

FARM SURVEY.

Key to Survey
Spring 1925.

Farm No.	Name of owner or tenant.
1	J.F.Reynolds (owner)
2	J.A.Otey -(J.O.Hoge) - (owner)
3	W.E.Smith (owner)
4	L.R.Brown (owner)
5	F.A.Smith (owner)
6	A.W.Miller (owner)
7	I.W.Slusser (tenant)
8	A.L.Dobbin (owner)
9	W.B.Grissom (owner)
10	Mrs.J.H.Stevens (owner)
11	A.H.Slusser (owner)
12	J.W.Shepherd (owner)
13	Waddy T.Wall (owner)
14	S.S.Long (owner)
15	J.C.Brown (owner)
16	J.H.Strickler (owner)
17	Maj.Heath (owner)
18	J.T.Kipps (owner)
19	J.T.Karr (owner)
20	C.M.McDonald (owner)
21	Mrs.M.J.Evans (owner)
22	H.L.Price (owner)
23	James Buchanan (owner)
24	Grubb, (owner)
25	Marion Johnson (owner)
26	Mrs.H.C.Hardwick (tenant)
27	H.Wade Smith (owner)
28	J.K.Henderson (owner)
29	Atkins, (owner)
30	R.H.Price (owner)
31	Floyd Smith (owner)
32	James B.Price (owner)
33	Flannagan Bros. (owner)
34	R.H.Bennett (owner)
35	W.A.Crawford (owner)
36	J.Bishop (owner)
37	W.S.Mathely (owner)
38	R.W.Brown (tenant)
39	Kent Apperson (owner)
40	W.M.Plunkett (tenant)
41	W.E.Hubbert (part owner)
42	G.V.Dickerson (owner)
43	H.G. Linkous (tenant)
44	C.E.Grumpacker (tenant)
45	J.F.Keith (owner)
46	C.H.Lucas (owner)
47	J.B.Henderson (owner)
48	J.L.Wall (owner)
49	V.P.I.
50	Layman Lester (owner)

THE FARM SURVEY AND ITS USE IN TEACHING VOCATIONAL
AGRICULTURE IN VIRGINIA HIGH SCHOOLS

—
A Thesis

Presented to the Department of Agricultural Education,
Virginia Polytechnic Institute
In partial fulfillment for the degree of
Master of Science

—
By

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I - Introduction

Under the Vocational Education Act, an opportunity has been afforded to carry agricultural instruction of a different nature than hitherto offered to the younger generation of this country. This instruction is not confined necessarily to the younger boy in school, but may reach the boy out of school, as well as his parent. The one big aim of this type agriculture is to give instruction to the people in any community in such a way as to best meet their needs. The objective is to solve the farming problems of one particular section or community. It is therefore necessary for the teacher of agriculture to know what the problems and needs of a community are if his instruction is to meet the situation.

Many ways have been devised by which an instructor can study the conditions and needs of his community, namely, by personal visits and conferences with individual farmers; secure from the farmer's organizations their most difficult problems; have pupils bring in a list of farm problems from their own homes, etc. The above methods are good, but perhaps are not sufficiently thorough to acquaint the instructor with all needed details. One of the best ways recommended for an instructor to get acquainted with his community is to make a comprehensive farm survey. This will insure the instructor's becoming acquainted with the farmers, the farms, and the problems arising in the agriculture of the community. To attempt to arrive at the best farm survey to use, means of securing information, and the uses to which this data may be put, is one of the objects of this paper.

Ever since Vocational Agriculture has been established in the high schools of Virginia it has been the set rule to teach agriculture as follows: Plant Production and Animal Production, alternating between the first and second years; Horticulture and Farm Engineering and Farm Management alternating in the third and fourth years. This method of learning agriculture is not the way a farmer has to meet his problems. He has his problems in all four branches to face throughout the year. By this, I mean a farmer may have corn to cultivate today, tomorrow he may have to work in hay or change hog pasture, etc. It is, therefore, the further aim of this paper to attempt to group, for instructional purposes, in each year's work, the farming enterprises which in actual practice must run hand in hand, rather than for the boy to study all crops in one year, animals another, etc.

II - The final purpose of this study might be stated as follows: To determine the economic factors and farming practices which control profitable production of agricultural products in the rural sections surrounding Blacksburg; to use the data secured to revise and formulate a more practical curriculum in Vocational Agriculture for the Blacksburg High School.

III - Procedure followed in making study.

In endeavoring to make a change in the course in agriculture taught here at the high school, it was necessary to study the agricultural enterprises of this section from various angles, such as scope, income, and farm practices followed. To obtain such information in such a systematic form that would be of value was the problem, and the only way that seemed possible was to make an agricultural survey of a number of farms.

1 - Fifty farms were selected in making this study. These farms were representative of the farming in this community, because of the fact that they were selected in this manner; some were outstanding farmers, some were classed as medium, and some who owned very little land farming on a very small scale. On these farms were found the following types of farming: beef; beef and sheep; dairy, and general farming. Several commercial orchards, and a few farmers who do some local trucking and cultivating small fruits were included in the list of farms. By choosing farms in this way, one is able to get a fair representation of the farming done in any community.

2 - Before the farm survey could be made, suitable farm survey forms had to be made out. In order to make up a form suitable for this particular purpose, a comprehensive study and interpretation of the best farm survey literature had to be made. This included about five United States Government survey forms, the one used by the Agronomy Department at V. P. I., the form used by the Agricultural Economics Department, and the form that was being used by the department of Agricultural Education. All the surveys except the one being used by the department of Agricultural Education deal only with the statistical and financial sides of the farm, such as scope, yields, income, capital, etc., while the department of Agricultural Education's survey incorporated with this some farm practices. For an agricultural instructor to be able to get the information he requires about the farming of the community, the farm survey that he takes must give to him the farming practices or the survey will be of only half value to him. It would be useless for an instructor to know that a certain farmer has made money and is outstanding in his type of farming and cite him as an illustration

of a good farmer unless he knows this man's methods. The reference to local practices or methods in the class room cannot be over emphasized. So, knowing that the farm practices had to be incorporated in the survey, a form was made that was thought would best suit the required needs.

This form contained the following headings:

For all cultivated crops and small grains, the headings are: No. acres in crop, variety, yields per acre, amount sold, planting (drilled, checked, broadcast), fertilizer (kind and amount per acre), how and when applied, rate of seeding per acre, cultivating implements used, implements used for first cultivation, practice followed in selecting seed, when is plowing done, treatment for disease and insects, and storage method followed.

All hay crops had the following headings: No. acres in crop, variety or mixture used, yield per acre, amount sold (loose or baled), quality, fertilizer (kind and amount per acre), how and when applied, rate of seeding (pounds per acre), how stored (barn or stack).

For orchards, the following headings were used: Number, kind and age of trees, yield, management of orchard, sprays, applications, time and number, how often pruned, amount sold, and value of small fruits.

All livestock enterprises including poultry and turkeys, have the following headings: Number mature females (breed), number young females or feeders (breed), number animals, (calves, pigs, lambs, etc., breed), males (breed, purebred or grade), total value of each type of livestock, winter ration (mature animals), summer ration (mature animals), ration for growing stock, gain per year (yearlings and two year olds), weight at which sold (beef, hogs, lambs), when and how sold (beef, hogs, lambs), where products sold

(eggs, meat, wool, milk, etc.), income from enterprises, practices in herd improvement, housing practices followed, average weight of horses, number days paid work off farm, time young are born.

A few questions were asked on the following topics: garden, pasture, lime, manure, and rotation followed. Other information asked for was: Conditions and value of buildings; acreage and value of land; a list of farm implements with values; annual expenses, including labor, living expenses, fertilizer, seed, spray materials, feed, taxes, and miscellaneous.

Another point to consider in making out a survey form is length and time it would require to take one of the surveys. To get farm practices requires the asking of many questions. In order to lessen the number of questions asked and the time required to take the survey, the enterprises were grouped as much as possible into one chart in this manner:

Crop Chart

	Corn for grain	Corn for silage	Potatoes	Wheat	Oats	Other grains
No. acres in crop						
Variety						
Yield per acre						
etc.						

In asking for number of acres in crop, you first follow straight through under each crop and make one question serve to get acreage for all crops. This saves considerable time in taking the survey and it furnishes a form from which tabulations of data are easily made.

These farm surveys were taken the last half of March. The farmers were busy breaking their land but all were willing to give me their time and furnished information on their last year's business.

Attention Patron:

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It took about an hour to take one survey, and seldom over one hour and a half.

IV - Compilation of Data

After all surveys were taken, the data was summarized into tabular form. This data was compiled with the following purposes in view:

- 1 - To determine the major and minor crop and animal enterprises in the community.
- 2 - To determine the most profitable enterprises in the community.
- 3 - To determine what factors, i.e. size of farm, capital invested, farming practices, etc., control profitable production in each enterprise.
- 4 - To determine which farms can be used as examples of profitable production in the several enterprises.

Tabulated data will be found beginning with page 51

Some method of arriving at a relative comparative rating of enterprises was necessary and the following arbitrary rule was adopted: Three points were given to each animal unit, five points for each percent of farms carrying the enterprise, and two points to the money value of each enterprise. In crops, acres are used in place of animal units. Each of these main heads was multiplied by the number of points given to that head. The product secured in animal units and percent of farms was divided by 10; the product secured in value of investment and acres in crops was divided by 1000 in order to hold the score down to small numbers. For example, take beef:

1240 A. units	x 3 =	3720	+ 10 =	372.0
78% farms	x 5 =	390	+ 10 =	39.0
\$60989 value	x 2 =	121978	+ =	<u>121.98</u>

532.98

The Standing of Enterprises as to Their Importance in the Community

	ANIMAL units	Score	% Farms	Score	Value of enterprise	Score	Total score
Beef cattle	1240	372.0	78	39.0	60,989	121.9	532.9
Dairy cattle	432	129.6	86	43.0	17,940	35.8	208.4
Sheep	304	91.2	41	20.5	18,303	36.6	148.3
Horses	209	62.7	98	49.0	19,600	39.2	140.9
Hogs	116.5	34.95	86	43.0	7627	15.25	93.2
Poultry	80.9	24.29	93.8	46.9	3,884	7.7	78.9
Turkeys	10	3.0	74	37.0	653	1.3	41.3

CROPS

	Acres	Score	% Farms	Score	Value	Score	Total score
Corn	879.25	263.77	94	47.0	\$48,345	960.9	1271.6
Mixed hay	1172	356.10	92	46.0	35,102	702.04	1099.6
Wheat	819	245.7	82	41.0	20,027	400.54	687.2
Silage	267	80.1	44	22.0	20,121	402.42	504.5
Orchard	252.5	75.75	44	24.0	16,160	323.2	418.9
Clover hay	147	44.1	28	14.0	4,575	91.5	149.6
Potatoes	23.2	69.6	86	43.0	3,034.25	60.68	110.6
Oats	89	26.7	28	14.0	2,274.30	45.48	86.1
Rye	83.5	25.05	18	9.0	921.25	18.42	52.4
Timothy	53	15.9	10	5.0	1,426.20	28.5	49.4
Alfalfa	16	4.8	20	10.0	1,534.50	30.68	45.4
Soybeans	29.5	8.8	16.8	8.4	980.00	19.6	35.8
Buckwheat	23	6.9	8	4.0	547.50	10.95	22.8
Orchard grass	11	3.3	4	2.0	306.00	6.12	11.4

Standing of Enterprises in Community from Standpoint of Profit

In making this table of rating on profit, it is only claimed to be a relative comparative rating.

	Total value	Total income	Value of Stock kept over	%Increase in value of investment, labor and feed not considered
Turkeys	\$653.00	\$2,091.00	\$653.00	320%
Poultry	3,884.00	5,777.25	3,884.00	148%
Dairy Cattle	17,940.00	17,430.00	17,940.00	97%
Sheep	18,303.00	14,067.75	18,303.00	76%
Hogs	7,627.00	8,034.50	3,365.00	49%
Beef Cattle	60,989.00	64,215.00	13,705.00	27%
Horses	19,600.00	2,983.00	19,600.00	15%

Crops

	Total acres	Total value of crops	Total income per acre
Potatoes	23.2	\$3,034.25	\$130.78
Silage	267.	20,121.00	75.35
Orchard	252.5	16,160.00	64.00
Corn	879.25	48,045.00	54.64
Alfalfa	36.5	1,534.50	42.04
Millet	6	216.00	36.00
Meadow grass	18	648.00	36.00
Soybeans	29.50	980.00	33.22
Clover hay	147	4,575.00	31.12
Mixed hay	1172	35,102.00	29.95
Orchard grass	11	306.00	27.80
Timothy	53	1,426.00	26.90
Oats	89	2,274.00	25.55
Wheat	819	20,027.00	24.44
Buckwheat	23	547.60	23.80
Rye	63.60	921.25	11.03

On total income basis, the enterprises of the community are:

<u>Major</u>	<u>Minor</u>
Beef cattle	Hogs
Corn	Poultry
Mixed hay	Clover hay
Silage	Potatoes
Wheat	Horses
Dairy cattle	Oats
Sheep	Turkeys
Orchard	Alfalfa hay
	Timothy hay
	Soybean hay
	Rye

On percent basis, the enterprises of the community are:

<u>Major</u>	<u>Minor</u>
Turkeys	Hogs
Poultry	Beef cattle
Dairy cows	Horses
Sheep	Millet
Potatoes	Soybeans
Silage	Clover hay
Orchard	Mixed hay
Corn	Orchard grass
Alfalfa	Timothy
	Oats
	Wheat
	Buckwheat
	Rye

Corn is the leading crop grown in this section, considering acreage and value of crop. It is outranked by several other crops in total income per acre, it being \$54.64. The total acres of corn grown on 94% of the farms is 879½ with a total value of \$48,045.00. The average yield is 46.2 bushels per acre. This is above the state average, but many factors can be improved that would probably increase the average yield and value of the crop. The outstanding problems in increasing the production of corn are: Plant better seed and varieties more suited to this altitude; proper fertilizer, amount and how to apply it; better selection of seed corn (field selection), and the testing of seed for germination and disease.

Silage ranks high in importance and gives a large income per acre. Forty-four percent of the farmers grow silage but all the farmers in this section who raise beef have not yet realized the cheapness of silage as a feed. If beef is to continue to be one of the leading enterprises in this community, the growing of silage is to be strongly advocated. In teaching the course on corn production, a few days more can be added to this course to cover any changes that may be necessary to cover the production of silage. On 267 acres, 2633 1/3 tons of silage were produced, an average of 9.4 tons per acre. Not as large a percent of farmers harrow their silage corn at first cultivation, as corn for grain. The implements used for cultivating corn are adequate, except with a small percent of the farmers, who still use double shovel plows altogether for cultivating this crop.

The same outstanding problems apply to silage as to corn for grain.

Hays are the next leading crop in importance. Hays include a number of different kinds, as mixed hay, alfalfa, clover, soybeans, orchard grass, timothy, millet and meadow grass. Mixed hay leads in acreage and value, but when income per acre is considered, alfalfa, millet, soybean, and clover give more income per acre than mixed hay. Orchard grass and timothy are the only two hays that give less income per acre than mixed hay. Taking all kinds of hay together, there is a total of 1473 acres with a total value of \$44,787.50, which nearly equals the value of corn.

As mixed hay is the chief hay crop, probably more attention should be given to this hay than any other hay. Ninety-two percent of the farms grew mixed hay, the total acreage being 1172 acres. The average yield per acre is 1.6 tons. Practically all hay was fed to stock on the farm, only 365 tons being sold, and only 65½ tons were baled. The problems that need most attention are: To increase the yield per acre, and better preparation of seed bed. In every case where a special preparation was made for the seed bed and grass seeded, the yield was around two tons per acre, and ~~sales~~^{wheat} seeded with wheat it was less.

Clover hay is next in importance to mixed hay in acreage and yield, and outranks mixed hay a little over \$2 per acre in income. Total acres, 147, and average yield, 1.7T per acre. Only 28 tons were sold and this was all baled. The main problems in clover production are to increase the yield per acre, better prepare the seed bed, and store more efficiently.

Timothy hay is next in acreage in crop and value in the list of hays, but it is lowest of all hay on income per acre, being \$26.90 per acre. The value of timothy hay as a feed to cattle is nothing, and since it gives a very small income per acre and is grown by very few farmers, very little time, if any, should be given

to its culture.

