reliability, cost, comfort, and convenience of the automobile and road systems have developed enough to encourage commuting. At what time should I list the automobile as an innovation affecting rural Missouri communities? Every decade?

To make the numbers and changes more meaningful, after discussing the innovations a personal capsule description of a family and a community will be presented in each section. The family is mine. The Campbell family lived in Jasper and Barton Counties, on the plains of extreme western Missouri, north of Joplin. When the century started, my family was located on a small rented farm of 140 acres,⁴ although I had uncles who were small business owners and one who was the superintendent of schools for the area. We lived about six miles from the nearest small town. Our home was located a mile and a quarter from a one-room school and a quarter mile from a small country church. These two institutions, church and school, formed

the heart of the neighborhood. My mother was of strong Germanic heritage and my father was American for many generations. The Scottish heritage had been lost many decades previously.

I am the youngest of five children, four boys and one girl. Five children were average for our time and community. In our neighborhood there was a family with no children, and one with eleven. My parents had limited education. My father went to high school and my mother stopped after the eighth grade, but at the same time education was appreciated and we children were urged to go to college. Because of the depression and World War II, only my oldest brother and I completed college. My oldest brother was thirteen years older than me. He left home to attend the University of Missouri before I started elementary school. Within a few miles of home, I had numerous relatives. The extended family gatherings would often include more than 100 attendees.

When the century closed, no one in my family had farming as a principle source of income (one of my nephews, a baby boomer, still has a rural residence and farms evenings and weekends) and they were scattered over three states. My oldest brother farmed and worked part time off farm periodically before retiring. My family is typical of farm families of its time.

Why Missouri?

The obvious reason for focusing on Missouri is my considerable personal knowledge of Missouri and how it has changed. I have conducted research and worked in Missouri for almost 50 years. This research has included numerous statewide and regional questionnaires as well as close examination of five Missouri censuses of population and housing and many other censuses of agriculture, business, and other issues. For about twenty years, I was a part of a north central regional committee that focused on demographic changes in the region. During my forty years as a professor, I have assigned and read thousands of student papers about their home communities.

More importantly, rural Missouri was and is a sub-culturally diverse state. The Ozarks extend well into Arkansas and Oklahoma and are similar in many ways to the southern Appalachian region. Northern Missouri is a part of the corn belt from Ohio to Nebraska. The "bootheel" of southeast Missouri is a part of the Mississippi delta, and my home in western Missouri is a part of the Great Plains. Thus, what occurred in Missouri has much broader applications to the Midwest.

-
4. *Actually, my family did not start until the time of World War I. Both my father and my mother were the youngest members of large families, so my aunts and uncles who were older started their families slightly after the turn of the century. At the extended family gatherings, I was one of the youngest.*

Changes in Rural Families and Communities

It is challenging to attempt to do an analysis of any area that includes as much cultural diversity as Missouri, but there were and are more similarities between different regions than differences. I will first describe the similarities and then describe some of the unique characteristics of each region.

Three major types of innovations emerge as the changes in rural Missouri are described and discussed:

- The agricultural innovations that had two major results: more production from the same acreage and/or time and labor saved;
- The home and community innovations that enhanced the quality of life, but at the same time required more money on a regular basis to pay for the innovations;
- Many of the community innovations that opened the door to alternative ways of earning a living.

Not all innovations can be included under these three headings. Government program changes often operate independently from economic or market forces. For example, the trend to consolidate small schools had its own momentum, not related to other innovations except transportation. One of the challenges in this book is to describe the large number of innovations that contributed to the revolution and keep still the length manageable.

The basic strategy of the book is to look at changes in a generational framework. Four generations of 25 years each will be utilized.

The overall goal of the book is to give a broad vision of what rural life was like in 1900 and in 2000 and to discuss why the changes occurred. The final chapter is a brief look into the future. What will happen to rural Missouri in the 21st Century?

Chapter 2

The Changing Rural Culture

Before I describe rural life in Missouri in 1900, some parameters need to be established. Missouri in its early history was entirely rural, but eventually major cities were established, in particular St. Louis, and Westport, which later became Kansas City. St. Joseph was important for the Pony Express and later in meatpacking. This is a book about rural Missouri so it is important to define the boundaries between rural and urban.

What is “Rural”?

The formal U.S. Census Bureau definition of rural in 1900 was that it included people residing in towns with less than 2,500 population and open country residents. “Rural” now excludes “urbanized areas” (areas which have an urban density, but are not in an incorporated town or city) and all major metropolitan areas regardless of population density. All of St. Louis and St. Charles Counties are considered to be urban.

Rural is that residual area left after larger towns, cities and urbanized areas are excluded. This definition is based solely upon size of population and not upon behavior or culture in general. The properties that characterize rural communities are not limited to low density or small populations. The argument can be made that there are numerous neighborhoods with “rural” characteristics in most large cities. These are usually neighborhoods with large numbers of migrants from rural villages of the old countries.

What about small towns with populations of 2,550 to 4,000 located well away from major cities? I will make the assumption that smaller towns and cities have more in common with rural areas than they do with large metropolitan areas. The working definition of rural for this book will be the Census Bureau’s definition for non-metropolitan; that is, all areas including towns of less than 50,000 populations outside of metropolitan areas will be included in our discussion.¹ However, urban growth has steadily invaded formerly rural communities. In order to make comparisons of changes over time, I will exclude all counties in Missouri that were defined as metropolitan in 2000.

1. Metropolitan areas include a city of 50,000 or more and the surrounding urban area.

Springfield, Missouri is an excellent example of a community that changed from rural to urban. Prior to World War II, Springfield had more rural traits than urban. The City was small, friendly, and agriculture-oriented. Today, Springfield is an urban city with characteristics such as impersonality, high population density, and traffic congestion.

The current metropolitan areas in Missouri are Columbia, Joplin, Kansas City, Springfield, St. Joseph, St. Louis, and the adjacent counties that are a part of the metropolitan regions. In 1900 almost all of St. Louis County and Jackson County were rural, but they are not today². Similar situations exist outside of Columbia, Joplin, Kansas City, Springfield and St. Joseph. The same outward spread has occurred in every metropolitan area in the Midwest.

In contrast, Columbia is roughly half the size of Springfield, but because it has always been a college community, the amount of “ruralness” was probably less than in Springfield in earlier years. The University of Missouri, with its diversity of students and professors, has made Columbia very urban even when it was a small town.

Traditional Rural Communities

The traditional rural communities consisted of a unique way of life, a distinctive subculture in Missouri and most of the United States. The early leaders of this nation were strong believers in the importance of what is called the agrarian philosophy. A part of the agrarian philosophy is the belief that a nation was stronger if one of the major components was a system of yeoman farmers who owned and lived upon their own land and not in villages as in Europe.

Agriculture was seen as the backbone of the nation. “As agriculture goes, so goes the nation” was widely believed by both urban and rural citizens. The system of small farm agriculture found throughout the Midwest in the late 19th century is a reflection of the agrarian philosophy. To get a homestead, the farmers were required to reside on the land and to make improvements such as building a residence.

At the turn of the 20th century, there were distinctive rural subcultures in rural America, including the South with its sharecropping, the West with ranches, the Northeast with the Appalachian mountain area. These all differed in varying degrees from the midwestern corn-belt subculture of much of Missouri.

While there were, as I’ve said, differences between rural areas of the state, there even more differences between rural and urban areas. There was no question of which type of person you were seeing when meeting someone on the street; there were clear visual differences. It was easy to tell country people from urban people. The suntanned and wrinkled skin with two-

2. *My parents and I lived on a farm in Jackson County for a time during my high school years. Blue Springs, where I attended school, was a considerable distance out in the country. Blue Springs is now one of the larger suburbs to Kansas City.*

tone complexion from long hours in the sun was only part of what made rural people distinct. The preferred male dress was denim overalls with built-in suspenders. Female dress was not as distinctive. Cotton dresses reaching the ankles were the norm. Women commonly wore cloth bonnets for sun protection.

One of the “trademarks” for men who worked in the sun was the “hat line”. Most people wore hats with wide brims. The hat line marked where the shadow of the brim fell on a man’s head. Above the hat line the skin would be light colored and below the hat line, the skin was heavily tanned. It was not unusual in church or other places where hats were removed to see a white³ bald head and a deeply tanned face. Another tan line was seen on men’s arms. All men’s shirts had long sleeves, but these were rolled up to above the elbow during the summer. The forearm was tanned and the upper arm light. Some farmers had no tan on their arms. Many older males wore long woolen underwear throughout the year and might roll up the outer shirt, but not the underwear. It was their claim that the long underwear was actually cooler in the summer because it served as insulation from the heat.

Bathing was not done frequently in those days and deodorants had not been invented. Bathing was at most a weekly, and more likely a monthly, activity. Clothing such as shirts and overalls were changed weekly. Sunday, a dress shirt with a wool suit was worn to church in both the summer and winter. Most males had only one suit and that suit was expected to last for a lifetime, so the suit was always the same. The suits normally smelled like mothballs. Monday was washday and a fresh shirt and overalls were usually worn.

Very few people in 1900 worked in the summer without a shirt. Getting a suntan was not a choice. If a person worked outside, they got a suntan; if they did not work outside, they did not get a suntan. There were no tanning lotions, no tanning parlors nor concerns about “strap lines”. Skin cancer was not generally recognized and the causes were not known⁴. Sunburns were expected and accepted.

The differences between rural and urban people could be seen in other ways such as their way of walking. Farm people, especially males of the older generation, walked differently. The rural walk was loose-hipped and bent-kneed, allowing a person to travel long distances without discomfort.⁵ A person could walk as far or farther than they could ride on horseback. I have not seen a person walking with the loose-hipped style since my youth. That is apparently a lost cultural trait. Our urban walking style comes from the British. The legs are held relatively stiff and strike the ground sharply with the heel.

3. As will be discussed later, almost all rural residents in Missouri in 1900 were “white”. The only minorities were located in southeast Missouri.

4. Cancers in general were not often recognized nor treated when recognized.

5. In my youth, I walked seven to ten miles at a time without feeling any particular effects. Such a walk took about two hours. Most people were in good physical condition at that time. Hard work in the fields and homes quickly produced good conditioning.

A Revolution in the Heartland

Another distinction between rural and urban was in speech. Rural Missourians, especially those in the southern portion of the state, spoke with a nasal drawl. The speech was slower than that found in the metropolitan areas. This country drawl can still be heard in older people such as myself who learned to talk before television. TV has had a leveling effect on regional speech patterns.

Rural culture valued a strong work ethic, honesty, morality, a willingness to help others and, belief in a Christian God. Many Victorian era beliefs and behaviors were still strongly held in rural Missouri. For example, sex and reproduction were not considered appropriate topics for discussion.

Today's generations of young people have never had the opportunities to experience life in a traditionally rural community. To them, rural culture would seem strange and confining. Family history was important. You were the son or daughter of so and so and that determined much of your status in the community. Many of the people in the community were related to you by blood or by marriage. If you were fortunate enough to have parents who were respected as hard working, honest, Christian people, you had a good start in life. I was fortunate to be born into a respected, hard-working, though poor, family. We had home grown foods, but not much cash. We went to church (most of the time), worked hard, were clean, and didn't drink or steal. The last three were very important in our family. My mother firmly believed that "idle hands are the devil's workshop."

If your father was a "ne'er-do-well" who drank, lied and/or couldn't hold a job, your future was rocky. The idea that your occupation (waiter, policeman, etc.) defined how you were to be treated had little meaning. Your family's reputation was more important than your occupation. True, there were people in certain occupations who did receive special privileges such as ministers and priests, bankers, physicians, and judges. If you were the son or daughter of the local banker, it is highly probable that you would be treated differently if you were caught tipping over outhouses in the community. Virtually all of the privileged positions were town residents, although there were some status differences among farmers. Families with larger scale operations were given higher status. Farmers who rented their land had a lower status than land-owners. A successful auctioneer held a high position in the community. Most auctioneers were wealthier than farmers and they knew everyone in the community.

Since the majority of residents had lived in the community all their lives, any outsiders were viewed with distrust. It might take a new family ten years to be fully accepted in the community.

"Social class" was not a term in general usage. In fact, most people would have said that everyone was about on the same social level. Their actions would not have supported their words. For instance, the family in which the father abused alcohol was never really accepted into the community. They would be taken baskets of food at Thanksgiving and Christmas and prayers

would be offered on their behalf, but there was a limit to the charity. No one would give them money because it could be used for alcohol.

Rural communities put narrow constraints on what was considered acceptable behavior. There was only one hairstyle, only one style of dress, and only one set of morals. There was only one right way and any number of wrong ways. People of the 21st century would probably be very uncomfortable in traditional rural culture.. When you were born and reared in the traditional rural system and you knew no other system, these constraints seemed very natural. Indeed, the narrow constraints seemed comfortable because a person knew exactly what was expected from them.

The predominant hair style for males of my youth was combed to each side with a carefully drawn part on one side of the head. There was a second male hairstyle, known as the soup bowl style. Some of the poorer children had this hair styling. It looked like a bowl had been placed on the head and everything below the edge of the bowl was cut off. I was amused to see a similar hairstyle become popular among young people about a decade ago. I doubt if they knew the heritage of their hair style. Women and young girls wore shoulder length hair that was usually curled. This meant that the hair was rolled up in ringlets every night. They, too, might have a soup bowl hairstyle. Virtually all hair, male and female, young and old, was cut at home.

Most people in 1900 were engaged in farming, mining, the lumber industry, or businesses that existed primarily to support these industries. If drought hit an area, both the farmers and the merchants had financial problems. A merchant of the time could and would discuss current agricultural conditions with considerable knowledge. As farming went, so went the community. There were no public or private insurance programs to cushion droughts or falling prices. The economic cycles were relatively short and severe.

In short, traditional rural communities were closed, conformist and hierarchical--closed because "outsiders" were viewed with suspicion and not welcomed, conformist because there was one approved way of doing most things, and hierarchical because there was definitely an underclass of "ne'er-do-wells" who lived on the social fringes of the society. This rather unflattering description of rural communities goes against the nostalgic Currier and Ives idyllic image that many Americans have of rural communities.

Rural Today

Rural to the average urban person is that residual area beyond the suburbs where a person goes for hunting, fishing, or to escape the urban "rat race". This is the place to build estate⁶

6. *These carry a variety of names such as estate lots, ranchettes, or even farms. Most have more than 10 acres and less than 100 acres; although some of the lots are in the one to ten acre size. The closer to urban areas, the higher the price of land and the smaller the average acreage.*

homes or where some unknown process produces food. Rural is a land of hills, trees, lakes and other "natural beauty". It is a place to be visited and admired.

The typical urban resident knows very little about traditional rural culture. If the grandparents still reside in a rural community, sometimes grandchildren will visit the rural community during the summer and gain at least a little knowledge about traditional "rural" culture. If the family is two or more generations removed from the country, most rural heritage has been lost.

There is much academic debate over the extent of the "mass culture" in the U.S. today. I firmly believe that when the entire nation watches the same TV programs, goes to the same movies, wears the same type of clothes purchased from the same chain of stores, eats the same foods and drives the same cars, I am in the same culture regardless of whether I reside in a rural or urban area.

Technological Change and Social Change

Technological innovations have a brief history when compared to human history. Humans have lived in the area now known as the United States for tens of thousands of years, but the innovations discussed in this book go back in time a maximum of one hundred and fifty years. Very few of the innovations to be discussed in this book were invented or discovered before 1850. The technical innovations have come quickly, each building upon those before. The overall effect is truly revolutionary.

Technological innovations often cause inadvertent social changes. For example, the automobile and television are two 20th century technological innovations that have caused, directly or indirectly, massive social changes. The purpose of their inventors was not to create massive social changes. The social changes an innovation will cause are hard to predict. It is only with the hindsight of history that some of the changes and their possible causes become apparent. Thus, the purpose of this book is to take a close look at where rural communities were at the start of the century and where they are today at the start of the 21st century and to discuss some of the more important technological innovations which have contributed to these changes. I do not claim that the automobile or television or any other single innovation caused direct increases in premarital sex, divorce rates, or crime rates. Most of the changes are cumulative. It is often difficult to find a clear cause and effect between technological and social changes.

Change is not a consistent process, with all people and all communities changing at the same time or the same rate. Some people adopt new technology earlier than others. For example, most farmers in most communities adopted the use of tractors as their primary source of power somewhere between 1920 and 1940. However, there were still a few people farming with horses after 1950. The Old Order Amish continue to use horses exclusively today. For every innovation, there will be a few innovators, some early adopters, some laggards and a few non-adopters.⁷ The same is true for innovations at the community level such as the formation

of electricity cooperatives. Rural electricity and water systems each took about twenty years before all communities adopted them.

Five Generations

From a generational perspective, about five generations will live during a century. The standard generational spacing is twenty-five years. I will start with a young couple in 1900 and assume they and their descendents have children about every twenty-five years. New generations would be starting in 1925, 1950, 1975 and finally, in 2000 for a total of five generations.

- The first is my parent's generation. I call them the **"rural foundation generation"**.
- The 1925-generation, like me, grew up during the economic depression of the 1930s. This shaped our lives in many ways, so I will refer to it as the **"great depression generation"**.
- The 1950s were the start of the high birth rates after World War II. This is the **"baby boom generation"**.
- Starting in the 1970s, the young have been called generation "y" and other things. These will be called the **"post modern generation"**.
- Finally, the generation now in diapers will be referred to as the **"21st century generation"**.

The generations who experienced many of the changes of the 20th century are passing quickly and with the passing of each generation a body of knowledge, of experiences is gone. Today the postmodern generation is busy buying homes and having children; the baby boom generation is nearing retirement. World War II veterans are retired and veterans of World War I are literally history. Time has a way of speeding by so quickly that the mileposts of change are not even noticed. Most people are unaware of the magnitude of the social changes that occurred in the last century. For each of us, our perspective on changes is limited to our lifetimes. This assumes someone is looking for change, and most of us are not. An infant born today can expect to live about seventy-five years. The first decade or two of this will be used "growing up", during which time most of the individual's attention is directed towards himself or herself. Thus the average adult may be able to "see" the changes of about half a century.

The current generation of young people have very little knowledge of the changes that have occurred in the last century. Their world has always had PC computers, "Walkmans", and illegal drugs. They may have heard their parents describe life during their youth, but that is the farthest time horizon young people have.

7. There have been literally thousands of studies of the diffusion and adoption process. For one summary of these, see Rogers, Everett M., **Diffusion of Innovations**, The Free Press, 1983.

Time and Change

Changes were not evenly distributed throughout the century. The industrial revolution started in the 19th century, but the greatest social impacts were near the end of the 20th century. The 20th century started out in rural communities with relatively little change, but the rate of change accelerated as the century progressed; the trickle of changes in Teddy Roosevelt's era became a tidal wave of changes for rural communities during the last half of the century. Even so, it is difficult for most people to see the true magnitude of the change. Many of the changes I will discuss were so gradual that they were not noticed.

Most major technological innovations were not the result of a single invention, but rather they developed as an evolutionary process. The automobile is an excellent example. The Model T Ford made an important contribution when it was introduced early in the century. It was the first car targeted at the mass market. The continuing improvements on both the automobile and associated roadways have created a multitude of additional social changes that continue even today. Would people be as willing to commute thirty minutes one-way each day if they had to worry about the car starting on cold mornings or getting stuck every time it rained?

Time of Impact

Many of the innovations were invented/discovered some years or decades before their impacts were felt in rural Missouri communities. The use of electricity for illumination was a nineteenth century discovery. Many cities were building or had built their own power generators and distribution systems around the turn of the century. Most rural areas did not get electricity until after the Rural Electric Administration was established in the mid-1930s. It was mid-century before some rural communities were provided electricity. I will discuss the innovations by the time of their principle impacts on rural Missouri communities, not the time of their invention.

Agricultural Changes

During the middle of the 19th century, national leaders and policy makers became concerned about the condition of rural America, which at the time meant farming. A series of national policies began to evolve, starting with the establishment of the land grant colleges such as the University of Missouri at Columbia and later the Cooperative Agricultural Experiment Stations, Cooperative Extension Service, the Agricultural Education programs for high schools and other related programs. Spurred on by such activities as the Country Life Movement, a growing national consensus developed that major changes were needed in rural America. There was no blue print that suggested that rural America should develop to what it is today. The desired changes were limited and short term: higher yields, better incomes, better living conditions, better schools, etc. The leaders were urging a journey of change to an unknown destination. Did they in any way realize the powerful forces they were unleashing?

Their motivation for urging changes for rural areas was that the world around them was changing and they did not want rural America stranded in the 19th century. The industrial revolution was just getting underway in the United States. Many groundbreaking discoveries were making the news: the steam engine, the electric light bulb, the telephone, the automobile, etc. Change, including social change, was becoming normal. The rural leaders of the day did not want their part of the world to be left behind.

There were, a few innovations that quickly became the standard practice. Hybrid corn is an example. In many ways, the adoption of hybrid corn was the start of the scientific revolution on farms. Hybrid corn is the result of careful cross breeding of older varieties. The advantages of the hybrid seed were very clear; yields doubled or more. The value of the harvested corn increased more than the costs. In about ten years, the widespread adoption of hybrid corn made a major impact on corn production. However, the switch to hybrid moved farmers into a money economy. Because of the crossbreeding, new seed corn had to be bought each year from commercial firms and for the best yields chemical fertilizers were needed. Sales had to be made every year to have enough cash to purchase the supplies.

The cycle of change was strongly influenced by the nature of American capitalistic agriculture. Every farmer made an independent judgment on how much and what kind of corn to plant without knowing what decisions other farmers would make. When hundreds of thousands of farmers were each making a decision about how much hybrid corn to grow and at the same time attempting to maximize their incomes, the results were more corn produced even though the price of corn might be low. The surplus of corn resulted in even lower prices and that meant the individual grower had to produce even more the next year to maintain his income. That in turn meant more land and bigger equipment and thus a cycle of rapid changes began that has not ceased to the present day. Every farm operator found himself on a treadmill of technological changes that never stopped, but rather increased in speed as the century progressed. Farming was a vocation that was passed down from father to son at the beginning of the century. At the end of the century, a farmer needed the technical knowledge and skill of an advanced college degree.

Social and Cultural Changes

Social and cultural changes occur relatively slowly. Bit by bit, change by change, they accumulate into major structural and behavioral changes.

What were the social and cultural effects of technological and governmental innovations? What exactly did the availability of electricity in rural areas cause? Did people read more because of better lights? Probably not. Did they work later because of better lights? Probably not. It did encourage families to buy an electric radio, and a washing machine, and a refrigerator. What changes, if any, did these make in the social life in rural communities in Missouri? I will answer these questions in the course of the book.

Most studies of cultural change are forced to focus on material and/or measurable change because numbers are available for them. I will also do some of this measuring, but I will look at the non-material changes as well. True, my conclusions will be subjective, not quantified. There is no question that the material gains were numerous over the century. But how much non-material gain has there been? And which non-material changes are gains? For example, the large increase in divorce rates may have been a gain in some ways, but to most of the individuals involved there were heavy losses. Many people suffered through decades of sorrow and abuse under the "no divorce" culture and were able to free themselves for a better life with a divorce. On the other hand, the number of divorces that I have seen that have left damaged people and children are much greater than those that left people with good self esteem and well adjusted children. Granted that many of these people and children would have been hurt even if the marriage had been maintained. Mass media creating romantic "Hollywood" expectations about marriages undoubtedly contributed to many troubled marriages.

Changes in Need for Money

The definition of success changed as new innovations were adopted. In my grandparents' generation, great importance was placed upon the family. Whether the children become productive members of the community was the most important issue. If so, a persons' life was considered a success. My parents gradually entered a more materialistic world. First they bought a tractor. Then the tractor needed different implements than horses, so a cycle began of buying more equipment. Today we think in materialistic terms: dollars, the size of the house, the amount of stocks and bonds. How much does the job pay? This is usually the first things asked about prospective employment. "The bigger, the better" is a national mantra. The rural culture in 1900 did not place nearly as great a value on wealth.

In their later years, my parents were forced by economic needs to leave farm jobs and commute some distance to work. The farm, even with increased productivity, would no longer produce enough income to maintain the style of life, modest though it was, that my parents wanted. The life path of my parents was typical of thousands of other families.

As the century progresses, rural as well as urban services have been converted from non-monetary to monetary. Lawn care is one example. In the early days of the century, lawn care was not an important part of rural life. The grass and weeds would be cut before they got too tall because they impeded walking. Farmers either tethered a cow or horse to graze the yard or used a hand scythe to cut the grass. There were a few hand-pushed lawnmowers. These were considered to be a city thing. In the middle part of the century, gasoline powered lawn mowers made their appearance and many people learned to spend a large part of their weekend going in circles first pushing and then riding a lawn mower. This allowed the yard to become a decorative extension of the home. Yards became manicured instead of trimmed. As more women entered the work force, time became limited so that services that had been done by members of the household were purchased. Lawn mowing services were established to meet the need of people who did not have the time or want to take the time to do it themselves.

Housekeeping, childcare, and food preparation are among the products and services that were almost entirely home-produced earlier and now are bought because the time to do such tasks is very limited.

I strongly suspect that many households today are simply trading money. People have to work long hours to pay for things that they could do for themselves, but choose not to. I will refer to this process of putting a price on and buying formerly home-produced services as “**commodification**”. In the 2000 home, rural or urban, everything has a price; everything is a commodity that can be bought or sold. Baby sitting is at least \$5.00 per hour for the teenager next door. Food comes from a fast food restaurant or the microwave. Cash is the language of the American economy today.

In the 1900s rural home, there was very little cash. My allowance until I was in high school was 25 cents a week. Candy bars and soft drinks were five cents each, so that allowed me to make some purchases. If we needed things, they were grown or made at home. Children, including babies, were taken with the rest of the family events. If there was an occasion for a babysitter, a simple “thanks” would suffice to pay your mother, mother-in-law, or neighbor.

What is a Community?

The word community is frequently used, but often it is used by different people, with very different meanings.⁸ Some variations even occur among sociologists. Often people use it to describe a place, a geographic space; others use it to describe a group of people interested in the same things, but who may be located in different places. In this book, I will use the word community to identify a place where the people know each other and where they interact to achieve common goals.⁹ These goals might include building better roads or a new school.

Communities are not just random collections of people; they are carefully constructed networks of interactions that are formed over time. These networks function for a large number of purposes: mutual help, social support, courtship, etc. Sociologists call these networks “social capital”.

The central idea of social capital is... that networks and the associated norms of reciprocity have value. They have value for the people who are in them, and they have, at least in some instances, demonstrable externalities, so that there are both public and private faces of social capital...

8. For a more detailed description of communities and community studies, see Edward W. Hossinger and James R. Pinkerton, **The Human Community**, Macmillan Publishing Company, New York, 1986, p.317+.

9. Kenneth P. Wilkinson, **The Community in Rural America**, Social Ecology Press, Middleton, Wisconsin, 1991 defines community simply as a group of people in interaction. I have simply refined this to include geographical location and purpose.

Like physical capital, social capital is far from homogenous. Some forms of social capital are good for some things and not for others. Accepting that there is no single form of social capital, I need to think about its multiple dimensions...

Some forms of social capital, such as a PTA (Parent-Teacher Association) organization, a national organization of any sort, or a labor union, formally organized with a chairperson, a president and membership dues, are highly formal. Other forms of social capital, such as a group of people gathering at a bar every Thursday evening, are highly informal. And yet, both forms constitute networks in which there can easily develop reciprocity, and in which there can be gains. Some forms of social capital are densely interlaced, such as a group of steelworkers who work together every day at the factory, go bowling together on Saturday, and attend the same church every Sunday. At another extreme, you have very thin, almost invisible forms of social capital, such as the nodding acquaintance you have with the person you occasionally see at the supermarket while waiting in line.¹⁰

As I will describe, social capital is one of the core rural values that has changed during the century

Regions and Regional Cultural Variations

Though there were variations in subculture, almost all of the people living in rural Missouri in 1900 came from a western European cultural heritage. In addition, most were natives, in the sense of having been born in this country. The Anglo American population of the Ozarks had four or more generations born in this country by 1900. Most of the Germanic population had two or more generations. Virtually all of rural Missouri was settled by the time of the Civil War. It was only in the 1990s that rural Missouri saw another influx of immigrants.

10. July 28, 2001, <http://www.isuma.net/v02n01/putnam/putnam.htm>

Part 1

Rural Missouri in 1900: The Threshold

Both social and technological change has been occurring in rural Missouri since the first European settlers arrived. The key questions are: How quickly did change take place? What were the types of changes? The freeing of the slaves in central Missouri after the civil war brought about major changes for the freed people and also for the tobacco and cotton growers. Many African Americans migrated to the large cities after the end of the war. The farmers along the Missouri and Mississippi rivers turned to growing corn and other crops that required less labor than tobacco and cotton. The share cropping system developed in southeastern Missouri.

The mechanization of farming was well underway by the turn of the century. The steel moldboard plow, the reaper, the grain binder, the mower, various hay rakes, and the grain threshing machine had been invented before 1900. John Deere and Cyrus McCormick were already well-established companies. However, the full impact of these inventions had not been fully felt by the farming community; nor had the gasoline tractor made its debut in Missouri farm fields. Steam engines were used for powering threshing machines, but horses and mules were the primary sources of power in the fields. An average farm had between six and ten horses or mules. These required considerable pasture, hay, and grain.

Change was on the horizon, but not recognized, so the portrait of Missouri farm life that is given in the following chapters is only slightly different than it would have been twenty-five or even fifty years earlier.

Chapter 3

Missouri Country Life—1900

The Geography of Missouri

Geologically, Missouri can be divided into three major areas. The northern and western portions of the state are rolling hills with scattered prairies. Most of the hills are small and, in general, the land is not well suited to the large-scale mechanical agriculture of the late 20th and 21st century. The bottomlands along the Missouri and Mississippi Rivers and the tributaries of each include large areas of fertile lands, but at the turn of the century, these were wetlands that were difficult or impossible to farm. Much of the Mississippi delta in Missouri was in the process of being drained from swamps at the turn of the century. This was the site of the great Mingo swamp. The enhanced drainage and construction of large earthen berms to protect against flooding occurred shortly after World War I.

Rural Settlement Patterns

The scattering of houses rather than clustering in villages is a uniquely American pattern, different from that found in Europe, Asia, or Africa. The fields and houses were owned privately in European countries, but often the cattle were pastured in a common field. The first European settlers started this same village system in America. The famous Boston Commons started as a common pasture for the village. Very few “commons” were established outside of the original 13 colonies. Missouri had a few in the early French settlements along the Mississippi River.

A conscious decision was made by the early leaders of our nation to use a scattered housing pattern in which the farmers would live on their land. The goal was an independent landowning yeoman class that would serve as the backbone of a new democratic nation. This philosophy was reflected in the various homestead acts; each of which required the grantee to live on and build improvements on the land for a period of time, usually five years. In 1900, about half of the U.S. population was rural and small farm families were the backbone of the nation at that time.

In Missouri, the homesteads were generally 40, 80, or 160 acres. The result was scattered farmsteads about every quarter to half mile along the country roads. It was uncommon to see farmsteads directly across the road from each other.

The majority of Missouri was surveyed and platted according to a one mile square grid. Roads, fences and farmsteads, in general, follow this system. In most of rural Missouri a public road can be found every mile. The basic land unit was 40 acres, which is a quarter mile square. These forty-acre tracts are combined to form 80-acre, 160-acre and larger farms. Often the surveying was less than exact, plus the curvature of the earth caused some inaccuracies. It is not unusual to find "40's" that actually contain significantly less than 40 acres.

Different systems were used to layout farms in some of the earliest settlements. The plat maps of today still show the different settlement patterns, especially along the Mississippi River south of St. Louis and in some places along the Missouri River. These used the French method for establishing farms. The farms started at the river and went away from it to form long more or less rectangular shapes. Every farm had some bottomland and some upland. These farms appear very different on plat maps from those created by the grid system.

The other exception to the grid system was in the Ozarks where the early settlements tended to follow the topography. The roads generally follow the ridge tops. Houses were most often located on the roads, but houses located a quarter or half mile from the roads were not uncommon. Many counties in the Ozarks had open range pasturing until after World War II. Small pastures around the houses were normally fenced for holding a milk cow or another animal that needed close confinement. Sows and pigs usually ran wild in the timber and fed off of the acorns and other nuts. These were hunted, as the only way to catch an animal was to shoot it.

The railroads were another important factor in settlement patterns. The early wood- and coal-fired railroad engines required frequent service points for water, fuel, and maintenance. As a result, several current Missouri towns started as railroad service points: Moberly and Sedalia are among these. The railroad steam engines needed a large amount of maintenance. "Round houses" were built that allowed engines to be serviced and to be turned around if needed. Other communities were built along the railroads to serve as shipping points for farm produce. The term "milk run" was used to describe trains that made stops every few miles to pick up dairy products. The Ozarks included a considerable number of dairy farms. The dairy farms shipped cream to Springfield where it was made into butter and cheeses. Grain elevators were built in small communities to facilitate the consolidation and shipping of small grains (primarily wheat and corn) to major markets. The tall elevators can still be seen in northern and western Missouri. Cattle were also shipped from smaller towns with stockyards¹ to the packing

1. Stockyards are retail markets for farm animals. They include large areas of pens and an arena where the animals are auctioned to buyers.

plants in Kansas City and St. Joseph. The cattle would be driven on foot to the nearest stockyard. This was a major undertaking and was only done once a year.

Missouri Counties

Rural communities in Missouri were influenced by various factors. The size of the county and the location of the county seat had an important influence on many communities. The sizes of the majority of the 114 Missouri counties were established on the basis of the “team haul” concept of transportation. Most of the counties are about 30 miles border to border, so that residents living near the boundaries of the county could drive a wagon to the county seat, conduct their business, and return home in the same day. This principle was often modified based upon the political wishes of the times and geographical limitations.

Missouri has more small counties than most other states. This early decision about size had many long-term effects, including the overall cost and efficiency of local government. In addition, Missouri counties had the option of forming township governments. A township was usually about six miles square. The typical Missouri county has from five to ten townships. The typical township government included a property assessor, a tax collector, justice of the peace and township road board. Some of these township governments still exist today. All of these township functions are duplicated at the county level. The advantage of the township government is that the small units are closer to the people. In effect, the people are the government.

Barton County, where I grew up, had township governments. I had many discussions with my mother about the relative merits of having township governments. My position was that it was a waste of money to have these small and inefficient governmental units. My mother was a firm supporter of township governments. She finally explained it to me by saying, “Yes, it may be less efficient to have township governments, but the township office holders are our people.” That response is a perfect example of the meaning of rural. Everything is based upon personal knowledge and on personal contact. I never argued the point again.

The Mining Industry in 1900

Extractive industries such as agriculture, mining and timber cutting were the primary sources of employment in rural communities in 1900. Agriculture was and is still the largest single extractive industry.

Mining was scattered across the state. Employment in mining is a distinctive sub-culture that attracted immigrants from European countries in which mining was a major industry. Italian immigrants moved into several small communities, such as Novinger and Bevier, to take advantage of the mining jobs available. When the mines closed, most of the miners migrated elsewhere.

The lead mines from Bonne Terre to the Farmington region are the oldest mines in the state. The early French settlers operated these. The lead mines in eastern Missouri continued to be important to the region until after the middle of the century. Several of the lead mining communities are still struggling with high lead content in the water. The lead and zinc mines near Webb City were in operation at the turn of the century, but almost all of them closed soon afterwards. In most of the agricultural region a seam of coal four to twelve inches wide was found at depths of twenty to fifty feet below the surface. At the turn on the century almost half of the counties included coalmines. Some of these areas developed strip mines. Most of these mines were out of business by shortly after World War II. The last coalmines in Missouri closed in the 1990s. Now all coal for the numerous electrical power generating plants in Missouri is shipped in from Wyoming.

Most of the mines were small and provided only coal for local heating uses. In my parents' generation, someone in the neighborhood would take a wagon and go to the nearest mine for a load of coal for the school or church. Only the cost of the coal was charged to the institution. My parents had a neighbor who as late as the 1950s operated a small mine for his own heating and cooking uses.

Most mines consisted of a tunnel back from a hillside, following the coal seam a few hundred feet, with frequent side tunnels. The roofs were usually about five feet high, so that it was necessary to walk bent over. The pilings supporting the roofs often broke, and the tunnels would collapse. Most mines were dripping wet inside, with very acidic water. This acidic water was toxic to fish and other aquatic life in the small streams. The temperature stayed at 59 degrees Fahrenheit in such mines, except near the openings. Coal was brought out in small pushcarts that ran on light steel rails.

Many communities in the state had shallow mines that produced clay for making bricks for buildings. Columbia, Mexico, and Higginsville are examples of such communities. Mexico developed the largest employment in clay mining with the establishment of A.P. Green and other companies that made firebricks for the steel smelting industry. The last of the fire firms closed recently.

The other major mines in the state are limestone quarries. The soil is stripped off and the rock is mined in an open pit. The lime and crushed rock from these mines are important for agriculture and transportation. Most Missouri soil is acidic and needs large quantities of lime for efficient agricultural production, and the rock is used to surface roads. These quarries developed in the early to middle part of the century as powered equipment became available. Many of them continue to operate today. Some of the larger mines near metropolitan areas have turned into underground mines that are used for commercial storage after the mining has removed the stone

Agriculture

Agriculture was the backbone of Missouri's economy in 1900. In addition to the grains and livestock that made up the majority of the state's agriculture, there were several important specialty crops that made major contributions to the state's economy. Horticultural crops were important in several regions of the state. Tobacco growing was an important enterprise in the loess soils along the Missouri river, with the largest production north of Kansas City, where a large tobacco auction was held every fall. The wine industry along the river from Jefferson City to Sainte Genevieve was one of the largest in the United States. Orchards around Springfield produced trainloads of apples for national and international markets.

Towns and Crossroad Stores

In most counties in Missouri, the remains of old commercial buildings can be found every few miles, at crossroads and other prominent locations. Most farmsteads had a general store within five miles. In 1900, these were the nuclei of rural communities. They bought farm products such as eggs, cream, and chickens. They sold almost anything that people needed:

The general store ... supplied the people of the locality with about everything that was required in their way of living. They carried everything from a paper of pins to a plow. They also carried a line of drugs, such as were in common use as well as a few patent medicines. Many of the groceries used at that time were sold in bulk, sugar came in barrels and was weighed out as needed, as was salt. Most people would buy their salt by the barrel, as much was needed in salting meat as well as for the cattle. The price was about a cent a pound. Soda, an article of everyday use in making cornbread and biscuits, was also kept in kegs, although some package soda was used. Black pepper in kernels could be bought and ground at home in the coffee mill. Green coffee was much used by coffee drinkers who preferred to roast or "parch" it themselves as well as to grind it. Most coffee was ground at home. The coffee mill held between the knees and used three times a day was as indispensable in those times as the can opener is today.... There was some tea used, as well as the drinking of sassafras in the Spring, perhaps not as much as coffee.... A package of tea "siftings," which was the broken leaves of the better grades could be purchased for fifteen cents. Eggs were legal tender in the local stores as well as money. The price would go up to twenty or more cents a dozen in winter and were sometimes as low as five cents in summer. As the customer brought them in, the merchant would count them out as he placed them in washtubs. He would generally have a number of these tubs full when the "huckster" came by.... He would pack them in layers of straw in the bed of his wagon and it was said, considering the roughness of the road, very few were broken on the way. If the customer didn't need groceries or goods for the full value of his eggs, he would receive a "due bill" for the balance. Although some tobacco was raised and used in the natural

leaf or made into twists for one's own use, as many liked their "chaw of home-made terbaccer," still there was much plug tobacco sold.... There was also some brands of smoking tobacco carried such as Old Coon and Cut and Slash. There was some snuff sold, not the moist "snoose" of today but a dry powder. The store had a back room that ran the length of the building where the larger articles were kept such as plows, harness, saddles, crosscut saws, axes, hoes and other tools, here the coal oil was also kept.²

If they didn't have what you wanted, they would do their best to have it the next time you went. These stores were unique in their contents and their function in the communities. Not only were they retail outlets; they were a gathering place for people to come together for visiting and gossiping. A person could learn more about current events at the local "store" than from the newspapers. General stores were common in 1900. Today, often nothing more can be found of them than foundations or decaying buildings.

Mail-Order Trade

The end of the nineteenth century was the end of a retailing era of the open country general store. By 1900, Sears and Roebuck and Montgomery Ward had already begun to make inroads in the way rural Missourians purchased retail goods. This was the start of mass merchandizing for rural Missourians. The large catalogs were a standard part of most rural households. The catalogs brought the latest styles in clothing and much more into the living rooms. The arrival of the new spring and fall catalogs were important events. Families spent many evenings paging through the catalogs. These were the "dream books" or "wish books" of a growing materialism. Shopping by mail made all types of items available to rural households. Sears sold everything from precut houses and automobiles to baby chicks, farm equipment, clothes, and furniture.

Mail order shopping utilized the rural postal service. The establishment of the Rural Free Delivery (RFD) system was the beginning of the end for the traditional semi-isolated rural community, although no one recognized it at the time.

The competition from the mail order houses was not well received by the local merchants, who recognized the threats of such trade on their own businesses. The following is from a local newspaper editorial:

Who sympathized with you when your little girl was sick? Was it your hometown merchant, or was it Sears and Roebuck? Who carried [allowed credit to] you last winter when you were out of a job and had no money? Was it Montgomery Ward and Co. or was it your home merchant? When you raise money for the church or for some needy person in town do you write to the Fair Store in Chi-

2. July 3, 2001, <http://198.209.8.166/wrvq/V2/N6/w66e.htm>

cago or do you go to your home merchant? How much do Seegle Cooper and Co. [a mail order firm] give towards keeping up the sidewalks of the town or paying the minister's salary? When your loved one was buried was it your hometown paper which shed the tears of sympathy and uttered cheering words or was it some Chicago or New York paper?³

Small business owners were normally some of the leaders in small towns and rural areas. The loss of small businesses often meant the loss of critical leadership in the communities. So the movement of retail sales to the out-of-town mail order firms meant more than just local economic losses, it represented the loss of personal interactions with the local business personnel. An important part of rural society had already started to change.

My family was participating in this transition. Most of my clothes came from Sears or Wards. We had no idea of the long-term results of our actions. Our mail orders were based upon the short-term goals of lower prices and better selection. We did not have the money to pay the higher prices in the local retail stores.

Population

European settlement of Missouri began in the 18th century, when the French took over Native American lead mines in eastern Missouri. However, the mass movements did not begin until the early to middle part of the 19th century. The rural portions of the state were "filled" by 1875. Most rural Missouri counties and small towns had their largest populations in either the 1890 or 1900 census⁴.

The total population of Missouri in 1900 was 3,106,665.⁵ Of these, 575,238 were in St Louis City, another 163,752 in Kansas City, 102,979 in St. Joseph and a relatively small 23, 267 in Springfield. Indeed, Joplin was larger than Springfield at this time.

Minorities in Rural Missouri

Native Americans

Missouri has had a troubled history with minorities. The Osage, the Missouri, and several other Native American groups once occupied the area now known as the state of Missouri. When the European settlers came, Native Americans were forced to move to the tribal lands in Oklahoma. The infamous "Trail of Tears" over which the Cherokees were forced to leave their native southeast and walk to what is now Oklahoma went through the Missouri Ozarks.

3. Quoted in Robert K. Gilmore, *Ozark Baptizing, Hangings, and Other Diversions: Theatrical Folkways of Rural Missouri, 1885–1910*, University of Oklahoma Press, Norman, 1984, p. 14.

4. Some of the communities that have become urban sprawl have exceeded this peak population within the last decade.

5. The population for each county in 1900 and 2000 is listed in Appendix A.

He [Mr. William Jephtha Johnson] told of seeing the Cherokees being driven by Government guards in 1838 along the 'trail of tears.' He said most of them were afoot as they proceeded down Finley creek to James River. They followed the James to the White, where they encamped for several days. He said some of the Indians died and are buried near that campsite.⁶

The intermarriage of Native Americans with people of European heritage was not unusual. One of my brothers married a woman who had fractional Cherokee heritage. By 1900, full-blooded Native Americans were a rarity in most rural communities. The only area of the state that had any was in the southwestern counties, near Oklahoma.

African Americans

The history of African Americans in the state is not much better than that of Native Americans. The original African Americans were brought as slaves to work on the tobacco farms along the Missouri and Mississippi Rivers. Later some came into the state to work on the cotton farms of southeast Missouri. Along with the slaves came the prejudices commonly found in the old south. It is estimated that at the time of the Civil War there were more than 100,000 slaves in Missouri. Most of these were on the tobacco farms. While there were exceptions, especially in southeast Missouri, most Missouri slaves lived on family farms where the average number of slaves was between four and eight. The Civil War was very bitterly fought within the state. The northern portion of the state and the Ozarks were pro-union while the central and southeastern portions were pro-slavery. There were numerous battles all over the state. Centralia and Lexington were two sites of battles in the central part of the state. Most of the border with Kansas had guerilla warfare.

The residuals of southern-based attitudes remained long after the war ended. Many tragic stories describe the conditions of the ex-slaves after the War. Many died of malnutrition and exposure to the harsh winters. Currently, the Klu Klux Klan is active in Jefferson County, south of St. Louis.

By 1900, the exodus of African Americans from the rural areas to the larger cities was well underway. The 1900 census of population reported that more than half of the African Americans in Missouri were residing in large cities of the state.

Some thought this migration was the result of activities of the Klu Klux Klan. These groups often used terror as a tactic to encourage African Americans to leave the community. Tactics included nightriders, cross burnings, and warnings of various types. Lynchings were infrequent, but most communities had at least one in its past.⁷

6. July 3, 2001, <http://198.209.8.166/wrvq/V1/N3/Sp62g.htm>

7. *Springfield had a lynching in 1906 and Columbia in 1918.*

A Revolution in the Heartland

Especially in rural areas, Missouri in 1900 was rigidly segregated.⁸ African Americans were for the most part limited to day work on farms, domestic work in homes, or janitorial work in public buildings. The areas of the towns where the former slaves resided often had very limited public services. In 1900, African Americans had to struggle just to get enough food, clothing and shelter to survive. Good education was not generally available to them. National African American leaders such as George Washington Carver were the rare exceptions.

Dalton, Missouri is a small town near the Missouri River in central Missouri. In the following quotation, the author is writing about his childhood in Dalton in the 1950s. The Vocational School was the first black high school in Missouri, established in 1883 by a group of African American farmers.

And Dalton was segregated. The northern half of town, over the low hill that fronts the floodplain, is the surviving half of the town now. That's where the black population lived in the 1950s. The Dalton Vocational School, for blacks only, was of brick, infinitely more sophisticated than the ramshackle one-room school for white children, on our side of the hill.⁹

One of the frustrating aspects of writing this section is the lack of scholarship and historical materials about black history in the Little Dixie area and southeast Missouri. This lack results in part from Missouri's racist history.

8. Gary R. Kremer and Antonio F. Holland, (Revised edition) **Missouri's Black Heritage**, University of Missouri Press, Columbia, 1993

9. Joel M. Vance, **Down Home Missouri: When Girls were Scary and Basketball was King**, University of Missouri Press, Columbia, 2000. p. 71.

Chapter 4

The 1900 Rural Missouri Culture: A Focus on North and West Missouri



North and West Missouri

In this chapter I will focus on the statewide cultural similarities that I have mentioned. The northern and western portions of the state had the least variation from these cultural generalities.

Many of the early settlers in Missouri had lived previously in Ohio or Indiana and moved to Missouri to take advantage of the unsettled territory. Most of these were second or third generation Americans. Relatively few were direct migrants from the European countries. The German immigrants were an exception. There was major German immigration during the last half of the nineteenth century. The most concentrated German settlements were along the Missouri and Mississippi rivers and in the northern Ozarks, in communities such as Herman, Concordia, Washington and Sainte Genevieve. As noted in the section on mining, there were a few small mining communities around the turn of the century with large proportions of Italians or Welsh.

Many of the observations made about northern and western Missouri also apply to the upland areas of the larger Ozark region. The hilly areas along the White River, the Osage River, and the Eastern Ozark Mountains have a somewhat different sub-culture since many of these people were from the southern Appalachian region. However, the lines between the various subcultures were not well defined, but blends of the groups were often found. In almost any community, people of German, Scottish, Irish, Italian and other heritages could be found. Inter-marriage of immigrant groups was common. African Americans were found in the towns in the "Little Dixie" areas of the state.

Life Expectancy

Life expectancy at the turn of the century was only 47 years. In the early 1900s, the major health threats were infectious diseases associated with poor hygiene and poor sanitation (e.g. typhoid), diseases associated with poor nutrition (e.g. pellagra and goiter—we often forget that iodized salt was not widely available until well into the century), poor maternal and infant health, and diseases or injuries associated with unsafe workplaces or hazardous occupations. Small pox and other contagious diseases were still relatively common. All of the childhood diseases such as measles, mumps, and whooping cough were very common. The infant mortality rate was 99.9¹. If a child survived the first five years, his probability of living into at least his sixties was high. However, heart disease, stroke, and cancer were all unrecognized, untreatable, or both, at the time. Serious accidents and deaths involving large animals, especially bulls or untamed horses, were occupational hazards. Most farm people could remember others who had been maimed or killed by such animals.

One of my earliest memories of when I was very young, perhaps four or five years old, was when a buck sheep knocked me down in the barnyard. Every time I would try to get up the sheep would butt me again. In that case, only my pride was injured and I quickly learned the

1. *This is per one thousand children under one year of age. 99.9 means that one out of ten children died before they reached one year of age.*

rules of being around animals, but we normally had at least one bull on the farm. A bull is a very aggressive animal and protective of his "harem" of cows. To avoid some of the dangers of being in the same area as a bull, we put a three-inch heavy metal ring through the bull's nose and attached a six foot long steel chain to the ring. The bull would step on the chain and this prevented him from charging us.

Health Care Resources

Most births in 1900 occurred in the home, not in a hospital. The same was true of deaths. Hospitals were few in number and small in size. Most hospitals were located in the larger towns or cities. Physicians made house calls if they were contacted a day or two in advance. Most small towns had at least one physician. Most commonly, the physician's office was in his² home and his wife served as receptionist, nurse, and assistant. The physician had a very limited arsenal of drugs that he could use for treatment of illnesses. There were no antibiotics, nor most of the other drugs common today. Friedrich Bayer & Co. did not release aspirin until 1899³. A physician could set broken bones, assist in childbirth, and a perform limited number of other services. I had pneumonia when I was young and I can remember the doctor coming to the house to visit. There were no drugs at the time that he could prescribe. His advise was to keep me comfortable and hope that I survived.

Dentists were found in most small towns. Their primary duties were pulling teeth and making "false teeth". Preventive dental care was unknown at the turn of the century. Most people had full sets of false teeth by the time they were in their fifties.

There were no "911" services, ambulance services, or emergency services of any kind in either rural or urban communities at this time. People who had strokes or heart attacks lived or died without much assistance from the medical establishment. It would have taken several hours or even days to get a patient to the nearest physician, and by then nature would have decided the outcome.

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2. *Virtually all physicians at the turn of the century were males. Women served as nurses in some hospitals.*
 3. *July 9, 2001, <http://www.mjm.mcgill.ca/issues/v02n02/aspirin.html> Aspirin has become so well known as a name, we forget that it was actually a commercial brand name for acetylsalicylic acid.*

Transportation



The country in 1900 was mainly populated with homes that had been built within the last twenty years. Relatively few of the rural houses predated the Civil War, which had ended thirty-five years earlier. The major exceptions to this were in Little Dixie in central Missouri and along the rivers.

The primary means of human transportation were walking and horse-drawn vehicles. Buggies were used by the middle and upper classes and wagons by working classes. While the thought of buggy rides may generate some nostalgia, actually riding for any distance in a buggy was hot in the summer, cold in the winter, and rough at any time. The primitive automobiles of 1900 were most commonly found in wealthy urban areas and were still called “horseless” carriages by most people. They were novelty items limited largely to Sunday afternoon drives on dry warm days. It was not until Henry Ford invented the Model “T” that automobiles were driven much in rural Missouri.

All rural homes were located on dirt roads. “Creek” gravel was available only in a few areas of rural Missouri, most commonly in or near the Ozarks. Crushed limestone, widely available today, did not become available until powerful machines were developed to crush the limestone. In most regions of the state, this did not occur until about mid century. Nor did petroleum-based “black top” paving become widely available until several decades of the century had passed. The first major paved highways were created in the 1930s.⁴

Rural roads were narrow, rutted, and became almost impassible after rain or snow. At their best, the roads were rough. In northern regions of the state, where the soil contained more clay, wheels and hooves became so encrusted with mud during bad weather that the horses sometimes could not move a vehicle.

A team of matched driving horses matched was desired in 1900 as a luxury car is today. A matched set of horses trained to be gaited (a unique way of trotting or running) was the ulti-

4. *The State government published instructions for do-it-yourself road construction in 1908. “Earth Roads”, Monthly Bulletin, Missouri State Board of Agriculture, Vol.6, No. 12a, December, 1908, Columbia, Missouri.*

mate status symbol. If a family had these hooked to a shiny buggy and taken for a Sunday afternoon drive, they were the envy of the community. Driving teams were smaller than the larger horses needed for fieldwork.

Missouri did not get enough snow in most parts of the state to make sledges useful. The wagons were usually rectangular grain wagons with sides about 14 inches high. Sideboards of about the same height would be added for hauling grain or shucking corn. Some families had a spring seat that could be added, but since the wagons had wooden wheels with iron rims and the roads were rutted; the most comfortable means of travel was standing up.

In the winter, old woolen quilts were used to wrap the legs of women and children while riding in a wagon or buggy. Men were supposed to be able to take the cold better and not need such covers. They were also more likely to be wearing long underwear and multiple pairs of pants. In cold weather, women would sometimes put on pants underneath their dresses while traveling. The most affluent families had special "lap robes" for winter use. These were rectangular throws made of heavy cloth or tanned animal skins.

Mud and livestock manure were both frequently encountered on a farm. The typical farmstead had no paving and very little gravel as means of keeping humans and livestock out of mud. Mud, often ankle deep, was a normal part of the Missouri landscape. The clayey "gumbo" soil found in northern Missouri was the worst. As with wheels, a person's shoes could quickly become caked with several pounds of mud.

Rural youth learned to watch where they stepped. Cleaning manure, and mud to a lesser extent, off of shoes was not a pleasant task. A boot scraper was often located outside the back door. A boot scraper was an iron contraption that was inserted in the ground and had a horizontal bar on which shoes and boots could be scraped to remove mud and manure. The back door was the most used entrance to most rural homes. This led into the back porch and the kitchen. Front doors were used only by visitors who were not familiar to the family.

In the Monthly Bulletin⁵ for 1905 is a picture of a team of horses pulling a buggy with one horse down to its belly in mud while the buggy was buried to the hub of the wheels—at least two feet. (Unfortunately, the picture is not reproducible here.) With our paved or at least gravelled roads always available, it is hard for us to imagine mud that deep.

Flooding across the roads from streams and ditches was common after any significant rains. Bridges were relatively rare and expensive and were only built over larger streams on well-traveled roads. People were forced to wait to travel until road conditions were better. There was an informal rule that adjacent landowners had some responsibility for the condition of the road. The local dirt roads were maintained largely by manual labor on a voluntary basis by adjacent

5. "Better Roads for Missouri", *Monthly Bulletin, Missouri State Board of Agriculture, Vol. V, No. 2, July, 1905, Columbia, Missouri.*

A Revolution in the Heartland

landowners. "Road graders" were not available. This often resulted in very uneven maintenance with large "chuckholes" and ditches across the roads. The major road maintenance tool was a "drag," which was a wide implement made from heavy wood that was pulled by two horses. The drag would help scrape rocks and dirt into some of the holes and ruts. Such repairs were given relatively low priority by most farmers.

Fencing to keep livestock in pastures, away from crops, and out of the roads was an important part of every farm. While the type of fencing varied across the state⁶, often the fences were hedges of Osage orange trees. These were trimmed every year to form a fence about four feet tall or they were cut every few years when the new growth became large enough to be used as fence posts. The shading of the road that resulted from untrimmed hedges prevented the quick drying of the road after a rain. If the trees were on the south side of an east/west road, this became a sore point for the neighborhood. The failure of adjacent landowners or renters to cut the trees and clean the ditches often resulted in neighborhood tensions.

The poor conditions of rural roads were very effective in controlling the driving speeds of the few automobiles that tried to travel rural roads at the turn of the century. Speeds of ten to twenty miles per hour were normal. Until mid century, one of the desired characteristics of automobiles was high clearance to allow them to travel on rutted roads.

As a result of the lack of transportation, it was not uncommon to find older adults who had not been outside the county of their birth. Travel for armed forces duties brought some men into contact with other portions of the world.

Communications

Telephone service was not generally available until after World War I, except for homes located near towns. In most rural communities, the first telephone systems were informal cooperative neighborhood systems, with the switchboard in a centrally located neighborhood home. Few of the systems had coverage of greater than two miles from the switchboards. These were battery-operated systems, with the wire often located on fences. The "poles" were small trees cut locally. The reliability rapidly decreased with rain, electrical storms, and growth of weeds and trees in the fencerows. All of the early phones were on "party lines". Each phone had a separate ring, but all phones on the line rang when any number was called. This allowed anyone on the line to pick up his or her phone and listen to the phone calls of others.

Most small towns had local newspapers that were published weekly. Most families in 1900 subscribed to few, if any, magazines, in addition to the local newspaper. The *Missouri Ruralist* was one of the early farm magazines. Almost all of the local papers were devoted to local people and events. Births, deaths, school events and local government actions were. The ads were small and more like announcements than what we call advertisements today. National and

6. *Portions of the Ozarks had "open range" until well after World War II.*

world news stories were slow to trickle into the local communities. The focus of attention was local and only occasionally did the larger world become an important topic of discussion, such as during presidential elections. The primary medium of communication was word-of-mouth.

Schools

Children attended local one-room schools, which taught up to the 8th grade. Most farm children in 1900 stopped their education when they finished the 8th grade. A one-room school was just that—one-room. The desks were in two or three different sizes to accommodate different sized children's bodies. There was a black slate chalkboard across the front of the room, with a picture of George Washington above it. There was a stove in one corner in the back, and hangers for coats in the other. The small library was old and it was not unusual to find textbooks that were ten or more years old. Often the teachers had minimal training. A local man or woman who had completed the eighth grade and a summer normal term, or passed an examination given by the county superintendent of schools, was considered adequately trained for teaching the school.⁷ The quality of instruction varied widely from school to school. Some communities were unwilling to spend very much on education. In the 1920s, more than 40 rural school districts had school terms of less than four months.⁸ Part of the lack of funding in some districts was an unwillingness to pay adequate taxes. However, most districts, especially in the Ozarks, were poor, and even those in north Missouri had difficulty in the 1920s because of the economic recession in agriculture.⁹

Many people, especially in the Ozarks, felt that basic instruction in reading, writing, and arithmetic was all that was necessary. The skills for farming could be best learned from their parents and from experience. As a result, communities were unwilling to vote taxes to support schools beyond a bare minimum.¹⁰

Graduation from the 8th grade was an achievement that warranted a countywide ceremony for all such graduates. To go further than the eighth grade often meant the children had to be boarded near the high school. It was not feasible for a child to travel several miles each day to attend high school; the boarding expenses and other costs were greater than most families could afford.

The one-room schools were located in about every six-mile square in Missouri. The schools were entirely financed by local funds and controlled by the local three-member school board

7. Robert K. Gilmore, *Ozark Baptizing, Hangings and Other Diversions: Theatrical Folkways of Rural Missouri, 1885-1910*. University of Oklahoma Press, Norman, 1990, p. 54

8. Richard S. Kirkendall, *A History of Missouri*, p. 103.

9. *Ibid.* p. 103.

10. *Ibid.* p. 104

(almost always males who were heads of the families with school aged children). The average enrollment was from eight to fifteen children.



One-Room School, 1930? ¹¹

The teachers were poorly trained by today's standards, especially in the Ozarks:

Many rural districts preferred to hire a local boy or girl who had completed the eighth grade and had received a teaching certificate.... Such a person could afford to work more cheaply than an outsider, because he or she could live at home and need not pay room and board. The only pedagogical skills required were those that would enable the teacher to impart the fundamentals of reading, writing, and ciphering; maintain a modicum of discipline...¹²

The teacher was normally an unmarried female. Some school districts in 1900 had informal policies that required a teacher to resign if she married. Married women did not work outside the home. The instruction was usually individualized because very few grades had more than one or two students. Since the teacher had no backups or substitutes available and often there

11. November 23, 2001 http://memory.loc.gov/cgi-bin/query/l?fsaall:144:./temp/~ammem_XGkU::display-Type=1:m856sd=fsa:m856sf=8b38052:@@@

12. Gilmore, *op.cit.* p. 54.

was no way of notifying students or the school board, the teacher had to be at the school every day, barring a major illness. Often teachers would board with a local family.

The schoolteacher was expected to be janitor, make the fires for heating, and do everything else to operate the school. The teacher always had authority to use corporeal punishment with the students. Often this was applied using a “switch”—a tree branch three feet long and about the same diameter as a finger. Whippings were administered to the buttocks and the back of the thighs. Discipline in most schools was strict. Children could not move about the room or read materials other than assignments without permission.

My mother, forty years after her primary education, could recite poems that she had memorized in school. Memorization of spelling, poems, state capitals, multiplication tables, and much more was an important part of the educational process. Students were required to stand in front of the room and recite various lessons. There were fads and fashions in school pedagogy then as there is today. I went through several grades in reverse order. I took the sixth grade before the fifth and the eighth before the seventh. The idea was to get more than one person in the same class at the same time and thus reduce the load on the teacher.

Much of the social life in the community was centered on school events. Pie suppers were commonly used for fund raising. School events were also held around the major holidays such as Thanksgiving and Christmas. The question of the separation of church and state had not been raised in 1900, at least not in a manner to attract local attention. Christmas school events drew heavily upon the fundamentalist Christian beliefs found in most rural Missouri communities while Thanksgiving events reinforced myths about the Pilgrims. Attendance at school events was expected of all families with children in the school as well as some families who did not have children. Carry-in meals were often part of the activities.

The school was a local program for the most part in 1900. The six-member local school board had almost complete control. This local control contrasts to latter periods where the state assumed an ever-increasing role in everything from teacher certification to textbooks and subject matter taught.

Churches

Most rural neighborhoods contained at least one small open country church. An exception was the Germanic areas, where the churches were more likely to be located in the nearby town. In the Ozarks, the churches were often small sect-type independent or Southern Baptist. In the agricultural areas of the state, denominational churches such as Methodist were more commonly found. Almost all of the open-country churches had small memberships and most lacked the services of a full time minister. A lay deacon would lead the services when a preacher was not available. In many churches, the preacher was on a four church circuit so that each church had his services once a month. Nevertheless, the churches played an important role in providing a frequent place for members of the community to come together, second

only to the schools in most communities. Many had graveyards associated with them. The maintenance of the graveyard was a task that many community members participated in regardless of whether they attended the church on a regular basis. Holiday services such as at Christmas and Easter attracted the entire community.

Regardless of their denomination, most Protestant churches had a fundamentalist theology with narrow and rigidly defined limits.

We believe that the Bible clearly teaches that the modern dance; card parties and card playing, either for amusement or for wager or prize; theatre going; fornication; adultery (sic); stealing; lying, perjury; the use, sale, and manufacture of alcoholic spirits as beverage; betting; covetness; neglect of the worship of the house of the Lord; and all other disorderly conduct are hurtful and pernicious, both in themselves and in their consequences...¹³

Revivals

Late July or early August was the favorite time for revivals. Crops had been "laid by"¹⁴, the hay "put up"¹⁵ and there was a lull in the farming seasons. Revivals ranged from one to three weeks in length. They were a favorite way for the fundamentalist Protestant churches to recruit new members and reinforce any wavering older members. The revivals in the early 1900's would include day and evening services, but by mid-century they had been reduced to only evening services. The first revivals were held in brush arbors¹⁶ and more recent ones in tents using bailed straw as seating. The sermons were on "hellfire and damnation" topics. The services included a considerable amount of participation from the audience. Shouting and singing were encouraged. In several denominations, "speaking in tongues" and "possessions"¹⁷ were frequent parts of the services. Every service concluded with an invitation for people to come to the front of the arbor and "confess their sins and find Jesus."

Revivals were a religious activity, but they were also a social activity. There was a saying that more souls were made during revivals than were saved. It was a time of courtship, of socializing, and in many revivals, partaking of homemade "white lightning" or store-bought whiskey. Before and after the services, the men would group together and discuss crops and other farming related subjects while the women gathered and discussed children, canning and other household topics. At this and most public gatherings, the social groups were segregated

13. Gilmore, *op.cit.* p. 16.

14. Laid by refers to the crops which have been cultivated and need no additional care before harvest in the fall.

15. This refers to putting hay in the second story of a barn.

16. A brush arbor was made with a pole framework and covered with newly cut brush with the leaves intact. A brush arbor will serve as shade, but is not waterproof from rains. However, this season does not usually have much rain in Missouri.

17. A person might be "visited by the holy spirit," during which they might convulse and/or faint..

by sex, males together and females together; only the minister made any attempt to visit in both groups.

Local Government

Many people viewed local governments with considerable ambivalence. Local governments functioned at two levels in most counties at the turn of the century: the township and county levels. If a county had township governments, they functioned with the oversight of the county governments. Township offices were always part-time positions with minimal pay. Some, such as the road board, had no pay at all. Generally, the road board members improved the road to their own places, and the road board positions were rotated around the community so that eventually everyone's road was improved.

The community often gave the other positions on the basis of need. A widow was seen as an appropriate office holder either at the township or county level. The office of County Clerk was often given by vote to a widow. The Sheriff had to be a male, as did the county judges (now called county commissioners). The other county office holders were predominantly male. The Sheriff's position was seen as one of the more powerful and prestigious. The Sheriff was elected almost entirely on the basis of popularity. He would show up at most gatherings in the community to shake hands and talk.

While there were always some "loafers" around the County Court House, it was seen as a place where one went to conduct business and leave. It was not a place for socializing with your friends and neighbors. The judicial system was an area of its own. The judges were usually some of the most respected members of the community. Any person not associated with the judicial system who was seen in the courtroom was assumed to be in trouble or associated with someone who was in trouble. "Good" people had no business in the courtroom.

Local Politics

Local politics at the turn of the century was a low-key affair with most of the campaigning done in person. Candidates for office would attend every public event available including fairs, auctions, and sporting events. At such events, candidates would work the crowds— shaking hands, handing out lapel pins and brochures and talking to anyone who would listen. During the campaign, the candidates would travel as a group from one community to the next. In each community, a free meal would be served to attract people to hear stump¹⁸ speeches from each candidate.

This is not meant to suggest that politics were not taken seriously. They were. This was the era when titles like "yellow dog Democrat" and "moss backed Republican" were used. A yellow dog Democrat was one who would vote democratic even if the candidate were a yellow dog. A

18. The term "stump speech" is based on the use of a tree stump for a speaking platform.

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moss backed Republican is one who was so conservative that they would never change regardless of the issue.

On Election Day, the political parties and major candidates would often have a representative at each polling place. The representative would hand out cigars, drinks of whiskey, and it was rumored that on occasion money would be exchanged for the appropriate vote.

My parents always split their votes. My mother characterized my father as a “yellow dog Democrat” and father expressed similar a similar opinion of my mother’s Republican tendencies. They always voted, but said they were going to cancel each other’s votes.

Farm Auctions

The leases on farms were always oral agreements that by tradition ended at the end of January or February. As a result, auctions of farm and household goods were most commonly held in February¹⁹. Not much occurs in February in farming except the chores of livestock care. Farm auctions were very popular events, with the entire neighborhood attending. The men would gather fifteen to thirty minutes before the auction, standing around a flat-bedded hay wagon upon which the small tools and supplies of the farm had been placed for display and sales. The auction would start with these small items after the auctioneer had made some complimentary comments about the farmer whose goods he was selling. Often an auction was an estate

19. Auctions were considered the most appropriate way to sell livestock and farming equipment at the time of retirement or to settle an estate.

sale after a person had died. In such cases household goods, including furniture, would be sold.



Farm Auction, Pettis County ²⁰

The auctioneer was a local man who was a respected part of the community. He was expected to know everyone by name and to make small comments, often humorous, about various members of the crowd.

The auctions would take most of a day, with the cattle, horses and other large items selling last. The auctioneer was the agent of the seller and would be paid a small percentage of the money from the sale. "By bidding"²¹, reserves²² and running up the price of items²³ were frowned upon by the community. An auctioneer could quickly ruin his reputation by allowing such

20. November 24, 2001, http://memory.loc.gov/cgi-bin/query/l?fsaall:1:./temp/~ammem_f53v::display-Type=1:m856sd=fsa:m856sf=8a12807:@@@

21. Sometimes groups of people who were all interested in the same thing would agree that only one person would bid on the item and thus get it cheaper. After the auction, they would get together and decide who was to get the item. Another frowned upon maneuver was for the auctioneer to fake a bid and run up the price on a legitimate bidder. An auctioneer would be accused of getting bids out of the trees or from birds. This might be done during the auction by making a comment loud enough for the auctioneer to hear "that the birds are really flying today". This was meant as a warning to the auctioneer.

22. A minimum price for an item is set before the auction. The bidders do not know what the minimum price is.

23. Running the price is when a person bids on an item, but has no intention of buying this item. This is a somewhat dangerous practice since the person running an item up may unintentionally buy the item.

activities to occur.²⁴ The most important characteristic for an auctioneer to have was honesty. If an auctioneer earned a reputation for “fooling around”, his business quickly declined.

Although farmers bought many farming tools, implements and animals, that was not the only reason for attending. Farm auctions were one of the primary places where farming news was exchanged. The women would gather in the house, where the discussions were directed toward children, cooking, and similar subjects. Lunch would be served at nominal prices by a local women’s club, with the proceeds to go toward some charitable cause in the community. Usually the makers would donate the items served.

24. *The auctioneers at this time were always males. This is still generally true for auctioneers in rural communities.*

Chapter 5

Farms in 1900

*How thankful we farmers ought to be that we live in the country instead of the noisy busy dusty city...I pity the poor little children that are shut up in the city...*¹

The late 19th and early 20th centuries represented the golden era of small farms. There were major economic challenges at several points, such as the national recession of the mid 1890s. Farm families were not completely isolated from the woes of the larger economy, but a farm family could always grow enough food to feed themselves.

There were economic ups as well as downs. Farmers received the highest prices in modern history between 1910 and 1918, compared to what they had to pay for supplies. World War I had started in Europe and American food supplies were badly needed.

The Farm

Most farms in 1900 were small, isolated, and largely self-sufficient. Farms were usually less than 240 acres. The families provided virtually all of the labor. Hired workers were unusual except during harvest. Most of the hired workers were older boys from neighboring families. Farm management was traditionally handed down from one generation to the next, always to males.

Crops were varied. A typical farm would grow corn, wheat, barley, oats, and hay. The grains would be used to feed the livestock. Farms generally had five to ten milking cows, a few sheep,

1. Quoted in Gilmore, *op.cit.*, p. 13.

three to seven horses and mules, a large flock of chickens for eggs and meat, and sometimes a few turkeys, ducks, geese or guinea fowl.



Woman with Cow—Southeast Missouri ²

In 1900, mechanization was just starting to impact the farm. My grandparents would tell stories about cutting grain with hand cradles (a cradle is a scythe with a frame to catch the grain as it was cut). This had ended by the last two decades of the 19th century. Cutting grain with a hand scythe³ was a physically demanding task, and horse powered mowers, rakes, and binders were widely available, along with threshing machines.

The yields of most crops were low. Corn harvest yields were generally 15 to 40 bushels per acre, while wheat yields were 10 to 25 bushels per acre. Farming was fraught with the dangers of crop failures from any one of several causes. Indeed, there were more years when the crops had damage than not. Soil erosion was high, with many fields having ravines cutting through the cropland. Major crop damage from infestations of insects such as armyworms, chinch bugs, and grasshoppers was frequent. There were no insecticides in 1900. One of my tasks when I was young was to ride one of the workhorses back and forth at the end of the field, dragging a log. The goal was to make a dust barrier between fields that crawling bugs would not cross. It was an act of desperation, since the bugs had already badly damaged one field

2. November 24, 2001 http://memory.loc.gov/cgi-bin/query/D?fsaall:31:./temp/~ammem_XGkU:

3. A scythe has a long curved wooden handle with a thirty-inch heavy steel blade perpendicular to the handle. It requires both hands to swing the scythe.

and were headed for another. In addition, droughts severe enough to reduce yields occurred more or less frequently, depending upon the soil type and topology. Hail, windstorms, and floods were other dangers for crops. Hailstorms were one of the most feared natural occurrences. In just a few minutes an entire year's work could be destroyed.

The Farmstead

Most farmsteads consisted of a cluster of buildings surrounded by fenced lots for livestock. The house was in front, nearest the road, with the barns and other buildings behind it. Houses varied widely in style, size, and maintenance. A square, two-story, white or red brick box was common in areas with a Germanic heritage⁴. In areas of English heritage, houses were generally smaller, built in a "T" shape with the top of the "T" facing the road. They usually had two stories on the front and one story on the back. Newer houses reflected the styles popular in cities.

The farmhouses and barns were surrounded by smaller buildings—outhouse⁵, chicken house, hog house, smoke house, and granaries. Beyond these were large fenced gardens and small pastures. Machinery such as plows, cultivators, mowers and wagons were often parked outside along the fences.

