

# Profile of Missouri's Farms and Farmers

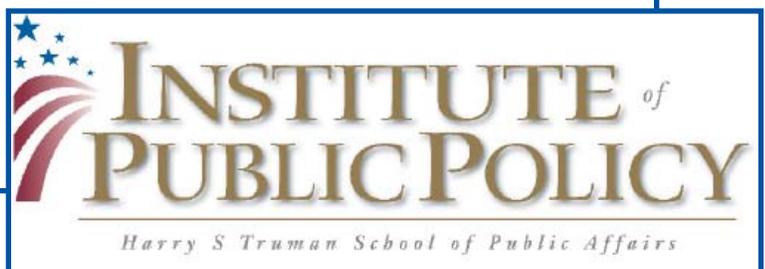
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## Introduction

Missouri is home to approximately 158,000 farm operators and more than 106,000 farms. The agricultural industry is an important part of the Missouri economy; in 2002 total Missouri agricultural sales were approximately 5 billion dollars. This brief examines Missouri's agricultural industry.

## Data

Data in this analysis were obtained from the Census of Agriculture, which is conducted by the United States Department of Agriculture (USDA). This data set measures agricultural activity and productivity at the county, state, and national level. Currently the census is conducted on a five-year cycle in years ending in 2 and 7. The next agricultural census will be conducted in 2007. For this profile, data from both the 2002 and 1997 census were used.

## Farms in Missouri

The 2002 census identified 106,797 farms in Missouri, down 3.9 percent from five years earlier. A farm is defined as any place from which \$1,000 or more agricultural products are produced and sold, or normally would have been sold, during the census year. These farms cover more than 29.9 million areas of land, or more than 68 percent of the total land mass of Missouri.<sup>1</sup> The average size is 280 acres and the median farm size is 156 acres.

Figure 1. Number and Percent of Farms by Total Acreage

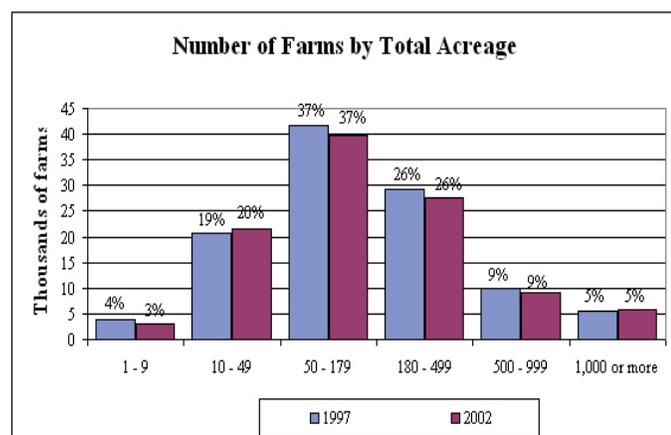
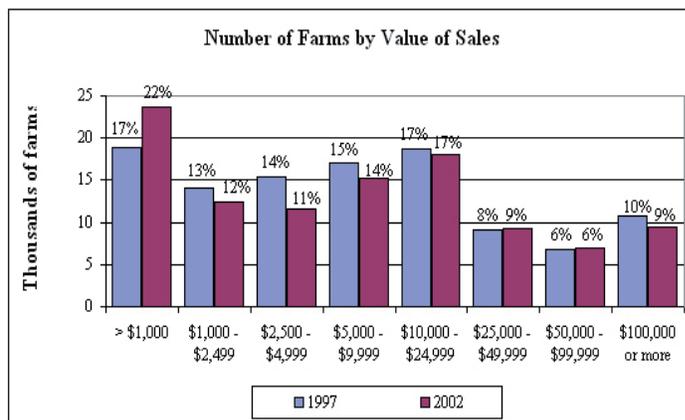


Figure 1 shows the number of farms by total acreage for both 1997 and 2002 in Missouri. The majority of farms are between 50 and 179 acres; only five thousand farms are more than 1,000 acres. There has been little change in the size of farms over the past five years.

Missouri ranks 12<sup>th</sup> in the nation for the total value of agricultural products sold, over \$4.98 billion in 2002. Figure 2 shows the number of farms at varying levels of sales. The majority of farms sell between \$5,000 and \$24,999 of products. Only a small number of farms (less than 10,000) sell more than \$100,000 of products. Almost 25,000 farms sell less than \$1,000 and that number has increased by more than 25 percent in the five year period.

Figure 2. Number and Percent of Farms by Value of Sales



## Rankings of Agricultural Products

Missouri produces a number of agricultural products. The most common livestock are turkeys, beef cattle, and hogs; the most common crops include forage, soybeans, and corn. Missouri ranks at the top of the nation with inventory and production of a number of agricultural products; top ten inventories include turkeys, cattle and calves, and hogs and pigs as well as acreage of forage, soybeans, corn for grain and all cotton. Missouri ranks 2<sup>nd</sup> in the number of acres used for forage including all land used for hay and haylage, grass silage, and greenchop (Table 1).