Alfalfa and soybeans are two very valuable hays. Both give high incomes per acre, but acreage in this section is very small in both crops. The few farmers who grow these hays seem to be only giving them a trial and only plant one or two acres. All who have grown the crop claim that they did well and time should be spent on these two hay crops to justify their place in the farming of this section. Average yield per acre for alfalfa is 1.9 tons, and soybeans 1.6 tons. Limited trials indicate that soybeans give better results than alfalfa.

Orchard grass, millet, and meadow grass are grown and cut for hay by a few farmers. They are of very little importance as a hay crop, only a few acres of each being cut for hay. Orchard grass may receive some consideration as a crop for hay, but it is given more consideration as an early pasture grass.

Millet is grown only as a catch crop and very little time needs to be put on this crop as hay.

The chief hay implements are mowers and rakes. All farmers do not have these machines. Very few tedders are found as well as loaders, hay forks, and ropes.

A considerable amount of hay is stacked, especially certain hays that should be in buildings. Just how much stress should be put on storage room for hay is a debatable question.

The small grains include wheat, oats, rye, and buckwheat, no barley being grown in this section.

Wheat, from the standpoint of acres planted and value, scores high as an important enterprise, but when income per acre is considered, wheat, along with the other three grains, falls to the bottom of the list. The total income for wheat per acre is \$24.44.

Oats gives a larger income by \$1.10 per acre than wheat. The majority of farmers grow wheat and though it has been a losing proposition the past three or four years, the farmers must have flour for bread and some wheat must be and will continue to be grown. They should, however, be educated to cut down their acreage when wheat is not paying and grow some other more profitable crop in its place. In order to hold their rotation, oats, which is a little better paying crop, can be grown in place of wheat as a small grain in the rotation. Eighty-two percent of the farms gave a total of 819 acres in this crop, with an average yield of 17.9 bushels per acre. The small yield per acre is the main reason for wheat being a losing enterprise. The chief problems to receive attention in the production of wheat are: To increase the yield; use good quality seed. Sixty-three percent of the farmers use their own seed continuously and use no means of improving the seed or keeping it pure and free of filth. Very few treat for smut.

Oats ranks low in importance as an enterprise, only 89 acres being sown to this crop, but in income per acre, oats leads the small grains. Oats is a good feed, but there is no market here for it, and this seems to be the main reason for the small acreage. Practically all the oats grown is fed.

Rye is of very little importance in this section as a grain crop, but is more important as winter and early spring pasture. There were 83½ acres sown and 43 acres were used as pasture, while 1½ acres were sown as a cover crop. The yield per acre was only 10.4 bushels, and the total income was \$11.03 per acre. The main reason for this low yield is due to the fact that late grazing reduced the yield on a good part of the acreage.

Buckwheat was only grown on four farms, the total acreage being 23, and average yield per acre 19 bushels. This crop

is of little importance in this section.

Most farmers have drills, but some did not include a drill or a binder in the machinery. However, some own in partnership and others borrow these machines to handle their crop.

Potatoes as a crop enterprise rate very low in this section, but they lead all crops by a wide margin in income per acre. Eighty-six percent of the farmers grow some potatoes but not over two or three farmers planted more than 1/4 acre. The majority only had small patches for their own consumption, and the total acreage planted was 23.2 acres. The total income per acre is \$130.78. This is a small income compared to the trucking section of Virginia, but the season last year was very unfavorable and for that reason the yield was reduced.

From the small acreage mentioned, it shows that potatoes would be a paying crop. This section has good climatic conditions and the altitude and soil are well suited to their growth. A big future for potatoes in this section is the production of certified seed for the eastern Virginia truck farmers. Several counties in this same section are producing seed for the eastern potato growers, and the western Virginia growers are making good at this enterprise and some are producing 200 to 250 bushels per acre.

The farmers of this section should be educated to this enterprise on a commercial scale and considerable time should be devoted to this crop. Farmers could well afford to grow several acres of potatoes and cut down acreage of wheat.

The problems needing most attention in the production of potatoes are: To adopt a standard variety, best kind and amount of fertilizer to use and how to apply, methods of cultivation, better selection of seed, spraying for disease, seed treatment

for scab, and proper storage.

Orchard as a farm enterprise can hardly be classed with crops. Forty-eight percent of the farms have an orchard, and out of this percentage only six farms are commercial orchard farms, the rest being family orchards.

The total acreage in orchards is 252.6, and the income per acre is \$64.00. This is a low income for orchards, but is due to the fact that most of these home orchards are poorly cared for and produced no fruit, or very little. Another fact causing this income to be low is that many of these orchards are young and not bearing. This low average income is not just to the commercial orchardist. To take these farms and work out the average income per acre would raise the rank of this enterprise.

When small fruits and gardens (sometimes truck crops) are considered in the course in horticulture for high schools, considerable time may have to be spent on this enterprise. The main problems to be stressed in orchard work are: Better management of the orchard, better cultivation and fertilization, and spraying for both insects and diseases.

Many factors in this community favor the growing of small fruits. They are well suited to small lots and places near town where the people work in town and have morning and evening for their culture. The climate is well suited and the community is close to the coal fields which afford a good market. The chief fruits to be considered are: Strawberries, raspberries, both red and black cap, and blackberries. An early variety of strawberries is out of the question here and no attempt should be made to get this fruit on early market, but have a variety that will come immediately after the early crop. Red raspberries should be strongly

considered. They are harder to grow and keep up than the black raspberry, but always bring as much as five cents per box more.

Blackberries make a good fruit and a good shipper and usually sell readily on the market. Sometime may be well spent on the culture of these fruits. Grapes, as a small fruit proposition here, is questionable.

Pasture may not be classed in this section as a very important enterprise because they have it in abundance and it is given to them naturally. Every farm but one has some pasture land. The average rate of pasturing in this section is three or four acres per head. Very little pasrue management and improvement is done and some time should be spent on this slong as this is to be considered a livestock section. Pasture land here is not what is considered to be first class pasture land such as is found further in Southwest Virginia.

Lime is something that has to be considered in a course in agriculture. A very small percent of farmers in this section use lime (42%) and some of these have only used it once in their life time and then on a small acreage. All report good results and it is known to be a fact that all crops in this section respond to the application of lime. Some time should be given to lime to justify its use.

Manure is also important and better care of manure should be stressed. This can well be taught with one of the livestock enterprises.

This community is in the livestock section and beef cattle is the leading enterprise as to number and value. Comparing the profit obtained from beef to other livestock enterprises, beef stands next to the bottom. On 37 of the 50 farms there is a total of 1349 head of beef cattle valuing \$60,989.00, with a net income, excluding labor and feed, of \$16,930. To figure the labor cost and feed would make beef raising in this section a losing proposition. Such has been the case for most farmers for several years past. The present marketing policies being followed need careful study and consideration and the future of the beef industry apparently rests on improved marketing practices.

Dairy cows rate next to beef cattle as an enterprise in importance and stand third in this community on profit. There is a total of 483 head of dairy cattle on 86% of the farms having a total value of \$17,940. The total income from these cows is \$17,430.

The great handicap to dairying in this section and the reason its rating is not higher is the fact that out of the 86% of the farmers only 8 farmers have actually been classed as dairy farmers, while all the rest list beef cows as milk cows or family cows and sell what little surplus products they may have. In many cases no income is listed from these cows and in many other cases it is small. All farmers who actually have dairy cattle listed a good income from the enterprise. A better market and all year around production are the biggest drawbacks to dairying in this community.

Sheep rate third in importance in this section as an enterprise and stand fourth in profit. There is a total of 1514 sheep and rams on 20 out of the 50 farms with a total value of 18,303.00, and a total income of \$14,087.75. This is a good rating and sheep show that they are profitable as a farm enterprise. The possibilities for sheep raising in this section are as good as can be found. Pasture is abundant and the climate is ideal for sheep raising. Sheep in this section as a whole are poorly managed and taking into consideration this fact, sheep are profitable. This enterprise should have considerable time spent on it in teaching agriculture in this section. Better management, feeding, breeding, and marketing should be stressed.

Horses stand fourth in importance as a farm enterprise but last in profit. Everyone today realizes that there has been no money in horses and the sale of horses is down to the lowest ebb. Horses are something that cannot be taken away from the farm, consequently enough must be raised to supply the needs for farm work. Horses are valued low at present but a good team always brings a market price and in taking these surveys a number of farmers say they see the need of good horses and a better demand in the near future, and were sorry they did not have their mares bred to drop foals this spring. In the light of these facts, some time should be spent in teaching the raising, feeding, breeding, care and management of horses.

Hogs stand in fifth place in both importance and profit. As in the case of beef cattle, to figure labor and cost of feed would make hogs practically a losing proposition. Out of the 50 surveys, 43 farms give a total of 773 head of hogs valued at \$7,627.00. The

total income plus the value of the stock kept over is \$11,399.50, leaving a difference over value of \$3,772.50. Hogs are found on nearly all the farms whether they are paying or losing. Most farmers figure they must have meat and that they can raise it cheaper than buy it. Unless something can be put on the farm that will take their place as meat and be a paying proposition, hogs will have to remain where they are and be given a place in the course in animal production with considerable time devoted to it. Hogs, like some crops, run a cycle of high and low production, which governs their profitable production, and whether pork is cheap or high they will remain a farming enterprise. To cut down the cost of production is the biggest problem. Marketing, better breeding and management, and more hog pasture, are other problems to be stressed,

Poultry ranks next to last in importance in the animal enterprises and next to the top in profit, being surpassed only by turkeys in this respect. When one considers that chickens are on practically 100% of the farms, they should really rank first. The total value of poultry is \$3,884.00 on the fifty farms. The total income is \$5,777.25 which far exceeds the value. Poultry, from capital invested, gives the largest returns of any livestock enterprise so far discussed. The cost of labor on poultry is next to nothing, because it is done mostly by the women and children, but labor is not considered in the figures above. Poultry seems to be the one enterprise that should replace pork production, when the raising of pork does not pay. As a potential enterprise, poultry is outstanding, the chief drawback being market facilities. Poultry in a course of animal production should be given a high rating and considerable time given its study.

Turkeys rank last in importance but first in profit. With a total value of \$653.00, turkeys gave a total income of \$2,091.00, Turkeys, like poultry, give a large return from the capital invested. The income here looks large but is really small to what it might have been because a study of surveys shows that many did not raise any turkeys last year, due to an epidemic which spread over the locality last season. When one considers that this income was due to only 1/3 to 1/2 crop last year, some time should be put on the study of this important enterprise.

Most farmers have some machinery but a great many do not have sufficient machinery to do good farming. Some of the large farmers are well equipped with the right machines to do their work efficiently, while other who have good sized farms need more and better machinery, and many of the smaller farms are very limited in machinery for farm work. At the present time labor is one of the big farm problems and unless the farmer has sufficient machinery that he can use to advantage, he is limited in crops. Therefore, machinery on the farm is one of the factors that control profit.

On the fifty farms surveyed in this section, it was found that the number of certain machines which are very efficient and save labor was very limited. Thirty-four farms do not have spring-tooth harrows. This is a good harrow and can be used to a good advantage on this type of soil. Eleven farmers have rollers and only seven farms have manure spreaders. Both of these are good machines to have, especially the manure spreader. This machine is one of the greatest labor saving machines a farmer can have, if he has any amount of manure to haul.

Hays are one of the leading crops, and the machinery to handle this crop is limited indeed. Not all farmers have a mower

and rake, no hay loader, only five tedders, and only eleven farmers use hay forks and ropes.

All farmers have turn plows and all have cultivating plows. Some still use double shovel plows, but the majority have single cultivators and two-horse cultivators.

Nineteen farmers do not have corn planters, showing that some in this section still do hand dropping and only five corn binders were found on fifty farms.

Thirteen farms reported no grain drill, and twenty report no grain binder.

Sprayers were found only on seven farms, and these were the chief orchard farms, except farm 49.

A study of some of these important machines should be incorporated in the course, as the crops are taken up.

Buildings and housings are problems that need attention in this section, and should be considered along with the enterprises with which they are connected. Buildings, as a whole, are valued low on most of the farms, and in the majority of the farms the barns and sheds are in bad condition and are not ample to care for the crops and give proper housing to livestock, especially cattle and sheep. A few farms have well kept farm buildings, the proper kind of buildings for housing their stock, plenty of storage room for crops, but since such few are well equipped with buildings, some time should be put on housing and farm buildings along with the enterprises with which they deal.

Capital Invested with Percent on Investment

	Farm No.	Cost	Size	Percent
\$1,000	3	\$6,728.00	146 A	.8
to	5	6,290.00	47½	0.0
\$10,000	11	5,062.00	27	3.2
Group	35	2,728.00	69	0.0
	Average	5,202.00	72½	1.0
\$10,000	14	\$10,160.00	64 A	0.0
to	16	13,600.00	75	0.0
\$15,000	19	11,495.00	80	0.0
Group	22	12,375.00	170	14.0
	27	10,645.00	116½	4.1
	34	14,185.00	466	0.0
	37	13,975.00	69	4.4
	Average	12,348.00	148½	3.2
\$15,000	4	\$18,850.00	300 A	1.1
to	7	17,365.00	270	0.0
\$20,000	23	15,470.00	112	0.0
Group	29	19,615.00	62	9.5
	32	15,785.00	134	8.9
	39	18,860.00	40	6.0
	Average	17,658.00	152.3	6.2
\$20,000	1	\$27,000.00	119 A	.3
to	6	22,062.00	450	0.0
\$30,000	10	26,415.00	53	10.2
Group	13	27,615.00	104	0.0
	24	24,870.00	200	2.7
	42	29,160.00	132½	4.0
	44	27,550.00	100	5.4
	46	28,090.00	272	3.0
	47	24,380.00	187	6.0
	48	21,235.00	148	1.0
	Average	25,837.00	176½	3.2
\$30,000	8	\$31,025.00	307 A	2.4
to	12	31,298.00	125	1.0
\$40,000	18	34,650.00	165	3.7
Group	21	35,000.00	260	0.0
	30	32,965.00	300	2.1
	40	31,015.00	250	6.0
	Average	32,659.00	255	2.6

Farm No.	Capital	Acres in Farm	Percent on Investment	
\$40,000	9	\$45,527.00	400 A	4.2
to	15	46,565.00	250	0.0
\$60,000	26	43,065.00	300	2.6
Group	31	42,920.00	500	3.2
	38	57,643.00	467	2.0
	41	47,310.00	193	1.3
	43	43,945.00	270	5.4
	45	40,870.00	52	.3
	50	40,245.00	650	5.0
Average		45,343.00	342½	2.6
\$60,000	28	\$71,655.00	600 A	6.1
to	36	73,690.00	456	1.3
\$80,000				
Group	Average	72,662.50	533	3.7
\$80,000				
to	2	\$95,650.00	420	0.0
\$100,000	20	91,120.00	425	1.0
Group				
	Average	93,385.00	422½	.5
\$100,000	17	\$125,920.00	1200 A	.6
and over	25	119,000.00	1390	.6
	33	214,560.00	1800	10.5
Average		153,160.00	1463 1/3	3.9

The tables on investment and size of farms, as factors in crop production, show that the man with small capital and small acreage made very little on his investment. This applies more to investment than size of farm, because a study of the other tables shows some small farms of less than 100 acres do make a good profit on investment. The farmer who has an investment of \$5000 or a little more, and around 70 acres of land, only made 1% on investment.

The group of farmers with an investment of \$10,000 to \$15,000 the average being \$12,348, with an acreage of 148½ acres of land, made an average of 3.2% on investment. One of this group is an orchard farm, which made 14% on investment. The group of farms with an investment of between \$20,000 and \$30,000, with an average of \$25,837, and an average of 176½ acres, also made an average of 3.2% on investment. This would be considered the average farmers' capital, and according to these figures the man with the \$12,000 investment is doing just as well as the man with \$25,000 investment, but, the man with \$25,000 will make more money owing to his larger investment.

The group of farmers with investment between \$15,000 and \$20,000 is the leading group. The average is \$17,658, and average acreage is 152.3. This group made an average of 6.2% on investment which is far ahead of any other group. This group contains one orchard farm, and one dairy farm, the dairy farm giving the higher percentage of the two. This group also contains one general farmer, who made a higher percent on investment than the orchard farm did.

As the investment and acreage increase, the income somewhat lowers. The average investment of \$32,659, and acreage of 235 acres, gave an average income of 2.5%, and average investment of

\$45,343, with average acreage of 342½, gave acreage average percent of 2.6 on investment.

Only two farms came in the \$60,000 to \$80,000 group, with an average of \$62,662.50, acres 533, percent on investment, 3.7. This is an increase over the two preceding groups, but should the group have included more farms the average no doubt would be lowered.