There were many variations in styles and layouts of buildings across the state and even within a neighborhood. The size of buildings and the quality of maintenance were important status symbols in the social hierarchy of the community. Neat, clean, and well maintained were words of praise. Weedy and trashy were conditions to be avoided.

The standard of "good" farmstead keeping was that all buildings should be painted and the weeds kept down around the buildings. The traditional colors were white for the house and red for the barn, although some barns were painted white. Since "good fences make good neighbors", maintaining fences was also an important part of a good farmstead. Manure from the livestock was thrown out of the barn during the winter, but it was expected that as soon as the weather warmed up enough to thaw the manure pile, it should be spread on the fields as fertilizer for the coming crops. A huge manure pile was considered a sign of lazy management.

Trees near the house were considered to be very important to provide summer shade. Most commonly, these were elms and soft maples that provided large amounts of shade. Most yards had some grass, and by today's standards it was tall. Manicured acres of lawns did not exist in the 1900s. Playing children wore paths around buildings and swings⁶. Chickens and other poultry were given free range and helped to keep the yards clear of insects and certain plants.

4. *Houses of this period were loosely built. The wall construction often consisted of clapboards on the outside without any sheathing underneath and lath and plaster on the inside. As a result, most houses were cold and drafty in the winter and hot in the summer.*

5. *The size, shape, and condition of the outhouse were a matter of some pride. They typically came in two sizes—a "one-hole" and a "two-hole". The normal toilet paper was an out-of-date Sears or Wards mail order catalog.*

A Revolution in the Heartland

The only lawn mowers available at the time were the push variety that didn't work very well, especially in tall grass. Generally farmers cut the yard once or twice a year with the field mower.

The proverbial "quiet of the country" was not quiet, at least in 1900. Barking dogs, or sometimes calling birds, met strangers. Guineas with their loud calls were thought to serve as good "watchdogs." My parents had three geese that were much better watchdogs than the family dog. Not only would the three geese sound off loudly if anyone came to the farm, they would charge at strangers, and sometimes us, flapping their wings wildly. A blow from their wings on my shins was like being hit sharply with a stick. They could bite, too. They don't have teeth, but their jaws were strong and their bills would pinch. If you got pinched on the leg, it would be black and blue for days. My impression was that they regarded the farm as theirs and saw humans as the intruders. In any case, when the noise of the dogs, geese, and guinea was combined with the mooing cattle, squealing hogs, crowing roosters, cackling hens, and the sounds of whatever other animals the farmstead might include, the typical farmstead produced a medley of sounds that could be heard from a considerable distance. However, there were no roaring tractors, trucks or other machines.



Well-to-Do North Missouri Farmstead ⁷

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6. *Two ropes hung from a tree limb and a wooden seat was all that were necessary for a swing for children. Many porches had two-seat wooden swings for adults.*

The Barn

A big barn was an important status symbol. It was not uncommon to see a large well-kept barn and a small poorly maintained house. The barn was considered to be the male domain on the farm. Barns were normally two stories high. The ground level would have pens for various animals, bins for feed and small grains and, in some of the larger barns, rooms for the storage and repair of harnesses. With the exception of the grain bins, the barn did not have wood or concrete floors. During the winter months, animals were kept inside, especially at night.

The top floor of the barn was for loose hay storage. The hay was brought from the fields on wagons, pitched from the wagon to the door of the hayloft and then carried a fork full at a time to the desired place and tramped down to allow maximum capacity. The nicer barns had a mechanical hay handling system by which the hay was picked up from the wagon parked outside and carried along a track mounted in the top center of the building. A person working inside could dump the hay at any point along the center track in the hayloft. A horse walking outside the barn supplied the power. During the winter, the hay was carried to a hole in the floor and thrown below, where it was used as feed.

Rats and mice were always problems in the barn. Almost every barn had a family of cats for pest control. The cats were fed milk from the cows as a supplement to their meat diet. Occasionally a skunk would invade the barn, but usually the presence of dogs discouraged such animals. When a dog did get into a fight with a skunk, both ended up losers. If the dog could fight through the smell from the skunk, it would kill the skunk. More commonly the scent from the skunk drove the dog off and the dog was left with a very bad odor that required a bath or at least a long swim in the creek.

Field Equipment

All field equipment of the era was made for horses. On small farms, the teams were usually two or three horses. Two horses could pull a wagon, a hay rake, a mower, or a single 12" plow. Plowing a field of any size with a single twelve-inch plow took many, many rounds around the field. If the driver was skilled, a twelve-inch plow might cut ten-inches of unplowed ground per round. The plows went about six inches deep. Plowing was a major task, thought of in terms of days or weeks to finish. Before my father bought the first tractor in 1937, I was too young to do much plowing with horses. One time my father was plowing with a single walking plow pulled by two horses. He asked me to do it while he rested. I had to guide horses and hold the plow in the right position to go into the ground. I thought I had got a hold of a dragon. I couldn't control it. The field was rocky and when the plow hit a rock, I was thrown to one side like a twig. Never again did I volunteer to try that.

7. November 24, 2001 http://memory.loc.gov/cgi-bin/query/l?fsaall:1:./temp/~ammem_9juH::display-Type=1:m856sd=fsa:m856sf=8c28161:@@fsaal

Steam engines were used to power threshing machines⁸, but very few farms had them. The fields were too small to allow their use to pull equipment. The steam engines normally had only one forward gear and no reverse gear. This allowed the engine to travel about two miles per hour. The lack of gearing made driving the machines an interesting challenge. The machines were large and slow. A movement of any distance took many hours and would require water and fuel every few hours. Because of the limited mobility, there usually was one steam engine somewhere within a ten to twenty mile radius that was used to power the threshing machine.

Horses and Mules

Operating an average sized farm took several draft⁹ animals, often five or more. These were very large animals that could weigh over a ton. A significant portion of the farmer's time and land was spent raising food for these animals.¹⁰

Draft horses were not suited for either horseback riding or to serve as buggy horses. Riding and buggy horses were smaller and faster. Riding a Percheon or a Clydesdale is similar to trying to straddle something the width of a sofa. Most saddles would not fit, so that meant riding bare back and suffering sore legs the next day.

There was an ongoing argument between the owners of mules and horses. The mule is a hybrid animal, the result of mating a jack (an adult male donkey) with a mare (a female horse). Mules were stronger and smarter than horses. It took less feed to keep them in good condition. If they got into unguarded feed, as they were prone to do, they would eat until they were satisfied and then stop. Horses did not know when to stop eating. They would eat until they become unable to eat more and could die from overeating. The only drawback to having mules was their unpredictable temperament—if it got too hot for them to work, they might quit. They could kick a man without any reason. Walking behind a mule was not a good idea. Their kick was strong enough to break a person's leg.¹¹

The Garden and Orchard

The majority of the family's food came from the garden and orchard. The potato patch was always large. Other major foods included green beans, cabbage, sweet corn, green peas and tomatoes. Minor crops included other types of beans, squash, pumpkins, watermelons, popcorn, and lettuce of various types.

8. *Threshing machines were used to separate the grain from the straw. Today, combines do the same thing, but as the name suggests, a combine both cuts and threshes in one operation.*

9. *Draft horses were larger and stronger than horses used for riding or pulling buggies. The famous Clydesdale teams used as parade horses today by Budweiser Brewery are excellent examples of draft animals.*

10. *Horses do best with special feed. Timothy hay and oats were considered to be good horse feed.*

11. *July 3, 2001, <http://198.209.8.166/wrvq/V2/n9/f66g.html>*

Most farmsteads had a small orchard with a few apple, pear, or peach trees. Apples were used for applesauce and canned apple slices. Strawberry and raspberry patches were common on most farms. Wild blackberries and huckleberries were common in the southern part of Missouri. Strawberry, blackberry, and peach preserves were very popular. Black walnut and pecan trees were often planted along fencerows.

The seeds for the garden and orchard were kept in pocket tobacco tins because they were mouse and insect proof. The garden was a place where both men and women worked, although the harvesting was largely a woman's job. All cultivation except the initial plowing was done by hand with a hoe.

Most things were planted in large amounts, for canning and preserving in quart and one-half gallon glass jars. The canning of products from the garden was a major task.¹² The crops had to be picked, processed and canned all in one day. Depending upon family size and amount of products, fifty to one hundred quart or half gallon glass jars of each item had to be filled and processed. This meant that the canner had to be kept in continuous use, often well into the night. All of this was done in a kitchen without any cooling and with a hot wood stove burning. Some items required additional processing, such as fermenting cabbage to create sauerkraut. Apples and pears were wrapped individually in old newspapers (the pages from the Sears or Wards catalog worked well) for future use. If apples or other fruit were stored touching each other, a rotten fruit would cause the other fruit to spoil more quickly. Fruits and canned goods were stored in the root cellar if there was one.¹³

The orchard was largely a man's domain. Insect control both in the garden and in the orchard was limited to a very few chemicals like nicotine and copper sulfate. Children were sometimes assigned the task of picking worms off of various plants. Drought was a constant worry since few farms had water available for irrigation. Wastewater from the house was often taken to the garden for minor irrigation. Adequate rainfall was essential for a good garden and a good garden was essential if the family was to have adequate food.

12. *If you didn't know how to can, there were instructions available from the state: "How to Can Fruits and Vegetables on the Farm", pp. 50–62, Monthly Bulletin, Vol. VII, No. 3, March, 1909, State Board of Agriculture, Columbia, Missouri. There were similar instructions for the novices for most other aspects of house-keeping.*

13. *A root cellar was a "building" dug into the ground so that only the rounded top was visible. These were usually five or six feet deep. They were used for storm shelters in the event of a tornado, as well as being storage spaces.*

Chapter 6

Families and Homes in 1900

Rural culture in 1900 was already in the process of change. The industrial revolution created new products for the home and the farm, but at the same time many beliefs and behaviors dating back hundreds of years continued to be prominent. In this chapter, some of the major cultural elements will be discussed to give a broad understanding of rural life in 1900.

The Home

Houses generally had four rooms on each floor, but most of the daily activities took place in the large kitchen. Furniture in the kitchen generally included a cast iron stove, an oak table, and chairs. The table was for both preparing food on and eating at, as well as serving as a desk when necessary. The floor of the kitchen was usually covered with linoleum, which made it easy to clean up the mud and manure that got tracked in from the barnyard. Very few houses had running water. Some houses had hand water pumps in the kitchen, but most families got their water from wells. It was carried in several times a day by the women or children, in three-gallon granite¹ buckets.

A wood-fired cooking stove generated so much heat that a few of the more affluent homes had summer kitchens in separate buildings. Most homes had kerosene stoves that were used in the summer. A typical kerosene stove had three or four burners. A portable oven was placed over two burners for baking. The use of the wood stove was preferred because the wood fuel was free for the cutting while the kerosene had to be purchased with scarce cash money.

In winter, the kitchen stove would be the first one lit, since it could be used for both heating and cooking. The heating stoves would be only used as needed.

The living room usually contained a sofa, at least two occasional chairs, and lamp tables. The sofa was usually upholstered in what was referred to as horsehair upholstery. This was a fabric with a short, stiff, almost bristly nap that was uncomfortable to sit on for any length of time.

1. *Granite is a porcelain coating that is used to cover thin metal containers such as pots, pans, and buckets. Such containers can be damaged easily, but they have the advantage of not rusting.*

A Revolution in the Heartland

Improved building techniques had made rocking chairs popular. Chairs with cane-woven seats and backs were also popular. The floor in the living room, as in the kitchen, was likely to be linoleum.

Larger homes had parlors, which were used mostly for special occasions, such as on Sunday when the preacher came for the noon meal. The furnishings in the parlor were fancier than in the living room or other parts of the house. The sofa might be upholstered in velvet and there were often matching chairs, a larger "gent's" chair and a smaller "ladies'" chair. The lamps were nicer and the lamp stands had marble tops. Some parlors had oriental rugs, or even a pump organ. There were hand-crocheted and stiffly starched doilies on the arms, backs and tops of most furniture.

The bedrooms were strictly functional in use and furnishings. The furniture usually consisted of a bed, a wardrobe, side tables, a dresser, and possibly a chest. Many of the old beds had rope "springs" that consisted of a lattice of ropes from the sides and the ends. Everything in these beds tended to sag to the middle. That made for a challenge when more than one person was sleeping in the bed. Newer, factory-made beds had wooden slats, wire springs and a four-to five-inch-thick cotton mattress. The springs were prone to squeaking, so that sleeping could be noisy. Houses at that time did not have closets, so the wardrobe was used to store clothes. Chests were also widely used for storage, but the average rural person only had a few changes of clothing and limited personal possessions, so the need for storage was limited.

The bedrooms were almost always unheated. A rich home was one that had enough feather beds that everyone had two feather beds each and a person could sleep between the two beds. I slept in warm comfort in below zero temperatures with two feather beds plus a wool comforter or two. Males slept in work shirts, socks, and long underwear in the winter. Women used a flannel gown and socks.

Furniture was almost always passed down through generations, but families were generally large, which meant that each generation needed to get some new furniture. By 1900, factory-made furniture, especially the modestly-priced type from Grand Rapids, Michigan, had replaced the local hand-made solid walnut and cherry furniture of previous generations.

Much of this new furniture was poorly made. For example, the drawers on cabinets had no center guides or dust separators between drawers, as drawers would have today. This meant that the drawers did not slide well. I remember that it took two hands to open and close the drawers on most such pieces. I needed to push equally on each side for the drawer to close and then lift a little bit at the end for the drawer to close tightly. The drawers were not often fully closed.

Lighting at the turn of the century was done mostly by kerosene lamps that could be carried from place to place as needed. A kerosene lamp was probably the equivalent to a five to ten watt electric bulb. A person could read by a kerosene lamp if it was close to the reading mate-

rial. "Aladdin" lamps were available in the homes of the more affluent. These were more equivalent to 100-watt bulbs, but the mantels of Aladdin lamps were very fragile and would break if the lamp was not handled very carefully. Mantels were expensive, comparable to thirty or forty dollars today, so a broken mantel was a significant loss. Candles were seldom used, except in poor homes where families made their own candles from beef tallow.

Reading by lamplight will create a need for glasses, but reading by the light from a lamp has some disadvantages besides the dimness. Lamps produce heat that is very noticeable, especially in the summer. They also attract insects.

Since electricity had not yet reached most rural communities by 1900, there were no refrigerators. Iceboxes were kept in most homes. An icebox was shaped like a small refrigerator with a chamber for ice on the top and a food chamber on the bottom. Milk, butter or meat could be kept for a few days if a good supply of ice was in the top; but they were only moderately effective for regulating temperatures. The wooden walls of the iceboxes were filled with sawdust as insulation, but it was not very effective. The ice would only last a few days in hot weather. The melting ice drained into a container that had to be emptied often. Ice was delivered on a weekly basis. The ice company gave each customer a window card with four different numbers: 50, 100, 150 and 200 lbs. These were made so that only one number was upright at a time and this was the amount of ice that was delivered and placed in the icebox. At least that was the amount that had started out at the ice plant. Often by the time the ice reached the home, a quarter or more had melted. A customer paid for the amount that started from the plant, not what was delivered.

In most homes without an icebox, some items such as butter and fresh meats would be kept in a springhouse or in a bucket lowered into the well. The temperature in those locations was about 59 degrees, much cooler than the 100+ degrees often found aboveground in mid summer. However, this meant that only a few things could be kept without spoilage and only for a few days.

Household Wastes

Very little was not used or reused on the typical farm. Food scraps were placed in a slop bucket kept at the house and then used as part of the hog feed. Paper was used for starting fires in the stoves, as were corncobs and small pieces of wood. Tin cans such as coffee cans were often used for storage purposes to hold nails, bolts, and other small items. Worn out garments were recycled in a variety of ways, most often either as patches in other garments or as pieces of a quilt. If no other use could be found for material, it would be used for rags in the machine shop or kitchen.

Piles of scrap lumber and iron were kept for use as needed. Used wire, fence posts and anything else that might be of use in the future were kept. Even used nails and screws of various types were sorted and placed in cans for reuse.

The Farm Family

When a young couple married, parents provided the basics for the start of the couple's family farm. In one family, this included a team of horses, a wagon, a milk cow, a sow, 25 laying hens, and a rooster. These basic resources allowed the new family to establish an income base while it became self-sufficient. The steps up the ladder of success included rental of land on which to farm. Savings from the sale of produce allowed for expansion of production resources. Through time the family would be able to save a down payment for the purchase of a small parcel of land. In addition to providing for current family needs, the ultimate aim of family farmers was to utilize savings to build equity in their land and eventually become debt free. The total accumulation resulted in building a retirement nest egg as well as providing a start for the new families of each child as they married.

Family Type

The male was head of the household. The female assumed the male's surname at marriage and they set up housekeeping at a new location. The parents of both bride and bridegroom would help by giving furniture, farm equipment, and animals to the young couple. Baby and youth clothing and equipment was shared with relatives and friends.

Most couples were from the immediate neighborhood and often the bride and groom had known each other since childhood. It was not unusual for a substantial portion of the neighborhood to be kin either by blood or by marriage. Many of the families never moved from the house in which they started their marriage. A young couple might start by renting a farm and then gradually become owners. Children in the community were often identified in relation to their parents, grandparents, or other relatives, as in, "This is Max, George and Marjorie's second child."

The family was generally nuclear, consisting of the two biological parents and their children, although one of the grandparents might reside with the primary family. Marriages were for life and divorce was a disgrace for the entire extended family. The age of marriage was relatively old, with the men normally in their mid to late 20s and women about five years younger. A young couple did not seriously consider marriage until the male was well enough established in a job to support a family.

Since birth control was virtually unknown at the time, it was expected that children would be produced shortly after marriage. A pregnant bride was not uncommon, but the marriage usually occurred before it became obvious that she was "in a family way".

Spouse abuse and child abuse were probably both relatively common, but these were labels that for the most part had not yet come into public use. The beating of women was privately frowned upon, but no public action was taken. Child abuse would have to have been very

severe before any public action was taken. Both were considered private behavior and not the responsibility of others.

Divorce or even talking about one was a serious matter. I had an aunt who told her husband of more than 25 years that she wanted a divorce. He shot and killed her and himself. These actions were so outrageous that the community shunned the husband's close kin for a time.

Most farm families retired to a house in the nearest town when they could no longer farm. There was no formal age for retirement; it was based upon the health of the couple, particularly the man. The rent from the farm would be the retirement income. The oldest male child would assume the operation of the farm, but he also assumed an obligation to pay his siblings a fair share for their part of the farm. In most cases, inheritance was shared equally among all children, although it was not unknown for male children to be given a larger inheritance.

Gender Roles

The settlers to rural Missouri brought with them the traditional western European family organization. The gender role differentiation in 1900 was very clear. The men were the primary decision-makers and had responsibility for most things outside the house. While the women usually had primary roles in what was planted in the garden, the men would often participate in preparing the soil, planting, and insect control. The man was responsible for the field crops and the larger animals. The woman was responsible for food preparation, child rearing, and housekeeping.

If a man appeared not to make the decisions, it was said that he was henpecked or that the woman wore the pants in his family. The man was responsible for all fiscal affairs. The woman was given a certain amount of money each week or month for groceries and other necessities.

Women at this time could not vote and very few were employed outside the home. If a woman was employed outside the home, it was probably as a schoolteacher, a nurse, a store clerk, a household domestic worker, or, in a few cases, a worker in one of the new shoe or mill factories that were being established in some small towns.

Family Size

Families in 1900 were large, especially in rural communities. Urban families averaged about two children fewer than rural families. The average rural family had six children. Ten to twelve children were not unusual. Children provided low cost labor on farms.

Fertility control was not practiced in rural communities to any large extent. Abstinence was the only known method of family planning at this time. It was not uncommon for a woman to have a child every two to three years after marriage. Nursing a child suppresses ovulation, so if a woman continued to nurse a child for two or three years, it would affect child spacing.

My mother had an older sister with whom she was close. They both got married at about the same time, both had four children—one every two years. There was a pause in the reproduction and then they each had another child—me, in my mother's case. This family size and spacing may have been by chance, but I have always thought it was too much of a coincidence to be unplanned.

While infant mortality was relatively high in 1900, it had started to decline. Improved nutrition and sanitation were beginning to have an impact. However, it was not until antibiotics were discovered after World War II and vaccinations against childhood diseases were widely available that infant mortality dropped sharply. Much the same was true for maternal mortality. Bearing children in 1900 was a significant health hazard.

Morality

The morality of rural communities was narrow and rigid. Every person was expected to be honest, hard working, God fearing, monogamous for life, willing to help neighbors as needed, and not to gamble or drink. Shunning and gossip were methods of social control. If a person did something considered to be wrong, the information would quickly spread throughout the community. If the matter was serious enough, shunning would result. Murder, excessive drinking, or stealing would quickly result in shunning.

While many rural communities had no minorities, schools, housing, public restrooms, and water fountains were rigidly segregated in those communities that had minority residents. I can remember seeing the signs for the colored and white restrooms in the Carthage courthouse.

Sex, including sexual orientation, was not a topic of discussion. The schools had no sex education. Human biology might be taught in high school, but this would be a very quick coverage of the topic. Most children learned about sex from watching farm animals. Homosexuals would be whispered about, and shunned if it became public knowledge. Adultery was part of the local gossip and if it reached widespread public attention, shunning would ensue.

Clothing

By 1900, commercial cloth was available at affordable prices from mail order outlets such as Sears and Montgomery Wards. Very few homes continued to weave their own cloth. The few that did were most likely to make bedspreads and other large pieces. Every woman was expected to know how to sew and to knit. Most homes had treadle (foot-powered) sewing machines. These were used primarily to make women's and children's clothes and men's shirts. Women would knit wool sweaters, mittens and socks. Winter coats, men's suits and most men's work clothing were purchased.

The women usually wore long homemade dresses with homemade slips. Drawers or bloomers were also homemade. The brassiere was invented in the late 19th century and had not been adopted by rural women in 1900. Men wore commercially made long underwear, especially in the winter. In the summer men frequently wore no undergarments. A shirt, overalls, shoes, and socks were sufficient.

Clothing colors were muted. The common fabrics were made from homespun flax (linen) or wool. These were often used in their natural colors. Better and cheaper dyes became more available in the later part of the nineteenth century. Most men's suits were black and women's clothing was often dark. Bright colors such as red were considered to be somewhat immoral. This was reflected in the use of cosmetics by women. Rice powder and perhaps very light rouge on the cheeks were the usual cosmetics. Bright makeup was considered to be used only by "fallen" women.

One suit for a man was expected to last at least a decade, if not a lifetime. Women's dresses would last many years. Children wore clothes until they outgrew them, and then frequently passed them down to younger siblings or relatives.

All clothing was patched and repaired numerous times. Patched clothing was considered to be ok to wear as long as it was clean. Dirty clothing met with strong disapproval. Buttons from old clothing were saved and reused. Most homes would have a box or jar of used buttons to be used as replacements or for new garments. All closings and fastenings were by buttons. The zipper was not invented until 1891 and it was well into the 20th century before it became common in rural homes. Snaps and elastic were not available in rural homes.

Shoes were commercially made, but they would be repaired at home. Men usually had a pair of low-cut dress shoes as well as high-cut work shoes. Children, if they had shoes, would have work shoes. Most homes had a leather-sewing tool and a steel shoe last to hold shoes while repairing them. Replacement heels and soles were available and could be cut to fit.

I and most other people under the age of about 15 wore no shoes in the summer, including for going to church or to town. It would take several days for my feet to toughen up in the spring so that I could step on a rock without flinching. For good reasons, my mother insisted that I wash my feet every night before going to bed.

Home Remedies for Health

Going to a physician in 1900 would not help with most illnesses, so people tried other treatments. Patent medicines were widely available and used. There were no restrictions on what patent medicines contained, nor were there any restrictions on what they promised to "cure". Some promised to cure everything from cancer to the common cold. Many contained opium or cocaine; others contained large percentages of alcohol. Many people who would not touch alcohol as a drink regularly used patent medicines as "tonics". People purchased a wide variety

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of patent medicines from local druggists and through mail-order catalogs. They were generally ineffective for curing anything, but they might make the person feel better.

The range of home remedies in 1900 was truly remarkable.² This was a time when measles, mumps, chicken pox, whooping cough and pink eye were common childhood diseases, not to mention colds and influenza. Even though I came along several decades later, I still had all of these illnesses in childhood.

Every family had a unique collection of home remedies. The following is just a small sample.

- Coal oil (kerosene) was used as an ingredient for several treatments, for example coal oil and sugar were mixed together as a medicine for sore throats. It was also used as a disinfectant for open wounds.
- A cud of chewing tobacco was thought to be effective treatment for bee stings. In my home, a wad of mud was applied to a bee sting.
- It was believed that rheumatism would be relieved if you carried a buckeye in your pocket. The buckeye was also thought to bring good luck to the carrier.
- Mixing and drinking of equal parts of honey, lemon juice and whiskey would help influenza. If the person drank very much of this, they were likely to forget the influenza.
- Vicks Vapor-Rub was very popular in the first part of the century for the treatment of sore throats and colds. A thick application would be rubbed on the throat and then covered with a flannel strip. For colds, the Vicks was applied to the chest and covered with a piece of flannel.

Beliefs and Superstitions

The typical rural Missourian in 1900 had strong fundamentalist religious beliefs about God and the hereafter, but often they had other less formal beliefs that influenced their daily behavior. Since it would take more than one book to discuss all such beliefs, a few of the major ones have been selected as illustrations.

Water Witching (Dowsing)

One of the most enduring beliefs is a centuries old belief in the merits of water witching. The original belief has been traced back to Eastern Europe where it was used to find precious metals. In the eastern U.S. it was thought to be effective in finding coal. Here in the Midwest, water became the target. The process was simple; a dowser took a y-shaped branch, often willow

2. Betty Hams, *Missouri's Early Home Remedies*, Quixote Press, Cedar Rapids, Iowa, 1992

since the willow was said to love water, perhaps 18 inches long, and walked slowly over the area to be checked. If water was found, the branches would twist downward in the man's hands. Some dowsers would predict how deep the vein of water was and how much would be found. Relatively few water wells were dug in 1900 without dowsers. Finding adequate water in much of Missouri was very chancy, so if dowsing would increase the odds, it was used. Almost every community had someone who practiced dowsing or at least knew of someone who did.

Signs of the Moon

Less prevalent than the belief in water witching, but still strongly held by many, was the belief in the importance of moon signs. If the moon was in first quarter, it was appropriate to start plants that had their seeds on the outside. The second quarter was best for plants that had seeds within the pod and the third quarter was best for root crops. There were similar beliefs for the care of animals such as the best time to castrate and dehorn livestock. If done according to the correct signs of the moon, animals were thought to bleed less and have a smaller probability of infections.

Predicting Weather

Woolly worms were carefully watched in late summer for signs of the coming winter. If most of the worms were colored a dark brown, the winter would be bad. They had had heavy coats or were seen before the first frost, the winter would be colder than usual.

Some other weather indicators:

- If hogs ran around with sticks in their mouths, a storm was coming.
- If the squirrels' tails were bushier than usual, the winter was going to be colder
- If domestic animals such as cows, horses and dogs had a heavier and earlier winter coat of hair, the winter would be bad.
- If frogs were calling, it was going to rain.
- When the "rain crow" called, the rain was over.
- If corn (pre-hybrid) ears hung down, the winter would be bad.
- If the sun shone while it was raining, it would rain the next day at the same time.

Chapter 7

Important Social Events in 1900

Courtship

Romantic love was alive and well in 1900. Parents and other adults often tried to take roles in match making, but the choices were limited because of the isolation in rural communities. A young man or woman often found that the number of potential mates was very limited. Eligibles were further limited by the prohibition against marrying first cousins. This was a time when magazines and books were filled with stories of romantic love, but love at first sight seldom occurred in reality. Most people had known each other since childhood. Courtships could continue for several years. In all cases, the male was expected to take the lead in the courtship. A girl never asked a boy for a date. She could only make her interest known informally. While the parents' opinion of a prospective mate was taken seriously, most often they were not the major factor in whether the marriage would occur.

Courtship often involved going to school or church events. A "date" might not be much more than a few minutes of walking and talking before or after the event. If you went "calling" on a girl, you might sit on the front porch and talk or take a walk down the country road. For most social events, the couples were chaperoned.

Bars (usually called saloons or beer joints) were not considered appropriate places for a date. Opinions on dancing varied among communities and families. Some rural churches had strong stances against dancing, while others were more tolerant. In general, dancing was not a common form of entertainment. Card playing was viewed similarly. Playing for money was definitely a sin. Playing pitch, pinochle, or bridge might be acceptable.

At a pie supper, buying the pie your sweetheart made was an important public indication of your interest. This was usually done with much teasing by the group, including running up the price of the pie. If the price of the pie were as low as fifty cents or a dollar, the girl would have been embarrassed. A high price would have been between ten and twenty dollars. It was good entertainment if a young man made a mistake and bought the pie of an older married woman. Since all of the money went to help the school or church, it was considered well spent. Since

the neighborhoods were small and everyone knew everyone else and what they did, dating was not likely to be a secret very long.

Marriage Ceremonies

Weddings of the time were relatively simple. There was no waiting period or blood tests required to get a marriage license. Often the wedding took place in the home of the bride's or groom's parents, with a minister or justice of the peace performing the ceremony. Church weddings on a weekend with a few friends and relatives were also common. The church was decorated with some cut fresh flowers from the yard and garden. Honeymoons of any length or expense were rare. In most cases, the couple was expected to start making their own living the next day or most certainly within a few days.

Shivarees

An important part of the wedding process was the shivaree. This informal event would be held on the wedding night or during the week following the wedding, usually at a late hour. The newly weds would be awakened by shotgun shots and fireworks under the window of the bedroom where they were trying to sleep. The couple would be required to come outside and do irritating or embarrassing tasks. For example, the groom might have to carry the bride for some distance in a wheelbarrow.

Births

Births were important events. This was a renewal of the generations; a sure sign that the family name and status would continue. Births were celebrated by all, especially if it was a first birth. The father was expected to give out cigars if the child was a male and candy if it was a female. If the birth was of a high order, say tenth, and especially if the family was poor, the comments of congratulation were more subdued. Private comments about the family "breeding like a bunch of rabbits" might be made. The colors of blue for male babies and pink for females were well established.

Births were expected to occur in legal marriages. Weddings in which the woman was pregnant were sometimes called "shotgun marriages." Such terms were used to indicate that the woman was publicly recognized to be pregnant. As previously noted, there was still a strong reluctance to publicly discuss anything related to sex. Pregnancy might be referred to as "being in a family way" or "starting a family". If a single woman became pregnant, there was perceived to be no choice. The prospective father had to marry her. If the male who had impregnated the woman was not known for sure, any man who had had sex with the woman was at risk of being named the father. If a male was named and unmarried, he was under great social pressure "to do the right thing" and "take responsibility". Married males were disgraced if accused of impregnating an unmarried woman. There were no effective birth control methods except

abstinence. Knowledge of ovulation was almost nonexistent. This meant that pre-marital sex was high-risk behavior.

Women often did not appear in public during the last month or two of the pregnancy and for a few weeks after childbirth. Maternity garments were very loose fitting so as to not reveal the pregnant woman's shape. Nursing a baby in public was frowned upon.

Showers

Showers were parties for the mother-to-be in which all participants gave her gifts for the coming baby. These were often held on a Sunday afternoon at the home of a friend of the mother-to-be. Showers were especially important for the first child, when the mother could expect to receive considerable amounts of infant clothing, bedding, and other essentials

Baptisms

Religious rituals varied widely from one religious group to the next. Some baptisms were done while the baby was young and was more of a christening. For the sect churches, including Southern Baptists, baptisms were more of an adult activity. I was a teenager before I was permitted to be baptized into the Southern Baptist church. These baptisms involved special ceremonies conducted on the banks of a local stream, during which the individual would be immersed in the waters of the stream. Other religious organizations, such as the Methodists, sprinkled their members with water in the conversion ceremonies.

Christenings of babies by Catholics were uncommon except in German communities. Indeed, some Protestants viewed the Catholic religion with suspicion. (Members of Jewish faith were almost nonexistent in most rural Missouri communities.) My mother, who was a good Southern Baptist, advised me not to marry a Catholic. (In her defense, I must add that my mother quickly adopted my Catholic wife into the family.)

Funerals

When a death occurred in the neighborhood, virtually all work stopped on the day of the funeral. Everyone was expected to attend the funeral. Neighbors brought in food. Often, enough was brought to last several days. If the death was unexpected and there was work to be done on the farm, friends and neighbors would quickly rally to do the necessary tasks.

The body of the deceased would lie in state in the family home. [see Wakes below] Friends and relatives of the deceased hand dug the grave the day before the funeral. The graveside services tended to be relatively short, although some ministers would have extended prayers of ten or fifteen minutes. The casket might be home made from wide boards, but commercial caskets were preferred. The services offered by funeral homes were most commonly used by

the more well-to-do people of the community. The local furniture store also sold caskets and provided other funeral services.

The funeral itself was basically a religious service, even if the deceased had not been very religious. The dress would be formal, with the men wearing suits and the women wearing dark dresses. There would be a brief description of the life of the deceased and the remainder of the services would focus on religious topics, including a sermon. Funerals are a good example of a ritual that varied across the state. A funeral in the Ozark region was more likely to have a sermon about salvation, while those in north Missouri were more likely to focus on the life of the person.

Wakes

An important part of the rites associated with death were wakes. A wake was held in the family home, where the deceased was either in a coffin or simply lay out on boards, with all of the body covered except the head. A wake was the practice of friends and family sitting up all night with the corpse. This involved discussion of the life of the deceased as well as prayers for his or her entrance into heaven. There was a belief that sometime after death the soul left the body and went to the "hereafter"; and those prayers would help speed the journey to a desirable outcome.

Wakes were disappearing by the time I was old enough to remember things. I do remember going to one when I was a small child. The body was laid out in the parlor. I remember being scared and wondering what was going to occur. I expected to see something ghost-like rise up out of the body when the soul left. I left the wake feeling relieved to have gotten out and faintly disappointed that nothing had occurred, except a lot of what I considered boring talk about the deceased.

Today, the custom has been modified into what are called visitations.

Quilting Bees

Quilting bees provided an excellent opportunity for women to discuss all of the current news and gossip.

Hand-made quilts were common in the 19th century. A quilt contains hundreds or sometimes thousands of pieces of fabric sewn together to form a picture or geometric pattern. Sewing the pieces together to make the top of the quilt is called piecing. The pieces used were often remnants of material used to make clothing for the family. The top and bottom of the quilt had to be sewn together at many points to keep the cotton batting from lumping together with wear and washings. This sewing together is what is called quilting. Normally, quilting is done in decorative patterns. Women took great pride in their quilting. Very fine quilting would have sixteen or more stitches to the inch. Quilting took considerable time. Groups of neighborhood

women came together on a regular basis to quilt. A quilt could be completed in three or four sessions of four to six hours each. A young woman would make at least one quilt for her hope chest, to be used after her marriage.

Quilting was normally done in homes, but it might be done in a church basement if one were available. The quilt was mounted on a large wooden frame that allowed quilting from two sides. As many as six women would work on a quilt at a time. As a section of the quilt was completed, it could be rolled up around the frame to give easy access to the next section. When the quilt was not being worked on, the frame could be suspended from the ceiling so that the room was accessible.

Women generally took turns piecing tops for the group to quilt. Sometimes they would make a quilt to be given to someone in the community who was a victim of a fire or a flood. One of the more popular traditions was the "friendship" quilt. Each woman would embroider a 12-inch square with a picture and her name. These would be pieced together to form a top and then quilted.

Handmade quilts were and are considered family heirlooms. Some have now passed down through numerous generations. They were also the cause of some dissention among the heirs unless the diseased had included instructions in their will. One of the ladies at the university told me of her discovery of a now cherished treasure. While attending a local auction she found a friendship quilt with her grandmother's name, great aunt's name, and aunt's name on it.

Taking Down the Stove

One event lost in the modern world, which symbolized the changing of the seasons, was taking down the stoves. As I mentioned in the last chapter, coal and wood stoves were used for cooking and heating. The heating stove was in the parlor or living room and the cooking stove in the kitchen. These took up considerable space. In the late spring both of these were moved to another building, after being cleaned and blackened to reduce rust during the summer. The commercial compound used for blackening included some type of petroleum-based material that burnt off when heated in the next use. The chore took the work of both the man and the woman. Stovepipes were about six inches in diameter and ran vertically from the stove and then horizontally to the wall. Almost invariably, taking down the stovepipes would release a considerable amount of black soot and ashes into the room. This very fine material is almost impossible to sweep up.

The women of the family were usually the first to mention the subject of the stove. Its coming down was an important, nay, vital part of the ritual of spring cleaning and the sooner done, the better. The room in which the stove stood could not be touched until it was out of the way and if the man doing the job

was clumsy enough to drop a stovepipe and shower soot about, any house-cleaning done before would have to be done over.¹

Family Reunions

The family, including the extended family, was very important in rural communities. Family members were expected to help each other as needed. There were ongoing social contacts throughout the year, but a major event was the family reunion. It was generally held on a Sunday afternoon in the summer. A carry-in dinner was served. Families often brought fried chicken, potato salads, and desserts. All food had to be prepared in the homes. It was a disgrace if someone was found to have brought a commercially prepared dish. The meal was followed by informal sports among the younger family members and conversations among the older members. Photos were almost mandatory. Usually the event would last about four hours, but it served the very important function of bonding the larger family together. Other holidays, such as Thanksgiving and Christmas, were generally celebrated with the nuclear families.

Recreation

Time and opportunity were major limitations on recreation. However, in some households, a limited number of books that had been around for years or generations were available and were read by each generation. Board games and card games would be played on holidays and Sunday afternoons. Square dances were held in some communities, but not often.

Most homes had a musical instrument or two, most commonly a fiddle. Mandolins and harmonicas were also popular. Pianos were expensive, so it was only the wealthier homes that could afford a piano. Formal musical training was rare, but children were encouraged to whistle or sing while working. People could be heard whistling and singing as they walked or as they did chores. Many of the tunes were of Irish or Scottish origin. Probably they would be categorized as bluegrass today. During church services, hymns were sung with more volume and enthusiasm than skill.

In 1900, the temperance movement was strong, especially in rural communities. Public drinking and drunkenness were universally condemned. It was one of the favorite topics for Sunday sermons. However, drinking was common, especially among young males. Indeed, more than a few homes made homebrewed wine or beer. Excessive drinking was more common in lower income households. In contrast, smoking and chewing tobacco were very widespread and generally accepted, especially among adult males. Most public places, such as courtrooms and public offices, had spittoons. Pipe smoking was one of the most common forms of tobacco use because it was cheaper than cigarettes or cigars. Smoking by women was frowned upon, although the use of snuff was sometimes seen as appropriate for women, although not in public.

1. July 3, 2001, <http://198.209.8.166/wrvq/V2/N3/sp65d.htm>

Relaxation for most people was simply time to chat with friends and relatives about farming, the family or other every day topics. Discussions of state or national affairs were rare. A glass of cold lemonade on a hot day was a real treat. The pleasures were simple.

Chapter 8

Typical Farm Life

Rural Missouri in 1900 was rigidly sexist. The roles of men and women followed the traditions brought to this hemisphere by immigrants from Europe. These traditions covered everything from clothes to jobs and decision-making. These beliefs could be supported by references in the Christian Bible, so that division by sex was viewed as "natural" and "right". The ministers, who were all male, would occasionally refer to these quotations in their sermons, which reinforced these belief systems. The division of labor was almost entirely based upon tradition, not rationality. Women were physically capable of doing most of the labor on the 1900 farm, but traditions were cultural "handcuffs" that prohibited crossing the gender lines. Both men and women's jobs on the farm were physically exhausting. The women usually worked longer hours than men. My mother usually darned socks or knit after the evening chores of washing dishes was finished.

The start of the day required getting dressed for the day's work. While the dress varied from summer to winter, there was otherwise little change day to day. During the summer, male nightwear consisted of shirts and underwear. During the winter, it usually consisted of a long-sleeved shirt, long underwear, and socks. Each morning the male pulled on blue or striped denim overalls and socks. If the day were especially cold, two pairs of overalls and overshoes would be worn. Otherwise, rubber "gum" boots that reached almost to the knee would be pulled on before leaving the house.

Most women wore handmade flannel nightgowns for sleeping. The female clothing of the time for daily wear was a dress that extended to the tops of the high button shoes. A long apron was worn over the dress. If a woman worked outside in cold weather helping the men, she could put on pants underneath the skirt. The work dresses were hand made at home from cotton printed fabrics. I never saw my mother wear pants without an overskirt until she went to work in a munitions plant that required women to wear uniforms that included pants, during World War II. Once the tradition was broken, she and most other women wore pants on occasion.

Adult Male Roles

The Daily Chores

The day began at 5:00 or 6:00 AM. After he got dressed, the man's first stop was the outhouse (toilet), and then the barn, to start the chores that consisted primarily of large animal care. Chores included milking the cows, feeding all the animals, cleaning manure from the barn, and putting fresh bedding down as necessary. The only light available was a kerosene lantern, which provided enough light to see within a five to ten foot radius. The farm animals were well aware of the time, and the man would be met at the barn door with moos, squeals and other animal calls. If the man was late, the animals would make louder noises in protest. Animals were normally fed inside the barn, and watered outside. Every animal knew its stall and would go to it immediately when the barn doors were opened. This prevented the animals from fighting over feed.

Some animals, such as the bulls mentioned previously, had to be approached with extra caution. Sows with young pigs are very protective of the young. They won't hesitate to charge an intruder. They have tusks capable of causing a serious wound. An angry four hundred pound sow is an animal to be feared. The hogs were fed from across a fence if at all possible. I would not enter the pen of a sow with pigs without a pitchfork in hand, and then only with care.

Most farms kept between five and ten horses in 1900. These had to be fed twice daily with grain if the animals were working, and always with good quality hay. Horses were normally kept in individual stalls in the barn.

The adult animals all had names and known personalities, as in, "Bossie is a kicker, so watch when you walk behind her." Usually the names were given by the children, but used by everyone as a means to identify individual animals.

The milking cows were lined up in homemade wooden staunchens that held their heads. They were given ground grains to eat while they were milked. The milker sat on a wooden stool that had only one leg and milked into a three-gallon steel bucket that was underneath the cow. If the cow kicked or moved around, the milker had to hold the bucket between his legs while milking. Milking cows by hand in the winter was not an unpleasant activity because the cows gave off enough heat to make the working environment somewhat pleasant. However, the cows generated the same heat during the summer. The cows' tails were frequently matted with manure and seeds. The swinging tail often hit the person milking in the face. Cows with short teats were a challenge because the milker could not grip the teats to force the milk out. Dog, cats, and small children were given warm milk directly from the milking bucket. Warm milk is an acquired taste, but I could not imagine anyone drinking cold milk when I was young. Also, the milk from cows such as we had on the farm was high in butterfat. Our milk was always five to six percent fat. Also, our milk was frequently flavorful. When the cows starting eating

fresh grass in the spring, a grassy taste would come through in the milk. The flavor was especially strong if the cows found some wild onions to eat.

Cream was the most common milk product sold in 1900. The milk was placed in a large container, usually a five-gallon stoneware jar, and allowed to sit for several hours. The cream rose to the top and was removed. Some farms had mechanical separators that separated the cream and skim milk. Turning the handle on the cream separator for 15 minutes to half an hour was usually the job of a younger child. Some of the cream was used to make butter for the home. The cream not used at home was marketed once or twice a week. The remaining milk was used for hog feed. Skim milk mixed with some dry ground grains (the mixture known as slop) was something that the hogs liked. The animals would fight to get to the trough.

The outside chores of children were similar for both boys and girls. Boys might be asked to help with indoor chore such as drying the dishes, but this would be usually under protest that these were girls' jobs.

Breakfast was normally ready by 7:00 AM, and the man returned to the house. After the meal, chores continued. If the weather were warm enough for outside work, a team of horses would be harnessed and hooked to the manure spreader. A manure spreader was a large box on wheels that had beaters on the rear to spread the manure as it came out of the machine. First preference for the manure would be given to fields that would be planted to corn in the spring. If the weather were cold, part of the day would be used to cut the ice in the pond to allow the livestock to drink and to allow the man to take buckets of water to the other animals.

Cutting, splitting, and carrying wood for heating took one to two hours per day during the winter. The preference was for a mixture of dry and greener hard woods such as oak or ash. Green wood (newly cut wood that contains considerable moisture) burns slower and lasts longer. Dry wood burns much faster and produces more heat in a short time. Elm, cottonwood, poplar, locust, and other soft woods were not considered desirable firewood because of a lower heat and a quicker burning time. The splitting was done with an axe, maul and wedges. The cutting was most commonly done with a one or two-man crosscut saw. Such work required considerable energy. There was no need for additional exercises after cutting wood for a couple of hours each day.

On cold days, the stoves had to be kept burning with enough fire to turn the outsides of the stoves red-hot. Even so, in many homes on cold windy days a seat more than six to ten feet away from the stove would be chilly. Houses were drafty. No farmhouse had any insulation or storm windows, and the windows fit loosely in most cases. It was not uncommon to wake up in the morning and find snow on your bedroom floor from around the windows.

In the afternoon, the cycle of chores started all over again with the work finished about 6:00 to 7:00 PM.

Shucking Corn

A typical winter harvest task done almost entirely by men was shucking corn. Shucking corn was hard physical work. Corn grows tall and produces one or two ears per individual plant. Most of the ears were below waist height so a person worked bent over. The ear of corn was bound in tight, dry shucks (coverings) that had to be split open and the ear broken off from the corn stalk. A wagon with a grain box plus a wide "back" board on one side was used for shucking corn. A team would slowly pull the wagon through the field while one or two men shucked corn on one side, throwing the ears into the wagon. All ears large or small had to be shucked.

One ongoing discussion was the relative merit of shucking hooks versus shucking pegs. The shucking hook was a metal and leather contraption that fit over the left hand with a metal hook in the palm. The hook was used to rip the corn shucks open. The shucking peg was a metal pin that was sharp on one end and had openings for two or three fingers. The peg did a similar task as the hook except the peg fitted across the fingers and was used with a thrusting motion. The goal was to have two or more ears of corn in the air at any one time. This meant rapid and hard work. Since the corn of the time often did not grow as high as it does today, and it might have blown down, the work was hard on the back of the corn pickers. As the youngest, I was often given the task of shucking the "down row," the row of corn stalks the wagon had run over and broken down. The advantage was that I only had to do one row while the others shucked two rows at a time.

The ear corn was then shelled off the cob or fed whole. Larger animals such as hogs and cattle usually got ear corn while poultry received shelled corn. Shelling corn by hand requires some skill. A corncob was held in one hand and used as a rasp across the ear of corn to force the grains out. We felt privileged when we had a hand cranked corn sheller that shelled one ear at a time. Shelling corn was an indoor task done during bad weather days in the winter.

Some of the corn plants were cut off at ground level made into large shocks of corn. A shock of corn resembled a Native American tepee in shape and is often seen in old-fashioned pictures with pumpkins. The shocks were used for winter feed for cattle.

"Ringing" the Hogs

This task was usually done twice a year, spring and fall. A hog is by nature a rooting animal. It will use its nose to dig up roots and insects to eat, in addition to seeds and grasses. If hogs are put in an outside pasture that has grass sod, they will in short order make it look as though it had been unevenly plowed. The hog will also use its nose to go under a fence. To avoid these things, the animals were "rung". In this process, the animal was caught by the nose and four to six rings were placed through the outer edge of its snout. The hog's snout has a "rim" around the topside about the size of a pencil that is very sensitive. A "C" shaped ring was placed through this rim, and squeezed shut. This ring made the hog's snout too sensitive to use to root in the ground.

This process was painful for the animal. A hog would quickly learn what the “hog catcher” was for and try to avoid being caught. A hog catcher was a four-foot piece of three-quarter inch iron pipe with a heavy wire attached to one end and running through the pipe. A loop was formed at one end and a wooden handle was attached on the other end of the wire. The loop would be placed over the hog’s nose and pulled tight. This simple holder could hold most hogs.

Farmers were not deliberately cruel to animals. Most farmers never really considered the pain they were causing an animal. Probably most farmers never considered that an animal could feel pain. Dehorning, castrating, ringing and other treatments were always done without any anesthetics or any thought about the comfort of the animal. Farm animals were there for the use by the farmer and his family. This was, to the farmer’s point of view, God’s way.

Butchering

Pork and beef were the primary meats in the winter and chickens in the summer. The pork and beef carcasses were relatively large, and without refrigeration, it was difficult to keep the large quantity of meat from spoiling except in cold weather. A whole chicken could be consumed in a meal or two during warm weather, so there was less need for cool storage.

Cattle and pigs were butchered first in the fall, as soon as the temperature dropped low enough for the meat to be kept, and again in the spring, when the meat would be preserved. For an average sized family, two hogs would be butchered in the fall and two in the spring. These were about 200 pound hogs that would yield perhaps a little more than 100 pounds of meat each. One young steer or heifer of 800 to 1,000 pounds would be butchered at a time. The animal would yield between 400 and 500 pounds of meat.

The animals were killed and hung outside, usually from a tree. The beef animal was skinned, while hogs were scalded with hot water and the hair was scraped off using large knives as razors. The animals were cut into quarters, allowed to cool and then cut into smaller pieces for further processing.

Beef was often ground, cooked, and canned as hamburger. It was also air or smoke dried into jerky. Pork hams, shoulders, and bacon were smoke cured. Most farms had a small building close to the house called the “smoke house,” where pieces of pork, especially hams and shoulders, were smoked using hickory or oak. This was a multi-week process that required around the clock attention to keep a smoky fire at all times. The alternative to smoking was a salt brine cure in which the pieces of meat were immersed in a salt and water mixture in wooden barrels.

Butchering day was almost a holiday, in which neighbors or relatives were invited to participate. The participants were always given meat to take home, usually organ meat (heart, liver, etc.). Very little of an animal was not used for food. The lungs were one of the few organs not directly used. The small intestines of hogs would be cleaned and used as casings for sausage.

One of my jobs as a kid was to put the cleaned small intestines on the output opening on the sausage-mill and then twist the filled intestine every four to five inches to form sausage links. The sausage was ground pork mixed with salt, pepper, and homegrown sage.

The bones, along with a little meat deliberately left on the bones, were used for making soups. "Head cheese", pickled pig's feet, and ox tail are examples of "using everything but the squeal". Cattle hides were normally sold to a tannery. Beef fat was rendered into tallow that was used for making candles or soap. Hog fat was trimmed off and rendered into lard by cooking in large outdoor kettles. The cracklings¹ left from cooking the hog fat were eaten as snacks much as potato chips are today. Lard was one of the primary cooking fats. The equipment to do the butchering included large knives, meat saws, meat grinders, sausage-mills, lard kettles, and lard presses. These were shared without cost among a neighborhood, but a piece of fresh meat was often included with the equipment return.

The butchering of chickens and other poultry was a woman's job. A batch of chicks (preferably roosters) would be raised from babies in the early spring. The chickens began to be eaten while they were still small and continued to be eaten throughout most of the summer.² The chickens remaining in the fall would be relatively large. The butchering consisted of catching the animal, cutting its head off, dipping the carcass into a bucket of very hot water, pulling the feathers off and finally removing the internal organs and cutting the bird into pieces. These pieces were cooled in fresh well water until the meal was prepared.

Mutton (sheep and lambs) was unusual, goat meat even more so. Most farmers had an aversion to eating mutton. They could not say why they didn't like mutton, since most had never tasted it, but they knew that they did not like mutton. This dislike was passed on from generation to generation.

Summer

Chores were year-round tasks, but during the growing season, fieldwork took up much of the time. Plowing, planting, cultivating, and harvesting were time consuming, time critical tasks that had to be added to an already full day. A field to be planted into crops had to be plowed (turning the soil and crop residues under), disked (breaking up the large chunks left by the plow), harrowed (making the seed bed—soil—more even) and finally planted. This meant that most fields had to be worked three or four times with three or four different implements. For the men and sometimes women these tasks took 15 to 17 hours a day of heavy work. After a day of this type work, there was a need for the 5,000+ calories that the three heavy meals included. However, by 1900 most farms had riding implements. For example, the plows had wheels and seats for the operator. Most disks, mowers, and rakes had seats.

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1. Cracklings are the fried pieces of hog skin remaining after the fat has been cooked away.
 2. Roosters were considered to be the first candidates for eating. A "setting" hen would start with perhaps a dozen eggs and eight to ten would hatch. Losses to foxes, coyotes, skunks and other "varmint" would probably reduce the number reaching maturity by 25 percent.

Farm life revolved around the weather. Every farmer tried to read and predict the weather. Too much rain brought floods, too little brought droughts. As I have said, I was reared on the plains of southwest Missouri. The summer thunderstorms that roll across that part of the state contain clouds to ground lightning. One either learns to read the storms or one gets wet frequently and is in danger of being struck by lightning. Several times in my early years, I saw tornadoes. Most were small and did not reach the ground. However, one funnel lifted and went almost directly over our house. A storm struck Kansas City once and dropped letters and other papers in a field near the Iowa border, where I was laying out a water-control system—a distance of more than one hundred and fifty miles.

Every farmer became an amateur meteorologist. The first thing a farmer would do in the morning was look at the sky as he left the house. That look would strongly influence the day's work. I still catch myself looking to the sky some fifty years later.

Making Molasses

One of the more strenuous summer tasks for the men was making molasses. In the early spring, one to two acres of sorghum cane was planted. By July or early August, the cane had reached full growth and was ready for harvest. The first task was to go through the field and strip all of the leaves off the stalks. After this process, the bare stalks were cut and loaded into a wagon. Both of these tasks were hot, strenuous work. The stalks, filled with sap, were heavy and hard to handle. The stalks were taken to a community molasses facility where the cane stalks were fed into a press a few at a time. A horse that walked in circles all day powered the press. The juices from the press ran through a pipe into a large flat pan in a nearby building. The pan was heated by a wood fire directly underneath. After cooking for several hours, the juices cooked down into syrup that was poured into tin one-gallon buckets for future use. This syrup was called molasses. Payment for processing was made either in cash or in sharing of the molasses. It was common for a family to have between 10 and 30 gallons of molasses for a year's usage. Molasses was used for sweetening and as a topping for bread and pancakes. A mixture of peanut butter and molasses on homemade bread was a common morning or afternoon snack. A molasses and butter mixture was especially good on hot biscuits on a cold winter morning.

Threshing of Small Grains

Prior to the middle of the 19th century, harvesting of small grains such as wheat, barley and oats were major tasks requiring the grain to be cut, gathered and threshed³ by hand. Cyrus McCormick and others changed all of this with the invention of the reaper, the binder, and the threshing machine.

By 1900, the custom of neighborhoods working together for threshing was well established. All members of the families were involved. The older men oversaw the handling of the grain.

3. *The separation of the grain from the straw.*

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Younger men worked in the fields as "pitchers," loading wagons. Eight to twelve year old boys acted as water boys, carrying a keg of water to all workers. Women and older female children prepared food.

A custom (hired) operator with a steam engine and a threshing machine would come into a neighborhood and systematically thresh all of the small grains in the neighborhood, going from one farm to another. These "threshing circles" were defined by the traditional neighborhood boundaries. All of the neighbors would work together to provide sufficient labor to keep the threshing machine running at capacity. This required several "bundle wagons"⁴, people to pitch the bundles of grain onto the wagons, a grain wagon, and people to operate it. A grain wagon was a box on four wheels that would hold 40 to 60 bushels of grain. The bundle wagons were loaded in the field with the bundles of grain and then brought to the threshing machine. The threshing machine was powered by the steam engine, and the steam engine was usually fueled by coal and operated by a person who did not become involved in the actual process of threshing. He kept the steam up and frequently walked around the threshing machine with a large oilcan in hand to oil the rapidly moving connections. This machine operator was seen as a above the sweat and toil of threshing.

The straw from the grain was blown into a large stack. Straw from this stack served as bedding for many of the farm animals during the winter and if the winter was long or the hay in short supply, straw served as emergency rations for the livestock.

All ten to twenty workers drank from a common water jug. There were no cups, just a two-gallon wooden keg with a hole in it with a corncob as a stopper. From personal experience, I know that carrying two gallons of water plus the keg all day was tiring. The whole thing weighed about 20 pounds, and was awkward to carry, but a one-gallon jug would not hold enough to last very long in the field. It took a little practice to be able to hold a two-gallon keg and drink from it without having water pour down your front. . Probably a quarter or more of the workers chewed tobacco and most would spit out their chewing cud before drinking. After drinking they would bite off another chunk from the plug of tobacco they carried in their pocket. More people chewed during threshing than at other times. It was dangerous to smoke cigarettes or a pipe when working around the very dry straw.

One of the common jokes was for the person who was pitching the bundles to the wagon to pick up a small snake with the bundles and throw it on the wagon. The person on the wagon was usually standing knee deep in bundles. To discover a snake at his feet was usually a bit of a surprise that called for some fast movement. These were usually black snakes and harmless. Snakes were commonly found around hay or grain bundles because they would be hunting the mice that made such places their homes.

4. *A bundle wagon was a flat-bedded wagon with uprights on each end to hold the bundles.*

When the threshing was completed, there was often a celebration, which might include a fish fry or fried chicken. This was an outdoor picnic.

Adult Female Roles

Food Preparation

In some households, the man started the fire in the cooking stove and in other homes this was a woman's job. As soon as the stove had reached a cooking temperature, food preparation started.

Preparation for the large noon meal and other housekeeping took up much of the morning. Bread making alone took a couple of hours for each batch. The ingredients had to be mixed, the contents allowed to rise, then kneaded, made into loaves, and allowed to rise again for at least an hour and finally baked for thirty to forty minutes. Yeast was kept from one batch to be used in the next day's batch of bread. For a family with several children, one loaf was not enough for a meal. Four to six loaves could be eaten in one day.

Almost all food was produced on the farm, except for seasonings such as salt, pepper, and sugar, although home-produced honey and molasses were commonly used for sweetening. One of the small advances in food preparation and serving was the availability of salt that did not cake up in damp weather. At the 1900 table, salt was served in "salt dish" and normally was caked almost as solid as a rock. A spoon would be used to scrape salt loose. "Solid" salt lasted until the 1930s when Morton's started selling salt that did not set with moisture. Morton's used the advertising slogan "when it rains, it pours" to refer to the non-caking feature of their product. The company still uses the picture of a small girl carrying an umbrella and a box of salt with the salt pouring out.

Sugar at the time was likely to be raw sugar, which has a light yellowish brown color, larger granules, and is not as sweet as refined sugar. Wheat flour and sugar were most often bought in fifty or one hundred-pound sacks. Homegrown wheat could be taken to mills for grinding. The availability of the mills was not uniform throughout the state because of their dependence on water for power. Some prairie streams did not generate enough "head" to power a mill. Coffee and tea were semi-luxury items limited to special occasions because they required cash to purchase. Whole coffee beans were ground by hand as needed.

Three Meals

The farm family ate three meals⁵ together: breakfast, dinner (now called lunch) and supper. These were formal to the extent that all family members sat at the table at the same time for eating. It was expected that all family members would be together for all meals. If one family

5. *Some families with German heritage ate five meals per day. In addition to the three regular meals in the house, the other two meals usually consisted of sandwiches and cookies at the place of work.*

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member were missing, the meal would be delayed until his or her arrival. Grace or prayers were commonly said at the start of a meal.

Breakfast was a hearty meal. The breakfast preparation started with the frying of thick slices of bacon that were cut off the bacon slab; biscuits were baked every morning. Two to three eggs per person were fried in the bacon grease. Potatoes might be fried also. Hot cereal, most commonly rolled oats, would be prepared in the winter, especially on days when hard labor was planned. In the southern portion of the state, grits (cooked white corn meal) were a part of the breakfast menu.

A kettle of hot water was always kept on the stove to be used for hand and face washing, cooking, and other purposes. Water for household use was carried into the house from the well, one bucket at a time. A dipper was kept in the water bucket as the universal drinking container.

After breakfast, the children's lunches for school had to be prepared and the children sent on their way. A lunch of bacon and biscuit sandwiches and cookies was common. Walks to school of one to two miles were typical, so the children had to be on their way before eight to reach school, which started at nine. It took a young child twenty to twenty-five minutes to walk a mile, assuming that distractions along the way did not claim his/ attention.

Dinner at noon was the largest meal of the day. It consisted of at least one meat dish, usually fried and always cooked well-done, potatoes, often fried or mashed, and one or two other vegetable dishes. Gravy was often cooked to be used with the meat and potatoes. White gravy was primarily wheat flour and milk cooked together. Brown gravy had more meat juices and grease in it. Brown gravy was served with roasts and white gravy with pan-fried meats. Gravies were often spread over pieces of bread or biscuits. Vegetables were usually boiled.

Large amounts of salt and pepper were often added as table seasonings. Thick layers of butter and fruit preserves were normally added to the bread. Desserts consisted of pies and cakes. A normal individual serving was a quarter of a pie. Fresh fruits were seasonal and normally eaten as snacks between meals. Milk, sometimes sweetened and flavored with chocolate, if available, was a common drink. Homemade ice cream was only for special occasions such as extended family meals.

Supper was similar in menu to dinner, but the quantity was usually less. Any leftovers from lunch were served. Supper times varied with the season and would be as late as 9:00 PM during harvest or other busy times.

Special Meals

The feeding of the threshing crews was a major event, often involving competition between the various households to see who could put on the largest and most varied noon meal. Since the number of workers was usually around 20 adult males, all with healthy appetites, prepar-

ing a threshing meal was a challenge for any cook. Usually, there would be a few different kinds of meat, at least two potato dishes, an assortment of other vegetables, and large amounts of homemade rolls and bread with fresh butter. Fresh tomatoes, corn on the cob, and cucumbers would all be taken from the garden. Desserts would include at least two kinds of pies, at least one cake, and iced tea was the most common drink.

The meal was normally served buffet style on a large table, outside under the trees. A person filled their plate from the table and sat on the ground to eat. Second and even third helpings were common. Since some of the neighboring women often came to help during the threshing day, it gave them an opportunity to compare meals.

I have never seen any computations on the number of calories eaten at a threshing meal, but it was probably well over 3,000. The heavy work and long hours gave used large amounts of calories.

Other major family meals were at Thanksgiving and Christmas. For the first few years after marriage, a young couple would return to the parents' home for the meals. Most commonly, the couple went to the parents of the male. The couple normally took a carry-in dish such as a pie or a cake.

Holidays were not "holidays" for the women. The cooking could start days before the day of the meal. There was only one oven, so baked goods and meats had to be planned ahead. A large roast or a large bird required several hours cooking. Cooking for 10 to 20 people took large quantities of everything. In many ways the menu was similar to that of threshing dinners: several meats, usually hot rolls, several potatoes dishes—always mashed and usually sweet potatoes—plus other vegetables and several deserts, almost always at least one kind of berry pie. Homemade ice cream might be made if ice were available.

Washing

Another time-consuming task was the washing of clothes and bedding. Anyone who refers to these as the "good old days" has never washed a large quantity of clothes with a washboard and homemade soap after heating the water in a black cast iron kettle. The traditional wash-day was Monday. The clothes were first soaked or boiled in the cast iron kettle. Then, the clothes and other items were dipped out of the kettle with a wooden stick and washed by hand in a large galvanized metal tub, using a washboard. It was a matter of pride to be the first in the neighborhood to have clothes on the line to dry.

Work clothes were very dirty and the soaking in hot water helped to loosen stubborn dirt. Most people had only one or two changes of clothes besides the ones they were wearing. A set of clothes would be worn for a week or more between washings. Some people were rumored to wear their clothes a month or more between changes. Boiling clothes had the added bene-

fit of killing any lice or lice eggs that might be in the clothes. Eradicating lice once a person or house was infected was difficult.

The soap was home made from tallow and wood ashes. Often this soap was harsh and hard on hands. The hands would be burnt red from the harsh acids in the homemade soap. Clothes were wrung out by hand and then hung on clotheslines (or fences) to dry. Most clothes were starched using a starch that had to be cooked before use. Washing took most of the day and ironing took most of another afternoon. After the clothes were dry, many were ironed using flatirons that were heated on the cooking stove. Some diligent housewives even starched and ironed denim work overalls. This work was hard and backbreaking.



Wife of Sharecropper Washing Clothes—Southeast Missouri ⁶

There was friendly competition between housewives regarding washing. One competition was over time. The washed clothes were expected to be on the drying lines in the backyard by early in the morning. Putting them out after noon was considered to be the sign of a lazy woman. The second competition was over the color of the wash. The sheets and other white —items should be white, not a dingy gray. This was not an easy task since the soap was home made and bleaches were not generally available.

6. November 24, 2001 http://memory.loc.gov/cgi-bin/query/l?fsaall:4:./temp/~ammem_SYRQ::display-Type=1:m856sd=fsa:m856sf=8a23162:@@@

The following is one woman's prescription for washing clothes:

1. Bild fire in back yard to het kettie of rain water.
2. Set tubs so smoke won't blow in eyes if wind is peart.
3. Shave 1 hole cake lie sope in bilin water.
4. Sort things---make 3 piles: 1 pile white, 1 pile cullord, 1 pile werk briches and rags.
5. Stur flour in cold water to smooth then thin down with bum water.
6. Rub dirty spots on board. Scrub hard, then bile. Rub cullord but don't bile, just rench and starch.
7. Take white things out of kettle with broom stick handel, then rench, blew ana starch.
8. Spred tee towels on grass.
9. Hang old rags on fence.
10. Pore rench water in flower bed.
11. Scrub porch with hot sopy water.
12. Turn tubs upside down.
13. Go put on cleen dress--smooth hair with side combs, brew cup of tee, set and rest and rock a spell, and count blessins.⁷

Evening Work

After the supper dishes were washed and dried, most women would take up sewing, such as the patching of garments or darning of socks. If these were completed, knitting or other needlework was done. Most women did not stop work until 9:00 PM or later—at least a 15-hour day and a six and one-half day week⁸. Little reading was done by either men or women. The newspaper, if any was taken, was the local weekly newspaper that had one page of news. Probably the most read section was the notices of marriages, births and deaths. Occasionally, legal actions such as arrests and fines would make the reading livelier.

7. July 3, 2001, <http://198.209.8.166/wrvq/V1/N11/Sp64i.htm>

8. Sunday afternoons were a relatively free time, often devoted to visiting families and friends.

After supper in the summer, it was more comfortable to sit on the porch or in the yard, away from the heat of the day that was still trapped in the house, even though all windows and doors were open. Young children would chase and catch fireflies and put them in glass jars. After the sun had set and if the moon had not risen, the sky would be the darkest of blues, almost black, and containing thousands and thousands of stars. Most people today have never seen the night sky away from the electric lights that make it hard to see the stars even in rural communities.

While the night skies might be dark, the rural night was not silent. The moos of cattle, the whinnying of horses, an occasional grunt or squeal from the hogs, the grumps of bull frogs, the call of the whippoorwills, the hoot of an owl or more eerie, the screech of a screech owl filled the night. When the moon started to come up, a chorus of coyotes would bark, with a response from the neighborhood dogs.

Child Rearing

Child rearing was primarily a woman's role, although disciplining was sometimes done by the male. Discipline was strict in most homes. The old adage of "spare the rod and spoil the child" was firmly believed. Corporeal punishment, including whippings using leather belts, razor straps, and switches, was almost universal. Child abuse, while perhaps common, was not recognized as such.

Children's Roles—"Chores"

Virtually every child older than five or six was expected to contribute to the household by doing chores before and after school. Poultry care was often a child's job. Poultry care was important. Chickens leave the chicken coop very early in the morning. Unfortunately, coyotes and foxes consider chickens an inviting target and they hunt at night or very early in the morning. If the chickens are kept in their house until an hour or two after sunrise, most losses can be avoided. In addition, skunks and weasels would invade a chicken house at night and kill numerous birds, so the door to the chicken house had to be opened in the morning and kept carefully closed at night.

One of the adventures of my youth came during gathering eggs. The nests were boxes about one foot square with straw in the bottom. I was going on my absent-minded way taking the eggs from the nests and putting them in a bucket when I reached in one nest and found a large black snake coiled up inside. Black snakes love chicken eggs and I had interrupted its dinner. Needless to say, my hand came out of that nest very quickly and I looked to see what was in the nests after that experience.

One other hazard to young hands was "setting hens". Occasionally, a hen would decide that the time had come to start a family by setting on a batch of eggs in order to hatch chicks. She would peck any hands that tried to take the eggs from her. Setting would earn a hen a trip to

the setting hen pen (a small pen without nests). If the trip to the setting hen pen did not break her from setting, she would become a candidate to be sold or eaten.

By the age of twelve, children were doing adult work such as milking, driving animals, gardening, and helping in the fields, the houses, or elsewhere. Most children were given a small amount of money per week as an allowance, perhaps a nickel or a dime. This could be used to buy candy or soft drinks. In all but a few families, education beyond the eighth grade was not emphasized. Only the sons (and a few daughters) of the local business and professional classes were able to pursue education.

The material possessions of most children were limited. Both toys and clothes were inherited from older brothers and sisters or from cousins. A child would normally have one pair of shoes per year. These would be bought in late summer, before school started. Usually, these shoes would be worn out by the late spring and the child would go bare foot during the summer. Often, in preparation for school, parents would either buy or make two sets of clothing for each child. One set would be worn while the other set was washed. Overshoes and a heavy coat were usually part of the wardrobe. Gloves were usually limited to work types. Typical Christmas gifts for a child would include an orange, some hard candy, and one small toy.

Chapter 9

Life in Small Towns in 1900

The smallest towns were a cluster of just a few houses, one or two general stores, a churches, and a one-room school located at a cross roads. These would often make attractive scenes such as those pictured in the popular 19th century Currier and Ives prints. Everyone knew everyone else, probably for several generations. Many were related by blood or by marriage. Children played in the streets during warmer weather, along with chickens and dogs. These towns had no water systems, no sewers, and often no formal government. The town always had a name, perhaps taken from an early settler or a local geographic feature.

The houses were mostly white one or two story clapboard¹ buildings surrounded by large elm and maple trees. Large gardens, orchards and outbuildings were located behind the houses. The streets were unpaved gravel (if gravel was available in the area) and were well shaded by trees.

Larger towns had several hundred people and included a variety of stores: grocery, hardware, lumber, clothing, furniture, etc. These towns had several churches; most of them were Protestant denominations except in areas with larger numbers of Germans, Italians, or French. The towns were the service centers for the items farming families could not produce for themselves and they were a place where surplus farm products were sold or exchanged. The high school for the area was located there. Often these towns were located on rail lines and would include a rail siding with a grain elevator to ship farm grains such as wheat and corn. The location on a railroad was the primary reason for existence for many towns, if they were not the county seat.

County seat towns were usually a little larger in size and would normally be the largest town in the county. The county seat towns usually had a square in the business district. The courthouse was located in the center of the square and businesses were surrounding it on four sides. Many of the business buildings in these towns were built around the turn of the century.

1. *Clapboards are long narrow wooden boards applied horizontally on the house with each board overlapping the board lower than it.*

A Revolution in the Heartland

Many were two stories, with professional offices, lodges, or apartments above the street-level business.

Most farm and small town people had little contact with local government. They might live in an area for years or decades without any reason for going to the county seat. One of the few reasons for such a visit was to record documents such as property deeds with the county clerk and to pay taxes.

Some people wanted to pay their taxes in person. They didn't trust the mail with their hard earned money. They wanted to hand the cash—and at that time it often was cash—to a real person and get a receipt before they left the office. Sometimes, the cash was a combination of many small denomination bills and coins that had been saved over the year. My parents used a bowl in the cupboard for this purpose. Many people did not have bank accounts. If they had any bank account, it was a savings account.

Social Status

In most small towns, there was not a large amount of wealth. The banker, the judge, the physician, and perhaps some of the merchants had larger than average houses, veneered with bricks. However, not all merchants could afford a house. Some lived in rooms behind or above their stores. Many of the houses were very small and poorly constructed, with three or four rooms for a large family.

The social structures of small towns were very similar to their country cousins. They were hierarchical, conformist, and largely closed systems. The status system in small towns was even more hierarchal than in the open country where virtually everyone's work was farm related. The banker, circuit court judge, and physician had the highest status. Small business owners and operators were the next tier. Public school teachers and ministers were in the middle. The lower tier was the working class who worked for wages, often on a part time or seasonal basis. Some worked as clerks in the store, the café, or other establishments. Most towns had a few alcoholics and other people who because of mental or physical conditions could not hold regular jobs. These unfortunates were at the bottom, pitied, but left to their own struggles. The retired elderly were almost a class to themselves. Most people worked as long as they were physically able and only retired when they had to. Many of the retired households consisted of a surviving widow, although frequently a single elderly person, especially if in poor health, would reside with a son or daughter. Nursing homes did not exist at this time.

The social distance between the judge and the town drunk was great. There was no welfare system in 1900, but the people of the town would provide food baskets at holidays, surplus garden produce during the season, used clothing, and other items, especially to families with children in the home. (see Ladies Aid Societies below) Widows with young children were seen as being particularly in need.

Infrastructure

Small town residences were in many ways more like farms than they were like the cities. Most of the house lots were large enough to have a large garden and many included space for a small pasture for keeping a cow and a horse. Chickens were commonly kept for eggs and meat. In addition to the house, the lot would include a small barn and other small out buildings. There were no city ordinances regulating what a property owner could or could not do on his property. If a property owner wanted to open a junkyard on his property, and some did, there were no laws to prohibit it.

Almost all small towns had several things in common. The following are some of the more outstanding.

Electricity and Other Infrastructure

The turn of the century was the time when many towns began to have electrical systems. The larger and more prosperous towns built electrical systems first, but gradually some of the smaller communities began their own systems. Most of these systems were small, poorly financed, and less than reliable. However, they opened the door for other services such as community water and sewer systems. In Missouri, most such systems were coal-fired, with much air pollution from the black smoke that came from the plants. Some of the towns had lines built to them by the growing commercial electrical firms that started in the larger communities.



