

# Establishing Discharged Service Men and War Workers on Farms

O. R. JOHNSON

Whether or not persons released from either the armed services or from war industries should turn to agriculture as a chosen occupation depends on many considerations.

First, is the question of adaptability to the life and work of a farmer. To persons well adapted by training and temperament an opportunity should be made available.

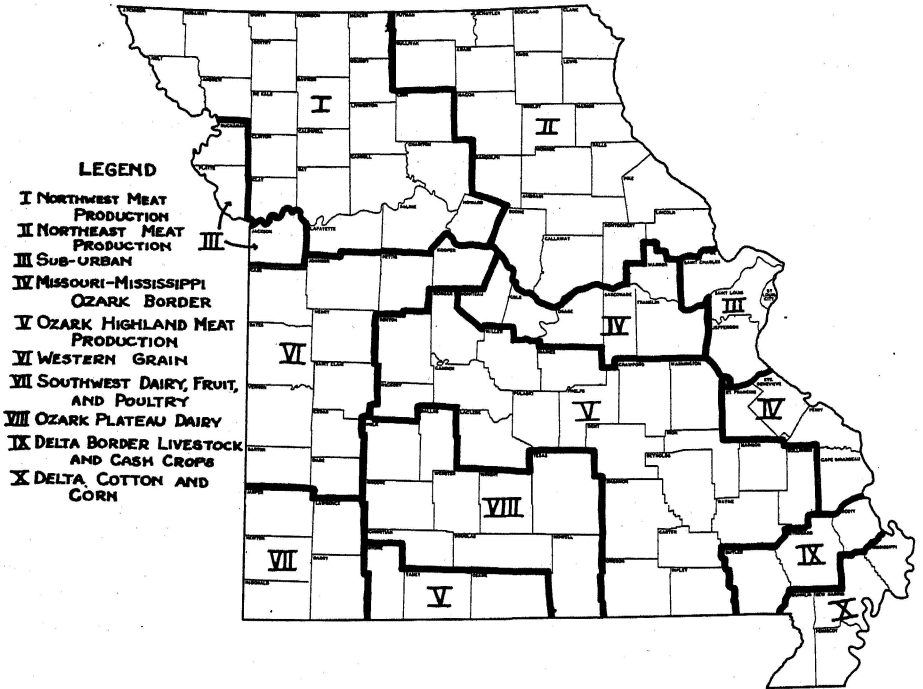
Second, while there are more farms and farmers now than would be required if all were doing a good job, yet additional *efficient* operators should be accommodated and at the same time the way should be made easier for the inefficient and unfitted one-fourth of our present farmers to move to occupations for which they are better suited. Agriculture and our whole economy would gain by such a shift.

There is ample opportunity for additional efficient operators to achieve security and a highly satisfying level of living in agriculture. Even a moderate degree of effectiveness will yield a good living, reasonable security, and a satisfaction that may be more treasured than the possibility of higher money rewards in some other vocation.

Efficiency depends partly on temperament and adaptability, and largely on adequate opportunity, so that both must be given careful attention in establishing new farm units.

The ideal adjustment would be for the returning well-suited family to displace one poorly adapted to farming, thus lifting the level of effectiveness of agriculture. Care must be exercised that establishment of new units does not reduce effectiveness of present ones through uneconomic sub-division, or the retardation of needed consolidations.

During the readjustment period following the war, the problem of selecting appropriate locations for those desiring opportunity to



Types of Missouri Farming Areas.

supplement other income by part-time farming activities will assume increased significance.

For such persons the appropriate acreage will be less than that required for an effective farm unit for those wholly dependent on the farm. The great variety of special circumstances which will determine the appropriateness of the location and acreage makes it impracticable to go into details in this particular report. However, it should be emphasized that the adaptability of the individual and his family to rural life and to the requirements for success with farm enterprises is just as essential as it is in the case of the full-time farm operator. The importance of this adaptability cannot be over-emphasized. Families poorly adapted to the life and work of a farmer would be much better situated in more nearly urban circumstances. With this caution, the whole complex problem of the part-time farm resident will be dismissed and attention centered on problems confronted by the prospective farm family who must depend almost or entirely on their farm for living and savings.