Only two farms come in group \$80,000 to \$100,000, the average investment is \$93,585, and acreage 432½. This group only made ½% on investment.

The last group of over \$100,000 investment includes three farms. Two of this group just barely broke even, while one made 10.5% on investment. This one man is particularly outstanding in that he is the largest cattle raiser in this section. Coupled with that he is a cattle dealer, and he has a market the average man does not have, and these two facts account in part for his high percent on investment. Owing to the last seven farms being somewhat special cases, they are not considered in drawing any conclusions.

25 to 75 acre group			75 to 150 acre group		
Farm No.	Size of Farm	Percent on investment	Farm No.	Size of Farm	Percent on investment
27	27 A.	4.1	19	80 A	00
37	28	4.4	44	100	5.4
39	40	6.0	13	104	.7
5	47½	00	23	112	99
10	53	10.2	27	116½	4.1
45	52	.3	1	119	.3
29	62	9.5	12	125	1.0
14	64	00	42	132½	4.0
35	69	00	32	134	8.9
16	75	.30	3	146	.8
			48	148	1.0
	Average	<u>3.46</u>		Average	<u>2.56</u>

<u>150 to 299 acre group</u>		
Farm No.	Size of farm	Percent on investment
16	165	3.7
22	170	14.0
47	187	6.0
41	193	1.3
24	200	2.7
15	250	0.0
40	250	6.0
21	263	0.0
7	270	0.0
43	270	5.4
46	272	3.0
Average		<u>3.83</u>

<u>300 to 500 acre group</u>		
Farm No.	Size of farm	Percent on investment
4	300 A	1.1
26	300	2.6
30	300	2.1
8	307	2.4
34	350	0.0
9	400	4.2
2	420	0.0
20	425	1.0
6	450	0.0
36	466	1.3
37	467	4.4
31	500	3.2
Average		<u>1.86</u>

Over 500 acre group

Farm No.	Size of farm	Percent on investment
28	600	6.1
50	650	5.0
17	1200	5.6
25	1390	.6
33	1800	10.5
Average		<u>4.55</u>

In working out a table not considering capital invested but only considering size and percent made on investment, we get the following results:

Farms in of 25 to 75 acres have an average of 3.48 percent on investment. In this group are ten farms, and all are small farmers.

The next group includes 75 to 150 acres, and takes in eleven farms. The average percent is 2.38. This group is 4% lower than the small farms' average percent on investment.

The third group includes farms ranging from 150 to 200 acres. This group is composed of eleven farms, and is to be considered the average size farm. The average percent on investment is 4% higher than the group of small farmers, it being 3.83%. This is the leading group when only the size of farm is considered

as a factor in crop production.

The farmers who own 300 to 500 acres of land make a smaller average percent on investment than any other group, it being 1.86%.

The last group which is composed of the large land owners of four 500 to 1800 acres show on the average the highest percent on investment. This is due to the fact that one of the farmers is a dairy farmer, who is marketing whole milk and the other is the largest cattle raiser in the community, and also as was stated before, a cattle dealer. He can hardly be classed with the others of the group, and to eliminate this one, the average percent would be 3%, which would make the large land owners fall below the medium land owner, and the small land owner.

Farm practices are to be found in the compiled tables for each enterprise, and the individual farms that are outstanding in each enterprise and can be considered as examples of good farming, are found at the end of the summary.

There is no question but that the better practices followed by the outstanding farmers have a marked influence on their success.

Conclusions

I - A study of the farm surveys of this community shows that the following enterprises are to be included in the curriculum of Vocational Agriculture for Blacksburg High School:

Animal Production Enterprises

- Turkeys
- Poultry
- Dairy cows
- Sheep
- Hogs
- Beef
- Horses
- Manure
- Housing

Plant Production Enterprises

- Potatoes
- Corn (silage)
- Hays
 - I - Legumes
 - 1 Clover
 - 2 Soybeans
 - II - Mixed hay
- Horticulture
 - 1 - Apples
 - 2 - Peaches
 - 3 - Small fruits
 - 4 - Garden
- Small grains
 - 1 - Wheat
 - 2 - Oats
 - 3 - Rye
- Pasture
- Lime

Farm Management

and

- Light and water systems
- Surveying
- Buildings

II - The grouping of the enterprises was made as follows:

First year

Potatoes
Poultry
Turkeys
Hogs
Corn
Projects

Second year

Dairy cattle
Sheep
Beef
Hays
Pasture
Silage (few additional jobs over corn)
Projects

Third year

Small grains
Horses
Small fruits
Orchard
Garden
Home ground improvement
Projects

Fourth year

Farm Management. This course is the same as taught here by Mr. Groseclose. The home farm including type of farm, system of farming, acres, investment, etc., equipment, special problems not covered in other course, tenants and renting, farm law, legal papers, deeds, mortgages, etc., taxes, labor and its distribution, capital, etc., lighting systems, water and other conveniences, keeping up farmstead, and projects.

III - Course each year with time allotted to the headings under each enterprise.

Potatoes

Adaptability	-	1 day
Seed for Eastern growers		1 "
Certified Seed		1 "
Select land		1 "
Needs of soil for potatoes		2 "
Inventory and records		1 "
Choosing variety		1 "
Securing seed		1 "
Choosing & procuring fertilizer		1 "
Procuring necessary machinery		1 "
Manure for potatoes		1 "
Applying fertilizer		1 "
Treating of seed		1 "
Cutting tubers		1 "
Planting		2 "
First cultivation)	
Subsequent ") -	1 "
Control of insects)	
Control of diseases)	3 "
Seed selection		2 "
Digging		1 "
Storage		2 "
Marketing		2 "
		<u>29 "</u>

Turkeys

Choosing breed		1 day
Securing breeding stock		2 "
Feeding and managing for eggs		1 "
Care of flock during mating		
season		1 "
Feeding & care of young poults		2 "
Incubating & brooding		1 "
Fattening turkeys		1 "
Marketing & dressing		2 "
Preventing disease		2 "
		<u>13 "</u>

Poultry

Determine adaptability of farm to raise	1 day
Choosing breed	3 "
Securing flock-	2 "
Arranging for flock	7 "
Housing	
Range & yards	
Winter pasture	
Management of flock	8 "
Culling	
Managing flock during winter	
Managing flock during summer	
Selecting breeding stock	
Care of mating pen	
Feeding	9 "
Feeding for winter egg production	
Purchasing feeds	
Feeding young chicks	
Feeding for fattening	
Feeding pullets in summer	
Marketing	7 "
Eggs	
Surplus stock (old hens, culls, fryers, broilers, breeding stock)	
Records	1 "
Incubating eggs	4 "
Preparing for young chicks	1 "
Control insects	3 "
Lice	
Mites	
Scaly Leg	
Gaps	
Control of diseases	3 "
Preventative measures	
White diarrhea	
Roup	
	<hr/>
	49 "

Hogs

Suitability of farm for hog raising	1 day
Choosing the breed	1 "
Securing stock	3 "
Feeding & care	
Breeding stock	2 "
For fattening	1 "
Hogging down crops (corn)	2 "
Sow during gestation	1 "
Sow at pigging time	2 "
Young pigs for growth	1 "
Housing	3 "
Pasture	3 "
Marketing	2 "
Butchering	2 "
Curing meat	3 "
Controlling diseases (cholera)	1 "
Controlling worms, mange, lice	1 "

29 days

Corn

Selecting land for corn	1 day
Study of soil	
Soil conditions for production	1 "
Study of soil from field	1 "
Selecting variety to plant	1 "
Corn in rotation	1 "
Plowing land for corn	2 "
Study of plows and how to operate	1 "
Testing seed corn (root rot)	4 "
Preparation of seed bed	1 "
Study of harrows, rollers, drags, etc.,	2 "
Selecting fertilizer, procuring & applying	3 "
Planting (when and how)	1 "
Study of corn planters	1 "
Cultivating crop	
First cultivation, (when and how)	1 "
Subsequent cultivations	1 "
Study of cultivating machinery	1 "
Thinning	1 "
Seeding cover crop	1 "
Selecting seed corn	4 "
Harvesting corn	2 "
Study of corn binder (if necessary)	1 "
Storing seed corn	1 "
Storing main crop	2 "
Exhibiting corn	2 "
Marketing corn	2 "

36 days

Dairy Cattle

Suitability of farm for dairying	1 day
Choosing breed	2 "
Selecting breed	5 "
Feeding	
The producing cow	1 "
The growing heifer	1 "
The young calf	1 "
Marketing	
Products	4 "
Surplus stock	1 "
How to determine profitable cow	4 "
Management and care of herd	8 "
Housing	
Breeding & care of cows during ges-	
Handling young stock	tation
Managing herd during summer	
Care of manure	2 "
Study of manure spreader	1 "
How to produce clean milk	3 "
Treating diseases	3 "
Milk fever	
Bloat & colic	
Garget (udder troubles)	
	<u>44 days</u>

Sheep

Suitability of farm to sheep	1 day
Choosing breed	1 "
Selecting breeding stock	3 "
Management and care of	
Breeding flock	2 "
Housing	1 "
Care at lambing time	2 "
Feeding	
Ewes in winter	1 "
At lambing time for milk	1 "
Of lambs	1 "
To flush ewes	1 "
Arranging pasture	2 "
Late fall	
early spring	
summer	
Castrating	1 "
Docking	1 "
Shearing & handling wool	2 "
Marketing wool	2 "
Marketing lambs and old ewes	2 "
Controlling disease	2
Mange	
Scab	
Controlling insects	3
Stomach worms	
Head bots	
	<u>29 days</u>

Beef Cattle

1. <i>omit</i> Determining whether to raise beef cattle	2
2. Suitability of farm for raising beef	1 day
3. Choosing breed	1 "
3. Selecting and securing breeding stock	2 "
Management	
During gestation	1 "
Breeding	1 "
During winter & summer	1 "
4. Housing	2 "
5. Feeding - <i>winter</i>	
Winter	1 "
6. Feeding - Calves)	1 "
7. Feeding - Fattening)	2 "
8. Marketing fat cattle	2 "
9. Selecting and securing feeders	3 "
10. Combatting black leg	2 "
11. Dehorning and castrating	2 "
	<hr/> 20 days

Hays

Determine adaptability	1 Day
Selecting land or field	1 "
Study of soil and requirements for good crop	2 "
Determine whether to use 1 crop or mixture	2 "
Choosing crop to sow, and choosing mixture	1 "
Deciding whether to seed in fall or spring	1 "
Preparation of land and seed bed	1 "
Procuring good seed	2 "
Inoculating seed	2 "
Seeding	2 "
Deciding whether to use lime	1 "
Why use lime	1 "
Form to use	1 "
How and when to apply	1 "
Procuring lime, fertilizers, manure, etc.	2 "
Applying fertilizer, manure,	1 "
Top dressing, how, when, with what	1 "
Winter pasture of hay crop	1 "
Harvesting, when	1 "
Study of mower and rake	1 "
Curing of hays (clover, alfalfa, soybean, mixed)	3 "
Storing hay (baling or stacking)	2 "
Study of loaders and hay forks and use	1 "
Marketing or feeding the hay	2 "
	<hr/> 34 days

Permanent Pasture

Farm suited to permanent pasture	1 day
Selecting land for pasture (How much land and which fields)	1 "
Improving pasture	
Materials needed (fertilizer, manure lime)	2 "
When and how to apply	2 "
Controlling weeds and sprouts	1 "
Drainage (if needed) and fences	1 "
Records	
	<hr/> 8 days

Temporary Pasture

Land suited to pasture grasses	1 day
Selecting land to put to grass	1 "
Study of soil conditions for grass	1 "
Choosing crop to grow (single crop or mixt- ure)	2 "
Procuring seed	1 "
Procuring fertilizers, lime, etc., for grass	1 "
Preparing land, applying fertilizer, lime, manure, sowing seed,	1 "
Pasturing first six months)	
Pasturing after six months)	1 "
	<hr/> 9 "

Small grains

Farm suited to grain (wheat, oats, rye)	2 days
Selecting land	1 "
Determining need of land	2 "
Taking inventory and records	1 "
Choosing variety of each grain to grow	2 "
Securing good seed	1 "
Preparing seed bed	
Fallow land, when and how	1 "
Ordering fallowed land and corn land	2 "
Determining fertilizer to use and procuring	1 "
Treating seed for disease	2 "
Seeding	1 "
Study of drill	1 "
Applying fertilizers)	
Pasturing small grains)	
Harrowing)	1 "
Selecting seed	
Head selection	1 "
Rogue field	1 "
Harvesting	1 "
Preparing binder for use	
Study of binder	1 "
Storage of crop before threshing	1 "
Threshing	
Fixing granary	1 "
Storing in granary	1 "
Controlling weevil	1 "
Marketing	2 "
	<hr/>
	28 days

Horses

Deciding type of horse to keep or buy	1 day
Buying horses	2 "
Breeding the mare	1 "
Managing during winter	1 "
Managing during summer	1 "
Care of mare and foal	1 "
Care of colt after weaning	1 "
Feeding horses in winter	1 "
Feeding horses at hard work	1 "
Treatment of minor ills	2 "
Fitting harness and hitching	2 "
	<hr/>
	14 days

Orchard

Determine whether orchard shall be home or commercial	1/2	day
What fruits to put in either	1/2	"
Determine variety of peaches for orchard	1	"
Determine variety of apples for orchard	1	"
Determine site for commercial orchard	1	"
Determine site for home orchard	1	"
Land improvement necessary for orchard	1/2	"
Replanting home orchard	1/2	"
Taking inventory and records	1	"
Determining system of planting orchard	1	"
Time to plant and spray	1	"
Heeling in trees and preparing land	1	"
Making planting board	1	"
Setting trees and pruning after setting	1	"
Intercropping	1	"
Determining fertilizer for orchard	1	"
Procuring and applying fertilizer	1	"
Cover crops to use	1	"
Protecting from rodents	1	"
Identifying insects and diseases with treatment	5	"
Determining spray material needed and number of sprays to use	1	"
Buying spray material (where and price)	1	"
Determining spray machine to use	1	"
Preparing spray machine	1	"
Mixing spray materials	1	"
Applying spray materials	1	"
Renovating old orchard	2	"
Budding and grafting	1	"
Thinning fruit	1/2	"
Securing packers and picking fruit	1/2	"
Grading fruit	1	"
Packing fruit	1	"
Storing fruit	1/2	"
Finding market	1/2	"
Marketing fruit and shipping	1	"
Home consumption and summarizing results	2	"
	<hr/>	
	38	days

Small fruits

Adaptability	1	day
Determining fruits to grow	2	"
Selecting land	1	"
Preparing land and planting	1	"
Cultivation	2	"
Fertilizers, manures, etc.	1	"
Study of insects and diseases	2	"
Spraying and materials	1	"
Pruning	1	"
Finding market	1	"
Picking, packing, shipping	2	"
	<hr/>	
	16	days

Home Grounds

Make plan of home grounds	4 days
Advisability of making improvements	1 "
Determining best shade trees	1 "
Determining best ornamental shrubs and flowers	1 "
Make plan of home ground improvement	2 "
Making proper location of shrubs, flowers, walks, roads	1 "
Buying trees, shrubs, flower seed, and bulbs	1 "
Prepare land and beds for planting	1 "
Make planting table showing time of planting life and flowering period	1 "
Transplanting flowers	1/2 "
Procuring proper fertilizers	1 "
Manuring shrubs and flowers for winter	2 "
What flowers to pot	1/2 "
Propagating flowers and shrubs	2 "
	<hr/> 19 days

Garden

Commercial or home garden)	
Size of garden)	1 day
Location and type of soil)	1 "
Planning home garden)	
Making prospective plan)	
Making planting table)	3 "
Determining amount seed & plants & buying	1 "
Making hot and cold bed frames	1 "
Planting seed in bed	1/2 "
Transplanting to cold frame	1/2 "
Preparing land & planting seed	1/2 "
Determining fertilizer to use	1 "
Identifying insects & diseases)	
What sprays needed)	3 "
Ant. spray needed & buying same)	
Applying spray	2 "
Cultivating garden	1 "
Gathering fall vegetables and seed	1 "
Harvesting and storing fruits	1 "
Marketing	1 "
	<hr/> 20 1/2 days

Farm Management

Get acquainted with home farm problems.

1. Acreage of farm.
2. Acreage and yields of each field.
3. Acreage and layout of present farmstead.
4. What is farm and equipment worth?
5. What type of farming is done on my farm?