Early Edison Light Bulb ²

It was in these small towns that farm people became aware of electricity and its potential. The stories are told by older residents that some of the early electrical systems in small towns were so limited that residents were restricted as to what they could do on certain days. For example, washing machines could be run on Mondays, irons to press the clothes on Tuesdays, etc. Larger commercial electrical systems that were more reliable became common by World War I. Many of the small town systems were phased out during this period.

2. November 24, 2001 <http://www.edisonian.com/p001b003.htm>

Electricity was not made available to some of the smallest towns until the rural electric cooperatives built lines in the 1935-1955 period to serve open-country customers.

Water and Sewers

Most communities did not get water systems until after electrical systems were built. Prior to this time, each house had a shallow well or cistern for drinking water. Electricity was needed to power the large pumps necessary for water systems. Sewer systems were the last to come to most small Missouri towns. Just as for electrical systems, many of the smallest towns did not get water systems until rural water cooperatives were built late in the 20th century. A considerable proportion of very small towns do not yet have sewer systems.

The paving of streets in small towns was a slow process. The tax base was often small, the incomes limited and paved streets had a lower priority than electrical or water systems. At the start of the 20th century, only the downtown streets, if any, would be paved.

The Town Governments

The governments in small towns in which everyone knew everyone else were in most cases less than formal. In many smaller communities, the only paid employee was a part or full time policeman (often called a marshal). The other city records were often a collection of papers kept in a shoebox and passed from city clerk to city clerk. The town council or board was often made up of whoever would run for the unpaid positions. In many communities, a person could be in a position for several decades, or the position might be passed around among a few people

The Blacksmith's Shop

One of the community centers for gossip and information for the men was the local blacksmith's shop. The establishment was essential unless a farm was fortunate to have its own forge and a skilled person to run it. Plowshares and many other implements were in frequent need of service, and the black smith also shod horses and mules. The blacksmith could weld iron and make many parts for various farm machines. At the same time, he talked and shared information about many aspects of the community.

The blacksmith shop was a focal point of the community, a gathering place for neighbors. The open front door of the shop was the community bulletin board, posted with upcoming events, items for sale, public notices and the like. Items placed on the door were rarely taken down, (just covered over), and so the blacksmith shop door became a sort of community archive as well.³

3. October 1, 2001 <http://www.spanishlake.com/>

There were a few places in most communities where it was appropriate for males to send idle time, to loaf, and often the blacksmith shop offered such an opportunity. Farmers were often standing and waiting for their plowshares to be sharpened or something else and a “loafer” could blend into this scene to talk with whoever came by for service. The shop was normally informal, with people setting and standing around talking and only or two people actively working.

The Barber Shop

Another favorite place to exchange gossip for men was the barbershop.⁴ Many men had daily shaves at the barbershop. Most small town barbershops had either one or two chairs for customers. Regular customers had their own personal shaving mugs⁵ with their name on their mug. Since many of the town businessmen and others came through the barbershop on a daily or semi-daily basis, the barber was a key person for communications.

In addition, barbershops often also offered bathing facilities in a back room where a person, for twenty-five to fifty cents, could get a bathtub filled with hot water, soap and a towel. For travelers this was useful because hotel rooms were just that—rooms without any other facilities.

For male readers to get a “feel” for the 1900 conditions, buy or borrow a straight razor and sharpening leather strop and shave yourself using only soap and water and, if you are really venturesome, cold water. I will not be responsible for any injuries that may result. I have done this and it is painful. At the end of the shave, I normally had several places that were bleeding. I can easily see why a male would go to a barbershop for a shave that included having your face wrapped in a hot towel to soften the whiskers. I have done so, and it is a very pleasant experience.

The Local Café

Every town of any size had a small café. Mom was usually the waitress and cashier and pop was the cook and dishwasher. The daily menu was written on a blackboard hanging behind the counter. Some type of meat, usually fried, potatoes and bread, with a vegetable as a side dish were staples of the meal. Fruit pies were the usual dessert offering.

A large round table, seating eight to twelve customers, was located in the rear of most cafés. This was the place where the local businessmen, professionals and other regular customers would be served. During the mornings and afternoons, coffee drinkers would be joined by the

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4. *Beauty shops for women were not established until several decades into the 20th century.*
 5. *A shaving mug is a porcelain cup or mug with soap and a brush in it. The addition of a little water and stirring would produce a soapy lather that when applied softened the beard and made it easier to shave with the straight razors of the day.*

café owners for a chat. Strangers to the community would never be invited to this table unless accompanied by an established local resident.

The Stables

Horses were the major mode of transportation. They were regarded much like an automobile is today. There were good buggy horses, good riding horses, good workhorses and then there were many that were not so good because of breeding, age, injury, or disease. In small towns, horses had to be kept somewhere, and if you did not have a barn near your house, you kept your horse at commercial stables. If you didn't have a horse and buggy, most stables would rent you one. They also sold horse feed of various types.

Trading horses was much like trading used cars today. A person had to be knowledgeable about horses or they could easily be cheated. For example, the age of a horse can be determined from the teeth, but you have to know how to interpret the information from the teeth. Horses live about thirty years, but after fifteen to twenty years they begin to lose their capacity for hard work. There were many other things to know such as whether the horse was "wind broke"⁶, blind, wild,⁷ old and much more. Often the stable's owner was a horse trader, also. Horse traders were often regarded as somewhat "shady" characters that could not be trusted too far. A person with a reputation as an honest and candid horse trader was admired.

Somewhat similar occupations found in many communities were the cattle buyers (often called "cattle jockeys") who would travel the countryside buying and selling cattle. Again, farmers would often regard them with suspicion unless they had earned a reputation.

Other Local Businesses

Most small businesses had long business hours. Seven in the morning to seven in the evening six days a week was not unusual, especially during the summer. No business was open on Sunday. Grocery stores and some others would maintain charge accounts for their regular customers. The stores normally did not charge any interest on these accounts, but expected them to be paid in full on a regular basis, i.e., when animals were sold or crops were harvested. They would know when either of these occurred.

All stores operated on a central aisle layout with shelves and drawers going to the ceiling along the walls. There were no baskets or carts. A clerk always took your requests.

6. *If horses are abused by overwork, their lungs could be damaged, and they have difficulty breathing when under strain.*

7. *Training a horse takes at least a year, often more.*

Law Enforcement

Most small towns had a marshal who had very little to do most of the time. Vandalism by young males around Halloween and perhaps public drunkenness or an occasional fistfight were about the only “lawless” activities. Many small towns did not have a jail, so that most law-breakers had to be taken to a neighboring large town if the crime was serious, such as the rare murder. Young vandals would be released to their parents.

In addition, county seat towns had county sheriffs. At the turn of the century, there were no requirements for being a sheriff. As a consequence, most sheriffs had more political skills than they had law enforcement skills. Since the demand for law enforcement was modest, this system worked well until there was a serious crime that required good law enforcement.

A little bit later than 1900, there was one county that had one sheriff for more than a decade, during which there were no murders in the county. Many people found it strange that all non-disease deaths were labeled “accidental” no matter how they occurred. It was rumored that gangs in St. Louis would bring people that they wanted to get rid of to this county, knowing that any death would be called “accidental”.

The Ladies Aid Society

Since there were no social service agencies at this time, there was a need for charity. The most common was the Ladies Aid Societies. These were a combination of social and charitable activities. The membership was open to the women in any of the “good” families in town. The meetings were usually monthly, and some of the programs included gathering and preparing used clothing and other household necessities for the poor. During the holiday season, food would be collected for the poor. In addition, the group would make quilts and comforters to be given to the poor or sold to raise money for the poor. Some women would visit older people on a regular basis to cook food or clean the house or just to make sure the person was all right.

The people that were helped included widows with children and people without income or with poor health. To be labeled poor enough to receive such charity was a major negative stain on the family. Living at the “county poor farm” was a last resort. In Missouri, the state law charges the county governments with providing for those who cannot support themselves. However, the presiding judges (now county commissioners) who administered the county poor farms were notorious for being hard-nosed and tight-fisted with the taxpayers’ money.

One of the haunting fears of old people was that they would not have enough money to support themselves in those pre-social security and pre-retirement fund days. An important goal was to have enough money left after their death to pay for their funeral and burial expenses. It was a disgrace to the family if they had to be buried at public expense. Funeral homes and insurance companies took advantage of this fear to sell “prepaid” funerals. Some of this continues even today.

Other Social Organizations

The Masonic Lodge and other fraternal organizations were strong. Most small towns had at least one and often two or three such organizations. The meetings of such organizations were places where the leaders of the community came together to make many informal decisions that were later ratified at board meetings, such as school boards and city boards.

Ice Cream Socials

An important social event of the summer was when the entire town (if small) gathered on Sunday afternoon in the town park for homemade ice cream. Many families brought their wooden hand cranked ice cream makers, while others brought cookies or cakes to eat with the ice cream. There was always plenty of chocolate syrup and fruit preserves to top the ice cream. The men would turn the handles on the ice cream freezers while the women put out other desserts. There was friendly competition in quality of desserts.

If a person cranking the freezer forgot to make sure that the drain hole on the side was free of ice and draining properly, the salty water in the freezer would rise and seep into the inside the container where the cream was freezing. Such an accident was met with strong comments and would be remembered for years. The person who was responsible was kidded about his inability to do something as simple as freeze ice cream.

Card Games

Popular forms of small group entertainment among the middle class in small towns were card games. These usually consisted of two to six couples playing at one time. The most prestigious game was bridge, followed by pinochle and pitch. Bridge playing was taken very seriously, with one partner often berating the other over the quality of play. People read books and news articles on how to improve their games. Playing was done most often in the evenings or Sunday afternoons, about once a month, for mixed couples. Groups of women formed bridge clubs that often lasted for decades. These usually met during the day and included lunch. The practice was to rotate among homes.

Pinochle and pitch playing was much more informal. Again, this was usually a couples' activity. These games were often played after family dinner for Thanksgiving, Christmas and other special occasions. There were occasionally informal groups that met on a regular basis to play pinochle or pitch, but these were much more uncommon than bridge groups.

The fundamentalist Christian churches condemned card playing of any type, so there were some community controversies over card playing. There was a live-and-let-live philosophy in most communities.

Farmers' Appreciation Day

These communities were farming centered and the businessmen recognized their dependency upon farming. Once a year most of the "better" farmers would be invited into town for an evening meal (although in a few communities this was done at noon, during the time of the annual agricultural fair). After this meal, speeches would be made praising the contributions of farming to the community and awards would be given for "outstanding" farmers. This was an important and well-attended event, and all businessmen and spouses were expected to attend.

Despite the "appreciation days", there was often quiet friction between the farmers and the merchants. The merchants had a captive customer base. The lack of transportation prohibited the farmers from going elsewhere for shopping or selling. The farmers often thought the prices they were forced to pay were too high and the prices for what they sold were too low. The Farmers' Appreciation Day was meant to reduce this friction. However, as I will describe later, the farmers quickly organized cooperatives after the federal government passed enabling legislation in 1926. These cooperatives reduced the costs of goods purchased and increased the prices they received for commodities.

The County Fair

In late summer, often in August, one of the breaks from the hard work of cultivation and harvesting was the county fair that was held at the local fair grounds. This three to five day event gave virtually everyone an opportunity to show off the successes of their farm production. Most county fairs had contests for everything from the cutest baby and best quilts to the best and biggest vegetables and livestock. Ribbons were given to the winners: purple to the grand champion, blue, red and white to the runner-ups. While no money was given as prizes, the competition was serious. Considerable "bragging rights" were associated with winning blue or purple ribbons. Indeed, blue and purple ribbons often helped sell livestock: "the son of the grand champion of the county fair". The typical family would rise early and take a lunch for spending a full day admiring or criticizing the winners and losers. Often commercial would be part of the fair activities. Always, one of the major reasons for attendance was to see and visit with friends, relatives, and neighbors.

Saturday

Television had not been invented in 1900. Saturday afternoon and evening was the time when local farm families came to town to shop and to visit with friends and neighbors. Farm families who lived some distance from town would leave early in the morning and pack a picnic lunch

to be eaten in the town park. This was their day for entertainment⁸. Some towns encouraged this with concerts in the park.

During warm weather, the men would gather in clusters in front of the businesses and visit about crops and other farming topics while the women were in the stores shopping and visiting about their families at the same time. Cold weather forced the men into the hardware and other "men's" stores, where they would gather around the stove in the back of the store. This was the time when many deals were made for rentals, extra help, animal trading, and so on.

The timing of when they came and left was related to the distance the family had to travel and the time of the year. A team of horses will walk three to four miles per hour. If a family lived six miles from the town, it would take one and a half to two hours travel time. Most families preferred to get home before full darkness. It is hard for us, in our highly lighted world, to image how dark it could get, especially on a cloudy night. It was so dark that, as the saying goes, you couldn't see your hand in front of your face. A kerosene lantern gave a little light for a few feet. Fortunately, most horses have better night vision than humans, and they knew the way home after traveling the route a few times. Thus, a team of horses took a wagon home at night without difficulty, except during storms or other adverse conditions. They knew that food, shelter, and rest awaited them when they reached their barn. They walked faster going home than when walking away from home.

Dealing with Bankers

Many farmers had to obtain loans from local bankers to buy land, equipment, animals or operating expenses. This was always a dreaded occasion because the banker had control of your farming destiny. This was before the days when bankers learned to treat customers in a friendly manner. Most small town banks were small in size, also. In the front of the bank were two or three teller's windows. Usually only one was available for service. In the back, behind a short wooden fence, was a desk with two hard wooden chairs in front of it. Behind the desk sat the bank owner and president, in a black business suit with a white shirt and tie. The farmer and wife would approach the fence and be invited in to sit in the chairs in front of the desk. The farmer would ask for the loan and the banker would immediately ask what it was going to be used for, how it would be repaid, and what the farmer had that could be used for collateral. The farmer had to have a good reputation plus good collateral to get a loan. After "signing their lives away" the farmer and wife might be granted the loan. Until it was repaid, the loan would be a constant worry. Bad weather, diseases, and many other things might intercede to inhibit repayment of the loan. Being "in debt" was a condition to be avoided if at all possible. Bankers were viewed by most farmers as people who would take their farms if the loans were not promptly repaid.

8. *Movies were not generally available until in the 1920s or 1930s. Radio became available at about the same time.*

This was before the Federal Reserve System was established. There were no agencies to insure a bank. The banker was often loaning his own money, so he looked at collateral very closely. Collateral was any possession that had cash value, including animals, equipment, land, or future crops. The banker would usually know personally the quality and value of the collateral. If a crop was mortgaged, the check from the sales of the harvest had to be taken directly to the banker. No mortgaged collateral could be sold without the permission from the banker.

A Visit to the Doctor's Office

Most small towns had a least one physician. The doctor's office was very different from those of today. There were no waiting rooms, no receptionists, and no old magazines. In most physicians' offices, a person went directly into the office. Seldom was anyone waiting ahead of you. If there was anyone ahead of you, you might be asked to take a seat while the physician finished with the current patient. If a person were seriously ill, the physician would make a house call.

The assistance that a physician could offer was limited. Heroin and codeine were about the only available.

An average person might not see a physician for many years. The problems that physicians could best treat in 1900 were injuries, especially broken bones. A physician could set and splint broken arms or legs, do amputations, and sew up open wounds. They were more surgeons than physicians, as we currently know them. Treatment for heart diseases, cancer, and most infections were yet to come.

I knew several people in my childhood community who said they had never been to see a doctor, and they were elderly when they said this. People lived and died without much attention from the medical establishment of the time.

The average cost of an office visit in 1900 was between fifty cents and a dollar.

The Local Tavern

Taverns (saloons, bars, etc) were places of controversy. These were dark and aromatic places filled with tobacco smoke and the smells of beer. Pool tables were a common accessory. The clientele was entirely male.

The "good" people of the community would not go into such a place. The clientele that came regularly drew heavily from the working class and the poor. Most evenings, a few regulars could be found talking with the bartender. The weekends, Friday and Saturday nights, were the most popular times. The tavern was closed at midnight on Saturday and stayed closed until Monday. Occasionally, local musicians would provide what is now described as "blue-

A Revolution in the Heartland

grass" music. One person might bring a fiddle and another a mandolin and/or a harmonica and the playing would be "by ear," without written music.

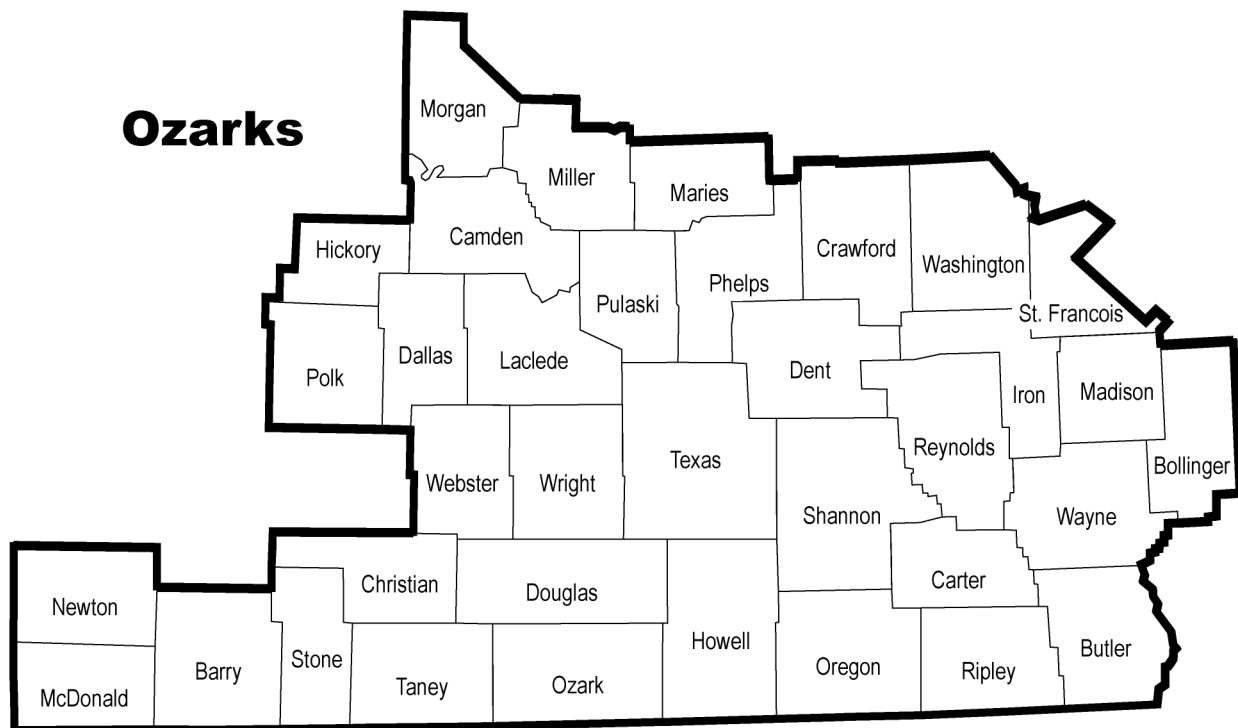
If middle class people consumed alcohol, and many of them did, they would buy a bottle in an out-of-town store and drink at home. They might go to a tavern while traveling out of town, as long they thought it would be safe from hometown knowledge.

Chapter 10

The Missouri Ozarks in 1900

Another funny thing about the Ozark Mountain country is the fact that there aren't any mountains there. Just a lot of little green hills, with trees on them, and big rocks. Some of the hills look taller than anything in the Adirondacks, but are really little more than two thousand feet above sea level.

—Vance Randolph



I've designated the Ozarks as a cultural region for the purposes of this book, but with considerable misgivings. The cause of the misgivings is the cultural heterogeneity that exists within the Ozark area.

The Ozarks is a very geologically old area, with rolling hills and plateaus covered by a thin, rocky soil. The hills don't produce good timber, but the stream bottoms are fertile enough to

grow good pine and oak forests. The commercial cutting of the Ozark forests was well underway in 1900. A considerable amount of the oak lumber was used to make railroad ties for the rapidly expanding railroads of the era.

While the popular images of the Ozarks are of hills and mountains, the region also contains large prairie plateaus, with livestock and grain farming¹. The plateaus, with the Springfield plateau being the largest, are considerably different from the sharply rolling hills along the White, Osage, and Merrimac rivers and the eastern mountains.² The Ozark plateaus are covered with thin, rocky, relatively poor soil that is subject to frequent droughts. Summer rainfall tends to be brief or to quickly run off the rolling, rocky fields. Drought is a threat almost every summer in the Ozarks. After a period of two or more weeks without rainfall in the hottest months, crops and pastures will begin to be hurt by a lack of moisture.

From a geographical perspective, the Ozarks include a substantial portion of north Arkansas and eastern Oklahoma. For purposes of this book, I will limit my comments to the Missouri portion.

In the eastern Missouri Ozarks, from Old Mines to Farmington to Viburnum, lead mining has been going on since the first French pioneers arrived. The first mining was in the most eastern portions and the Viburnum area.

Huge outcroppings of lead found by French explorers some two-and-a-half centuries ago in what is now northern Madison County proved to be one of the greatest concentrations of that mineral ever discovered on the North American continent. Covering several square miles altogether, it acquired the name "Mine a La Motte," after Antoine de La Mothe, Sieur Cadillac, early eighteenth century governor of French Louisiana. Mine La Motte and the surrounding region yielded lead, zinc, cobalt, and iron from the early eighteenth century to the mid-twentieth in almost unimaginable quantities. It was for a long time hauled in ox-drawn wagons some forty miles to the Mississippi, thence by raft or boat to New Orleans, where it was marketed.³

The Ozark People

Native Americans were the first inhabitants of the Ozarks. The people we call the Osage had semi-permanent villages throughout most of the Ozarks, especially near the streams. These inhabitants were pushed out of the Ozarks early in the 19th century. Europeans had superior weapons and brought diseases such as small pox that decimated the native population.

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1. July 1, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow104a.htm>
 2. Milton D. Rafferty, *Missouri: A Geography*, Westview Press, Boulder, Colorado, 1983
 3. July 1, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow203e.htm>

The first European settlers were associated with the lead mines in the eastern Ozarks. The miners lived in small towns and passed the occupation on from one generation to the next. In such areas, there were almost two separate communities: one associated with mining and the other with things like agriculture, timber, and hunting.

People moving up the White River from Arkansas were the next immigrants. Most of these people were of English stock, from the hill country of Kentucky and Tennessee. These people were pro-union during the Civil War. As a result, the Ozarks had a lot of guerilla battles. A significant portion of the population along the Missouri/Kansas border and in the Ozarks was forced to flee until the war was over. After the Civil War, settlers of Germanic background moved into the plateau portions of the region.

Many other nationalities came to the Missouri Ozarks, each with its own traditions. These include the Italians at Rosati, the Swiss at Altus; the Polish at Pulaskifield; the Swedish at Swedeborg; and the Belgians at Belgique. Austrians, Bohemians, Danish, Dutch, Greek, Hungarians, Moravians, Portugese, Russians, Welsh, Waldensians and Yugoslavians also settled in the region. A few Amish and Mennonite groups also found their way to the Ozarks⁴ before 1900.

The stereotype of the Ozark people is as "hillbillies". "Hillbillies" are lazy, ignorant, bare-footed men with long beards, wearing overalls with only one suspender fastened, who have many children and dogs at home. This caricature never existed, at least for any substantial portion of the population. It is true that many people in the Ozarks in 1900 had lower incomes and less education than in other portions of the state. And it is true that many families, especially those in the more hilly areas, lived a subsistence lifestyle, doing considerable hunting and fishing to supplement other food sources.

An old native of the White River Valley, after being queried from time to time by tourist looking for a hillbilly, was once more asked by a New Englander where he might find one. After he was informed that he was talking to a hillbilly and finding that the native looked no different than any one else, commented; "These natives aren't like they used to be, are they?" To which the old native replied; "No, nor they never were."⁵

Stereotypes die especially hard when they are given life by television, as in *The Beverly Hillbillies*, a popular show that featured a few scenes filmed in the Missouri Ozarks. Another stereotypical image of the Ozarks was created about the time of World War I by the extremely popular book *Shepherd of the Hills*, by Harold Bell Wright. This created a "warm and fuzzy" image of the people of the Ozarks that, while it had some truth, was in many ways a caricature.

4. July 1, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow202d.htm>

5. July 3, 2001, <http://198.209.8.166/wrvq/V1/N3/Sp62e.htm>

In *The Shepherd of the Hills* (1907) Harold Bell Wright wrote a novel around the idea of an Ozarks cure. The Shepherd, the product of urban civilization, has been ravaged by that civilization. He comes to Taney County, Missouri for recreation and restoration, a process that includes involvement with the "natural" folks of the neighborhood. In the fashion of romantic Edwardian sub-literature, *The Shepherd of the Hills* is a morality tale. The central moral: go to the country, be in nature, and both body and soul may be saved.⁶

My first acquaintance with the Ozarks was in the late 1930s when my sister, after reading *The Shepherd of the Hills*, wanted to see the area first hand. *The Shepherd of the Hills* book was very popular in the 1920s and 1930s and made a major impression on readers concerning the Ozark culture. "Uncle Matt," who lived near Branson, was one of the principle characters described in the book. My sister and her boyfriend, with me as a chaperone, drove to the Branson area. Branson was at that time a small town in the middle of the hills. After asking for directions in Branson, we drove down a gravel road (now MO Highway 76) and stopped beside the road. There were no signs or gates. My sister insisted that she wanted to see Uncle Matt's cabin. She crawled through a weedy barbed-wire fencerow and walked through a pasture to where the cabin was slowly decaying. She was disappointed by appearance of the cabin, and she got poison ivy from the fencerow.

I was impressed with all of the hills, trees and curves in the road. I was a flatland kid. I had never seen anything like that in my early life.

The Ozark Sub-culture

There were more similarities between the Ozarks and the rest of America than there were differences. In the following discussion, I will focus more on the differences. The culture of those living on the plateaus was very similar to that found in the other agricultural areas of the state. The largest variations were the subsistence culture, found predominately in the hills along the White, Osage and Merrimac Rivers, their tributaries, and the mountains of the eastern Missouri Ozarks. This subsistence culture is what I will call the Ozark sub-culture.

The story of Ozark Mountain Country...was once defined by its isolation. ...The Ozark hills were settled by yeoman farmers who moved into the area from the mountains of the Carolinas, Tennessee, and Kentucky—individuals who were themselves descendants of farmers from Scotland, England, and Ireland...To the early settlers of the Ozark Mountains, life was hard. As the growing population depleted the once abundant game, residents were forced to exact a subsistence living from their small farms. When row crops like corn were planted on the steep hillsides, the region's soils, never rich or deep except on the regularly inundated flood plains, were scoured by gully washing rains. By the last decades

6. July 3, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow304c.htm>

of the nineteenth century, the economic history of the region became a story of various attempts of the local population to supplement their meager incomes...Various industries were tried with little or no success; two examples are lead mining and the collection of mussel shells from the area rivers for the button industry. The first sustained boom to the area's economy resulted from the harvesting of local timber when the nation's expanding rail system created demand for a seemingly endless supply of cross ties. After the forests were cleared of their virgin timber, the revenue vacuum was filled by the development of the tomato and strawberry industries. The production of moonshine was sometimes used by the remote hill people for supplementary income.⁷

A Homestead in the Ozarks

In contrast to the typical farmstead described earlier, the typical Ozark home was much smaller, often unpainted, and with relatively few outbuildings. The house was often a three-room, T-shaped house with a porch across the front. Another common form was the three-room "shotgun"⁸ house of southern heritage. Ozark houses, especially older ones, seem to belong to no discernible architectural style, not even "farmhouse style," as it might be called in the North. The tall, white-painted farmhouses of the Midwest are seldom to be seen here.⁹

Front porches are practically universal. Porches are a part of the Southern building vernacular, a utilitarian outside "room," of which the yard is a natural extension. They may be furnished with old sofas, straight-backed hickory chairs.... In summer, gourds, pumpkins and strings of drying hot peppers in fall, and dogs, cats, and folks in all good weather.... The trash and garbage of ancient Ozarks ancestors for whom the yard was, among many other uses, the disposal place.¹⁰

Gardens, on the other hand, are manicured, almost ostentatiously well-groomed. People take pride in the appearance of their gardens. Gardens are pretty.¹¹

Chickens and dogs were common around the Ozark homestead. In 1900, much of the Ozarks' government-owned forests were open range, and cattle and hogs were allowed to run where they wanted. The hogs took advantage of the large amounts of acorns found in the fall, and the cattle browsed in the open areas of the timber. The Arkansas "razorback" hogs were get-

7. July 22, 2001, <http://www.branson.com/branson/general/settlers.htm>

8. This house was given this title because the house was built in a straight line and it was said you could shoot a shotgun through the front door and the shot would go through the house and out the back door without hitting any walls or other obstacles.

9. July 1, 2001 <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow201a.htm>

10. *Ibid.*

11. *Ibid.*

ting rare by the turn of the century. The fatter European breeds were taking over, except in the deepest Ozarks.

Roads in the Ozarks

There were several military roads that had been constructed to link some of the major regions of the Ozarks together. Highway 66, now interstate 44, generally follows a military road that went from St. Louis (Jefferson Barracks) to Fort Gibson in Oklahoma. The country roads were most often trails winding through the forests, following ridgelines and other natural topography. Sometimes these were not more than paths from which trees and brush had been removed. Since Ozark soil is very rocky¹², the trails were often more usable than the roads on the prairies. Also, much of the Missouri Ozarks are far enough south that snow cover seldom stays on the ground for more than a few days.

Rivers as Highways

The original non-mining settlers in the interior of the Ozarks came up from the south on the White River. Fairly large boats could use the White during much of the year. As late as 1900, the White River still served as an important means of transportation both into and out of the Ozarks. "Jon"¹³ or larger boats could be used on other Ozark streams such as the Osage and the Merrimac.

Farming

Most farming in the Ozarks was subsistence farming. That is, most of the crops, gardens, and animals were grown for consumption by the family. Most of the crops were grown on the alluvial soils in the valleys along the creeks. These were small patches of a few acres, and best suited to cultivation by horse drawn equipment that could be easily maneuvered. Corn, wheat, and oats were the common grains grown.

The Dairy Industry

The gently rolling plateau around Springfield encouraged livestock production. The soil, while thin and subject to frequent droughts, made good pastures for small dairy herds. A sizeable butter and cream industry developed in Springfield. Shortly after World War I, Springfield ranked fourth in the nation in the production of churned butter, with eleven creameries that

12. In many areas of the hills, simply scraping off the brush and trees and leaving the soil open to rains would quickly produce a "gravel" road.

13. A jon boat is boat with a flat bottom, a generally rectangular shape and around 15 feet long. The name and the shape probably came from the Cajon culture to the south of the Ozarks.

employed 650 people.¹⁴ These provided a ready market for small dairy herds, which existed up until the recent decades.

Timber Cutting

The Ozarks was covered with high quality pine and oak forests.¹⁵ Oak furniture was in high fashion and the white oak lumber was in considerable demand. By 1900, the cutting of these forests was well underway. Eastern firms had purchased large tracts of land and large sawmills had been constructed for processing the lumber. This industry offered employment for large numbers of people. Almost anyone could get a job cutting and trimming trees. A two-man crosscut saw was the most common tool used for felling trees. This was very hard work, but the skills needed could be learned quickly. The logs were pulled from the forests by teams of horses. Some people hired themselves and their teams out as a combination. A third major source of employment was the sawmills. The largest employment was during the winter months, when men were not involved in agricultural work. The logging went on year around, however.



Pine Logs at Sawmill in Ozarks. ¹⁶

Hunting and Fishing

As noted above, the Ozark subculture placed a heavy emphasis on subsistence activities. Even though a man might be employed in the local sawmill, hunting and fishing were often the

14. Milton Rafferty quoted in Richard S. Kirkendall, *A History of Missouri*, Volume V, p. 51

15. Milton D. Rafferty, *Missouri*, Westview Press, Boulder, 1983

16. November 27, 2001 <http://www.watersheds.org/blue/farm/hforestry.htm>

most important parts of his life¹⁷. By 1900, most of the wild game had been eliminated in the Ozarks; white tail deer and wild turkeys had been hunted until they were endangered. The black bears had been eliminated, as had the large cats. This left raccoons, coyotes, rabbits, squirrels, skunks, quail, and a few other animals. Rabbits and squirrels were hunted for meat. Rabbits were also sold for their fur, along with 'coons, 'possums, mink, skunks, weasels, muskrats, and an occasional fox. A few people, not more than one or two per community, trapped fur animals during late fall and winter for commercial sales. This was generally considered a marginal way of obtaining money.

I grew up in southwest Missouri. On many Sundays, I would take a .22 rifle to the woods to hunt squirrels. I never saw a deer in all my youth, and only one fox. I walked more than a mile for elementary school and a mile to catch the bus for high school, plus hundreds of walks in the woods and lots of work in the fields, so I had lots of opportunity to see any wildlife. Looking back, I can understand why I didn't see any wildlife except squirrels, rabbits and a few birds. There were not any to be seen. My older brothers trapped rabbits that were sold for their fur. In contrast to the shortage of deer, the roads at that time had numerous rabbits in the mornings and evenings. Diseases have since largely eliminated the rabbit population.

The most exciting and challenging form of hunting was 'coon hunting. 'Coon hunting was a late night or all night activity. A group of hunters would gather together after dark and release their dogs. For the next several hours, the hunters would follow the dogs, listening to the calls of the dogs as they tracked the 'coon or, as frequently happened, the dogs became distracted by chasing rabbits. This was considered to be a major sin and the dogs would be severely punished. When the 'coon was at long last "treed", it might either be killed by a rifle shot or be chased out of the tree to fight with the dogs. A full-grown 'coon could give one or two dogs a good fight. A good 'coonhound was considered to be a valuable possession, and much of the night would include discussions of the merits of various dogs and/or the trading of dogs. 'Coon skins were at times valuable commodities, however the value varied widely depending upon the supply and the demands of fashions. Young 'coon was considered to be a desirable meat.

'Coon hunting was generally regarded as a working class activity. Not so for "bird" (quail) or duck hunting. Again, these required the use of dogs. A good (non-rabbit-chasing) bird dog that would find, hold on point and retrieve shot birds was a valuable animal, worth as much or more than the large animals on the farm. Quail and duck hunting were middle class activities and often businessmen from the nearby towns would come out to a farm for bird hunting on a Sunday afternoon. Duck hunting was dependent upon the availability of a body of water that would attract ducks. Both the quail and ducks were used for their meat.

The consumption of alcohol during hunting was an expected activity. This was probably "home brew"¹⁸ or "white lightning" in the earlier years, beer and whiskey in later times.

17. *Hunting and fishing were almost exclusively male activities.*

Fishing occurred through a variety of techniques, including regular fishing with lines and poles, "trot lines"¹⁹, "bank lines"²⁰, seines²¹, noodling²², and spear fishing. Fishing was a "meat" activity. That is, it was not considered a sport as it is today, but rather as a way of obtaining food. Mountain brown trout could still be found in some of the Ozark streams. Almost none of the streams now have trout. There were many secrets concerning fishing, such as the best places to fish, the best baits, the best times, and so on. These were passed from father to son. Women occasionally took part in fishing activities, particularly if the fish were going to be cooked and eaten on the stream bank.

Trading, Bartering and Sharing

Hard money was scarce in the Ozarks in 1900. The term hard money refers to money made from metals such as gold and silver. There was a suspicion of paper money, stemming from the deflation of confederate money after the Civil War. As a result, trading and bartering were important economic activities. The official government data do not reflect this informal economy. If I had an extra calf of butchering size but needed firewood; a trade could often be worked out without any cash being exchanged. In addition to bartering, neighbors often shared goods. If one found a wild bee tree with a large amount of honey, it was just being a good neighbor to share some of it. When people butchered a calf, they would take the neighbors some fresh liver. Fruits from the orchards and vegetables from the gardens were commonly shared. No written records were kept of the bartering, trading and sharing, but a mental record was kept and if the neighbor did not reciprocate in an appropriate manner, the exchanges stopped.

Education

Formal education was not emphasized in most parts of the Ozarks. This was part of the southern Appalachian heritage brought into the Ozarks.

It was a day when school attendance was not compulsory. By many of our elders, who had managed with little or no education, school was regarded often as a soft way to get out of work, as a waste of time, as a means of alienating the young from the social and religious traditions of their families, at any rate as necessary only to the extent of learning how to read, write and cipher. Rural

18. Home brew is fermented much like beer, but in color and taste, it is more similar to European dark ales. White lightning is distilled liquor made from fermented corn, with a very high alcohol content. To purchase beer and whiskey required money not always available.

19. Trot lines are long lines stretching between two banks or trees over a body of water. The trot line includes a number of short lines hanging from the long line, each with a baited hook. These were usually put out and checked by boat.

20. Bank lines are thrown out from the bank and left overnight to catch catfish or carp.

21. Seines are long nets that were stretched through the water.

22. Noodling is catching fish with the bare hands.

A Revolution in the Heartland

schools then began in July and closed by the new year. In this period came such farm tasks as corn picking, sorghum making, getting in the winter's wood. If the pupil's help was needed on any of these chores, he was withdrawn from school until another spell of comparative leisure on the farm. In short, school was a luxury to be indulged only when more important things were not pressing.²³

In sum, the Ozark sub-culture had much in common with the remainder of rural Missouri. In 1900, it was largely a subsistence way-of-life, with occasional wage labor jobs. Ozark people were not lazy. After the timber was cut in the local area, other jobs were very scarce. The differences in culture were largely derived from the source of the settlers who moved into the Ozarks hills. The southern Appalachian culture was different long before the settlers arrived in Missouri.

23. July 3, 2001, <http://198.209.8.166/wrvq/V1/N10/W63d.htm>.

Chapter 11

The Germanic Region



The geography of the Germanic region of the northern Ozarks is similar to the rest of the Ozarks, with rolling hills, and clear streams flowing into the Missouri river, but the culture is different. Most communities in Missouri already contained some people of German ancestry when immigration to the U.S. increased as a result of famines and unpopular governments in Europe. The Germanic population in Missouri increased rapidly as waves of immigrants came to find a better life than that in Europe. It is estimated that more than 100,000 German immigrants came to the region between 1830 and 1880.¹ In the area bordering the Missouri and Mississippi Rivers, especially from Jefferson City to Cape Girardeau, the percentage of the population that was of Germanic heritage was such that the churches, other buildings and other

1. July 5, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow301d.htm>

aspects of culture such as the language reflected the German culture.² There were German language newspapers, German restaurants, and German wineries and breweries. Some scholars refer to this area as "Missouri's Little Germany".³

The German language was commonplace in the place of my youth. Women gathered for quilting bees in the front rooms of old houses and spoke the language of their ancestors with frequency and fluency. Old folks spoke German on their telephone party lines so that young folks couldn't understand them. I remember, in particular, one elderly gentleman who had rarely been out of the county and who was three generations removed from his German forebears; still, German was his first language. He thought in German, and he required a German-speaking priest to hear his confession.⁴

The Germans who settled along the rivers were generally "upland Dutch," from the rolling hills and mountains of Bavaria and what is now Austria. They chose land and climate similar to that of their homeland. My mother's father, who was two generations removed from Germany, always told us very proudly to remember that we were "upland Dutch".

The Germans were excellent but conservative farmers. They had a sense of the land, and how to farm it successfully. Their farming contrasted with the land-depleting practices of their Ozark neighbors.

The German farmsteads featured large brick houses, large well-painted barns, many outbuildings, tailored fields, and weed-free premises. Often the farmstead would be located at the end of a winding lane, perhaps on a hilltop overlooking the fields. Even more than a 100 years later, their farms and farmsteads stand out.

The buildings of this region -- stoutly built, well-executed dwellings, barns, wine cellars, outbuildings, stores, commercial and industrial buildings, steepled churches -- are in the countryside and towns alike. In picturesque towns like Hermann, Washington, Augusta, Westphalia, and numerous others are houses and stores placed close to the street, often built of brick with arched openings and fancifully finished cornices. Farmsteads with houses, great barns, and outbuildings of stone, fachwerk (half-timbered), horizontal log, frame, or brick occur in great number in the beautiful rolling farm country of the Rhineland and "Father Hellas" settlement regions. Exquisite churches, often made of stone, dot the rural landscape, reflecting the strong influence of Catholics and of German Protestants (Lutheran, Evangelical, Methodist) whose parishes and congrega-

2. Robyn Burnett and Ken Luebbering, **German Settlement in Missouri: New Land, Old Ways**, University of Missouri Press, Columbia, 1996, p.3.

3. *Ibid.* p. 27.

4. July 5, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow301f.htm>

tions were focal points for the clusters of communities spread across a succession of ridges and valleys on either side of the lower Missouri River.⁵

The Germanic communities were tightly knit, with much of the community activities focused around the church, whether Lutheran, Evangelical, Reformed, or Catholic. The communities were church-centered and the households family-centered. Both were strong social units. These strong families and communities resulted in lower migration rates. While Anglo-American youth were migrating to the cities, the Germanic youth stayed in the home community.

Old Order Amish and Mennonites in Missouri

Although there were Amish settlements in Missouri as early as 1850, none of those established before 1930 remain. Nor is there any systematic history of these early settlers. Of the present settlements, Bowling Green, established in 1948, is the oldest.

5. *Ibid.*

Chapter 12

Southeast Missouri—Boot Heel



The southeastern portion of the state, known as the “boot heel”, “Mississippi lowlands,” or “swamp east,” is geologically and culturally unique in Missouri. It is the northernmost portion of the Mississippi delta and is composed largely of rich, deep alluvial soils, lying flat, with some low terraces. It includes some of the richest farming lands in the state.

Until recently, most of the area was a swamp. Crowley Ridge and other rolling areas rose above the swamp and were settled early by Europeans who had moved up from the south. The New Madrid fault line runs deep under the area. The massive earthquakes of 1811 and 1812 resulted in the depopulation of much of the region. The tangle of fallen trees left by the earthquake made the region very difficult to traverse. It was not until almost 100 years later, in 1905,

that the massive project of draining the swamps started. The project, which moved more soil than the construction of the Panama Canal, continued for the next twenty years.



Construction of Drainage Ditch—Southeast Missouri ¹

The population reflected this pattern. In 1900, there were 95,000 people residing in southeast Missouri. This increased to 171,000 in 1930 and 219,000 in 1950 before declining again.

As the project succeeded in draining the swamp and making the rich alluvial land available for farming, a cotton culture similar to that in Arkansas and Tennessee was created. The startup costs for farming there were relatively high and the financing was entirely private. Most people could not afford become landowners. Landowning was restricted to those with wealth, generally gained in southern agriculture.

The new cotton farms included large numbers of sharecroppers, mostly African American. This culture was highly segregated by race and economic status. Most of the black population (and a substantial portion of the white) was poor, and the landowners, who were almost entirely white, were the elite wealthy class.

Cotton farming was also very labor intensive and for the landowner to make a profit, the labor costs had to be low. Two unique features of cotton farming required large amounts of labor. The seed had bits of lint stuck to it. As a result it would not flow evenly through planters, as

1. November 24, 2001, http://memory.loc.gov/cgi-bin/query/D?fsaall:15:./temp/~ammem_SYRQ::

would corn or wheat. The cotton was planted unevenly and then thinned with a hand hoe. Also, often the cotton would be cultivated by hand hoe to remove weeds. The other labor-intensive part was in the picking. Cotton bolls are tough and the lint, including seed, had to be pulled from the seedpods and placed in a sack that was dragged through the field by the picker as he or she worked. Since cotton plants grow to around two feet high the picking has to be done bent over at the waist.



Mechanization did not come to cotton farming until almost mid-century.²

There were two types of landowner/tenant arrangements in cotton farming. In the “rent for a share” arrangement, the tenant provided the labor, the farming equipment, animals, feed, seed, and fertilizer. The landowner would earn anywhere from a fourth to a third of the crop value and the tenant was given the remainder. The majority of sharecroppers were too poor to own their equipment, so the more common system was for the sharecropper to supply only his own labor and the animals, and to borrow the cost of the seed, fertilizer, equipment, and living expenses from the owner, usually at a high interest rate. On the larger farms, the landowner set up a company store that sold, on credit and with a large mark up, items necessary for continued survival. The landowner got half of the crop, plus interest on the loan. If the debt were higher than half of the crop, it would be carried over to the next year. Most sharecroppers were continuously in debt to the landowner and had very little opportunity to move or otherwise change the situation. The sharecropping system kept the families in poverty, generation

2. November 23, 2001 http://memory.loc.gov/cgi-bin/query/l?fsaall:67:./temp/~ammem_XGkU::display-Type=1:m856sd=fsa:m856sf=8a23253:@@@

after generation. The result was an economic and political system where the population was only a short step away from slavery.

Inez Anderson: Ah, my early years, I was living in Missouri, was born in Missouri and moved to Arkansas at five years old with my family of five, and we were share croppers on the farm. We had to work in the field and chop cotton and pick cotton, and I was very small. I started about four years old. My mother made me a cotton sack out of her flour sack, 100 pound flour sack. And I was only four years old, and I would pick cotton beside my mother, and she would tell me how to do it until I get sleepy, and I had to work as long as the bigger people had to work. Everybody in the family had to work; because that's the only way we could live. The grownups would make about \$1.00 a day, so I would work alone. I wouldn't make any money. Never had any money to put in my pocket, never. And I grew up on this farm until I was about twelve years old, and I would pick like 115 in the beginning, and my father would spank me and tell me I could get more, you know, to work harder, I could get more and what he was going to give me if I would pick more, and I would get like 200, you know. I could get it now. I could pick it because my mother learned me and got up to twelve years old, and I got as much as 334 pounds. And that was just as much as the grownups would get. But I was really smart in the fields and when I would come home, we had to . . . my mother would leave early and cook dinner and also early to cook supper, and she'd have everything together and we'd always sit at the table together and ate together. We did everything together. So after work in the fields on Sunday, we'd all go to church. We all would go to church, and Sunday night we'd go to church. We always would have plenty food to eat. But the church that we would go to, there was the school that we attended. We would attend school in the church. There were no other nationalities going to this school, our church, but the blacks. I had to come home, I had to help chop wood, stack the wood on the porch to make fires, and when I got to be about twelve years old, I'd get up in the morning, and in the wintertime it was cold in the house, and I'd have to make a fire and help with breakfast, just work all the time. Work and church, just all I did, work, church and I went to school, work, church and school. That was it.³

The following poem expresses the despair of people locked into sharecropping:

SHARE-CROPPERS

*Just a herd of Negroes
Driven to the field,*

3. July 12, 2001, <http://www.proviso.w-cook.k12.il.us/EAST/downtweb/pproject/inezinterview.htm>

*Plowing, planting, hoeing,
To make the cotton yield.*

*When the cotton's picked
And the work is done
Boss man takes the money
And we get none,*

*Leaves us hungry, ragged
As we were before.
Year by year goes by
And we are nothing more*

*Than a herd of Negroes
Driven to the field --
Plowing life away
To make the cotton yield.*

—Langston Hughes⁴

Education for the children of the sharecroppers was minimal. The “separate, but equal” doctrine of the Supreme Court was never really implemented in southeast Missouri. There were schools for minority children, but these were not much more than shacks with underpaid and under trained teachers. These schools were scattered, and the only means of transportation was walking. As a result, substantial portions of the sharecroppers were illiterate. This made it easy for the sharecroppers to be exploited by the landowners. There were a few landowners who tried to make sure that the sharecroppers were treated fairly. Most landowners in 1900 were not more than one generation removed from slave owners who still strongly resented the forced changes brought about by the Civil War. A very significant proportion of the landowners did not believe that blacks needed schooling or, indeed, were capable of learning in school. Similar beliefs were held about health care, participation in local government and other non-labor activities for the sharecroppers and their families.

4. July 12, 2001, <http://www.flint.lib.mi.us/fpl/resources/poetry/poetryquiz/hughes.html>

Part 2

The Decades of Change

Major Innovations Leading up to 1900

Plows

One of the most basic and most important machines was the steel moldboard plow. Like so many innovations, the moldboard plow had many early models. Thomas Jefferson is one of the more famous inventors.¹ It was John Deere who invented one in 1838 that would turn the tough prairie sod and continue to do so without stopping for cleaning.² Prairie sod is a tangled, tough mass of roots and decaying vegetation. The steel moldboard plow enabled a man with a team of horses to “break out” perhaps an acre of prairie sod in a long day. By 1900, this plow had been adapted to riding and wheeled use.

Harvesting Process

A second major area of important developments was in the harvesting process. Four men cutting small grains with hand scythes and cradles had been replaced by one man with a binder pulled by three horses³. The first threshing machines were invented in England around 1800 and by 1900 the use of such machines powered by steam engines had become relatively commonplace in rural Missouri.⁴ Mechanization of small grain production and harvesting had reached a stage where farmers could handle larger acreage than in the past. A similar series of inventions had greatly enhanced the cutting and storage of hay. The sickle mowers had replaced the scythes; horse drawn rakes replaced hand rakes; and hay-handling equipment in

1. July 6, 2001, <http://www.monticello.org/resources/interests/moldboard.html>

2. July 6, 2001, <http://web.mit.edu/invent/www/inventorsA-H/deere.html>

3. July 6, 2001, <http://www.vaes.vt.edu/steeles/mccormick/harvest.html#tractor> A binder cuts the grain stalks about four inches above the ground and gathers them into bundles that are tied with twine.

4. July 6, 2001. <http://ebooks.whsmithonline.co.uk/encyclopedia/05/A0000005.htm>

barns replaced in part the man with a pitchfork. The stage was now set for the first of what became many series of horizontal expansions of farms, i.e., the farms became larger in acreage.

Corn Production

A similar series of innovations occurred in corn production, one of the other major field crops in Missouri at that time. The corn check-row planter began to be used in the middle of the nineteenth century.⁵ By the turn of the century, corn planters that used wires to produce “check rows” were in common use. The wire had knots in it that triggered the planter to deposit seeds in “hills”. Using this method, the corn was planted in hills that were lined up two ways. From above, in a perfectly aligned field, the pattern of corn plants would form squares. This arrangement allowed the corn to be cultivated from two directions—down the rows and across the rows. It was a matter of considerable pride for a farmer to be able to line up the corn in straight rows from the two different directions. Other farmers passing by would observe and comment on how straight the check rows were. The use of check rows also had a practical use. The cross cultivation helped to keep the weeds reduced, especially in the cornrows. Again, results were the same. Instead of the farm operator and children hoeing the corn plants by hand, a machine—the corn cultivator pulled by two horses and the operator riding on the machine—could now do the job. This was another reason for expansion of farm size.

Barbed Wire

Barbed wire and other commercial fencing materials had become standard by 1900. This allowed an increase in livestock production with the same or less labor. No longer was it necessary to have a child or someone go with the cattle as a herder. “Hedge fences”⁶ were effective for cattle if they were carefully maintained, but this took a large amount of labor. Fencing permitted the ending of “open range” that was common in the Ozarks at the turn of the century.

5. July 6, 2001. <http://web.winco.net/~tbould/Planter.html>

6. *Hedge fences were rows of trees that have many small and very sharp thorns that were trimmed to be about waist high and about two feet wide. These had to be trimmed every year, although some farmers permitted them to grow for several years until the new growth was large enough to be used for fence posts. The wood is very hard and difficult to cut. Hedge fence posts had to have the wire tied to the post because the wood was too hard to drive a staple into.*

Chapter 13

Technological and Other Innovations, 1900–1925: Agriculture

The major advances in civilization are processes that all but wreck the societies in which they exist.
—Alfred North Whitehead⁷

The new millennium brought optimism for the future. The industrial revolution had already begun to affect the growing middle class of urban America. The cities had water systems, sewer systems, electricity, telephones, streetcars, and more.

Many of the innovations that were to later transform rural America had already been discovered or invented and put into place in urban areas. The automobile, electrical service, telephones and others had started down the long route to widespread adoption in rural communities. Because urban and coastal communities were the first to adopt most innovations, the rural Midwest was somewhat laggard in the adoption process.

Stability, not change, was the norm in most rural Missouri communities at the turn of century. But already changes were starting to appear, in the form of the steam engines that powered the threshing machines, horse-drawn riding plows and mowers, and binders to cut and bundle the small grains. These were small indicators of things to come.

The period from 1909 to 1914 has been called the “Golden Age of Agriculture”. Agricultural product prices were high compared to production costs. These years have often been used to define agricultural parity⁸. Parity is, in essence, a measure of the potential for making profits by comparing the costs of production to the prices received.

World War I provided a major boost to the economy, especially the agricultural sector. Demand created by the war pushed prices for farm products even higher than during the “Golden Age” of the previous decade. The government urged farmers to produce more for the war effort. The U.S needed to feed its own troops plus provide food for some of the European population.

7. Cited in *The National Interest*, no.41, Fall 1995

8. Parity is the ratio of farming expenses to the prices of farm products sold.

A Revolution in the Heartland

Farmers responded by putting more acreage in crops. However, after the war was over, agricultural products were in surplus and prices dropped sharply in the 1920s as a result of over production.

This period was known as “the Roaring ‘20s” for the optimism about current and future economic growth. While the 20s roared, it was less well known that the agricultural sector was already in a recession that inhibited many farmers from making changes if they desired to do so. Money was tight.

The World War sent agricultural production soaring. It brought in a few years changes that might otherwise have extended over generations. Farm prices and land values doubled and trebled... The need to increase production accompanied by a declining labor supply led to mechanization on an unexampled scale. Farmers, caught up in the expansive spirit of the times, mortgaged their farms to purchase high priced land and expensive equipment.

And then the rocket burst. Farm prices dropped. Nationalism abroad and American tariff barriers cut the agricultural exports of the United States, which had become a creditor nation. Competition appeared from Argentina, Canada, Australia, and New Zealand where production and producing lands had been expanded greatly during the war. The depression which engulfed the United States in 1929-1930 had been familiar to the farmers since 1920 -1921.⁹

My father was one of those caught in the 1920s recession. He had bought dairy cattle in the late 1910s when demand was high, and had to pay for them when the glut of dairy products cheapened the price.

Agricultural Innovations

Tractors

The first quarter of the twentieth century saw the first widespread use of gasoline motored tractors for fieldwork. In the latter part of the nineteenth century, some of the larger farms used steam engines to pull field implements. These were too large and clumsy for the small farm fields commonly found in Missouri. Gasoline motored tractors were much smaller and therefore more widely useful.¹⁰ John Deere produced their first gasoline motored tractor, the Waterloo, in 1918. The first tractors cost close to \$1,000 each compared to the \$50,000 to 100,000 of today and gasoline and oil had to be purchased on a regular basis, so they were purchased by farmers with large acreages who could justify the added costs. Only 4% of farmers had tractors in 1920. By 1925 most communities had at least one tractor in the fields. By

9. July 28, 2001, <http://www.dcw.com/~bptpl/brookston/ch4.htm>

10. Lori Breslow, *Small Town*, John J. Buse Historical Museum, St. Charles, 1977, p. 36

1930, the number of tractors on Missouri farms was more than three times the number in 1920. By today's standards these were slow, rough-riding, hard-to-steer, hard-to-start, primitive machines, but nevertheless they opened the door to a mechanical revolution in farming.

No single mechanical agricultural innovation changed rural Missouri as much as the use of tractors. It was no longer necessary to devote a substantial portion of the farm to horse feed to maintain a team of horses. The tractor would do the work of many teams of horses.¹¹ While the number of farms in 1930 with tractors was still less than ten percent, the numbers increased rapidly in the following years. The growth in size of farms was strongly motivated by the adoption of tractors, both because it was necessary to have a larger acreage to afford a tractor, and because tractors made it easier to farm larger acreages

Some industries were hurt by this transition. Missouri had an excellent reputation for mule breeding. This market declined, although the demand from cotton producers in the South helped to maintain demand for a few more years. Harness makers were also virtually eliminated.

My home area had some breeders who had national reputations for breeding high quality red mules. They continued to do so for a couple of decades after much of the demand had disappeared. They continued to show such mules at local and state fairs for the pride of the past. Interestingly, one of their continuing markets was the U.S. Army, which purchased the mules as pack animals for use in the mountains.

As I noted in the first chapter, the first experience in our family with a tractor was a Farmall F-12 (now called McCormick-International Harvester) that we purchased new in 1938. We were not one of the early adopters. Our farm was too small to justify a tractor. The buying of the tractor soon encouraged my father to go from farming 140 to farming 360 acres. The tractor had just about the same power as three or four horses. Indeed, it was used like an iron horse. We hooked implements made for use with horses to the drawbar of the tractor. With one person (often me) driving the tractor and another person riding the implement, the fieldwork was done. It actually took more of us with the tractor than without. My father insisted on keeping a team of horses to pull wagons and other light loads for many years after buying a tractor. While driving that tractor was not easy, it was easier than driving horses all day. There was no power steering, no starter, very little springs under the seat, no cab, and no air conditioning.

New Crops

Korean Lespedeza is an example of the diffusion of a crop from another country that had a significant impact on one region of the state. It was introduced into the U.S. in the first decades of the 20th century. This legume would grow on relatively poor soils, but at the same time respond well to higher fertility soils.¹² Korean lespedeza hay, alone or in combination with

11. Richard S. Kirkendall, *A History of Missouri*, P. 55.

12. July 8, 2001, http://www.uaex.edu/Other_Areas/publications/HTML/FSA-3050.asp

grasses, made a feed that was ideal for dairy cows. The seed was affordable and the knowledge required was limited, thus the adoption by farmers was rapid. Korean lespedeza encouraged the start of the dairy farms that eventually became a major industry in the Ozarks.

Soybeans, another adopted crop, are today one of the most important cash crops in the world. Soybeans originated in China and were introduced into this country in the 19th century.¹³ However, commercial production in this country did not begin until the second and third decades of the 20th century. No records are available that indicate when the crop was first grown in Missouri, but it is clear that soybeans did not have a major impact on Missouri farm incomes until the second quarter of this century. Soybeans are grown primarily for seeds, which are used in the production of cooking oils. Prior to growing soybeans, many farms grew cowpeas, another legume, used primarily for hay.

Changes in Agriculture Policy and Program

Agricultural Research/Education

For generations, farmers used the methods of the previous generations. “Book learning” for farming was regarded by many as suspect, as was change. Far-sighted leaders saw that farming needed to change and pushed in Congress for laws to encourage the establishment of research stations and teaching colleges in each state.

By 1900 the land grant colleges and research experiment stations had been established in most states and major technological innovations were just over the horizon. During the first two decades of the new century, Congress passed bills setting up the Cooperative Agricultural Extension Service and vocational agriculture in the high schools.

- **Morrill Act**—Land Grant Colleges (1862).
- **Hatch Act**—Experiment Stations (1887).
- **Smith-Lever Act**—Extension Service (1914).

The three federally sponsored programs¹⁴ that worked directly with farm operators are:

- **The Cooperative Extension Service**—this placed educated technical trained staff in every county of the state. The word “cooperative” means that this program is a partnership between USDA and the state agencies, usually the land grant colleges. The states had to put up matching funds. In Missouri the program now called Outreach/Extension is a cooperative program between the University of Missouri, Lincoln University, and USDA. The

13. July 8, 2001, <http://www.agron.iastate.edu/soybean/history.html#Origin>

14. *In no other industry, with the possible exception of forestry, has the federal government taken such an active role in promoting change.*

early extension service focused on Agriculture, Youth, (4-H clubs), and Home economics (Homemakers clubs).

- **Soil Conservation Service (SCS)**—as the name implies, the primary focus of the SCS is on soil conservation. The SCS is a direct federal program. Staff is on a multi-county (regional) basis. The primary function of the staff is to work with landowners to develop farm soil conservation plans. The SCS staff provides technical assistance when laying out terraces¹⁵ and ponds¹⁶ and provides financial assistance to pay part of construction costs.
- **Agricultural Education** (including the Future Farmers of America, now just FFA, and Future Homemakers of America, or FHA, now Family, Career, and Community Leaders of America)—a federally subsidized program that was designed to teach high school students the principles of good farm management and husbandry (this was the early emphasis—it has changed in recent years, as the interest in returning to farming and traditional home economics has declined).

All three agencies saw one of their primary goals to be change— to encourage people to try and adopt innovations in farming and in the farm home and family. Often “demonstration plots” were established in communities to show the results of the farming innovations. The first innovations promoted were those that produced direct and immediate results. For example, they enabled farmers to get higher yields through the use of crop rotations and “green manure” usage.

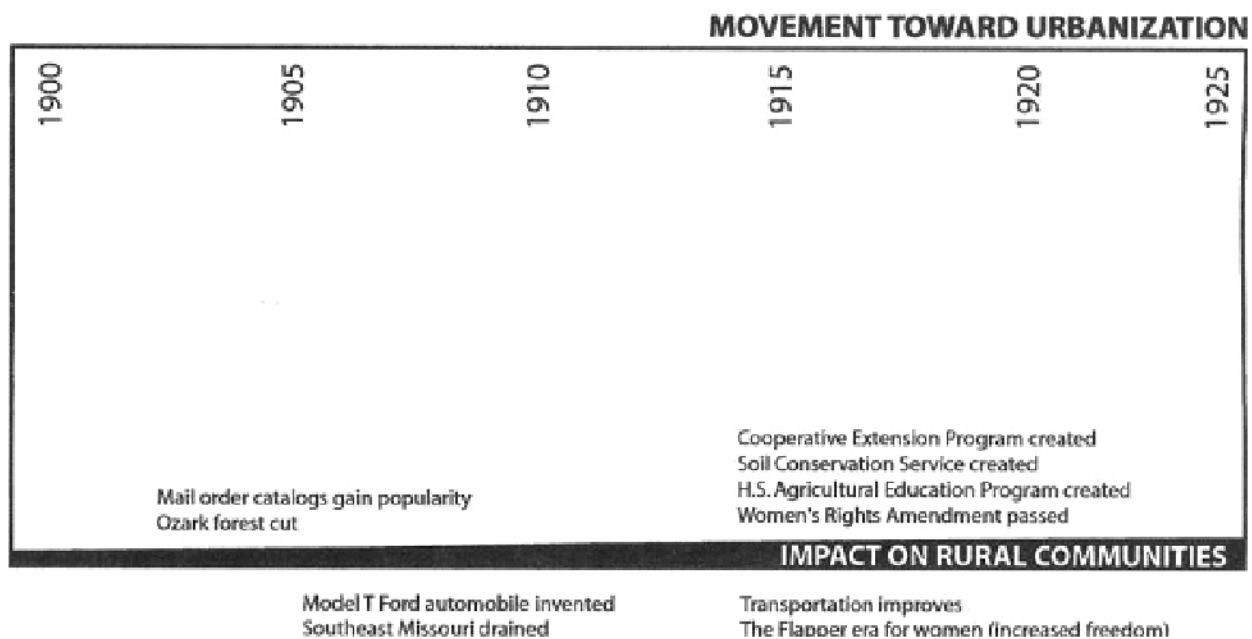
15. Terraces are berms made from soil that follow the contours of the land and make the water runoff in a much less erosive manner. These were first built with horses, now road graders or other mechanical dirt moving equipment is used.

16. Ponds are small impoundments of water, often built to help reduce erosion as well as hold water. Flying over rural Missouri in the evening, hundreds of these ponds can be seen. These now provide the major water source for livestock on farms.

Chapter 14

Technological and Other Innovations, 1900–1925: Community Changes

SELECTED INNOVATIONS INFLUENCING RURAL COMMUNITIES 1900-1925



The Setting

World War I

The war had social impacts that lasted for several decades. Many young men were drafted for the Armed Forces. A substantial proportion of these were sent to Europe for service. When these service men returned, they were not the same people who had left. They had seen other

countries and other cultures and brought new ideas back with them. As the song goes “How are you going to keep them down on the farm after they’ve seen Paree?”¹

Germany was the enemy in World War I. Before World War I, Missouri had twenty-eight newspapers and twelve monthly publications printed in German. It was common for German to be the language of the home and children to learn English at school. Many church services were in German. The Missouri Germans were very loyal to the U.S., but they found themselves in a difficult situation when things German became less popular and to speak German was somewhat suspect. Many people stopped speaking German at this time.² With the predominant language now being English, the Germanic communities began to lose some of their close internal cohesion. Slowly these communities became more similar to the surrounding communities. Many of the surnames were still of Germanic origin and the houses and barns still had the neat appearance that indicates Germanic heritage, but these characteristics can be found in Germanic heritage families in most rural Missouri communities. Most given names in the Germanic communities are of English origin. As I said earlier, my mother was of Germanic descent, but I ended up with a given name that is of Italian origin and was the name of a popular Hollywood movie star of the time.

Communications

By the turn of the century, the telephone had been invented³ and radio was in its infant stages of development⁴, but it was another fifty years before these had major impacts on rural communities in Missouri. After World War I, some farmers united in some rural communities and built primitive telephone systems. Often these were no more than a wire strung along the fencerows. The telephones were the large oak wall phones now found in antique stores. They required two large cylindrical batteries for operation. The systems tended to work when the weather was dry and be unreliable during rain or storms. The sound was often filled with static and they were always party lines. There were different rings to differentiate different phones. Since everyone knew the rings for other people on their line, it was not unusual to hear a click while talking. This indicated that someone else was also on the line listening. These systems also required a person to operate the switchboard. The small systems continued to spread until about one-third of the farmers had telephones in the 1930s.⁵ It was not until after World War II that a majority of rural homes had reliable telephone service.

These early telephone systems had very a limited impact on most communities. They did serve as a means of communications within the neighborhoods. Long distance calls using these systems were very difficult, if not impossible. However, they served to introduce telephones in a way that made additional changes later more easy to accept.

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1. July 7, 2001, <http://www.filmsound.org/ulano/talkies3.htm>
 2. Burnett and Luebbering, *op.cit.* p. 103.
 3. July 7, 2001, <http://www.iath.virginia.edu/albell/default.htm>
 4. July 7, 2001, <http://www.angelfire.com/co/pscst/radio.html>
 5. July 7, 2001, <http://www.norbest.com/norbest/aghistory.htm>

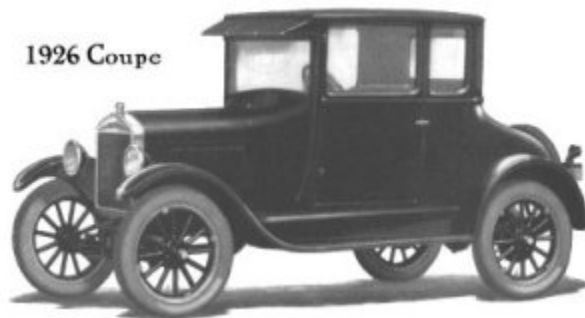
We had a system in our community that worked most of the time. It was used primarily for the women to talk with each other about coming events such as at school or church. Maude was our switchboard operator, who was paid a small amount each month. If she didn't answer our ring, we assumed she was outside feeding the chickens or something and we would call again in an hour or so.

Transportation

Most Missouri country roads at the turn of the century and for the first quarter of the twentieth were dirt when it was dry and mud when it rained. The county seat town had brick paved streets around the square. Automobiles were viewed as expensive toys to be driven once a week, at most.

This started to change in the first decade of the new century. Henry Ford, after several failures at developing a useful and affordable machine, came out with the "Model T" in 1908.⁶ For the first time there was an automobile for the masses.

The car that finally emerged from Ford's secret design section at the factory would change America forever. For \$825, a Model T customer could take home a car that was light, at about 1,200 pounds; relatively powerful, with a four-cylinder, twenty horsepower engine, and fairly easy to drive, with a two-speed, foot-controlled "planetary" transmission. Simple, sturdy, and versatile, the little car would excite the public imagination.⁷



1926 Model T Ford Coupe⁸

The machine was simple, the parts were interchangeable and the "shade tree" mechanic was born. People could and often had to work on their own machines. The speed of change was relatively slow at first, but it was not long before the Ford factories, with the newly created automobile assembly lines, were building automobiles by the tens of thousands. By the time

6. July 7, 2001, <http://www.cbc4kids.ca/general/the-lab/history-of-invention/automobile.html>

7. July 7, 2001, <http://inventors.about.com/science/inventors/gi/dynamic/offsite.htm?site=http://www.wiley.com/products/subject/business/forbes/ford.html>

8. November 24, 2001 http://www.lausd.k12.ca.us/Belmont_HS/tkm/modeltfordpic.html

the model was dropped in 1927, eighteen million had been made and the price had dropped to less than \$300. By this time, Ford had developed the more reliable "Model A" as the primary replacement for the Model T. Other models of automobiles were quickly being introduced.

While it was not known at the time, the state, the nation, and the world had started down a road that would transform social and economic structures. In 1900, there were 8,000 automobiles registered in the U.S., 8,131,522 in 1920, and 23,034,753 in 1930.⁹ Even so, the machines were relatively slow in coming to rural communities. The condition of the roads did not encourage automobiles. But the Model T and competitive automobiles that started to come from the newly formed General Motors,¹⁰ Chrysler, and other companies created a demand for better roads. No longer was it acceptable for the roads to be muddy. The desire for all-weather roads started the process of improving roads that in Missouri became known as the "Farm to Market" road program.

Prior to 1907, highway improvements were left entirely to the counties, most of which were without trained or experienced engineers. Nor was there coordination of planning among the counties. With the introduction of the motor vehicle, highway transportation needs were not being met; and it became evident that insurmountable road deficiencies were no longer manageable at the county level.¹¹

More than any other single innovation, the Model T and similar automobiles opened previously isolated rural communities to urban influences.

In my family, my grandparents were the first to have automobiles, but it was my parent's generation that fully adopted the use of the automobile. My parents got their first car a few years after getting married. I think it was in the mid-1920s that they bought a 1920 used Chevy and kept it until 1938. The car was worn out before my parents bought it. It was very hard to start and had to be hand cranked much of the time. This chore usually fell to some of my older brothers to do.

Speeds were very slow during these early years. On country roads, 10 to 25 miles per hours would be normal. The roads were very rough and filled with potholes. Some of the potholes were so deep that the car would have to be placed in first gear and then eased carefully into the pothole. The tires of the time were not nearly as sturdy as those of today. The sidewalls had rayon reinforcement that was not very strong. Tubeless, steel belted, and radial tires were all fifty years away. It was easy to break the sidewall or tread of a tire by hitting a pothole or anything else very hard. More often than not, the spare tire would have lost its air pressure. Tire

9. David C. Mowery and Nathan Rosenberg, *Paths of Innovation: Technological Change in 20th-Century America*, Cambridge University Press, Cambridge, 1998, P. 55.

10. July 7, 2001, http://www.gm.com/company/corp_info/history/gmhis1900.html

11. July 9, 2001, <http://www.modot.state.mo.us/about/history.htm>

pumps, patching kits, tire irons, and the ability to use them were all essential to having a rural automobile.

School Buses

Along with gasoline powered automobiles and tractors came trucks and buses. School buses were a very important development for rural students. Instead of being limited to eight grades in the neighborhood one-room school, it became possible for most students to continue their education through high school. Completion of high school allowed the possibility of attending college. The doors of education were opening to rural students. High school enlarged the geographic perspectives of both students and parents.

These are a few of the important dates in the history of school bus development:

1900: 17 states had pupil transportation programs. The first was in Massachusetts in 1869.

1915: International Trucks (now Navistar) manufactured the first school bus, the Model F, for Rivinia School District in South Dakota.

1919: All 48 states in the contiguous United States had enacted laws allowing the use of public funds for transporting school children.

1927: Albert L. Luce, Sr. built the first all-steel body school bus. Within eight years, all other major school bus manufacturers were building steel body school buses.

1939: Adoption of school bus yellow color for school buses.¹²

The impact of the use of school buses was uneven. Most school districts had busing for country students starting in the 1920s or 1930s. In some communities, dirt roads were impassible when wet and thus the school bus routes were limited to paved roads. It was still necessary as late as the early 1950s for some students to board in town during bad weather.

School Consolidation

School officials had been citing the problems of small schools. By 1925, 232 consolidated districts had been formed.¹³ Buses allowed consolidation to work. The closing of the one-room schools was not a welcome event in many communities. Indeed, school consolidations continued up until the 1950s. The Star Valley School east of Lamar, from which I graduated in 1944,

12. July 31, 2001, <http://www.stnonline.com/stn/100years.htm>

13. Richard S. Kirkendall, *A History of Missouri*, p. 101.

was still open until the 1960s. Even today, the debate continues of the advantages of small schools versus large schools.

High School Team Sports

The improved transportation helped the development of what became a very important local activity: high school team sports, especially basketball and football. Usually friendly and a few not-so-friendly rivalries in sports developed between neighboring towns and schools. These contests became the high points of many school years, with the teams being supported by the town's business, community, and other organizations, including a few prayers in churches. These team sports and other school activities helped to build a feeling of community over the larger areas covered by the high schools. The open country neighborhoods began to fade in importance, as the larger high school based community became the place of identification.

Other Outside Events influencing Rural Communities, 1900–1925

Three events that occurred outside rural Missouri communities had a significant impact on the communities.

Country Life Commission

Theodore Roosevelt established the Country Life Commission in 1908 to focus attention on the problems of farm wives and the difficulty of keeping children on the farm. This commission was active from 1908 to 1917. The first report in 1909 called for greater public emphasis on efforts to enhance the quality of rural life.¹⁴ Some of the specific findings of the Commission included:

- Rural schools were in general poor,
- Rural people were socially isolated,
- Rural roads were bad,
- Rural communications were poor,
- There was a need for adequate farm credit,
- Farm cooperatives were needed,
- An Extension Service was needed.¹⁵

14. *Ibid.*

15. **Monthly Bulletin**, *Missouri State Broad of Agriculture*, Vol. VIII, No. 2, February 1910, p. 56, "The Rural Home", Dean F. B. Mumford, College of Agriculture.