The satisfaction derived from farming is no small part of any farm family's reward for careful farm planning and a large amount of hard work in carrying out those plans. Those discharged from the armed services or from industry at the close of the war, who feel that they would be more satisfied on the farm than in some other vocation, should know under what conditions they may reasonably expect to find a secure place among the moderately or highly effective farm families and how they may avoid those conditions which would prevent this.

### Requirements for Satisfaction on Farm

Anyone to be satisfied on the farm must be able and willing to work, but must also be able to think and plan while working and carrying out those plans. One must not mind the outdoor weather. He must like animals and plants, and like to work with the soil. He must enjoy seeing things grow and do well. He must be concerned when they do not do well, find out causes, and correct them.

He must follow through after the crop is produced and see that it is well preserved, well utilized, or well sold. He must be willing to read widely, observe the farming of his neighbors and consult with them, confer with the county agent, keep in touch with his Experiment Station, and constantly study his own soil and his farming setup to find ways and means of doing a better job. One of his major problems is how best to supplement the limitations of both soil and season to achieve a production better than average methods will bring. Exceeding average results is essential to satisfy the ambitious operator.

He must know how to work with machinery and tools, and how to care for these and keep them in good working order. He must be careful to see that machines are used instead of his own hands when machines can do the work better and save him time which he can use productively at other tasks. His plan of work must be suited to his own capabilities and those of his family.

He must appreciate cooperation with his neighbors; frequently helping a neighbor in order that the neighbor will be willing to help him may increase his effectiveness many fold. Incidentally, it also increases the appreciation of neighbors for one another, which is not to be overlooked.

### Variation in Productivity of Land

The preceding paragraphs have indicated the kind of ability which a man needs if he is to find satisfaction in farming. There are about as many necessary considerations of the land as there are of the man.

In Missouri there is a great variety of lands, some highly productive and some of low productivity. Those highly productive can be used in more ways than can the less productive areas. One

cannot use the same methods and practices on all grades of land. Each must have applied to it those practices best adapted to that land.

Naturally the most productive land will usually be the highest priced land. Also the better the land the more one can depend on its productive powers and the less one needs to depend on the skill of the operator and the use of resources other than land to get results. The poorer the land, the more dependence must be placed on the skill with which the land is handled. While land of low productivity is usually less expensive than more productive land, its requirements of operating capital are quite likely to be high.

Much of our less productive land in Missouri is devoted to pastures and woodland uses. Naturally it requires more acres of pasture land than of highly productive land adapted to growing crops like corn and alfalfa. Uses appropriate to pasture land acres can and do give living levels just as satisfying as those uses and practices appropriately followed on some of the best lands. If one must be a tenant and operate from year to year, he would better be on the best land. Land of lower productivity requires more care and management than a one-year tenant can afford to give.

#### Adequate Farm Unit Essential

An adequate farm should provide enough production to cover cash operating costs; provide an acceptable living for the family; maintain the land and improvements; retire the mortgage in an orderly way; and pay a fair rate of interest on real estate capital, not represented by the mortgage, as well as on operating capital.

Farm families will require a certain minimum income to provide an acceptable living regardless of whether the land they are operating is of high or low productivity. An effective or adequate farm unit should, therefore, increase in acreage as productivity of the land declines. This increase will not be at exactly the same rate as the decrease in productivity occurs, because operating costs do not increase directly as productivity increases nor as the acreage operated expands. The more highly productive land usually calls for operations which require a larger cash outlay per acre. Also there are some expenses which will increase as the number of acres in the farm unit increases. For instance, it requires more fencing on a 200 acre farm than on one of 100 acres, but it does not usually require twice as many rods of fence. Thus the smaller unit of higher productivity will have some increases in operating costs, but some of its operating costs will be less than for the larger acreage of less productive land. The important consideration is the *gross production less actual cash outlays for operation and maintenance*. That amount, whatever it is, will determine the adequacy of the unit.

Likewise, the degree of intensity with which the land is used directly affects the number of acres which will be required for an adequate family living. If the land is to be used for extensive crops like corn and small grain, it will require more acres than when used in more intensive crops like fruit and truck crops. Also many livestock enterprises increase the intensity of use. A poultry farm of 15 or 20 acres might be just as effective a farm unit as a dairy farm of 120 acres or a grazing farm of 500 or 600 acres. Great care must be exercised to be sure that with appropriate systems of farming the acreage is sufficient to sustain a business large enough to meet operating and maintenance costs and adequately support the family.