Other problems:

1. How can I improve my farm layout?
2. How can I improve the plan of my farmstead?
3. Should I increase or decrease the amount of livestock on my farm?
4. Should I acquire more land to fit labor and equipment conditions, sell or rent some land, or fit equipment and labor to the needs of the acreage I have?
5. What is my most profitable farm enterprise?
6. Am I justified in keeping cost accounts?
7. Is my capital suited to my farm needs?
8. How can I maintain the fertility of my soil?
9. Can I derive benefit from any form of co-operative enterprise? What co-op?
10. How can I best market:
 - a. Grains
 - b. Hogs
 - c. Sheep
 - d. Poultry
 - e. Cattle
 - f. Hay
 - g. Vegetables
 - h. Fruits
11. How can I use labor more intelligently?
12. With what legal papers will I have to deal and what do they mean?
13. On what basis shall I lend money?
14. On what basis shall I borrow money?
15. Am I in a position to benefit by the local Farm Loan Association?
16. What type of farming best suits this community?
17. What type of farming best suits my farm?
18. How much of my money should be invested in machinery?
19. What piece of machinery pays the largest dividend?
20. Why are there no manure spreaders on the 14 farms we are studying? Lime spreaders?
21. What rotation best suits my farm?
22. What are the essentials of a system of farm accounts?
23. What items should be considered in buying a farm?
24. How can I acquire a farm of my own?
25. Why is there a farm labor shortage?
26. How can I produce pork most economically?
27. How can I produce beef most economically?
28. What is a good winter ration for dairy cows?
29. How much feed is saved by housing cattle in winter?

30. Does my farm pay a net income of 5% on its fair valuation?
31. Will a membership in the Farm Bureau pay me?
32. Should I practice diversification of my crops?
33. How can I establish contour lines on my farm map?
34. How can I beautify my home grounds?
35. Which of my fields pays the largest dividends?
36. How can I economically improve my farm equipment?
37. How can I improve my dairy herd?
38. How can I improve my home flock of poultry?
39. Am I justified in practicing fall plowing?
40. What is the proper method of handling manure in Montgomery County?
41. Advantages of a farm inventory?
42. What is the value of a purebred sire?
43. To what use can I put my farm map?
44. What are the advantages and disadvantages of sheep raising on my farm?
45. How much of my money should be invested in farm equipment?
46. Will proper housing of machinery pay on my farm?
47. What are the outstanding types of farming in my community?
48. What is the comparative importance of local crops?
49. What are the reasons for the relative importance of each crop?
50. What can be done on my farm during the first deep snow in February?
51. What is the efficiency of my team?
52. What is the efficiency of labor on my farm?
53. Make out a memorandum of work for rainy days.
54. What is the average length of the working day on my farm?
55. Am I justified in putting in a water and light system?
56. How can I improve conveniences and attractiveness of my home?
57. Does it pay to paint my buildings and machinery?

The above list of farm problems was handed in by the class in farm management. Other problems in addition to these that come up during the course were taught in this year course.

It is recommended that gas engines be put into the shop course.

In making up any course of study for vocational agriculture, certain criteria must be considered. Some of these criteria are:

- 1 - Ability of pupil.
- 2 - Time (number of teaching days).
- 3 - Supervised practice.
- 4 - Major enterprises.
- 5 - Potential enterprises.
- 6 - Seasonal sequence.

The ability of the pupil has to be carefully considered in grouping the enterprises in the year in which they are to be taught. The young boy, coming from the grades into the high school, has a somewhat undeveloped and immature mind and is unable to handle the more difficult problems of agriculture during the first two years. The enterprises to be grouped in the first two years of the vocational agricultural course, especially the first year, are those with subject matter of simpler nature and those that appeal to the constant and financial interest of the boy. The more difficult problems which involve more reasoning, an application of the lesser important enterprises, and decisions pertaining to the managerial side of farming, should come later in the course. As an example, such enterprises as improving home grounds, planting an orchard, managing the home farm, should be taken up in the third or fourth year.

The time factor has to be carefully watched, because too many major enterprises cannot be grouped in one year because of the time required to teach them. Supervised practice is the big factor in agricultural teaching and is to be pushed. The first year enterprises should be those that will furnish suitable opportunity for supervised practice in this year as well as providing for continuation and improvement of those enterprises through succeeding years. By grouping those enterprises in the first year that occur most fre-

quently in the community, supervised practice will tie up with classroom instruction much better than by grouping enterprises occurring less frequently. Enterprises that are most frequent grouped in the first year simplifies the teaching, because the boys have more common knowledge of such enterprises.

The major enterprises of the community are to be started early in the course, that would mean the first or second year. These are enterprises that are to remain in the community as valuable enterprises and if started in the first and second year of the course, improvement of these can be pushed through supervised practice work during the other years.

Potential enterprises or those enterprises that have a future that can be developed in the community like the major enterprises should be started soon in the course. They should be started in a small way the first year through projects, and if successful you have an excellent opportunity of putting them on a commercial basis before the end of the fourth year.

Seasonal sequence is one of the vital factors in any course of agriculture to make it successful. To teach a job at the time it is being done in connection with any crop or enterprise is when the information is valuable and can be fixed in the mind of the boy. In grouping all animal production or crop enterprises in one year, it is hard to get seasonal sequence in all cases. It is, of course, admitted that some jobs have to be taught out of season because school does not run throughout the year. When all crops are studied in one year, there is the maximum amount of conflict in teaching jobs in season. By grouping some animal enterprises with plant enterprises, it appears that seasonal sequence can be better followed.

In grouping the enterprises as set forth in this paper, on page 30, for the different years, the above mentioned

criteria were considered. Corn and chickens are enterprises that occur most frequently and subjects with which the boys have a considerable fund of common experience. Both are leading enterprises and furnish suitable opportunities for supervised practice work. Corn is the one enterprise that will furnish more teaching material than most any other enterprise. Potatoes are a potential enterprise and furnish outstanding possibilities. Most of the leading enterprises and those that seem to have a promising future in this community are grouped in the first two years. This starts the enterprises off and the opportunity is left to further develop those enterprises during the other years, through supervised practice work.

In the third and fourth years, some such problems as the following are taught: The study of small fruits, orchards, the labor situation, when is one justified in borrowing money, etc. These problems somewhat do away with the idea of quick financial returns and bring the boy to the point where he is made to feel the importance of farming and to appreciate and see the future in the different farming enterprises. In the third and fourth years the boy is older and has greater mental development and is able to shoulder more responsibility. In these years emphasis is placed upon and instruction given in the managerial side of farming. The operative skills, however, are not subjected entirely and when even possible are linked along with the managerial.

Summary.

From the study and observation made, the following are some of the advantages to be derived from a farm survey:

I- It acquaints the agricultural instructor with his community because he learns

- 1 - The major and minor farming enterprises.
- 2 - The farm practices being followed in the community.
- 3 - Who the best farmers are.
- 4 - The yield per acre of certain crops and knows where to stress improvement.
- 5 - To know the people of the community in an intimate way.

II - If a survey is taken every 4 or 5 years, it will enable you to ascertain the improved practices, increased yields in the community, etc. This should serve as a fairly reliable measuring stick of the results of the teaching of agriculture in the community.

III - Improves his teaching because

- 1 - He knows what enterprises are of most importance and needs the most attention.
- 2 - He has in tabulated form the farm practices of the community which cannot be excelled as teaching material.
- 3 - He knows who are the best farmers and can use field trips and analysis to study their methods.
- 4 - He has actual figures on yields, income, etc., which reduces the amount of conjecture and puts teaching on a basis of facts. These facts provide an initiative for study, which has been sadly lacking in our teaching hitherto.
- 5 - He can compare the local practices with standard practices of experiment stations, which, in itself, is a method of teaching.
- 6 - Tabulating the farm survey data makes an ideal farm management exercise for the class.
- 7.- In the actual taking of the survey, the instructor is teaching adult farmers, because he brings to their attention certain vital problems and may offer a solution to them.

Every instructor should make a farm survey every five years in his community because of the above facts. It is also recommended that the form of survey used in making this study be used by other instructors with one change, and that is the expense column. It is admitted that this is not accurate, but in case facts are desired this form is as good as any studied.

III - Grouping of enterprises in the four year course.

Recommendations advising this same procedure being followed in other communities is a difficult task before the course has been tried out. Some points in favor of this procedure are:

- 1 - Knowing the enterprises that should be taught in the community, one can better distribute the time to be devoted to each enterprise.
- 2 - By this procedure, one may be able to teach all the agriculture needed in a certain community in less than 4 years.
- 3 - Better correlation of projects with class room instruction can be obtained.
- 4 - Better interest on the part of the boy in agriculture and better class work ought to be obtained, because following this grouping each lesson taught will be of direct importance to some member of the class.
- 5 - Better seasonal sequence in arranging the jobs to be taught is possible.

Some weak points in this procedure are:

- 1 - It is questionable how far this grouping of enterprises should be attempted, possibly not further than the first two years.
- 2 - It would be almost impossible for a new instructor going into a new place to attempt this procedure the first year.
- 3 - By grouping animal enterprises in different years, it may make the teaching of feeding more difficult.
- 4 - Before this procedure is attempted, not two years but the entire program must be carefully mapped out.

It is recommended that all instructors make and use the farm survey to improve their teaching, but before one should attempt to group ^{the plant animal production} and ~~small~~ the enterprises together, he should have the entire four years' work planned and then give such procedure very careful consideration. It is further recommended that every instructor give this idea of grouping the enterprises a reasonable amount of consideration and see if it can be successfully applied to his community.

Wheat	\$1.25 per bushel
Oats	\$1.00 per bushel
Barley	\$1.00 per bushel
Rye	\$1.00 per bushel
Clover hay	\$15.00 per ton
Alfalfa hay	\$15.00 per ton
Timothy hay	\$15.00 per ton
Orchard grass hay	\$15.00 per ton

Attention Patron:

Page 48 omitted from
numbering

Prices at which all crops are figured, when prices were not given by the farmer:

Corn,	\$1.25 per bushel
Silage,	\$8.00 per ton
Potatoes,	\$1.00 per bushel
Wheat,	\$1.50 per bushel
Oats,	\$.70 per bushel
Rye,	\$1.25 per bushel
Buckwheat,	\$1.25 per bushel
Apples,	\$1.00 per bushel
Peaches,	\$1.50 per bushel
Mixed hay,	\$18.00 per ton
Clover hay,	\$18.00 per ton
Soybean hay,	\$20.00 per ton
Alfalfa hay,	\$22.00 per ton

Bibliography

1. U. S. Government Survey.
2. Survey of the Agronomy Department of V. P. I.
3. Survey of the Economics Department of V. P. I.
4. Survey of the Agricultural Education Department of V. P. I.
5. Survey for the State Board for Vocational Education of N.C.
6. Bulletin No. 98, Federal Board for Vocational Education, "Principles in making the Vocational Course of Study in Agriculture in the High School.
7. Bulletin 4, Clemson College, Division of Agricultural Education, "The Use of the Farm Survey in Teaching Agriculture".
8. The Course of Study used in Blacksburg High School for the session of 1924-25 in Plant Production, Animal Production, Horticulture and Farm Engineering, and Farm Management.

57
beef cattle

Farm No.	No. mature females (Breed)	No. young females or feeders (breed)	No. calves (breed)	Males (breed) P.B. or grade	Total value	Winter Ration mature animals	Summer ration	Ration for growing stock	Gain per year (yearlings & 2 yrs.)	Wt. when sold	When & how sold	Income	Herd improvement	Housing practices	When young were dropped
1	4 Shorthorns	12 Shorthorns	7 Shorthorns	1 Shorthorn	790.00	silage, hay, fodder	pasture	pasture	300#	1000#	fall, dealer	300.00	P.B. bull	barn	spring
2	12 "	40 "	17 "	1 "	7690.00	" " straw	"	" & silage	300#	1500#	Sept.-ship	*3200.00	P.B. bull	shed	"
3	-	1 "	1 "	-	90.00	hay, fodder	"	pasture	250#	-	fall, dealer	-	P.B. bull	barn	"
4	-	20 "	-	-	400.00	mixed hay	"	milk, pasture	200#	800#	fall, dealer	not sold	P.B. bull	shed	"
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	27 "	20 "	-	700.00	exp. feed at college barns	"	pasture	250#	1000#	July, dealer	480.00	-	shed	"
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	36 Hereford Angus	10	1 P.B. Angus	1800.00	hay, fodder	"	" hay, corn, bran	300#	1200#	Aug. dealer	600.00	P.B. bull	shed	"
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	15 grade Hfds.	3	-	475.00	hay, fodder, straw	"	" milk	250#	1000#	Oct. dealer	300.00	P.B. Here.	none	"
13	-	5 grades	-	1 P.B. Here.	175.00	hay, fodder	"	-	-	-	-	-	-	-	-
14	2 Shorthorns	2	1	1 grade shfn.	75.00	hay, fodder	"	pasture	400#	1000#	fall, local	-	P.B. sire	barn	fall
15	-	15	6	1	465.00	hay, fodder, corn	"	"	-	1100#	fall, Ass'n.	400.00	P.B. bull	none	Feb. Mar
16	-	1 grade	-	-	30.00	corn, C.B.M., hay	"	"	-	1000#	dealer	60.00	-	-	-
17	-	15 polled Durham	20	1 P.B. Pol. Dur.	2250.00	silage, fodder, hay	"	" & whole milk	300#	1350#	Sept.-local	4250.00	P.B. bull	shed	spring
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	6 Here. & SH.	21	14	-	1160.00	silage, fodder, hay	"	silage, bran, corn	250#	1400#	fall, shipped	140.00	P.B. bull	barn	spring
21	-	26 Shorthorns	3	-	750.00	corn, hay, fodder	"	pasture, milk	250#	1300#	Oct. dealer	-	good bull	none	fall & Sp
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	10	1	1 Gr. Hereford	470.00	corn, hay, fodder	"	-	300#	1000#	October,	100.00	raise & buy	shed	-
24	-	5 S.H. & Hfd.	2	1 Shorthorn	300.00	hay, fodder, straw	"	pasture	300#	1250#	local	460.00	-	shed	-
25	12	4	1	1 PB "	1800.00	hay, fodder, corn	"	"	400#	1100#	ship, Penn.	1400.00	P.B. bull	barn	spring
26	-	56 Herefords & Shorthorns	2	2 grade Shorthorns	1655.00	hay, silage, fodder	"	" & 4 months milk	300#	1000#	Aug.-Oct. Assoc.	2000.00	-	barn	-
27	1 Hereford	33 PB Herefords	-	-	455.00	hay, fodder, straw	"	pasture	350#	1000#	fall, dealer	305.00	P.B. bull	-	spring
28	-	50	-	-	2250.00	hay, fodder, silage	"	"	350#	1450#	fall, dealer	4088.00	grade bull	barn	"
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	8 grade SH	-	-	6 PB Sh.	555.00	corn, fodder, hay	"	"	300#	1300#	fall, dealer	1000.00	P.B. bull	shed	"
31	6	26 SH 7 Hfd	14	1 PB Shorthorn	840.00	hay, fodder, corn	"	"	350#	1200#	fall, dealer	1000.00	P.B. bull	shed	"
32	4	19	-	1 PB Shorthorn	584.00	silage, straw	"	"	330#	1350#	shipped	2042.00	P.B. bull	shed	"
33	12	306 SH & Hfd.	12	1 PB Hereford	2500.00	corn, silage	"	"	300#	1475#	ship	36960.00	P.B. bull	barn	"
34	6	-	14	-	400.00	hay	"	"	-	1000#	fall, local	200.00	P.B. bull	none	"
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	8 Herefords	52 mixed Herefords	5	1 PB Hereford	1670.00	hay, straw	"	" & milk	300#	1000#	Sept. dealers	1300.00	P.B. bull	shed	"
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	13 Hfs. & SH	50	14	1 PB Hereford	2345.00	silage, fodder, hay, straw, corn	"	silage, hay, corn, oats	350#	1200#	Oct. dealers	1400.00	P.B. bull	shed	"
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	20 grades	16	1 PB Hereford	800.00	silage, fodder,	"	pasture	350#	1000#	Oct.	1100.00	P.B. bull	shed	" & fa
41	-	3	-	-	36.00	hay, alfalfa	"	"	-	-	-	50.00	-	-	-
42	-	13	2	-	849.00	hay, fodder, straw	"	pasture	300#	1380#	Oct. dealer	520.00	-	none	-
43	-	15	-	-	965.00	silage, fodder,	"	"	300#	1200#	Oct. dealer	1250.00	-	shed	-
44	-	15	-	-	600.00	-	"	-	300#	1200#	Nov. dealer	1200.00	-	barn	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	-	28	8	1 PB Shorthorn	1050.00	stover, hay	"	" & milk	300#	1200#	Oct. dealer	200.00	P.B. bull	barn	spring
47	-	11	-	1 " "	475.00	silage, hay, straw, fodder	"	" & milk	300#	1100#	Sept. ship	430.00	P.B. bull	barn	"
48	-	-	28	-	270.00	silage, hay, fodder	"	"	300#	700#	-	130.00	-	shed	"
50	-	22	-	-	270.00	hay, fodder, straw	"	-	300#	1100#	Oct. dealer	500.00	-	barn	"

* * Lost on this

37 farms, 78%, have beef cattle

13 of the 37 report cows as breeding stock. Number of cows, 94.