The work of this commission helped to generate support for the passage of Cooperative Extension and Vocation Educations acts.

In the first decade of the century, the University of Missouri College of Agriculture was publishing "Monthly Bulletins" that included a wide variety of topics. For example, in 1908 topics included:

- Boys' Corn Growing Contests for 1910 (advice on how desirable corn ears looked),
- Home Maker Conference Association
 - Planning and Furnishing the Farm Home
 - Running Water in the Country Home
 - Home Decoration
 - Pictures for the Home
 - Principles of Art Applied to Dress
 - Laundry Equipment
 - The Cooking of Vegetables
 - Planning Meals
 - The Boy and Girl on the Farm
 - Recreation in the Rural Community
 - The Rural Home
 - The first sentence: "It is generally recognized that the open country offers advantages for healthful living and the development of sterling qualities of mind and heart not found in the congested portions of our modern cities."¹⁶
 - The Relation of the Rural School to the Rural Home
 - The Training of Young

16. *Monthly Bulletin*, Missouri State Broad of Agriculture, January–July, 1910

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- Children in the Home
- Corn Growing in Missouri
- Cement for the Farm and Farm Home
- Third Annual Meeting Highways Engineers' Association of Missouri
 - Highways of Commerce
 - The Farmer and the County Highway Engineer
 - Modern Highway Bridge Construction
 - The Passing of the Devil-Wagon (this is a sales pitch for the automobile)
 - Road Oils and Their Application
 - The Sand-Clay and Sand-Gypsum of Kansas
 - Good Roads
 - The State in Road Building
- Revised Laws of Missouri relation to Agriculture and Horticulture¹⁷

The contents of many of the articles, mostly written by University of Missouri professors, are highly prescriptive. At the same time, one can read some of the articles today and see the shape of the rural future, although I doubt if the writers were aware of the import of their words. These were the first tentative steps into a world where scientific knowledge replaced traditional indigenous knowledge for the farm, the family and the community. The old ways were no longer good enough.

Prohibition

Two of the major industries in the Germanic areas were beer and wine making. Missouri at that time was one of the largest wine makers in the nation. Stone Hill Winery was at that time the third largest wine maker in the world. Missouri had a local option law since 1887 that allowed counties to be dry. By 1917, ninety-six of Missouri's one hundred and fourteen counties were dry. Most rural communities had strong beliefs about the evils of alcohol. However the major cities remained wet. In total, brewing employed fifteen thousand people and represented the

17. Richard S. Kirkendall, *A History of Missouri, Volume V, 1919 to 1953*, University of Missouri Press, Columbia, p. 25.

fifth largest industry in the state.¹⁸ When the national prohibition of 1920 was enacted, the economic disruption of prohibition was very hard on communities such as Hermann and Augusta.¹⁹ The wine industry was the largest employer in the Germanic region and when the wineries closed, thousands of jobs were lost. It took more than fifty years for the Missouri wine industry to make even a partial recovery. While some of the companies attempted to use the grapes in other ways such as jellies, this took only a small fraction of the grapes produced. A few wineries were able to operate on a small basis making sacramental wines and grape juice.

Prohibition did not prevent the building of stills to produce “white lightning,” especially in the Ozarks where it was easy to hide illegal stills in the woods. These products were placed in glass jars and taken into the cities for sales. There was more than a little ambiguity in prohibition, even in rural communities. It would not have been very unusual to pass around a jug of moonshine outside the church before the services and then to hear a sermon on the evils of drinking. Moonshine could be a dangerous drink, though people were not aware of the risks at the time. An immediate danger was the use of lead solder to put the stills together. The lead content of the booze must have been well above safe limits.

Another favorite alcoholic beverage during Prohibition was “home brew”. While “white lightning” is a distilled drink with a high alcoholic content made from corn, home brew is a fermented beverage using barley or other small grains. Finished home brew resembles the dark European ales and is closer to commercial beer or wine in alcoholic content.

We once found a five-gallon stoneware jar filled with fermenting home brew and covered with a board on the back side of our farm in a timbered area. We never knew and did not ask who was the making home brew. After looking at that smelly, fly-covered mess, I decided I did not want to find out how home brew tasted.

My mother would have been very upset if any of her children drank—at least while still at home. As it turns out, all of the children did drink, but infrequently. I know of only one occasion that any of my siblings got drunk and that had to do with the break-up of a marriage. I might add that in her older years, I saw my mother drink a small glass of wine. I have always thought that her behavior was reflective of some of the changes going on in rural communities—greater tolerance for a wider range of behavior.

Women’ Rights

The movement to give women the right to vote started in the early nineteenth century, but it was not until 1920 that the Nineteenth Amendment was adopted. This is important because it made a major change not only in voting rights, but also symbolically in the overall position of

18. *Ibid*, pp. 108–111.

19. July 7, 2001. <http://memory.loc.gov/ammem/vfwhtml/vfwtl.html>

women in the community.²⁰ The patriarchal system was still dominant, but this act and related activities helped to elevate the role of women.

Beginning in the mid-19th century, several generations of woman suffrage supporters lectured, wrote, marched, lobbied, and practiced civil disobedience to achieve what many Americans considered a radical change in the Constitution. Militant suffragists used tactics such as parades, silent vigils, and hunger strikes.²¹

The ways of the city where the feminist movement started and was strongest did not reach the rural communities except for voting. Women in most rural communities quickly took advantage of their new rights to vote.

I never knew my parents to not vote. My mother was a staunch Republican and my father a “yellow dog” Democrat, at least that is what my mother called him. Each time they would go to the polling place with the comment that they might as well not go because they were going to cancel each other’s votes.

Summary

While the rural heartland communities were not the leaders in any of these movements, neither were they completely immune from the influences of the larger waves of social changes sweeping the nation.

20. July 7, 2001, <http://www.nara.gov/education/teaching/woman/home.html>

21. July 8, 2001, <http://chla.library.cornell.edu/cgi-bin/chla/chla-idx?notisid=ANU8129>

Chapter 15

Changes in the 1925 Rural Missouri Social Systems

The doors of social and cultural changes in rural Missouri communities had been cracked open, but it was still just a crack. A checklist:

- **The school systems had not changed—at least substantially.** The one room school was still the mainstay of rural education.
- **The rural churches had not changed substantially.** Small and poor churches were still the most common. However, some were sounding the alarm: “The country church has declined in every agricultural section of the United States.”¹
- **The methods of farming had not changed substantially.** Horses for power and small general farms were the typical units.
- **The methods of transportation were beginning to change.** The Model T was beginning to pull rural Missouri out of the mud. Farm to market roads were just being built.
- **The methods of communication were beginning to change.** Maude was the switchboard operator who knew what everybody in the community was doing—minute by minute.
- **The family size was declining.** It turns out that “cheaper by the dozen” does not apply in the materialism age.
- **The family structure—patriarchal—remained the same.** Pa’s word was the law, but ma was starting to vote.
- Skirt hems had gone shockingly high in the big city fashions and it was only a matter of time before the new fashions moved into small cities and towns and, finally, with conserva-

1. Dean F. B. Mumford, *College of Agriculture*, p. 57, “The Rural Home”, *Monthly Bulletin*, Vol. VIII, No. 2, February, 1910.

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tive modifications they reached the rural heartland. That journey of a few hundred miles was to take a decade or more.

- The automobile was beginning to offer a new more private place for courtship.

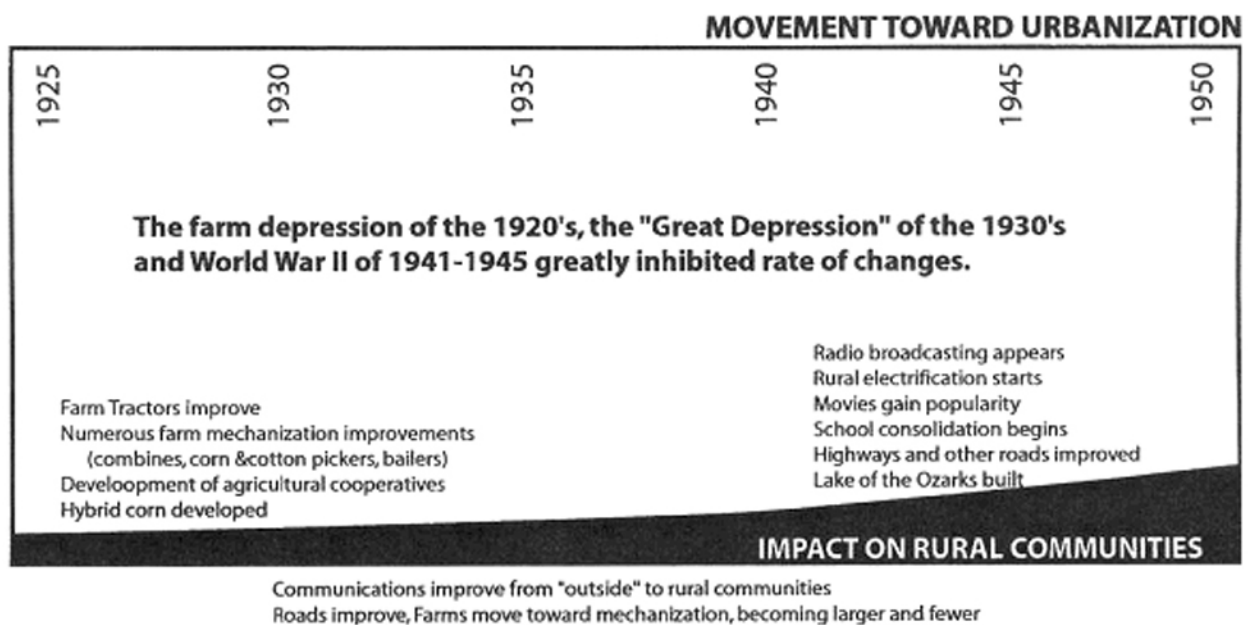
The Lynds, in their classic study of Middletown published in 1929, found that consumerism was already eroding the strong values of an earlier Middletown.² However, for a variety of reasons, consumerism (I prefer the term materialism) was slower to hit Missouri rural communities. The farm recession of the 1920s inhibited spending of any type. The lack of electricity in most rural communities and the relative isolation of the communities also served as barriers to rapid changes.

2. R. S. Lynd and H.M. Lynd, *Middletown, A Study in Contemporary American Culture*, Harcourt, Brace, Bruce and Company, New York, 1929.

Chapter 16

Technological and Other Innovations, 1925–1950: Agricultural

SELECTED INNOVATIONS INFLUENCING RURAL COMMUNITIES 1925-1950



Two world events heavily influenced this period. These were the economic depression of the 1930s and World War II. Both of these slowed down changes that might have otherwise occurred more quickly.

"Great Depression"

The depression was so severe in many communities that physical survival was the focus. Many people who had moved to the cities in previous decades moved back to rural communities to

take advantage of the ability to grow their own foods. "Make do or do without" became a motto in many families and communities.

The Great Depression was the worst economic slump ever in U.S. history, and one that spread to virtually the entire industrialized world. The depression began in late 1929 and lasted for about a decade. Many factors played a role in bringing about the depression; however, the main cause for the Great Depression was the combination of the greatly unequal distribution of wealth throughout the 1920's, and the extensive stock market speculation that took place during the latter part that same decade. The maldistribution of wealth in the 1920's existed on many levels. Money was distributed disparately between the rich and the middle-class, between industry and agriculture within the United States, and between the U.S. and Europe. This imbalance of wealth created an unstable economy. The excessive speculation in the late 1920's kept the stock market artificially high, but eventually lead to large market crashes. These market crashes, combined with the maldistribution of wealth, caused the American economy to capsize.¹

The depression of the 1920s and 1930s forced large numbers of rural people to seek opportunities elsewhere. California was the most popular destination beyond the Missouri borders. While the "Okies" and "Arkies" achieved fame through Steinbeck's books and movies, The "Moies" never received such recognition; perhaps "Moies" is not as catchy a term.

...200 people from little Dade County (Missouri) could meet at Mooney's Grove outside Visalia, California for a picnic on August 9, 1923, while a fourth this many could attend a wedding in Whittier at the same time.²

The adoption of new technology and innovations almost always involves some risk and usually some additional capital. When the focus is on mere survival as during the economic depression, risk taking was reduced to a minimum. With those limitations in mind, there were a number of notable changes in technology that started during this period. But the full implementation of many of these innovations had to wait for better economic times following the end of the war.

I remember well the deep concerns my parents had during these years. There was very little money for any thing. While my parents wanted to give us children Christmas gifts, there was usually only enough money to buy a small toy, an orange, and some hard candy. Oranges were rarities in our home. Christmas would be the only time we had any.

1. July 9, 2001, http://www.escape.com/~paulg53/politics/great_depression.shtml

2. John K Hulston, **An Ozarks Boy's Story: 1915-1945**, School of the Ozarks Press, Point Lookout, MO, 1971, p. 61.

Two other examples: One of my older brothers enrolled in MU in the late 1930s. He had to earn his own way. My parents could not afford to provide him with any significant assistance. After a few months, my parents sensed that he was struggling. We drove to Columbia and found that the only things he and his roommate had to eat were a few potatoes. My mother insisted he come home where at least he would have food.

The other example is my father. He smoked tobacco—hand rolled cigarettes. At the time, he would buy a pocket tin of “Velvet” tobacco that he would make last a week. I have forgotten the exact cost, but it was between five and ten cents. In addition, if he had the money, he would buy a book of 100 cigarette papers for one cent. If he didn’t have the penny, he would put a piece of newspaper in his pocket and tear off a small segment for hand rolling a cigarette. I shudder to think what the metals in the ink on the newspaper, plus all of the carcinogens in the smoke did to his system.

World War II

The war ended the depression in rural communities. It brought a wave of changes that had dramatic impacts on rural families, communities, and the entire culture. All available resources, including factories, were devoted to producing materials for the war. Thus, the production of new models of tractors, automobiles, farm equipment, and many other things were put on hold while tanks and all sorts of other military vehicles came off the same assembly lines. The result was a four-year gap during which no equipment was replaced. When production of farm equipment started again, there was a large backlog of demand for new equipment. This was enhanced by the high wartime prices for agricultural products. Following the war, many farmers had money to spend.

Farmers during the War were encouraged to maximize their production. Patriotism, combined with high prices, produced record production. As with World War I, the stage was set for over-production and low prices when the market demand lessened in the 1950s.

The third impact of World War II was that most young males were drafted into military service.³ These were the people most likely to take risks and adopt new practices. Those farmers who remained were much more likely to continue with the same practices and the same equipment as they had used in earlier years. After WWII, the GIs returned to take up farming using low cost and relatively easy credit from commercial sources. Training programs for new agricultural technology were made available by the federal government. The GIs had traveled to many parts of the U.S. and the world. The travel broadened their perspectives and produced very different attitudes from their parents. Indoor plumbing and electricity in the home and mechanization for the farm were standard parts of their lives. This generation marked a major turning point in rural American.

3. *Some young males received draft deferments if they were farming. However, this was a relatively small minority because such individuals were often labeled “draft dodgers” by the community.*

A Revolution in the Heartland

Again, I can best illustrate the impacts of World War II from my family. I had two older brothers and a brother-in-law who were drafted into military service. We were fortunate that all made it home safely. Our family had a cousin who was lost in the Battle of Midway. My father encountered some health problems about halfway through the war as a result of trying to run a large farm with limited assistance. As a result, we quit farming, temporarily. Both of my parents took off-farm jobs working in a munitions factory. My mother had never worked off-farm and with this job she was wearing coveralls to work every day. This was a woman who had never worn pants in her life. She and my father learned roles that changed their visions of the world.

One of my brothers came back to farm. He was college educated, and scientific agriculture was a standard part of his farming practices. He read the college of agriculture publications and followed recommended practices. My parents watched with more than a little skepticism.

Agricultural Innovations

Scientific Agriculture

Agriculture had been a way of life that was learned from previous generations. The new crops and new technology that became available in the middle decades of the twentieth century forever changed that tradition. Within one generation, using “cutting edge” technology became the norm. The catalyst for this was a relatively few major technological breakthroughs.

Hybrid Corn (Maize)



Corn is one of the few commercial crops indigenous to North America. The impacts of hybrid varieties on Midwestern farm operations were so great that few crops had as much notice.

Hybrid varieties of corn had two major impacts. First, hybrid corn varieties very increased yields by about 65 percent.⁴ Hybrid corn was first developed in the 1930s. By the 1940s the majority of corn planted in the U.S. was a hybrid variety. Yields increased from an average of 35 bushels per acre in 1900 to 115 bushels. Hybrid corn varieties need high soil fertility that can be most easily supplied by commercial fertilizers. The initial use of commercial fertilizers roughly parallels the use of hybrid corn. Money expended on fertilizers for hybrid corn was returned with considerable profits in the fall. Hybrid corn grows best when the plants are grown close together. The practice of planting corn by checking disappeared with the adoption of the use of hybrid corn. No longer could a farmer gain prestige with the precision of his planting.

The other major impact of the adoption of hybrid corn was to legitimize the role of science in agriculture. It gave the colleges of agriculture, the county agricultural agents, and the vocational agriculture teachers greater legitimacy. Each year the college of agriculture published a bulletin that gave the yields of different varieties of hybrid corn. It was a concrete example of the value of agricultural research.

Grain Sorghum

Sorghum, like corn, belongs to the tall grass family. It was originally an African crop. The grain is a small ball, about the size of a "BB". The first varieties from Africa were tall, often six to eight feet at maturity. Sorghum is more resistant to drought and other adverse growing conditions than hybrid corn. Sorghum was useful for making silage, molasses, and fodder, but not for grain production. The only practical way of harvesting grain from sorghum was to cut the heads off by hand, a very labor-intensive job. These heads could then be fed to poultry and other animals. When a dwarf variety, Milo, was developed in the 1940s, it became a lower-risk alternative to corn. In southwest Missouri, Milo became an important cash crop for many farms. Corn in southwest Missouri was always a relatively high-risk, low-yield crop on the thin droughty soils of the region. Because of the successes of grain sorghum and soybeans, almost all of the native prairies in southwest Missouri were plowed and put into row crops.

Kentucky Tall Fescue Grass

The Kentucky Agricultural Experiment Station released this native grass of Kentucky as a new variety in 1943. While it is easy to see the impacts of tractors and hybrid corn in Missouri farming communities, Missouri has a large amount of rolling lands unsuited to large equipment or row crops. In these areas, Kentucky tall fescue grass filled an important niche. This pasture grass transformed cattle raising in Missouri. Tall fescue is tolerant of adverse growing conditions. It stays green later in the fall and starts growing earlier in the spring than native grasses. It is more drought tolerant and will grow in a wide variety of soils. Fescue quickly spread through Missouri and the surrounding areas of Arkansas and Oklahoma. It became the first choice for hay and pasture.

4. July 8, 2001, <http://agcom.www.ecn.purdue.edu/AgCom/Pubs/NCH/NCH-29.html>

A Revolution in the Heartland

Large tracts of timber in the Ozarks were stripped of the second growth timber either by bulldozing or by chemical spraying and planted to fescue. Large-scale operators from Texas and other places bought up large acreages of Ozark hills. Beef cow/calf farms that had been primarily in the northern portion of the state began to move south. The longer growing season in the Ozarks permitted pasture grazing ten months per year. But in the 1970s a serious problem was found with fescue. Most of the fescue carries endophyte, which causes fescue foot (sore feet) in cattle that are pastured on the grass. Nevertheless, fescue continues to be the most common grass, especially in the Ozarks. Today, there are endophyte-free varieties of fescue.

Agricultural Mechanization

Technological innovations come from three sources: colleges of agriculture, commercial companies, and from farmers. A large share of the mechanical innovations came from farmers tinkering in their shops. Often, the patents were purchased by commercial firms who marketed the innovations. This was a very fertile time for numerous technological innovations. Only a few have been selected for discussion herein.

Tractors

Most companies such as John Deere and McCormick Dearing (Farmall brand name) developed tractors that were smaller and easier to operate. The small sizes were important for working the very small fields found throughout Missouri, especially in the Ozarks. By the 1930's, 30% of farmers used tractors. By 1950 very few farms were operated by horsepower alone. Parallel developments were occurring in the machines used with tractors.



Farmall H 1939-1953

I was impressed with two changes on tractors of my childhood. The first farm tractors had steel wheels with large steel lugs sticking out. They were bone jarring and teeth rattling to ride on. The availability of rubber tires for farm tractors was a major improvement. Another relatively small, but important, change was the addition of a road gear for moving tractors to and from the field. Our first tractor's fastest gear was around 3 miles per hour. I could jump off the back of the tractor when my father was driving, pick up an interesting rock in the road and

jump back on without any significant effort. When tractors came out with ten to fifteen miles per hour road gear, it made it much quicker to move from field to field or farm to farm. No one at the time thought of how this would change farming. A person could now buy/farm land efficiently several miles from the home farm. This made expansion of farms much easier.

One of the first implements to be adapted to the tractor was the plow. Plowing requires a considerable amount of power. The horse-drawn plow had only one moldboard, but even the low-powered early tractors could pull plows with two or more moldboards. They could plow deeper and cut through tough sod that was almost impossible for horses.

In the late 1940s, the Ford Tractor Company started to produce tractors and implements that were suited to the small farms in Missouri. These tractors had a low center of gravity. With wide front wheels, they could be used safely on the sides of hills and ditches found on most Missouri farms. And with electric starters, comfortable seats, and lights, they were much easier to use. This generation of machines ended the use of horses and mules as the primary power sources on farms. Now the land that had been used to grow horse food could be used for cash crop production.

My father bought his first tractor in 1938, a Farmall F-12. My mother opposed it because this was during the depression and she did not want to go into debt to buy the tractor, which cost about \$800. In addition, she was opposed to getting rubber tires—they cost more. We had to move to a larger farm to make enough cash to pay for it and the new car my father bought at about the same time. With World War II rapidly approaching and my older brothers being called into service, I found myself learning to drive and service a tractor when I was 10 years old. My brothers had learned to harness and drive horses. My father, my sister, and I farmed more acres than any two farmers could have farmed with horses only.

Combines

A second major area of important developments was in the harvesting process. By the end of this period the first “combines” were beginning to be used. These were at first tractor-pulled machines that cut and threshed the grain in one operation. This was a major labor saving innovation. No longer was it necessary to bind, shock, and thresh the grain. One farmer could now harvest hundreds of acres of small grains. One man with a combine replaced the harvesting work of five or six people. With the older threshing machines, harvesting had the following steps: (1) the grain was cut with a binder that tied the grain into bundles, (2) the bundles were formed into “shocks” that allowed the grain to dry for several weeks, (3) the bundles were loaded onto wagons with one person on the ground pitching the bundles onto the wagons and another loading the wagon, (4) the loaded wagon was taken to the threshing machine some distance away, the wagon was unloaded into the threshing machine, and (5) the grain was hauled away in another wagon. The combine did all of this in one operation. The only thing needed in addition was a truck to haul the grain away.

Corn Pickers

The corn picker was invented during the 1920s and began to be marketed in the 1930s. The corn picker removed the ears of corn, including cobs, from the stocks. Most early corn pickers were built to pick two rows at a time. A tractor-pulled corn picker replaced numerous people shucking corn. Again, this was a major step in mechanization. This machine probably replaced the equivalent of three to four people.

Hay Balers

The hay baler also came into general usage during this time. Previously, the hay was handled using a pitchfork. The baler compacted the hay into rectangular bales of 75 to 100 pounds each. These could be stored more quickly and in a smaller space than the loose-hay methods. The first balers were stationary machines that required the hay to be brought to the baler. These required crews of five to six people to operate. Later balers picked the hay up from windrows and required only one person to operate.



John Deere Tractor and “Square” Baler

The reduction in the use of horses and the use of baled hay changed the architecture of barns. The two-story barns with large open spaces for loose hay storage were no longer needed. Many of the two-story barns did not have sufficient support for the second floor to hold large amounts of baled hay. A new type of building to store baled hay had to be designed. Often, the land grant colleges of agriculture faculty helped in this design process.

There were many small innovations that were required for each major innovation. For example what tool(s) would assist in handling the bales of hay? Some person, probably a farmer, took a piece of steel rod perhaps twenty inches long, put a large sharp hook on one end and a round wooden cross handle on the other end. This simple tool was a major help in handling hay bales. Trucks and wagons also had to be modified to haul bales rather than loose hay.

Milking Machines

Mechanization was not limited to field crops. The milking machine was developed during the last half of the nineteenth century and first part of the twentieth century, but it was not until later in the 20th century that milking machines became widely adopted by dairy farm operators.

Milking machines consist of rubber and steel tubes that fit over the cow's teats and operate by pulsating vacuum. They do a quick and efficient job of milking, weighting the milk from each cow and moving it into tanks.

Cotton Pickers

Last but certainly not the least was the cotton picker. The adoption of the cotton pickers, along with flame weeders, revolutionized cotton growing practices.

The pickers, painted bright red, drove down the white rows of cotton. Each one had mounted in front a row of spindles, looking like a wide mouth, full of metal teeth that had been turned vertically. The spindles, about the size of human fingers, rotated in a way that stropped the cotton from the plants; then a vacuum pulled it up a tube and into the big wire basket that was mounted on top of the picker. In an hour, a good field hand could pick twenty pounds of cotton; each mechanical picker, in an hour, picked as much as a thousand pounds—two bales. In one day, Hopson's eight machines could pick all the cotton...which was sixty-two bales. ...picking a bale of cotton by machine cost him \$5.26, and picking it by hand cost him \$39.41. Each machine did the work of fifty people.⁵

After the civil war, the share cropping system developed as was described earlier. When the cotton pickers, along with tractors and flame-weeders, were adopted by the cotton growers in southeast Missouri, all of the share-cropping people, poor and mostly African American, became surplus, redundant to cotton production. Some were forced out of their homes on the plantations.

On the morning of Tuesday, Jan. 10, 1939, motorists traveling along US Highway 60 between Sikeston and Hayti were startled to see the roadsides cluttered with the meager and pitiful furniture, household goods, and livestock of hundreds of families of tenant farmers and sharecroppers who were camped along the highways. Their arrival had begun the night before and, by noon of the 10th, over 1,000 homeless people had camped along the road; most were there because they had no place else to go.

The roadside demonstration was in reaction to evictions of tenants and sharecroppers by local landlords who, by abandoning the share and rental systems of farm production in favor of day labor, were able to pocket government parity payments for crop reductions under the Agricultural Adjustment Act. The payments, made to the landowner, were to be distributed to tenants and croppers in proportion to their share in the crop. To avoid this, the landowners notified

5. July 28, 2001, <http://www.terry.uga.edu/~dawndba/4500PromisedLandI.html>

large numbers of tenants and sharecroppers in the Missouri Bootheel that their labor would not be needed in 1939.⁶



Evicted Sharecroppers' Camp, Butler County, Missouri.⁷

The basic framework of mechanization of much of agriculture was now established. The stage was set for the next horizontal expansions of farms

Changes in Agriculture Policy and Programs

Agricultural Research/Education

These were the decades when the cooperative extension service and vocational agriculture education were implemented in most rural communities. All extension agents and vocational agriculture teachers had to have a college degree. For many farm families, this was their first contact with scientifically trained agriculture professionals.

In 1925, these were just starting to be implemented in many rural communities. For example in 1920, there were 31,000 students enrolled nationwide in vocational

6. July 12, 2001, <http://www.umsl.edu/~libweb/blackstudies/homeless.htm>

7. November 24, 2001 http://memory.loc.gov/cgi-bin/query/D?fsaall:4:./temp/~ammem_7oa2:

agricultural education and in 1940, there were 584,000 students enrolled in agricultural courses. Similarly, by 1941 there were extension agents working in every rural county in the country, including Alaska, Hawaii, and Puerto Rico.⁸ These were the front line workers, the change agents for technological and other changes in rural communities. Promoting change was their purpose.

I started my career as an extension agent. My job was to help improve agriculture by convincing farm operators they should follow the recommendations of the University of Missouri College of Agriculture. I was very aware that my role was to be a change agent. It was a noble cause to me.

Agricultural Cooperatives

One of the major new forms of social organization in most of Missouri was the widespread formation of agricultural cooperatives during the first part of the twentieth century.⁹ Cooperatives were widespread in the north before 1900. In the remainder of the country, cooperatives were promoted as a way for farmers and others to work together to achieve common goals. While most of these goals were economic in nature, cooperatives took a number of forms. Some were organized to facilitate the efficient sales of farm products while others had the goal of saving money through the purchase of farm supplies. A third type was service cooperatives for fertilizer or other chemicals. Many of the cooperatives tried to provide all three types of services.

By the early 1900s the United States government began to pass laws that provided a favorable environment for cooperative development. A commission established in 1908 by President Roosevelt noted that the country lacked adequate credit for the agriculture sector, and their findings helped lead to the passing of the Federal Farm Loan Act in 1916, legislation that led to the creation of the Farm Credit System. The Capper-Volstead Act of 1922 was crucial for agricultural marketing cooperatives, as it provided limited antitrust immunity for farmers and ranchers who join together in cooperative marketing associations.

Government encouragement for agricultural cooperatives was highest during the 1920s and 1930s. Most state legislatures established agricultural cooperative acts during this time. America's agricultural sector went through a difficult period as prices collapsed after World War I ended. As part of the response to the adverse economic conditions, Presidents Harding, Coolidge, and Hoover all strongly endorsed the use of agricultural cooperatives. The Agricultural Marketing Act of 1929, which included the establishment of a fund for cooperative loans, also helped to strengthen the cooperative movement (Cobia).

8. July 8, 2001, <http://www.usda.gov/history2/text10.htm>

9. *The patrons own the assets of the cooperatives. Each "patron" has one vote in the management of the cooperative.*

According to the United States Department of Agriculture (USDA), the largest number of agricultural cooperatives occurred during 1929-30. At that time, the USDA recorded 12,000 farmer cooperatives (Mather, et al.).¹⁰

In Missouri, the Missouri Farmers Association had the largest membership and provided all three types of service.

MFA traces its beginnings to a one-room schoolhouse near Brunswick, Mo. In Newcomer School on March 10, 1914, seven farmers met to discuss an article by William Hirth. In his magazine, Hirth called for formation of farm clubs.By banding together for economic strength, members of the Newcomers Schoolhouse Farm Club saved \$400 in several group transactions..... Word spread like wildfire. From that meeting emerged a cooperative that grew to become the largest business enterprise in the state. By the 1920s, MFA represented 400 local cooperatives.

Today, MFA Incorporated is a Midwest-based regional farm supply and marketing cooperative serving more than 45,000 farmer/owners in Missouri and adjacent states. We're built around the concept of serving our farmer/owners. MFA is the farmer's vertical integration into the farm supply and grain business...(that) provide goods and services that are essential for crop and livestock production. That's been our tradition since 1914. ...MFA is representative of agriculture, building on the strengths of each commodity... MFA Agri Services Centers comprise the more than 115 company-owned locations and more than 40 branch locations throughout our territory. They complement the 45 locally owned affiliates and approximately 400 independent dealers with which MFA does business.¹¹

Our local MFA Cooperative Exchange had one room with groceries. We bought cattle, chicken, and hog feeds and some seeds and fertilizer and sold our cream, chickens, and small grains. For a child like myself, going to the Exchange was an experience to be remembered. There were all kinds of smells, many of which were pleasant. Many cattle feeds of the time included black strap molasses as one of the ingredients. Cattle apparently have a sweet tooth. I liked to walk the aisles of the Exchange, looking at all of the interesting products, such as new kinds of seeds, veterinary supplies, and much more. I could weigh myself on their scales. There are other important agricultural cooperatives and farm organizations in Missouri. The Missouri Farm Bureau has played an important role in Missouri rural development. The Missouri Farm Bureau is organized on a county basis while the MFA is organized on a trade area basis. In recent years, MFA has focused primarily on economic activities while the Farm Bureau has been much more active in the political arena.

10. July 9, 2001, http://www.umanitoba.ca/afs/agric_economics/ardi/history.html

11. July 9, 2001, <http://www.mfa-inc.com/cooperative/about.shtml>

Missouri Farm Bureau is a “grassroots” voluntary nonpartisan organization founded in 1915 out of a desire of Missourians to join together for the benefit of their families, friends, and neighbors. Missouri Farm Bureau was the first state Farm Bureau to organize and is an affiliate of the American Farm Bureau...Missouri Farm Bureau representatives in Jefferson City and Washington, DC, work together with a strong and active grassroots membership to assure Farm Bureau members are heard loud and clear on state and national legislative issues. In addition, county Farm Bureaus are active in representing members on issues of local concern. ...Farm Bureau members have helped bring electricity to rural areas; create water districts; expand phone and ambulance service; improve roads; protect homes, lives, and property; safeguard the environment; develop responsible tax limitation policy; and produce nutritious and affordable food for a hungry world...Today, Missouri Farm Bureau is the state’s largest general agriculture organization with 91,777 member families. Local offices can be found in 113 Missouri counties.¹²

Other cooperatives active in the state include MFA Oil, Farmland, and MidAmerica Dairymen, Inc.

New Governmental Agricultural Policies

The economic depression of the 1930s created a need to help stabilize and increase the income of farm operators. For the first time, the federal government interceded in the income flow of farmers in several different ways. The following is a brief summary of those programs:

(AAA), former U.S. government agency established (1933) in the Dept. of Agriculture under the Agricultural Adjustment Act of 1933 as part of Franklin Delano Roosevelt’s New Deal program. Its purpose was to help farmers by reducing production of staple crops, thus raising farm prices and encouraging more diversified farming. Farmers were given benefit payments in return for limiting acreage given to staple crops; in the case of cotton and tobacco coercive taxes forced (1934–35) farmers to cut the amounts that they marketed. In 1936 the Supreme Court declared important sections of the act invalid, but Congress promptly adopted (1936) the Soil Conservation and Domestic Allotment Act, which encouraged conservation by paying benefits for planting soil-building crops instead of staple crops. The Agricultural Adjustment Act of 1938 empowered the AAA in years of good crops to make loans to farmers on staple crop yields and to store the surplus produce, which it could then release in years of low yield. Soil conservation was continued, and farmers could by two-thirds vote adopt compulsory marketing quotas (as they did for cotton and tobacco). In World War II the AAA turned its attention to increasing food production to meet

12. July 9, 2001, <http://www.mofb.org/aboutus.html>

war needs. It was renamed (1942) the Agricultural Adjustment Agency, and in 1945 its functions were taken over by the Production and Marketing Administration.¹³

In addition, Congress established the Farmers Home Administration (FmHA) in response to the economic impact of the Great Depression of the 1930s. Both the Farm Credit System (FCS) and FmHA have played major roles in supplementing agricultural credit provided by private lenders such as commercial banks and life insurance companies by providing credit to enable producers to purchase farmland as well as to finance annual production expenses. The two lenders play different roles. The Farm Credit System provides credit to creditworthy borrowers. Farmers Home Administration makes financial assistance available primarily to family farmers unable to secure credit from private lenders.¹⁴

Throughout the 1930s, commodity programs unsuccessfully attempted to annually adjust supplies of the major crops in line with available market outlets at satisfactory prices. Marketing agreements and orders, which promoted more organized marketing and gave producers increased bargaining power, also were utilized by the producers of milk for use in a number of city "milk sheds".¹⁵

The federal agricultural programs, which continue today in modified form, have remained controversial to say the least. They have had a major role in shaping farming in Missouri as it is today. In retrospect, they appear to have been the proverbial "double edged sword". That is, they have had benefits and unanticipated negative effects. For example, they have helped to boost and stabilize farm incomes but in so doing these same income guarantees encouraged some farm operators to expand their operations. So one of the impacts of such programs was to encourage horizontal integration of farm operations. "Get bigger or get out" became the motto of generations of farm operations after World War II.

Missouri Conservation Programs

The state was starting new programs that would have a major impact in later years. Most of the Ozark timberland had been cut by this time and most wildlife species had disappeared from rural communities. This era represents the low point for many species of wildlife in the state. To counter these negative trends the state established the Department of Conservation in 1937.

National and then state forest preserves began in the 1930s to restore and manage large reaches of timberlands. Work projects of the Civilian Conservation Corps (CCC) advanced timberland, soil, and water conservation objectives, and built facilities that helped convert the state park lands from primarily wildlife

13. July 11, 2001, <http://www.bartleby.com/65/ag/AgrAdj.html>

14. July 11, 2001, http://www.access.gpo.gov/congress/senate/sen_agriculture/ch4.html

15. *Ibid.*

preserves to real parks. Such depression-born enterprises had economic relief and development as primary objectives. But they also embodied a conservation ethic that, over time, they institutionalized and made permanent.

In 1937 the Missouri Department of Conservation was established by constitutional amendment, a fish and game agency unique in its comprehensive approach to habitat conservation and its independence from political pressures. Although the Conservation Department now has land preserves --wildlife, wilderness, and forest -- all over the state, in the beginning its attention was focused primarily upon the Ozarks.¹⁶

16. July 11, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow204d.htm>

Chapter 17

Technological and Other Innovations Influencing Rural Communities 1925–1950

Communications

Radios

By the 1930s, powerful radio stations had been established in most large cities. These had coverage over large areas, often a radius of 100 to 150 miles from the station. At first, a city would have only one station. Music was performed live and many programs were created locally. You could tell if a rural home had a radio when driving by. A radio of that time required an outside antenna that was a single wire strung between a tree and the house.

Radio was *the* entertainment medium, with nationally popular programs. Many of these were broadcast live in the evenings. This was how many stars of television got their starts. Jack Benny, Bob Hope, Amos and Andy, and the Lone Ranger were a few of the famous names. Mass media had become a reality. Franklin Roosevelt was the first president to recognize and use this new medium effectively, through his “Fireside Chats,” which gave many listeners the impression he was talking directly to them. People listened and believed what they heard. This was particularly true in rural audiences. People were used to taking comments literally. Orson Wells caused panic in the streets of some cities with his radio dramatization of an invasion from outer space.

Radios brought important new information to rural households. The weather forecast was important. If it was going to rain, the hay could not be cut. If the cut hay was rained upon before it was baled, it turned brown and lost much of its nutritional value. The first weather forecasters developed almost cult-like followings. Since there were no regional or national forecasts, and very little science at that time in weather forecasts, two forecasters would often make very different forecasts for the same area, and the most correct forecast was ammunition for his followers.

Another important bit of information from the radio was marketing information concerning agricultural commodities. Early every morning, most radio stations had programs that gave farm marketing information. This would include the prices that various commodities had brought at the local markets the previous day. For the first time, a farmer had information concerning current markets before he took his products to market. The farm reports were broadcast early in the morning and often breakfast was prepared so that a person working outside could come in to eat breakfast and listen to the farm reports and weather at the same time.

All early radio announcers were males. Indeed, most radio “stars” were males. Females were only in relatively minor support roles. Females did not begin to have radio announcing jobs until well after World War II.

Movies

The movie industry was rapidly expanding during this time. Movie theaters were being built in most towns. Movies theaters of the day had to be closed and darkened for people to be able to see the rather dim black and white films. The first films in color were cartoons shown during the breaks between films.

The earliest air conditioning to be found in small towns was in the theaters. They were sometimes the only buildings in town that were air-conditioned. Many theaters of the time had large signs outside during the summer advertising air-conditioning inside. For many people this was their introduction to air-conditioning.¹ It helped to create a demand for home air-conditioning when that became available later. The theater was the place that I first encountered air conditioning. It was a real treat to go from the hot muggy Missouri summer day into a cool theater.

There was pressure on young people of high school age and younger to go to the movies. If you had not seen the latest movie, your peers downgraded you. Movies were generally 25 cents admission, but a few theaters charged only 10 or 15 cents. Popcorn was a dime for a large box.

Movies quickly assumed a major role in courtship. Going to the movies became the universal thing to do on a date. Of course, a car was needed for transportation. The car, with its relative privacy, also gave opportunity for changes in premarital sexual behavior. Opportunities for sex were much greater in the car on a dark side road than when a date was sitting in the parlor or

1. *Retail stores in small towns were slow to add air-conditioning. The only other place a person could go to get cool on hot summer days was in the “locker plant” where the temperature was kept well below freezing. The locker plant contained row after row, rack after rack reaching to the ceiling of metal boxes that were rented to consumers for the storage of frozen foods—primarily meats. These rental “boxes” were perhaps two feet wide by two feet high by four feet deep. It was not until well after World War II that home freezers began to replace the locker plants. Lockers were very popular in the late 1930s, '40s and into the '50s. The automobiles by this time had become reliable enough to allow trips into town on a regular basis.*

going to the church's carry-in dinner. Movies and cars didn't increase premarital sex; they just made it easier.

Movie stars became familiar to most people, rural or urban. Names like Gary Cooper, Vivien Leigh, Laurence Olivier, Alfred Hitchcock, Humphrey Bogart and Myrna Loy were recognized everywhere.

The top ten movies of the 1930s included titles² that are still popular:

1. Gone with the Wind, 1939
2. Snow White and the Seven Dwarfs, 1937
3. The Wizard of Oz, 1939
4. The Woman in Red, 1935
5. King Kong, 1933
6. San Francisco, 1936
7. Hell's Angels, 1930—tie
8. Lost Horizon, 1937—tie
9. Mr. Smith Goes to Washington, 1939—tie
10. Maytime, 1937

Another form of mass communication was available to rural people. Rural and urban people were seeing the same films. Theaters also ran short "news" segments that included clips on the latest clothing fashions, especially for women. Movies have an influence on styles of clothing, hairstyles, and manners of speaking, among other things. This was especially true for this period when movies were the only visual media available in most rural communities.

My earliest encounter with the movies was as a child on a hot summer day when we started to go town. A tornado was seen developing about 100 yards from where we were passing. My father thought that this might be a good time to go to a movie in a county seat town away from that storm. I remember that in 1938 they gave away a set of dining dishes for eight at intermission as a door prize.

2. July 11, 2001, <http://topten-results.tripod.com/30sMovies.html>

Metropolitan Newspapers

Another tentacle of mass media was beginning to reach out into rural communities. Many metropolitan newspapers created weekly editions that were available by mail subscriptions. *The Kansas City Star* had a weekly edition that reached a wide audience of rural people in the western part of the state. These carried summaries of national news as well as the prices at regional markets for farm products. One of the popular features in the Weekly Star was a different pattern each week for making pieced bed quilts. These were widely used by homemakers' clubs in their quilting.

Transportation

Automobiles

The automobile continued to improve in reliability and comfort. By the 1930s, the side curtains had been replaced by glass windows that rolled up and down. All vehicles had electric starters and for the most part a three-speed manual-shift transmission and a clutch on the floor that made shifting easier. On cold mornings, most vehicles still had difficulty starting and had to be pulled by a team of horses or a tractor to get started. The tires and springs had been improved to make riding more comfortable, and the heaters worked, more or less. Despite these advancements, all automobiles still came with a hand crank for the motor. All rural drivers needed to be able not only to change a tire, but also to patch the inter tube as needed and to hand pump the air into the repaired tire. Houses started to have garages instead of stables.

My parents bought a 1937 Plymouth, which was a vast improvement over the worn out 1920 Chevy. The Chevy would rarely start without help. It was not really safe to drive farther than you could walk home if it stopped. The new Plymouth allowed us to go further, and in some degree of comfort. Instead of going only to the nearest town, Jasper, we would occasionally go to Carthage, a much larger town with more shops.

Almost all rural drivers were males. I don't think my mother started driving until around World War II. It was very unusual to see a woman alone driving a car at this time. Driving tests to get driver's licenses were not required. The driving skill level of some drivers was minimal. Most rural roads had one-lane traffic and when two vehicles met, traffic would often come almost to a complete stop. If one of the drivers was a minimal skills type, it was not unusual to see the other vehicle pulled off almost into the side ditch.

Trucks and pickups became important parts of the farm equipment during this period. Taking 40 bushels of wheat to market in a wagon pulled by a team of horses took most of a day, but a truck could make several trips in a day, with 100 bushels a trip. The trucks and other such equipment encouraged the farm to become part of the market economy.

Roads

Starting in the 1920s, to meet the demands for better roads so that the automobiles and trucks could be driven at any time, the local governments and the state developed roads that had all weather surfaces. In most cases, this was a gravel surface. At the same time, the state and federal systems of paved highways was developing. Many of the highways with U.S. numbers were first built at this time. As one example, Highway 66 was constructed through the Ozarks during the 1930s.

Route 66 was a highway spawned by the demands of a rapidly changing America. Contrasted with the Lincoln, the Dixie, and other highways of its day, route 66 did not follow a traditionally linear course. Its diagonal course linked hundreds of predominately rural communities in Illinois, Missouri, and Kansas to Chicago; thus enabling farmers to transport grain and produce for redistribution. The diagonal configuration of Route 66 was particularly significant to the trucking industry, which by 1930 had come to rival the railroad for preeminence in the American shipping industry. The abbreviated route between Chicago and the Pacific coast traversed essentially flat prairie lands and enjoyed a more temperate climate than northern highways, which made it especially appealing to truckers.³

During this time, the Missouri Department of Highways started what was to become a vast network of local, supplemental state roads. These carry currently alphabetical designations and were established as "farm-to-market" roads. Some of these were built with support from the federal Works Progress Administration (WPA) that was set up to help counter unemployment from the depression.

Mass Transit

Mass transit was becoming more available to rural Missouri. In addition to the trains, Greyhound and similar bus companies had established routes that connected the vast majority of rural communities to the major metropolitan areas. The buses would discharge or pickup passengers at any point on their route. A country person could board or leave a bus at a point close to their home. It was now just a matter of a few hours to get to the center of a large city. And for the most part, the fares were affordable for many.

Community Infrastructure

Rural Electricity

Thomas Edison developed the first electric light bulb in 1880 and the first electrical system started in lower Manhattan in 1882, but it would be at least another 55 years before electricity

3. July 11, 2001, <http://www.route-66.com/history/history2.htm>

came to much of rural Missouri. The first electric utilities were built in cities. Some of these were municipally owned, but many more were privately owned. Regardless of the ownership, they did not build electric lines in rural areas unless your home happened to be located near the between-cities transmission lines. Areas outside of incorporated cities were slow to get electric service from the investor-owned utilities because there was little profit in serving the more wide spread rural consumers. In 1930, only ten percent of farms had electricity. In 1935 the U.S. Congress passed the Rural Electrification Act to encourage investment in rural electric service through low-interest loans and technical assistance. For the first time, an urban quality of life service was being made available to rural households. In Missouri the process of making electricity available was not complete until the mid-1950s.

Within the 1930's most urban areas of the United States had enjoyed electric service for fifty years, but beyond the city limits, there was darkness. It was simply not profitable for private power companies to provide service to sparsely populated rural areas, and farmers and ranchers were left to their icehouses, hand pumps and oil lamps. But farmers and ranchers wanted and needed power, and decided to do something about it. They organized into local cooperatives and petitioned their government to provide the financing to electrify their communities. Today there are over 900 consumers-owned cooperative electric systems providing service to 30 million customers in 46 states. Along with improvements to education, farming and ranching operations, and boosting the economic development of rural communities, the ready availability of electricity has improved the quality of life for Americans across our nation.⁴

It is hard to over emphasize the importance of available electricity in changing the lives of rural Missourians. One of the most appreciated benefits of the new electricity was to have a "yard light" that was simply a large wattage bulb in a reflector high on a pole that lit the paths to the barns, outhouse, etc. No longer was it necessary to find the kerosene lantern, hope it had enough kerosene, light it and carry it to the barn. Flipping a switch was much easier.

Even though electricity became available to almost all rural Missouri homes by mid-century, the impacts at first were limited. The typical wiring of a rural Missouri home would have a light fixture with a pull chain switch in the center of the ceiling of a room. This meant that a person walking in the dark had to feel with out-stretched arms to find the hanging cord to turn on the light. One or perhaps two outlets completed the wiring for a room.

I became somewhat of an electrician in my youth. My parents moved several times while I was growing up. My father took the lead in each community in getting the electric cooperatives to build lines through our neighborhoods. As a result we wired three houses for electricity. Since I was the youngest child, it was assumed that I was most capable of lying on my stomach on the attic rafters with my arms outstretched to feed wires down

4. July 14, 2001, <http://www.bluebon.net/deregulation/history.html>

through outside walls. Of course, rapidly increasing use of electricity made radios, refrigerators, washing machines, televisions, milking machines, bench grinders, welding machines and a host of other appliances available to rural families. Within a decade after getting electricity, most households had a majority of the above named appliances. The urban lifestyle had made a large step into rural Missouri. Most of these appliances also made life much easier for rural people. No one is going to choose to wash clothes on a washboard if a power washing machine is available. The same is true for milking machines, bench grinders, and other tools for the farms.

I watched my mother wash clothes on a washboard, then a Maytag washing machine powered by a gasoline motor and finally, an automatic washing machine, as we know it today. I would not recommend to anyone that they should return to the days of hand washing.

Schools/education

The small schools all over the state were under siege during this period. The one-room schools and the small high schools were portrayed as out-of-date, an antique left over from a previous century. Bigger is better was a strongly held belief by educational people at all levels. It was a school administrative policy both at the state and local levels for several decades. The movement was to consolidate schools all over the state.

Research does not support the belief of bigger is better:

“Professional faith in the virtues of larger schools persisted, virtually unchallenged, at least through the mid-1960s,” writes Howley (1989, 3). The challenges began with Roger Barker and Paul Gump’s 1964 book, *Big School, Small School: High School Size and Student Behavior*. Barker and Gump’s research revealed that both the number and the variety of extracurricular activities in which students participate are significantly higher in small schools than in large ones. The small-school student was also more likely to hold important positions in the activities in which he or she participated and to derive greater satisfaction from participating. Although there is no conscious intent to deny participation opportunities to many students, large high schools nevertheless have this effect, leading Barker and Gump to conclude that small schools are best and that the supposed superiorities of large schools are “illusions” (195).⁵

Nevertheless, school consolidation continued at a rapid rate, especially during the 1950s and 1960s. By the end of this period, almost all one-room schools in rural communities had disappeared, along with many of the smaller high schools. In communities with high schools, the school system was often the largest and best-paying employer. The schools also gave communities a sense of identity and a center of community functions that was lost when the schools were consolidated.

5. July 8, 2001, <http://www.nwrel.org/scpd/sirs/10/c020.html>

School consolidation was a painful transition for dozens of Ozarks rural districts. The process in the Missouri Ozarks generally took place from the 1930s through the 1950s. The district records were often scattered into private hands, but much remains with county clerks in the county seats; additional records reside in the archives of public schools formed or enlarged by consolidation. These records continue to have a critical function for thousands of persons who were not born in a hospital and currently need age verification to collect social security, veterans and insurance benefits.⁶

World War II G.I. Bill

Prior to the passage and implementation of the World War II G.I. Bill, post high school education, especially a college education, was limited to the elite. This bill had a huge impact on rural Missouri as well as the rest of the nation because now almost any high school graduate who was a veteran could get the financial support to go to college. As one example, the enrollments at the University of Missouri, Columbia had been less than 2000 students prior to the G.I. bill. Shortly after its passage, the enrollment was more than 10,000 students. Many of the college graduates returned to farms to apply the new scientific agriculture and ratchet up both production and competition among farms.

Many others became professionals such as bankers, teachers, attorneys, and physicians and returned to rural communities. Many more took their new skills and migrated to California⁷ or to the large cities within Missouri.

The G. I. Bill was not limited to helping people get a college education. Tens of thousands of Missouri farmers took advantage of the on-the-job training to gain new agricultural skills. Scientific agricultural information was rapidly becoming normative.

This program ended July 25, 1956. In the peak year of 1947, veterans accounted for 49 percent of college enrollment. Out of a veteran population of 15,440,000, some 7.8 million were trained, including:

- 2,230,000 in college
- 3,480,000 in other schools
- 1,400,000 in on-job training
- 690,000 in farm training⁸

6. July 8, 2001, <http://198.209.8.166/wrvq/V32/N4/s93g.html>

7. *Starting in the 19th century, California was seen as a land of opportunity.*

8. July 9, 2001, http://www.gibill.va.gov/education/GI_Bill.htm

By the time the last American World War II veteran graduated in 1956, the United States was richer by 450,000 engineers, 238,000 teachers, 91,000 scientists, 67,000 doctors, 22,000 dentists, and more than a million other college-trained men and women, thanks largely to the Servicemen's Readjustment Act of 1944, universally known as "the GI Bill." This landmark legislation helped steer a country geared to winning a globe-spanning war—with roughly 8 million citizens in uniform in 1945 and 22 million involved in war production—smoothly back into a peacetime economy, led to lasting changes in America's system of higher education, and turned uncertainty into opportunity for thousands of war veterans.⁹

Regional Changes: Construction of Ozark Lakes

Major innovations were coming to rural Missouri, but not all of the innovations were universal. Some, such as the construction of the Lake of the Ozarks had a major impact on a large area of the Ozarks, but not all of the Ozarks. These will be described as regional changes.

Lake of the Ozarks

The Lake of the Ozarks was the first of several large lakes constructed in the Ozarks. This was the only lake constructed before World War II, and the only large privately owned lake. Union Electric Company built the lake for power generation for St. Louis City. For the first three decades, the amount of tourist industry was very limited:

The lake was born on August 6, 1929 when workers began building a hydroelectric dam across the Osage River near the tiny town of Bagnell in the Ozark plateau of mid-Missouri.

The \$30 million dam project was the undertaking of Union Electric Company (UE). The dam project would create 10,000 jobs and eventually employ some 25,000 workers to fill those jobs. When it was built Lake of the Ozarks was the largest manmade lake in the world.

To create the 1,375 miles of lake shoreline the electric company built a concrete dam 2,543 ft. long, supporting a 20-ft. roadway and a 3-ft. wide sidewalk. At the time it generated 215,000 kilowatts of electricity most of which was sent to St. Louis and surrounding areas.

To allow the waters of the Osage, Niangua and Little Niangua Rivers, and numerous creeks and streams to fill the lake, UE surveyed and mapped more than 100 square miles and cleared thousands of trees from 30,000 acres of Ozark valleys and hills. Workman moved 900 miles of fence, 32 cemeteries, containing 2,850 graves, and the entire town of Linn Creek, population 500.

9. July 9, 2001, http://www.thehistorynet.com/AmericanHistory/articles/1999/10992_text.htm

The lake opened for use May 1931 just two years after construction began.¹⁰



Bagnell Dam During Construction.¹¹

Lake Taneycomo

Another early lake constructed to generate electrical power was Lake Taneycomo located between Branson and Hollister in southern Missouri.

Lake Taneycomo originated (in 1913) when the White River was confined by the completion of the "Power Site" Dam, near Forsyth, Missouri. The Power Site Dam is privately owned by Empire Electric Company. From 1913 until 1958 it was a warm water lake. The completion of Table Rock Dam in 1958 changed the source of water to Taneycomo from that of the White River's flowing waters to the bottom tailwater of Table Rock Lake from the dam spillway. This created a cold water fishery.¹²

Cold water is required for trout to survive. Missouri Ozarks streams had brown trout before the timber was cut and the streams were polluted. Trout are considered to be a desirable species for sport fishing. The only other places where trout can be found in Missouri are in the cold waters coming from springs such as Roaring Rivers and Bennett Springs.

10. July 11, 2001, http://www.golakeozarks.com/menu/page.php?url=lake_history.html

11. November 24, 2001 <http://www.funlake.com/about/heritage.html>

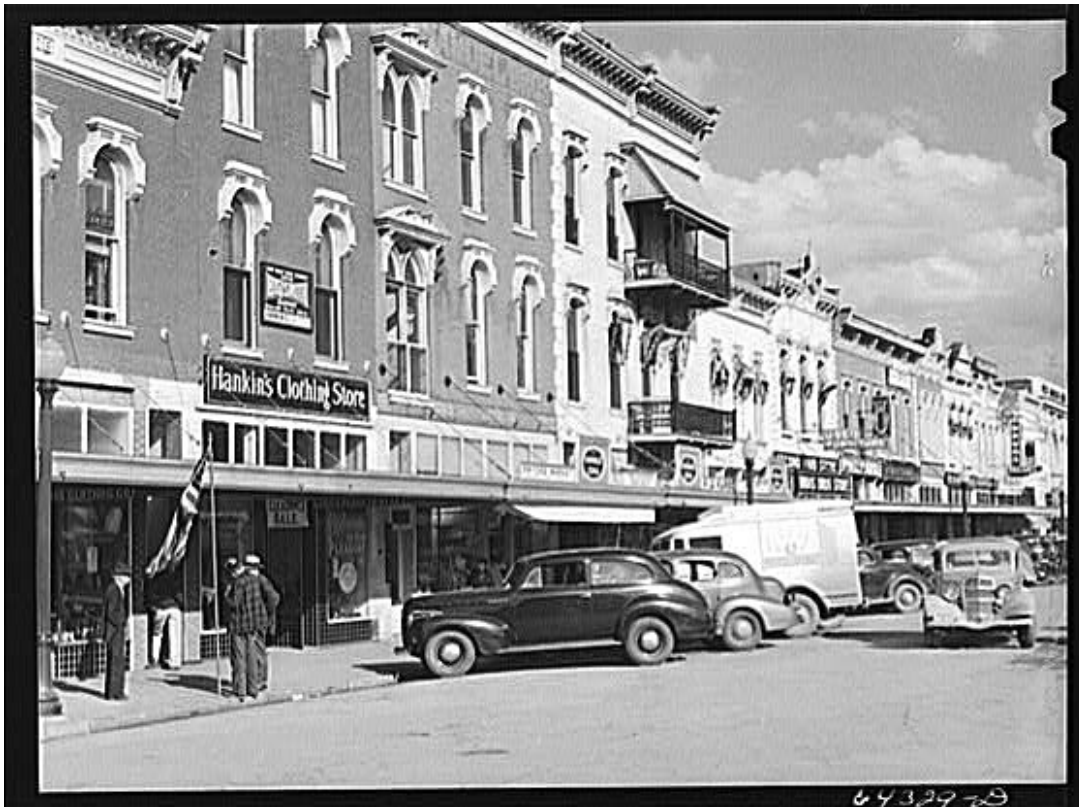
12. July 11, 2001, <http://www.bransonmo.com/BransonMoLakeTaneyGS.htm>

Chapter 18

Missouri Rural Communities at Mid-Century

The war and the depression were over. The GI's were home. Everyone was getting married and having children. The future looked bright and unlimited. Many GIs returned to their home communities hoping to take up farming as a life-long career just like their parents. There were guaranteed veterans' loans to help them get started.

Rural communities had electricity, for the most part. There was a radio and a refrigerator in every home. Electric washing machines were common. Tractors, pickup trucks and cars were in every yard and even rotary lawn mowers were starting to appear.



Downtown Nevada, Missouri, c.1945¹

A Revolution in the Heartland

The door of social change in rural Missouri communities had widened a bit further. But it was still just a wide crack. The depression and World War II had kept the door almost closed.

A checklist:

- The school systems were beginning to change. However, the one room school was still the mainstay of rural education in most rural communities.
- Rural churches had not changed substantially. Small and poor churches were still the most common.
- Methods of farming had begun to change substantially. Tractors were the primary source of power, but small farms were typical.
- The methods of transportation were changing rapidly. Several major highways had been constructed. Gravel was being applied to rural roads. The Model T was history and numerous improved models of automobiles were available to virtually every household. The V-8 motor was now the standard.
- The speed had gone from the 10 to 20 miles per hour of the Model T to 40 to 60 miles per hour depending upon the condition of the roads. A larger world was becoming available.
- Methods of communication were improving rapidly. Radios were now present in almost every rural home. Telephones were increasingly common.
- Family size had declined dramatically in the 1930s. The depression reduced the fertility rate to one of the lowest in modern history.
- Family structure—patriarchal—remained much the same. Divorce rates jumped up sharply at the end of the war with the reuniting of couples who had married in haste during the war. After a brief surge, the rate declined.

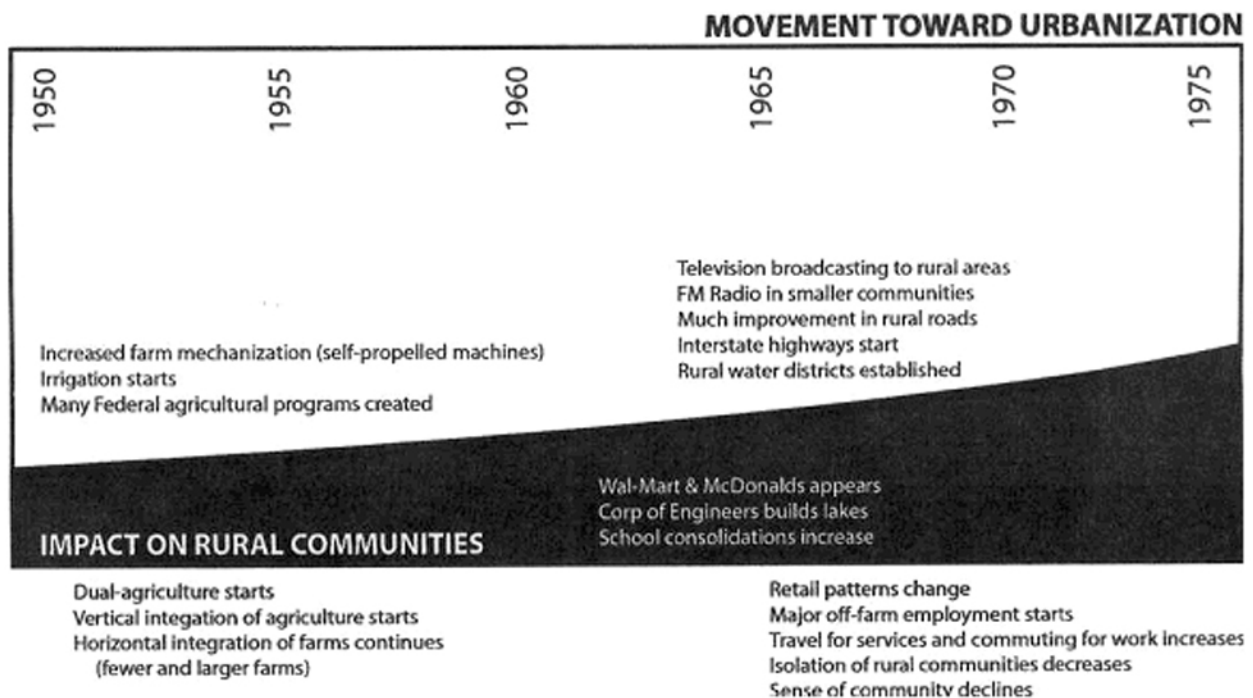
1. November 24, 2001, http://memory.loc.gov/cgi-bin/query/l?fsaall:3:/temp/~ammem_3UPj::display-Type=1:m856sd=fsa:m856sf=8c20752:@@@

Chapter 19

Technology and Other Innovations 1950–1975: Agricultural

"May you live in changing times." —Old Chinese curse.

SELECTED INNOVATIONS INFLUENCING RURAL COMMUNITIES 1950-1975



This period was the flowering of the technology age when it was assumed that all problems could be solved through science and technology. Major national magazines such as *Life* and *Look* featured stories about the wonders of the future with unlimited technology. By 1975 there would be a personal helicopter in every garage, plastic domes over cities for climate con-

trol, and moving sidewalks. There were discussions of how we might take one pill a day that would meet all of our nutritional needs.

Although not all the predictions came true, there were major technological innovations that changed the lives of every American, and especially those in the rural heartland. Perhaps more importantly, this type of publicity helped to generate a feeling that change is good and technological innovations are good. In other words, a national mood was created for change. This was particularly true for agriculture. The agricultural press was filled with innovative practices being used by people who were portrayed in a favorable light. If you were not changing your farming practices, something had to be wrong with you. People who were resistant to change were called laggards.

This period represented the flowering of the land grant colleges of agriculture. The federal government and the Missouri general assembly provided increasing amounts of funds for agricultural research. Research on pesticides, new crop varieties, and improved management techniques provided a steady stream of innovations. Commercial seed companies worked closely with the MU College of Agriculture and other land grant colleges in the marketing of innovations. Many of the mechanical innovations came directly from commercial companies. The major manufacturers of agricultural machinery were constantly changing and improving their products. For the first time, planned obsolescence became part of marketing strategies. New models of tractors came out on a regular basis. However, for many farmers, especially the older ones, buying a new machine before the old one was worn out was considered a waste of money and strongly resisted.

Innovations became institutionalized during this period. It became expected that each new year would bring new crop varieties, new pesticide control measures, new farm management techniques, and other innovations. The Agricultural Extension Service was expected to have new recommendations each year. The institutionalization of research and innovations occurred in agriculture about 50 to 75 years later than it did in other industries, for a couple of reasons.¹ First, there were many more small producers and fewer large ones who had the economic assets for research, and second, rural America has been and is more conservative and more risk adverse than other portions of the economy.

There were so many innovations coming during this period that again I have divided them into agricultural related and community related changes in the following chapter.

The Setting

As in the 1920s, prices declined sharply from overproduction after World War II. The returning GIs who had just started farming found themselves in very tight financial squeezes and many

1. *avid C. Mowery and Nathan Rosenberg, Paths of Innovation: Technological Change in 20th-Century America*, Cambridge University Press, Cambridge, 1998, P. 11.

decided in the 1950s that their best future was in the cities, not in farming. Missouri and the Midwest lost more farms during this decade than during any other decade.

This was when part-time farming started. The roads and highways were much improved, automobiles were improved, and economic necessity forced people to look for alternative sources of income.

Travel by air was becoming widely accepted during this time. The federal government subsidized air travel to small cities during this period. Small cities such as Kirksville and Joplin had scheduled passenger air service. While air travel did not directly affect most rural Missouri communities, it helped in creating an image of a shrinking world. Distance was much less of a barrier to travel and communication. Travel by horse took days or weeks if you wanted to go very far. Travel by trains or buses took days to go to either coast. Travel by air took hours.

Agricultural Innovations

The last horses were on their way out of the farming scene. The only horses seen on most farms after this were recreational horses—riding for pleasure or pulling for pleasure. Tractors were now available in all sizes from small “chore” tractors to mammoth four-wheel drive units that would plow in one round trip as much as a day’s work for a man and a team of horses. The cost of one of these huge machines was often more than the land had cost in the past. Combines and many other implements became much larger and self-propelled. There was now a machine to do almost anything: machines to bale the hay, machines to pick up the bales of hay. Hand labor was disappearing. If a machine couldn’t do it, it probably was not worth doing.

The cost for machinery to run a farm rose to hundreds of thousands of dollars. The only way to justify these high capital costs was to enlarge the scale of farms—farm more acres or have more heads of livestock. Prices of farmland quickly went up as operators bid against each other for expansion acreage. The price of farmland in many cases became higher than the returns from the land would pay. The higher prices put farmland buyers at a greater risk when the agricultural commodities went down in prices or costs of production went up. Land ownership has long had more than purely economic value in the United States and in rural Midwest. Families retained land out of a sense of tradition and history, among other reasons.

Irrigation

The irrigation of crops is a very ancient practice, going back into pre-history. Most of the Midwest receives enough natural rainfall to grow good crops in most years. However, this rainfall varies from one year to the next, with frequent droughts. The operating costs for farms have become so high that crop failures from drought can be financial devastating, especially to smaller farms. In the 1950s and 1960s, a series of droughts encouraged the development of irrigation systems. The “central pivot” system of irrigation was adopted from western farms. In the central pivot system the long irrigation pipes supported about eight feet off the ground by

A Revolution in the Heartland

stands and wheels that rotate around a pivot, irrigating the crop below. The water for irrigating comes from ponds, lakes, or wells. Irrigation is another aspect of farming, which requires considerable capital for equipment and operation. Only farmers with good finances could afford it.

Round Balers

This seemingly modest innovation contributed much to revolutionizing Missouri agriculture. The large round bales, weighing 500 to 800 pounds, were often used to bale fescue hay. Instead of handling by hand six to ten 50-pound bales, one large bale could be moved by a tractor or pickup with a six-foot-long spike. The large bales had the ability to shed some rain and could therefore be left in the field until needed during the winter. The hay quality was modest, but most of the hay was fed to beef cows that tolerated lower quality hay better than dairy cows. Often the quality was made up with greater quantity.



Driving through the countryside, large numbers of large bales of hay can be seen in or at the edges of fields. Bales are taken one at a time and placed inside a round fence, which the animals eat through. Little time or labor is required of the farmer. One bale might last the animals for several days. The big barn, with its hayloft for loose hay, became obsolete. This change in labor requirements was one of the events encouraging farmers to take off-farm jobs.

Corn Picker Heads for Combines

Again, corn picker heads are a relatively minor innovation that had major impacts. The combines had been originally developed for harvesting small grains, and had a sickle bar for cutting the stalks of the grain. The picker head for the combine took the function of the corn picker. The ears of corn were stripped from the stalk and then the grain was shelled from the cob. This innovation eliminated a step (corn shelling) in corn harvesting and thus reduced the amount of labor required to produce a bushel of corn.

In contrast to ear corn, no special storage is needed for shelled corn, although drying facilities are needed. Corn and other grains, such as sorghum, need to be dried to remove excess moisture. Drying facilities added another factor to the increasing cost of farming.

Bulk Tanks for Milk Storage

In the second quarter of the 20th century, milk had been sent to market in ten-gallon cans. Trucks picked these up every other day. The milk in the cans had to be kept cool to keep it from

spoilage. Usually this was done by keeping the milk cans in a tank of cool water. The water had to be changed several times a day. The cans had to be cleaned after the milk was marketed and returned to the farm. This was a less than satisfactory method—often the milk would sour if the weather were warm. Sour milk was not accepted by the buyer (the milk plant) and would be returned to the farm and fed to the hogs.

Bulk tanks are large, refrigerated, stainless steel holding tanks. The milk is piped from the milking machines into the bulk tank. A refrigerated tank truck takes the milk from the tanks. This innovation had several impacts: the quality of milk improved, less labor was needed to handle the milk, and more capital was needed to pay for the bulk tank. Processing plants and haulers required the use of the tanks. This was very controversial because of the capital required to buy the tank. The number of cows milked had to be increased to justify the money invested in equipment. At the same time, sanitation requirements for milking “parlors” increased, so old barns had to be remodeled or new ones built. The numbers of cows in milking herds increased rapidly. From herds of five to ten milking cows at the turn of the century, herd size increased to hundreds of milking cows. Currently, experts recommend that milking herds should be about 500 cows. Today, the only herds milked by hand are the very few milking goatherds, and even most of these use milking machines and small bulk tanks.

Small Gasoline Motors/Rotary Lawn Mowers

The small gasoline motor and one of its earliest uses, the rotary lawn mower, are largely unnoticed and unmentioned in the chronology of cultural changes significantly affecting rural communities. The urban sprawl of recent years, with the acres of closely mowed lawns, would not have occurred without the rotary lawn mower that enabled large acres to be mowed quickly and relatively easily. Prior to this innovation, it was only the very rich who could afford to have country estates with acres of lawns. It is my judgment that riding lawn mowers encouraged suburbanites to move to the country and buy a ranchette with two or three acres of lawns. The weed whip, hedge clippers, snowplows, chain saws, portable generators, and other small gasoline powered tools made smaller contributions. These, with the use of large amounts of chemicals, have facilitated the fashion of manicured lawns of today.

I think that lot sizes would be smaller if it were not for these innovations. It is a mystery to me why driving in circles on a riding lawnmower most weekends mowing a lawn is entertainment, but many people say that they enjoy mowing their huge lawns. Usually grass has to be cared for when it is hot or raining, too. Are these rationalizations? Could it be that they are participating in a form of conspicuous consumption for themselves and others by saying to themselves and to the world: look at how much land I have?

Chemical Fertilizers

In 1900, the fertilization was done with animal manure from the barns and a manure spreader to distribute the manure. Clovers and other legumes were grown and plowed under for nitro-

gen. All fertilizers were organic products. Starting about 1950, fertilizers became dry chemicals delivered to the farm in sacks that were then spread by machines. Next came bulk spreaders that were modified trucks which spread fertilizer in 50-foot-wide strips, or machines that inserted the fertilizer as a gas into the soil. The latest change is the machines that spread different amounts over different parts of the fields depending upon the soil fertility in that precise part of the field. Most farmers today would not even think of depending upon animal manure for fertilizer. Indeed, manure spreaders are becoming rare machines on most farms. Today, the large animals are not kept in barns during the winter and so very little manure is collected at the barns.

From the beginning of human history through the 1940's, virtually all of the agriculture on earth was organic. That is to say, food was grown without the aid of chemicals.²

Modern farming requires large inputs of chemical fertilizer and stimulants to increase yields from hybrids that are themselves high yielding. These hybrids are not natural plants, they are artificially bred, sometimes with a poor human nutrient [sic] content. From the producers and consumers point of view, hybrids have been developed to harmonize with the modern economic outlook toward production, which is very high yields and equally high profits. The characteristics of successful agriculture as commonly understood today is to produce very high yields on smaller plots of land.³

The process of making ammonium nitrate fertilizer was discovered in Germany in 1909. The widespread adoption and use of ammonium nitrate fertilizer did not occur until hybrid corn, which requires large amount of nitrogen fertilizer, was widely adopted, and low cost electricity was available to make it efficient. The availability of cheap electricity after World War II made the production of synthetic ammonium nitrate competitive to other sources of nitrogen.⁴ It was the availability of relatively cheap ammonium nitrate that produced major gains in yields of corn, wheat and many other crops.