### Location Possibilities

The most obvious possibility in locating a returning family in a community is on a farm whose operator is at or beyond the usual retirement age and who is desirous of turning the farm over to younger hands as soon as the war emergency is ended. Such farm units are generally effective units and are to be found in most neighborhoods; so that placing new families on these units will in no sense involve the objectionable features of colonization projects on lands which for some reason have not before been considered practicable possibilities. A careful survey of these prospective available units will reveal that in many cases these may be placed in the hands of service men or war workers coming originally from that same or nearby neighborhoods, thus eliminating much of the hazard for both the new and the retiring operator.

In some cases the retiring operator will want to retain a small acreage and a home on the original farm unit rather than move to new and strange surroundings.

Another possibility exists in the drainage and reclamation of delta and river bottom areas now ineffectively used because of flood hazards or lack of natural drainage. Frequently these areas would be highly productive if flood prevention, drainage, and clearing could be provided. Such improvement cannot be practicably borne by the beginning settler. It will require outside capital to put the land in shape for effective operation. Retirement of the loan thus advanced will be feasible if distributed over a reasonable number of years.

Subdividing large farms already in effective use will in most cases be undesirable. There is too much danger of reduced efficiency in use of labor and capital by such subdivision. Net production will likely be reduced.

A highly desirable but extremely difficult readjustment could be undertaken in the case of the very considerable number of farm units now occupied by families poorly adapted to the occupation of farming. If such families could be identified and persuaded to

exchange their unsatisfying present occupation for a reasonable opportunity to work in non-farming activities, and if in their stead adapted returning families could be placed on these farms, the result would be a clear gain all around. The difficult part of the problem lies in identifying these families which could appropriately be moved to better adapted circumstances and persuading them that such a move would be in their best interest.

Many of the present inadequate farm units should be appropriate objects for consideration either in locating those who require only part-time farming assistance or as reasonable prospects for developing into adequate units by the addition of the necessary acreage from adjacent farms which could without handicapping their own prospects spare such acreage. Such a unit before its readjustment should not be considered in locating returning families who are dependent entirely on their farming activities for their family income.

#### **Old Home Neighborhood Safest**

For the one who has an agricultural background, it is usually safer to find a location somewhere in the old home neighborhood, where he is acquainted with the seasons and farming practices which have been used successfully. Every community will have practices which in the main afford safe guidance for a beginner and are probably safest in the long run. For one without a background of agricultural experience or one who does not wish to return to the old home community, there is a wide field for selection of the community in which to settle. In this case, the choice of the community is a serious one and must be made most carefully. Congenial neighbors are very essential. One cannot hope for much shift in one's neighbors, so certainty that one will enjoy association with neighboring farm families is most desirable. Soils are very inflexible in their capabilities, and farming systems are not quickly or easily changed. If uncertainty exists, it would be wiser to try to find work as a hired laborer or to farm as a tenant for a year or so before purchasing a farm. Few farmers have a chance to make more than about one choice of the farm and community in which they will spend the major part of their lives.

#### **Obtaining the Land**

Lands might be rented or purchased outright. For families without previous experience in the community, renting temporarily would be desirable. With present renting practices it is doubtful if continued renting offers much promise of either satisfaction or permanence to the prospective farm family. Eventual outright purchase is certainly the better prospect. This involves the question of the amount of resources available and how those resources should be used, also the extent to which one can safely incur indebtedness.

In general terms, the more productive the land and the smaller acreage required, the higher will be the price per acre. Because of the risk factor and other special considerations of great importance in the case of highly specialized systems of farming, the following comments will be on the assumption that the safest possible diversified farming system will be the beginning objective of the prospective settler.

Under these conditions the farm unit needed will include a little woodland, some considerable pasture acreage, and some acreage of very productive, readily tillable land; or at least land which can be made very productive by proper crop adaptation, use of fertilizer, limestone, etc. A farm unit consisting entirely of tillable, highly productive land is desirable if there is plenty of money available for financing this kind of a setup.

Recognizing that capital limitations will be operating with most families and that more lands of moderate productivity will be obtainable with reasonable capital outlays, a combination of readily croplable land with natural pasture and some woodland will be the most likely setup. Ten acres of well managed woodland should provide a permanent fuel supply and all the post timber needed for fencing. Perhaps one-third of the remaining acreage could be effectively used in permanent pasture. The remainder should be adapted to small grain, row crops and specialties in which the family is interested.