24 farms of the 37 listed their cows under dairy cows, because they sell surplus milk or use them as family cows. The leading beef breed is Shorthorn, with Hereford second, and only one farmer is breeding Polled Angus, and one farmer is breeding Polled Durham.

On the 37 farms are 94 cows, 1011 feeders, 218 calves, 26 bulls, making a total of 1349, with an average per farm of 33.5 head. The total value is \$60,989.00.

Hay, fodder, and straw are the chief winter feeds for beef. 29.8% of the farmers feed silage, and 24.3% feed some grain, (mostly corn). One farmer fed cottonseed meal. The summer ration is nothing but pasture.

35% of the farmers raise calves on pasture. 27% of the farmers feed milk, (either let the calf run with the cow or feed milk two to four months), with pasture. Three farmers feed grain with hay or silage. 29% reported no method of feeding calves.

The average weight at which the animals are sold is 1110 pounds, and the average pounds gain each year is 300. The total income is \$64,215, making an average of \$2,070 per farm. One farmer reports a loss of \$3200.

54% of the farmers breed to purebred bulls, 10% to good grade bulls, and 36% report no improved breeding practices.

40% of the farmers use sheds for beef cattle housing, 37.5% use barns, and 12.5% report no housing.

48.6% farmers have calves dropped in early spring, 12.5% in fall and winter, and 37.9% made no report when calves were dropped.

Farms No. 17, 25, 26, 28, 31, 32, 33, 36, 38, 43, and 44 are leaders in beef production.

In this community it is the practice for most of the farmers to have beef breed of cows for the purpose of raising feeders. These cows are listed as dairy cows because of the fact that they sell the surplus milk and cream from these cows.

86% of the farmers have milk cows.

Farms No. 1, 8, 13, 18, 29, 37, 41, 50, are about the only dairy farms listed.

Total number of cows, 369; heifers, 71; calves, 37; bulls, 6. Total value, \$17,940.00.

The leading breed for those in dairying is Holstein-Friesian.

Corn, bran, fodder and mixed hay are common feeds for those having beef breed milk cows. Those running dairy herds feed silage in addition, as well as cottonseed meal, and in most mixtures, oats. One farmer feeds best pulp. Summer ration is mostly pasture.

Two of the leading dairy farmers feed the same mixture for summer ration and cut down on the amount of grain fed.

Six farmers feed cottonseed meal or chop with pasture.

4 farmers feed calves whole milk with bran or chop, 9 feed calve skimmed milk with some grain, 11 raise the calves on pasture alone, and 16 reported no calf ration.

23.8% of the farmers sell whole milk to the creamery.

One farmer is retailing whole milk in town.

16.6% of the farmers sell cream to the creamery, 30.9% sell butter to local merchants and hucksters, 26.2% report no sale of dairy products. Three farmers report the sale of veal calves.

21.4% of the farms report no income from milk cows.

78.6% report a total income of \$17,430. Average per farm, \$528.20

3 dairymen have purebred Holstein bulls, and one dairyman has a purebred Jersey, one a purebred Guernsey, and one a purebred Shorthorn bull.

45% of the farmers report breeding to purebred bull, but in the majority of the farms they are breeding beef type bulls.

85.8% farms house dairy cows in barns, and 14.2% in sheds.

26.2% farms have part of calves dropped in fall or winter, 50% have all calves dropped in spring, and 23.8% did not report when calves were dropped.

Farms No. 8, 13, 18, 29, 37, 41, and 50 are the leading dairy farms.

Hogs

Farm No.	No. mature females (breed)	No. sows or gilts (breed)	No. pigs (breed)	No. males (breed) PB-grade	Total value	Ration			Selling weight	When and how sold	Where products were sold	Income from hogs	Practice of herd improvement	Housing practice	Time of farrowing
						winter	summer	for pigs							
1	1 P-C	-	1 P-C	-	\$50.00	Chop, kitchen waste	Waste, pasture	-	180#	-	private	\$30.00	-	house	F&S
2	6 Berkshire	30 B	-	1 Berkshire	1000.00	corn, slop	corn, pasture	milk, corn, slop	200#	cured meat	shipped	500.00	PB sire	shed	F&S
3	-	2 P-C	-	-	72.00	corn, slop, milk,	milk, pasture	milk, corn,	235#	pork	-	35.00	-	house	-
4	3 P-C	8 P-C	-	-	130.00	middlings, corn	middlings, corn,	corn, chop, tank-	-	as pigs	local	200.00	PB herd	house	F&S
5	1 P-C	2 P-C	6 P-C	-	30.00	corn	corn, milk	corn, milk	200#	pigs & pork	local	52.00	PB herd	house	F&S
6	8 PB Durocs	38 Durocs	-	1 PB P-C	225.00	shorts, tankage, corn,	corn, pasture	bran, chop, corn,	225#	L.S. Asso.	-	985.00	PB boar	shed	Sp.
7	1	-	-	-	20.00	corn	corn, pasture	corn, pasture	190#	local market	local	63.50	PB boar	shed	Sp.
8	-	1	-	-	10.00	corn, slop	corn, slop	-	-	-	-	-	-	-	-
9	2	7	-	-	104.00	corn, slop	corn, pasture	milk, corn	-	as meat	local	200.00	-	barn	fall
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	2	-	-	20.00	corn, slop	corn, slop	-	-	-	-	-	-	-	-
12	1 P-C	5	1	-	60.00	corn, slop	corn, slop	milk, chop	-	meat	local	300.00	PB sire	house	F&S
13	2 P-C	-	10 P-C	-	130.00	corn, milk, slop-	corn, milk, pasture	milk, chop, corn	200#	pigs, local	local	85.00	PB sire	shed	S&W
14	2 P-C	-	2 P-C	1 PB P-C	125.00	corn	corn, pasture	corn, pasture	-	pigs, local	-	250.00	PB sire	"	W&Sp.
15	1 P-C	-	10	-	50.00	corn, slop	corn, slop	corn, slop	250#	through Assn.	-	72.00	PB sire	house	"
16	1 PB Duroc	10	-	-	40.00	corn, milk	milk, slop, pasture	milk, chop	200#	dressed	local	240.00	PB sire	shed	F&S
17	7 Chester & D.	60	60	1 PB 60 Chester	1160.00	corn, slop	corn, pasture	milk, pasture	90#	pigs	local	900.00	PB sire	"	S&W
18	1 mixed	7	6	-	175.00	corn, chop, milk	corn, pasture, milk	milk, corn	-	" & dressed	local	100.00	PB sire	house	S&S
19	1 P-C	7	-	-	85.00	corn, slop, milk	corn, pasture	-	-	-	-	-	PB sire	"	S&S
20	4 B & P-C	20	40	-	540.00	corn, milk, chop	milk, pasture	milk, corn	150#	pigs	local	300.00	PB sire	"	"
21	1 P-C	6	-	-	110.00	corn, milk, slop	corn, milk, slop,	milk, corn	-	-	local	90.00	good sire	"	Spring
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1 P-C	11	-	-	25.00	corn, chop, slop	milk, corn	milk, chop	200#	dressed	local	125.00	PB sire	house	F&S
24	2 Duroc & Berk.	4	9 berkshire	-	145.00	corn, slop	corn, slop	corn, chop	-	pigs	-	65.00	PB sire	"	F&S
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	6 grade P-C	6	75	1 PB P-C	645.00	corn, slop	pasture, slop	slop, chop	200#	pigs	local	450.00	PB sire	"	F&S
27	1	-	-	-	15.00	corn, slop	pasture	pasture	200#	-	-	-	-	-	-
28	4	-	16	1 mixed	150.00	corn, slop	pasture	pasture	100#	live	local	300.00	-	shed	F&S
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	1 Berkshire	-	8 berkshire	1 PB Berk.	108.00	corn, slop	pasture	pasture	180#	dealers	local	150.00	PB sire	"	F&S
31	1 P-C	5 mixed	5 mixed	-	70.00	corn, slop	corn, pasture	pasture	250#	"	local	75.00	PB Berk.	"	spring
32	2	-	18	-	60.00	corn, slop	pasture	pasture	-	pigs	local	70.00	PB sire	"	F&S
33	-	-	40	-	400.00	fellow cattle	pasture	pasture	300#	ship	North	960.00	-	-	-
34	2	-	-	1 PB P-C	30.00	corn, slop	corn, slop	corn, slop	250#	consume	-	-	-	-	-
35	1 grade	-	10	-	80.00	corn, slop	corn, slop, pasture	corn, slop, milk	300#	as pigs	local	50.00	good sire	"	"
36	1 P-C	6	-	-	75.00	corn	corn, pasture	corn, ilk	300#	dressed	local	150.00	PB sire	house	F&S
37	1 Berkshire	6	-	1 PB Berk.	90.00	corn, slop	corn, rape	chop, milk	-	pigs	local	56.00	PB sire	shed	"
38	6, Ch., Dur., P-C	16	24	1 PB P-C	508.00	corn, slop, rye,	corn, pasture	bran, corn, milk	170#	pigs	local	550.00	PB sire	house	"
39	3, PB P-C, grades	-	-	-	60.00	corn, chop, slop	grain, pasture	-	-	-	-	-	-	pen	"
40	2 P-China	-	-	-	30.00	corn, bran, milk	corn, milk, pasture	corn, milk, chop	125#	dressed	local	90.00	PB sire	shed	"
41	5 P-C	10	18	1 PB P-C	415.00	corn, slop, milk	corn, clover, beans,	chop, milk	300#	pigs	local	125.00	PB sire	house	"
42	-	5-	-	-	20.00	corn, slop, milk	corn, milk	corn, milk	200#	dressed	local	100.00	PB sire	"	"
43	3 P-C	-	-	1 P-C	100.00	corn	corn, slop, pasture	corn, chop, milk	-	pigs	local	60.00	PB sire	"	"
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	1 P-C	2	13	-	115.00	corn, slop	corn, slop	rye, chop, milk	-	pigs	local	55.00	PB sire	shed	F&S
47	1 P-C	-	-	-	35.00	corn, slop	corn, slop	rye, chop, milk	-	-	-	-	-	house	"
48	2 P-C & chester	6	-	1 PB chester	140.00	corn, slop	corn, slop	slop, milk, chop	-	pigs	local	100.00	"	shed	"
49	2 P-C	7	9	1 PB P-C	175.00	corn, chop, slop	pasture	corn, chop	-	pigs	-	100.00	PB sire	"	"

6 farms report no hogs.
 43 farms report 91 sows, 287 shoats, 381 pigs, 14 males.
 Total value of hogs, \$7627.00.

Poland-China is the leading breed with 41 sows and 8 boars (purebred)
 Berkshires is second with 13 sows and 3 boars.
 Durocs are third with 8 purebred sows and 3 grade sows.
 Chester Whites come fourth with 5 sows and 2 purebred boars.

- It is the common breeding practice in this community not to keep pure breeds but to cross the breeds, Berkshire with Poland-China, and Poland-China with Duroc-Jerseys.

68.1% of the farmers feed only corn or chop with slop in winter.
 32.5% of the farmers feed skim milk with corn and chop.
 Only 1 farmer in 43 with hogs puts tankage in the ration. This same farmer is the only one to furnish winter rye pasture for hogs.
 1 farmer for winter feeding let his hogs follow beef cattle.

25.5% feed hogs in pen during the summer the same as for winter.
 11.6% farmers report only pasture for summer feeding.
 62.9% feed some grain with pasture.
 Only 2 farmers provided special pasture for hogs. 1 grew rape, the other soybeans and clover.

The ration for pigs is practically the same as for hogs, with the exception that pigs receive more skimmed milk.

Average weight when sold, 210 pounds.

2 farmers market hogs through the livestock association.
 1 farmer ships his own to market.
 3 farmers sell as cured meat.
 9 farmers market hogs dressed locally.
 4 farmers market altogether fat hogs on foot to local buyers.
 19 farmers market as pigs locally.
 5 farmers consume all raised.

All hog products are marketed locally, except with one farmer. This man ships cured meat to individuals in different states.

Total income on hogs, \$6034.50. Average per farm, \$189.35.

1 farm (No.4) has purebred stock (Poland-China).
 67.4% of the farmers breed to purebred boars. 9.3% breed to good grade boars. 23.3% improve their herd in no way through breeding.

48.8% of the farmers house hogs in sheds, and 51.2% in hog houses or barns.

3 farmers report only spring litters, 1 reports only fall litters, and 32 farmers report fall and spring litters, mostly September and March.

Farms No. 4, 6, 17, 33, and 36 are leading hog raisers.

Farm No.	No. mature ewes (breed)	No. No. lambs (breed)	No. rams purebred or grade	sheep		Ration for growing stock	Value of flock	When & how sold	Wt. at sale	Where products sold	Income from sheep	Practices of herd improvement	Housing practices	Time of lambing
				winter ration	summer ration									
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	39 southdown	2 S.D.	1 S.D.	hay, silage	pasture	bran, chop	\$455.00	-	-	-	-	P.B. ram	none	March
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	38 Hampshire	-	Dorset Hampshire	corn, bran, and alfalfa	pasture	pasture	400.00	July 1, Feb. Br.	80¢	local dealer	\$200.00	P.B. rams	bed weather	March 1
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	77	60	-	corn, bran, oats hay, straw	pasture	corn, bran, oats	880.00	dealer	65¢	dealer	506.00	-	shed	Feb. Mar.
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	19 shropshire	20	1 Shr. gr'd.	bran, corn,	pasture	pasture	205.00	June	90¢	local	246.00	grd. ram	barn	Feb.
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	28	15	1	corn, oats	pasture	bran	390.00	Assoc.	100¢	local	144.00	P.B. ram	shed	March
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	202 Hampshires	100	7-	hay, corn,	pasture	pasture	2760.00	shipped	85 ¢	local	1300.00	none	shed	Jan. Feb.
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	75 shropshires	75	2 -shrop S.p.	silage, bran, corn, hay	pasture	bran, oats corn	500.00	Assoc.	85¢	local	1000.00	Buy P.B. rams good rams	shed barn	February Feb.
21	36 Hampshires	32	1 Dorset	bran, corn,	pasture	bran, pasture	370.00	May & June dealer	85¢	local	375.00	-	-	Feb.
22	20 shropshires	-	1 Shrop.	clover, soy-bean hay	pasture	pasture	105.00	June Assoc.	80 ¢	pool	185.00	P.B. ram	shed	Feb.
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	260	231	7 P.B. Hamp.	bran, corn, C.S.M. hay	pasture	pasture	2600.00	Jersey City	82¢	ship	2062.75	P.B. Ram	shed	Feb.-Mar
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	60 grades	70	2 grades	bran, corn	pasture	pasture	833.00	local	85¢	pool	725.00	-	shed	Feb.-Mar
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	14	13	1	corn, hay	pasture	pasture	108.00	breeders	112 1/2 ¢	local	220.00	P.B. rams	shed	Feb.-Mar.
33	300	300	10 P.B. Hamp.	corn, bran, hay	pasture	pasture	3000.00	market	75¢	-	3600.00	P.B. Rams	shed	Jan-Feb.-Mar.
34	15	27	1 grade	corn, hay	pasture	pasture	270.00	local	82¢	shipt	334.00	good "	shed	-
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	36 Hampshires	47	1 Shrop.	corn, oats, hay	pasture	corn, bran	610.00	May, June	80 ¢	local	490.00	P.B. ram	shed	Feb.
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	112 grades	125	3 Hampshires	corn, bran, fodder	pasture	pasture	118.00	Jersey City	85¢	local	1000.00	P.B. rams	shed	Feb.
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	40 Hampshires	45	1 P.B. "	silage, bran, corn, C.S.M.	pasture	pasture	425.00	July	85¢	local	700.00	P.B. ram	barn	Feb.
47	50 Hampshires	48	2 P.B. "	low ground	pasture	pasture	550.00	July	70¢	local	500.00	P.B. ram	shed	March
48	28 Shropshires	24	1 grade "	corn, bran, fodder	pasture	pasture	290.00	June -	70¢	local	200.00	grade "	barn	Feb.
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	19 Hampshires	-	1 p.b. "	corn, C.S.M. bran fodder, silage, hay	pasture	pasture	200.00	Farm Bureau	85¢	local	300.00	P.B. ram	shed	Feb.