The application of fertilizers with the seeds required new machinery. Up until this time, corn planters did not have fertilizer attachments for putting on fertilizer as the seed was planted. The same was true for grain drills. Fertilizer boxes were added to corn planters and a special compartment was necessary for grain drills. A generation of equipment lacking such became obsolete. As the new equipment was added, machines were also made larger in size. Instead of two-row planters, the new ones planted four rows or more. Grain drills went from six or eight feet in width to ten or more feet.

2. July 11, 2001, http://www.ecochem.com/t_organic_fert.html

3. July 11, 2001, <http://www.island.lk/2001/04/07/featur01.html>

4. David C. Mowery and Nathan Rosenberg, *Paths of Innovation*, P. 76.

We used ammonium nitrate for decades without knowing that it is explosive. Indeed, most of the time a few sacks of nitrate could be found piled in our sheds. I have picked up many sacks and dropped them to break up the contents when the nitrate became hardened during storage. Today, it is used by terrorists to create huge bombs such as the bomb used in Oklahoma City. Anhydrous ammonia, another common fertilizer, is used to make the illegal drug "meth". Anhydrous ammonia must be now kept securely locked up.

Please note that the following table is total consumption in tons while the graph is in total nutrients—different ways of measuring the same thing. One of the essential practices of farming today is the high use of commercial fertilizers. As the graph below indicates, fertilizer usage increased very substantially from 1960 to 1980.

Average annual consumption of commercial fertilizer—U.S. (tons)

- 1900-1909: 3,738,300
- 1910-1919: 6,116,700
- 1920-1929: 6,845,800
- 1930-1939: 6,599,913
- 1940-1949: 13,590,466
- 1950-1959: 22,340,666
- 1960-1969: 32,373,713⁵

U.S. commercial fertilizer use (nitrogen, phosphate, and potash) for all purposes rose from 7.5 million nutrient tons in 1960 to a record 23.7 million tons in 1981. Total nutrient use dropped from this level, along with total crop acreage, to 21.3 million tons in 1995 and then increased slightly over 22 million tons by 1998.⁶

5. July 12, 2001, <http://www.usda.gov/history2/text4.htm>

6. July 12, 2001, http://www.crosslink.net/~cncurtis/98Terre_Trends.html

A Revolution in the Heartland

Probably no other single innovation contributed more to the increased production of most commodities. Increased production meant that fewer farmers were needed to produce the same quantity of each commodity. Fewer farmers meant fewer small farm supply businesses.⁷



Sources: The Association of American Plant Food Control Officials (AAPFCO, Lexington, KY), and The Fertilizer Institute (TFI, Washington, DC). Commercial Fertilizers, 1999, and earlier issues of this report.

U.S. Department of Agriculture, Economic Research Service, ARB UPDATES: Nutrient Use and Practices on Major Field Crops, Table 1, p. 2 (USDA, ERS, Washington, DC, 1997) and agency updates.

Notes: Quantity refers to total active ingredients in fertilizers. Includes fertilizer use on farms, lawns, golf courses, home gardens, and other nonfarm lands. Includes Puerto Rico. Years ending June 30.

Other Chemicals—Herbicides

One of the first chemicals to be used in large scale was 2,4-D herbicide, first used in 1944. This herbicide was widely used to kill hundreds of acres of trees and brush in the Ozarks and elsewhere to make pastures. A common way to apply was spraying from airplanes. This encouraged the coverage of large acreages. It was common at this time to drive through the Ozarks and see entire hills with only dead trees remaining after the spraying.

From an agricultural perspective, herbicides have made the production of several crops more efficient. Soybeans grown with "no-till" use of herbicides reduces the amount of cultivation necessary both before and after planting. The amount of soil erosion has been reduced through "no-till" techniques. In south Missouri, the use of herbicides has permitted the double cropping of wheat and soybeans. The soybeans are planted immediately after the wheat is harvested, along with spraying of herbicides to reduce competitive weeds and grasses. In the fall, the soybeans are harvested and wheat replanted.

7. July 12, 2001, <http://www.crosslink.net/~cncurtis/fig7x10.jpg>

Pre-emergent, post-emergent herbicides, a vast variety of pesticides starting with the now infamous DDT made the farm operator become a chemist and created a demand for chemical applicators. The popular reception of Rachel Carson's book, *Silent Spring*, in 1963 concerning the dangers of DDT for the ecosystem had a dramatic impact on the public's view of chemical usage such as spraying for mosquitoes and agricultural chemical usage. The widespread use of antibiotics in poultry and hog feeds has contributed to the development of resistant bacteria in humans. Many private water wells now show traces of herbicides in the water. Today, pesticide-resistant mosquitoes are often carrying a strain of malaria which also resists common treatments.

DDT was commonly used to control mosquitoes in small towns in the 1950s and 1960s. I remember seeing the fogging machines driving through the neighborhoods with small children running behind playing in the fog. I have often wondered what if any, health effects this later had on those children. Of course, at the same time we on the farms were handling all kinds of chemicals without gloves or masks. Same question.

From an environmental perspective, the use of many of the new chemicals was and is troubling, to put it mildly. Indeed, many of the new, non-farm rural residents have raised questions or made protests concerning the use of these powerful chemicals close to their homes. Of course, many of the same protestors would use the same or similar chemicals for weed/pest control on their lawns, often at higher than recommended rates of use. Chem-lawns are not limited to city lawns. Some of the most intensive chemical uses are on suburban lawns.

Changes in Agricultural Policies and Programs

Federal Agriculture Programs

The 1950s saw a continuation of many of the agricultural support programs and the creation of several new ones. At the same time, debates about the level of farm price supports and surpluses continued at every level. One of the hottest debates was over parity. Comparisons were made to the parity of 1910–1914, when the cost/price ratio was one of the highest the American farmers had ever seen. This meant that farmers made more profits than at any other time for which data are available.

During the 1950–1975 period, farmers were a much stronger political force than they are now. The proportion of voters who were farmers was much higher than today. More of the U.S. Congress members represented predominantly rural/farm districts. Also, many of the people in the cities were only one generation removed from farming, and they felt that the federal government should support family farms. This political clout led to the establishment of several new federal agricultural programs. One of the more popular in Missouri was the "soil bank".

In 1956 a new program called the "soil bank" was authorized. It was designed to reduce crop surpluses by taking croplands that were most subject to erosion

out of production for up to 10 years. The USDA shared the cost of converting cropland from production to protective vegetative cover. In other words, a farm operator received an annual rental for not planting on the designated acreage and also got paid in part for planting grass or other plants to prevent erosion.

Over its 10-year life, the Soil Bank Program diverted 28.7 million acres to conservation practices on 306,000 farms. Two similar long-term contract programs, the Cropland Conservation Program, authorized in 1962, and the Cropland Adjustment Program enacted in 1965, followed it.⁸

The purpose of the soil bank was to reduce production and conserve topsoils. However, it had some other, unanticipated effects. If a farm operator was able to put a substantial portion of his/her cropland in the soil bank, they could take an off-farm job, or retire, or buy farmland and use the soil bank rentals to pay a substantial portion of the land costs. Farm suppliers in the small towns lost a lot of business. Some farm supply businesses were forced to close because of the loss of business, since the farmers were no longer buying chemicals or equipment to farm the soil bank acres.

Another important piece of “agricultural policy” started in 1964 was the Food Stamp Act.

The Food Stamp Program provides a basic safety net to millions of families with children. The idea for the program was born in the late 1930s, with a limited program in effect from 1939 to 1943. It was revived as a pilot program in 1961 and was extended nationwide in 1974. The current program structure was implemented in 1977, with a goal of alleviating hunger and malnutrition by permitting low-income households to obtain a more nutritious diet through normal channels of trade.

The program provides monthly coupons to eligible low-income families, which can be used to purchase food.⁹

One of the rationales given for this act was that it would increase the consumption of surplus agricultural products and thus help increase the prices for agricultural commodities. In some rural areas of the state, such as the eastern Ozarks, food stamps became an important part of the economy and were often used as currency for buying items not on the approved lists for food products. Tobacco and alcohol were sometimes part of the food stamp purchases. In northern Missouri, people who were qualified for food stamps did not use them to the same extent. The northern Missouri culture held the belief that food stamps were charity (welfare) and one should not accept charity if at all possible.

8. July 14, 2001, <http://www.usda.gov/history2/text11.htm>

9. *Ibid.*

Farm Organizations

Both the MFA and Farm Bureau continued to be active during this period. The MFA went through a change of operating philosophies that ended with the organization focusing on economic activities and less on political concerns. In contrast, the Missouri Farm Bureau moved to focus on the sales of insurance and political actions and less on retail programs. Some MFA exchanges were caught in downward spiral of farming and farm supplies purchased.

A new farm organization was formed in the 1950s as a protest against low farm commodity prices. The organization had its start in northern Missouri.

National Farmers is a not-for-profit, paid-membership general farm organization. It evolved from a farm protest movement in 1955 into a producer-owned organization of farmers, which today negotiates contracts, and terms of sale for hundreds of millions of dollars on behalf of its family-farmer members in 37 agricultural states in the continental U.S.

National Farmers handles millions of dollars in agricultural commodities daily on its members' behalf. However, NFO does not buy commodities from members, or sell commodities to members. It does not manufacture or process its members' commodities.¹⁰

The advantages of the different farm organizations were hotly disputed in farming communities. The NFO was in favor of increased governmental assistance and the Farm Bureau was not. The Farm Bureau supported the policy of letting the free market take care of needed changes.

Another farm cooperative, Mid-America Dairymen, Inc., was formed in southern Missouri, with headquarters in Springfield. This organization purchased milk from farmers and, after processing, sold a wide variety of dairy products. Mid-Am, as it was called, became the largest dairy cooperative in the United States. In the mid 1990s, Mid-Am and three other cooperatives formed Dairy Farmers of America that included **19,500 dairy producer/members in 45 states**. Many farmers felt there was little difference between selling to Mid-Am and selling to Kraft, a commercial organization.

Vertical Integration in Agriculture

Perhaps you have noticed, while driving through the countryside, the very long and low buildings with curtains on the sides and metal roofs that are often located in groups of twos and threes or more. These are most commonly broiler, or turkey, rearing houses. These are a part of what is called the poultry vertical industry.

10. July 17, 2001, <http://www.nfo.org/webpages/history.htm>

Vertical integration is when two or more of the functions from production to retailing of a product are put together into one firm. If a tomato grower packaged his tomatoes and sold them under a brand name, it could be said that was an integrated firm. However, the term is usually aimed at much larger firms, such as Tyson Foods or Smithfield.

The classic case is the poultry industry. The broiler industry led the way to large-scale integration. The integrated broiler industry started in the 1920s in the Delmarva Peninsula in Maryland, but it was not until the 1950s that the vertically integrated broiler industry reached Missouri. To say that this has been controversial is an understatement, but here is how the USDA reports it.

The broiler industry was one of the success stories in American agriculture during the last century and is an example of how the use of technology, improvements in production practices, and product marketing can change the basic structure of agriculture.

Broiler meat has been improved and is now a healthy, nutritious, convenient product available at a price lower than it was 50 years ago. Broilers have the best-feed conversion ratio of any domesticated land-based animal. The broiler industry has evolved from millions of small backyard flocks of dual-purpose (eggs and meat) chickens in the early 1900's to less than 50 highly specialized, vertically integrated agribusiness firms.

Until 1920, chicken meat was considered a luxury reserved for special occasions. Chickens were strictly a by-product of egg production, as cockerels and unproductive hens were culled from the laying flock. Efforts to raise chickens for meat had been spotty and short-lived.

In the mid 1920's production of chickens for meat reached significant levels, and the poultry industry in the United States has evolved dramatically ever since. Scientists developed ways to meet the nutritional needs of chickens kept in protective environments, making large-scale, year-round production possible. Beginning in 1926, many processing plants voluntarily participated in a USDA inspection program for wholesomeness.

Broiler production emerged in the 1930's as a separate industry that operated year-round, rather than one producing only seasonal "spring chickens." During World War II, the biggest broiler customer was the U.S. army. After the war, more emphasis was placed on integration of production and marketing processes.

In the 1950's and 1960's, vertical integration became common, with a single company involved in every process, stabilizing the rapidly changing relationships between inputs, production, and marketing segments. Vertical integration

allowed the broiler industry to take advantage of new production and processing techniques in order to become more efficient, responsive, and profitable.¹¹

Critics of the program note that the farmers are reduced to being wage laborers in vertically contracted operations. The farmers are normally paid per pound of gain/quality. The renewal of contracts is uncertain and subject to negotiations in which the farm operator has little bargaining power. Everything from when the birds are started, the design of the buildings, the feed, when the birds are finished, down to the type of feeders is controlled through the contract. The farmer never owns the birds. The farmer owns the land and the buildings (and there are usually mortgages on the buildings). Since the growth of broiler operations in the southwest counties of Missouri in the 1950s, contract production of broilers, turkeys, and most recently, of hogs, has spread throughout the state.

Another charge by critics of "factory farming" systems is the poor quality environments for the animals. The densities of animals in the buildings are very high. For example, the broiler chickens have only a fraction of a square foot of space per bird. Chickens, when placed in such high densities, have a tendency to become cannibalistic. If a chicken is wounded, other chickens will chase, pick on, and eventually kill the wounded bird. To prevent this, the chickens are "debeaked" when young. In the egg-laying flocks, several layers of cages are placed one above the other. Not only are the hens kept in small spaces, but also the droppings from the top layers of hens drop down upon lower levels of hens. Similar examples of poor environments for animals can be given for veal and hog factory production. None of these animals ever have the opportunity to live in a semi-natural environment.

Increased Beef Cow-Calf Herds

Small farm operators were increasing turning to beef cow-calf herds as their primary animal enterprise. Beef cow-calf herds had several advantages. The labor requirements were limited and could be done in the evenings, on weekends, or other spare times. Beef-cow herds do best with skilled management, but will survive under unskilled managers. While the cows prefer other grasses, they will eat fescue. There were not many other animal enterprises available to small scale farming operations. Poultry had been taken over by Tyson and other large producers, and dairy and hogs required much labor and management. Perhaps most importantly, cows looked good grazing on the pastures. Such small herds allowed many people to say they were farmers.

Cow-calf herds are the least profitable sector of the beef industry. The calves are sold to be grown until they are large enough to go to feedlots. This yearling portion, as it is sometimes called, is usually much more profitable than the cow-calf production. But because it takes more capital, better management skills and more labor, very few Missouri farmers take advantage of the potential profit.

11. July 12, 2001, <http://www.usda.gov/nass/pubs/trends/broiler.htm>

Development of a Dual Agricultural Structure

Throughout the century, the numbers of mid-sized family farms has declined. Most of this attrition has been between generations. When the parents retired or quit farming, none of the younger generation were willing to take the farm over. Frequently, the farm was sold to another farm operator who added it to his existing operations.

At one time, I owned a farm that had been eleven farms originally, and my farm was only part of a larger operation. The original farms had been from 40 to 100 acres. My brother and I were at that time farming about 2300 acres in total. This was operated with two workers.

After the farm recession of the 1950s, when considerable numbers of smaller farmers quit farming, a new pattern began to emerge. It became apparent that the majority of former family farms would not provide enough income to support a family at the desired level of living. One alternative was for one or both adults to take an off-farm job. This might have been, at that time, at the local shoe factory or in the local hospital. Another alternative that was frequently taken was truck driving. Many rural households have several sources of income during the year; some are seasonal, some are temporary, and one might be permanent.

During the first 75 years of the century, the monetary requirements of farming increased steadily. All of the technology cost money; often large amounts of it. Self-propelled combines cost upward of \$100,000. Tractors cost perhaps half of that. Most farmers tried to use older equipment whenever possible. However, a fad developed the 1970s to trade equipment frequently. Interest rates to borrow money were relatively low, and prices for farm commodities relatively high, especially in the first half of decade. The costs for fuel, fertilizer, and chemicals required large cash flows. There were also increased household costs, such as electricity and propane. Some of those who took on large debts for land and/or equipment at this time became fiscally endangered later when interest rates rose sharply.

A limited number of farmers were able to expand their acreage and/or their volume of production enough to be competitive. The middle-sized family farms became an endangered species. They were too small to get the greatest efficiencies of scale, but too large to be part time. Often they did not have adequate capital to take advantage of the latest technology or to expand their scale. The farming operations became polarized. The 75 percent who were small scale produced only 10 percent of the farm products sold, while the relatively few large-scale operations sold the majority of the farm products. Most of the small farming operations had beef cow-calf herds as their major enterprise.

It is more difficult to have a community when both people in a couple work off-farm. If people are employed full time off the farm and then must do their farming in the evenings or on weekends, it leaves very little time for community related activities. Communities are much more likely to be functional if the members have things in common to talk about. A small-scale, part-time cow and calf producer probably has little in common with a large-scale grain

producer. Both will have little in common with the rural resident who lives down the road on ten acres and commutes an hour to work at an automobile assembly plant.

Chapter 20

Technological and Other Innovations Influencing Rural Communities 1950–1975: Household Changes

Household Appliances

Changes were occurring within the house that were just as dramatic as those in the fields. Rural housekeepers saw the invention of the powered automatic washing machine as a gift from God. Gone were the days of backbreaking labor bending over a washboard. Only slightly less profound in its impact was the hot water heater. Readily available hot water enabled clothes washing and personal bathing to be done as desired. They were no longer major events that took hours of preparation. While these innovations had been available to urban residents for some time, it was only when the household finances improved and electricity was available in most rural communities that these appliances became universal in rural homes.

Many other household appliances quickly became part of the average rural home. The refrigerator, vacuum cleaner, home freezer, electric or gas cooking stove, furnace, and air conditioner were in most homes. The technological age had arrived. Along with these came innovations for food processing and preparation, such as cake mixes, frozen foods of many different varieties, and better preservatives that allowed foods such as breads to be kept longer.

Between 1900 and 1950, however, a variety of conveniences brought spectacular improvements to the nation's private homes. During this time, the occupants of nearly all private homes acquired electrical service, complete bathrooms, refrigerators, central heating, and washing machines, along with vacuum cleaners, toasters, phonographs, telephones, and radios. Mechanization continued apace during the second half of the century as water heaters, color televisions, microwave ovens, and clothes dryers became standard household equipment. Tens of millions of families installed swimming pools, home freezers, personal computers, water softeners, whirlpool baths, and other technologically advanced conveniences. Air conditioning became standard, particularly in the South and Southwest, where it fostered both population and economic growth. Among its many effects, domestic mechanization greatly lightened the routines

of housework, thereby enabling married women to seek work outside of their homes.¹

A new, controversial consumer product was just beginning to make its appearance. It was called a "TV" dinner—a meal that you could heat and eat while watching your favorite program. It was controversial because it was not fully prepared in the kitchen. For many housewives, especially the older generation, use of prepared foods was considered lazy. The cost of the prepared food was slightly higher, but the time saved was substantial. If a person stopped at a local fast food outlet and took the results to a family dinner, there would be comments about how the person did not care enough to do the right thing and prepare it themselves. I have seen instances where the diners would almost refuse to eat a store-prepared dish.

Just as the farm tractor and combine reduced labor per unit of production, the widespread adoption of food and household innovations dramatically reduced the amount of labor necessary for housework. Household mechanization and reduced family size freed time for the women to take out-of-the-home jobs.

Propane for Home Heating and Cooking

The traditional fuel for heating and cooking was wood, or coal in a few places. Over a period of about 30 years, all of the coalmines in Missouri closed. The cutting of enough wood for both heating and cooking was a very time consuming task. Propane slowly became the fuel of choice, when people could afford the cost. Its first use in many rural homes was for cooking. The instant and easily controlled heat was a major improvement over the erratic heat of the wood stove. Starting a fire and bringing the wood stove up to cooking heat was at least a fifteen-minute chore. Thermostat-controlled, forced-air furnaces became more feasible with propane or fuel oil. At the same time, buying the relatively expensive propane required an increased cash flow. On a very cold windy day, rural people said they could just see the money go up the chimney as the gauge on the propane tank went down. The movement of the rural households into the "cash" economy was rapid during this time.

Air-Conditioning

Most older houses, rural and urban, have large porches across the front of the house. These commonly had a swing seat hanging from the ceiling. A screened-in porch was desired, but hard to come by. It was the custom for people to sit on the front porch in the afternoon or evening during warmer weather and on warm sunny days in the winter. People passing by would stop and visit. This was especially popular on Sunday afternoons.

The process of air-conditioning was invented in 1902, but for the first fifty years air-conditioning was almost entirely in commercial buildings because the large units were unsuitable for

1. <http://www.pbs.org/fmc/book/pdf/ch5.pdf>

homes. It was not until the much smaller window air-conditioning units became available after World War II that widespread adoption occurred. Some new homes were being built with whole house air-conditioning units. The construction of porches disappeared. It now became more comfortable to sit inside, where the cool air from the unit reduced Missouri summer temperatures and humidity to a more tolerable level. The “ranch” style home is in large part the result of air-conditioning. The older homes, with their tall ceilings, were built to make rooms cooler in the summer. The urban ranch-style homes were quickly adopted in rural communities.

The latest fashion in architectural planning is to build or add porches to houses. It seems that architects have found what people knew a century ago—that porches help make good neighbors.

The growing availability of air conditioning occurred at about the same time that television was becoming popular. The net result was that the family disappeared inside the house. There were fewer opportunities for interaction with friends and neighbors. People did not know or interact with their neighbors as much as they had in the past. People of today might think it odd to sit and talk for hours on end with the neighbors. This decline in interpersonal interaction was a small thread in our tapestry of changes, but one that contributes much to the overall changes.

Air-conditioning in automobiles did not come into general use until in the 1960s. Automobile air-conditioning has to be both powerful and small to fit within the limited space available. Automobile air-conditioning made distance commuting to work much more pleasant, especially in the hot summer months. Again, this was a small but important step in the encouraging changes in rural communities.

During this period much of what had been luxuries in previous decades became necessities. Washing machines, vacuum cleaners, and much more come to be seen as essentials.

Mobile (Manufactured) Homes

The average household incomes in rural Missouri communities have always been lower than the state average and correspondingly, the poverty rates have been higher. Much of the housing in rural communities was constructed around the turn of the century and the quality when constructed was often not the best. For example, many homes were constructed without concrete foundations. The floor joists would be placed upon small piles of rocks. In many cases, these rock piles have collapsed, leaving the house sitting on dirt, with rotting structures. Almost none had bathrooms or other modern facilities. The windows and doors in these old houses are loose; there is little or no insulation. The electrical wiring is usually minimal; the plumbing, if any, is often exposed and subject to freezing.

A Revolution in the Heartland

I have lived in such houses, where the only thing keeping the wind from blowing straight through the house was the wallpaper. The house had no insulation of any type; no sheathing on the outside (it had clapboard siding with large cracks between boards) and the plaster underneath the wallpaper was cracked on the inside. In some places, the wallpaper was holding the plaster on the wall. Try heating that house! We did and found we couldn't afford the amount of propane it would take to heat it.

After World War II, the recreation industry started building trailers for camping. However, there was a strong demand for semi-permanent housing that was affordable by the large numbers of lower income rural residents. Mobile homes offered several advantages; they were cheaper than similar sized "stick built" homes. The financing was different for mobile homes. In Missouri, mobile homes are financed similar to cars. Financing for a mobile home is easier to get than for a regular home. Families could buy a house that had a modern kitchen and bathroom(s) for a price they could afford. One of the continuing concerns about some mobile homes is the quality of construction. Missouri has no state building code standards. During the early years of the mobile home industry, the quality was highly varied. Another concern was the lack of "tied downs" and skirting on the mobile homes. Mobile homes are subject to wind damages more than regular houses, if they are not tied down to foundations or other anchors.

Another important reason for mobile homes in rural communities in larger numbers was the lack of local restrictive regulations. Most incorporated communities (towns) have zoning and building codes that restrict the location of mobile homes. Very few counties outside the metropolitan counties have either zoning or building codes. The possibility of building mobile home parks in most towns still brings out strong "not in my back yard" protests. Thus, people who wanted to escape the regulations and who simply "want to get away from it all", but could not afford a regular house, bought a few acres, preferably on a paved highway, and located a mobile home there. Even today, it is not uncommon to find a newer mobile home located near an older, dilapidated house.

In many counties, especially in the Ozarks, the proportions of new units that were mobile homes is high, sometimes running more than 50 percent.

More recently, with greater affluence, the growth of the "double wide" manufactured home that closely resembles a regular home has increased. The manufactured home industry has adopted standards that more closely resemble those found in cities with building standards. Today, the dividing line between manufactured homes and custom built homes is difficult to see. The federal government says that if a house is located on a permanent foundation and has eaves (extension of the roof beyond the outside wall), it is a house, not a mobile home, regardless of whether it was built in a factory. Mobile homes are more tolerated by rural residents than in the middle class in the cities; but they are considered undesirable, especially as they get older and are not well maintained. In many ways they are considered similar to old cars in the front yards, ugly and trashy.

Innovations Influencing Rural Communities

Communications

This is the quarter century when the rural world was really opened to the media of mass society. During the previous twenty-five years, radio had brought Hollywood type entertainment to the rural communities everywhere. But television was the medium that has had the greatest impact on the American society. The rural Missouri communities were no exceptions.

Radio

The first radio stations, not surprisingly, were built in the large cities in the 1920s and 1930s. After World War II, there were a large number of FM radio stations established in smaller cities and towns. By the mid-1950s, most towns of 10,000 or larger population in Missouri had a local radio station, almost always an FM station. This was a mixed blessing to rural communities. It gave a better outlet for local news, but at the same time it shifted the focus of public attention away from the smaller rural neighborhoods and more to the trade area of the larger towns where the stations were located.

Newspapers

Daily metropolitan newspaper subscriptions were becoming available in many rural communities for same-day home delivery. During this period, the technology for printing papers changed from the linotype and cast lead type to offset printing. This type of printing can easily be used for commercial printing of other types. Holding companies or chains that sold advertising for a large area purchased many of the small weekly newspapers. Many of the papers had been under major financial pressures because of the loss of local businesses that had purchased advertising in the paper. Often the local paper had a front page that reported local news the rest was "canned" materials provided by the parent company. The local schools, if any, provided about the only local "news" besides births and deaths and an occasional accident. These items were placed on the front and back pages along with local ads.

Magazines

During the previous decades, finances had limited subscriptions to magazines. During the 1950s and the 1960s, incomes slowly increased to where more rural homes had subscriptions to farm magazines such as *Missouri Ruralist*, *Farm Journal* and *Successful Farming*. These magazines touted innovations for both the farm and the home. In addition, nationally popular magazines such as *Life*, *Look* and *Saturday Evening Post* could be found in many rural homes.

Television

I was working as a University Extension staff member in rural communities of northern Missouri in the late 1950s when the first television station started broadcasting in the area.²

Almost overnight we had to change our methods. Some nights became off limits for meetings because of conflicts with popular television programs. In general, it became much harder to get people to come to evening meetings. The Ed Sullivan show, which was broadcast on Sunday evenings, killed evening church services in many churches.

Television has an impact on all of us, but especially on young people. The average person, rural or urban, watches almost forty hours per week of television. Some may watch sports, others watch series, and some are hooked on old movies. Television brought the world into our living rooms, first in black and white and then in color; first on 8-inch screens, then 17-inch screens and now on 60-inch screens. At first the family would gather in the living room to watch; now teenagers and others often have their own sets in their bedrooms.

Another personal example: in the 1960s I had several national research projects that required me to do interviews in different parts of the country. I can remember the southern drawls, the New England broad "A's" and the other regional accents of the people with whom I talked. Today when I talk to people from these same areas, it is only if I talk with older people that I hear the regional accents.³ Instead I hear accents closer to my own. The major TV broadcasting networks made a decision to hire announcers, including news anchors, from the Midwest. If a young child watches television thirty or more hours per week, as most children do, during the period when they are learning the language, television has an impact upon the accent.

TV is a "double edged sword". There is a vast amount of excellent information that can be obtained through television, but there is a negative side also.

The introduction of the television has certainly been one of the most significant events in history. While its early growth was slow, its popularity soon exploded; now almost every household in the United States owns at least one. While its influence is widespread, two areas in particular are noteworthy. The television has had an adverse effect on the environment, and it has also contributed to declining social relationships.

It did not take too many years for the negative effects of television on social relationships to become apparent. In the late 1970s a writer to "Dear Abby" complained of friends and neighbors disturbing her family's time together in front of the TV: "We hate to be rude, but we would rather watch our programs than visit with them..." (Smith 200) Another writer complained of her husband, a television addict: "The minute my husband comes home from work, he turns

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2. *Most Americans (63%) bought television sets for the first time between 1947 and 1955. (The Wall Street Journal, July 16, 2001, p. B1) Many people in rural communities were a little later in buying their first TV set because the stations that covered rural areas were some of the last to be built.*
 3. *Even some of the older generation's accents have changed somewhat. When I listen to Senator Edward Kennedy from Massachusetts, I do not hear as much accent as earlier. President George W. Bush does not have the Texan accent of the previous generations such L.B Johnson.*

on the TV and watches anything that happens to be on...He doesn't talk to me or the children. Abby, he stays up until 2 o'clock in the morning...of course we don't have a sex life anymore." (Smith 200) Another family in the 1980s described the breakdown of relationships in their family due to the television. The husband was ignored while the wife obsessed over a soap opera. Both parents ignored their children. While few notable changes were seen, the family describes a slow change that began when they bought a television: "It was the gradual clipping away of decent standards, the flip attitudes, the casual acceptance of violence, the trivialisation of love and sex." (Smith 201)

John Leonard ...claims that "everybody agrees...that watching television causes antisocial behavior." (785) A principal factor causing antisocial behavior is the fact that television has replaced the community we once knew in our neighborhoods, in our families, and in our churches — communities of real live human beings. Instead, we now look to the television for "virtual community;" we look to the television—instead of people—to release us from hunger, anger, and loneliness, since it "is always there for us, a twenty-four-hour user-friendly magic box." (789)

Chris Arthur presents a powerful argument in his article, claiming that the influence of television on modern life is similar to that of a cult. He says that "ours is an age not of churchgoers, not of atheists, not of Buddhists or Muslims, but of TV watchers." (194) He cites several convincing statistics throughout the article, which support his belief that TV has had detrimental impacts on our society. He says that not only will most of us spend "more time watching TV commercials than an undergraduate spends in classes during a four-year University course," but we may actually spend up to eight years of our lives watching television. (195) In addition, before a television watcher reaches the age of fourteen, he or she will possibly witness approximately 14,000 deaths on TV. (196) It is next to impossible to argue that viewing 14,000 deaths on TV has no negative effect on a child's behavior or thought life.⁴

The list of research projects showing the numerous impacts of television is so long, there can be no argument that the widespread adoption of television has to rank with the automobile for changing the way that Americans, in this case rural Missourians, live. With the almost complete adoption of television by families, the isolation and insulation of rural Missouri communities had largely disappeared. I have had the opportunity of watching several nation- and world-changing events on TV. High on my list are the assassinations of John Kennedy, Martin Luther King, and Robert Kennedy, the coverage of the Vietnamese war and more recently, the terrorists' attacks of Oklahoma City and September 11, 2001. The gripping video from these tragic events has and will continue to change our worlds, rural or urban.

4. July 13, 2001, <http://www.bethel.edu/~kisrob/ens305/project/television.html>

Rural Telephones

As a stimulus to improving rural telephone service, the USDA was permitted to fund telephone cooperatives similar to rural electrical cooperatives. Only a few were organized in Missouri. In most communities, to meet the possibility of increased competition, telephone service from the large commercial companies increased considerably, although often service was available only for party lines.

Transportation

The automobile became a major force in shaping the future of the American communities, rural or urban. The wedding of the average American to his/her automobile was permanent. There was little possibility of a divorce in this union. Housing, shopping, employment and entertainment all became dependent upon having an automobile. It also was becoming a major status symbol. The more expensive the automobile, the higher was the perceived status.

Foreign Made Cars

This time period included the introduction of small "foreign" autos into the American automobile markets. The Volkswagen "Bug" was a pioneer in small vehicles, closely followed by models from Toyota, Datsun and other companies. While people living in rural communities were at first reluctant to buy anything other than an American vehicle, they eventually followed the rest of America in buying Japanese and German cars. This shift may not seem related to changes in rural communities, but it is. The large (called full-sized by the marketers of the day) American cars were considered to be "family cars". That is, they were large enough that the entire family could and did travel together. When a trip was made to town, it was assumed that the entire family would go, not just an individual. The small cars were targeted much more at the individual. The idea was that these were personal cars in which one or two people could travel to work, to shop, or to do anything else. In other words, travel was moving from being a family activity to an individual action. Cars became personal: "my car" versus "the family car". This was a significant step in enhancing individualism throughout society, including rural Missouri.

Pickups

The pickup was still a farm work vehicle. The bed was scarred from every type of use, including hauling the bull that entered only under great protest. The passenger area had a heavy steel chain lying on the floor. Something was always getting stuck in the mud and a chain was essential for pulling it out. One frequent attribute of pickups of this era was a gun rack in the back window that might hold a rifle or a fishing rod or both.

The pickup had not yet become a status symbol, but the process had started of converting it into the vehicle of the "urban cowboy," with air-conditioning, soft springs to make it ride like a sedan, and plastic bed liners. Somewhere in the conversion process, the prices for the fancy

pickups became higher than for sedans. The hardest use it might get was hauling the Christmas tree home. This transition is probably a reflection of who rural residents are and what they do for primary employment. During most of this period, pickups were primarily male vehicles.

Gasoline

The price of gasoline and diesel remained relatively cheap. The last few years, 1972–1975, were an exception. The low prices encouraged people to drive farther for employment and for shopping.

Tires

The improvement of the quality of tires continued during this period. Virtually all tires were now tubeless, and radial tires were generally available. In the early era tires might average a few thousand miles each. Ten thousand miles tread wear was considered good. The average tire life continued to creep upward, to 30,000 or 40,000 miles and even more in some cases. The cost per mile went down and tire troubles became less frequent.

Highways

Several major changes were made in the Missouri highway system starting in the 1950s. Among other things, the state took over maintenance of many roads. These greatly improved roads opened the rural communities physically to the rest of the world.

Local Roads

In 1952, the state Department of Highways took over responsibility for maintaining almost 12,000 miles of local or county highways. The goal was to bring 95 percent of all Missourians to within two miles of a hard-surfaced road.⁵ At the same time, the local elected road boards were upgrading the surfaces of the remainder of the local roads with gravel. As noted elsewhere, gravel only became available when sufficient power was available to crush the rock. In most communities, this was about mid-century.

Total Miles of State Maintained Roads⁶

- 1920: 19.9 miles
- 1940: 15,571 miles
- 1960: 29,406 miles
- 1980: 32,180 miles

5. July 9, 2001, <http://www.modot.state.mo.us/about/history.htm>

6. *Missouri 1900-2000: A Century of Change*, p.22.

- 2000: 32,337 miles

Interstate Highways

In an act that forever reshaped the American rural landscape, the administration of President Dwight Eisenhower started building a massive interstate highway system in the late 1950s. Most people have forgotten or never knew that a major justification for the interstate system was national defense. President Eisenhower wanted a good road system in order to move tanks and other war materials around quickly.

In Missouri, the interstate highway system included five major highways. These had two important impacts on local rural communities. The new need for services such as truck stops, motels, and restaurants created a considerable amount of local economic activity. Less visibly, but ultimately more importantly, it extended the commuting range for employment and services by a considerable distance. Once on the interstate, a commuter could drive 50 miles in less time than a city resident could drive ten miles.

While the interstate highways were being built, some major changes were occurring in the metropolitan areas. Earlier, the major manufacturing plants and retail services had been located in the central city. Over time, most plants and many headquarters moved out to what had been the fringes of the metropolitan area as bypass highways were built around metropolitan areas. In the St. Louis area, Highway 270 had a major impact on the city and on nearby rural areas. Many industries relocated close to 270, and with the combination of interstates 44, 55, and 70, people could reside 50 or more miles away from the metropolitan area and commute to work.

The changes opened up many, many rural communities to being places of residence from which the people would commute to their place of employment. If a map of Missouri had been drawn in 1975, after the interstates were built, that showed where people could reside if they were willing to commute an hour each way to work, a considerable proportion of the state would have been included. The average American commuted about 30–40 minutes one way during this time period.

One of the most revealing pieces of research on commuting that I have done was a simple tabulation. I got the home zip codes of the workers at the General Motors plant in Wentzville, a suburb of St. Louis. I plotted these on a Missouri map, ignoring workers from other states. The southernmost workers were almost at the Arkansas state line. The northernmost workers were at the Iowa state line and the western line was Booneville (the next town west of Columbia). The maximum commuting range was about 150 miles. Some of these commuted in “van pools” or other shared rides, but many drove their own vehicles.

I gave these results to a group that included people from Centralia (25 miles north of Columbia) and asked if that seemed like a long commute. The answer was no; that there were four

people from Centralia commuting daily to the St. Louis Chrysler plant on interstate 44, which is a greater distance than to the GM plant. I asked the same question to an MU extension worker in Wayne county (southeast Missouri, close to Popular Bluff) and was told that people from south of Wayne County were commuting daily to St. Louis and that people from Wayne county were driving all the way to Memphis, Tennessee on a daily basis.

In another small exercise on commuting, I asked the nurses in the MU hospital where they lived. Much to my surprise, I found that the weekend nurses who worked two twelve-hour shifts commuted from as far away as Centerville, Iowa and Kirksville, Missouri. They stayed between shifts and then returned home. While that was the extreme, very few of the nurses lived in Columbia. Most came from small towns or the open country within 45 miles.

The improvements in highways allowed for the development of regional shopping and service centers, especially medical centers. A colleague, Daryl Hobbs, found that in the Ozarks, if there were close-by physicians, they would be utilized. If, however, people had to go outside their own community, distance was less important than going to a medical center with specialists. In other words, a person looking for medical services did not necessarily go to the closest physician who could treat them.

Community Services

Rural Water Systems

Water for household use in most rural communities had been uncertain and left to the individual farm or home to provide. To drill a water-well cost over \$5,000 (c.1960) in many parts of the state, with no guarantee of satisfactory results. An alternative was to buy the water from a nearby town one-truck load at a time. This was dumped into the household well and used from there. Much of the water seeped out into the surrounding dry soils and could not be used.

The creation of rural water cooperatives using USDA funding in the 1950s, '60s and '70s had a very dramatic impact on rural communities. Adequate and reasonably priced water was the final step to developing a high quality urban life style in rural communities. With all the urban amenities available in rural areas, there was little to discourage people from moving into the country.

Before 1937, there was no national effort to help rural communities with water problems. Most rural people depended on well water for drinking and home use, for irrigating crops, and for other important farm uses. However, well water was not always available, and even when it was available, it took lots of time and effort to haul water where it was needed.

Then, in 1937, Congress enacted the Water Facilities Act, signed by President Franklin D. Roosevelt. This law began a program that provided loans to help with the severe drought and water problems in 17 Western States...That same year -1937- the Farm Security Administration was created, which delivered the water program until the 1946, when the Farmers Home Administration was created. The program was expanded to cover all of America's rural areas.⁷

Health Care

Rural communities have many health care challenges. Agriculture has a high accident rate, with workers getting very seriously injured or killed by machines. In my family, my nephew was killed by an accident with a hay baler and a hired worker was seriously injured by an accident with a feed mill. Like most people who have worked on farms, I have had some close calls. Corn pickers and balers are notorious for their tendency to injure people. Treatment of such injuries requires medical trauma centers that are only available in large urban centers. In addition, most rural communities have larger proportions of older people who need more health assistance and many low-income families who are unable to pay for health insurance or good health care.

Finding physicians and other health care personnel to work in rural communities has been a challenge for decades. Physicians during this period were not willing to locate in rural areas for several reasons: fewer people with health insurance and a larger proportion of low income patients, heavier work loads with fewer fellow physicians to share the load, and inadequate and often out of date equipment and hospitals. In an attempt to help on the latter, Congress passed the Hill-Burton Act to help smaller communities build better hospitals.

In 1946, Congress passed ...the Hill-Burton Act.... Since 1946, more than \$4.6 billion in Hill-Burton grant funds as well as \$1.5 billion in loans have aided nearly 6,800 health care facilities in over 4,000 communities. In return for Federal funds, facilities agreed to provide free or reduced charge medical services to persons unable to pay. In 1970, direct loans and loan guarantees with interest subsidies to facilities were authorized...⁸

Many relatively small rural towns built hospitals using funds made available through the Hill-Burton Act. While these hospitals were not able to offer the medical technology found in large metropolitan hospitals, they were able to offer much better care than previously available.

My father, who was residing ten miles from a small town, had a major stroke in 1968. The only ambulance available at that time was the hearse from the funeral home. It took two hours to get him to the local hospital. All the local Hill-Burton type hospital could do was make my father comfortable and wait and see what happened. After a few days, he was transferred to a

7. July 14, 2001, <http://www.usda.gov/rus/educate/ruwater.htm>

8. July 19, 2001, <http://www.hrsa.dhhs.gov/osp/dfcr/about/aboutdiv.htm>

regional hospital, but in the treatment of strokes, this was much too late to have any significant impact on his condition.

A new type of elderly housing/care developed during this time period. The custom of older people staying with their children after they could not care for themselves changed. If older people could not care for themselves, they moved (were moved) into specialized housing/care facilities called "retirement centers" and "nursing homes". Nursing homes became important institutions in most small towns, with their high proportions of older people. During the same period, the U.S.D.A., through its Farmers Home Association program, financed the building of large numbers of senior housing in almost every small town in the state. Nursing homes were a major growth industry in small towns during this time.

Retail Trade

The improvements in transportation, automobiles and highways during this period made travel for shopping much easier. During the later part of this period, regional shopping malls began to be constructed. These often attracted shoppers from as far away as 75 miles.

At the same time, retail stores like Sam Walton's Wal-Mart began to appear on the outskirts of the smaller towns. Sam Walton was from Columbia, so Missouri small towns were some of the first to receive Wal-Mart stores. Wal-Mart made a steady growth in numbers of stores, starting about 1970. If a town were selected as a site for a Wal-Mart store, people for a distance of 20–30 miles would come to shop. Stores in that area that carried much the same things as Wal-Mart had trouble competing. Wal-Mart was often able to sell at a price cheaper than small stores could buy at wholesale. Stores that sold products such as appliances, for which follow up services were important, were better able to compete.

The stores in the old downtowns began to close after Wal-Marts located on the outskirts. The storefronts were often boarded up because no business wanted to locate in a dying area. Now such buildings may contain stores selling "antiques," or in many cases the buildings have been demolished. Some county seats were able to avoid this in part because some of the stores were converted to legal firms offices doing business at the courthouses. When Sam Walton died, the *U.S. News and World Report* had his obituary under the title: "The Man Who Moved Main Street", a very fitting description.

Wal-Mart's growth was paralleled by the growth of supermarkets that replaced the "mom and pop" grocery stores. If a grocery store did not have at least 25,000 square feet, the probability of its survival was low. At the same time, most of these stores relocated to large lots with much parking, on the outskirts of town, preferably close to the Wal-Mart store and the new strip mall. The tradition of charge accounts and home deliveries became history; everything was "cash and carry".

A Revolution in the Heartland

The next retailing revolution to hit small towns was fast food outlets, especially the McDonalds franchises. McDonalds first located in larger towns, but then began to move into smaller places. As with Wal-Mart, McDonalds was very tough competition for the “mom and pop” restaurants. After McDonalds came Taco Bell, Pizza Hut and all of the other fast food franchises. Soon it became very difficult for an independent retail food business to survive in most small towns.

Clothing stores were some the last small stores to close in many small towns. Wal-Mart never stocked “dress” clothing, but the regional malls were competition that the small clothing stores could not overcome.

Some of the smaller towns were left with only a “convenience store”, if that. These formerly independent communities became, in essence, suburbs to larger nearby towns.

The growth of discount stores such as Wal-Mart made a wider range of consumer products available to rural people at lower prices. Families on limited incomes could now buy more products. At the same time, the owners of the small businesses in the downtowns had provided much of community leadership. Not only did the stores change, but many communities lost their “soul”, the social interactions, that made them into a community rather than merely a collection of houses and businesses. No longer did the business owners gather every morning around the round table in the back of the café. Both the cafés and the other businesses gradually closed. The communities that attracted a Wal-Mart and other franchised businesses retained enough retail trade to avoid the death of the retail sector, but the new arrangement both in retail location and ownership changed the leadership structure of the communities.

Banks

At the beginning of the 20th century, every small town of more than a few hundred people had a bank that was locally owned and operated. Very often, the bank owner would be one of the major leaders in the community. Issues would often succeed or fail depending upon his backing or opposition. My early home of Jasper had slightly over 500 residents and a bank, the First National Bank of Jasper. As the farming industry, the retail businesses, and the population declined, local banks were placed under considerable economic pressures. Starting in the 1960s and 1970s, some closed and the larger and more viable banks were bought up by bank holding companies. Within a few decades, the locally owned and controlled banks were becoming uncommon in most of rural Missouri. Instead of the local owner who knew everyone in the community and often made loans on the basis of a person’s character, the bank was absentee owned and decisions concerning loans were made in the regional headquarters based primarily upon economic criteria. Many rural banks, with their “bottom line” orientation, have moved more to automobile and other short term loans that yield higher interest rates rather than the longer term agricultural loans. This has made it more difficult for young people to enter farming.

Another loss has been in leadership. In the old banks, the owner/manager was the voice for the communities. In branch banking, the chain bank will often place a young person as a branch manager. While this person may try to be active in the community, they will often find it more difficult to get the trust of the community than would the old time owner who was a long term resident. Many of the branch managers are only in a community a few years before being promoted to larger banks or the regional office. Leadership has become a scarce commodity in many rural communities.

Off-Farm Employment

During this time it became essential to have a steady cash income to pay for electricity, water, propane, car payments, tractor loan, children's school clothing and everything else that had become essential for the late 20th century household. There were numerous monthly bills that had to be paid. This was a push factor for people taking off-farm employment.

A pull factor was from industries that needed large numbers of un- or semi-skilled workers. They found rural people to be hard workers who would work for lower wages than urban workers. Most rural workers were willing to work without a union and that was attractive for many industries.

Manufacturing Changes in Rural Missouri

Shoe and Textile Manufacturing

The first industries to move into small towns in rural Missouri were the shoe and textile factories, both of which used a large amount of semi-skilled labor. Some of these moved into small towns as early as the late 19th century, others as late as after World War II. These labor-intensive factories have since moved to third world countries to take advantage of even lower priced labor. The long, three-story brick buildings are still standing in some communities as monuments to the past era of shoe industries in the rural setting.

Poultry Processing

As the vertical integration of the poultry industry moved into Missouri, starting first in southwest Missouri, poultry processing plants came also. These poultry and swine processing plants needed large amounts of semi-skilled workers. When the plants first opened, they were able to attract enough local workers, but this became more difficult as the harsh conditions and low pay in the plants became known.

Automobile Manufacturing

A third major trend in Missouri manufacturing employment resulted from the location of several major automobile assembly plants in Kansas City and St. Louis. It is not well known that

Missouri ranks third behind Michigan and California in the numbers of automobiles assembled per year. When the “just in time” method of inventory control was instituted by the assembly plants, it encouraged the relocation of some parts manufacturing plants to be within a relatively close and convenient shipping location. As a result, a considerable number of non-metropolitan communities in the state became the site of automobile parts plants. These tended to make parts that were bulky and harder to ship such as seats and dashboards.

Other Employers

There was a considerable increase in recreational/retirement employment, especially in southern Missouri. Branson was at this time just beginning to make a name for itself. The Lake of the Ozarks area was also on the verge of large population and economic growth.

Conclusions about Local Changes

Looking back, it is easy to see that a huge amount of technological innovations had been unleashed on rural Missouri communities during the 1950–1975 period, and that many more were in the offing, but to a person living in rural Missouri at the time it was hard to recognize that trauma was being created by the changes. However, if one checks the local auction ads for this period, there were a considerable number of “quitting business” auctions, as the small business owners and the small family farms were forced out of business. Whenever possible, the owners/operators held on until a nominal time for retirement. Small businesses would often gradually let their stock decline as they used the stock as a source of income. Most of these closings were quietly done without much public notice. Most people did not want to call attention to the fact that they could not succeed in their business. However, these former storeowners were somewhat bitter about an economic system that was so unfair to small businesses.

Downtown Commercial Areas

The old downtown retail section in most small towns became a boarded up relic of bygone days. It was similar to the center cities of metropolitan areas, a semi-abandoned “hole” in the community. However, another major problem was appearing. When new houses were built, often they were built on the outskirts of town beyond the existing city limits. A common pattern was for a string of new houses or mobile homes⁹ to be built along a paved road going out from the town, especially if a rural water line had been built along that road¹⁰. Unless the town had an aggressive annexation plan, it was left with an aging population and an aging infrastructure.

9. *The “double wide” and “triple wide” mobile homes were beginning to be more popular at this time. When placed on a permanent foundation, these further blurred the line between mobile homes and “houses”.*

10. *People who build or buy houses are typically couples in their 30s or early 40s who have children at home. An exception to this generalization is if the area is a retirement/recreation area, where the buyers/builders are more likely to be in their mid 50s.*

Under heavy pressure from rural legislators, the Missouri state legislature passed a bill around 1970 that makes it much more difficult for a town to annex additional territory involuntarily. Under this law, the voters in both the proposed area to be annexed and the larger community have to vote in favor of the annexation. If both are not in favor, then it requires a combined vote with a higher (2/3) proportion voting in favor. Finally, a court case must be filed showing the need for annexation and that the town can provide the necessary public services. Voluntary annexation (the property owner and/or voters ask to be annexed) does not require any of these steps. Only the town government has to approve.

There exists in most of rural Missouri a strong suspicion of government and the sentiment that the best government is the least government. Many people who moved out of towns did so because they did not want all the rules and regulations found in many towns. Many such people will vigorously oppose any attempts at annexation of their homes into the town.

Changes in National Programs

Farm operators received a large amount of federal assistance starting in the 1930s. However, rural low-income people outside of agriculture had not received any major attention from Congress until Lyndon Johnson's "Great Society" package of programs in the mid-1960s. These programs included:

1. Office of Economic Opportunity
2. Community-Action Agencies: Head Start, Upward Bound, Legal Services Program
3. Job Corps
4. Volunteers in Service to America (VISTA)
5. Neighborhood Youth Corps

While many of these programs no longer exist, the Head Start and VISTA programs continue in many rural communities.

War on Poverty

The companion program to the Great Society was the "War on Poverty". The components of the War on Poverty included: new federal antipoverty programs such as food stamps, Medicaid, Medicare, Head Start, etc. and community action programs based on the "maximum feasible participation of the poor." The latter was important because the program insisted that representatives of lower income groups participate in the planning and action portions of the programs. In most rural and urban communities, poor people were considered unable to contribute in any way except manual labor. While the war on poverty has often been criticized, the

numbers of poor families fell from 40 million in 1959 to 25 million in 1968. Some of this reduction was undoubtedly due to the programs while some may have been due to other economic factors. By most measures, the poor, including the rural poor, were better off in the 1960s than at any time since then. For example, the minimum was higher in terms of buying power in the 1960s than the minimum wage of today.

Head Start

Rural Missouri, especially the eastern Ozarks and southeastern Missouri, has had a disproportionate number of people who fall below the poverty line. There was neither the tax base nor the political will to develop good schools. Many of the low-income families did not encourage their children to take advantage of the limited educational opportunities available. The net result was generation following generation with very limited futures. Head Start was developed to help break the cycle of poverty. This has turned out to be one of the most successful "War on Poverty" programs. It continues today in most communities.

In 1964, the Federal Government asked a panel of child development experts to draw up a program to help communities overcome the special needs of economically disadvantaged preschool children. The findings of that panel report became the blueprint for Project Head Start...

Project Head Start, ... was designed to help break the "cycle of poverty" by providing preschool children of low income families with a comprehensive program to meet their emotional, social, health, nutritional, and psychological needs. Recruiting children age three to school entry age, education, child development specialists, community leaders, and parents enthusiastically received Head Start across the nation.¹¹

VISTA (AmeriCorps) (Volunteers In Service To America)

The idea behind VISTA was that by putting young (usually) people to do what would be called community development work today in local poor communities, the communities would benefit from the establishment of programs such as Head Start and the local people participating would benefit from the empowerment gained through participation in the development of programs.

The first VISTA members started in January 1965, and by the end of the year, more than 2,000 members were working in the Appalachian region, migrant worker camps in California, and poor neighborhoods in Hartford, Connecticut. By 1966, there were 3,600 VISTA members serving throughout the country. Throughout the 1960s, they helped develop some of the first Head Start pro-

11. <http://www.ilheadstart.org/history.html>

grams and Job Corps sites. The first members started agricultural cooperatives, community groups, and small businesses that still thrive today.

During the 1980s, VISTA's focus changed to encouraging citizen participation and community self-help. Through their own initiatives, community members could increase awareness and participation in community issues. In 1986, the VISTA Literacy Corps was developed to create literacy councils and expand adult education. One-quarter of all VISTA members focused on increasing literacy rates throughout the United States...

Throughout the 1990s, AmeriCorps*VISTA members ... helped develop tenant-owned cooperative low-income housing, expanded Individual Development Accounts to help people save, and focused on assisting people making the transition from welfare to work.¹²

Social Security

When social security was established in the 1930s, many self-employed professions such as farmers were not included, nor were farm workers. It was the custom for farmers to farm as long as their health permitted and then retire to a nearby small town and live on the proceeds from renting the farm. Hired farm workers were included in social security starting in 1950 and farm owners in 1954.¹³ Farmers were given full benefits even though they had paid only a minimal amount into the program. The guaranteed income gave farm families more flexibility for retirement. Many took advantage of the USDA soil bank program to retire in place; that is, not to move their place of residence. Others sold the land and between social security and the proceeds from the sale were able to retire to Arizona, Florida or some other more comfortable location. By far the largest source of income in many rural Missouri communities is "transfer payments" and the largest transfer payment is social security. Populations with more than 25 percent of the population 65 years of age or older are common, especially in the areas that have not attracted in-migrants. This means that one out of four people are drawing social security, and for most of those it is the principle source of income.

My parents were beneficiaries of this new coverage. While they had worked off-farm for several years, the farm coverage immediately made them eligible for larger payments. Their small farm was paid off and they were able to live modestly in comfort with social security their main source of income. This pattern was typical throughout rural America.

12. <http://www.americorps.org/vista/history.html>

13. July 20, 2001, <http://members.aol.com/rechtman/ssafaq.html#TOC1>

Medicare and Medicaid

Another major component of the Great Society was federal support for health care for elderly and lower income Americans. These programs, Medicare and Medicaid, continue today and represent the only support for health care that many rural Missourians have today.

Second only to social security in its impacts on older Americans, the 1965 health insurance act provided federal support for hospitalization costs. Rural communities, many of which have disproportionate numbers of older people and people without health insurance, benefited greatly from the new program. In the past, a rural person went to a hospital only as a last resort because most did not have health insurance and they could not afford the relatively high costs of hospitalization. By the time they went to the hospital, it was too late for many conditions.

The major hole in Medicare coverage is that outpatient prescription drug costs are not covered. As a result, Medicare only covers today slightly more than 50 percent of seniors' medical costs.¹⁴

Health insurance for the aged, popularly known as Medicare, has had a broad impact on the living patterns of Americans, young and old. The legislation, which provides low-cost hospitalization and medical insurance for the Nation's elderly, directly aids nearly one-tenth of the population. Millions of younger people also benefit indirectly by being relieved of heavy financial responsibility when an aged member of the family encounters major health expense.¹⁵

As originally enacted in 1965, Part A of Medicare reflected the Blue Cross pattern; the program reimbursed providers for the reasonable cost of hospitalization, most in-hospital services (except physicians) and in-hospital drugs. All people eligible for Social Security cash benefits and age sixty-five or older qualify for hospital benefits.

The Medicare program pays costs directly to the hospital providing services to the insured. When Medicare started in 1966, beneficiaries paid the first \$40 of billings and Medicare paid the remainder for the first sixty days of hospitalization for a "benefit period" consisting of each time period of illness. By 1987, the initial hospital deductible had become \$572. A complicated formula keys the hospital deductible to the average of hospital daily rates. As daily rates have climbed more rapidly than the consumer price index to which cash benefits have been pegged since 1975, beneficiary costs have increased more rapidly than cash benefits.¹⁶

14. <http://www.whitehouse.gov/infocus/medicare/>

15. <http://www.ssa.gov/history/corningfore.html>

16. <http://www.caremedic.com/history.htm>

Medicaid is a similar health insurance program, but is directed toward low-income households rather than older people.

These programs have been very beneficial to rural communities, but they have not brought health care to rural communities equal to that found in cities. Many people still have to go outside the community to find adequate health care.

Civil Rights Movement

Racial discrimination and segregation of housing and schools have long been part of the Missouri rural culture. The state was badly split during the Civil War and many of those prejudices lingered on well into the 20th century. Virtually all schools and housing, both urban and rural in Missouri, were segregated until the 1960s. Rural Missouri, of course, was not unique. It took the civil rights movement of 1955 to 1965 and the federal legislation that resulted from the movement to begin correcting some of the worst racial problems. The Civil Rights Act of 1964 and the Voting Rights Act of 1965 were the two most important pieces of legislation resulting from the movement.

Major Features of the Civil Rights Act of 1964(Public Law 88-352)

- Title I: Barred unequal application of voter registration requirements, but did not abolish literacy tests sometimes used to disqualify African Americans and poor white voters.
- Title II: Outlawed discrimination in hotels, motels, restaurants, theaters, and all other public accommodations engaged in interstate commerce; exempted private clubs without defining "private," thereby allowing a loophole.
- Title III: Encouraged the desegregation of public schools and authorized the U. S. Attorney General to file suits to force desegregation, but did not authorize busing as a means to overcome segregation based on residence.
- Title IV: Authorized but did not require withdrawal of federal funds from programs which practiced discrimination.
- Title V: Outlawed discrimination in employment in any business exceeding twenty-five people and created an Equal Employment Opportunities Commission to review complaints, although it lacked meaningful enforcement powers.¹⁷

In 1965 the Voting Rights Act was passed, which placed federal observers at polls to ensure equal voting rights. The Civil Rights Act of 1968 dealt with housing and real estate discrimination. In addition to congressional action on civil rights, there has been action by other branches of the government. The most

17. July 20, 2001, <http://www.congresslink.org/civil/essay.html>

notable of these were the Supreme Court decisions in 1954 and 1955 declaring racial segregation in public schools unconstitutional, and the court's rulings in 1955 banning segregation in publicly financed parks, playgrounds, and golf courses.¹⁸

These various acts and the Supreme Court decisions brought about major changes in rural Missouri communities. All Missouri schools desegregated without major problems, although some school districts in southeast Missouri resisted at first. Housing has been desegregated although cases of red lining of mortgages have been found to occur.¹⁹ Employment is an area where discrimination still occurs in rural communities.

Corps of Engineers Projects

The 1950s, '60s and early '70s were very busy time for the Corps of Engineers in Missouri. Several major lakes were constructed in Missouri during this period. These include Table Rock Lake, Truman Reservoir, Pomme deTerre Lake, Mark Twain Lake, Stockton Lake, and Wappapello Lake. The Bull Shoals Dam and Lake in Arkansas backed water up into Missouri. These lakes, built for electrical power, flood control, and recreational purposes, took tens of thousands of acres of the most fertile farmland in Missouri out of production. Several small villages were submerged under the lakes.

Fishing and water sports of other types have attracted a considerable number of visitors each year to these lakes. However, the total recreational/economic development on several of the Corps lakes has been limited when compared to the Lake of the Ozarks, a privately owned lake that permits lake front development. The Corps of Engineers requires a setback and limited access to the water in all of its lakes. The newer lakes have wider set backs than the older lakes. This has greatly restricted housing development around most Corps lakes. Table Rock Lake near Branson does have some housing development adjacent to the lake.

The U.S. Army Corps of Engineers has been a crucial player in the history of passing Ozarks land from private to public ownership -- but in a peculiar way. The Corps dammed major Ozarks watersheds and buried their valleys forever underwater. (An often-heard Ozarks saying is that time here is divided into two parts: B.C.E., Before the Corps of Engineers, and A.C.E., After the Corps of Engineers.) The Corps' purposes were essentially developmental -- downstream flood control (mostly outside the Ozarks) and hydroelectricity -- purposes largely inimical to conservation. The Corps destroyed rather than preserved the land. Paradoxically and ironically, Corps reservoirs have over time produced regional income and employment beyond all the possibilities of valley farming and valley towns, which they destroyed -- and beyond the intentions of the Corps that conceived and constructed them.

18. July 20, 2001, <http://www.bartleby.com/65/ci/civilrig.html>

19. In "redlining," certain areas will be declared as ineligible for mortgages.

The preserve managers and preserve users constitute new, influential population elements in the Ozarks. They include some of the native population, especially young people, who might otherwise have departed the region. The paradox is that while preserves have disrupted and diminished certain traditions of Ozarks life, they have added jobs, directly and indirectly, and have contributed to the quality of life by preservation and restoration of the region's resources and early character. The cumulative effect of preserves upon the Ozarks has not been calculated; but surely it is immense.²⁰

The other major task of the Corps of Engineers during this period was the channelization of several Missouri rivers. Channelization is the straightening of the channel of the river to enhance the drainage or, as for the Missouri River, to improve barge transportation. Many rivers, especially in north Missouri were channelized, some of these were done by the Corps and a few done by private funds. Examples include the Chariton River and the Grand River. These changed meandering, tree-lined streams with fish and birds into straight drainage ditches devoid of any wildlife. Today, we realize the damage that this process does to the ecosystem, but at the time, the entire focus was on improved drainage to what had previously been very wet and difficult-to-farm land. The channelization was welcomed by the landowners because it made their land more productive and valuable, but opposed by environmentalists who were usually urban residents.

Ozark National Scenic Riverways

An Act of Congress created Riverways on August 24, 1964, to protect 134 miles of the Current and Jacks Fork Rivers in the Ozark Highlands of southeastern Missouri. The clean, clear waters of these two beautiful rivers provide excellent opportunities for john boating, canoeing, swimming, fishing and tubing. Hunting is also an authorized use within the Riverways' boundaries. The landscape is predominantly rural, with broadleaf forests and occasional open fields.²¹

The creation of the Riverways was the result of a hard fought battle between the local landowners and environmentalists and conservationists from St. Louis and other urban places.

The fights mounted by conservation interests to save the Current-Jack's Fork Rivers in Missouri and the Buffalo River in Arkansas from the relentless and seemingly invincible Corps of Engineers became high drama. When opposition succeeded the consequences were momentous. The question was, how to assure that the rivers would be saved in perpetuity? The answer: make them into riverine national parks. It was an extreme -- and still controversial -- means of preservation. The river parks are composed not just of the rivers, of course, but also of land preserves formed to enclose the rivers. The preserves thus

20. July 28, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow204d.htm>

21. July 20, 2001, <http://www.nps.gov/ozar/>

formed are perhaps the most extraordinary of all in their composition, control policies, and management.²²

The Riverways have been grudgingly accepted by the local residents, in part because the Riverways attract tourists. However, probably a majority would still prefer to have the lands in private ownership.

Changes in State Programs

Missouri Wildlife Management Programs

The whitetail deer had been almost eliminated from most of rural Missouri by 1900. A small deer restoration program was in place for most of the first half of the 20th century.

By 1890 deer had disappeared from northern and western counties where extensive cultivation altered their habitat and unregulated hunting eliminated their numbers (Robb 1959). Extensive logging, overgrazing by domestic livestock and annual burning, coupled with uncontrolled market hunting almost led to the extirpation of white-tailed deer from Missouri by the early 1900s (Torgerson and Porath 1984). The low point in Missouri deer numbers occurred around 1925 when Game and Fish Department (predecessor to the Department of Conservation) personnel conducted the first statewide deer inventory and reported 395 deer in 23 counties (Robb 1959).

The first effective conservation legislation was passed in 1905 when a 2-month bucks-only season was established with a limit of one deer per day. Transportation and sale of deer and other wildlife were prohibited and the first paid wardens were hired. By 1925 the deer season was closed. For the first time deer management began to progress beyond the mere passage and enforcement of legislation. Land was acquired and established as wildlife refuges. Michigan deer were imported and released on these areas. In addition, native deer were purchased from private individuals and released on the refuges. A 4-day season was restored in 1931 and a statewide inventory in 1934-35 found 2,240 deer in 28 southeastern Missouri counties. At least half of these deer were located in and around 5 state refuges (Robb 1959).

In 1937, the Missouri Conservation Commission and the Missouri Department of Conservation were established. The deer season was again closed in 1938 and a comprehensive deer restoration program initiated.²³

22. July 28, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow204d.htm>

23. July 14, 2001, <http://www.conservation.state.mo.us/hunt/deer/deertxt.html>

The other very popular wildlife reintroduction was wild turkeys. The management program was very successful, with turkeys quickly spreading throughout the state.

The restoration program was begun in 1954. When the program was terminated in the spring of 1979, turkeys had been moved to 142 areas in 87 counties. A total of 2,611 turkeys have been trapped and released in Missouri. The normal stocking rate was two hens to each gobbler, with 12 to 24 birds released on each site. Most releases were successful in re-establishing turkeys. All 114 counties now have huntable turkey populations...²⁴

The Department of Conservation has had successful reintroduction programs for other species of wildlife such as otters, but these have not had the same impacts on rural communities and will not be discussed here. It is worth noting that whitetail deer (along with Canadian geese, raccoons, opossums, groundhogs and squirrels) have been so successful in adapting to the new environments that they have become pests in many areas of the state.

There were other native species that did not fare as well. Prairie chickens and, more recently, quail and frogs have been greatly reduced. Prairie chickens are now found only a very few places in the state. Some species of fish, such as the native brown trout found in many Ozark streams, have been almost eliminated.

Hunting

After 1950, deer hunting became more popular as the deer numbers increased and the hunting season and types of deer hunted were both enlarged. The first hunting was restricted to bucks only. Now, all deer are hunted. Many of the hunters are from the metropolitan areas. Some of the hunters bought vacation homes and hunting lands, especially in the Ozarks. The vacation homes often turned into retirement homes in later years. Others leased the hunting rights for large tracts of land. The hunting rights leases created a significant source of income for the landowners.

Deer hunting is largely a male activity, although not all, or even a majority, of rural males hunted. Most people were tolerant of hunting, but a few opposed it.

Some people encouraged deer on their property by putting salt blocks and feed out for the deer. This was done either to attract deer to shoot or to draw deer away from hunting areas, for their protection.

In rural communities, absenteeism from work and in high schools increases substantially during hunting seasons for both deer and turkey. I kid my hunting friends that such wild game is one of the highest priced meats when you consider hunting license, deer tag, expensive gun

24. July 14, 2001, <http://www.conservation.state.mo.us/nathis/birds/turkey/>

and ammunition, special clothes, time lost from work, turkey call, and other expenses. That will always elicit a strong reaction; hunting is an important part of the rural experience. It is not subject to rational discussion. The Department of Conservation's "game wardens" were people of considerable controversy. Rural opinion was that wildlife belonged to the hunter or the landowner. Slowly, awareness has increased that management is necessary to preserve wildlife.

The woods are not safe places to be during deer hunting season. Deer rifles have great power and the bullets will carry several miles. More than a few houses and barns have bullet holes from errant shots. Many hunters have had little experience with the high-powered weapons, and when combined with some alcohol consumption it makes for a dangerous situation. Stories are common in most communities about goats and cows killed by hunters. Most of these are probably myths. I have never talked directly to anyone who had animals killed by hunters. It was always that they had heard of someone else who had had animals killed. Although it is probable that some farm animals have been killed by hunters, the numbers are limited.

In general, we never permitted hunting on our farms and posted signs for no hunting. I have approached hunters to ask them to leave our property, perhaps foolishly, and found some to be well on the way to being drunk. However, most hunters are courteous and obey the laws.

Almost every community has people who do not obey the laws and hunt out of season and use illegal methods such as "jack lighting," which is the practice of using powerful lights at night to blind the deer. How much of this is myth and how much is real is difficult to determine.

Summary

The tidal wave of technology had begun to impact rural communities. The generations that had started the century were now retired and the Depression/World War II generation had taken over. They were better educated and more willing to try some new things, although the experiences of the depression still held them back from taking too many risks. Gradually these attitudes changed as the passage of time and a reasonably good economy reduced the impact of the depression. The Great Society and other such programs reduced the probabilities of repeat occurrences.

Chapter 21

Population Changes from 1950–1975

Population Changes

For six decades, starting with 1900, most Missouri rural counties lost population. The young people went to school and when they finished, they headed for the cities and the west coast. California in the 1970 Census of Population had more people who said they had been born in Missouri than the entire population of Kansas City, Missouri.

In the early 1980s, I conducted a small research project in the Ozarks, centered around West Plains. I secured the graduation lists from several high schools for ten years previous to that time. I sent letters with post cards to each graduate asking for their current address. The letters were sent to their home addresses with a request to forward the letters. The returns indicated that eighty-five percent of the graduates had addresses outside of the county in which their high school was located. The largest number of students moved to St. Louis, but sizable numbers moved to California and Texas. Most moved to places where they had relatives or friends to stay with and help in the transition. For some, especially those with fewer job skills, the move was not permanent.

The migration from the agricultural areas continued, especially from southeast Missouri. The out-migration of African Americans was especially high. The end of the sharecropper system and the obstacles that banks and federal agencies placed in the way of African Americans becoming farmers left them with little choice.

The largest northward migration of blacks took place during and after the Second World War. This exodus was largely a result of the invention of the mechanical cotton picker, which enabled three or four workers to perform a task that on some farms had required hundreds if not thousands of hands. Displaced by machinery and no longer needed in the underdeveloped American South, where they had been brought solely to do this kind of work...¹

1. July 28, 2001, <http://www.eduhwy.com/techvsafican.html>

But the 1980 Census of Population revealed a very different pattern of population change. In what has been called “the population turn around”, many rural areas all over the United States, including much of rural Missouri, indicated that instead of losing population, they had gained population in the last decade.

Several different streams of migration made up this “turnaround”. In the southern Missouri Ozarks, people were migrating into the Ozarks for retirement and to take advantage of the many recreational opportunities. The relatively low cost of housing in the Ozarks permitted them to sell their house in a metropolitan area, buy a house in the Ozarks and have funds left over. Others moved in to operate the motels, restaurants and other tourist-oriented businesses. Young people continued to leave most rural communities, but other people offset this loss.

Another major in-migration stream was “return” migrants, or people who had moved away when they were young, had a career in the city, and returned to the country. Some returned to their childhood community, but many others were satisfied just to have a home in the country.

Numerically, the largest movement was the “country life” movement. In large areas adjacent to the Kansas City and St. Louis metropolitan areas, and smaller ones around the other cities, urban families were moving to the open country for quality of life concerns such as safe streets, better schools, and clean air. In most cases, working members of the family would commute daily to the metropolitan area. In some areas of the state, industries were relocating to take advantage of the high quality and reasonably priced rural labor. These industries included manufacturing plants that made parts for the automobile assembly plants located in Kansas City and St. Louis.

A third, much smaller, in-migration was a “back to the land” environmental movement of people who wanted to escape the problems of the large cities. In the early 1970s, a new (or renewed) social movement started. There was an outcry against the very strong emphasis Americans place on materialism. Using Henry Thoreau’s *Walden* as an example of a desired return to a simpler lifestyle, some young people moved into rural areas and tried to return to the perceived “good old days” when life was simpler.² The “back to the land” people were more common in the Ozark portions of the state. One of the more unique forms of this was the establishment of “communes,” which are egalitarian and democratic group homes in which all people participated on an equal basis. Many or most of the “back to the land” people have since abandoned their efforts to gain a purely subsistence lifestyle and have joined their neighbors in taking off farm jobs or have moved back to urban places. Most communes did not survive more than a few years.

A little-recognized migration that occurred during this period was the movement of some low-income people from the metropolitan areas to non-metropolitan communities including

2. Robert McGill, *Moving to the Country*, White Oak Press, Reeds Springs, MO, 1987.

smaller towns. If you were on “welfare” or other fixed income sources and/or if you lived in a high crime rate area of a large city, the low cost and safer housing found in rural communities was attractive. The amount of this migration varied considerably from one community to another. In some towns with public housing projects, people were invited (recruited) from large cities to come and fill housing units. The long-term out-migration of African Americans greatly reduced the demand for minority housing. While it is too early to yet tell, the movement of low-income people to small towns may have been halted with the recent changes in the welfare laws.

Chapter 22

Changing Rural Communities, 1950–1975

The floodgates of change in rural Missouri communities had opened. A checklist:

- **The school system had changed substantially.** The one-room schools were history, as were many of the small high schools. Now children were bussed twenty miles to the consolidated school that was given an innocuous name such as “Southern xxx County” and built out in a cornfield half way between the old high schools. The chief “glue” of many communities was high school sports.
- **The rural churches had changed substantially.** The variety of churches had changed from old-line protestant to more evangelistic and fundamentalist churches. My old Baptist church is now an evangelical denomination.
- **By 1975, 99 percent of rural homes had electricity and 90 percent had telephones.** Urban home appliances were now available to every household that could afford them. The urban style of life had become the rural style of life.
- **The methods of farming had changed substantially.** Tractors had replaced the horses for power and small farms were common, but a relatively few large units were emerging and producing most of the farm products sold.
- **The methods of transportation had improved.** Cars were the mode of transportation. The Department of Highways had built farm-to-market roads all over the state.
- **The methods of communication/entertainment had changed.** Television in the form of “I Love Lucy”, “The Ed Sullivan Show,” and many more such programs had taken over. Drive-in movies were popular.
- **The family size increased with the baby boom after World War II.** The differences in family sizes between rural and urban had largely disappeared. Most families had two to four children.