Lands in Missouri vary in price from a few dollars per acre to as much as two hundred dollars or more. Consequently, there will naturally be a wide range of values to consider. Lands within the reach of most families in the categories just indicated will vary in value from 20 to 30 dollars per acre to 75 or 80.

Naturally it will take more acres of the less productive land than of the better land to make a satisfactory farm unit. Also what capital is not necessary to put into the land will very likely have to be used for good land use and soil management practices to make the less productive land satisfactorily meet the needs of the family.

The following figures will give some idea of variability in productivity of Missouri lands and the influence which this variability may have on the size of farm unit needed.

## Variation in Yields of Major Farm Crops in Missouri

Crop	Medium to Low Fertility Areas (Per acre)	Some of the Best Areas (Per acre)
Corn	10 - 25 bushels	40 - 80 bushels
Wheat	8 - 12 "	20 - 40 "
Oats	15 - 30 "	40 - 60 "
Alfalfa	1½ - 2 tons	3 - 5 tons
Timothy (meadow)	½ - 1 ton	1½ - 2 "
Permanent Pasture		
North Mo.	5 - 15 c.e.*	25 - 40 c.e.
Central Mo.	5 - 12 "	20 - 30 "
Ozark Plateau	3 - 10 "	15 - 25 "

\*C.E. means corn equivalent, or a feed value equal to that of one bushel of corn. Wheat has a c.e. value of 1.15; oats .47; alfalfa 18.72 per ton; and timothy 15.87 per ton.

A farm should have a producing capacity of at least 2500 to 3000 c.e. per year to give a family a fair chance to pay reasonable operating costs, live acceptably and maintain the farm.

It is quite likely that federal agencies will have some means of aiding prospective farmers in settling on lands under a sale contract or some other plan which will give the necessary feature of permanence to the project. If farm units are privately financed, the buyer will find it necessary and desirable to pay down at least one-third of the purchase price of the land, and this purchase price must not be too far above the values which prevailed in the period 1923-28 or 1937-41. Repayment of that portion of the purchase price covered by a mortgage should be by a series of payments over a period of years. These payments should be something like the payment of rent with larger payments permitted in good years and smaller payments accepted in poor years. Permission to repay more than the standard amount on any interest paying date should be provided.

The prospective purchaser, if not well acquainted with the land under consideration, *must never fail to consult impartial, informed sources concerning quality of land, reasonableness of price asked, and suitability of the unit for the purposes the purchaser has in mind.* The county agent, the State Experiment Station, trained personnel of the Soil Conservation Service, vocational agriculture teachers, and disinterested successful farmers of the community are possibilities.



### Needed Operating Capital

It is very important that the prospective farm operator reserve from his resources sufficient capital and credit not only to permit effective equipment of the farm, provide seed, fertilizer, and family living requirements, but have some reserve left over in case something occurs which will prevent income materializing as soon as anticipated. Work stock, other livestock, machinery, feed until feed is produced, enough seed to plant the crops, and fertilizer to help them to grow will all be necessary. In addition, the operator and his family will have to live until they receive income from the sale of products. The very minimum of equipment, even if it is procured second-hand, will probably require from four or five hundred to one thousand or more dollars.

At least one good work team will be needed under most conservative circumstances. A minimum of two milk cows is as important a part of the equipment of the farm as is the work team. From 50 to 100 good laying hens will be desirable on most of these units. Before very long a brood sow may be added to the livestock list. The cropping system for the farm will need to be carefully developed.

Current expenses until sales occur will also have to be estimated and allowed for. Disinfectants, spray materials and some allowance for occasional hired labor or custom work, and unforeseen expenses must be included.

If the farm is purchased with the buildings, fences, and water supply in a good state of repair, these will not be a drain on the operating capital. If this was not the case, then some allowance must be made for these uses of capital. To be more specific, the following includes the most probable requirements as regards the livestock equipment for the farm.