20, or 41% of the farmers raise sheep.

Total number ewes, 1466. Ewes and rams, 1514. Average per farm, 75. Number lambs raised last year, 1232. Total value of flocks, \$18,303. 14 farms out of the 20 reported the breed. 1 farm has Southdowns, 7 have Hampshires, 4 Shropshires, and 2 report first grades (all flocks are grades). 6 farmers make creeps for lambs, and feed extra. The first crop, or early lambs, are marketed the middle of May to the middle of June. The late crop lambs are marketed July to August.

5 farmers shipped through the shipping association, seven shipped their own lambs directly to market, (Jersey City,) and 8 sell through local dealers.

Average weight of lambs when sold, 76 pounds.

Fourteen farmers sell wool to the local dealers. Two sold through the wool pool, two shipped their wool, and two did not report how they sold the wool.

Total income from sheep, \$14,087.75. Average per farm, \$704.40.

13 farmers use purebred rams to breed up flock, 4 farmers were using high grade rams, 3 farmers report no methods of improving flock, 2 farmers report lambs dropped in January, 13 reported lambs dropped in February, 4 reported lambs dropped in March, and 4 farmers did not report when lambs were dropped.

Farms No. 7, 20, 25, 33, 38, 46, 50 are leaders in sheep production.

Horses

Farm No.	No. Hares Breed	No. Geldings	No. Colts	total value	winter ration	summer ration	Income	Housing practices	Average wt. of horse	No. days paid work off farm	Time of foaling
1	1	1	-	\$300.00							
2	6	2	-	1800.00	corn, mixed hay	corn, oats, pasture	\$36.00	barn	1200#	18	-
3	-	3	-	350.00	corn, hay	corn, pasture	-	barn	1500#	-	May
4	-	3	-	200.00	clover hay	corn, hay, oats	-	barn	1180#	-	-
5	2 Percherons	-	-	300.00	corn, mixed hay	corn, hay, pasture	-	barn	1300#	-	-
6	2 Percherons	1	2 (Reg.)	800.00	corn, hay	corn, hay	-	barn	1450#	-	-
7	2	3	-	240.00	corn, hay	corn, hay, pasture	-	barn	1650#	-	April
8	3	2 mules	-	500.00	corn, hay	corn, hay, pasture	-	barn	1200#	-	April
9	4	2	-	360.00	corn, hay	corn, hay	-	barn	1200#	-	-
10	-	-	-	-	corn, hay	corn, hay, pasture	-	barn	1100#	-	-
11	1	1	-	200.00	corn, hay	corn, hay, pasture	500.00	barn	1020#	100	-
12	4	2	-	600.00	corn, hay	corn, hay, pasture	142.00	barn	1400#	30	-
13	3 Percherons	-	-	250.00	corn, hay	corn, hay, pasture	155.00	barn	1300#	-	-
14	2	1	-	275.00	corn, hay	corn, hay, pasture	-	barn	1250#	-	-
15	5	-	-	200.00	corn, hay, oats	corn, oats, pasture	-	barn	1600#	-	-
16	2	-	-	200.00	corn, hay, oats	corn, oats, pasture	-	barn	1200#	-	-
17	4	4	1	900.00	corn, hay	corn, hay, pasture	900.00	barn	1300#	-	-
18	4 Percherons	-	1	800.00	corn, hay	corn, hay	-	barn	1400#	0	-
19	2	1	-	200.00	corn, hay	corn, pasture	-	stable	1200#	-	-
20	4	2 mules	-	600.00	corn, hay	corn, hay, pasture	165.00	barn	1200#	-	-
21	3	-	-	250.00	corn, hay	corn, hay, pasture	180.00	barn	1500#	-	-
22	3	1	-	200.00	corn, hay	corn, hay, pasture	-	barn	1100#	-	-
23	4	-	1	600.00	corn, hay, bran	corn, hay, oats	-	stable	1400#	-	-
24	2	2	-	350.00	corn, hay, oats	corn, hay, oats	-	barn	1300#	-	-
25	2	4	-	350.00	corn, hay, fodder, chop	corn, hay, pasture	-	barn	1250#	-	-
26	2	3 mules	-	500.00	corn, hay	corn, hay, pasture	140.00	barn	1250#	-	-
27	1	1	-	200.00	straw, corn	corn, pasture	-	Mules barn	800#	-	-
28	2	4	-	300.00	corn, hay	corn, pasture	-	barn	1500#	-	-
29	1	2 mules	-	300.00	corn, hay	corn, hay, pasture	-	barn	1000#	-	-
30	2	1	-	250.00	corn, alfalfa hay	corn, pasture	-	barn	1200#	-	-
31	3	2	-	250.00	corn, straw, hay	corn, pasture	-	barn	1400#	-	-
32	4	2	-	400.00	corn, hay	corn, pasture	-	barn	1200#	-	spring
33	3	6	-	450.00	corn, hay	corn, pasture	-	barn	1000#	-	-
34	1	1	-	200.00	corn, hay	pasture	-	barn	1400#	-	-
35	2	-	-	200.00	corn, hay, fodder	corn, hay	-	barn	1400#	-	-
36	3	4	-	600.00	corn, hay, fodder	corn, hay	-	barn	1200#	-	-
37	1	2 mules	-	300.00	corn, hay	corn, oats, hay, pasture	-	barn	1200#	-	-
38	2	4	-	800.00	corn, hay	pasture	-	barn	1000#	-	-
39	1	1	-	400.00	corn, oats, hay	oats, corn, hay, pasture	60.00	stable	1400#	10	-
40	4 - 1 saddle 3 Percherons	3	-	600.00	corn, mixed hay	hay, corn, pasture	85.00	barn	1250#	-	9
41	6-	3	-	800.00	corn, hay	hay, corn, pasture	-	barn	1000 #	-	-
42	1 percheron	1	-	200.00	corn, hay	hay, corn, pasture	150.00	barn	1200 #	30	-
43	1 Percheron	2	-	300.00	corn, hay, straw	hay, corn, pasture	-	barn	1400#	-	-
44	1 percheron	-	-	100.00	corn, oats, hay	corn, pasture	-	barn	1100#	-	-
45	2	-	-	150.00	corn, hay	corn, hay	-	barn	1100#	-	-
46	3	1	-	335.00	corn, hay	corn, hay, pasture	300.00	barn	1350#	-	-
47	3	2	-	500.00	corn, hay	corn, hay	145.00	barn	1250#	-	May
48	4	-	-	400.00	corn, hay	corn, hay, pasture	-	barn	1200#	-	May
49	2	3	-	100.00	corn, hay	corn, hay, pasture	125.00	barn	1200#	-	-

Only 1 farm reports no horses, and this farm is all orchard.

48 farms have mares, 122; geldings, 73; mules, 11, and colts, 6, making a total of 212 head.

Total value, \$19,600.00.

Average weight, 1275 pounds.

Average weight of mules, 900 to 1000 pounds.

77% of the farms fed corn and hay through the winter, (one farmer fed alfalfa hay, and one soybean hay).

10% of the farmers increased the cost of winter feeding by adding bran or oats to the ration.

13% of the farmers cheapened the cost of winter feeding by adding fodder or straw to ration.

3	farms	reported	only	pasture	as	a	summer	feed	or	work	ration.	
7	"	"	"	corn	and	hay	as	a	summer	or	work	ration.
9	"	"	"	corn	alone	with	pasture.					
22	"	"	"	corn	and	hay	with	pasture.				
2	"	"	"	corn,	oats,	and	pasture.					
2	"	"	"	corn,	oats,	and	hay.					
3	"	"	"	corn,	oats,	or	bran,	hay,	and	pasture.		
14	"	"	"	a	total	income	of	\$2,983	on	horses.		
5	"	"	"	income	from	hauling.						
9	"	"	"	"	"	sale	of	animals.				

Very few colts are being raised (7 farmers report colts to be dropped this spring).

Farms No. 20, 27, 31, 35, 36, and 43 are leaders in horse management. Farm No. 6 is raising registered Percherons.

Poultry

farm No.	No. hens (breed)	No. raised	No. roosters	Value of flock	winter or egg ration	summer ration	chick ration	Selling weight	How & when sold	Where products were sold	Income from flock	Practices of flock improvement	Housing practices	When hatched
1	60 RIR	100	3	\$100.00	scrap, corn, bran	corn, wheat	bread, ck. corn, milk	1 1/2#	local market	private customers	\$134.00	P.B. cocks	house	March
2	300 mixed	100	25	325.00	corn, wheat	corn, wheat	corn, wheat, oats	-	-	local	400.00	-	house	March
3	55 mixed	140	3	135.00	corn, wheat, egg	corn, wheat	ck. corn, wheat	1 1/2#	local market	local & egg circle	170.25	P.B. cocks	house	spring
4	25 R.I.R.	5	4	34.00	corn	corn	cracked corn	-	home consumption	-	-	" " & eggs	house	"
5	40 mixed	75	3	43.00	corn	corn	corn meal	1 1/2#	local market	local	50.00	-	house	March
6	23 PB Wh. Rocks	350	3	115.00	egg mash, corn, wh.	egg mash, wheat	meal, starter feed	10#	local	local	200.00	buy cocks	house	March
7	50 mixed	50	4	68.50	corn, oats, scrap,	corn, wheat	ck. corn, wheat	2#	local	local	-	day old chk.	house	March
8	75 mixed	100	4	75.00	corn	corn	corn, bran mash	2#	local	local, egg circle	100.00	buy settings	house	April
9	45 mixed	150	7	50.00	corn, oats, bkwh.	corn	chick feed	1 1/2#	local	local	140.00	PB cocks	house	Feb.-Mar.
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	35 R.I.R.	100	3	37.00	corn, bran, wheat	corn	mash	2#	local	egg circle	100.00	PB flock	house	Fall & Mar
12	85 mixed	300	7	90.00	corn, wheat, bran,	corn, run	corn, oats, wheat,	1 1/2#	local	local	100.00	none	house	April
13	60 R.I.R.	100	4	65.00	corn, wheat, oats	corn, wheat, oats	ck. corn, wheat, feed	5#	local	egg circle	100.00	PB flock	house	March
14	75	-	4 PB Wh. Lg.	50.00	corn, wheat, oats	corn	-	-	-	local	100.00	PB cocks	house	March
15	100	-	8	100.00	bran, corn, oat	corn, oats, run	bran, milk	1 1/2#	-	local	-	PB eggs	house	April
16	50 R.I.R.	80	3	75.00	corn, bkwh. oats	run, some grain	milk, chk. feed.	1 1/2#	local	local, egg circle	315.00	PB flock	house	March
17	30 mixed	100	2	30.00	corn, wheat	corn	cracked corn	-	-	-	-	-	house	March
18	150 mixed	300	30	200.00	corn, wheat, oats	corn, wheat	ck. corn, wheat	1 1/2#	breeders	local	375.00	-	house	April
19	50 mixed	100	4	55.00	corn, wheat	milk	ck. corn, wheat, milk	2#	live	local, egg circle	100.00	To get PB	house	April
20	85 R.I.R.	100	4	100.00	corn, wheat	corn, wheat	chk. feed, bread	5#	local & ship	local & ship	75.00	Buy eggs	house	March
21	100 mixed	150	6	100.00	corn, wheat	corn	bread, meal mash	2#	broilers	local	210.00	buy PB	house	April
22	30	-	2	32.00	corn, wheat	corn, wheat	-	-	-	-	-	-	-	April
23	40 mixed	50	3	45.00	corn, egg mash	corn, pasture	chick feed, wheat,	5#	culls	local	50.00	buy settings	house	March
24	30 mixed	60	3	65.00	corn, oats	corn, oats, wheat	ck. corn, wheat	1 1/2#	local	local	86.00	buy cocks	house	March
25	50 mixed	200	1 PB Rock	65.00	corn	ck. corn, mash	-	-	-	-	100.00	-	house	April
26	75 mixed	100	4	75.00	corn	corn	corn meal, wheat	2#	local	local	100.00	none	house	March
27	100 mixed	-	5	125.00	corn, wheat, oats	corn, wheat, oats	-	-	-	local	50.00	-	house	April
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	45 barred & White Rock	125	3	45.00	meat scrap, oats	meat scrap, oats,	starter feed,	2#	broilers	local	105.00	buy PB cocks	house	Feb.
30	150 B. Rocks	25	-	187.50	corn, wheat	run	scratch feed	5#	-	-	200.00	-	-	April
31	190 mixed	150	10	200.00	corn, wheat	corn	-	-	-	local	300.00	-	house	April
32	100	100	5	110.00	corn, wheat	-	-	-	-	local	50.00	-	house	April
33	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	25 mixed	25	3	12.00	corn	let run	ck. corn	-	-	-	-	-	house	April
35	40 mixed	75	3	45.00	corn, oats, wheat	corn	ck. corn, wheat	1 1/2#	live	local	65.00	buy & exch.	house	March
36	60 mixed	100	3	65.00	corn, wheat	corn	ck. corn, wheat	1 1/2#	live	local	100.00	-	house	April
37	40 mixed	50	3	45.00	corn	scratch feed	starter mash	5#	culls	local	20.00	-	house	April
38	90 B.R. & Brahma	50	6	100.00	corn, wheat, oats	let run	meal, ck. corn	-	-	local	80.00	buy cocks	house	March
39	20 B. Rocks	-	2	22.00	scratch feed	scratch feed	-	-	-	local	12.00	-	house	April
40	125 Buff Orpington	200	7	130.00	corn, wheat, egg	corn, wheat	scratch feed	2#	local	local & ship	400.00	buy cocks	house	Feb.
41	200 R.I.R.	150	5	205.00	bran, corn, oats	bran, oats	chick feed	1 1/2#	live	eggs circle	350.00	PB flock	house	Feb.
42	80	200	4	85.00	corn, wheat	corn, wheat, scraps	ck. corn, wheat	1 1/2#	friers	local	255.00	exch. cocks	house	March
43	75 mixed	75	4	80.00	corn, wheat	corn, wheat,	meal	1 1/2#	dealers	local	100.00	-	house	March
44	40 B. Rocks	100	1	40.00	corn, egg mash	corn, wheat	ck. corn, wheat	5#	culls	local	85.00	PB cocks	house	April
45	40 W. Rocks	50	4	60.00	corn, wheat	corn, wheat	mash, meal, wheat	-	-	local	50.00	PB flock	house	April
46	50 B. Rocks	100	3	50.00	corn, wheat, bran	corn, wheat	ck. corn, wheat	1 1/2#-2#	broilers	local	100.00	buy cocks	house	April
47	40 R I R	75	3	43.00	corn, wheat, oats	corn, wheat	ck. corn, oats	5#	culls, ship	local	100.00	buy cocks	house	April
48	100 mixed	200	5	100.00	corn, wheat	corn, wheat	chick starter,	5#	culls, local	local	250.00	-	house	March
49	125 R.I.R.	150	5	130.00	corn, wheat, egg	corn	growing mash	5#	culls	local	100.00	buy cocks	house	March

93.8% or 46 of the farms have chickens, 3353. Hens and roosters, 3584. Average flock for farm, 78.

19.6% of the 46 farms have Rhode Island Reds. 4 have purebred flocks. 2 farms have purebred White Rocks, 4 have Barred Rocks, and 1 farm has Buff Orpingtons.

23 out of 46 farms, 50%, have mixed flocks. 6 farms, 13%, reported no breed. 7 farms, 15.2%, have no breed.

7 farms out of 46, 15.2%, feed only corn in winter; 14, or 30.4% feed corn and wheat in winter; 25, or 54.4% feed mixture of the three feeds or more. Six of these last 25 use egg mash in the mixture, and 3 use meat scrap in the mixture. The summer ration is chiefly corn, corn and wheat.

6 farms out of 46 use scratch feed for chicks, 5 use chick feed, 4 use starter mash, 7 report no feeds for chicks, and 5 feed little chicks only cracked corn.

Rest of farms feed 3 or more feeds including the following: Cracked corn, wheat, bran mash, meal, breads, skim milk.

23 farms, 50%, sell as fryers or broilers, 1½ to 2 pounds.
10 farms, 21.7%, sell as culls and brooders, 5 to 10 pounds.
13 farms, 28.3%, report no sale of fowls.