Table 1. Missouri Rankings by Major Agricultural Product, 2002

	U.S. Rank
<i>Livestock Inventory (number of head)</i>	
Turkeys	5
Cattle and calves	6
Hogs and pigs	7
Broilers and other meat-type chickens	13
Layers 20 weeks old and older	15
<i>Crops (number of acres)</i>	
Forage *	2
Soybeans	5
Corn for grain	9
All cotton	10
All wheat for grain	13
*Includes land used for all hay and haylage, grass silage, and greenchop.	

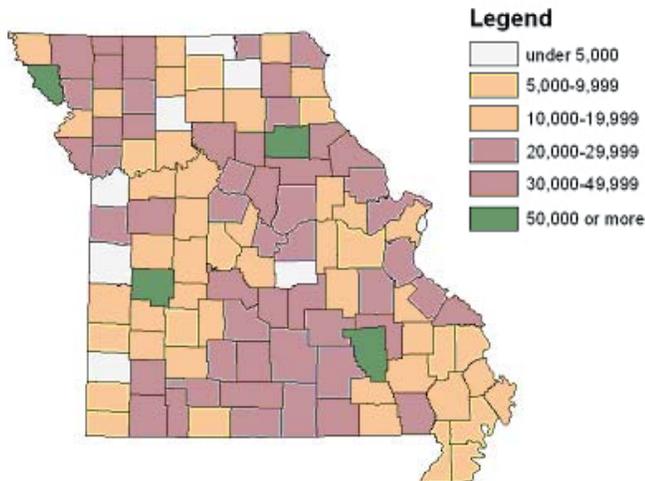
**Livestock Production**

Livestock production plays an important role in Missouri agriculture. Cattle, hogs, and broilers are three major livestock species produced in Missouri. Below is a brief description of the livestock groups along with a map indicating where the majority of production occurs.

**Cattle and Calves**

In 2002 Missouri sold 2.49 million cattle and calves from approximately 58 thousand farms. This represents an average of 43 head per farm. Holt and Monroe counties sold the most head with more than 60 thousand each. Figure 3 shows the total number of cattle sold by county.

Figure 3. Number of Cattle and Calves Sold by County, 2002

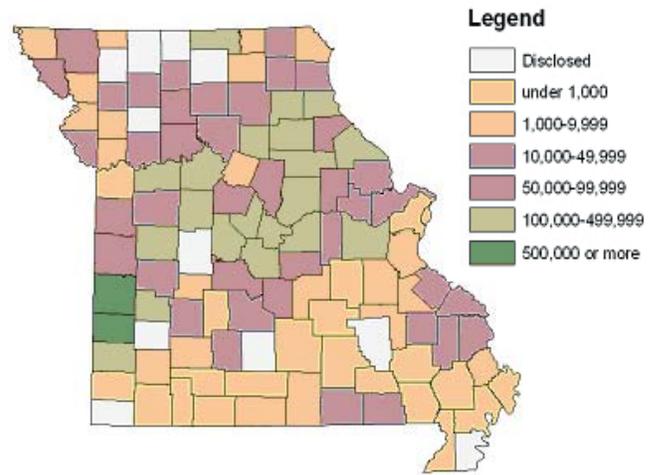


**Hogs and pigs**

Missouri sold 9.2 million hogs from 3,752 farms, for an average of 2,475 per farm. Vernon county sold 1.2 million, or 13 percent of Missouri's total, more than double the second highest producing county. Figure 5 illustrates the sales of the

total number of hogs and pigs sold by county. The two top producing counties (Vernon and Barton) are both in southwest Missouri.

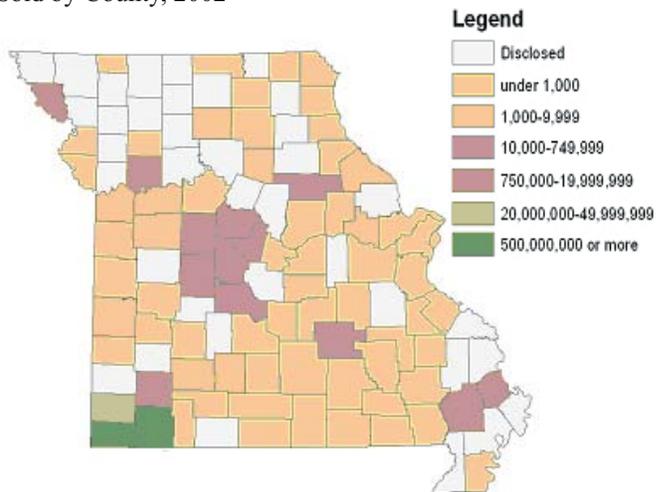
Figure 4. Number of Hogs and Pigs Sold by County, 2002



**Broilers**

Broilers and other meat-type chickens were sold from 812 Missouri farms. A total of 273 million broilers were sold, for an average of 336 thousand per farm. Although broilers were sold in 55 counties, the top producing county, Barry, sold 32 percent of the total. Figure 5 is a map of broiler and other meat-type chickens produced by county. The two largest producing counties are in southwest Missouri.