- **The family structure remained predominantly patriarchal, but women's rights were beginning to be considered even in rural communities.** Divorce rates were on the increase, as were out-of-wedlock births.
- **The population in most small towns was aging as a result of the out-migration of the young people.** Small towns in which 25 percent or more of the population was 65 years of age or older were common, especially in agricultural areas.
- The average age of farm operators became older as fewer and fewer young people chose farming as a career.
- **The outside state and federal bureaucracies were increasing their control over local communities.** The state Department of Education established requirements for high school graduates. The USDA, as a result of federal acts, set up rules and regulations that told farmers what and how much they could grow. Big bureaucracies were undercutting the autonomy of small communities throughout the nation.¹

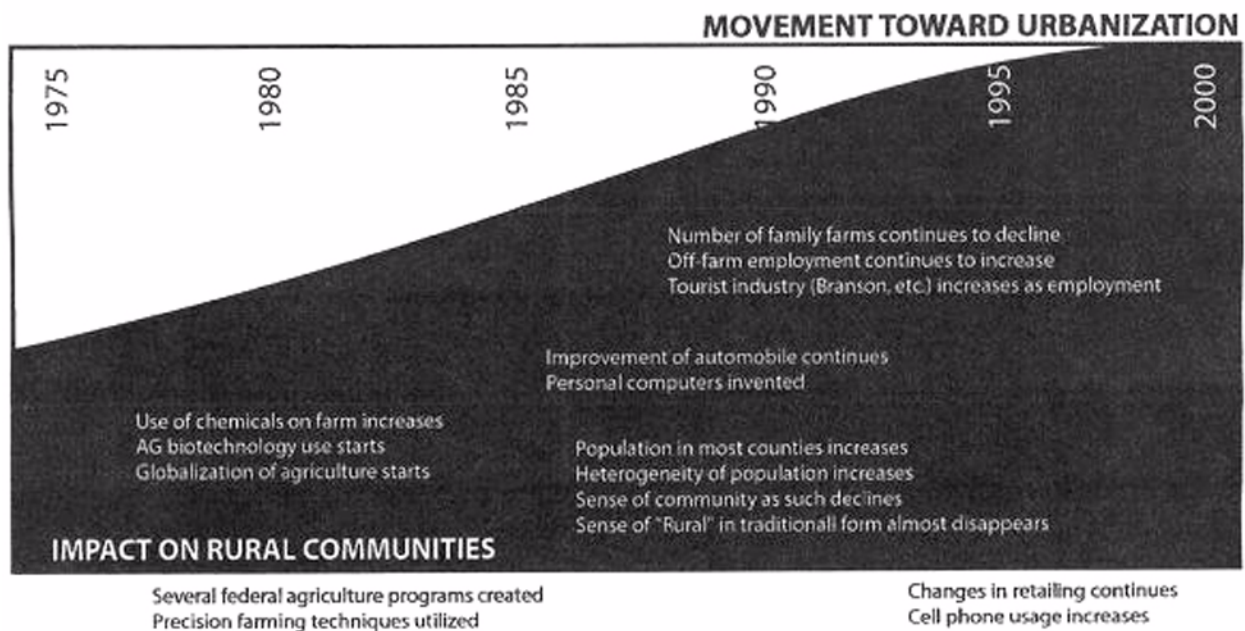
1. A.J. Vidich and J. Bensman, *Small Town In Mass Society*, Princeton University Press, 1958.

Chapter 23

Technology and Other Innovations 1975–2000: Agricultural

“...and the rains continued to fall”

SELECTED INNOVATIONS INFLUENCING RURAL COMMUNITIES 1975-2000



Rural Missouri communities in 1975 were in the midst of an unrecognized revolution. On the community side, they had electricity, rural water systems, steadily improving telephone service, satellite and broadcast TV, numerous radio stations, greatly improved roads and highways and access to more non-farm jobs. The local school was gone, along with most local retail services. The average rural community had less than 50 percent of the employment in farming or

mining. Those who lived on the farm were generally part time operators who commuted to work off-farm.

Most adults had personal cars or trucks that were dependable and not too expensive to operate. Divorces were becoming common; families with children from more than one marriage were not unusual; out-of-wedlock births no longer brought disgrace.

The Farm Crisis of the 1980s¹

The farm crisis of the mid-1980s had a profound impact on the outlook for the future of young people in farming. The cause of the crisis was a doubling of interest rates charged for loans within less than a year. During the inflationary period prior to this dramatic increase, the high rates of inflation made buying farmland easier by making the dollars cheaper and more plentiful. Many of the young and aggressive farm operators had taken on large debts in order to obtain the size of farm that they wanted. The Regan administration and the Federal Reserve System increased the rates to reduce inflation. The commercial rates moved up to more than 20 percent. As a consequence, many farmers had to declare bankruptcy.²

The farm crisis reached beyond the farms in two ways. Many farm suppliers such as implement dealers had large outstanding debts owed them by farm operators. Many of these debts were never repaid. As a result, some suppliers also went out of business.

Also, for the first time, farmers who had carefully followed the advice of the universities and other change agents were being forced out of business. Many change agents were forced to examine their own recommendations and their role as advisors. The "bigger is better" advice did not work if it involved significant debts.

This was a very traumatic period for most rural farming communities. Psychological counseling suddenly assumed major importance in communities where it had been frowned upon before, and a few suicides occurred.

When I started teaching forty years ago, about 20-25 percent of the students in my introductory classes said they planned to enter farming. Now, perhaps one out of fifty will say that. Many students will say they want to live in the country or on a farm, but that farming will not be their career. The decline in farming as a career after the farm crisis was very dramatic.

The farm crisis impacts were very severe in our family. My oldest brother and I had taken on large debts to increase the size of the farming operation and to help two of his sons enter farming. The doubling of interest rates was more than our operation could support. We were

1. For a more detailed discussion of the farm crisis see: Osha Gray Davidson, **Broken Heartland: The Rise of America's Rural Ghetto**, The Free Press, New York, 1990
2. Mary Elizabeth Fricke, *Dino, Godzilla and the Pigs: My Life of Our Missouri Hog Farm*, Soho Press, Inc. New York, 1993.

barely able to escape bankruptcy by selling almost all of the lands. Needless to say, the two sons had to look for alternative occupations. Our situation was one encountered by tens of thousands of Missouri and Midwestern farm families.

The farm crisis forever changed the way that farming was viewed in most rural communities. Farming had been viewed as the backbone of numerous rural communities. After the crisis, it was viewed with more than a little sadness and nostalgia as something of by gone days now limited to a handful of full time operators in most communities.

The latter part of the period—the 1990s—was a period of relative prosperity for most of the economy. Non-farm jobs were generally available. Energy costs were relatively low, so people decided to commute considerable distances for work, shopping, health care, and other services. Some sectors of farming continued to be in a recession or a depression, however.

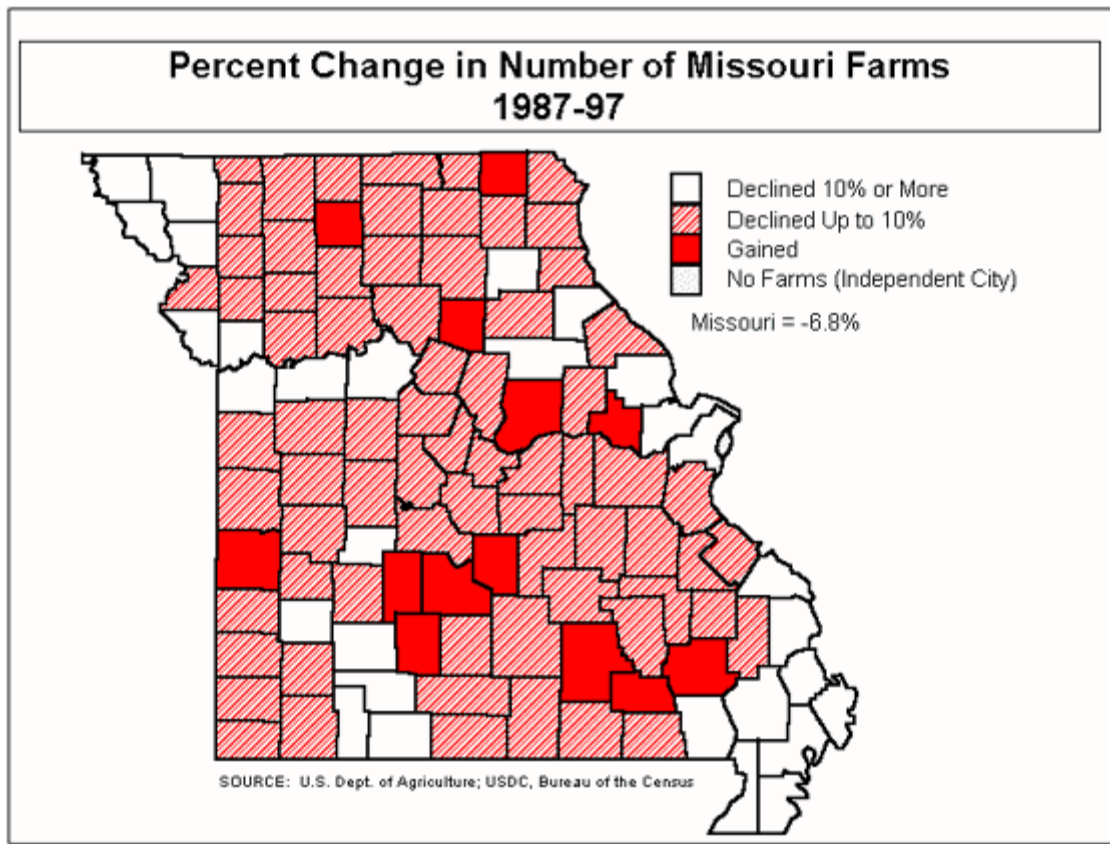
Agricultural Innovations

This area had largely reached a plateau. If farming activities could be mechanized, they had been. Grain was no longer scooped; it was augured. Four-wheelers were now used to herd the cows. Tractors and combines came in all sizes and types. Headers³ that cut 15–20 feet could be obtained. Six row, eight row, and even larger corn planters were available. Custom operators, with equipment that covered 50–100 feet at a time, were used to apply fertilizers, pesticides, and herbicides.

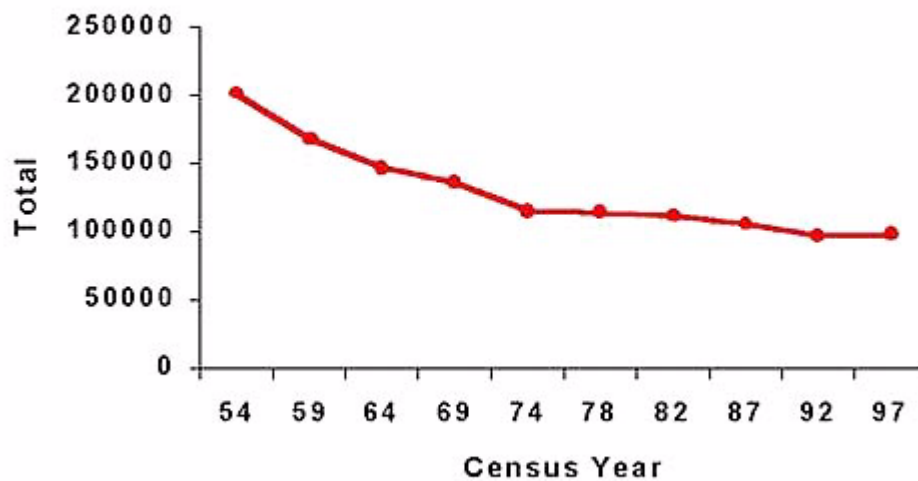
Mechanization encouraged the large farms to grow even more. This is reflected in the continuing decline in numbers of farms, particularly in areas that are primarily agricultural such as along the Missouri River, northwestern Missouri and southeastern Missouri. These are areas of the state with relatively flat topography, suited to large-scale farming. The counties near metropolitan areas and the Branson/Springfield area lost farms. The competition for land to be used for residential purposes encouraged farm owners to sell and retire or move to areas where the land prices were lower.⁴

3. *Headers are attachments that cut the standing grain or other attachments cut the corn stalks.*

4. *July 21, 2001, <http://www.oseda.missouri.edu/images99/agriculture/pcfm8797.gif>*



Number of Farms in Missouri



Source: USDA, National Agriculture Statistics Service

5. July 21, 2001, <http://www.oseda.missouri.edu/agreport97/images/farms.jpg>

Intensive Rotational Grazing

Intensive rotational grazing (IRG) is a pasture management technique that originated in New Zealand. In IRG, the improved pastures are divided into smaller sections each of which is intensively grazed for a short period and then the animals are moved to the next section. Using these techniques, the production of beef or dairy per acre can be increased very substantially. While it sounds simple, IRG is management intensive, meaning that a high degree of skill and knowledge is needed for the most effective use. This is the opposite of what most residential farm operators possess. Most often they have neither the knowledge nor the time to maximize grass production. IRG has been relatively slow to be widely adopted in Missouri. This is largely a reflection of the fact that most Missouri farms are part time and the operators do not have the time nor the skills required for IRG.

Precision Farming

There were two high technology innovations during this period: precision farming and the biotechnological revolution. These are so new that the full impacts are not yet known.

"Precision Farming" is a current buzzword among agricultural circles. The term "precision farming" means carefully tailoring soil and crop management to fit the different conditions found in each field. Precision farming is sometimes called "prescription farming", "site specific farming" or "variable rate technology." It has caused a focus on the use of three technologies that are very central to the LARS programs—remote sensing, geographic information systems (GIS) and global positioning systems (GPS). ... We have literally taken "agriculture into the space age." Farmers have services available that involve satellites collecting data, transmitting locational information, or providing data from a variety of sources. Farmers can analyze this satellite information or they can rely on companies to do this service for them for a fee.... More recently farmers have gained access to site-specific technology through Global Positioning Systems (GPS). GPS makes use of a series of military satellites that identify the location of farm equipment within a meter of an actual site in the field. The value of knowing a precise location within inches is that 1) locations of soil samples and the laboratory results can be compared to a soil map, 2) fertilizer and pesticides can be prescribed to fit soil properties (clay and organic matter content) and soil conditions (relief and drainage), 3) tillage adjustments can be made as one finds various conditions across the field, and 4) one can monitor and record yield data as one goes across the field. The real value for the farmer is that he can adjust seeding rates, plan more accurate crop protection programs, perform more timely tillage and know the yield variation within a field. These benefits will enhance the overall cost effectiveness of his crop production.⁶

6. July 17, 2001, <http://pasture.ecn.purdue.edu/~mmorgan/PFI/over.htm>

One of the current "gee-whiz" stories about precision farming is that programs are being developed that will allow a tractor to be guided by remote control to within inches using GTS guidance. Some field farming functions will be automated in the near future.

Biotechnology in Agriculture

Biotechnology in agriculture is a very broad field that includes the study of cellular biology of those plants and animals most directly involved in agriculture. There are many other facets of the broad topic biotechnology. Here is how one scientist defined the area:

... "new" biotechnology derives from techniques discovered only in the last 20 years. Briefly they are:

- The ability to cut and stitch DNA.
- The ability to move DNA and genes from one organism to another and moreover the ability to persuade the new gene in this new organism, that is to make new proteins.
- The ability to modify proteins by a process termed "protein engineering".⁷

The innovations include animal cloning, plant cloning, genetically modified foods, and much more.

Here is another, more specific description:

Genetic engineering, or "recombinant DNA technology", is a radical new technology for transferring fragments of DNA, and their associated genetic characteristics, from one species to another. It has been used thus far primarily for agriculture-for the creation, patenting and commercializing of genetically modified living organisms. For example, the splicing of a flounder gene which produces a blood "antifreeze" protein into tomatoes, to render them frost resistant; or creating corn endowed with its own built-in pesticides.

Already, more than 60% of the foods on our grocery store shelves contain genetically modified ingredients-from infant formula to corn chips. None of these foods have been safety tested on humans, and none are labeled. Hence most Americans are eating these foods without knowing it, despite unique health risks posed by these experimental foods. Some scientists believe this experimental food technology will lead to abundant harvests, and thus help feed our expanding world population.

7. July 17, 2001, <http://www.agbioworld.org/articles/burke.html>

Others believe genetic engineering is one of the most dangerous technologies ever developed, and if we do not create proper safety guidelines for the release of genetically altered organisms into the fields and the market, the world's food supply will be irreparably damaged.⁸

One of the first controversies, which has continued for more than 10 years, was over the use of bovine somatotropin (bST) that is given to dairy cows to increase milk production. The use of bST does increase milk production; most of the controversy is over possible side effects. One of these is that it tends to shorten a milking cow's productive life. An animal gives more milk for a shorter period of time. Is that something that should be done? It is a question of values.

Another controversy concerns seed sales. It has been the custom of farmers for generations to save seed from the previous year to plant the next year. Under the agreements required by Monsanto Chemical Company for the right to use their "Roundup Ready" soybeans, a farm operator cannot save the seed, but must buy new seed from Monsanto each year.

St. Louis-based Monsanto has filed a federal lawsuit accusing the Roush family of violating its patent by saving seed from genetically engineered soybeans to use the following year. The lawsuit is one of at least two dozen pending across the country as Monsanto tries to protect its patent on Roundup Ready soybean... Roundup Ready soybeans are genetically modified to tolerate the company's Roundup herbicide. The company requires farmers who buy such seed to sign a agreement stipulating that they will not re-use it. "If we don't file these lawsuits and permit the product to be used without (farmers) paying the technology fees, we jeopardize our rights to the patent," said Miles P. Clements, a New Orleans attorney representing Monsanto in the case against the Roushes.⁹

Organic Farming/Sustainable Agriculture

If the winds of change in agricultural technology were blowing strong towards biotechnology and increased use of chemicals, there was at least a breeze blowing in the opposite direction—less use of chemicals. Many producers are very suspicious of the heavy use of chemicals in the production of their foods.

Sustainable Agriculture:

- Relies more on the productivity of people who farm, and less on purchased inputs or industrial farming methods
- Supports family farms, independent food producers, and viable rural communities

8. July 17, 2001, <http://www.howtopreventcancer.com/cpc/books/rBGH/Foreword.htm>

9. July 17, 2001, <http://www.purefood.org/Monsanto/SeedSavingSuits.cfm>

A Revolution in the Heartland

- Conserves and protects soil, water, and other natural resources
- Supports local and regional food systems
- Nurtures the land, builds community, and generates wealth
- Provides opportunities for future generations

"Sustainable farmers are linked by their common commitment to the principles of sustainability. Intergenerational equity is the hallmark of sustainability—meeting the needs of the present while leaving equal or better opportunities for the future. ...holistic management is a hallmark of sustainable farming -- balancing economic, ecological, and social objectives—in harmony with some higher order of things. Nature and society are within the bounds of their decision-making—they consider the environment and the community in every decision. Guided by a higher self interest sustainable farmers build relationships and practice stewardship, neither for economic gain nor personal sacrifice, but instead to enhance their overall quality of life..."¹⁰

There is a strong belief system that people in sustainable agriculture hold about what is "good" and "wholesome" in foods that is very different from the equally strong belief systems that the majority of farmers and the other sectors of the agriculture community have towards "scientific agriculture". This is a clash of agricultural "religions".

The concern about too much chemical usage is not limited to producers. Many consumers have equal concerns. An increasing number of small-scale farm operators have been taking advantage of a growing market for "organically" produced products. These include many vegetables and fruits, but also organic milk and meats of various types. Most such products are sold directly to consumers through farmers' markets and similar outlets. The size of this market has been small, but it appears to be growing.

Research for Innovations for Small Farms

The farm crisis of the 1980s heightened a concern that numerous farmers had concerning the role of the MU College of Agriculture. While the MU researchers saw their research as being scale neutral, that is, that the results of their research was as useful to small-scale operators as by large-scale operators, many of the small-scale operators and some farm organizations (NFO, primarily) disagreed. Their belief was that often the topics of research were more suited to the needs of the large-scale operators than the small-scale. At some point, a decision was made that Lincoln University in Jefferson City would assume the responsibility for research/extension work to do with small-scale farms. The LU research program has long been very modest

10. July 18, 2001, <http://agebb.missouri.edu/sustain/definition.htm>

because of a lack of adequate funding. Small-scale or residential farmers are not as well organized and do not have the economic power of large-scale operators. Thus, their voices are not as well heard when decisions concerning research and other programs are made. At the same time, the MU research program has become more focused on basic research¹¹. Thus, there has been less applied research of any type for any scale of farming.

The question of the roles of MU/LU in research for small-scale farming was never fully resolved and is likely to reappear when another economic crisis occurs that impacts small-scale operators.

Exotic Animals

As the markets for hogs declined, many farmers were searching for niches that would supplement their regular enterprises. In the mid 1990s, a fad for various types of exotic animals started, with several farmers losing considerable amounts of money in the process. The largest of these was for “pot bellied pigs,” which are small hogs that supposedly make excellent household pets. Even small hogs grow to several hundred pounds when mature, making them less than ideal pets. Other faddish animals included emus, ostriches, llamas, red deer, elk and buffalo.

The trend started with breeding animals selling for thousands of dollars at exotic animal auctions. There were two auction firms in Missouri holding exotic animal auctions twice a year for several years. People attending these auctions told stories of various animals bringing ten of thousands of dollars each, and the total for the auction being in the millions of dollars. The market price fell when it was discovered that there were no markets except for breeding. People tried to sell emu meat, buffalo meat, and other products as being more healthy. These attempts never succeeded in creating enough of a market to support any significant number of growers.

Most of the participants in the exotic animal bubble were “farmers” with significant alternatives sources of income such as physicians, attorneys, and contractors. Farm losses could be written off against other large income sources.

Changes in Agricultural Policies and Programs

Federal Agricultural Programs

The heavy involvements of the federal government in agricultural production through crop production subsidies continued through this period. However, a new program was started that had a significant impact on land use: the conservation reserve program.

11. *Basic research explores fundamental processes that do not have direct application for use. Much of the genetic research is basic. The scientists conducting basic research are interested in knowing how the biological systems work. The results may have applications at some later stage of development.*

Agricultural exports expanded rapidly through the 1970s to record levels, and producers responded by bringing additional land into production. Excessive rates of erosion, characterized as rivaling those of the 1930s dust bowl, were one byproduct of this expansion. When the boom ended abruptly in the early 1980s, producers were left with excess capacity and insufficient markets. Compounding woes for farmers was a widespread farm credit crisis with declining land values. Federal programs at that time allowed farmers to receive payments for acres not planted, referred to as annual set asides, but did not include any multi-year efforts that could provide more enduring benefits for either conservation or the producer's bottom line...Congress enacted the CRP in the 1985 farm act to fill this void. Program proponents sought to reduce excessive erosion, stabilize land prices, and slow chronic excess production. CRP allows producers who cultivate highly erodible or environmentally sensitive land to bid to retire it from annual production, usually for 10 years. Participants receive rental and cost sharing payments from the Farm Service Agency (FSA) and technical assistance from the Natural Resources Conservation Service (NRCS). Enrollment is generally limited to 25% of the cropland in a county. ...The 1985 legislation's goal was to enroll between 40 and 45 million acres of cropland, about 10% of the national total, before 1995. By 1990, almost 34 million acres had been enrolled in 9 signups, and overall enrollment has been as high as 36.4 million acres.¹²

Like the USDA soil bank program that preceded the conservation reserve program, the CRP encouraged operators to put their land in the program and take a job off-farm. Some people bought land because it had a large CPR payment, but had no intention of ever farming it.

Vertical Integration of the Hog Industry

In the previous time period, I discussed how the poultry industry had become almost entirely vertically integrated. This reorganization next moved to the hog industry and is still in process.

Vertical integration and/or coordination has been the primary method used by processors to increase efficiency in livestock marketing channels. Vertical integration refers to ownership across pricing points in a market channel. An example of vertical integration would be the ownership of hogs by processors from birth through processing and wholesaling. Vertical coordination may occur with or without vertical integration. That is, different segments of the marketing channel may coordinate their efforts with or without the same firm owning both segments. Vertical coordination between producers and processors takes several different forms. Dr. Clement Ward at Oklahoma State University describes these forms as "(1) packer feeding of livestock in packer-owned facili-

12. July 14, 2001, <http://www.cnie.org/nle/ag-65.html>

ties or on a custom basis; (2) forward contracting or production contracting; and (3) purchasing livestock under exclusive marketing/purchasing agreements." Whether vertical integration or coordination is used, the result is basically the same, producers and/or handlers act in tandem with processors, and processors gain control over at least a portion of the supply needed to operate processing plants efficiently and to better provide the types of products demanded by consumers.¹³

The Premium Standard firm, which is the 2nd largest hog producer in the nation, is located in Worth and adjacent counties on the Missouri-Iowa border. It raises about 2,000,000 hogs per year. It is not the only vertical integrated hog operations in Missouri. Tyson and several other firms have integrated hog operations that are smaller. Premium Standard has been the target of a large amount of criticism, including legal suits by the state attorney general, the EPA and others. On the positive side, Premium Standard has generated a large number of reasonably well-paid jobs with benefits for Missourians. The long-term population loss in Worth County has been turned around in large part because of the economic contributions of Premium Standard.

Premium Standard Farms (PSF) goes whole hog. The company, one of the largest pork producers in the US, controls production from birth to slaughter, making feed and selling live hogs, fresh pork, and processed products. It has facilities in rural northern Missouri and in Texas. Not everyone is hog wild about PSF: The company has faced protests and paid fines over the economic and environmental impact of its large-scale hog operations. Founded in 1988 and slopped with cash for years by investment bank Morgan Stanley, PSF reorganized under Chapter 11 bankruptcy protection in 1996. Agribusiness giant Con-tiGroup bought 51% of PSF in 1998 and combined its own pork operations with the company.¹⁴

Huge hog factories are under increasing fire nationwide for ongoing manure spills and fish kills and gut-wrenching odors. The corporate swine industry's negative social and economic impacts on rural communities and family farmers have also caught the nation's attention. Rural communities are struggling as family hog producers are forced out by the large corporations' market control, and local politicians try to manage the increased crime and poverty in communities Big Pig calls home.¹⁵

Beyond the impact on small hog producers all over the state, there is an immediate impact on people living near the farms. These farms stink. Hog manure has an aroma all its own. Depending upon the wind, the farms can sometimes be smelled for miles. If you are so unlucky as to

13. July 17, 2001, <http://agecon.uwyo.edu/WMMEC/WebArticles/MarketingArticles/TodayTomorrows.htm>

14. July 17, 2001, <http://www.hoovers.com/co/capsule/9/0,2163,55749,00.html>

15. July 18, 2001, http://www.farmweb.org/b/19990723_mo_psf.htm

have a home near a large hog farm, the smell can become unbearable. In addition, frequent leaks from the manure lagoons have had destructive impacts on the streams in the area. Most recently, Premium Standard has agreed to build sewerage disposal plants similar to those that cities use for human wastes. These should, if maintained correctly, eliminate some of the odors.

Prior to this, the use of lagoons for waste disposal produced odors that had negative impacts on surrounding residents.

This report explores only the impacts large scale confined animal feeding operations (CAFOs) have on the value of nearby property, and finds there is a relationship...Average loss of land value within this 3-mile area would be approximately \$112 per acre.¹⁶

Granted there are positive local economic impacts of these industrial hog farms, and they produce pork at a lower price for consumers, but at the same time, thousands of small hog producers in Missouri have been forced out of the hog business because they cannot compete. Hogs at earlier times were called "mortgage lifters" because small farmers could always make money raising them. Within the last few years, 5,000 farm operators in Missouri have dropped hogs as one of their enterprises.

The "factory" hog farm issue is one that generates passionate debate. The following ten points are from a strong opponent.

Concern #10. Hogs stink. Odor is at the top of the list for many opponents of large-scale hog farms.

Concern #9. The work is not good for people. A large confinement hog facility is not a pleasant place to work.

Concern #8. Piling up too much "stuff" in one-place causes problems. If you spread out the hogs and let hog manure lay where it falls in a pasture, it doesn't bother anyone very much. But if you start collecting it, flushing it, spreading and spraying it around—all normal practices in confinement hog operations—it becomes air pollution. Water pollution also is a symptom of the same basic problem -- too much manure in one place.

Concern #7. Consumers have little if anything to gain. Large-scale, corporate hog production is frequently justified to the general public as a more efficient, lower cost means of producing higher quality pork. The facts of the situation simply do not support such a claim.

16. August 2, 2001, <http://www.cpac.missouri.edu/library/reports/landvalue-saline/landvalues.pdf>

Concern #6. Continuing regulatory problems are inevitable. Without regulations, big hog operations will impose costs on their neighbors—air pollution, water pollution, and others—that are not part of the historic costs of producing hogs. It will cost money for hog factories to deal with "externalities" such as air and water pollution.

Concern #5. Hog factories destroy public confidence in agriculture. Over the decades, family farmers have built up a vast treasure of public confidence and good will. Many people in the cities either grew up on farms or have parents or other close relatives who either are or were family farmers. The "farm family" conjured up images of people who are hard working, moral, honest, solid, dependable, trustworthy, caring, and responsible.

Concern #4. Future of the community is turned over to outside interests. Rural people need to take charge of their own destinies if they expect to sustain a desirable quality of community life for themselves, their children, and future generations of rural Americans. Quality of life is about much more than just creating more jobs and making more money. Quality of life is also about positive moral and social values and being responsible caretakers of the community as a place.

Concern #3. The decision making process can rip communities apart. The process of decision-making may be more important than the decision itself. Anyone who has been a part of a family has experienced this first hand. The memory of an act that triggered a family feud has long since faded, but the feud goes on. Feuds result from a loss of confidence and trust, regardless of the context within which the loss takes place.

Concern #2. Hog factories degrade the productive capacities of rural people. Factories "use up" people. Assembly line work is "non-thinking" work. When you work on an assembly line, you simply do what you are told as fast as you can for as long as you can.

Concern #1. Tomorrow's problems are disguised as today's solution. Rural communities will see them as "the solution" to today's problems without seeing them as a potential "source" of problems for tomorrow. Maybe there are some communities so desperate for jobs that it makes sense to take the risks. Maybe they feel they have to do something today to give them a chance to do something better tomorrow. But, hog factories are a short-run solution, at best.¹⁷

17. <http://www.ssu.missouri.edu/faculty/jikerd/papers/TOP10.html>

One innovative attempt to meet the competition of industrial sized hog producers is Patchwork Family Farms located in Columbia.

Patchwork Family Farms has withstood the violent downturns in a volatile market where family farmers are struggling to compete. This project has proven to be a viable alternative that can give independent producers a guaranteed price that meets or exceeds cost of production while keeping consumers' prices competitive.

Patchwork Family Farms is catching the attention of many hog producers around the state with its fair prices, sustainable growing practices and a sales volume that has more than tripled since December of 1998.

Each year Patchwork has grown, having at least doubled the number of hogs slaughtered and the gross sales since 1994. The number of producers has also increased. Patchwork now has 12 independent family hog farmers participating in the project....

Patchwork has made great gains by creating its own market. Since February, Patchwork has acquired sales from ten new businesses in the Columbia area. They have seen a doubling in sales volume each year since 1994. In 1997, Patchwork earned \$60,000 in gross sales. That figure jumped to \$120,000 in 1998, and sales are expected to break a quarter of a million dollars this year.

By cutting out the middleman, this project has kept more money in producers' pockets. Last year, Patchwork producers received \$25,000 more than if they had sold their hogs on the open market. Producers saw these payments up front, not after the product was sold.¹⁸

The vertical integration of the hog industry is "strike three" for many family farms. Hogs were one of the largest and sources of income for the family. Now that is rapidly disappearing.

Globalization

It is difficult to imagine how a typical 1900 rural Missouri resident would have responded if he had been asked about globalization. Their world was only slightly larger than what they could see from the front door. Today, the world is made up of multi-national companies that operate around the world; of communications that are virtually instantaneous from any two points on the globe; of products that may be made in China, packaged in Panama and sold in Steelville, MO; and of money that flows by the billions of dollars from one place to another in seconds.

18. July 18, 2001, <http://www.inmotionmagazine.com/patchlh.html>

Farm operators in Missouri have not escaped the impacts of globalization. For example, Brazil has a prairie area larger than the U.S. Corn Belt that is just being opened to farming.¹⁹ The area is good for growing soybeans. Because of much cheaper land and labor costs, soybeans can be grown for at least a dollar per bushel less than in Missouri. Most agricultural crops in Missouri are commodities that require further processing before they reach the consumer. No one can tell from the bottle of cooking oil or stick of margarine whether the soybeans that were used to make the oil or margarine came from Missouri or Brazil.

Where will soybeans be more likely to be grown in the future? Where were your shoes made? A pair of mine has Brazil as the country of origin. A few decades ago, they could have had anyone of a number of Missouri towns as the place of origin. Our soybeans of the future may well come from Brazil also.

Many of the fruits and vegetables that we consume are coming from countries "south of the border". Globalization has removed most of the barriers for the movement of goods and services around the world. It seems probable that the trends of production in poor countries and consumption in wealthier countries will continue, especially for items that can be transported easily and relatively cheaply.

The following is a succinct summary of the changes in agriculture:

It (the 20th century) represents the industrial revolution in agriculture and is concomitant with the national trends of industrialization, urbanization, and mechanization. The expansion of industry, growth of cities, and expansion of foreign trade gradually transformed agriculture into a specialized, commercial occupation. Highly commercialized farming made the remaining traces of self-sufficiency seem vestigial. Comparative independence yielded to dependence upon the whole sweep of national and international economic factors. While his market area was becoming worldwide, the farmer's standard of living was likewise rising and he demanded conveniences and comforts from American industry and from the ends of the earth. To satisfy his wants required money, so the farmer, seeking more cash crops and higher production, called to his aid technical knowledge and an amazing array of mechanical helpers. To produce more crops to buy more land and machinery to produce more crops became the cycle.²⁰

Integration of the Food Industry

There is another important change occurring in the food systems. It has not been discussed in this book because it only indirectly has or will have an impact on rural communities. The change is the continuing consolidation of the food industry. In most sectors, the industry is

19. *Transportation was a major problem for the area up until recent years.*

20. July 28, 2001, <http://www.dcw.com/~bptpl/brookston/ch4.htm>

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busy buying competing firms. In most sectors of the food industry, the number of competing firms is very limited, often three to five. This will have important impacts on both the consumer and the producers. The consumer is likely to pay higher prices at retail for food products and the producers will have very limited, if any, markets for their products.²¹ The net consequence to the rural community is a further hastening of the development of the mega-farms that produce directly for these global firms.

21. Mary Hendrickson, William D. Heffernan, Philip H. Howard and Judith B. Heffernan, **Consolidation in Food Retailing and Dairy: Implications for Farmers and Consumers in a Global Food System**, Report to the National Farmers Union, University of Missouri, Columbia, Missouri, January 8, 2001,

Chapter 24

Technology and Other Innovations 1975–2000: Community Changes

New technology has become expected and accepted, but changes in community services are not as obvious. Very few expected that when a new Wal-Mart was built at the edge of town the old downtown business district would be wiped out. This chapter will examine some of community changes that resulted from changes in communication, transportation, and retailing.

Communications

Most rural communities now have multi-channel TV available, access to radio stations by the dozens, and improved telephone service.

Computers/Internet

Personal computers and the internet are just reaching rural areas. Many rural communities are lagging behind because of the lack of necessary infrastructure. To have dial up internet service, private telephone lines must be available and not all people in rural communities have them yet. To have high-speed internet service, the connection must be within 1,500–2,500 feet of the telephone switches, a condition very few rural people can meet. To have broadband internet access, the home must be served by TV cable service. There is very limited availability to homes in the open country, But it is likely just a matter of time and technology for even country homes to be online. Even today, there are satellite internet services available. Less expensive satellite internet services will probably be available within a few years.

Fiber optic cable networks are being established that allow such things as medical records to be shared or school classes to be held simultaneously in several locations. These are now available in several, but not all, rural areas of the state. It is expected that all schools and all hospitals will have such access shortly. We now hear stories of how a patient may be in one place and the physician hundreds of miles away. Time and space barriers continue to decline.

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Closely associated with the internet are personal computers. When IBM made the first personal computers in the early 1980s, they were considered a novelty, but soon programs for a wide variety of uses, including farm business analysis, were available. Computers became essential for school, business and personal use. Now combined with the internet, they have become an essential part of most households, rural or urban, but not all households have them—yet.

Cell Phones

Cell phones and pagers that can serve any part of Missouri are currently available in rural Missouri. However, the service available in remote and mountainous communities of the state is not likely to be satisfactory. The isolation of the 1900 rural communities is now totally gone. The questions of today are regarding the use of such phones while driving and similar issues, not their availability.

Transportation

1975-2000 was more of a time of evolution of existing modes of transportation than of new innovations. The automobile continued to improve, to become more reliable and more comfortable. The size of the car has become smaller in answer to environmentalists' pleas for less gasoline consumption. Gone is the customary 8-cylinder engine; now the V-4 or V-6 is the standard. Traffic congestion has become a major headache in many areas. The construction of highways has not kept up with the demands by commuters and other travelers.

The railroads that had long dominated freight and, to a lesser extent, passenger service abandoned many of their rural railroad service lines during this period. This was largely the result of federal deregulation that allowed the railroads to eliminate unprofitable lines. Trucking has become the freight transportation method of choice. A few of the abandoned rail lines were converted into recreational travels (linear parks) that attracted tourists.

Parcel Service

The United Parcel Service (UPS) has extended its service into all portions of rural communities. FedEx has followed in a similar fashion. It is now possible to get over-night delivery of mail and packages to rural addresses. Rural delivery of many metropolitan newspapers has become widely available.

Of the transportation, communication and community services offered in most cities, the only major service missing is fast internet service. True, a person can not stand on a rural corner and hail a cab or catch a bus, but neither could a person standing on a typical suburban corner.

Retail Trade

The dominance of Wal-Mart in retail trade continued to grow during this period. It is now the largest retailer in the world. It has entered more than 1100 markets and has been successful in every location.¹ Many of the larger towns have become the sites for “Wal-Mart Supercenters,” which include groceries and, after Sam Walton’s death, liquor.

I had the responsibility for participating in the ribbon cutting for a new “Toys R Us” store. While waiting, I chatted with a company vice-president. I asked him who was their hardest competition. He said Wal-Mart. Wal-Mart could handle merchandise with a six to seven percent markup. He said he thought his own firm was efficient, but that it cost them about eleven percent and he added that it cost J.C. Penny 30 percent. This story is several years old and so the figures may have changed, but it serves to illustrate the very tough competition that Wal-Mart brings to local markets. I have heard several small business owners remark that some of Wal-Mart’s retail prices were lower than their wholesale prices.

These supercenters are very difficult for smaller, often home-owned supermarkets to compete with. Other big box stores such as Sam’s, Lowe’s and Home Depot are now locating in small to medium sized cities in addition to the metropolitan locations. This places a wide-variety of mass merchandisers within easy travel for much of the state’s rural population. These retail changes have meant a wider range of merchandise at lower prices for rural residents.

Wal-Mart is now beginning to build smaller neighborhood type grocery/pharmacy/small items stores. The original Wal-Marts eliminated many smaller stores; Sam’s came next, then the Supercenters and finally the neighborhood markets. The domination/elimination by the Wal-Mart firm of small retail businesses is almost complete. The “Dollar” stores and others are filling the few remaining niches. The traditional “mom and pop” independent stores of any type are few and far between. Most of these are limited to gift shops and other niche outlets, often involving service (frame shops, etc).

Factory Outlet Malls

Another important change in the patterns of retail service was the development of several large “factory outlet malls” such as in Branson, Lake of the Ozarks, Warrenton, Odessa, and Cape Girardeau. Again, the clothing outlets commonly found in such malls are very difficult competition for the small clothing stores that used to be found in every small town. Most of these small stores have closed or are closing as the owners retire. The independent small clothing store is rapidly disappearing as chains like Gap and Banana Republic take over. Only the small appliance stores remain in small numbers as the big box stores increasingly take their markets. Montgomery Ward, one of the early pioneers in large-scale retailing, declared bank-

1. http://ozarkswatch.smsu.edu/v2n2/art07_01.html

ruptcy and J.C. Penny's and K-Mart are struggling to meet the competition from Wal-Mart and other discount stores.

Another casualty of the changing retail patterns has been the small service stations that sold gasoline and tires and tuned up your car. The first wave of replacements was the C-stores (convenience) with U-pump gasoline. The sales of snacks and gasoline made for profitable businesses. Next came "Jiffy" lube car washes and other specialized units. Now, the competitive edge is large stations that have pay-at-the-pump facilities. Most of these are located on the interstates or in larger communities—always on major highways.

Again, these new patterns of retailing reduced the ability of almost all small local businesses to attract customers and continue in business.

Emergency Services

As with many of the other community innovations described in this book, 911 services started in cities and slowly moved to rural areas. During the 1980s and early 1990s, most counties of the state established 911 emergency services along with ambulance services if the local hospitals did not offer them. In most cases, this required a vote of the people and the establishment of a tax, to pay for the service. One of the results of the establishment of the 911 systems has been the naming of roads and highways and each house having a number—just as in towns. Now, in most counties of the state the address of an open country house looks very similar to those in towns. It used to be that if an address had a RFD (Rural Free Delivery) postal route address, it was rural—no more, now the address is 10225 Country Lane.

Prior to the last few decades, emergency medical care was not readily available in most rural communities in Missouri. The hearse of the local funeral home also doubled as an ambulance on the infrequent occasion when ambulance service was used. Most commonly, an ambulance was only used for transferring patients from one facility to another. The medical training of the drivers was usually minimal. Today, many rural counties and hospitals have established ambulance services with trained personnel.²

Several of the major trauma hospitals in the larger cities have established partnerships with the smaller rural hospitals. The rural hospitals refer patients requiring specialized care to the larger hospitals. Fiber optics cable networks between large hospitals and small have been established in several areas. The network in the Green Hills region of north central Missouri that connects several smaller hospitals with the University hospital in Columbia is one of the oldest.

2. July 19, 2001, <http://www.ruralmedics.com/ruralreader.htm#top>

Tourism

Tourism in the Ozarks has a long history, going back to the turn of the century. While it is true that the last four decades have seen a great growth in tourism in the Ozarks, it started from an earlier base.

As the image of the area as a playground gained momentum, thirteen counties in southwest Missouri and northwest Arkansas institutionalized the playground idea and organized the Ozark Playgrounds Association in the fall of 1919. Aimed at publicizing the Ozarks and encouraging tourism, the O.P.A. adopted the slogan, "The Land of a Million Smiles." The motto adorned picture postcards and entitled poems and songs. The O.P.A. published an annual illustrated guidebook, a "Master Map of the Ozarks," and ran advertisements in leading newspapers in southern and mid-western states.

However, people still had considerable difficulties when trying to travel any distance. The bad roads often caused flat tires and put a considerable stain on the rest of the vehicle.

This picture brightened, however, when in 1916 President Woodrow Wilson signed the Federal Road Act, which provided federal financing for rural road building, and required state participation in administration and funding. This took road development out of the realm of volunteerism and placed it under governmental auspices. Consequently, roads in these counties were improved by 1926, although by modern standards their condition was still miserable. The best Stone County could boast was a 12-mile stretch of State Highway 43 (later 13) with a graded earth surface; the rest of it remained unimproved. Nevertheless, automobiles carrying visitors to Marvel Cave usually came through Reeds Spring on that highway because it was still the best route. The alternate way, from Branson around the southern foot of Dewey Bald Mountain, remained practically impassable until the creation of Highway 76 in 1933. Taney County had done better than Stone: the gravel-finished portion of Highway 3 (later 65) extended east to Forsyth. Improvements did shorten travel time considerably. By 1921 the trip from Springfield to Fairy Cave, a distance comparable to the mileage from Springfield to Branson, could be made in just over two and one-half hours.³

The improvement in highways has reduced that travel to a fraction of what it was. Even with the congestion on Highway 65, the trip from Branson to Springfield seldom exceeds 45 minutes. Tourism has become a major economic engine for growth in the Ozarks.

3. July 28, 2001, <http://198.209.8.166/sheproom/periodicals/ozarkswatch/ow304d.htm>

Chapter 25

Population Changes from 1975–2000

Population Change

In 1900, 60 percent of the U.S. population was rural (see Figure ___)¹. In 2000, this had declined to 25 percent, and that does not take into account the changes in who lives in the open country. At the same time, the population living in suburbs went from 12 percent in 1910 to 52 percent in 2000.

The population of Missouri in 2000 was 5,595,211, an increase of 2,488,546 from the 3,106,665 in 1900. This was an 80 percent increase, while the nation as a whole gained 277 percent. One of the major reasons for Missouri's relatively slow rate of growth was that for the first 70 years, almost all areas of the state lost population.

In 1900, almost half of the population lived on farms. In 2000, less than 5 percent of Missouri's population lived on farms. Much of the change is the result of the reduction in numbers of farms, but some is the consequence of the much smaller families now found on farms. The population on the remaining farms is relatively old. The average age of Missouri farm operators is now older than 55 years of age. This suggests that the numbers of farms will continue to decline as the older farmers retire and are not replaced.

Most of the population growth in Missouri has been in or around the three major metropolitan regions: St. Louis, Kansas City and Springfield. Each of the cities has grown in a modified ring style, constantly taking over former farms. The homes in the growing rural fringes were located on larger lots, often of ten acres or more.

The University of Missouri Office of Social and Economic Data Analysis summarized Missouri's population 1990–2000 changes as follows:

1. Theodore Caplow, Louis Hicks and Ren J. Wattenberg, *The First Measured Century: An Illustrated Guide to Trends in America, 1900–2000*, The AEI Press, Washington, D.C., 2001.

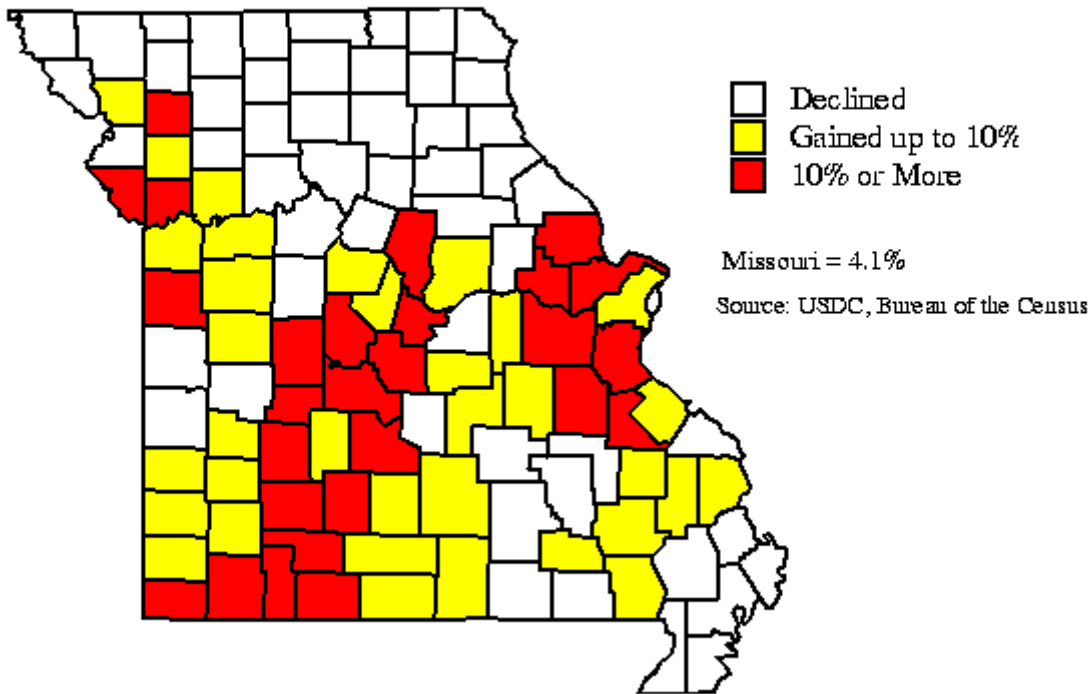
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- Missouri's population growth during the 1990s (9.3%) was nearly 2 1/2 times the state population growth of the 1980s
- Compared with the U.S. as a whole, Missouri had a slow population growth during the 1980s (4.1% growth compared with 10.0% growth nationally)
- At the time of the Census, 22 of Missouri's counties were classified as metropolitan. In 2000, those 22 counties accounted for 67.8 percent of Missouri's total population. However, according to the 2000 Census, 75.8 percent of Missouri's population increase occurred in the metro counties. The 93 non-metro counties accounted for 24.2% of the population increase of the 1990s...
- During the 1990s, only 17 Missouri counties suffered a loss of population; 53 counties lost population during the 1980s. Furthermore, the loss was less than 3.0% in 10 of the 17. By contrast, during the 1980s the losing counties lost as much as 20% of total county population²
- In the previous decade, the fastest growing county in the state was St. Charles, located in the St. Louis metropolitan area. For the 1990s, Taney (Branson), Stone (adjacent to Taney and including part of Table Rock Lake), and Christian (located between Springfield and Branson) counties were the fastest growing. Taney and Stone had the somewhat dubious distinction of being in the 85 fastest growing counties in the nation.

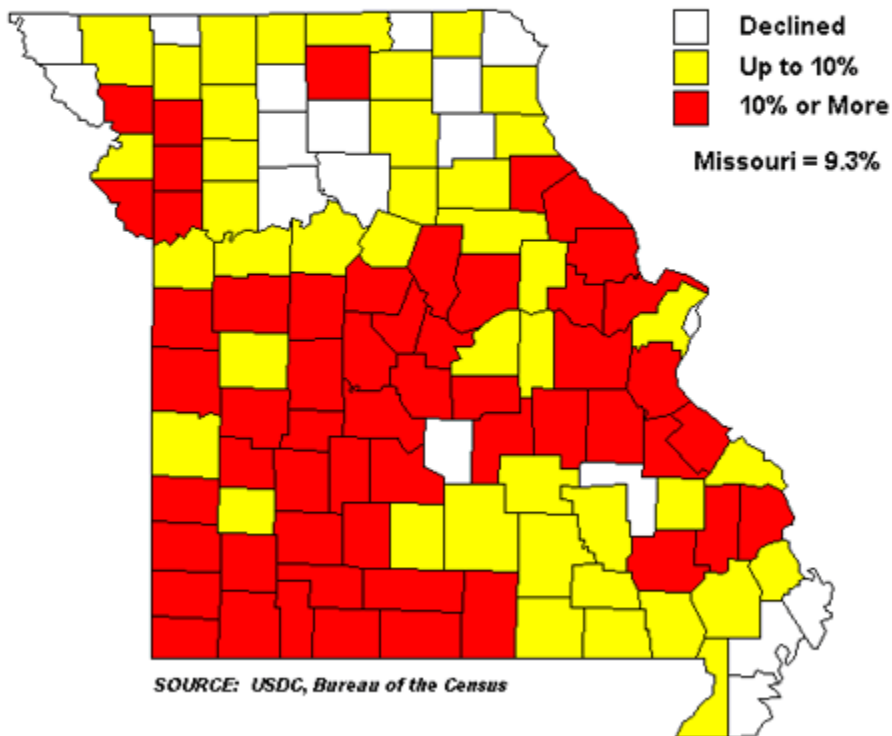
The following map of the population change from 1990–2000 shows that the northern Missouri agricultural counties had the smallest gains and most losses. The county in the central Ozarks with a loss is Pulaski County, which includes Fort Leonard Wood military base. The population at the base varies according to military policy. The other Ozark County with a loss is Iron County, which includes a considerable number of lead mines, but the lead ore prices have been depressed for many years and this has reduced employment in the industry.

2. July 21, 2001, <http://www.oseda.missouri.edu/demographics.html>

Percent Change in Total Population, 1980-1990



Percent Change in Population, 1990-2000



Life expectancy

The life expectancy of a child born in Missouri in 2000 was 76 years, compared to 47 at the start of the 20th century. Much of this gain came about as the result of the control of infectious diseases, especially among children. Walking through rural graveyards and looking at the old head stones, one can see a grim reminder of this. It not unusual to see graves marked with stones that read "Baby..." or to see the graves of children. The differences in life expectancies between rural and urban have disappeared over the years.

Rural areas still have poorer-quality healthcare than major urban centers. The result of this lower quality is most often seen near the end of life and less at the beginning. Some of the poorer health care may be offset by a healthier lifestyle, including regular exercise, cleaner air, etc.

While both of my parents lived to their seventh decades, both would have survived longer today, especially if they were living near good medical facilities. Being born when they were and living in a rural community with marginal health care probably resulted in a reduction of their life spans by at least a decade each.

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3. July 21, 2001, <http://www.oseda.missouri.edu/graphics/mo/page1.gif>
 4. July 21, 2001, <http://oseda.missouri.edu/thematicmaps/mo2000/population/pchg2000.gif>

Chapter 26

Changing Rural Communities 1975–2000

"It was the best of times, it was the worst of times."

The floodgates of social change in rural Missouri communities had been opened, and it was one for the record books. Changes and innovations were sweeping aside the last vestiges of the 1900 rural life.

A 2000 checklist:

- **The school systems were fully consolidated and integrated.** Now all children were bused, often many miles, to the consolidated school.
- The numbers of rural churches were about the same; but **types had changed substantially.** The churches had changed from old line protestants such as Methodist to more evangelistic and fundamentalist churches.
- **The methods of farming had changed dramatically.** The use of many different chemicals was considered to be essential.
- **The old general farm had disappeared.** Farms were specialized, especially in livestock. Chickens and other poultry were seldom found.
- The small milking herd had also vanished.
- Small-scale hog producers were under heavy competitive pressure from the industrial hog farms.
- The large-scale crop farms continued to grow.
- **Long distance commuting had become the norm in many rural areas.** The interstate and most other highways became jammed with vehicles. Stop and go traffic with multi-vehicle accidents were all too common.

- **Teenagers expect cell phones, portable CD players, and individual television sets today. An automobile for the sixteenth birthday is an almost universal expectation.** Instant messaging on the internet and an AOL account are also included in the expectations.
- **Distance as an isolating factor has largely disappeared.**
- **The most common choice today for family size is between two and three children.** However, four is a more common size than one. The size seems to vary based upon the future economic outlook.
- **The family structure remained somewhat patriarchal, but women's rights have made considerable progress, especially in more educated families.** Divorce rates reached a peak in the late 1980s and leveled off. Often families were composed of children from earlier marriages as well as from the current union. "His, hers and ours" families were not unusual.
- **An aging population in small towns was very common.** Small towns in which 25 percent of the population were 65 years of age or older were common, especially in agricultural areas.
- The average age of farm operators became older as fewer and fewer young people chose farming as a career.
- A visual change, especially in the Ozarks and fringe areas, was the growth of cedars and other second growth scrubs on what had been open pasture/crop lands.
- **Rural communities are increasingly aware that their communities have changed, that they have become more heterogeneous and less interactive (some say less friendly)**

What a difference a century makes! A comparison of any one of the preceding points to conditions 1900 reveals dramatic changes in the rural Missouri culture.

The question now is: How much rural is there remaining in Missouri today?

In the rural world of earlier times, the close-knit communities defined appropriate behaviors. Today, urban values found through America including rural areas have created wide ranging social behaviors.

Part 3

Rural Missouri in 2000: The Consequences

The changes that occurred can be grouped into three categories:

- **Agricultural innovations**, which allowed more production from the same acreage and reduced the amount of labor needed;
- **Home innovations** enhanced the quality of life, but at the same time required more money; and
- **Community innovations** opened the door to alternative ways of making a living.

If just one or even two of these had occurred the results would have been much different. It was the combination of the three interacting together that produced the revolution of rural Missouri.

When these four urbanization charts are placed together, a pattern becomes clear. The change during the first half was relatively slow but building as innovation after innovation came to rural Missouri. Rural Missouri sub-culture virtually disappeared as it was swamped by the mass urban culture during the last quarter of the century.

Chapter 27

Rural Missouri Employment—2000: Agricultural

In 1900, rural meant agriculture. The few people who lived in the small towns were providing services and supplies the farmers needed.

Today, only a small percentage of most rural communities' income comes from agriculture. There is no one occupation that has replaced agriculture, but many. The largest single income source is some type of "transfer" payments from the government, with social security at or near the top of the list in many counties. Most rural families have multiple sources of income.

Traditional Farming Areas

Since 1945, the U.S. has lost two-thirds of its farms.¹ In 1994, seventy-three percent of the farms produced only nine percent of total farm production and two percent of the farms produced fifty percent of the total.

In Missouri, the situation is even more uneven. There were 98,860 farms in Missouri in 1997. Of these, 55,000 sold less than \$10,000 per year of any farm products. This is total sales, not profits. An optimistic estimate would be that profits were 20 percent, or a maximum of \$2,000. A more realistic estimate of profits is in the five to eight percent range. Another 26,664 farmers sold between \$10,000 and \$50,000 of farm products. Putting these two groups together, 84 percent of Missouri farms sold less than \$50,000 of farm products in 1997. In terms of land size, only 20,000 had less than 50 acres in 1997 compared to about 76,000 such farms in 1900.

The average size of Missouri farms had reached 292 acres in 1997, compared to the U.S. average of 487 acres. Of the total labor force in Missouri in 1997, a little over 2 percent were farm operators and managers, while in 1900, more than 25 percent were farmers, planters and overseers.

1. Willard W. Cochrane, "Food and Agriculture Policy for the 21st Century" cited in Eva Jensen, "Come to the Table"; *Catholic Rural Life*, Volume 43, Number 2, Spring 2001.

It would be unfair to leave the impression that people living on small farms are unimportant to the communities. These “farm” families are just as important to the communities in which they live as any other residents. They buy groceries and other consumer products. Most also work at other jobs, unless they are retired. Often the income from farming provides important discretionary income. The off-farm income pays for the day-to-day living expenses, but the farm income may help pay the property taxes, a child’s school tuition, or for a vacation.

At the other end of the farming spectrum, there were 10,684 farms that sold \$100,000 or more in 1997, and 5500 farms with over 1000 acres, ten times the number in 1900. It is very feasible today to have over \$100,000 sales of farm products and still be a part time operator. Most small grains take only a limited time to plant and another limited time to harvest. If the soil conditions are right and equipment available, a large acreage can be planted in a week and harvesting done in the same time. More than ninety percent of Missouri farm families have non-farm income.

The size changes do not really reveal the major shifts that occurred. It is very possible to have large shifts at each end of the spectrum and have very little changes in the average. Indeed, this is exactly what has occurred in Missouri agriculture. There is another type of change that is not revealed in the official data. As I drive through the country, I see many areas that were formerly field and pastures that are now growing up in cedars and other second growth trees. The USDA keeps the official data on what is farmland, but if an owner chooses not to participate in the Census of Agriculture, the USDA will keep that land on their books in the same category as it was earlier. This is a long-winded way of saying the amount of land in farming is probably declining faster than the official data shows.

It is very difficult to describe farms in Missouri today because of the heterogeneity.² Let me first take inventory of changes in farms.

- The general farms that were described in the first chapters are long gone.
- Horses and mules are gone. Most horses found on farms in Missouri are for pleasure riding. There are a few farm operators who keep a few draft horses and mules for nostalgia. The number of horses on Missouri farms declined 91 percent during the century and mules declined 98 percent. There were only 4,500 mules (including donkeys and burros) left from the 292,000 in 1900. All of the land that was used to grow horse/mule feed is now used for grain crops.
- Poultry has disappeared from the farms, except for the large-scale contract growers. The origin of the old joke about why did the chicken cross the road would be lost on the current generation. They have probably never seen a chicken in a roadway.

2. For an excellent description of a year on a commercial central Missouri farm see Richard Rhodes, *Farm: A Year in the Life of an American Farmer*, Simon and Schuster, New York, 1989.

A Revolution in the Heartland

- Small-scale hog and dairy farms are in a steep decline.
- The number of dairy cattle has declined about 30 percent in the last decade. The numbers of hogs sold in the state has been going up in recent years, but the increases are coming largely from contract growers outside the traditional hog producing areas. Eighty-five of the 114 counties had smaller sales of hogs and 11 counties had large gains in the last decade.
- Even gardens and small orchards are going out of style. With the two paid worker households, there is not time for raising a garden or preserving the results. Old canning jars are now collectors' items. Butchering seems barbaric and unsanitary to most people.
- An enterprise that has substantially increased in Missouri during the century is turkey production. The number of birds has increased from less than half a million in 1900 to almost nine million in 1997. Almost all of these were contract grown for the integrated firms.
- Soybeans, a crop that was not grown in Missouri in 1900, is now the largest cash crop with more than 4.6 million acres harvested in 1997.
- Corn acreage has gone the other direction. In 1900, more than 7.4 million acres was harvested. In 1997, the acreage had declined to 2.5 million acres, a 67 percent decline. The amount of corn harvested, however, increased 31 percent.
- The story for wheat is similar. The acreage has gone down almost 50 percent in the last century, but the bushels of wheat harvested increased 126 percent.
- Tenant farmers (renters) almost disappeared during the century. There were 87,000 tenant farmers when the century started but only 7,000 in 1997.
- As a consequence of these changes, the land in farms has gone down from 34 million acres to 29 million acres, a 15 percent decline during the century.

The Workers in Integrated Agricultural Enterprises in 2000

In chapter three, I described the start of the day in 1900 for a farmer who went to the barn and was greeted by "Bossy" the "head" cow waiting to be milked by hand and who greeted the farmer with a gentle "moo".

Now I will describe the morning of a professional milker who milks cows eight hours a day on an 800-milking cowherd "farm". The cows are kept twenty-four hours a day in small dry lots that includes some concrete pavement. There, they are fed silage and hay. They are milked three times a day for maximum production. As a cow enters the milking room, the electronic tag around her neck identifies her to the computer. Her only identification is by number;

names for cows have long since disappeared. The computer delivers an amount of feed to the trough based upon how much milk she produces. The milker cleans and checks her udder and attaches the milking machine to her. Her milk is automatically weighed and recorded by the computer, which will in turn determine her feed at the next milking. She is probably given periodic injections of bovine somatotropin (BST) to enhance her milk production (and reduce her life span). About once a year she is bred through artificial insemination, to reproduce and start the annual cycle over again. After a productive life span of perhaps four years (six years in total), or sooner if the computer says she is not paying her way or if her legs go bad from prolonged walking on concrete, she is headed for the fast food world as hamburger. Her ancestors in 1900 probably had a productive life span of five to eight years, or even more in a few cases. The children on the farm cried when "Bossy's" time came to go to the big pasture in the sky.

Back to the milker, who has now finished his mornings quota of cows; he pushes a button for the washing cycle of the milking machine, takes a high pressure hose and washes out the milking room, checks out the other equipment, punches out on his time card and heads for the local McDonald's for breakfast.

The duties of a contract worker in the integrated poultry industry are very limited and simple: They must walk through the buildings on a frequent basis and check and remove ill or dead birds. If the number of ill or dead birds exceeds a certain number, the company veterinarian must be called. The worker also checks the feeders and waters to make sure they are working correctly. The optimum feed rations are determined in the home office and provided by the truckload. The contracting companies have field men and veterinarians who will occasionally check the animals. After the birds are taken to be processed, the worker must thoroughly clean and disinfect the buildings. This is a smelly, eye-watering job. The manure and bedding are spread on fields as fertilizer (usually to the dismay of non-farming neighbors).

After the contracting company picks up the birds, the worker/owner has to wait until the company decides to place more chicks in his houses. If the numbers of dead birds are too high or if the market demand for poultry goes down, the worker/owner may be left with empty houses and a mortgage to pay without income from poultry.

There are two different models followed in the large-scale integrated hog production. One is very similar to the poultry model in which animals are placed on farms and the owner cares for the animals and is usually paid per pound of gain. In the other model, the corporation owns the animals, the buildings and the land and the worker is paid hourly.

Chicken manure smells bad, but nothing like hog manure. I could walk by the hog pens and when I came to the house my wife would comment that she could smell the hog odor clinging to my clothes. To work in a confinement hog house is a major challenge. In addition to the odors, dust particles may cause asthma attacks or other respiratory problems. Working around large numbers of hogs, especially if confined in buildings, is not for people with sensitive noses

or respiratory systems. A person working in confinement hog or poultry will be happier off if their sense of smell is poor.

Large Scale Traditional Farm Operators

The independent farming enterprises are primarily in grain crop production. Most of the large-scale row crop farms are now located in just a few areas of the state: in northwest counties, a few counties along the major rivers, and southeast Missouri.



New Holland TX32 Combine Harvesting Wheat ³

This is the era of specialization in large-scale agriculture. The “bigger is better” philosophy has been widely adopted by agricultural organizations. Agricultural cooperatives are joining together to meet the competition from humongous corporations. Farmers no longer produce food, but rather they produce agricultural commodities that are the raw materials for a wide variety of retail products. As a result, the proportion of the consumers’ dollars they receive has been steadily dropping and now is less than 11 cents of each dollar.

For a variety of reasons unique to each, other commodity sectors have followed different paths to what appears to be a similar structural outcome, namely that market access for farmers is dominated by just a few transnational corporations. For instance, change came to the beef sector at the feedlot level. Today 20 feedlots feed 50 percent of the cattle and are directly connected to the four processing firms that control 81 percent of the beef processing either by direct

3. November 24, 2001 http://www.ytmag.com/cgi-bin/today/cphoto_pic.cgi?pic=http://www.ytmag.com/today/cphotos/a142.jpg&firstrec=1&lastrec=15&Parameter=

ownership or through formal contracts. The only question that remains is how the cow/calf producers will be integrated into the predicted seamless system. Will many of the small and less price sensitive farmers be left without access to markets?⁴

The important question is what kinds of communities does this agricultural structure produce? The blunt answer is that it does not help and probably hinders establishing good working communities. The factory farms⁵ have a structure much like corporate firms of other types. There are managers and workers—a clear status hierarchy. This social distance is hard to bridge when in a community it is expected that everyone will be on the same level. The workers see the boss all day at work. It is unlikely that they or the boss will feel comfortable establishing an equal partnership in the evening to work together on, say, improving the schools.

To get a larger proportion of the retail dollar, some farmers are forming what are called “new age” or “new generation” cooperatives. New age cooperatives have members that invest cash and commit a specific amount of produce each year to form a business that produces a value-added product. For example, ethanol, a type of alcohol, is made from processing corn.

On Saturday, April 29, 2000, the Northeast Missouri Grain Processors hosted a grand opening, ribbon cutting and tours for Missouri’s first ethanol plant. The grand opening events were the first in Missouri, not only for an ethanol plant, but also for a new generation, farmer-owned, value-added cooperative.⁶

A recent groundbreaking for a new farmer-owned ethanol production facility in Craig, Missouri celebrated the emerging ethanol industry in the state. The Golden Triangle Energy Cooperative facility will bring economic activity and provide value-added for the cooperatives’ farmer members. The 15 million gallon per year plant will join another 15 million gallon per year facility under construction by Northeast Missouri Grain Processors of Macon, Missouri.⁷

As was mentioned earlier, a different approach has been taken by a group of small-scale producers working together to get more of the consumers’ dollars is “Patchwork Family Farms” of Columbia:

Three independent farm families came together in 1992 to create Patchwork Family Farms...These families raised hogs the traditional way, in the sunshine and fresh air without the continuous use of antibiotics and with no growth hor-

4. July 23, 2001, <http://www.competitivemarkets.com/library/academic/heffernan.pdf>

5. This term will be used for the large scale, often vertically integrated firms such as poultry, hogs and large dairy or other “farming” operations that involve hired workers, managers, etc.

6. July 23, 2001, <http://www.mocorn.org/news/2000/News%20Release%20NEMOGP%20Grand%20Open%20POST%20%2005-01-00.txt>

7. July 23, 2001, <http://www.ethanol-gec.org/winter99/win9914.htm>

mones or synthetic growth promoters...Patchwork now includes 15 independent family hog farmers located all around Missouri. Producers receive no less than 43 cents per pound or 15 percent above market price.⁸

Niches

As old farm enterprises disappeared, such as poultry and hogs, some farm families began to search for offbeat opportunities. These were very limited in number, but there were a few "niche" producers who succeeded. The most common were various horticultural enterprises. Orchards growing apples and peaches are fairly common. Some families expanded the garden enough to sell at the local farmers' markets. Raising dogs for the pet industry was a successful venture for a few breeders.

During the early 1990s, several farm operators experimented with U-pick operation for strawberries, raspberries, blueberries and other small fruits. Some of the initial operations were successful. Other farmers, seeing the success of their neighbors, decided to set up their own operations. This split the consumers, and in most cases made it unsuccessful for all, including the original operators. Most Missouri farmers are good at producing and not so good in marketing areas such as measuring consumer demand.

Most of the new enterprises yielded only a few hundred dollars net income and were at best supplemental to other income sources.

Farmers' Markets

Farmers' markets have been increasing in many parts of the state. The numbers of markets have increased from 53 in 1997 to 86 in 2001. Information from the mid 1990s suggested that the average seller at Missouri farmers markets might net from \$500 to \$800 per year, so this is also a supplemental income. Often the produce source is a large garden with limited varieties. The production of fruits and vegetables is both labor and management intensive. Producing uniform round red tomatoes and being the first to market in the season takes considerable skill.

One of the major benefits of farmers' markets is to the consumers who have an opportunity to buy high quality products directly. The prices are usually similar to those found in supermarkets. The quality is very different, since most farmers' markets products are field-ripened and picked immediately before being transported to the market. Supermarket items often come from a different country and are harvested a week or more before reaching the supermarket.

8. <http://www.inmotionmagazine.com/patchlh.html>

Scientific Agriculture

As late as the 1950s, farmers would tell me that they did not need “any of that book learning” on how to run a farm. This was the time when soil testing was just becoming accepted, along with artificial insemination of cattle, improved crop varieties, chemical fertilizers and other farming innovations. Soil testing was required for some important governmental benefits (partial payment of liming costs) of the time. Thus, the adoption of an innovation was required to get a useful governmental benefit.

The farming skills page of knowledge was being turned from tradition to science, although at the time neither the farmer nor I recognized it. Today, a considerable knowledge of soil chemistry, not to mention reproductive physiology if the farm has animals, and economics and finance and much more, is considered essential to operate a farm. The large-scale farms are most often capitalized at several millions of dollars, with annual gross receipts in the hundreds of thousands, if not millions, of dollars and considerable knowledge of finance is essential. Tomorrow, it will be GIS and satellites for precision farming. This assumes that the farm operators have decision-making power. In the case of contract production, the decisions use the very best cost-effective technology, but the decisions are made in the executive offices and the laboratories at the corporate headquarters, several hundreds miles away from the farm.

My expectation is that more and more of agriculture will become vertically integrated; that most crops will move to contract production. As genetic engineering improves, it is only a matter of time until separate varieties of crops are developed for specific uses. One variety of corn might be developed that is best for animal feed and another for making ethanol. These specific varieties can only be marketed directly to the users. Mixing them in commercial grain elevators would take away the advantage of the specialty varieties. Contract growing has already started in specialty crops such as popcorn and vegetables.

The global agricultural markets are here to stay. If we cannot produce soybeans (or other crops) at prices competitive to those grown in Brazil, the production will move elsewhere. What use will the majority of land in Missouri have? Currently, the largest single use is for pasture and hay for cattle. My guess is that recreational uses such as hunting and hiking will increase. The price of land will be set more by its scenic value than by its agricultural productivity. Location will also be a major factor in price.

The Future for Farms



Probably, the best alternatives to ensure the survival of at least some smaller family farms are niches. That is, to find alternatives that are too small to attract the global corporations, but large enough to provide adequate incomes for the proprietors. These will vary from one locale to another. For some, it may involve crafts, or the development of unique mustard or BBQ sauce, for others it could mean producing organic milk or meat, and still others may find a niche in producing fresh, high-quality local fruits. The potential list is almost endless and is only limited by the person's ability to "think outside the box", to see opportunity where others do not or are not willing to try. How about growing edible flowers for the local restaurants? I know a farmer who is doing just that.

While a person can hope that the larger niche markets and other efforts will succeed, the odds are not good. For example, if the ethanol plants are profitable, it seems likely that a large industrial corporation such as Archer Daniels Midland Company (ADM) will take over the market.⁹

Another significant threat to many farms is the high and often increasing price of farmland, which is resulting from the competition from alternative uses such as housing and recreation. A house lot in a metropolitan area of the state sells from \$40,000 to \$100,000. In many rural fringe areas, "raw" land can be bought for \$1000 per acre. There are relatively few areas in the state where a farm operator can buy land and pay for it with the profits from farming. In addition, the property taxes increase in the growing areas, due to the higher land evaluations and the higher tax rates required to pay for infrastructure such as schools.

I consider the current period the "mopping up" of the traditional family farms. After this generation of farm operators is gone, the era of the mid-sized family farm in Missouri will be over. Most of the large-scale farms will be family corporations. The residential farms will continue to exist in large numbers. Profits are not a major determinant of continued operation; style of life (living on a farm in the country) is the major concern.

9. ADM currently produces about 55% of the ethanol manufactured in the U.S. See: July 26, 2001, <http://www.consumeralert.org/fumento/adm.htm>

The large-scale farms will continue to grow in size and numbers, in part because of large federal payments. In 2000, almost two-thirds of the \$27 billion in federal farm subsidies went to ten percent of the farm owners, including numerous multimillion-dollar corporations. One southeast Missouri farm (Missouri Delta Farms) received \$6.8 million.¹⁰ In Missouri, one dollar out of four went to corporate farms and a substantial amount more went to large, single-owner farms.



A Small Herd of Mixed Breeds Beef Animals Typical of Missouri Small Farms

10. *Corporate farms reap big benefits*, *Columbia Missourian*, September 10, 2001.