7 farms, 15.3% sell eggs through the egg circle, while 29 farms, 63.0% sell eggs to local merchants and hucksters.

2 farms report shipping part of eggs, and selling remainder locally.
1 farmer sells to private customers.
7 farms, 15.3%, report no market of eggs.

6, 13% of farms, are breeding purebred flocks.
10, 21.7% of farms breed up flock with purebred cockerels.
3 farms buy both purebred cockerels and eggs from purebred flocks.
2 farmers buy eggs to set to breed up flock.

2 farmers exchange cockerels.

23, 50%, practice no means of improving or breeding up flock.

4 farms report February hatching, 21 report March hatching, 20 report April hatching, and 1 reports fall and March hatching.

Total income on poultry, \$5,777.25. Average per farm, \$125.80.

Farms No. 6, 11, 16, 29, 40, 41, and 48 are leaders in poultry raising.

32 farms, 65.4%, have turkeys.

6 farms, 25% of those reporting, report no breed.

31 out of the 32 have Bronze, 1 Burboun Red.

32 farms, 65.4%, have 147 hens; hens and gobblers, 183; average 58.

Total number raised last year, 573. Average per farm, 17.9.

Total value of all flocks, \$653.00.

14 of the 32 farms have purebred toms.

9 of the farms, 28.1%, feed only corn during the winter.

17 " " " 53.1% " corn and wheat during the winter.

6 " " " 18.8% " corn, wheat, and oats in winter.

9 " " " 28.1%, feed corn for summer ration.

6 " " " 18.8% just let the turkeys roam.

2 " " " feed in summer corn, wheat, and oats.

15 " " " 47%, feed corn and wheat in summer.

2 farms simply turn the small poults loose and let roam.

1 farm feeds young poults on starter mash.

The others generally feed poults cracked corn, meal, breads, eggs, wheat, and sour milk. Average weight when sold for all farms is 11.7 pounds. Only 3 farms dressed turkeys for market (dry picked).

32.2% shipped turkeys to market, mostly Pennsylvania.

67.8% sold locally.

37.5% sold at Xmas market.

59.3% reported no time for selling. one farmer sold on Thanksgiving market.

40.6% use purebred toms in keeping up flock through breeding; 25% exchange toms in breeding up flock; 34.4% use no means of improving flock; 87.5% of poults hatch in May, and 8.3% hatch in April. one farm reports June hatching. Total income was \$2091, and average income per farm, \$65.35.

farms no. 13, 18, 21, 38, 43, 48 are leaders in turkey raising.

CORN

FARM NO.	NO. ACRES	Yield per A. bus.	Total yield. bus.	Variety	Amount sold bushels	Method of planting	Rate of seeding per acre	Fertilizer kind and amount	How applied	Cultivating implements	First cultivation	Seed selected	When plowing was done	Total value of crop
1	10	40	400	Yellow Dent	None	drilled	1 gal.	200-16%	planter	D.Shov.Rd.Cult.	D.Shovel	crib	spring	\$600.00
2	65	45	2925	Boone Co. White	"	checked	1 1/2 "	150-10-2	"	Riding cult.	Harrow	buy	fall	3656.25
3	4	55	220	Yellow Dent	"	"	1 "	100-3-8-3	planting	D.Shovel	D.Shovel	field	spring	285.00
4	15	20	300	Boone Co. White	"	drilled	1 "	-	in rows	Single Cult.	Single Cult.	crib	winter	375.00
5	12	35	420	Wh. Dent, Gov. 182,	"	-	1 "	200-16%	in rows	D.Shov.Cult.	Harrow	crib	spring	535.00
6	16	35-50	610	U.S. 182	"	checked	1 "	-	-	Riding cult.	Harrow	bin	spring	1012.50
7	10	35	350	Mixed Gov. 182	"	"	1 "	200-16%	planting	3 teeth	Harrow	bin	winter	437.50
8	18	25	450	Gov. 182	150 - 10 bu. seed	"	1 "	200-16%	brdcast.	5 tooth cult.	Harrow	bin	spring	552.50
9	19	50	950	Yellow Dent	-	"	1 1/2 "	200-16%	drilled	Riding cult.	Harrow	shock	winter & spg.	1187.50
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	5 1/2	35	184	Gov. 182	25 bu.	drilled	1 "	300-3-8-3	"	"	Harrow	shock	winter	230.00
12	12	50	600	Boone Co. White	-	checked	1 "	200-16%	in hills	Double shovel	D. Shovel	crib	winter	750.00
13	8	50	400	Gov. 182	25	drilled	1 "	200-16%	drill	D.Shov.Rd.Cult.	Harrow	crib	winter	568.75
14	15	40	600	Gov. 182	10	"	2 "	-	-	D.shovel	D.shovel	crib	spring	782.50
15	15	35	525	Boone Co. mixed	-	checked	1 1/2 "	200-16%	planting	D.shovel	D.shovel	bin	spring	656.25
16	10	30	300	Hickory King & YD	-	drilled	1 1/2 "	200-16%	drill	Cultivator	Harrow	shock	spring	375.00
17	36	35	1260	Yellow Dent	-	drilled	1 1/2 "	-	-	"	Harrow	shock	winter	1575.00
18	14	40	560	-	-	drilled	1 "	200-16%	drill	"	Harrow	shock	winter	600.00
19	10	40	400	Yellow Dent, BOWht.	-	drilled	1 1/2 "	200-16%	planter	"	Harrow	crib	winter & spg.	500.00
20	24 1/2	40	960	White Dent	-	checked	1 "	-	-	"	Cult.	shock	winter & spg.	1200.00
21	22	50	1100	Yellow Dent	100	checked	1 "	-	-	D.shovel	D.shovel	crib	winter	1375.00
22	8	40	320	White plint	-	"	1 "	200-3-8-3	drill	D.shovel, 5 tooth	Harrow	shock	winter	400.00
23	9	50	450	Yellow Dent	40	drilled	1 "	100-16%	planter	Cultivator	Harrow	crib	winter	562.50
24	9	70	630	-	-	"	1 1/2 "	150-10-4	"	" & D.shovel	Cult.	crib	winter	788.50
25	40	40	1600	Boone Co. White	-	checked	1 "	-	-	3 tooth Cult.	Harrow	shock	winter	2000.00
26	20	48	964	Yellow Dent	-	drilled	1 1/2 "	100-16%	drill	Cultivator	Harrow	bin	winter	1192.50
27	8	50	400	mixed	-	checked	1 "	50-10-4	in hill	D.shovel	D.shovel	field	winter	500.00
28	30	40	1200	Boone Co. White	-	drilled	2 "	200-16%	planter	5 tooth cult.	Harrow	crib	winter	1500.00
29	16	55	880	-	-	"	1 1/2 "	200-16%	planter	3 shovel plow	Harrow	field & bin	winter	1100.00
30	20	110	2200	Gov. 182	15 seed	checked	1 1/2 "	100-10-2	drilled	cultivator	"	"	winter	2791.25
31	40	35	1400	Gov. 182	50	"	1 1/2 "	200-16%	drilled	D.shovel	D.shovel	"	winter	1750.00
32	8	50	400	mixed	-	"	2 "	100-10-4	drilled	"	"	shock	spring	500.00
33	55	62 1/2	3437	B. C. Wh. & Y. D.	-	"	2 "	200-16%	drilled	"	"	bin	winter	4296.25
34	-	-	-	-	-	-	-	-	-	-	-	-	fall	-
35	8	40	320	Yellow Dent	-	checked	1 "	100-16%	drilled	"	"	"	winter	390.00
36	30	40	800	mixed	-	"	1 "	200-16%	drilled	"	"	"	"	1000.00
37	4	75	300	-	-	drilled	1 1/2 "	200-16%	planter	cultivator	D.shovel	"	"	375.00
38	35	40	1400	B. Co. White	50	"	1 "	200-16%	drilled	"	cultivator	"	spring	1750.00
39	10	50	500	Gov. 182	-	"	1 "	200-18 1/2	"	"	Harrow	bin	winter	625.00
40	27	60	1620	Boone Co. White	60	"	1 "	-	-	"	"	shock	"	2025.00
41	20	50	1000	Yellow Dent	-	"	1 "	100-16%	planter	"	"	buy	"	1250.00
42	14	55	770	Boone Co. White	150	"	1 "	75-15%	planter	"	"	crib	spring	962.50
43	28	50	1400	Yellow Dent	100	"	1 "	-	-	"	D.shovel	"	"	1875.00
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	5	75	375	White Dent	150-	"	1 1/2 "	200-3-8-3	"	"	Harrow	field	spring	468.00
46	14	30	420	Boone Co. White	-	checked	1 1/2 "	200-16%	drill	5 tooth cult.	5 tooth cult.	shock & bin	winter	525.00
47	7	50	350	" " "	-	"	1 "	-	-	" " "	Harrow	crib	"	437.50
48	15	45	675	Yellow Dent	-	"	1 1/2 "	-	-	D.Shovel & "	"	crib	"	843.75
49	50	50	2500	WY Yellow Dent	1500	drilled	1 1/2 "	300-16%	drill	cultivator	Harrow	field	fall & "	3125.00 *
50	16	40	640	Boone Co. Wh. & Y. D.	-	checked	1 1/2 "	-	-	"	"	crib	winter	800.00

* this farm alone treated for root rot germination.

94% of the farmers grew corn. Total acreage, 879½. Total yield, 40,655 bushels. Average per acre, 46.2 bushels. Total value, \$48,045.75.

23% farmers plant Yellow Dent, 4% plant White Dent, 22% plant Boone County White, 8% plant both Boone County White and Yellow Dent, 23% farmers plant Gov. 182, and 12% gave no variety or called it mixed. 1 farmer planted V.P.I. Yellow Dent, 1 planted White Flint, and 1 planted Hickory King and Yellow Dent.

49% of the farmers check corn, 51% drill corn.

55% plant at the rate of 1 gallon per acre, 34% at the rate of 1½ gallon per acre, 9% at the rate of 2 gallons per acre, and 1 farmer planted 1½ gallon per acre.

55% of the farmers use acid phosphate on corn. 1 farmer used 16%, 200# per acre; 1 used 16%, 300# per acre. 1 farmer used 16% 75# per acre, 1 used 16%, 100# per acre. 22 used 16%, 200 per acre.

1 farmer used 10-2, 100#, with 16% phosphate, 200# per acre. 1 farmer used 10-2, 150# per acre.

6% of the farmers use 10-4 fertilizer.

1 farmer used 10-4 at the rate of 150# per acre, 1 at the rate of 100# per acre, and 1 at the rate of 50# per acre.

9% of the farmers apply 3-8-3 to corn.

2 applied at the rate of 200# per acre, 1 at the rate of 300# per acre, and 1 at the rate of 100# per acre.

30% of the farmers apply no fertilizer at all to corn.

51% of the farmers put fertilizer in row with planter, or drop.

45% broadcast fertilizer in row with drill.

4%, or 2 farmers, apply part with drill and part in planter.

Double shovel, 5 tooth cultivator, and riding cultivator are the chief cultivating implements.

62% of the farmers harrow corn for the first cultivation, while 32% use double shovel or colter plow for first cultivation. 6% use 5 tooth cultivators for the first cultivation.

57% farmers select seed from crib or bin, 22% from shock, 6% buy seed corn, 8% do some field selection and part bin selection, 7% do field selection for seed.

55% of the farmers plow corn land in fall and winter, 23% in spring, and 22% plow all they can in the winter and finish in spring.

Only one farmer tests corn for germination and root rot.

Farms No. 24, 30, 33, 31, 45, and 49 are outstanding in corn raising.

Farm No.	No. A.	Yield per A.	Variety	Amount sold	Fertilizer per A.	How Applied	Rate of planting	Cultivating implements	First cultivation	Select seed	Plowing done	Total yield	Total value
1	4	20	Cooke's Prolific	none	16% - 200#	planter	1 gal.	Riding D. shovel	Double shovel	crib	spring	100	800.00
2	40	4	Boone's white	none	10-2 - 150#	planter	1 1/2 "	Riding Cultvtr.	Harrow	buy	fall	160	1280.00
3	none												
4	none												
5	none												
6	3	18	Cooke's Prolific	none	none	-	1 1/2 gal.	Riding cultvtr.	Harrow	buy	spring	54	144.00
7	none												
8	6	8	Va. Ensilage	-	16% - 200#	drilled	1 gal	5-tooth cult.	harrow	bin	spring	48	84.00
9	none												
10	none												
11	none												
12	none												
13	4	14	Cooke's Prolific	-	16% - 200#	drilled	1 gal.	Double shovel cultivator	harrow	crib	winter	501	400.00
14	none												
15	none												
16	none												
17	35	10	Cooke's Prolific	-	16% - 200#	planter	1 1/2 gal.	Cultivator	harrow	buy	winter	350	2800.00
18	6	9	Eureka	-	16% - 200#	drilled	1 gal.	Cultivator	harrow	buy	spring	54	432.00
19	none												
20	8	10	White Dent	-	-	-	1 gal.	Cultivator	cultivator	shock	winter	80	640.00
21	none										spring		
22	none												
23	none												
24	none												
25	none												
26	8	9	Va. Ensilage	-	16% - 100#	drilled	1 1/2 gal.	Cultivator	harrow	bin	winter	72	576.00
27	none												
28	10	8	Boone Co. white	-	16% - 200#	planter	2 gal.	5-tooth cult.	harrow	crib	winter	80	640.00
29	7	21 2/3	Virginia Ensilage	-	16% - 200#	planter	1 1/2 gal.	5-tooth	harrow	crib & field	winter	150	1200.00
30	none				10-2 - 100#	drill		8-shovel cult.					
31	none												
32	none												
33	45	10 1/2	Boone Co. white & Yellow Dent	-	-	-	2 gal.	Double shovel	double shovel	crib	fall	470	3760.00
34	none												
35	none												
36	none												
37	3 1/2	14	Virginia Ensilage	none	-	-	1 1/2 gal.	Cultivator	double shovel	buy	spring	49	392.00
38	8	10	Wood's Ensilage	none	-	-	1 1/2 gal.	Cultivator	cultivator	crib	winter	80	640.00
39	none										spring		
40	9	8 1/2	Boone Co. white	none	16% - 100#	planter	1 gal.	Cultivator	harrow	shock	winter	76 1/2	612.00
41	8	9 1/8	Yellow Dent	none	16% - 100#	planter	1 gal.	Cultivator	harrow	buy	winter & spring	74	592.00
42	none												
43	5	10	Va. Ensilage	none	16% - 100 #	planter	1 1/2 gal.	Double shovel cultivator	double shovel cultivator	buy or crib	winter & spring	50	400.00
44	none												
45	none												
46	2	15	Pumpherys	none	-	-	1 1/2 gal.	5-tooth cult.	5-tooth cult.	bought	winter	30	240.00
47	3	10	Boone Co. white	-	-	-	1 1/2 gal.	5-tooth cult.	harrow	buy	winter	30	240.00
48	4	9	Yellow Dent	-	-	-	1 1/2 gal.	double shovel & cultivator	harrow	crib	winter	36	288.00
49	40	12	V.P.I. Prolific	all sold	16% - 300#	drill	1 1/2 gal.	cultivator	harrow (twice)	field	winter	480	3840.00
							1 1/2 gal.	Cultivator	cultivator	crib	winter	60	480.00
50	2 1/2	24	Pumpherys	-	-	-							

44% farmers grew silage corn.
 Total average, 268 acres.
 Total yield, 2633½ tons.
 Total value, \$20,121.00.

Average tons per acre, 9.45 tons.

5 farmers grew Boone County White (a grain variety).

3 " " dent corn (2 yellow dent, 1 white dent).

4 " " Cocks's Prolific.

5 " " Virginia Ensilage.

1 " " V.P.I. Prolific.

1 " " Eureka.

1 " " Wood's Ensilage.

2 " " Pumphrey's Prolific.

41% of the farmers growing silage used no fertilizer.

55% of the farmers growing silage applied 16% phosphate.

7 applied 200# per acre.

4 " 100# " "

1 " 300# " "

1 farmer applied 10-2 fertilizer 150# and one applied 100# of this along with his 16% phosphate.

100% drill corn.

55% plant 1½ gallons corn to acre.

31.7% plant 1 gallon corn to acre.

13.3% plant 2 " " " "

72% farmers use cultivators in cultivating corn.

1% " " double shovel plow only.

1% " " 3 shovel plow only.

4% " " both double shovel and cultivators.

50% farmers harrow corn as first cultivation.