Figure 5. Number of Broilers and Other Meat-Type Chickens Sold by County, 2002

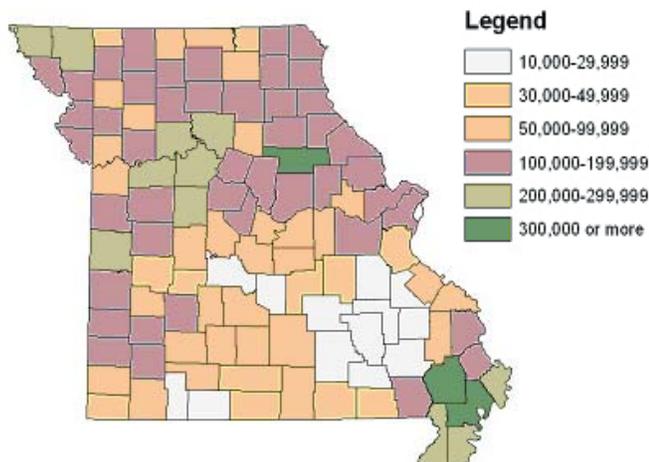


**Grain Production**

Crop production is a significant proportion of Missouri agricultural products with more than 13 million acres of harvested cropland.<sup>2</sup> New Madrid county has the largest number of acres of harvested cropland. Figure 6 is a map of harvested cropland by county.



Figure 6. Total Acres of Harvested Cropland by County, 2002



Three of the major crops in Missouri are corn, soybeans, and wheat.

#### Corn for grain

There were 15,655 farms in Missouri growing corn for grain, producing 268 million bushels on 2.7 million acres. There was an average of 171 acres per farm in corn production. Production averaged 100 bushels per acre. Shelby county is the top producing county in Missouri.

#### Soybeans for beans

Soybeans were produced by 21 thousand farms in 2002, harvesting 165 million bushels. Over 5 million acres of farmland was used for growing the soybeans. The production averaged 33 bushels per acre. Butler and Livingston counties both produced more than 6 million bushels.

#### All Wheat for grain

Missouri farmers produced 34.9 bushels of wheat and 811 thousand acres of farmland Livingston and New Madrid counties produced more than 2 million bushels of wheat for grain, in each.

#### Profile of Farm Operators

Approximately 158,000 individuals operate farms on Missouri which represents 2.8 percent of Missouri's citizens.<sup>3</sup> There is an average of 1.5 operators per farm; 60 percent of farms have 1 operator, 35 percent have 2 operators, and 5 percent have three or more operators. The vast majority of farms are operated by males (90%), although the percent of principle female operators increased by more than one percent over the five years. Ninety-eight percent of the operators are white.

More operators (81%) indicated their place of residence was on the farm operated in 2002 as compared to 1997 (73%). In 2002 the majority of operators (57%) also worked off farm as compared to 59 percent in 1997. Of those that work off farm, an astonishing 75 percent reported working 200 or more days off

the farm. In 2002, 57 percent indicated farming was the primary occupation up, from 42 percent in 1997.

A majority of farms do not produce substantial revenue. Net cash income of operations is calculated by subtracting total farm and farm related expenses from total sales, government payments, and other farm-related income. This averaged only \$7,522 in 2002. Under the net cash income of operations, farms are divided into two categories those with net gains, included those that broke even, and farms with net losses. Slightly over 50 percent of the farms experienced a net gain or broke even. The average net gain was \$26,594 per farm. For farms with net losses, the average loss was \$11,653.

#### Conclusion

Agriculture plays an important role in Missouri's economy. The main livestock species include cattle, hogs, and broilers; the main crops include forage, corn, soybean, and wheat. Missouri ranks in the top of the nation in the products of each of these commodities. The agriculture industry sold nearly \$5 billion products in 2002; ranking Missouri 12<sup>th</sup> in the nation for value of products sold. The number of small farms is increasing and larger percent of farmers indicated the farm was the place of residence. The percent of operators indicating farming is the primary occupation is increasing. Missouri agriculture not only provides revenue from the sale of food products but employs 2.8 percent of Missourians.

#### (Footnotes)

<sup>1</sup> Based on Missouri total acres: U.S. Census Bureau, Statistical Abstract of the United States: 2004-2005, Table 347.

<sup>2</sup> Harvested cropland includes land from which crops were harvested and hay was cut, and land used to grow short-rotation woody crops, land in orchards, citrus groves, Christmas trees, vineyards, nurseries, and greenhouses. Land from which two or more crops were harvested was counted only once. Land in tapped maple trees was included in woodland not pastured.

Harvested crops in Missouri include: all sunflower seed; all cotton; tobacco; soybeans for beans; dry edible beans, excluding limas; potatoes; peanuts for nuts; forage; vegetables harvested for sale, land in orchards; rice; rye for grain; triticale (cereal grain); corn for grain; sorghum for grain; all wheat for grain; barley for grain; emmer and spelt (wheat varieties); flaxseed; oats for grain; and popcorn.

<sup>3</sup> Based on 2002 Missouri population: U.S. Census Bureau, Statistical Abstract of the United States: 2003, Table 17.

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