Chapter 28

Rural Missouri Employment–2000: Non-agricultural Industries

Rural equaled agriculture in the first half of the century, but this relationship rapidly crumbled in the second half. Tourism industry and commuting to employment in a metropolitan area were the two most common ways of earning money in 2000 in rural Missouri. Prisons had become the growth industry of rural Missouri in the 1990s. Health care, education, government and a limited amount of manufacturing were the other primary sources of jobs. Focus in this chapter will be on those industries impacting rural communities the most. Statistics are not generally available to separate rural and urban or even county data.

Manufacturing/Distribution Centers

During the latter part of the 19th century and the first part of the 20th century a considerable number of shoe factories were built in small towns scattered over the state. Numerous “sewing machine” factories that made a wide variety of wearing apparel followed these. The shoe factories started to close by mid century and move to locations in third world countries that had lower labor costs. The apparel factories started moving to other countries at about the same time. By the end of the century very few of the labor-intensive industries remained in Missouri. Some of these were replaced by automotive parts plants that were located within convenient “just-in-time” shipping distance of assembly plants located in Kansas City and St. Louis. The net result has been a steady decline in the number of manufacturing jobs in rural Missouri. Most of manufacturing jobs were better paid and had better benefits than the tourism jobs that were available at truck stops (see below).

With the spread of the big box stores, a need developed for large distribution centers that could supply stores over a wide area. Several communities in central Missouri have become the sites for such centers. The number of employees, usually less than 50, is not large considering the size of the centers: 100,000 square feet plus.

Prisons (Correctional Institutions)

A major growth industry in rural Missouri in the past decade has been the building and staffing of new prisons. More than two-thirds of Missouri's population is in metropolitan areas, but none of the prisons built in recent years have been in metropolitan areas. Only the facility at St. Joseph is in a (small) metropolitan area. The following is a list of the facilities for adults in Missouri: Boonville, Bonne Terre, Bowling Green, Cameron, Charleston, Chillicothe, Farmington, Fordland, Fulton, Jefferson City (2), Kaiser, Licking, Maryville, Moberly, Mineral Point, Pacific, St. Joseph, Tipton and Vandalia.

The Department of Corrections received the most new employees [from 1992 to 2000]. That agency increased its workforce by 4,807, nearly doubling the number of employees from 5,580 in 1992 to 10,458 in 2000.¹

Most of these were added in small rural communities.

In 2001, there were 28,000 people in prisons in Missouri. Including parole officers, the system employs 11,000 professionals. Some of these are parole officers located in the large cities, but it would be fair to say that the number of people working in corrections in rural communities is rapidly approaching that of full time farmers.

Higher Educational Institutions

Perhaps to many people's surprise, higher education has been and is a good source of steady employment in several non-metropolitan communities around the state. Four of the five state universities are located in relatively small cities. Northwest Missouri State University is in Maryville, Truman State is in Kirksville, Central Missouri is in Warrensburg, and Southeast Missouri is in Cape Girardeau. Only Southwest Missouri, in Springfield, is in a metropolitan area, and Southwest has a satellite campus in West Plains. Each of these institutions except Northwest employs more than a thousand people, and many of the support staff and even some of the students live in rural areas.² The University of Missouri-Columbia campus has more than 10,000 employees. While it is a metropolitan area, it attracts commuters from surrounding rural areas. In most cases, the support workers live in rural communities.

State Capital

The state government in Jefferson City is another very large employer that attracts commuting workers from the surrounding rural areas as well as having employees in every county. The total number of state employees in 2000 was 59,252, up from 49,300 in 1992. Many of these employees are spread across rural and metropolitan areas of the state.³

1. August 3, 2001, <http://www.mochamber.org/pr010124.htm>

2. August 3, 2001, <http://www.cbhe.state.mo.us/pdf/44a.pdf>

Local Governments/Education

While the 114 counties vary widely as do the cities, the total number of employees of all local governments including school systems in Missouri was a very large 207,989.⁴ Of these, more than one-half (110,516 employees) were in primary and secondary education⁵. In many smaller communities, schools are the largest and best paying employer. Next on the list would be other local governmental workers.

The place of residence makes considerable differences in the relative incomes. For example, housing costs are usually much lower in rural communities than in large metropolitan area. A family with a \$40,000 total income would not be well off in Kansas City or St. Louis, but \$40,000 in Eminence would be comfortably middle class.

Health Care

Health care has been growing steadily. The 1997 Economic Census reported that health care and social assistance employed more than 300,000 in Missouri.⁶ These include public/private hospital workers as well as private physicians and their staffs. In addition, the numerous nursing homes in towns large and small have created a large demand for LPNs, RNs and housekeepers.

Gambling/Gaming

There are two “gaming boats”⁷ located in out state areas. One is in central Missouri (Boonville) and the other is in southeast (Charleston). Both of these as well as the several “boats” located in Kansas City and St. Louis offer considerable employment. Most hire upwards of 500 people, many of which are part time, low paid, and “dead end”. Unlike much of the tourism industry, there is less seasonality in gambling. People gamble year-around.

The boats attract large numbers of gamblers to the communities and these visitors may buy gasoline or other incidentals in the communities. Most boats do make a sizable contribute to the local governments each year. However, additional costs for street maintenance and police take up a significant portion of the additional revenue.

3. *Ibid.*

4. August 3, 2001, <http://www.census.gov/govs/apes/00locmo.txt>

5. Unfortunately, the Census does not provide data for rural and urban areas.

6. Gaming is the term the industry prefers, gambling is what the general public more accurately calls it. Most of these are not boats at all, but buildings surrounded by moats of river water. Some of the older boats on the Mississippi do still take “cruises”—short trips on the river.

7. Gene Summers, “Persistent Rural Poverty” in Emery N. Castle (ed.), ***The Changing American Countryside: Rural People and Places***, University of Kansas Press, 1995.

Despite the jobs created, the net effect for the larger area is that the gambling industry does not generate wealth, but rather takes money out of a community. Usually, those hardest hit are working class people who are more likely to gamble and who can least afford to lose. These monies come from largely discretionary funds of the families and, thus, less money is available for spending on movies, restaurants and even church contributions. Gambling addiction is a serious illness that impacts perhaps one to two percent of the visitors. For these people, essential money for food, clothing and housing may go for gambling. Largely working class people patronize the boats. Middle class, especially those with more education, are less likely to gamble.

Lead Mining

Lead mining was one of the first activities of the early French settlers in Missouri. In the following 280 years lead mining has been a major source of employment in eastern Missouri Ozarks. Another area of lead mining started in southwest Missouri near Joplin, but this lasted only about 25 years. For the last 90 years the eastern Ozarks has been the principle source of lead for the U.S., producing 80–85 percent of the nation's mined lead. Wholesale lead prices dropped sharply when lead was eliminated from the very large markets of paints and gasoline. The remaining major market is for batteries in automobiles and other vehicles and these are highly recyclable. Lead is also used in the chemical industry, medical processes and in the manufacture of some pipe, weights, glass and china.

Doe Run Company owns all eight of Missouri's current lead mines. It expects current lead reserves to run dry in the next 30 years, with a loss of some 1500 jobs. Additional lead deposits are thought to exist under some of the most pristine area of Missouri centered on the Eleven Point, Current and Jack's Fork rivers, all of which are federally protected and geologically unique. While Doe Run has withdrawn one application to explore in this area, additional applications seem likely in the future by Doe Run or other companies. The Sierra Club and several other environmental organizations are actively opposing any such exploration.

The Eastern Ozarks

The southeastern Missouri Ozarks are an area of "persistent high poverty," based upon information from 1960 to 1990.⁸ This area has had a declining population and high unemployment rates for decades. West Plains and Howell County are exceptions especially in recent years. Unfortunately, the growing employment base in West Plains is not large enough to reach outside the county. Most of the other counties have large proportions of the lands in national forests. The Scenic Riverways is in this area, but as will be discussed later, it offers only a small amount of economic development, not enough to pull the region out of poverty.

8. *It is important to note that the environmentalists often located in urban areas have taken as their task to protect the Ozark environment. The same effort is not applied to the north Missouri environments.*

First, there were forests that the Native Americans farmed with fire to encourage better forage for the wildlife that they harvested. Then came the European who saw the trees as an obstacle to farming so they cleared some of the creek bottoms for planting. Next was the timber cutting for railroad ties and lumber shortly after the turn of the 20th century. Thousands of acres were sprayed to kill the trees and make pastures in the 1970s. Now, the chip mills are threatening another clear cutting of the Ozark forests. The primary issue is clear cutting versus selective harvesting. It is environmentalists versus industrialists. Neither of the two adversaries are permanent residents of the Ozarks⁹. Here is how one environmental group who opposes building additional chip mills phrased the issue. The chip mill owners see it from a very different perspective.

The chip mill issue can be framed as a question of how to utilize the Ozarks' forest resources to the best advantage of the region's residents...(One) option can be characterized as a labor intensive, value added, non-declining even flow timber harvest which is an environmentally acceptable and sustainable system whose market demand is based predominately on regional economics...The second option, that of bringing in more remote, high capacity chip mills, can be characterized as a mechanized, low value added, declining flow timber harvest which is an environmentally unacceptable and regionally non-sustainable system whose market demand is based on global economics.¹⁰

In charcoal making, the issue has been smoke that comes from the charcoal kilns. This issue has been resolved by new regulations that are being phased in by 2005 to control smoke.

Southeastern Missouri produces approximately three-quarters of all the barbecue charcoal used in the United States, converting sawmill waste into the mainstay of summertime outdoor cooking. (Charcoal making produces) dense, moist, choking smoke that rises from the 229 kilns scattered around Missouri's Ozarks...(I)n March 1998 the Missouri Air Conservation Commission adopted regulations to phase in controls of charcoal kiln smoke. This marked the end of a 26-year controversy. Making charcoal from poor-quality timber and sawmill waste is a process that has changed little in centuries. The bark-covered slabs produced by ... first cut become the raw material for charcoal briquettes. Seasoned hardwood is sealed in an air-tight enclosure and allowed to burn with the barest minimum of air. Just like in a woodstove with the damper closed, the wood slowly turns to almost pure carbon as its lighter, more volatile components are driven off by heat. ...For years, making charcoal was one of the few sources of income for people in the Ozarks... Many independent kilns have been leased or purchased by the large corporations that produce and market charcoal briquettes.¹¹

9. July 24, 2001, <http://www.moenviron.org/ecochips.htm>

10. July 24, 2001, http://www.dnr.state.mo.us/magazine/2000_spring/from_the_hills_to_the_grills.htm

11. July 25, 2001, <http://www.ecodev.state.mo.us/mediastorage/column/TourismWeek.html>

How the future of lead mining, the chip mills, and charcoal plants will affect the economy and jobs in the Ozarks remains to be seen. The eastern Ozarks remains as one of the poorest areas of the state. Timber, minerals and tourism are the only natural resources. As in the past for lumber cutting, many of the important decisions that will affect the Ozark economy and the environment are being made by industries and organizations from outside of the region. It seems unlikely that the residents will have much of a voice in their future. A large proportion of Shannon and several adjacent counties have large proportions of the land owned by the state or federal governments or by held by private owners in large tracts.

The residents of these areas are for the most part working class people who are seeking jobs with reasonable pay and benefits. While many are concerned about environmental impacts, their first concern is to make a living. In the early days of the century, the only jobs were timbering and subsistence farming, if that can be called a job. Now with better highways and automobiles, prison jobs and other more distant jobs become viable alternatives. Often, it is not one job, but several sources of income that supports a typical Ozark household.

Truck Stops

The Tourism industry is a \$12.6 billion tourism industry in Missouri. Throughout Missouri, tourism creates about one in 14 jobs; generates more than \$574 million in state tax revenues; and, according to the numbers reported in 1999, brings more than 34 million visitors to the state.¹²

Until almost the 1980s, motels were built in larger towns or cities and so were most truck stops. Then developers found land was much cheaper to build very large truck stops and even a few separate motels and restaurants outside of cities but located at interstate exits. The truck stops that have become popular include a restaurant, perhaps a motel and a truck wash and a very large parking area. All of this takes a considerable amount of land for each truck stop. For truck drivers, there is less traffic to avoid when coming and going. A successful truck stop often attracts other tourist-oriented businesses. A large truck stop may create as many as 50 to 150 jobs for the package of businesses. These will be drawn from people residing in the area. Passenger car and truck drivers traveling through a strange area prefer to get off the highway at an exit where the services and the return to the interstate are all clearly visible.

Wright City on interstate 70 near St, Louis violated this principle when the interstate was being constructed. They decided to have an exit on one side of the City, but to get back on the drivers have to go along the service roads through the City for perhaps three-quarters of a mile. Not many successful highway businesses developed in the City. In contrast, Warrenton and Wentzville on each side of Wright City have easy off, easy on exits and have much more tourism development.

12. July 26, 2001, <http://www.ecodev.state.mo.us/research/pubs/flw/>

Fort Leonard Wood (Pulaski County)

Pulaski County is located in the center of the Missouri Ozarks, but in terms of population changes, it has a different drummer. When surrounding counties were going down in population, it might go up, and the reverse. The difference is Fort Leonard Wood, which employs 11,895 military and 2,018 civilian employees with an annual payroll of \$435,469,000.¹³ This does not count the ancillary jobs in the local economy. Decisions concerning what occurs at the Fort are made in Washington, D.C. by the Army and Congress and have very little, if any, relationship to what else occurs in the surrounding Ozarks. There is one unmeasured and immeasurable impact of the Fort and, indeed, most any military base. An active military training base such as the Fort has tens of thousands of people coming and going every year. These people do not stay on the base all of the time, but during off duty hours, many will travel into the surrounding towns and communities. When they do, they often bring new ideas and new behaviors with them.

When the Fort was first established, it was seen as a mixed blessing. It produced jobs, but some of the off-base behavior was not appreciated. Over the decades that the base has been in existence, the area has adjusted and accepted the military personnel. Today, it is seen as an essential part of the central Missouri Ozarks that produces a large amount of economic activity for the region. The growth of the Fort has been the primary result of the veteran U.S. Congressman Ike Skelton's continuing work on its behalf. He represents that district and is a senior member of the House of Representatives Armed Forces Committee.

Whiteman Air Force Base

Whiteman Air Force Base in Johnson County has an important impact on the County with its 3,174 military and 730 civilian personnel and a payroll of \$143,199,000, but it does not dominate the county population trends as does Fort Leonard Wood.¹⁴ It is currently the home base for the B-2 bombers. The location near Kansas City allows the impacts of the base to blend into the larger metropolitan region.

Construction Industry

Population growth creates jobs especially in the home construction industry. While mechanization such as nailing guns and backhoes has made construction workers more productive, it still takes a considerable amount of manual labor to build a house or a business structure. As a result, fast growing areas such as Branson, the Lake of the Ozarks and the suburbs of the metropolitan areas have had considerable demand for construction workers. Many part-time farm

13. *Ibid.*

14. Amy K. Glasmeier, *The High-Tech Potential: Economic Development in Rural America*, Center for Urban Policy Research, Rutgers, The State University of New Jersey, New Brunswick, 1991.

operators have good heavy equipment skills as well as skills to do carpentry and other construction trades.

Home Based Businesses/Day Care

The large percentage of women working outside the home, especially younger women with children, created a demand for day care for children in most rural communities. Home-based day care is common in almost every community. Missouri state law permits a person to keep up to ten children in their home without a state license. There are regulations home based day care operations have to meet, but these are not as restrictive as those for larger commercial day care facilities. Caring for children in the home has several advantages. If a woman has children of her own as most home day care operators do, she could stay at home with her own children. Caring for other children generates some additional funds for the household. Many parents seem to prefer home based day care rather than commercial day care facilities.

High Technology Industry

During the mid- and late-1990s, there was a strong bubble of interest in high technology.¹⁵ The thinking of the time was that the future belonged to the high technology industry. If an area could not attract high technology industry, its future was less than bright. The high technology bubble has quickly burst and the future now appears to be more balanced and more traditional. However, the future of rural Missouri is going to be influenced by the growth of high technology. Like most of rural America, rural Missouri is lacking in the basic infrastructure for participating in high technology. The access to broadband infrastructure is severely limited in most rural Missouri communities today.

15. August 3, 2001, http://www.census.gov/epcd/ec97/mo/MO000_62.HTM

Chapter 29

The People of Rural Missouri in 2000

Here is an overview of innovations affecting rural Missouri in 2000:

- Broadcast television is everywhere. People in the bootheel and in northwest Missouri have the same programs broadcast to them. Shows such as *Oprah*, *Larry King Live* and *Survivor* are the same in St. Louis, Kansas City, New York City or West Plains. Cable and satellite TV offer even more shows in most locations.
- Cell phones are available for use almost anywhere.
- The mass merchandisers cover the state, rural and urban. Home Depot and Lowe's are within driving distance of almost everyone. Even closer are the McDonalds, Pizza Huts, Taco Bells and other fast food restaurants. A Wal-Mart store, even perhaps a Supercenter, is nearby. A "factory outlet" shopping center is within easy driving distance of most of rural Missouri. A regional mall with dozens of stores is often less than an hour's drive away.
- Relatively good infrastructure, electricity, water and roads/highways are in almost all rural Missouri communities. The wired phone systems while not up to urban standards in many rural communities are considerably improved.
- Mobile (manufactured) homes with affordable financing are available throughout the rural areas of the state.
- The technology for individual home sewer systems such as septic tanks has improved.
- The household cash income has risen from off-farm employment, social security and other transfer payments to a level where most rural households can afford at least a minimal urban quality of life.

A Revolution in the Heartland

- The costs of mass printings have been greatly reduced, first through the linotype and more recently electronic technology. This has encouraged the publication of more specialized magazines¹, newsletters and “junk” mail.
- Most “rural” communities now have urban-style addresses as a result of establishing 911 systems.
- While information specific to rural Missouri is not available, a 1992 national poll of rural people found that alcohol abuse, crime, illegal drugs, loss of family farms and the loss of jobs were seen as threats to the future of rural life.² It is highly probable that Missouri rural residents would have reported the same five issues.
- Unfortunately, illegal recreational drugs are readily available and some are even grown/made in rural communities.
- The general consensus in the drug use literature is that the prevalence rate of substance abuse in rural settings at least equals, and in some cases exceeds, that seen in contrasting urban settings.³
- Alcohol is the commonly abused drug in rural communities. Forty percent of rural school children said they had at least tried alcohol by age 10.⁴

In summation, the mass culture lies like an invisible blanket over the entire state, rural and urban. We are so immersed in it that we never see it. We all:

- drive the same type of vehicles,
- wear the same styles of clothes,
- watch the same TV shows,
- eat the same types of food in the same types of restaurants, and,
- live in the same styles of houses.

1. *Specialized magazines/newsletters in general help communicate within narrowly defined communities such as llama growers, hound breeders, day lily growers, etc. For the most part, they do not help bring together locality-based groups. Some local school publications are exceptions to this general rule.*
2. <http://www.ncrel.org/sdrs/areas/issues/envrnmnt/drugfree/v1hobbs2.htm>
3. David Kearns and David Rosenthal, “Substance Abuse in Rural America” in Robert M. Moore III (ed) **The Hidden America: Social Problems in Rural America for the Twenty-first Century**, Susquehanna University Press, Selinsgrove, 2001, p. 154.
4. *Ibid.*

As one small example, cargo pants quickly became a clothing fad a few years ago in both rural and urban school systems and just as quickly disappeared. Wal-Marts and many mall stores featured them for a year and then moved on to the next clothing fad. Economic status (money) is more of a determinate of how we live and behave than is place of residence, rural or urban.

With that background, it is not surprising to find that the following are becoming the same as or very similar to urban figures:

- family size,
- divorce rates,
- percentage of women working outside the home,
- death rates (adjusted for occupations and incomes)

Let me repeat a comment made at the start of this book: There still exist some social differences between some rural communities and some urban communities. There are larger social differences within most metropolitan areas and within most rural regions than there are between metropolitan/urban and rural communities in total. Old Order Amish, Mennonites and a few other faith-based groups who maintain a unique life style are exceptions to these conclusions.

Rural Cultural Regions of the State

I started the book by looking at four major cultural areas in the state: the Ozarks, the Germanic area in the northern Ozarks, southeast Missouri and central west/northern Missouri that was by far the largest region. Do these divisions make sense today? Are people who reside in each of these substantially culturally different from those in another region? If these are not the best, are there others that make more sense? My answer to the last question is: well, yes and no. The old areas in some cases do still contribute, but in other instances they are misleading. Let's try to sort it out⁵.

The North and Western Agriculture Region

It is in this region that the full impact of the changing structure of farming is seen. The population of the region was 1,074,405 million in 1900, but had declined to 773,611 in 2000, a 28 percent loss. The number of farms went from 141,799 in 1900 to 43,105 in 1997. Only one farm out of three survived. These are very dramatic numbers that clearly reflect the farming revolution of the last century. These gross numbers do not reveal that a vast majority of those remaining farms are part-time or residential farms. Atchison and Chariton counties still retain strong agri-

5. Chapter 24 includes a total view of population changes in the state.

cultural bases. In most of the other counties, farming contributes a small percentage of the total income (under 10 percent). Interestingly, transfer payments such as social security contribute much more than agriculture in most of these counties.

In total, ten north Missouri counties did not gain population between 1990 and 2000. The ten shared two characteristics. First, they are remote, away from major job centers and their economic base depended heavily on farming.

The continuing out-migration for most of the century of the young people has resulted in older populations. Several of the smaller towns in north central Missouri have one-fourth or more of their residents who are 65 years of age or older. The remaining farm operators have a median age in the upper fifties. While the recent population gains in some of the growing counties will help to restore a more typical age distribution, it will take considerable time.

Interstates 29 and 35 going north and northeast and Interstate 70 going east and Highway 71 going south from Kansas City have extended the convenient commuting distances for employment in Kansas City. In the last decade, Premium Standard has created a considerable number of jobs in Sullivan County where a pork processing plant is located (See map below. Sullivan is the county colored red in north central Missouri and is surrounded by white and yellow shaded counties).

The results of the commuting are reflected in the household incomes. Lafayette and Clinton counties, both within easy commuting distance of the Kansas City metropolitan area, have two of the highest average incomes.

Several new prisons scattered across the region have added a considerable number of jobs and helped to stabilize populations.

The Ozarks Region

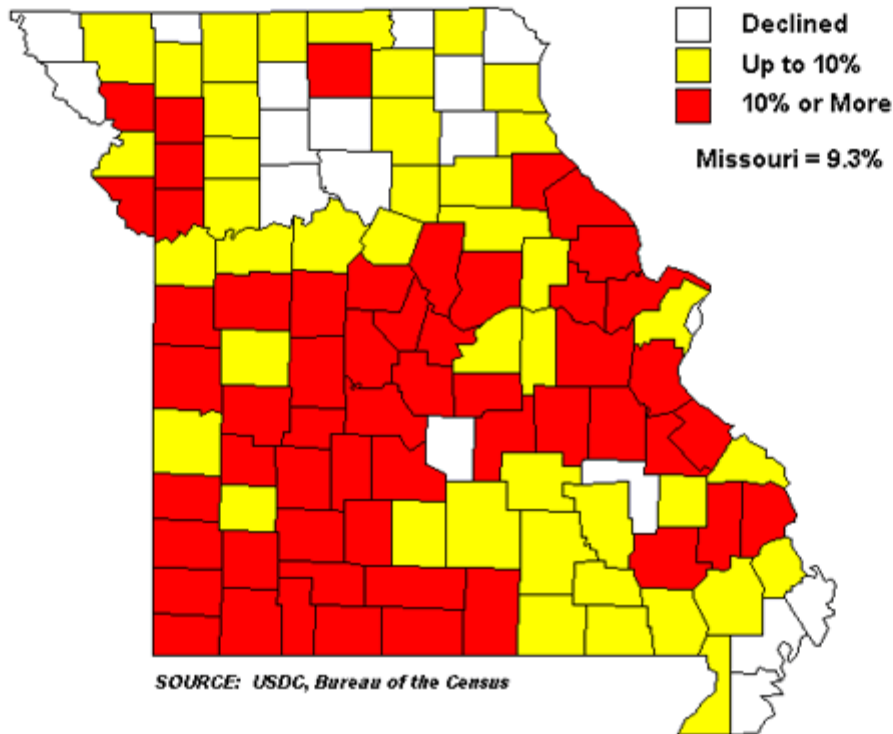
The Ozarks' population has increased 56 percent in the last century. Some of this growth has been in towns, but a large proportion has been in the open country. The Ozarks were also entirely "rural" in 1900, but about three-fourths were rural at the turn of the 21st century.⁶ The movement to the open country has been primarily during the last 20 years.⁷

The Ozarks are not homogeneous as to population change. The eastern Ozarks are slow growing and one mining county is losing population. The western Ozarks, including the Branson area, Lake of the Ozarks, and the greater Springfield area have had much higher rates of

6. *This is an estimate. The U.S. Census Bureau has not released the 2000 rural data.*

7. *This is somewhat misleading. If a town had a population of 2499 in 1900, it was included in the rural category. If it were 2501 in 1980, the 2501 people were removed from the rural category and put in the urban category.*

Percent Change in Population, 1990-2000



growth for several decades. The Ozarks should be divided into two sectors: eastern and western. I will examine what differences that makes in the next chapter.⁸

One surviving characteristic of the Ozarks and to somewhat lesser extent the other rural communities is what can be called the non-cash economy of trading, bartering and sharing. A very substantial proportion of the economy of many Ozark households never shows on the official records because there is very little or no cash that exchanges hands. For example, if one person has firewood and another has a surplus beef calf, the calf may be exchanged for the firewood. Or a person may work for another and take his pay in products such as fruit from an orchard or hay. No paper contracts are made for such exchanges. A person's word is his bond. If he violated the verbal contract, word would get around and that person would not be offered another chance. Sharing is most common among relatives and would include freshly butchered meats, fruits and vegetables, clothes, furniture and any other "surplus" items. It is important to note that most of the bartering and trading is done among the "natives" and not with the newcomers.

8. For an interesting and very readable discussion of life in the Ozarks in the 1950s, read Leonard Hall, *A Journal of the Seasons on an Ozark Farm*, University of Missouri Press, Columbia, 1980.

Southeast Missouri

The southeastern Missouri population increased by 65 percent in the last century. The largest population in Southeast Missouri was around mid century. Since then the population has been declining, rapidly in several counties. Much of the growth that has occurred has been in towns where some industry or a gambling casino has located. The "Bootheel" was entirely rural in 1900, but about slightly more than one-half rural at the turn of the 21st century.

The southeast is still a very distinctive sub-culture. In some ways it has made a complete circle. Before the land was drained, the most common crops were corn and wheat, much more like a midwestern corn-belt farm. After it was drained, the crops and the culture became southern sharecropping cotton. Now, the crops are a combination of corn, soybeans, wheat, rice and cotton, and the culture has changed somewhat. The fields are tilled and harvested by day workers driving large machines, tractors, combines, cotton picker, etc. Water for irrigation in the dry years is available just a few feet below the topsoil. Much of the farm consolidations occurred between 1974 when the average size of farm was 393 acres and 1997 when the average jumped to 739 acres, almost doubling in 23 years.

The phrase "rich lands and poor people" has been used to describe southeast Missouri. The average income is the highest for any rural region of the state, but the number of people with incomes below the poverty line is high also. Much of the low-income housing is substandard. The number of landowning and operating farm operators is relatively small and the average size of farms is large. These people have large incomes, with some of the farms reporting annual gross incomes of well over \$1 million dollars. A considerable number of the descendants of the sharecroppers, mostly African Americans, still live in the small towns. These work at the day jobs available during the farming season. A few factories, power plants and a gambling casino are located in the region and provide some job opportunities. Thus far, most of the region has been excluded from the full impact of the welfare reform act. The counties have not had to achieve the same proportional reductions in the numbers of welfare cases. In other words, there are more people currently on TANF (the new name for welfare) than would be permitted than in say, Jefferson City.

In recent years, Hispanics have been brought into the region as migrant workers, primarily to an increasing the horticultural industry. A considerable number have settled permanently in the region.

The Germanic Region

It is very questionable whether the Germanic region in the northern Ozarks should remain a separate region. The suburbs and urban sprawl around the St. Louis metropolitan area have reached well into the old region. The town of Washington does retain bits of the Germanic culture, but it is in most ways a suburb of greater St. Louis with much commuting for employment. On the western side, similar urban growth around Jefferson City has created new

patterns. There are still pockets of strong Germanic influenced culture such as around Herman, Vienna, etc., but not the former contiguous region stretching along the Missouri and Mississippi Rivers. Even in these areas, non-Germanic people who have moved into these areas have diluted the Germanic influence and, more importantly, these areas, like the remainder of the state, have been submerged by the mass culture. The Germanic culture may be used more today for nostalgia than for everyday use. An example of this is the October Fest in Hermann that has developed into a major tourist attraction.

From a demographic perspective, the population of region almost doubled during the century and became more urban.

Old Order Amish

The Old Order Amish and Mennonites migrated into Missouri over a period of several decades.⁹ Of the present settlements, Bowling Green, established in 1948, is the oldest. Families from Iowa established the Clark and Jamesport settlements in the early 1950s. The numbers of Mennonites and Old Order Amish have both been increasing in rural Missouri. The families are usually large and families have been migrating to Missouri from Iowa, Ohio and other eastern states to take advantage of the relatively lower priced farmland. Also, the regulations concerning schooling are more rigid in other states than those in Missouri.¹⁰

The Amish form separate local church districts that are the decision-making bodies. The districts are scattered over the state. Each Amish church district was established at a different time. There is no one Amish area, but several in the northwest and northeast regions of the state. The same is true for the Mennonites. They located in southwest and south as well as north Missouri.

Changes in African American Populations

Ancestors of many of the African Americans in rural Missouri were brought from the southern states of Kentucky and Tennessee into Missouri in the early 19th century as slaves to work on tobacco farms. After the Civil War ended and the slaves had their freedom, many moved into the small towns¹¹ adjacent to where they had lived as slaves. The slave holding areas formed a region sometimes referred to as "Little Dixie". The region ran along the north side of the Missouri River from St. Joseph to St. Louis, north to Hannibal and south to Cape Girardeau. However, the conditions in these small communities for African Americans were grim. There was discrimination in almost every aspect of life, segregated and poor quality housing, poor employment, poor schools, poor justice, even lynching, etc. As a result of the lack of opportu-

9. *The Old Order Amish and Mennonites are both conservative Protestant religions with strong German heritages. Both wear clothes that are distinctive, but the Mennonites will use more "modern" practices such as automobiles—usually black colored only.*

10. *July 8, 2001, <http://www.missourilife.com/dest001a.shtml>*

11. *Some of the migration was involuntary because some former owners refused to hire (pay) the former slaves.*

nities in the small towns for the next 140 years, there was a steady out-migration of African Americans, especially of the young people. When their education was completed, the young people moved to the larger cities such as Kansas City, St. Louis, and Chicago, looking for better conditions. The out migration was almost constant during the 20th century except for some depression years in the 1930s. The rate of out-migration of African Americans was reduced in most "Little Dixie" communities in the last decade. There was some in-migration in some communities as people in the inner city and poor regions of the Mississippi delta searched for better opportunities. In southeast Missouri, Cape Girardeau and Sikeston gained African American population as people moved from the smaller communities into these larger towns.

Today, the work opportunities for the African American population are dichotomous. For people who had a good education, the opportunities, especially in the public sector, are much better than in previous times. This is not meant to suggest that prejudice in the work place is not encountered on occasion. Indeed, Missouri rural culture still includes considerable racial prejudice. Those without education or good job skills are likely to find their employment opportunities limited to traditional low paid service occupations.

Despite the racial prejudice in most communities in the early part of this century, there were several African American farmers in some of the "Little Dixie" communities. In addition to the normal problems that white family farmers encountered, the African American farmers had to deal with discrimination in many USDA programs and unfair treatment by many local lending institutions. As a result the number of African American farm operators declined even more sharply than the number of white farm operators. By the turn of the 21st century, the number of remaining African American farm operators was very small.

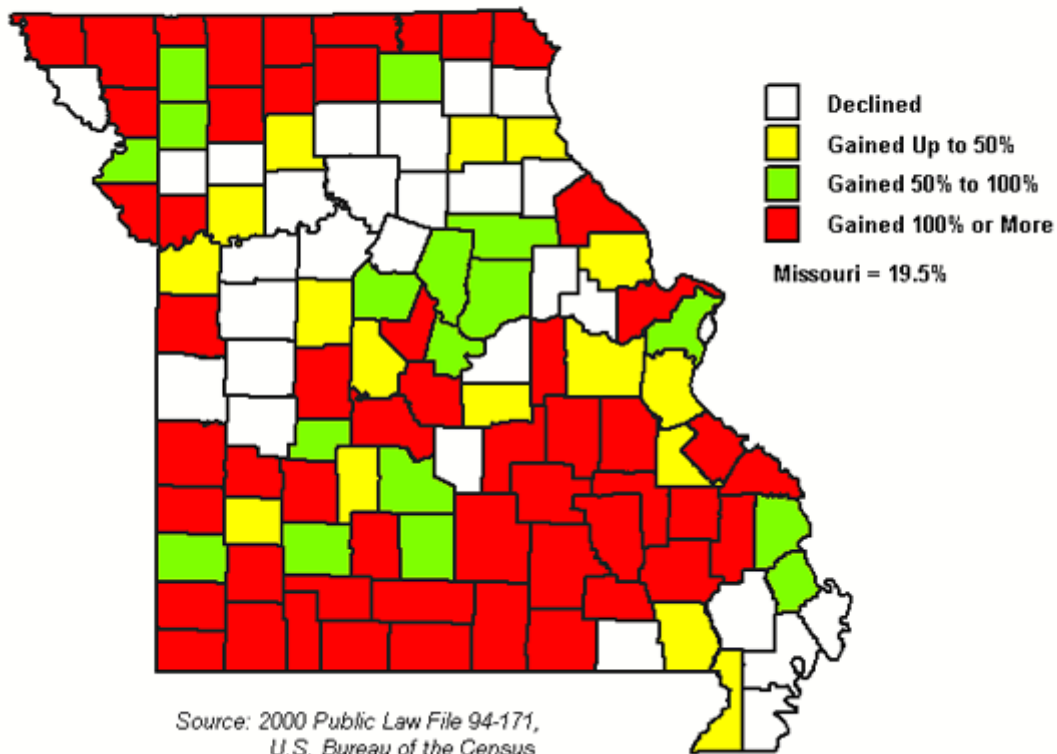
As a result of the long negative history of African Americans with agriculture, colleges of agriculture have difficulties in recruiting African Americans to enter their programs. The negative associations start with the slavery period. These were reinforced by the sharecroppers' experiences and finally, by the continuing discrimination against independent African American farm operators.

During the first half of the century, when overt racial discrimination was common, there were some efforts by African Americans to make rural areas more hospitable for African Americans. These included "Lake Placid" in Morgan County built in the mid-1930s and "Colored Picnics," often held on August 4th.

The following map must be interpreted with care because the numbers of African Americans in many counties was very small in 1990, thus an increase from two to four people is a hundred percent increase. These small numbers are found in extreme north Missouri and the Ozark region. ¹²

12. July 22, 2001, <http://osedamissouri.edu/thematicmaps/mo2000/population/pchgblk.gif>

Percent Change in African American Population 1990-2000



Changes in the Hispanic Population

Up until the last decade the only Hispanic community of any size was in Kansas City. This changed as a result of recruitment of Hispanics by employers for work in Missouri. The first employers to do this were the operators of the meat processing plants. The poultry, pork, and beef processing plants originally hired from the local labor force. However, the recruitment of local workers did not fill the plant's labor needs because of the harsh working conditions and low to moderate pay scales of the plants. Tyson, Cargill, Premium Standard, and other companies have recruited Hispanics for their plants in other states for some time. Starting in the early 1990s, Hispanics were recruited to work in poultry processing plants in southwest Missouri. Recruiting Hispanics for plants in Sedalia, California, Milan and Marshall quickly followed.

The tourist industry also has turned to Hispanics for employees. The next communities to see increases in Hispanics were Branson, the Lake of the Ozarks and Columbia where employers in the recreation areas hired Hispanics for service jobs such as waiters and housekeepers. Construction crews of some firms were filled with Hispanic workers.

The numbers increased dramatically in several counties. In 2000, the Census of Population reported a total of 118,592 Hispanics in the state. Of these, Jackson County (Kansas City) had

the largest number with 35,160. Outside the metropolitan areas, Pulaski County (Fort Leonard Wood) had the largest with 2,404 followed closely by McDonald County 2,030. The people coming to McDonald County and several other non-metropolitan counties were looking for employment (Barry, Cape Girardeau, Cole, Dunklin, Johnson, Lawrence, Pettis, Saline, Sullivan and Taney; all had over 500 Hispanics in 2000). At about the same time, Hispanics became part of the migrant labor stream coming into southeast Missouri to work on the horticultural farms.

After being recruited to come to Missouri for meat processing or similar jobs, the Hispanics are moving on their own into other occupations and other communities. Many of the Hispanic immigrants took the jobs as a means of making enough money for a better start in their home country where they plan to return.¹³ In the first wave of immigrants, many did not stay very long. But most are here as permanent residents and are starting to learn English, buy homes and become part of their communities.

About sixty percent are from Mexico and the remainder from Panama or other countries. The immigration was not directly to Missouri from the other countries, but most came from here from Texas and the Southwest.

Thus far, the receiving communities and the immigrants have coexisted without significant problems. While I have heard negative comments concerning the newcomers, grumbling has been limited. In some communities groups have been organized to welcome the immigrants. Jefferson City has worked at welcoming the newcomers more than other communities. Churches took the primary lead in facilitating the individual and community adjustment processes. The lack of English language capability was the greatest barrier to rapid adjustment to the new environment. This is most acute in health care and education. Eighty to ninety percent of the migrants speak little or no English when they reach Missouri. This drops about ten percent per year of stay in Missouri. A few, especially older people, will never gain much skill in English, but they will depend upon their children and friends for help.¹⁴

The "Urban Sprawl Regions"

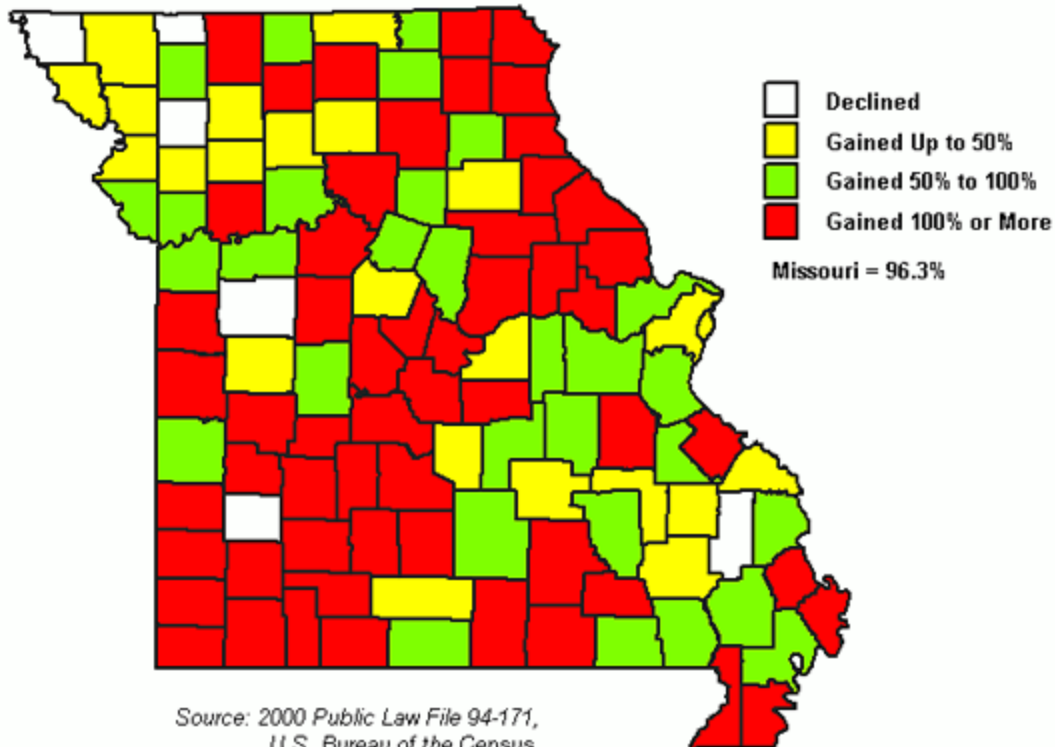
The regions of the state (west and north Missouri, the Ozarks, Germanic and southeast Missouri) don't explain most of the variations in rural Missouri communities in 2000. The movement of urban residents further and further out into formerly "rural" communities is probably the strongest force for change in rural Missouri today.¹⁵ When an older suburb becomes "con-

13. *This is very similar to the patterns found in the Polish and other immigrant groups of earlier periods. A few did return to their old country, but most stayed and made their homes here.*

14. July 22, 2001, <http://oseda.missouri.edu/thematicmaps/mo2000/population/pchghisp.gif> The map must be interpreted with care because the numbers of Hispanics in many counties was very small in 1990, thus an increase from one to two people is a hundred percent increase.

15. Peirce Lewis, "The Urban Invasion of Rural America: The Emergence of the Galactic City" in Emery N. Castle (ed.), ***The Changing American Countryside: Rural People and Places***, University of Kansas Press, 1995.

Percent Change in Hispanic Population 1990-2000



gested," families move out to the next ring. Because the land areas become geometrically larger moving away on a radius from the metropolitan center and the population increases arithmetically, the population sprawl becomes less dense as the edge moves outward. Generally, this has been referred to as "urban sprawl". The land area taken by the sprawl that is large. Between 1982 and 1997, for the entire nation an area larger than the state of Indiana was consumed by sprawl.¹⁶

In addition to ex-urbanites moving to the country, a very large percentage of what were full-time family farmers became part-time farmers and full-time commuting workers. The same is true for former full-time homemakers. The mechanization of the home, the reduced family size and the easy availability of prepared foods facilitated the women taking paid employment. Peaceful country roads will suddenly come alive from about 5:00 to 6:00 AM as the residents depart for work a considerable distance away. The process is repeated in the late afternoon when workers return. Farming is done in the evenings and especially on the weekends.¹⁷ During normal working hours, the rural communities, like their suburban cousins, are relatively deserted except for retired people. Only the occasional farm operator labors in the fields. In

16. *The Wall Street Journal*, August 1, 2002.

17. John Herbers, *The New Heartland: America's Flight Beyond the Suburbs and How It Is Changing Our Future*, Times Books, 1986, pp. 79-88.

many ways, driving through a rural area during the day is very similar to driving through a suburb. There is not much going on.

The highest concentration of exurbanites is found in the ring of counties adjacent to the major metropolitan regions, Kansas City and St. Louis. These patterns of migration of exurbanites follow the transportation routes such as the interstate highways to the state highways and finally to the paved former farm-to-market roads.

Lower levels of sprawl can also be found throughout the state near any town of significant size¹⁸. Even in predominately agricultural areas, sprawl is evident. I looked at changes along paved farm-to-market roads more than fifty miles away from any metropolitan area and found that small tracts (less than 40 acres) had doubled in numbers in slightly more than a decade.

One of the differences between traditional rural people and today's "rural" residents is how they describe distance. The traditional rural way was to use miles, i.e., "we live about 10 miles east of town" while the new "rural" person thinks in time/distance, i.e., "it is about 15 minutes to where I work". Both make sense in different ways; for a person accustomed to the common one-mile grid system used in most rural communities, the thinking in miles is almost automatic. For a person accustomed to driving in urban areas where the speed limits and driving conditions and road conditions varies widely, time is a better measure of travel.

The attraction that rural areas have for ex-urbanites is complex and multifaceted. The American folkway has always had negative images of large cities. They were viewed as cesspools of crime, and disease. More recently, air pollution and bad schools were added to that list. While it is very difficult to measure, "white flight" was a cause in earlier times of people moving to the suburbs and, perhaps is a cause for the movement to the country today.

In contrast, rural communities have long had a very positive image. The air is clean, the people honest and hard working. The popular Currier and Ives prints portrayed the country life as ideal. Today there is a very strong belief that living in rural Missouri is desirable—not as desirable as living in the mountains or on the seacoast, but the best that Missouri has to offer.

The urban sprawl process consists of a farmland owner selling off property along paved roads in lots that vary from 1 to 40 acres. The most common size seems to be in the 5 to 15 acre range. If the demand is great enough, a small subdivision may be created, most commonly with gravel streets and very few other amenities. Most farm operators are cash poor and land rich. If an offer is made for a small acreage of land at a price substantially higher than its agri-

18. *My former home county was Barton, in southwest Missouri, with Lamar as the county seat. This is a one traffic light sized town (about 3,500 population). On several of the paved roads leading away from the town limits, new houses have been built for the last ten years. The older part of the town is declining in population. This pattern of loss on the inside and growth on the outside is very similar to what has been seen for several decades in the large cities. The construction of a Wal-Mart store on the edge of town led the way for the movement of businesses away from the old shopping area around the square.*

cultural value, the temptation is great to sell. When generations change, often the need for money to pay estate taxes will force the heirs to sell land for the highest prices and most of the time this is for non-farming uses.

I examined ten Missouri rural counties in detail to see the patterns of sprawl. One example, Caldwell County, is about 50 miles from Kansas City. I-35 runs diagonally through the county. In twenty-five years, the numbers of small tracts (less than 40 acres) has increased 125 percent.¹⁹ The traffic on the local highways has more than doubled also. Many people are commuting into Kansas City or its suburbs on a daily basis.

The Ex-urbanites

The migrants to rural areas are heterogeneous from a socioeconomic perspective. They can be divided into four categories.

Highest in terms of wealth are the people in their 40s or 50s who want to build their own special trophy home. 5,000 square feet of living space, with four to six bedrooms, at least that many bathrooms, and a three-car garage is a minimum starting size. Often these are located on the shore of a man-made lake with acres of manicured lawns, a stone/brick gateway and an electronic gate. These people are not likely to be interested in participating in the local neighborhood. Their friends are likely to be other “conspicuous consumers”. Why have a house like that if you can’t show it off? Often these houses are a challenge to realtors to market after the generation that built them is gone. If a person wants a trophy house, they don’t want some one else’s trophy. This is not true if the trophy house belonged to someone with a public reputation such as an ex-governor, a sports star, or the CEO of a major corporation.

The largest group of migrants is the middle class families who are looking for what they define as a high quality life style for themselves, but especially for their families. A “safe” environment for the children is often high on the list of their reasons for moving. Most of these are in their 30s and 40s with children. They want an urban material quality of life with what they perceive as a “rural” life. This is usually defined in terms of “amenities” (hills, trees, etc.) and not traditional rural social interaction. Many of these are likely to be active in the PTA and other local organizations and actively push for improvements in the community such as schools, roads, etc. These people know and want high quality local services and may be willing to pay higher taxes to get them—much to the chagrin of the natives who want lower taxes.

The working near poor is next. Many of these are natives who move from rental house to rental house with considerable frequency.²⁰ These often hold jobs in the service industries where they work as housekeepers, cooks, or clerks. The percentage of this group who participate in organizations and vote is relatively low. Their incomes are limited. Many of the jobs in which they work are seasonal. A housekeeper in a resort may have employment for only eight

19. <http://www.ssu.missouri.edu/publications/policy/1997/campbell.htm>

months per year. If their rate of pay was eight dollars per hour,²¹ the total yearly income would be in the \$10–12,000 range. Even if there are two wage earners in the household, with two children, the household total will be slightly above the poverty line. Often their home may be an older model manufactured home parked in the trees with several older cars and trucks in the yard. Many retired people living on social security checks alone or on a similar fixed income will be in this category. Because of the fixed income of the latter group, they oppose any attempts to raise taxes.

At the bottom of the economic ladder is the non-working poor who may have been on welfare, are disabled, or for other reasons cannot find or hold a job. The numbers are greater in most rural communities than most people realize. This population is almost “invisible” in terms of community participation. The quality and variety of social services available in most rural communities is limited. Thus, these people often find themselves at the fringes of the communities without adequate support. They are forced into a position of taking whatever housing and social services are available. While there still exists a myth from the past about rural people helping each other, today, charity from churches and civic groups is likely to be limited to food baskets at Thanksgiving and Christmas. On the positive side, if a person is on a fixed income, the housing costs are less for the same quality housing than in larger towns and cities. Also, the neighborhood probably will have less crime than a low-income metropolitan area.

The relative balance in a community between the four groups varies widely from one community to another. The wealthiest have first choice of places of residence, the middle income second and the lower groups have last choice. The top groups will chose places with good transportation and good amenities. This means that low income groups are relegated to the back roads, the more distant places, or places with poor amenities, i.e., near landfills, hog farms or similar places.

20. Often when in-migration occurs, the average income goes up and the assumption is made that the community has been improved. This is usually not the case. The lower income people are still there with the same poor incomes, but because higher income people have moved in, the average has been raised. Often the lower income people become almost invisible. The property that they can afford is often located on the back roads where it is less visible to the average person.

21. This would be higher than the average at the current time.

Chapter 30

Open Country Institutions and Infrastructure—2000

To be viable, a community must have something to hold it together, something that encourages people to come together and work for a common purpose. A community is not merely a collection of houses with a name. A housing subdivision with a name and a gateway entrance may be, but usually is not, a community. There must be some common goal that holds the people together in interaction with each other. A school is an example of such an institution. Churches may serve as a focal point for a community. This will depend upon the church, its board, and the size of its membership. A community goal such as new water or sewer systems may help pull a community together (or apart, depending upon the leadership). Sometimes an outside threat such as a proposal to build a landfill, super highway or dam may bring a community together at least for short time.

Rural Schools

The only “rural” schools that exist today are consolidated schools. However, there are many small-consolidated districts located in rural areas of the state. How different are they from their larger urban cousins? The results of the research are unclear, as described in the following summary. However, many rural schools do face some special challenges.

Despite variability among communities, research does point to characteristics that are more common in rural areas than elsewhere and affect educators' efforts to involve parents. It is not clear, however, that rural communities are any more or less likely than urban or suburban ones to involve parents in the educational process. Research provides conflicting findings. A study of 296 schools in Missouri (Sun, Hobbs, & Elder, 1994), for example, found that parent involvement was higher in rural than in urban communities. In contrast, findings from a large national survey of eighth-grade students suggest that parent involvement tends to be higher in urban and suburban communities than in rural communities (National Center for Education Statistics, 1994). Johnson (1990), by contrast, found that suburban parents from middle- and upper middle-class communities were the most involved.

Even if parent involvement is more prevalent in rural than in urban and suburban schools, rural educators may still face special challenges often associated with rural life. Among these challenges are isolation, poverty, and lack of job opportunities. Isolation restricts rural schools and communities from making use of urban-based resources that might enhance educational programs--museums, research libraries, and colleges and universities (Capper, 1993). Furthermore, the poverty of many rural communities limits parents' ability to provide for their children and to augment their children's education with resources in the home. Finally, the lack of job opportunities makes it harder for rural students to see any financial benefit to attendance or success in school (Bickel & Lange, 1995).

These circumstances lead some educators to conclude that rural families place a low value on the education of their children. This conclusion gains support from the finding that rural parents have lower educational attainment than their urban and suburban counterparts. As the argument goes, parents who lack personal experience of education beyond basic skills often fail to see its importance for their children. Further, they may feel intimidated by school procedures and expectations (Capper, 1993).

However, other evidence demonstrates the high value that rural residents often place on their schools. Not only do they view schools as a central focus of community life (Herzog & Pittman, 1995), residents in many rural areas support their schools with higher tax rates than those imposed in urban and suburban districts, where property values are higher (Stern, 1994). Educators can draw upon this community support to expand parent involvement programs in rural schools. In some rural communities, such programs have mobilized residents to work toward the combined revitalization of schools and rural economies (Miller, 1995).¹

There is a pattern in high school dropout rates. High school dropouts result from a combination of parental, school and community characteristics, such as the availability of jobs for young people. The lowest rural dropout rates are found in northern Missouri (Chariton in north central and Worth in extreme north Missouri had 0%). The jobs available for teenagers in these counties are very limited; there are a few jobs in fast food establishments and not much more. The rates were higher in the Ozarks and southeastern Missouri.² The highest rates in the state were in the inner cities.

One clear pattern is the increased homogeneity of curricula across the state, large schools and small, urban and rural. Many argue that this uniformity is good because all graduates go to col-

1. August 1, 2001, <http://www.ael.org/eric/digests/edorc973.htm>

2. <http://oseda.Missouri.edu/step/vol4/vol4-2.html>

lege with equal preparation. The other side argues that such uniform curricula ignore the local setting, history, and culture.

Mass society is affecting schools as much as any other part of rural life. The following gives an excellent example of how this is occurring.

What happens when kids are held captive to an endless stream of MTV-like television commercials? Armed with a tape recorder, Roy F. Fox, a language and literacy researcher, spent two years interviewing over 200 students in rural Missouri schools. Why? Because more than eight million students in 40% of America's schools, every day, watch TV commercials as part of Channel One's news broadcast. Students read commercials far more often than they read *Romeo and Juliet*. These ads now constitute America's only national curriculum.

...Fox explores how these commercials affect kids' thinking, language, and behavior. He found that such ads do indeed help shape children into more active consumers. For example, months after a pizza commercial had stopped airing, students reported that one brief scene showed a couple on an airplane. The plane's seats, students noted, were "red with little blue squares that have arrows sticking out of them."

Also, kids "blurred" one type of TV text with another, often mistaking Pepsi ads for public service announcements. Kids "replayed" commercials by repeating or reconstructing an ad in some way--by singing songs, jingles, and catch-phrases; by cheering at sports events (one crowd at a school football game erupted into the Domino's Pizza cheer); by creating art projects that mirrored specific commercials, and even by dreaming about commercials (the product, not the dreamer, is the star).³

In sum, a school may serve as a force to bring a community together. High school sports teams such as football and basketball serve this purpose in many communities. However, the communities formed by such attractions are often loose and without very close interactions. These probably serve as communities for identification purposes but not much more. Indeed, some consolidated school districts are so large geographically and without a core in the form of a central town, that they do not represent a community, but rather may contain a number of smaller communities or no communities.

Churches

The churches in rural areas have survived almost a century of population decline, while the numbers of churches have remained the same. In several cases, the churches may have

3. August 1, 2001, <http://info.greenwood.com/books/0275971/0275971015.html>

changed denominations. The University of Missouri Department of Rural Sociology has been doing research on rural churches in the state for about fifty years. The following are some of their conclusions.

The churches identified in 1997-99 (in the sample areas) numbered 415. This was down from 493 in 1982. Back in 1952 there were 505 congregations. Given the fact that some congregations were formed during the period since 1952 (the researchers have found as many as 672 different congregations in the 99 townships across the second half of the 20th century), it appears that more than 100 churches, or about one in five, that were in operation in 1952 have disbanded, moved, or been merged...The total number of Mainline Protestant (Methodist, Presbyterian, Lutheran, Disciples, Episcopal, and United Church of Christ) and Roman Catholic churches/parishes (not including Southern Baptists) in 1952 in the sample townships was 214. Southern Baptists had 123. The remainder (169) were classified as sectarian. The most current study found that Southern Baptists now have 125 congregations, after some expansion in the 1967 and the 1982 studies. So, they end the century with a stable picture. The Mainline Protestants have far fewer congregations. The Roman Catholic closed some and opened others, so they lost only two net.(17 to 15). The sectarians formed many new congregations, but they also saw many close. So, in general, they too experienced a net loss of congregations.⁴

The stereotype that many people hold about rural communities and churches is that they are in a state of decline. Our findings challenge the stereotype. I have found that rural communities are very diverse: there are greater differences among rural communities than there are between rural and urban areas. Because of this diversity, rural churches operate in a variety of contexts, and thus, there is no one "rural church" or one best way of "doing church." The case-study stage of the study has helped us to conceptualize a typology based on three kinds of church membership (declining, stable, and growing) and three kinds of township populations (declining, stable, and growing), ...

For example, only 45 churches out of 402 churches, or about 11% of the sample, were included in the declining-church/declining township category. Even in townships with declining population (almost 40% of the sample), we found stable and growing churches. Thirteen percent of the total sample was made up of stable churches in declining areas and 15% of the sample was made up of growing churches in declining areas. Conversely, even in areas of population growth, there are churches with declining memberships. Five percent (n=20) of the sample was made up of churches with decreasing membership in areas of population growth.⁵

4. August 1, 2001, http://www.seorf.ohiou.edu/~xx042/r_ctr/mostudy4.htm

The rural church has its challenges though. "Because many rural congregations are small, it is difficult to afford a full-time minister, but that is the dominant model," said Jere Gilles, the project's coordinator and an associate professor of rural sociology at MU. "The supply and preparation of ministers and reliance on an aging population seem to be some of the greatest challenges to Missouri's rural churches."⁶

Many of these churches attract specific small groups, such as lower or middle-income groups with very specific beliefs. As such, they are not likely to represent a force to form a community. The larger churches may serve as a core for a community. Some of the Roman Catholic churches in the Germanic area may serve this purpose.

The Ozarks, which are often called the "buckle in the Bible belt", has been the site for several religious cults. Some of these have been "right wing" extremist groups with strong prejudices towards African Americans and Jews, while others have been very "liberal" communes. In some ways, the Ozarks are a "live and let live" sub-culture as far as religions are concerned.

Rural Health Care

There remain major gaps between rural and urban health care systems. Rural health has not improved to the extent of major health care centers located in metropolitan centers. The high quality contemporary health care requires highly trained specialists and expensive equipment. Many rural areas with lower incomes and lower density populations have not attracted the facilities to provide the best care. The Rural Policy Research Institute (RUPRI) assembled a distinguished panel of national rural health policy experts in 1995 to support national policy makers. This is a summary of their findings.

Pace of Change

- While there are some examples of rural employers either creating or negotiating with managed care plans, overall there is only limited activity of this type in rural America.
- A handful of health maintenance organizations (HMOs) have a long history of activity in rural areas; but there have been very few initiated in recent years.
- State government initiatives to create managed care plans for Medicaid beneficiaries could result in more managed care in rural areas, both in anticipation of implementation and after such systems are initiated.

5. August 1, 2001, http://hrr.hartsem.edu/org/faith_congregations_research_rurchrch.html

6. August 1, 2001, <http://2kj.com/sunday/ruralchurch.html>

A Revolution in the Heartland

- A common reaction of rural providers to potential pressures to develop managed care products is to focus on the development of delivery networks.
- There is very little use of managed care by rural Medicare beneficiaries.
- Efforts to save money and expand access to insurance by using purchasing alliances among small employers have only recently begun, and their impact cannot yet be assessed.

Change and Local Resources

- Competitive market forces can benefit rural residents if plans compete on the basis of having services conveniently available; conversely, if competition is based solely on economies of scale, rural residents could be forced to travel farther for basic services.
- Increased competition for primary care providers to work in managed care systems creates additional uncertainty for communities already having difficulties recruiting and retaining primary care providers.
- A few states are using the purchasing power of state employee plans to encourage wide availability of managed care plans in rural areas.⁷

In sum, rural people are less likely to have health insurance and are less likely to have easy access to good medical facilities. However, as the practice of medicine uses more and more capital intensive technology, the possibility of rural communities, with their smaller populations and lower incomes, having improved service is limited. Rural populations will have to commute to larger towns to obtain the best health care services. Nursing homes and other health care services in rural communities that require close personal care may provide a higher quality of service than those in the cities. This is the result of the close personal nature of rural communities.

Emergency care in rural communities will continue to lag behind most metropolitan areas. The matter of time is important in emergency care. If the residence is fifteen miles away from emergency care facilities such as ambulances, there is no way that EMT personnel can reach a person in the critical four minutes after heart seizures before permanent brain damage occurs. Even in cities where the nearest EMT personnel may be a short distance away, this is very difficult.

A personal note: this book has been written during the time I was having a mitral valve in my heart replaced and a pacemaker installed. The treatment was done in the facilities of the MU teaching hospital. I can only speculate about what would have happened if I had to depend on

7. August 1, 2001, <http://www.rupri.org/pubs/archive/old/health/P96-2.html#Executive>

a small rural hospital as my parents did. I fear the results would have been very different. Certainly, if this were 1900, there would have been no options.

Local Governments

As exurbanites move into rural communities, their expectations for public services do not change very much, if any. They expect police protection, fire protection, good roads and all the other things they were accustomed to in their urban places. However, as discussed earlier under sprawl, costs are higher to provide the same level of services to lower density populations. Local governments are caught in a squeeze. The newcomers want good quality public services. The natives are used to poorer quality services and lower taxes and will normally resist attempts to increase services and taxes.

The size of the population of a local community affects both the kinds of services that can be provided and the nature of civic life...many very small local communities cannot provide for their own police and fire services, schools and libraries, or sewage and trash disposal systems. These small communities often join with other nearby communities to share these services, or they contract with state or county government to provide them.⁸

In Missouri, some rural communities have cooperated on sewers, fire protection and school consolidation, but those are the extent of intra-city cooperation. A very limited number of smaller communities in the metropolitan areas cooperate on police protection and sewer services.

Once a governmental structure is established, it is very difficult to change or abolish it. Do we "need" 114 counties today in Missouri? Probably not if the same criterion (transportation) is used as was used to establish the counties. Many Missouri counties still have the township form of government, even though the primary reason (transportation) for such has long since disappeared. But if there were one thing I would predict with near 100 percent certainty, it that the current units of local government will be still in existence in another fifty years.

Welfare Reform

The passage of the 1996 Personal Responsibility and Work Opportunities Reconciliation Act (usually called "welfare reform") caused major changes in many welfare programs. Lifetime limits of a total of five years for TANF (Temporary Assistance for Needy Families) payments were established. Food stamps were limited; people on TANF had to seek work and take employment if it were available. As the following 1998 report indicates, welfare reform is having impacts; some are not positive.

8. August 2, 2001, <http://www.usinfo.state.gov/journals/itdhr/0499/ijde/katz.htm>

While welfare reform has brought about the reduction of welfare rolls across the nation, there are geographic differences in this decline. Research indicates that welfare reform outcomes differ for rural and urban areas.

While caseloads have gone down in rural areas, labor force participation among the rural poor has not increased. Between 1992 and 1997, labor force participation among the poor increased by 8% in urban areas and 4% in suburban areas, *but did not change in rural areas.*

Although caseloads have declined in rural areas, the working-age poverty rate has not declined. Between 1992 and 1997, the working-age poverty rate declined by 7% in central cities, from 22% to 20%, and declined by 10% in suburban areas, from 10% to 9%. *This rate did not change in rural areas, remaining at 17% from 1992 to 1997.*

Child poverty has declined at a lower rate in rural areas than in urban or suburban areas. Between 1992 and 1997, the child poverty rate declined by 12% in urban areas, 7% in suburban areas, and 4% in rural areas.⁹

Rural areas face unique barriers in responding to welfare reform, including lack of childcare and transportation options.

Even in situations where economic opportunities exist and individuals already possess appropriate skills to take advantage of those opportunities, there are still many barriers that can stand between individuals and employment...

Childcare One of the most significant challenges for parents (especially single parents) working outside the home is getting access to affordable, high quality childcare. This is particularly critical for preschool children, both because they need good care to meet their physical and safety needs and because of the importance of preschool years to social and cognitive development (Caspi et al., 1998; Duncan et al., 1998). Quality care is also important for school age children...Employed rural mothers are more likely than urban employed mothers to use childcare provided by relatives and are less likely to use center care (Casper, 1996; Hofferth et al., 1991)...In both rural and urban areas, the supply of childcare for infants is not adequate to meet the demand at prices that low income families can afford. Childcare for children in school is almost nonexistent. These mismatches between supply and demand are exacerbated in rural areas, because of the lack of scale economies needed to make centers profitable and because of lower incomes of rural workers that dampens effective demand for childcare slots.

9. August 2, 2001, <http://www.rupri.org/>

Health Care The relationship between health care and employment is multifaceted. Not only is health related to worker productivity, but health care for children often affects parents' employment decisions... access to health care is more limited in rural areas than in urban areas... In addition to limited access to service providers, fewer individuals and children have health insurance in rural areas than in urban areas. Nonmetro areas have a higher proportion of the uninsured and individually insured than metro areas (Hartley et al., 1994; Frenzen, 1993), and a higher proportion of rural residents are without comprehensive health insurance coverage (Agency for Health Care Policy and Research, 1995)... Because small employers are less likely to offer health care insurance -- and rural employers are more likely to be small -- moving from welfare to work in rural areas could be more likely to involve loss of health care coverage.

Housing ...Without adequate housing, employment can be routinely interrupted by recurring housing crises... As with health care, low-income rental housing is less available in rural areas. Housing in rural areas also tends to be of a lower quality than that in urban areas... housing problems were worse for rural welfare recipients compared with other rural residents. Two of every five rural welfare households paid more than 30% of income for housing, 6% lived in homes with physical deficiencies, 5% were overcrowded, and 13% had multiple problems (Housing Assistance Council, 1997).

Transportation The provision of transportation options to low income citizens is one of the "big three" issues most frequently mentioned by service agencies when considering welfare-to-work programs. Childcare, job readiness, and transportation are seen as three major issues that will effect the success of welfare reform... Rural areas ...face many unique challenges in meeting transportation needs... Transportation is necessary not only to get to and from a job, but transportation is also critical for accessing childcare, health care, and other activities such as purchasing food. Transportation in rural areas is particularly critical as distances tend to be greater and public bus service is a rarity... Because public transportation is limited, in many rural areas individuals have to rely on some form of private transportation for their commuting needs... According to one study, 96% of public assistance recipients have no personal automobile (Miller, 1997). Nearly 57% of the rural poor do not own a car (Rucker, 1994).

Community Context While the implementation of welfare reform provides challenges and opportunities in all communities, many rural communities have a unique context that shapes these challenges and opportunities... Rural service provision is affected by many unique characteristics... For example, a low population density in rural areas means that some services may cost more and they could be of lower quality... Rural communities are also less likely to have access

to economic development resources. As a result, issues of distance, education, and housing combine to make prospects for high wage economic development less bright for many rural communities. Furthermore, rural communities also have fewer nonprofit resource organizations.¹⁰

Community Infrastructure

The infrastructure in many formerly low-density rural communities is becoming inadequate as the sprawl increases. Roads, water, and sewers are three of the most critical in many rapidly growing rural areas.

Water service is a good example of problems that can occur as an area grows in population. The amount of water flow is becoming a matter of contention in many rural water districts. Most rural water districts were built with two to four inch main water lines. The capacity of these quickly becomes exhausted as houses are added. The low pressure during high use times may reduce the flow to a trickle. If your house happens to be on or near the end of a water line, you may have to take your showers and wash your clothes in the late night when the pressure builds up a little. Adequate water for a fire hydrant takes a minimum of an eight-inch main. Very few rural water districts have this capacity. The only water for fighting fire is usually a tanker truck brought by the volunteer fire department that will arrive fifteen to thirty minutes after called. The quality of fire and police protection is of increasing concern, especially to the new residents in many rural communities. Many city quality homes are being built with inadequate fire protection, and with many households now having two-wage earners and the houses located a distance from each other, the opportunities for burglaries are also high.

Sewers or the lack thereof is a growing problem in most rural areas. Most of the older homes have marginal or inadequate septic tanks. There were no statewide regulations concerning the size and type of tank, nor the size and type of lateral fields until recently. Even today, while there are recommended plans for septic systems, there are no inspectors in most communities to check what is actually built. The only checking on whether systems are working is done on the basis of citizen complaints to the state Department of Natural Resources.

My parents home had a septic tank with a short lateral field. The end of it drained into the ditch of the public road. No one complained while my parents lived there. I expect that I could go to that house today (20 years later) and find the septic tank draining in the same inadequate way. When houses are half a mile apart, the environmental damages from poor systems are much less than if they are a few hundred feet apart.

There is another environmental problem that might be described as a sleeping bear. Steel fuel tanks were buried on many farms in the 1950s and 1960s. After a few years, those tanks rusted

10. *Ibid.*

out and allowed fuel to leak into the soil around it. Most such tanks are still buried and have the contamination in place or spreading through the soil. The most serious immediate danger is the water wells near these tanks, because the contamination could reach the drinking water.

It is impossible to have the same level of infrastructure in a low-density rural housing at similar costs to urban areas with higher housing densities. In urban sprawl areas, the lots may be ten acres average size as compared to a city where there are an average of four houses or more houses per acre. At the time of this writing, city quality streets with curbs and gutters cost between \$100 and \$200 per running foot, sewer lines about \$75 per foot. Add to these the costs for school bussing, for police, and all the other expected public services, and the additional costs quickly exceed what most residents can or are willing to pay.

The demands for urban quality public services in the sprawl areas is creating tension between the “natives” who are not used to and don’t want the more expensive services and the ex-urbanites who think that everyone should want and help pay for higher quality of public services. The natives often state: “I have always lived on a gravel road. If they didn’t like a gravel road, why did they move out here? It was a gravel road before they came and it should stay a gravel road.” Often these disputes continue until the newcomers have a voting majority.

The Internet and the Information Age

The internet is an almost invisible “superhighway” for the movement of information around the world.

Distance has been largely eliminated as a factor in the flow of information and data. Many of the references in this book were found on the internet. The internet has a wealth of information readily available. The dot-com bubble has burst and not everything is going to be sold via the internet, but it is an excellent means of exchanging information. There are some serious obstacles before rural communities can take full advantage of the potential of the internet. Some of those are physical (broadband access is limited in most rural communities) and some are psychological (the reluctance to be the first to adopt).

I suspect that the concern by store merchants concerning the internet was probably similar to those fears of store merchants when catalog shopping became popular. Both have turned out to be relatively unfounded. People have kept buying most things in person and that seems likely to continue.

In a 1999 report, research study on computer usage in rural areas found that:

...the most recent report ... notes:

At almost every income level, those households in rural areas are less likely to own computers than households in urban or central city areas.

At every income level, households in rural areas are significantly less likely -- sometimes half as likely -- to have home Internet access than those in urban or central city areas.

Black households in rural areas are 1/3 less likely to own a computer than the average U.S. Black household, and are 2/5 less likely to access the Internet than the average U.S. Black household.

For rural areas, the Kindergarten-12th grade school is a popular point of Internet access: 30.0% of rural persons use the school for Internet access outside the home, compared to a national average of 21.8%.¹¹

These findings echo a 1998 report's conclusions that rural citizens are far less likely to use computers and digital networks, including the Internet, than average Americans. This disadvantage is exacerbated by the lower income and education levels characterizing most rural regions, and is most prevalent among non-white populations.¹²

The jury is still out on the question of whether internet usage in rural areas will catch up with urban usage. This will be decided in part by the telecommunications industry. They are unlikely to build good systems unless they think there is a market for it. The coming availability of wireless internet may make usage easier. Cost of wireless internet is likely to be an important determinate of the rate of adoption in rural areas.

Planning and Zoning

Real estate property rights have been debated since before the nation was established. A "conservative" perspective is that the owner has the right to what he wants with the property. The "liberal" position is that the larger community has the right to set limits through government regulations on what the individual can do with the property. Planning and zoning are examples of such regulations. Very few rural counties have either planning or zoning ordinances.

One of the first clashes between "natives" and newcomers is often over the role of government. The natives want to keep government out of their lives and the newcomers want to have control to protect their quality of life. This clash often comes about over agricultural issues such as odors, dust and noises. The smell of a large hog facility is more than most people can tolerate. The newcomers want zoning to prevent a hog facility or a used car lot from being built next to their new \$200,000 home. They moved to the country for the amenities and they will fight to protect the amenities. The newcomers are usually better educated and more knowledgeable about getting changes made, but they will often run into opposition from the local politicians who are closely attuned to the voters. The newcomers will, if necessary, force

11. August 2, 2001, <http://www.ntia.doc.gov/ntiahome/digitaldivide/factsheets/rural.htm>

12. August 2, 2001, <http://www.rupri.org/>

proposals through initiative petitions. The conflicts are often put to several community votes before they are resolved.

A retired MU extension staff member tells the story of how one night in a rural community a meeting was called in a schoolhouse to discuss the merits of implementing planning and zoning in that community. The extension person was to be the featured speaker to tell why the community should adopt planning and zoning. He says his talk was very brief after one of the community members came into the schoolroom with a shotgun and, without saying a word, sat down at a desk and lay the shotgun across the desk. This was some years back and perhaps attitudes have changed somewhat, but in general, rural people are not in favor of regulation of land use (USDA crop controls are an exception, although many farmers take issue even with those).