**Work stock.**—A good work team will be needed on any family farm except perhaps truck or other highly specialized farms, where other power provisions might better be made. A work team could be mules, geldings or brood mares, or some combination of these, depending on the likes of the operator. One good farm work horse will require approximately 35 bushels of corn, 50 bushels of oats, 2 tons of good hay, and one-fourth to one-half acre of good pasture as his feed requirement for a year. He may be expected to do from 1000 to 1500 hours of work. If the farm has ample pasturage and hay and oats producing facilities, brood mares would do the work needed and raise a colt, which would in most cases reduce the cost of keeping work stock for the year.

**Milk cows.**—A good farm milk cow well cared for should require in a year approximately 15 bushels of corn, 9 bushels of oats, 300

pounds of bran, 30 pounds of bonemeal and salt, 2 tons of good legume hay and 2 to 4 acres of good pasture as her feed requirement. She should produce about 6000 pounds of milk and 250 pounds of butterfat. Most small family farms should have at least two cows, one freshening in the spring and one in the fall. Cows of good quality will return 30 to 60 cents per hour of labor after other costs are paid, under reasonable price conditions. Cows are ideal users of pasture and roughage. Two good cows would regularly supply the family with all the dairy products they desire, provide skim milk for 100 hens and enough butterfat for sale to pay the grocery bill on most family farms.

**The poultry flock.**—One good laying hen has a year's feed requirement of about 45 pounds of scratch feed, 45 pounds of mash, 80 pounds of skim milk with some vitamin D, and adequate range in the range season. She should produce from 160 to 175 eggs per year as a minimum. Two chicks should be raised for each hen kept to permit adequate culling of the laying flock and poultry meat for the table. Hens from good laying strains and well cared for will ordinarily return two to three dollars for each dollar's worth of feed used. This allows good wages for labor after other costs are met.

**The brood sow.**—The feed needs of a brood sow including that of her pigs to weaning time, and assuming a one litter system, would include 20 bushels of corn and oats, 60 pounds of tankage, and abundant clean pasture, mostly legume (about one-half acre per sow). She will also need some good legume hay in the non-pasture season (about 100 pounds total). Each pig raised from weaning to market age, 200 pounds, will require about 12 bushels of corn, 50 pounds of tankage and one-third acre of legume pasture.

If the sow is required to raise two litters per year, her feed requirement will be increased. With a one litter system seven to eight pigs will be raised. They may be sold at weaning time or fattened, depending on feed supplies and other conditions.

Breeding service should be secured from neighboring farms rather than for the farmer to attempt to keep sires for his very limited needs.

**The family living.**—The livestock suggestions in the preceding sections had in mind two objectives—first, livestock make more practicable the establishment and following of a good land use system for most Missouri areas; and second, livestock greatly enhance the importance of the farm's contribution to the family living. This latter feature is so important that one is strongly tempted to suggest some livestock on more highly specialized farms.

One can reasonably expect that with adequate garden and orchard provision on most farms and with the livestock products already sug-

gested, the farm should provide directly about 40 per cent of the total family living and a much larger percentage of the food supply. The portion of food requirements met with products from the farm is so variable, due to the inclination and skill of the family in preserving and storing for later use some of the farm products, that no very definite percentage figure can be supplied in this connection. Providing fuel from the woodlot, a house in which to live, garden and orchard products, and the livestock products here indicated are perhaps the most certain and dependable income which can be derived from a farm.

The value of the contributions is computed at producer prices and not at city consumer prices. If it were computed at consumer prices, the percentage of the total living cost would be larger but it would not have been contributed by the farm. All of the processing and storage services included in retail prices would have been provided by the family. There are numerous publications available indicating the amount of the various garden, orchard and livestock products which a family should attempt to provide for themselves. These are not enumerated here.

It should be pointed out, however, that successful production of garden and orchard products requires eternal vigilance to control insect pests and diseases of all kinds which would otherwise make such production practically impossible. The prospective operator and his family must acquaint themselves with sprays, poisons, seed treatment and other practices which control these various pests and diseases; otherwise the farm's contributions to living will be greatly reduced.

The Agricultural Experiment Station is in the process of preparing for various type of farming areas of the state reports and guides which will provide more detailed specifications of possibilities and dangers in becoming established in these various type of farming areas. The entire objective of this and the other forthcoming reports is not to discourage movement of adapted families back toward the country. It is rather to protect them in case they do return to the country so that they will have a reasonable prospect of procuring an acceptable living, a security and satisfaction which in their judgment other opportunities do not seem to offer.