Amenities

Mountains, water, and climate are the important attributes for most American when given a choice of housing locations—assuming equal employment opportunities. The Missouri Department of Economic Development prepared a very interesting study in which they looked at the importance of amenities in determining rates of population growth. The amenities that they used were:

- Mean January temperature, 1970–1990, people would prefer to live where it is warmer.
- Mean January sunlight hours, 1970–1990, people would prefer to live where there is more winter sunlight
- Mean July temperature, 1970–1990, people would prefer to live where there is less extreme summer heat.
- Mean July humidity level, 1970–1990, people would prefer to live where there is less summer humidity.
- Percent of land in water, 1970–1990, people would prefer to live where there are more lakes or rivers.
- Topographic variation, 1970–1990, people would prefer to live where there are more hills and mountains.¹³

The results of the Missouri Department of Economic Development analysis were:

13. July 25, 2001, <http://www.ecodev.state.mo.us/research/pubs/natamenity/natamenity-aug2000.pdf>

Compared to the national average, Missouri ranks 31st on the desirability of its natural amenities...Compared to the nine other central Midwest states, Missouri ranks 4th...Although Missouri ranks low, the difference in amenity scores are quite small. Missouri falls within a band of 13 states whose scores do not differ much from the national average. Most counties in Missouri fall either slightly above or below the national average.¹⁴

Sixteen Missouri counties ranked in the top 25% of all counties in the United States on the desirability of its natural amenities. Out of 3,111 counties in the United States, the top Missouri counties are: Perry (416), Stone (427), Wayne (437), Ste. Genevieve (459), Barry (486), St. Francois (546), Camden (549), Taney (565), Ozark (571), Benton (607), Reynolds (632), Cedar (717), Carter (719), Hickory (724), Morgan (725), and St. Clair (771). These counties have the same degree of amenity attractiveness as those found in North Carolina, Idaho, Florida, Colorado and Arkansas. Nearly all of the top-ranked counties in Missouri are located in the reservoir and national forest regions in the southern part of the state. Key areas are Table Rock Lake, Mark Twain National Forest, Lake of the Ozarks, and Truman Reservoir.¹⁵

The map of amenities shows that the Ozark region of the state has the highest amenities. And those counties with high amenities had higher rates of population increase 1990–1999.¹⁶

All of which brings me back to the earlier conclusion that locations near sources of good employment as well as good transportation routes are important determinates of population growth rates. The final equation might be as follows: if people have wide choices such as for places of retirement¹⁷, then amenities become important, but for the remainder of the population being within commuting distance of employment is essential. Now, if they have choices between high and low amenities at possible home sites, they will choose high amenities. Indeed, they will commute a considerable distance to gain those amenities.

Housing¹⁸

Rural homes built before 1950 are less likely to have been constructed after electricity and running water became widely available. As a consequence, the plumbing and electricity are additions and not integral to the home. Bathrooms were added either by taking part of a room or building an addition on the house. The ages of houses are reflections of the patterns of population growth or decline. As a result, more than twenty, almost all of them northern Missouri agricultural-oriented, counties had a much larger percentage (forty or higher) of the houses

14. *Ibid*

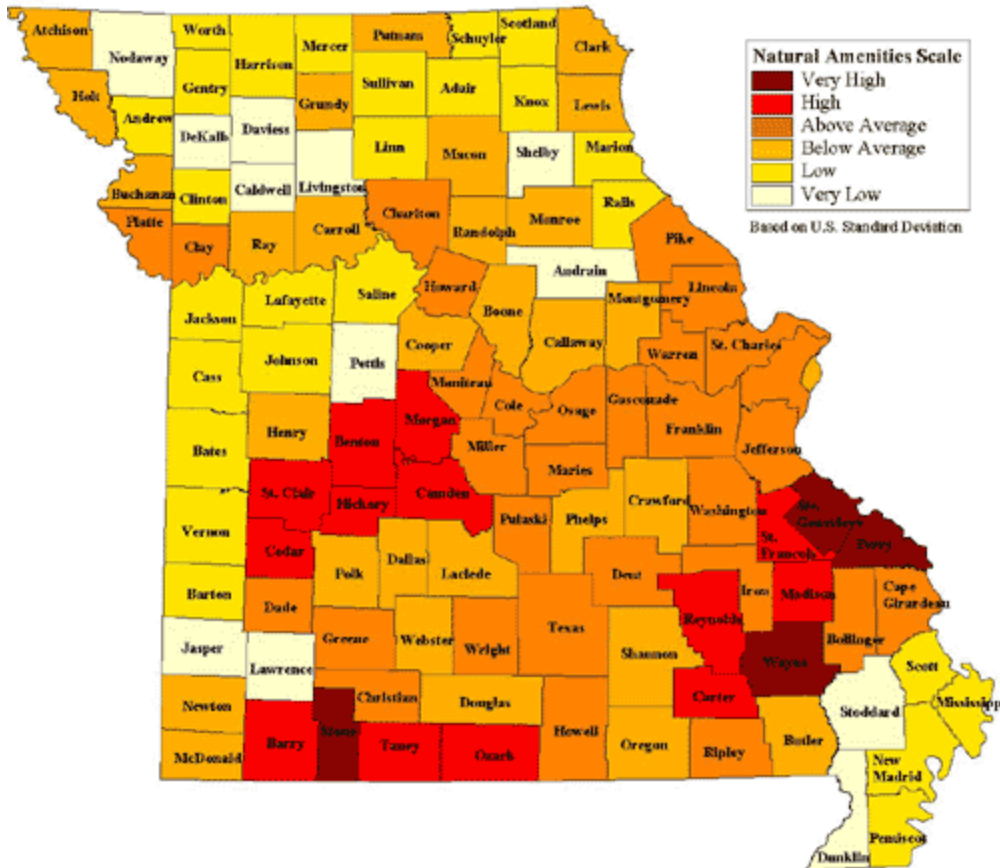
15. *Ibid*

16. <http://www.ecodev.state.mo.us/research/images/Image6.gif>

17. *Somewhere in this equation, the location of grown children and other kin needs to be taken into account.*

18. *The following data are from the 1990 Census of Housing.*

Natural Amenities Scale



built before 1950. These are counties that have had a long history of out-migration. In contrast, Taney county (Branson) and Camden county (Lake of the Ozarks) had less than ten percent of this age. The latter two have had considerable population growth. The state average of houses built before 1950 is slightly more than twenty-five percent.

We lived in a house once that had a bathroom added on the north side of the house, and it had no heat. I found out what was like to have a fully filled bathtub frozen solid. I thought I could thaw it by adding hot water—wrong. It was spring before it thawed.

Another indicator of the type and probably quality of the homes is the proportion that are mobile (manufactured) homes. Hickory County (Pomme de Terre Lake), Taney County (Branson), and Washington County (fringe of St. Louis metropolitan region) all had about one out of four houses that were mobile homes. The state average was under seven percent. If the population is growing, but most are lower income households, mobile homes may be one of the only affordable types of housing available. Two things I look for as I drive through areas are the size and number of mobile home dealers and the proportion of mobile homes in the open

A Revolution in the Heartland

country. These are good indicators of the prosperity or lack of it in an area. Mobile homes, especially older models, are indicators that the residents do not have sufficient funds to buy or build a regular home.

Another indicator of wealth or poverty is the percentage of homes without telephones. In today's world, we often assume that everyone has a telephone, but that's not true. Three distinct parts of the state rank high in the proportion without phones. Carter (eastern Ozarks) McDonald (southwestern-most county) and Pemiscot (southeast-bootheel) counties, all have about one out of five households that do not have telephone services. In contrast, the state average is one out of twenty, and the richer suburban counties have only about two or three out of a hundred without phones.

Chapter 31

Rural Regions of the State—2000

Rural versus Rural

Rural Missouri was heterogeneous in characteristics of the population at the opening of the 20th century, although these had some geographic patterning that was described with the four sub cultural regions. Now, rural Missouri has moved in large part into the mass culture, but there still remains considerable heterogeneity both within and between communities. Amenities, transportation, and availability of off-farm jobs within commuting distance are key factors in determining the exact mix within or between communities. Halperin used the terms “shallow” and “deep” rural to differentiate between rural areas close to urban places and those more distant.¹ Location is a key factor in the characteristics of rural communities today.

Recreational/Retirements Areas

Over the century, the average American household income rose, until traveling for recreational purposes became an important part of the family’s activities and a very large industry. Most families travel for recreation several times per year. After retirement, extensive traveling is thought to be a pleasant activity. Planned bus and ship tours have become very popular. Weekend or three or four day bus tours to Branson are popular with retired people who do not want to drive. While it is difficult to get exact figures on the tourism industry, press releases have called tourism Missouri’s largest industry.

Tourism usually is defined to include everything from large convention hotels and restaurants in large cities to mom and pop operations selling fishing bait and renting canoes on a side road in the Ozarks. If I stop at the local McDonalds for lunch, I am participating in the “tourism” industry.

In the last quarter of the 20th century, starting with the environmental movement of the 1970s, appreciation by urban residents of nature and natural beauty increased rapidly. Trees, open

1. Rhoda Halperin, *The Livelihood of Kin: Making Ends Meet “The Kentucky Way”*, University of Texas Press, Austin, 1990. p. 17.

fields, rolling hills and mountains increasingly became desirable places to go for recreation and to have as a place of residence. The first priority was to have your house located in areas with high amenities: trees and rolling hills. If that were not possible, then a place to go on vacation, a summer home, or a retirement home was the next best thing. Missouri has several areas that have good amenities. Almost all of these are in the Ozarks.

Seven types of recreational/retirement areas currently exist in rural Missouri:

Branson

Branson is unique and it should be discussed alone. Branson has exploded in recent decades from a very small town in the southern Missouri Ozarks to one of the top entertainment spots in the U.S. Branson attracts six or seven million visitors per year. Several times it has been the top attraction for tour buses. Most of the visitors stay for several days and spend considerable money attending music shows and shopping. Branson has several major attractions. The original attraction was fishing in Lake Taneycomo. Silver Dollar City with its native crafts came next, and then came the music shows that are now one of the primary attractions. The addition of factory outlet malls has made shopping more attractive to do between attending music shows. This helps Branson cultivate an image as a family entertainment center.

A four-lane bypass was completed in the mid 1970's. ...At that time, businesses were just beginning to develop along 76 west of Branson with only a few scattered shops and five music shows. A decade later, eleven more music shows and many restaurants, motels and tourist attractions had extended the built up area three miles further west. The number of music shows, which started with the Baldknobbers in 1957 and increased to sixteen in the 1980's, now exceeds thirty; and with the addition of the Ozark Mountain Christmas Celebration, the tourist season has increased to nine months...The entertainment industry is here because of a long and involved history. Fishing, originally in the White River and James Rivers and then in the lakes, caving in Marble Cave, the revival of the area's craft industry, and visitors' interested in the setting of a best selling novel all contributed to a gradual increase in the area's tourism.²

The less desirable side of Branson is that most of the jobs in the tourist industry are seasonal, low paying, and dead end. Even the musicians, other than the stars, are low paid. The tourism industry in Branson has worked to extend the season, but the maximum is still only nine months. The cost of housing in the City of Branson is so high that many of the workers have to commute to work from surrounding rural communities. Several new highways have been added to the Branson area in recent years, but the traffic into Branson from any direction is a challenge. Highway 76 through the main tourist attractions is heavily congested at most times of the day, especially when the music shows are changing. Four lanes are now open from I-44

2. July 22, 2001, <http://www.branson.com/branson/general/branhist.htm>

and Springfield and that will encourage additional tourists. Branson is trying to attract even more visitors by building a convention center during the next five years. A pressing question for Branson is who will replace the aging stars, many of whom are at or beyond normal retirement ages.

There is a price for growth. Branson passed two bond issues during the 1990s to build new school buildings for the 55 percent increase in students during the decade. Of course, property taxes had to be raised to pay off the bonds.

Lake of the Ozarks (recreation and retirement)

The Lake of the Ozarks is seven decades old. It is a privately owned lake. For the first three or four decades, residential and tourism developments were very limited. There were a few tourist attractions along Highway 54 near the dam and a limited number of "cabins" on the lake. Most of these cabins were rustic. That has changed greatly in the last two decades.

Recent growth is described as "explosive" by Joel Pottinger, executive director of the Lake of the Ozarks Convention and Visitor Bureau. Not only is tourism up, but the average home price has increased by about \$40,000 in three years. Sixty percent are weekend or summer homes, and some overlooking the lake cost as much as \$3 million...Luxury yachts vie for space with speedboats, fishing vessels, and personal watercraft. About 100 marinas provide rentals or offer parking and services for travelers who bring boats from home.³

The development of "condos", timeshare units, and permanent housing has taken up much of the available water front property and even some property that is removed from the lake. The building of a toll bridge from near the dam to the western portion of the lake is encouraging development in that formerly secluded portion. The styles of housing have changed dramatically from the rustic cabins of yore. Today's styles and costs are similar to those found in suburban America. The building of the very large factory outlet mall on Highway 54, along with a Wal-Mart Supercenter, has added shopping to the attractions. On most summer weekends, the waters of the lake are filled with boats and personal watercraft and the highways are jammed with traffic. The completion of four and five lanes on Highway 54 through the lake area has helped to relieve traffic on that highway. The Lake's promoters tried to develop music shows with much less success than Branson. The Lake's primary attractions are water-based recreation and shopping. The central location of the Lake in the state has facilitated three large hotels/convention centers, hosting large numbers of multi-day business meetings of various types.

3. July 22, 2001, <http://www.runningriver.com/modeland/excerpts.htm#Misunderstood>

Ozark National Scenic Riverways and other float streams

The establishment of Scenic Riverways has protected some beautiful Ozark streams. The Sierra Club and other environmental groups led the push to establish the Riverways. The establishment of the Riverways was bitterly opposed by many, especially property owners along the rivers in the areas. There were reports during the controversy of visitors in canoes who had rifles fired in front of them to frighten them.

Float trips are now popular with the younger adults, and each year tens of thousands of people take advantage of the opportunities to float and camp on the Riverway streams. The local residents joke that at times the canoes are so thick that a person could walk across the river by stepping from one canoe to the next. The economic impacts of visitors are relatively low and not many local jobs have been created as a result. Most people camp out and picnic, and the major cost is for canoe rentals (and many people bring their own canoes).

Fishing Lakes (Truman, Mark Twain, Wappapello, Table Rock, Stockton and others) Other Fishing Areas

All of the Corps-of-Engineers-built lakes have development restrictions along the shorelines. The oldest built lakes have the least restrictions and more recently built lakes the most restrictive rules. A few of the oldest Corps lakes such as those along the Grand River in Oklahoma permit private boat docks to be built on the lake. None of the Missouri lakes permit lake front development of this type. All of the regulations inhibit development around the lakes except for small areas for proscribed developments such as for marinas. The result is that the most common use of the lakes is for fishing and some water skiing and boating. Table Rock Lake, with its close proximity to Branson and Springfield, has the most water-based recreation. Several of the other lakes are basically fishing lakes. Fishing lakes have a relatively minor economic impact on the surrounding region. Most people who fish bring their boats and fishing gear with them. They might buy a few groceries, gasoline, or live bait. A few may hire local fishing guides.

The trout fishing in the coldwater streams near the large natural springs in the Ozarks attract people who are more likely to stay overnight. In most of these areas, a boat is not required and bank and wading fishing is most common. While the fishing is seasonal, the numbers of people coming to the trout areas are very large. It is not unusual, especially on weekends and holidays, to see people standing fishing about five feet apart. The trout are raised in a hatchery near the fishing areas and are released every evening. Sport fishing (catch and release) has become common. The main economic impacts are the motels and restaurants that the fishers patronize.

You've probably heard the saying that if you give a person a fish, they will eat it that day, but if you teach a person how to fish, they will be fed for a lifetime. Well, I have heard it said that if you teach an American to fish, he will go out and buy a big boat and trailer for \$35,000, a pickup to pull the boat for another \$30,000 and \$10,000 worth of fishing gear, and then sit in

the middle of the river all day drinking beer and release any fish that might come his way. There is more than a little truth in that.

I guess it is a result of my fishing for food when I was young that I have considerable difficulty seeing the fun in catching and releasing a fish that was released the evening before from the rearing pools. I view that with about the same enthusiasm as I do hunting for pheasants or other birds that are raised in cages and put out the night before the hunting. Speaking of artificial hunting, there was at one time a farm in the Ozarks that bought surplus "wild" animals from zoos and other sources and charged hunters large sums for shooting these domesticated "wild" animals.

Retirement Communities

Open Country Retirement

Scattered throughout the open country, especially in the Ozarks, are large numbers of well-built, relatively new homes. Often these will be built overlooking a scenic valley. If you look carefully, you will see there are no farm animals and little farm equipment around the buildings. In many cases, these are retirement homes of returning migrants, persons or families that moved to a city when they were young and earned enough money to build nice retirement homes in the Ozarks and have some left for living expenses. Many of these went to California after World War II and have now moved back to the Ozarks. The high prices of houses in California and the much lower prices in the Ozarks make such moves attractive.

But among those who have left the Ozarks, even a half-century or more ago, there appears to be a universal longing for "home." Many who abandoned the area during the Depression still subscribe to regional publications and newspapers from their old communities. Their letters, full of yearning and homesickness, are published frequently on editorial pages. Among "newcomers," those people who have chosen to live in the Ozarks, there are a great many intelligent, talented, creative, people--artisans and artists, writers, weavers, sculptors, musicians, educators--most of whom could live anywhere they choose and came here from the "advantaged" cities they were glad to leave behind. Those who were born here and have had the good sense to stay--even if they take the Ozarks for granted--love it nonetheless.⁴

Most retirees move to their place of retirement when they are in their mid to late 50s. Almost always they will have had prior contact with the place of retirement, either through previous residence or as a vacation place. Often they start a second career running a small business in their new community. This lasts until one of the partners experiences major health problems and then a second migration may occur to be closer to good medical facilities or children.

4. July 22, 2001, <http://www.star-telegram.com/travel/stories/ozarks.htm>

There is another group of migrants, who move to California and Texas for a few years and then move back—often in serial patterns of several moves back and forth. Eventually, many “settle” in their native Ozarks, but at the same time they have experienced the “outside” world and bring some of it back with them. Some of what they bring may be desirable, such as better work skills, and some of it is undesirable, like illegal drugs.

Planned Retirement Communities

In Arizona, Florida, Arkansas and other states attracting large numbers of retirees, large-scale developers put up retirement “villages”, complete with clubhouses, recreation facilities, and other amenities. Missouri has had just a few of these planned retirement communities. Kimberling City near Branson is one of the larger ones, but it’s nothing like Sun City, Arizona in scale of development. Knox Village in Knob Noster is another example of a planned center. For the most part, retirement migration in Missouri has gone into individual homes on separate lots.

In the 1970s and 1980s, there were large numbers of developers who tried to sell lots, primarily around the Lake of the Ozarks and Branson, but a few hardy developers even tried in north Missouri. My wife and I received dozens, maybe hundreds, of announcement that we had “won” a two or three day vacation, or a television set or a variety of other “prizes”. The only catch was that we had to come to the purposed development and listen to a 30 or 45-minute sales pitch. We were never interested enough to go and listen, except once when we received one from a development in northern Missouri. I was curious about what was going on in northern Missouri so we went up and listened. We were not impressed by the development, but we did enjoy the \$200 we received in place of the golf clubs they were offering. Several of our friends bought lots in developments near the Lake of the Ozarks. Most, if not all, stopped making payments after a few years. We still get an occasional phone solicitation about such developments. Somebody must be buying or they would not keep trying.

The Invisible Rural Population

In driving through the open country in Missouri, many newer homes can be seen, especially on the better-paved roads and closer to towns. Hidden from view are the homes of the lower income people. If you get off the beaten paths, off the paved roads, down the gravel or dirt roads, perhaps down a tree- and brush- covered lane, sitting among some trees is a mobile home or a small older home. Often one or more junk cars/trucks will be parked in the front yard. A visitor to the community must look closely to see many of these houses. This is where the people live who cannot afford the price of land on the better roads. Most of these people are hard and willing workers. They are often lacking in education and job skills. These are the workers who make the beds and clean the rooms at motels, who cook the hamburgers, clean the hospital and nursing home rooms, and do a thousand and one other things necessary in the tourist industry or in the service professions. The turnover rate is high in most such jobs. A few weeks or months and the grass will look greener in some other position. The chances of

moving up a career ladder after starting as a motel housekeeper are very limited. As a result, rural Missouri continues to have a higher percentage of people in or near poverty than in the metropolitan areas of the state.

In many ways, rural communities now have dual societies: “the haves” and “the have-nots”. And seldom do the two ever get together to work on common goals. Greatly improved transportation and communications allow people to associate with whomever they want. The people with whom they associate may be next door or in the next county. Moderate distance is not a barrier during most of the year. People are much more likely to seek others with similar interests and similar ways of life. The days of the Great Society, when boards had to include representations from the lower income groups, are long gone. Today, the school boards, the city councils, and the watershed boards rarely have proportional representation from the lower income residents. Most local boards and commissions are filled with the middle class. Of course, proportional representation of low-income people really did not occur much in the past either.

Summary and Conclusions

We do not have a single rural or even four rural regions today as was suggested for 1900. Every non-metropolitan community is unique.

- Areas of the state where “rural” in the more traditional form is likely to be found are in north central Missouri, often referred to as the Green Hill Region, and the southeast Ozarks and the Bootheel. Tiny traditional rural areas can be found in the Old Order Amish communities near Clark and St. James.
- **We have become an urbanized state with the major variants being population density and wealth.**
- **This urbanized culture is permanent.**
- **The front porch days are gone.** Most people like air-conditioned houses with big screen TVs. The days of neighboring or informal interaction are not likely to return.
- **Commuting some distance to work or for other services is not likely to decline.** People will buy smaller, more fuel-efficient vehicles before they will move back into cities. They will make other significant changes before they give up the pleasures of living in the country.
- **The days when rural equals farming are gone.** All farmers are less than two percent of the population and less than 25 percent of the rural population; and that is using the most generous definition of farmers. We could get all of the large-scale producers in Missouri together for a meeting in MU’s Hearnest basketball arena that seats 13,000 people and still have considerable seating left.

- **Past usage, customs or habits will probably ensure that the term “rural” remains as part of our everyday language.** Instead of meaning a way of life, a subculture as in the past, it will be used to designate areas of lower density population—the urbanized land beyond the suburbs.

Chapter 32

Family and Community—2000

“Progress cannot be reckoned in railroads and steamboats, or counted in money, or decided in any way by the census tables. Are we producing better children and better men and women? This is the question which decides everything.”

—Josiah Gilbert Holland¹

Size of Families

The size of the average family in 1900 was large. Family planning and contraceptives were almost unknown. The average number of children was above six and it was not unusual to see families of ten, twelve or more children. There was a popular saying about “cheaper by the dozen”² that was applied to the size of families. On Mother’s Day, after it was started, magazines and newspapers would run stories with pictures of very large families. The notion was that large families were better than small ones. For farm families, children contributed much needed labor for a wide variety of tasks. Farming at the turn of the century was labor intensive.

The size of families took a sharp decline during the economic depression of the 1930s. The fertility rate declined to a low that was not matched again until the late 1960s and early 1970s. There were relatively few babies born during the depression years, when I was born (1931). This has had a major impact on my career. There was not as much competition for me as there was for the baby boom cohort born after World War II.

By the middle of the century, many of the differences between rural and urban Missouri had disappeared. However, one of the reasons for the disappearance was the rapid increase in family sizes during the “baby boom” that followed World War II. Both rural and urban sizes increased during this period. Four and five children families became the norm. This family size

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1. Nineteenth century journalist quoted in *Missouri 1900-2000: A Century of Change*.
 2. Bakeries and some of the other retail stores would give discounts if 12 or more of the same items were purchased at one time. The bakeries would add one item free while other stores would give a 10% discount for buying twelve.

fashion lasted slightly more than a decade and then fertility rates went into another sharp decline.

Today, the most common family size is either two or three children. There are occasional families that have five or more children, but these are not common.

One of the reasons for the reduction is that while children were assets in 1900 in terms of contributing to the household income through their labors on the farm, they are now expensive portions of the families. Instead of money flowing from children to parents, the money now flows from parents to children—in large amounts. The first child costs about \$200,000 to rear to age 18. The size of families today seems to be conditioned by the parent's economic outlook for the future. Pessimism for the future reduces family sizes.

There are several commonly held myths about family size. For example, the belief that rural families and low-income families are larger is not true. Yes, there are a few low-income families with large numbers of children, but there are a few large middle-income families also. The average size of low-income families is just about the same as middle income. Another myth is that minority groups have large families. This is not correct for most minority groups. It is true that Old Order Amish families are larger, but the number of Amish is so small compared to the total rural families that they do not have any significant impact on the overall family size. Immigrants from Mexico and Central American countries rapidly reduce their family sizes once they are located in the midwestern communities.

The divorce rates remain high after a peak rate in the early 1990s. The results are many different types of families. One of the traits of many families in 2000 is that they only have a single parent, most often the mother, with children. A female head of the household with children is one of the most common types of families with incomes less than the poverty scale. Closely following the single parent households are the mixed families with children from several different marriages. The number of people living alone has also increased.

Family Problems in Rural Communities

Personal and family stress has been increasing in rural communities.³ The farm crisis of the 1980s continues to have negative impacts on individuals and families. The self worth of many of the "young tigers" in farming was severely challenged by this crisis. They had done everything the "experts" recommended and this was not enough to insure survival in farming. This led in a few cases to suicide and in more cases to divorce or abuse.

The time constraints in two earner households and the pressures of low wage jobs put a large amount of strain on families.

3. <http://www.ncrel.org/sdrs/areas/issues/envrnmnt/drugfree/v1hobbs2.htm>

... research is increasingly indicating that rural families are experiencing problems usually associated with urban populations, such as divorce, economic hardships, drug abuse, and violence.⁴

Two of the barriers to treatment of drug abuse and spouse abuse are the lack of the appropriate social service agencies in many rural Missouri communities and the lingering tendencies for rural people not to be willing to talk about such problems. Even when treatment centers are available, the rural tradition of self-reliance inhibits the willingness of rural people to use such centers.⁵

Spouse and child abuse was all too common in 1900, but only in extreme cases was it reported to the authorities. The only place to report it was the county sheriff, who would not have known what to do about it. At most, he would have talked to the errant spouse. Chicken stealing was more in his turf. Indeed, the terms spouse and child abuse were not used. There was neighborhood gossip about wife and child beatings, but unless serious injuries resulted, no actions were taken. Thus, the increases in rates of spouse and child abuse may be the result of larger proportions of abuse being reported rather than an actual increase in abuse.

Children in 1900 experimented with alcohol and tobacco at relatively early ages. Boys in particular, would sneak behind the barn to try smoking tobacco. It was fairly common for adult males to give children chewing tobacco and watch with enjoyment while the child became ill. Today, rural children still experiment with drugs but the variety of drugs available is much, much greater. Powerful drugs such as "meth" and crack cocaine are available, but most young people do not try these. Various forms of alcohol are still the drugs of choice. "Binge" drinking (consuming large quantities of alcohol in a short period of time) by young people is common today.

When I poll my classes about the availability of drugs, nearly one hundred percent of the students from the large urban high schools reported that many types of illegal drugs were readily available in their high schools. Most students from smaller rural high schools reported that illegal drugs were available in their high schools. However, the types and the availability of drugs were more limited in most rural schools. Alcohol and tobacco were easy to obtain in all schools.

Two Earner Households

The net income from most small farms is not enough for a family. The service and seasonal jobs created by tourism and retirement communities do not pay enough for a household to survive on only one income. Also, the health and retirement benefits offered by such jobs are minimal.

4. Erik R. Stewart, Stephen M. Gavazzi, Patrick C. Mckenry and Tammy H. Sheidegger, "Parenting Practices of Rural Families and Their Relationship to Adolescent Educational and Emotional Outcomes" in Robert M. Moore III (ed) *op.cit.* p. 132

5. *Ibid*, p.165.

Thus, the employment of two people outside the home is not by choice, but by necessity. If a couple had two children and both parents worked at minimum wages for an average of nine months per year, their total income would still be close to the poverty level. It is not unusual to find people who are holding two full time jobs at the same time.

At the other end of the income scale are the relatively small numbers of families with two professionals in the household, such as a physician and an attorney. These are likely to reside in large estate homes and hire people to maintain the home. White fences along the roadway require considerable upkeep, painting every couple of years and rebuilding once or more per decade. The animals are often purebred cattle or thoroughbred horses. These families are in rural communities, but are not usually a part of such communities.

Paired Interaction between Generations

In 1900, sons worked side by side with fathers and the same was true for daughters and mothers. A child learned his or her roles and skills from the previous generation by working with them. This has been entirely lost in today's families. Now, we have one special day per year when a parent should take his or her child to work.

A child is often placed in day care at a few months of age. From then on, the majority of that child's care and education will be in an institutional setting—day care, kindergarten, elementary schools, secondary schools and maybe colleges. At an early age, there is likely to be a series of summer camps of various types to fill in during the summer school vacation. All of these cost money and must be paid for by the family or the community. If the grandparents live on a farm, often the grandchildren will stay a portion of the summer on the farm.

Commodification of Rural Family Life

In the first chapter the process of commodification was introduced. Probably the best single measure of the process of urbanization is the amount of commodification in the households. If we had a measure of how many bills people had to pay each month, we would have a good measure of urbanization in rural communities.⁶ Every month, car payments, rent or house payments, gasoline bills, propane bills, electricity bills, telephone bills, and credit card bills are all due. There are so many bills to pay that two or more good incomes are needed.

If many of the commodified services were done by one of the partners and a paycheck eliminated, what would be lost or gained? In the mass culture of today, people have become conditioned to buying most goods and services. The ability to be self-sufficient has been almost entirely lost.

6. *The first bill to arrive on a regular basis in most rural households was the electricity monthly bill in the 1935–1955 era. From that time forward, the bills have stacked higher each month.*

Foods in 2000

For many of us who are older, eating meant cooking and sitting down at a table. About one-third of the students in my classes report that their families never have regular meals together except for holidays, and sometimes not even then. The “normal” breakfast, if any, consists of a “Pop Tart” put in the toaster and eaten while driving to work or school and washed down with a soft drink. The fashions of food went from home prepared, to frozen “TV” dinners in the 1960s and 1970s, to carryout fast foods or home delivery pizzas in 2000. Today the lines for the drive-through windows at fast food restaurants are always longer than those inside. The term “one-handed” food was invented in the 1990s to describe the large amounts of food consumed while driving.

Americans are obsessed by convenience, saving time and buying cheap. The pursuit of these goals is apparent as we derive our daily menus from drive-up windows, carryout meals and vacuum-sealed products...

Half of all of the money used to buy food in the U.S. is spent in restaurants, mainly on fast food that is delivered frozen, canned, dehydrated, or freeze-dried. Much of its flavor and aroma is courtesy of better living through chemistry (i.e., “natural” flavor)...

But the fast-food industry isn't the only driver of change. A ... report, "Consolidation in Food Retailing and Dairy, Implications for Farmers and Consumers in a Global Food System," illustrates that the retail sector increasingly calls the shots. Compiled for the National Farmers Union by University of Missouri researchers, it reveals that:

- Kroger, Albertson's, Wal-Mart, Safeway, and Ahold USA account for 42% of retail food sales in the U.S...
- Current trends suggest six or fewer global food retailers will evolve over the next few years. Only one, Wal-Mart, is a U.S. firm.⁷

Flash back to 1950. Mom was in the kitchen, making three square meals a day from scratch. When she went to the grocery store, farmers got more than 40 percent of the money she spent on food. Now, fast-forward to 1997. Mom puts in a 40-hour week at the office. Families eat on the run. In this fast-paced, wired world, convenience is key. This radical social change is the main reason farmers today get just over 20 percent of the money people spend on food, said Dave Schweikhardt, agricultural economist at Michigan State University. Consumers are paying other people to prepare their food for them. Ever-increasing labor

7. July 31, 2001, <http://www.agriculture.com/sfonline/sf/2001/mid-march/0105family.html>

costs are the main reason for the widening spread between farm prices and retail prices. "They're not buying flour, eggs and milk," Schweikhardt said. "By and large, they're buying prepared food, convenience food. It's inevitable that's going to drive the farmer's share down." In the United States, about 45 percent of the money consumers spend on food goes to food they eat outside the home...Add a growing proportion of people who eschew the nuclear family and stay single, plus a buoyant economy, and the trend becomes more pronounced.⁸

Demographic, socioeconomic and attitude changes are driving food consumption trends. Slow population growth, an aging population and shrinking household size continue to reduce volume food sales... The increase in dual income households has reduced discretionary time for shopping and food preparation, which has increased the demand for prepared dishes and takeout foods and encouraged the trend towards eating out. A smaller proportion of income is being spent on food and, as income increases, so does money spent on food outside the home.

The top ten food items for 1996, in order, were: French fries, salad, pizza, baked goods, hamburgers, sweetened baked goods, sandwiches, desserts, ice cream, and soup. The top ten beverages for 1996, in order, were regular coffee, regular soft drink, diet soft drink, hot tea, juice, beer, milk, wine, decaf coffee, and milkshakes. Appetizers are more popular because consumers are looking for more mini-meals and snacks and there is an increase in home entertaining. There is an increasing demand for freshness, as is evident in the increased number of supermarkets with in-store bakeries and delis. Technology has become so advanced that there is less need for frozen and preserved foods. We continue to see more chilled foods replacing frozen foods.⁹

During the last four decades, fast food has infiltrated every nook and cranny of American society...Fast food is now served not only at restaurants and drive-throughs but also at stadiums, airports, college campuses and elementary schools, on cruise ships, trains and airplanes, at Kmart's, Wal-Marts, gas stations and even hospital cafeterias. In 1970, Americans spent about \$6 billion on fast food. Last year they spent more than \$100 billion on fast food.

The rapid growth of the fast-food industry has been driven by fundamental changes in the U.S. economy. The hourly wage of the average American worker peaked in 1973 and then steadily declined until last year. Women entered the work force in record numbers, often motivated less by feminism than by a need

8. July 31, 2001, http://www.producer.com/articles/20000601/special_report/20000601food3.html

9. July 31, 2001, <http://www.gov.nf.ca/agric/WHATSNEW/Strategy/VAddedOpp.htm>

to help pay the bills. In 1975, about a third of American mothers with young children worked outside the home, today about two-thirds of such mothers are employed. As the sociologists Cameron Lynne Macdonald and Carmen Sirianni have noted, the entry of women into the nation's work force has greatly increased demand for the types of services that housewives traditionally performed: cooking, cleaning and child care. The fast-food industry has benefited from these demographic changes, supplying at low cost the meals no longer prepared in the home and hiring at low wages millions of young women in need of extra income.¹⁰

These trends apply to rural Missouri as well as metropolitan St. Louis.

Rural Communities in 2000

Volunteer Organizations

Americans have long been noted as a society in which people formed and joined many organizations. This was true in 1900 for residents of small towns as previously described. The organizations then included Masonic Lodges, Daughters of the American Revolution and other social organizations, all of which were divided by race, gender, and social status. In 2000, residents were still joining, but different types of organization. Civic clubs such as Rotary, Kiwanis, and Lions were popular. With the two earner households, organizations had moved to luncheon or dinner meetings that provided business/service people a chance to interact while working to assist in some charitable cause. All of these included both men and women and were racially diverse. The cost of membership and the selection process tended to make them still socially stratified.

The youth clubs of agricultural America, 4-H and FFA, were still in existence in 2000, but with very different purposes. 4-H had become largely an after school program and FFA placed much more emphasize on leadership development than in earlier times when the emphasis was on learning farming and family related skills.

PTAs

The informal pie suppers and other school related activities were replaced by formal organizations, Parents/Teachers Associations as they were first called, now PTAs. Every school, especially an elementary school, is expected to have such an organization. The purpose remains basically the same, to raise money and provide other support for the school. The success of these is strongly influenced by the economic status of the parents. When most of the parents are middle class, the PTAs are strong and successful. In schools serving predominately lower income families, the PTAs often struggle. This is true for both rural and urban-based schools.

10. July 31, 2001, <http://www.mcspotlight.org/media/press/rollingstone1.html>

Soccer (and Soccer Moms)

Baseball, football and basketball are the traditional rural sports, especially for males. Strong emotions are developed around the high school teams for these sports, particularly for basketball and football. During the 1970 and 1980s soccer became popular in the middle class suburbs. One of the rules of most soccer teams is that everyone gets to play. This democratic policy made it popular for suburban parents. A child-rearing fashion of the times was that children should have training in music, dance, and sports. It was usually the mother's responsibility to get a child to the various activities. Not only were the mothers the providers of transportation, they often exhibited strong emotions concerning their child's achievements. The outbursts of soccer moms (and dads) have come to be feared by coaches and other officials.

With the migration of families into rural communities, the parents kept the same goals for their children as they would have had if they had maintained a suburban residence. The other middle class rural parents quickly picked up the suburban patterns of childrearing. Soccer moms taking their children to various activities became common in the 1990s in most rural communities.

Senior Centers

Organized activities for retired people spread throughout rural communities as a result of state and federal programs. One of the most popular was a subsidized lunch. This insured that low-income older people received at least one nutritious meal each day. To prepare and serve the meal a building was needed. Most rural communities had a surplus of vacant buildings because of the shifts of the businesses to the outskirts of larger towns and the consolidation of schools. In many rural towns, one of the vacant buildings was converted into a senior center that includes pool tables and other games and places for people to meet and quilt or do other crafts. Many of the centers have a professional staff that plans activities for the retired people. These senior centers have become important gathering places for many rural residents.

***Bingo*¹¹**

In most small and not so small towns, bingo games are now held on a regular basis, usually weekly. The Knights of Columbus (the Catholic Church men's organization) are often one of the sponsoring organizations, along with other civic clubs. The proceeds from bingo are one of the principle means of raising monies for various charity projects.

While state law limits the monetary prizes, one or more games will have a sizeable reward. Many bingo players do not regard their playing as gambling. The players are usually very serious about their play. In many ways these weekly events resemble clubs. Many of the same people come every week and they chat about families and other interesting topics until the games

11. *Bingo can be discussed as a recreational activity or as a semi-formal organization.*

start and careful attention is given to the six to ten bingo cards in front of each person. Bingo games, and to a lesser extent other forms of gambling, are heavily patronized by older women, and include a disproportionate number of smokers. The air in a bingo room is usually blue with cigarette smoke. One section of the room is normally designated for non-smokers.

Although state law limits the sponsors of bingo to non-profit organizations and one session per week, many players will go to several different games each week. Some of the most committed bingo players go on a regular basis by chartered buses to the Native American bingo games in Oklahoma, where the winning pots can be as much as \$10,000.

In some ways, bingo games have become a place where community cohesion develops.

Interestingly, bingo games, bars, and bowling alleys are three of the strongest holdouts against the prohibition of smoking. When we were proposing a few years ago to revise the no smoking rules for public places in Columbia, bingo games were listed for no smoking. The bingo players turned out in large numbers to protest and to insist that no-smoking rules were not appropriate for bingo games.

Chapter 33

A Summary of the Causes of the Heartland Revolution

In the preceding chapters I described literally dozens of innovations that impacted rural families and communities. Obviously, the individual innovations differed in the impacts they had. These innovations impacted some families and some communities positively, but impacted other families, even within the same community, negatively. For example, the cotton picker made cotton growing more profitable for the grower, but put many tenants out of a job.

Now, taking all of them into consideration, I list them in a hierarchy of the importance of their total impacts. Not all innovations are listed, just those that I think were the most important in terms of relative impact. The rankings are based upon my almost fifty years of research and work in action programs in Missouri.

Any attempt to do a statistical testing of this ranking or similar rankings will require many assumptions concerning the most appropriate measures of impacts¹. The results would be meaningless or misleading. I am sure there are many who would list their favorite “cause” higher on the listing than I have. Rural America would be very different today if any of the general categories and many of innovations listed as sub-categories had not been discovered or invented and distributed. These impacts could be labeled either positive or negative depending upon a person’s perspective. I will try to avoid labeling.

The general categories are listed in order of importance (amount of long term impact) and the sub-categories are also listed in order of importance within the larger categories. However, an innovation that is listed last in a subcategory is not necessarily more important than the first item in the following category.

The Most Important Innovations

1. **Electricity**—Rural Electric Cooperatives (REC)—The single most important factor in changing rural families and communities was the universal availability of electricity at affordable

1. For example, researchers have been feuding over the impacts of television for decades.

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rates to all rural homes. Without electricity, many of the other innovations could not have occurred.

2. **Communications**—These brought the outside world to rural families and communities.
 - Television
 - Radio
 - Telephone
3. **Enhanced Transportation**—This allowed rural families to cheaply and conveniently travel to the outside world.
 - Automobiles
 - Trucks for transporting farm products
 - Farm-to-market roads
 - Interstate Highways
4. **Mechanization of Agriculture**—These were the “enablers” of changes in farming. Instead of farming forty acres, one person could now farm thousands of acres.
 - Tractors and other gasoline/diesel powered equipment such as self-propelled combines.
 - Labor saving devices such as milking machines and bulk tanks.
5. **The Genetic/Chemical Revolution in Agriculture**—These provided the “ammunition” for changes—why changes should occur.
 - Hybrid Corn and all the other enhanced species that followed
 - Chemical Fertilizers
 - Herbicides and Pesticides
6. **Government Programs**—These were the “grease” for change—they made change easier.
 - Social Security
 - Land Grant Colleges and Universities

- USDA Price Support Programs
7. **Retailing Revolution**—These were the bulldozers for change—powerful agents for changes.
- Wal-Mart
 - Sears, Roebuck and Company and other mail order firms
 - Regional Malls

Illustrations from a Typical Rural Family of the Era

I will illustrate some of these forces for change by events in my family. My family was similar to tens of thousands of other rural Missouri families. We were neither rich nor poor, although we were often closer to the latter category than the first. Probably, the one place we differed from most surrounding rural families was my parents' strong belief in the value of education and that in large part explains why I am a professor. Other than that, we were a typical rural American family of our times.

In retrospect, available and affordable electricity was the linchpin for rural families and communities to enter the modern age. The key was the 1936 federal act that enabled and encouraged the formation of rural electricity cooperatives. The act provided for low interest loans to build the electricity lines into all rural communities of the nation. If this act had not been passed, perhaps the commercial (investor owned) electricity companies might have slowly built lines into the rural areas with the highest potential usage. It is doubtful that the coverage would have been as quick or comprehensive.

My family's first experience with electricity was when lines were built into our neighborhood in 1939. We had a light fixture in the middle of the ceiling of each room, with a string hanging from it to switch it on and off. I can remember well going into a dark room and waving my arms to find the light cord, stumbling over the furniture while doing so. Due to our moving into areas without electricity, my parents went through the process of getting electricity two more times, in 1943 and 1957. By the last time, almost all rural communities had electricity. The use of electricity was progressing; the last house we wired had wall switches for the lights and wall outlets. Two of my older brothers started working to help build the lines and worked for rural electric cooperatives their entire careers.

The first electric appliance in most homes, including ours, was a radio. These were more dependable and more powerful than the battery radios. We could listen to the radio for longer periods. In our home, refrigerators, other kitchen appliances, and lights in the barns and outbuildings quickly followed. My mother was more than willing to trade the hard-to-start gasoline motor on her Maytag washing machine for a quiet, dependable electric motor. Some of us

missed the popping of the washing machine motor that we could hear a quarter mile away. We knew by the sound that washing was underway. The “pole” light (a bright light at the top of a tall pole) between the house and barn was a welcome addition that allowed us to walk outside without stumbling. Such a light was delightful when returning home on a dark and stormy night.

The transportation revolution was continuing parallel to the communication revolution. In my family, going to town for shopping went from once a week to whenever the urge and the need arose. The roads and cars had improved so that it was not a major undertaking to run into town to pickup needed items. Starting the car was no longer a trauma to be feared. My mother had stopped making bread at home by about World War II and started buying white bread. This was not a sudden change, but intermixed. Depending upon need and finances, at times she made bread and at other times bread was purchased. Heaven forbid, but occasionally my mother bought a cake mix instead of making one from scratch.

These changes required ready and easy access to grocery stores, especially supermarkets with the ten of thousands of products they sold. A small one-room grocery store could only stock a few hundred items. They could not afford to take the shelf space for a new product that only a few people bought at first. Improved transportation made more products available in stores, as well as making stores easier to access. The first use of a new product is usually an impulse purchase. The more a consumer is in a store, the more likely they are to impulsively buy something. The effects of easier access to more products quickly snowballed.

Television in most rural communities followed electricity within two decades. The smaller cities in rural areas were some of the last markets to be tapped by television broadcasters. Tall antennas quickly appeared on almost every house within reception range of a new station. The house might be small and shabby and the family poor, but the antenna on the roof indicated the family had TV. There was a running joke in my family that some families might be poor enough to be on welfare and food stamps, but they were rarely too poor to have a television set. Somebody in our car when we were traveling would often comment about a poor run-down house that had a tall television antenna. Television had become one of the necessities of rural life.

By mid-century, the canning of fruits and vegetables had declined. Freezing them and putting them in the locker in town became the norm. A commercial firm that cut and packaged the meat did the butchering. Again, this required easy access to freezer lockers and a dependable automobile for transportation. Improved transportation was reducing the self-sufficiency of rural families.

By the mid '50s, my parents were working off farm in a munitions factory about 50 miles away. Gradually, the adults living along our road took jobs off-farm. My parent's 200 acre farm, similar to tens of thousands of other small farms, had proven to be too small to provide an adequate income to pay for the new car, the electric bill, the gasoline bill and all the other family costs,

modest through they were by today's standards. They left home on Sunday evening or early Monday morning and worked for five days and then farmed on weekends.

Many of the jobs were temporary or seasonal at first, but became permanent after a few years. The wife in the family closest to our house took a job in nursing home. Another one took a job in a new factory that moved to Lamar. There was no single occupation. The change was gradual and often generational. The younger generations took off-farm jobs from the start of their working careers.

As soon as Social Security coverage was made available to farmers, my father, along with thousands of other farmers, took advantage of the provision of the law that does not require that farmers have a history of SSI contributions. He retired, but still operated the farm. He farmed as long as his health permitted. This became the pattern for most farmers in rural communities. Farming was a way of providing supplemental income to other primary sources. Dad would sell a few beef calves and perhaps some grain for a total of a few thousands of dollars. This income was an important addition to social security checks.

My oldest brother was the farmer of our generation. He was a graduate of MU College of Agriculture and adopted the recommended innovative farming practices from MU Extension. He carefully read the recommendations for new varieties and had the soil tested and applied fertilizers according to Extension recommendations. He bought additional land to try to take advantage of larger equipment. Being a "good" farmer was not enough to make the farm economically sustainable. He and I, in partnership, along with tens of thousands of "good" farmers nearly went broke in the farm crisis of the 1980s and he retired shortly thereafter with broken health. We were better off than many who lost their farms at this time.

The origin of the Wal-Mart stores was in northwest Arkansas, about a hundred miles from Lamar, my hometown. Wal-Mart built their first expansion stores close to their home base. As a consequence, Lamar was one of the earlier small towns to get a Wal-Mart store built on the edge of town. While it took about two decades for the retail sector around the courthouse square to disappear, the impact of the Wal-Mart store on competitors was felt almost immediately. Today, most of the viable businesses in Lamar are located on the highway near the Wal-Mart store. The smaller towns of Golden City, Iantua, Jasper, Liberal and Sheldon that surround Lamar had their entire business districts disappear.

Missouri was one of the earlier states in which every rural town of significant size received a Wal-Mart. I followed this process for a couple of decades, checking on the impacts of such stores. It was like watching a slow-motion tidal wave sweep throughout the state, overwhelming numerous small retail stores and towns as it went. Wal-Mart brought cheaper prices and more variety of products to the communities in which they located. They were a boon to the consumers, but a bust for the local competing retail establishments.

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As an interesting aside, while Sam Walton was the high profile founder of the firm, there were two brothers, Sam and "Bud", who worked together to start the firm. Both were born and reared in Columbia, but "Bud" maintained his home here. As a result, Columbia has gone through several generations of Wal-Mart stores from one smaller store built during the first round of building stores to now, with several stores, including a Sam's and a "Supercenter".

Today, my family, like so many other rural families of that bygone era, is an urban family, with only one of my nephews doing part-time farming. Others reside in urban and metropolitan areas in several states, from the west coast to eastern states.

Part 4

Looking Ahead: Rural Missouri in the 21st Century

Will the hectic rates of technological and social changes of the 20th century continue? The terrorist bombing of the World Trade Center and the Pentagon, followed by an economic recession and a stock market bust, has created much uncertainty among the American public. In some ways, the shock and uncertainty of today resembles that after the attack on Pearl Harbor. It is likely to take several years for these shocks to wear off, and should they continue the future will be very difficult to predict. The terrorist attacks will likely increase the outward flight from the cities. However, if subsequent events greatly increase energy costs, then the ability to commute long distances for employment and services would be inhibited. At this time, a large increase in commuting costs seems improbable.

Chapter 34

The Future of Rural Missouri—2025

Assumptions about the Future

Trends change, but usually these changes are gradual. Because large shifts are almost impossible to predict, I will assume that most of the existing trends will continue into the near future. The change that could make major shifts in the trends is if the price of petroleum increased several hundred percent. Even then, I suspect that most people would change their transportation to more energy efficient vehicles rather than give up living in the country.

Before I describe my view of the future, I should examine a few “what ifs” that have been discussed concerning rural and agricultural policies.

I will attempt to look forward to 2025, almost a quarter century from now. What will “rural” Missouri be like in another 20some years? Here are my assumptions, not in any order of importance:

- Prison employment will level off and no new prisons will be built. Crime rates have been declining and more judges are looking at alternative forms of punishment/corrections.
- Local and state government employment will be stable, with small additions to meet the needs in areas of population growth.
- Higher education will have modest growth in this period. The college age cohorts increase modestly during the next few years.
- Employment in health care will continue to increase as the large baby boom cohort ages.
- Health care and other service industries will continue to be the primary areas of job growth.
- The terrorist attacks in New York and Washington will add additional pressure for families to seek places of residence in small communities or open country areas, away from large metropolitan areas. A slow movement of businesses will accompany them. If another tragedy similar to the World Trade Center were to occur, the movement could become a stampede.
- If California and other states have continued energy crises, there will be increased migration by both firms and people to states such as Missouri with available and moderately priced electricity.
- Major changes in immigration policies could cause shifts in these trends. For example, if immigration policies were liberalized, large numbers of Hispanics and people from other third world countries would likely move into the state. However, I think that such changes are unlikely.
- Energy prices, especially gasoline, will be maintained at affordable levels.

- Retailing, along with most other sectors, will continue to be dominated by big box stores and large multinational firms.
- “Smoke stack chasing” by small towns will continue to be relatively unsuccessful. With a few exceptions, such as meat processing and “just in time” bulky-product manufacturing, most manufacturing firms have already moved to less industrialized countries such as China.
- The information revolution will not have much impact on places of employment.
- A long and severe economic depression of the magnitude of the 1930s is not likely to occur. If one did occur, the consequences for rural areas would be dramatic and presently unpredictable.

The Future for Rural Areas in Missouri

Most rural areas in Missouri are now essentially “bedrooms” for larger urban areas. There are still lingering traces of earlier rural sub-cultures in more isolated areas. These will gradually disappear with the changing of generations and continued in-migration from urban areas. “Rural” continues to exist in the minds of many. People think there are more differences between rural and urban than actually exist.

A rural areas’ population growth or decline will be determined by distance to the nearest major employment center and amenities available in the area. If the distance is short or the highways are good and the amenities are high (lakes and rivers, rolling hills or mountains and trees or warm climate), the population will continue to increase. If the area does not have any of the above, then population decline is the most likely prospect.

The “rings” of population density that surround urban centers are actually more of an amoeba shape with the “arms” following the highways. Further out, the rings include a limited number of upper class homes. Often these are “ranches” with horses, purebred beef animals or exotic animals such as bison, elk, etc. If any group deserves the label “hobby farms”, these “ranches” fit that description, although their income tax accountants might disagree. On the back roads there are larger numbers of working class families, often living in old mobile homes.

Where will the functional boundary of St. Louis be on the west in 2025? Probably it will overlap the eastern boundary of Columbia, with some people commuting to Columbia while others in the same area will be going to the St. Louis metropolitan area. This boundary will probably be around Williamsburg. The eastern boundary of Kansas City is likely to combine with the western boundary of Columbia near Marshall Junction/Sweet Springs.

I have been impressed with the willingness of people to drive considerable distances for various activities. Columbia residents have no hesitation driving to St. Louis and Kansas City for a

sports event or other entertainment. The reciprocal is true also. I still think of going to Kansas City or St. Louis as a day trip, but we have friends who will drive to a restaurant in St. Louis for dinner. There are a limited number of people currently commuting from Columbia to St. Louis and vice versa. This number seems likely to increase, especially if the interstate highway is improved. If I-70 is made six lanes across the state, distance commuting will increase. The average commuting time has remained relatively about 30 minutes for several decades, but what has changed is the distance that can be covered in 30 minutes. Assuming better highways, 30 minutes in 2025 could be an increase of ten to twenty miles for commuting. The construction of light rail to the St. Louis and Kansas City suburbs could also extend commuting distances.

The Future for Small Family Farms

There have been continuing debates over what should be the role of the federal government in preserving small/medium sized farms and rural communities. These have waxed when agricultural prices were low and waned when prices were better.

Over the century, the calls for federal government intervention to “preserve the family farm” have been almost continuous. Indeed, numerous programs have been implemented to support farm income. As far as stopping the decline in the numbers of family farms, they have failed. Many programs appear to have had just the opposite effect. A large proportion of the price support has gone to a relatively few very large-scale farm operations. These have continued to expand using the government funds. Large corporate farms are far ahead in financing and technology. Large operations have the capital to obtain new technology and can afford to take risks that smaller farming operations cannot take. In recent years, the voices calling for a return to the family farms have become more muted. In the last presidential election, agriculture and the family farm were not major issues for discussion. This is probably closely related to the major decline in the voting power of farmers.

I believe that the numbers of mid-sized family farms will continue to decline until they become vestiges of the past. An unbiased observer might say that they already are vestiges compared to those of 1900. Perhaps, they will become the Currier and Ives stereotypes for the future. Children of tomorrow will go to “living history farms” to see what farming was in the past.

I do not like to make that statement about the continued decline of family farms. Unfortunately, I believe it to be true. My family farm background biases me in favor family farms, but this is not enough to offset the hard facts of what is occurring. I have watched the demise of small grocery stores, small hardware stores and many other small retail businesses. Do small businesses not have equal rights to survive? Small businesses are often called the backbone of our country. If so, we should do more to enable them to survive. As consumers, we have benefited from the growth of large scale of retailers and producers. We get cheaper food and other products, but at a severe cost to the small retailers who are forced out of business.

The Large Scale or Corporate Farms

The large-scale farms will largely determine the future of agricultural production in Missouri. Most of these are formerly mid-sized family farms that through good management, good fortune and good financing have grown to be very large-scale operations.

If the number of large-scale farms is about 11,000 today in Missouri, what will it be in 2025? There are economies of scale in purchasing, sales, and management that would be gained by the consolidation of large-scale farms. At some time, a “Wal-Mart” size and efficiency farming system will be developed. After that happens, as it already has in poultry and hog production, massive consolidations of the large-scale operations will occur. These will probably occur before 2025. Thus, I strongly suspect that the number of large-scale operations in Missouri will be less than 5,000 in 2025.

The Recreation/Retirement Areas of the State

The Ozarks has all of the high recreational/retirement growth of Missouri, but not all of the Ozarks are high growth areas. The southwest quadrant of the state, with the Lake of the Ozarks on the northeast corner has the most rapidly growing areas. Another growth pattern follows I-44 southwest from St. Louis. Will the growth patterns of the future be the same? Or will growth spread throughout the eastern Ozarks? The most probable answer is the first. West Plains is the only growth point in the eastern Ozarks and the growth there is not large enough to create growth in adjacent counties. I think that most of the recreational/retirement growth will be around the Lake of the Ozarks and Branson. In the next twenty-five years, however, Branson is not likely to have the high percentage growth rate of the last decade.

One possible growth factor is telecommuting. The use of computers and wireless electronics has enabled many people to “telecommute” and thus live wherever they prefer. Missouri’s amenities, while good, do not match those of the mountain west or the seashores¹. While there will be some increase in telecommuting by people in Missouri, it is not likely to cause significant population increases in most rural communities.

1. *Arkansas and several other areas in the southeastern U.S. have greater amenities.*

Chapter 35

The Future of Agricultural Change Institutions: Land Grant Colleges, Cooperative Extension, Related Federal Programs and High School Vocational Agriculture

Old bureaucracies never die, they just fade and fade....

My primary focus has been on changes at the family and community levels. Closely linked to many changes are the institutions and programs that were designed to bring about the changes in farming and rural communities. Several governmental institutions were established around the beginning of the 20th century with the primary mission of changing farming practices and, as a consequence, farming communities. Land grant colleges, agricultural experiment stations, cooperative agricultural extension, high school vocational agricultural education and related federal programs such as the Soil Conservation Service and Forrest Service are the major programs.

Land grant colleges have been some of the most effective change agents. Land grant colleges usually divide their programs into three broad areas: on-campus education, research, and outreach or extension. The discussion here focuses primarily on the latter two, although there are some implications for the first one also.

First, a brief history of the congressional enabling acts is provided.

Principal Education/Research Federal Acts

- **1835:** The Morrill Land Grant College Act established land grant colleges in every state.
- **1887:** The Hatch Experiment Station Act established agricultural experiment stations at MU and other land grant colleges. This legislation included “mechanical arts” and home economics, in addition to agriculture.

A Revolution in the Heartland

- **1890:** The Second Morrill Act established 18 predominantly black land grant colleges.
- **1914:** The Smith-Lever Extension Act established cooperative extensions at Missouri and Lincoln Universities
- **1917:** The Smith-Hughes Vocational Education Act established High School Vocational Education programs in most rural high schools.
- **1924:** The Clark-McNary Act provided for forestry extension work
- **1925:** The Purnell Act provided for economic and sociological research in the experiment stations
- **1935:** The Bankhead-Jones Agricultural Research Act more than doubled support of extension work.

These programs have been very successful, probably much more so than their most fervent early supporters would have predicted, and perhaps even too successful. Some farmers think that the agents for change became, in essence, agents for destruction. As a result of the farm crisis of the 1980s, many progressive farmers who were in financial trouble came to regard the recommendations of extensions as being one of the causes of their problems.

What does the future hold for these change agents? Today's large-scale farms are usually operated by people with college training and equipped with computers connected to the internet. Is there a continuing need for such change agents in the 21st century?¹ Is this a time to say enough? Or should they move ahead with new goals?

The first impulse of a bureaucracy, once it is established, is self-perpetuation. The second impulse is to increase in size. One way to do that is to change the primary mission of the program or institution if the original mission becomes obsolete.

The agricultural research, outreach/extension areas are likely to face more difficult times in the Missouri legislature in the next few years. Three major clouds are on the horizon: budget limitations, term limitations for all state legislators which become effective in 2002, and legislature redistricting for the 2002 elections. The budget crisis in the state finances seems likely to continue for several years. Some legislators with considerable influence and interest in agriculture will not be eligible for reelection. Redistricting based upon the 2000 census of population will give more legislative districts to the suburbs and the urban sprawl areas around the cities.

1. Donald W. Littrell and Doris P. Littrell, "Civic Education, Rural Development, And the Land Grant Institutions" in Kenneth E. Pigg (ed.), **The Future of Rural America: Alternative Policies for Constructive Change**, Westview Press, Boulder, 1991.

It is going to be difficult to secure state funds to continue outreach/extension at levels similar to the past. Some states, such as Iowa, have already turned to charging for services as a means of generating operating funds.

Reinvention has been done by extension/outreach with varying degrees of success. The process of reinvention is still going on. The MU Outreach and Extension has very different programs from those at the turn of the 20th century, those of mid-century, or even those of two decades ago.

Research

As the numbers of farmers become smaller and smaller, the task of coming up with publicly acceptable agricultural research missions becomes more difficult. Do you need a college of agriculture and an experiment station (actually Missouri has two of each) to serve the 10,000+ commercially sized farms in the state? What kind of research would benefit the 85,000 small-scale operations in the state? Would the taxpayers and the farmers be better served by some other research organizational structure? Are publicly funded research organizations needed for agriculture in the 21st century? There are no special research institutions for the automotive industry. If research institutions were being established to serve agriculture today, the total number would be much more limited than in the past. One or two per major agricultural commodity is all that are needed.

Currently, research in colleges of agriculture is funded through six primary sources.

1. The oldest source is non-competitive federal grants funded by congress. The USDA and Congress decide each budget year what the total amount will be for agricultural experiment stations and this amount is allotted to the state by a formula based upon the rural population in each state.
2. Competitive federal grants are funded for substantive areas. Again, Congress decides each year the total amount of such grants. Researchers from across the nation in both land grant and non-land grant colleges and universities make proposals and the winners are decided by peer evaluations. In theory, only the "best" proposals are funded. The funding by Congress has increased for competitive research grants, but not for non-competitive funds.
3. Several Missouri research projects are funded by direct federal appropriations made as special line item funding (sometimes called pork barrel research funds). This requires a powerful senator or congressman who will make sure these items are included in the USDA budget appropriations. MU has two such major projects, FAPRI (Food and Agricultural Policy Research Institute) and RUPRI (Rural Policy Research Institute).
4. The traditional major source of funding is from the Missouri legislature. These funds have been increasing very slowly, except for a special amount for a new research program called

"Food for the 21st Century" that has focused primarily on biotechnological topics. Currently, major efforts are being made to establish a new line of funding with the title of "Life Sciences" that combines the political support for health, biology, and agriculture.

5. The commodity organizations such as soybean growers provide research funding for their commodities.
6. Corporate funding from companies such as Monsanto has been increasing in recent decades. The grants are normally for specific topics that will assist the corporate interests. These are controversial because sometimes the corporate funding covers only a portion of the costs and the corporation often restricts the release of the results.

Research is given high priority by most colleges of agriculture, including MU. The amount of research grants obtained is given heavy weight when professors are evaluated for decisions concerning tenure and promotion.

In recent decades, the proportion of total research funds from corporate and commodity sources has increased substantially. This has reduced the ability of states such as Missouri to set their own research agendas. Currently, research must be done on topics that are determined by the USDA and Congress or commodity and corporate interests. The amount of applied research that directly benefits Missouri farmers (especially small scale farm operators) is relatively small as compared to the first half of the 20th century.

About twenty years ago, the leaders of the U.S. land grant colleges and those of commercial agricultural research firms made an agreement on the division of research between the two groups. Prior to this agreement, the faculty of the land grant colleges did much of the applied research for developing new crop varieties. The extension staff took the results and recommended them to farmers. The plant-breeding firms found there was money to be made in the developing and marketing of such innovations. As a result they asked the land grant colleges of agriculture to focus more on basic research and not so much on applied research. Basic research² is usually more expensive and not as likely to lead directly to a profitable product. Today, the plant breeding firms have been bought up by multi-national corporations and it is corporate giants such as Monsanto that sell most of the seeds and other supplies that farm operators' need.

The current "hot" area of basic research is molecular biology. It has been sold to the public as offering the exciting potential of solving major health and other problems. Biotechnological research is very expensive to set up and to conduct. As an alternative to traditional agricultural research, the University of Missouri and most of the other major land grant universities in the country are working very hard to make themselves major players in biotechnology research. In

2. *There is a continuing discussion over the line dividing basic from applied research. Much of the current basic research is at the cellular level, focusing on genetics and biochemistry.*

this competition are other major universities such as Harvard, Stanford, and virtually all of the other major private research universities. The field is packed with universities jockeying for advantageous positions.

How many universities are needed or can afford to become major players in biotechnological research? Are the people of Missouri willing to put up the tens or hundreds of millions of dollars needed each year to support a major biotechnological research institution? Can they compete with the states of Illinois, California, Ohio, North Carolina, Wisconsin, New York and others with much larger tax bases? Based upon past political actions such as state support for higher education, one cannot be optimistic that such resources will be made available by the state government in Missouri. The "Hancock Amendment" sets major limits for tax funds for future governmental programs of any type. The Hancock amendment says the governmental resources and spending cannot increase faster than the rate of increase for the overall economy. This means that funding for biotechnological research must compete for funds with primary and secondary education, highways, prisons, prescription drugs for seniors and many other public needs. The possibility of the repeal of the Hancock Amendment is slim.

One alternative for university administrators is for the formerly politically powerful and popular names to be left in the organizational chart, but not funded well. Instead, many small cuts will gradually reduce the programs until they become shadows of their former glory. The "cuts" may not be actual cuts, but if the increases do not keep up with inflation and/or increases in the university's base budget, the results are the same. As faculty/staff positions come open because of retirement or other reasons, not all of the open positions are filled. If this attrition occurs over many years or decades, it will avoid the public controversy that would occur if a formerly popular program were to become a candidate for elimination. I believe this will happen in many states, including Missouri.

Extension/Outreach

The traditional Cooperative Extension Service had three major thrusts: home economics, 4-H (youth), and agriculture. These three programs met many of the needs of the rural families of the 1920s and 1930s when extension personnel were located in most counties. There was a male staff member for agriculture, a female for home economics and usually a male for youth. These were all white except for a very few African Americans working in southeast Missouri, and all were college educated.

The program objectives were to bring about social and technological changes in almost all aspects of farming; changes in the way women kept the house, cooked and preserved the food; and how children were educated. Many specific objectives in these early areas were successfully met. But times and needs change, the program of yesteryear is not necessarily the program for today or tomorrow. In the two full-time workers households found commonly today in both rural and urban areas, time for anything beyond the family and household necessities is difficult to find. For today's parents, soccer and dancing lessons for the kids plus

housework are the normal Saturday activities with shopping on Sunday afternoon. 4-H has gained some success by becoming an after-school program rather than an evening event as it was in earlier years.

To reach adult men and women is more challenging. The diversity of interests for those who have any "free" time makes it challenging to find common threads for program development. Leadership development has been a successful topic in many communities. Leadership groups may be in competition with Chambers of Commerce leadership programs and commercial leadership programs. In some communities, the organizations work in cooperation on leadership programs.

Traditional extension programs have had to make major adjustments to fit the new realities:

As the population shifted to the cities, Missouri's extension program expanded to include programs for urban populations. Currently, those include after-school youth leadership programs in federal housing developments, food and nutrition education programs for limited-resource populations, and labor education courses delivered through interactive television.³

Most of the early 4-H projects (established in 1927 for youth of 8 to 18 years of age) were directed at agriculture type activities for the males and home economic activities for the females. As the rural world changed, types of projects had to be revised or replaced. The Missouri program currently offers over 60 projects, including such things as human nutrition and pet grooming and reaches one out of five Missouri youth.

The home economics programs were forced to make even more alterations. Several changes occurred in the traditional home economics audiences. As women took on out-of-home jobs time became a major constraint, and at the same time women's interests broadened. Again, diverse interests make it more difficult to find subjects in which enough people are interested to justify developing a program for them.

As the number of full time farms declined and the dual agriculture developed, the cooperative agricultural extension found itself facing very different potential audiences. The transition to meet the changing needs has been less than smooth. The relatively large numbers of on-campus state agricultural specialists and the county/regional level agricultural specialists were reluctant to give up what many had regarded as a "noble" mission—to bring the latest scientific agriculture to the farms, large and small.

It takes considerable time to change the programs of a large bureaucracy. In some ways, it is like changing the heading of a large aircraft carrier. Change occurs slowly even in an organization that has change as its primary mission. Most professionals in bureaucracies have 20 to 30

3. August 2, 2001, <http://outreach.missouri.edu/about/UOEWeek/98%20UOEWeek/history.html>

year careers. Most are reluctant to make major changes in their area of expertise. The chance of an agronomist enthusiastically becoming, say, a community development specialist is very limited.

Change is further complicated by the dual agriculture structure. The relatively small numbers of large-scale operators are politically well connected, especially at the state level. They have the knowledge of how the system works and the resources, money, and power, to make things happen. The large numbers of small-scale operators are not well organized and often do not have the knowledge of how the system works.

The transition has had very mixed results. There was a push in the 1960s and 1970s to upgrade the skills of the agricultural specialists. Master's degrees were required for extension field staff jobs. Many of the extension agricultural programs do not meet the needs of the small farm operators. Many of the small-scale part-time farm operators do not have the time, interest or capital for the high tech agriculture that the extension staff is offering.

The part-time operators are often weekend farm operators who only have time to talk to extension staff in the evenings or on weekends. Most extension workers thought their job was a nine-to-five job and not a weekend job. The result was that the increasingly high tech agricultural specialists were chasing smaller and smaller audiences as the numbers of medium sized operators continued to decline.

The poultry contract growers, and now an increasing number of hog contract growers, get their instruction from corporate field men who have "books" from headquarters on what to do and when. There is no role for extension staff in these systems. I watched an attempt in the mid-1980s by Missouri extension to approach Tyson poultry field men about cooperative activities. While it was said in a more polite way, the response from the field men was in essence, "we don't need you". When asked what they would do if the answer to a problem was not in their field guides, they said that it would be up to corporate headquarters to come up with an answer. They as field men had no responsibility to try and find such answers. Indeed, such actions by the field men would likely bring a negative response from headquarters, especially if the proposed solutions were not successful. They said that if the headquarters needed research assistance, they would contact the University of Arkansas with whom they had a long relationship. Apparently, one university relationship was sufficient for the multi-state production.

The community development area is one that has been seen by many as an alternative to agriculture. This program has had a rocky road in the state. Despite the positive perception of community development held by many people, during an MU campus administrative fad for cutting programs during the 1980s, the academic program for community development was eliminated. The remaining community development faculty members were limited to outreach/extension programs. At one time, the MU community development program had more than twelve on-campus faculty members. Today, the number of active staff is less than five.

In the last decade, outreach/extension has adopted a community needs assessment approach as a means of grounding the local programs. This has met with some success, but often encounters a problem at the regional and state levels when the local initiatives are grouped together in broad areas, losing sight of the needs of individual communities. Another difficulty is that such an approach requires a very different type of local staff; they must be generalists who can work in several different and often changing substantive areas rather than the narrowly trained specialists of the 1970s and 1980s.

The "struggle" for resources (i.e. money) started in the 1980s and is still continuing. Slowly, largely by attrition, the domination of extension by agriculture is declining. The new roles for extension/outreach are still evolving. It is unclear at this time whether outreach/extension will be able to develop programs that will generate sufficient legislative support at a time when primary and secondary education, health care, and transportation are all demanding major new resources.

Another factor influencing the extensions is the internet. More and more people are using the internet as an information source. It is especially convenient for busy people such as those in two-earner households who want to find the desired information at a time convenient to them. This offers major opportunities for extension/outreach with one major reservation. People using the internet do not care where the information comes from. They will not care if the site is at Iowa State University, Cornell University (New York), or the University of Missouri.

In sum, extension/outreach has been casting about for missions and retooling for almost three decades. With the great diversity now found in most communities, rural and urban, it is very difficult to establish any program that comes close to having the loyalty and support that the original extension programs had. My prediction is that outreach/extension is likely to go through a similar slow attrition to that discussed above for agricultural colleges. It is very possible that the limitations of state funding for higher education will cause extension to be reduced faster.

Agriculture Education in the MU College of Food, Agriculture, and Natural Resources

Forty years ago, when I started my teaching career, about twenty to twenty-five percent of the typical freshman class would say that they intended to go back to farming. Today that number is well under five percent. Sometimes I will not have any students who raise their hands. Two of the largest undergraduate majors in the College of Agriculture, Food and Natural Resources (CAFNR)⁴ are pre-medicine in Biochemistry and pre-veterinary in Animal Sciences. Another large undergraduate program is "Hotel and Restaurant Management," which is a distance from the traditional agricultural programs of soils, animal husbandry, and plant science and farm

4. *The college was renamed from the College of Agriculture about a decade ago in an attempt to broaden its image.*

management. The total undergraduate enrollment in the MU CAFNR has been stable for several years, but there have been major shifts in the most popular majors.

Several of the state universities (Central, Northwest, Southeast, and Southwest) offer agricultural degrees. Lincoln University also has agricultural training. Southwest Missouri State University at Springfield also has a research program that emphasizes horticultural projects. Truman State University at Kirksville is the only state university to drop an agriculture program.

There are more than 800 post-high school agricultural education programs in the nation. Are all of these still needed? It is easy to say that some should go, but which programs should go is a much more difficult question. Just as in farming and other businesses, people and institutions have large investments in programs. Tenured professors might have to be terminated if a program is closed. This is always a very difficult process. Thus, most institutions avoid making such hard choices by waiting for the people to retire and not replacing them.

My perspective on undergraduate training is that the employment market for graduates will take care of the need for more or less agricultural course offerings and programs. Most students are sensitive to the career opportunities offered by programs. In contrast to the other programs discussed here, there is a more direct market mechanism in undergraduate education.

High School Vocational Agriculture

The Agricultural Education program in high schools involves different bureaucracies. The Missouri Department of Elementary and Secondary Education and the local school systems, in addition to the USDA and Congress, are all decision-makers in determining the future of agricultural education. It may be easier in some ways to retool agricultural education than some of the other former change agents. Programs on environmental education and leadership offer promise for continuing redirection.

The agricultural education programs usually have good political support at the local level. Thus, it would be more difficult to eliminate such a program if it were so desired.

Some of the small changes along the way:

- The traditionally male youth organization Future Farmers of America became simply "FFA" and has both males and females as members. The teachers of Vocational Agriculture remain predominantly male. The MVATA (Missouri Vocational Agriculture Teachers Association) state executive committee is entirely male.
- The Future Homemakers of America disappeared along with the label "Home Economics" when the roles of women changed and they made careers outside the home. The closest Missouri state subject area title to the traditional home economics would appear to be

"Family and Consumer Services and Human Services". The youth organization is "Family, Career, and Community Leadership" and has both males and females as members (mostly females).

Related Federal Programs

Over the years several other federal programs (each a very large bureaucracy) have been added. These include the Soil Conservation Service, the U.S. Forest Service and several others. Each of these has more narrowly defined missions than the programs discussed above. Each would claim that their mission remains incomplete. Because they are very small portions of the total federal budget, it seems more likely that they will continue. The same attrition process may be applied to them if the federal budget tightens significantly. However, it only takes a few (one might be enough) powerful senators or representatives to insure continuing funding for any such programs. It is possible but improbable that some of these programs may be abolished as federal budgets tighten.

Summary

If the world were a completely rational place, several of these programs would be abolished; others would be severely downsized and others would have a major restructuring. To many of these would go a commendation; "job done—well done". But the bureaucratic world is not very rational, so I will end the chapter as it began: "old bureaucracies never die, they just fade and fade and fade and...."