1 farmer harrows twice.

45% uses plows and cultivators for first cultivation.

45% select seed from crib.

41% buy seed corn to plant.

2 farmers select seed from shock, and 1 from field.

23% farmers do all plowing in spring, 59% in fall and winter, and

18% do all plowing in winter and finish in spring.

Only one farmer tests seed corn for germination and root rot.
 Farms No. 6, 29, 46, 49, 50, rank high in growing silage.

Potatoes

Farm No.	No. Acres	Variety	Total Yield	Yield per A.	Total value	Fertilizer	How applied	Rate seeding	How cultivated	How select seed	Plowing done	Disease treatment & insects	Storage
1	1/4 A	Green Mountain	15 Bu	60	\$15	200# - 16%	In row	-	Double shovel	bin	spring	hand bugging	cellar
2	1/4 A	" "	105	210	\$157	-	-	12 bu.	3 shovel plow	buy	fall	scab treatment	cellar; cover straw
3	-12 rows in garden	" "	17	-	17	-	-	12 bu.	double shovel	bin	spring	blight "	ground pit
4	1/4 A	Irish Cobbler	50	100	50	none	-	14 bu.	single cultvtr.	best looking	winter	-	cellar
5	1/4 A	Early Sunrise	40	80	40	400# - 16%	in hills	14 bu.	double shovel	bin	spring	-	cellar
6	1/4 A	White Elephant	90	180	108	1600# - 16%	broadcast	14 bu.	5-tooth cultvtr.	bin	spring	scab - formaldehyde	cellar
7	1/8	Early Sunrise	10	75	10	200# - 16%	in row	15 bu.	3 shovel cultvtr.	bin	fall	-	ground pit
8	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1	Grn.Mt. & Early Rose	50	50	50	200# - 10-4	in row	14 bu.	Riding cultivator	bin	spring	-	cellar
10	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1/4	Green Mountain	18	72	18	300# - 3-9-3	drilled	14	cultivator	bin	winter	-	ground pit
12	1/4	White Elephant	42	-	42	200# - 16%	in rows	4	cultivator	bin	spring	-	pit
13	1/4	Green Mountain	30	120	30	200# - 10-4	-	14	double shovel	bin	winter	-	cellar & pit
14	1/8	Early Rose	15	120	15	-	-	15	-	best ones	spring	-	cellar
15	1	" " & I. Cblr.	70	70	70	-	-	15	double shovel	-	spring	-	ground
16	1/8	Early Rose	30	240	30	-	-	15	cultivator	bin	spring	-	cellar
17	1/8	Irish Cobbler	80	160	80	-	-	14	single "	bin	spring	-	cellar
18	1/8	Money Maker	20	160	20	200# - 16%	in rows	16	5 tooth "	bin	spring	-	cellar
19	1/8	Green Mountain	80	160	80	400# - 16%	in rows	14	double shovel	bin	spring	-	cellar
20	1/4	Green Mountain	38	150	38	-	-	10	double shovel	bin	W & spring	scab treatment	cellar
21	1/4	Green Mountain	50	200	50	-	-	14	double shovel	bin	spring	-	cellar
22	1/4	Early Rose	38	150	38	200# - 3-8-3	in rows	-	double shovel	bin	spring	-	pit & cellar
23	1/4	E.R. & Irish Cblr.	20	80	20	-	-	8	double shovel	buy	spring	-	cellar
24	1/4	Farmers' favorite	40	160	40	-	-	10	double shovel	bin	spring	-	cellar
25	-	-	-	-	-	-	-	-	-	-	-	-	pit (cellar)
26	1/4	Irish Cobbler	30	120	30	-	-	12	double shovel	bin	spring	-	cellar
27	1/4	Green Mountain	50	100	50	-	-	-	double shovel	bin	winter	-	cellar & pit
28	1/4	Irish Cobbler	25	100	25	200# - 16%	-	15	5 tooth cultvtr.	bin	winter	-	cellar
29	1/4	E.R. & I.C.	15	60	15	C.S.M.	in rows	14	5 tooth cultvtr.	bin	winter	-	cellar
30	1/4	Early Ohio	25	100	25	200# - 16%	drilled	16	double shovel	-	winter	-	cellar
31	1/4	Sir Walter Raleigh	75	150	75	100# - 10-4	in row	15	double shovel	bin	spring	-	pit (ground)
32	1/4	Irish Cobbler	50	100	50	100# - 16%	drilled	15	double shovel	bin	winter	-	cellar
33	-	-	-	-	-	-	-	-	-	-	-	-	-
34	-	-	-	-	-	-	-	-	-	-	-	-	-
35	1/4	White Elephant	35	140	44	200# - 16%	in row	10	double shovel	-	spring	-	pit & cellar
36	-	-	-	-	-	-	-	-	-	-	-	-	-
37	1/4	White Elephant	40	160	40	-	-	16	cultivator	bin	spring	-	cellar
38	1 1/2	Irish Cobbler	150	100	150	150# 16%	in rows	16	cultivator	bin	spring	-	cellar
39	1 1/2	V.P.I. Green Mtn.	130	120	130	800# - 4-8-4	in rows	14	single "	hill	spring	scab treatment	pit
40	1/2	R. New Yorkers	75	100	75	-	-	15	cultivator	bin	winter	-	pit
41	-	-	-	-	-	-	-	-	-	-	-	-	-
42	1/5	White Elephant	15	75	15	-	-	10	single "	bin	spring	-	pit
43	1/2	-	90	120	90	1	-	12	double shovel	bin	winter	-	pit
44	1/4	White Elephant	75	150	105	-	-	14	cultivator	bin	spring	-	cellar
45	1/4	Farmers favorite	105	420	127.50	-	-	-	single cultvtr.	bin	spring	-	cellar
46	-	-	-	-	-	-	-	-	-	-	-	-	-
47	1/4	Early Rose	30	120	30	-	-	14	double shovel	bin	winter	-	cellar
48	1/4	Green Mountain	50	100	50	100# - 16%	in rows	10	double shovel	bin	winter	-	cellar & pit
49	6 A	Irish Cobbler	750	125	750	800# - 4-8-4	in rows & drill	15	cultivator	bin	fall	scab treatment	farm - covered with straw
50	1/2	Green Mountain	70	140	140	200# - 16%	in row	14	Single cultvtr.	bin	winter	-	pit

86% of the farms grow potatoes. (mostly in small patches).
 Total acreage, 232.
 Total yield, 2973 bushels.
 Average per acre, 126.8 bushels.
 Total value, \$3034.25.

28% of the farmers plant Green Mountain,
 16% of the farmers plant Irish Cobbler
 12% of the farmers plant Early Rose
 1 farmer plants both Early Rose and Gree Mountain.
 3 Farmers plant Irish Cobbler and Early Rose.
 2 farmers plant Early Sunrise.
 14% of the farmers plant White Elephant.
 1 farmer plants Money Maker.
 2 farmers plant Farmers' Favorite.
 1 farmer plants Sir Walter Raleigh.
 1 farmer plants Rural New Yorker.
 1 farmer plants V.P.I. Green Mountain.
 1 farmer plants Early Ohio.

48% of the farmers used no fertilizer on potatoes.
 28% of the farmers used acid phosphate, 16%.
 8 farmers of 28% used 200# per acre, 6 of the 8 putting it in row,
 1 in row and mixed with soil, 1 drilled as fertilizer.
 2 farmers of the 28% applied 400#, 1 dropped in hills, 1 in row.
 1 farmer applied 1600# per acre, drilled.
 2 farmers of the 28% applied 100# per acre, one drilled, 1 mixed in
 row.
 1 farmer of the 28% used 150# per acre, and mixed it in the row.

7% of the farmers used 10-4 fertilizer.
 2 of the 7% applied 200# per acre in row.
 1 of the 7% applied 100# per acre in row.

2 farmers applied 3-8-3 fertilizer, one 300# part broadcast and
 part in row, other 200# per acre all mixed in row.
 2 farmers applied 4-8-4, 800# to acre, part broadcast, part in row.

The double shovel plow is the leading implement used to cultivate
 potatoes in this section. The 5-tooth cultivator is used nearly
 as much. A large percent of farmers use double shovel for the
 first cultivation, and cultivator for subsequent cultivations.

60% of farmers practice bin selection of seed.
 1 farmer buys seed.
 1 farmer hill selects.
 1 farmer rogues field and takes out mixed hills and other varieties
 and then bin selects.

44% farmers work potato land in fall and winter, and 56% in spring.

86% farmers make no treatment for disease and insects.

1 farmer does hand bugging, 2 farmers gave scab treatment and spray-
 ed for blight, and 4 gave scab treatment.

56% farmers store in cellar, 26% in ground pit, 14% use both methods.
 1 farmer stored in barrels in basement of barn, covered with straw.
 farms 8-18-19-39-45-49 are outstanding in potato growing.

Wheat

Farm No.	Acres	Variety	Yield per acre bushels	Total yield bus.	Amount sold bus.	Total value	Fertilizer, kind and amt. per acre	Rate of seeding	Seed selection	When plowing was done	Disease and treatment
1	15	Stoner	14	210	7	\$336.00	150# - 16%	5 pks.	Own seed	-	-
2	45	Fulcaster	20	900	500	1350.00	150# - 16%	6 pks.	buy	-	-
3	-	-	-	-	-	-	-	-	-	-	-
4	9	Stoner	10	90	-	135.00	200# - 16%	5 pks.	bought	corn land	-
5	6	Fulcaster	18½	111	-	166.50	200# - 16%	4 pks.	Own crop	-	-
6	10	Fulcaster	16	160	50	240.00	300# - 16%	1½ bu.	change each 4 yr.	-	-
7	7	Fulcaster	13	91	12	136.50	200# - 16%	6 pks.	Own seed	corn land	-
8	11½	Fulcaster	11	126½	100	263.50	200# - 16%	1½ bu.	buy	fallow	-
9	12	Fulcaster	16	216	150	324.00	200# - 16%	1½ bu.	Own seed	corn land	-
10	-	-	-	-	-	-	-	-	-	-	-
11	4½	Fulcaster	14	63	12	82.00	250# - 16%	1½ bu.	Own seed	corn land	smut
12	10	Fulcaster	22	220	150	330.00	200# - 16%	1½ bu.	Own seed	-	-
13	7	Fulcaster	10	70	50	105.00	200# - 16%	1½ bu.	buy	fallow	-
14	6	Fulcaster	25	150	-	225.00	200# - 16%	1½ bu.	best wheat	-	-
15	15	Stoner	16½	247½	125	378.25	-	2 bu.	home seed	fall & summer	-
16	-	-	-	-	-	-	-	-	-	-	-
17	24	Fulcaster	9	216	170	324.00	200# - 16%	1½ bu.	buy	corn land	-
18	14	Fulcaster	15	210	160	315.00	200# - 16%	1½ bu.	Own seed	corn land	-
19	10	V.P.I. No. 131	10	100	-	150.00	200# - 16%	5 pks.	buy	fallow	-
20	24	Fulcaster	20	480	200	688.00	200# - 16%	5 pks.	buy	fallow	-
21	-	-	-	-	-	-	-	-	-	-	-
22	8	Fulcaster	20	160	-	30.00	300# - 16%	5 pks.	Own seed	fallow	-
23	8	Fulcaster	12	96	-	144.00	200# - 16%	1½ bus.	buy	corn land	-
24	9	Fulcaster	27½	247	220.	494.00	200# - 16%	1½ bu.	Own seed	fallow	-
25	20	Stoner	6	120	-	180.00	200# - 16%	1½ bu.	Own seed	corn land	-
26	41	Fulcaster	13½	553	200	1067.25	200# - 16%	1½ bu.	Rogue field	fallow	-
27	8	Fulcaster	12	96	20	144.00	200# - 10 -4	1½ bu.	-	corn land	-
28	25	Fulcaster	18	450	110	675.00	200# - 16%	1½ bu.	Own seed	corn land	-
29	-	-	-	-	-	-	-	-	-	-	-
30	10	V.P.I. No. 131	15	150	15 (seed)	240.00	16%	1½ bu.	Rogue field	corn land	-
31	50	Fulcaster	10	500	50 (seed)	750.00	200# - 16%	1½ bu.	Own seed	corn land	-
32	7	Fulcaster	15	105	-	157.50	200# - 16%	1½ bu.	Own seed	corn land	-
33	60	Fulcaster	15	900	850	1350.00	200# - 16%	1½ bu.	Own seed	corn land	-
34	3	Fulcaster	23½	71	-	106.50	600# - 16%	1½ bu.	Own seed	corn land	-
35	5	Fulcaster	13	65	-	97.50	200# - 16%	1½ bu.	Own seed	corn land	-
36	75	Fulcaster	15	1025	150	2250.00	16% - 300#	1½ bu.	change every 3 yr.	fallow	-
37	-	-	-	-	-	-	-	-	-	-	-
38	30	Fulcaster	18	540	100	898.50	200# - 16%	5 pks.	Own seed	fallow	-
39	-	-	-	-	-	-	-	-	-	-	-
40	30	V.P.I. 131 - Stoner	15½	457	300	928.00	200# - 16%	1½ bu.	buy & own seed	fallow	smut
41	38	Fulcaster	16	608	300	820.00	200# - 16%	1½ bu.	Own seed	fallow	-
42	24	Fulcaster	18	432	300	583	200# - 16%	1½ bu.	Own seed	fallow	-
43	40	Fulcaster	19	760	400	1520.00	200# - 16%	1½ bu.	Own seed	fallow	-
44	-	-	-	-	-	-	-	-	-	-	-
45	4	Fulcaster	20½	83	50	124.50	200# - 3-6-3	1½ bu.	Own seed	fallow	-
46	10	Stoner	16	160	-	240.00	200# - 16%	1½ bu.	bought	corn land	-
47	-	-	-	-	-	-	-	-	-	-	-
48	22	Fulcaster	17	374	150	592	200# - 16%	1½ bu.	exchange	fallow	-
49	50	V.P.I. 131	15	750	600	1012.50	300# - 16%	1½ bu.	Rogue field	corn land	smut
50	12	Fulcaster	12	144	-	216	200# - 16%	1½ bu.	Own seed	corn land	-

82% of the farmers raised wheat.

Total acreage, 819 acres.

Total yield in bushels, 14,707.5

Average yield per acre, 17.9 bushels.

Total value of crop, \$20,027.00.

80% of farmers growing wheat sow Fulcaster, 14% sow Stoner, and 6% V.P.I. 131.

97.5% of the farmers growing wheat sow 16% phosphate to wheat. The common amount is 200 pounds per acre. 2.5% of the farmers used 200 pounds 3-8-3 fertilizer per acre.

75.6% of the farmers seed $1\frac{1}{2}$ bushels wheat per acre, 14.6% 5 pecks per acre. One farmer seeded 4 pecks per acre, one 2 bushels per acre, and 2 farmers seeded $1\frac{3}{4}$ bushels per acre.

63.4% of the farmers use their own seed continuously. 28.3% of the farmers buy seed every few years, or exchange, and 7.3% of the farmers rogue field before harvest and clean wheat of filth.

42% of the farmers seed wheat to corn land only, 42% sow fallow land to wheat, and 16% did not report land seeded to wheat.

90% of the farmers never treat for smut, while 10% treat for smut when necessary.

Farms No. 12, 14, 20, 22, 24, 34, 38, 42, 43, 45, and 49 are outstanding in yield or practices in growing wheat.

Oats

14 or 28% farms raised oats

Only 6 of the 14 reported variety.

3 reported white oats (no special name).

2 reported Black Mogul.

1 planted V.P.I. No.1.

Total acres, 89; total yield, 3109 bushels. (4 acres not threshed)

Average yield per acre, 36.5 bushels; total value of crop, \$2,274.30.

General rate of seeding, $1\frac{1}{2}$ bushels. (4 farmers seeded 2 bushels).

100% farmers sow 16% phosphate, and all but 2 sows 200#, 1 sows 300#, 1 sows 150# per acre.

42% of farmers growing oats buy seed.

36% of farmers growing oats use own seed.

22% did not state how they obtained seed oats.

1 farmer practices roguing the field before cutting, for all foreign growth and filth.

6 farmers reported when land was plowed. 3 plowed in spring,

1 in winter, 2 seeded corn land.

92.4% have never treated for oat smut.

7.6% of farmers treat whenever oats need treatment.

Farms No. 49 and 24 are best in oat production.

Rye

7 farmers grew rye. 2 seeded the Abruzzi variety, and 1 farmer used it for pasture.

Total acreage of 83 $\frac{1}{2}$; 32 acres pastured late, yielding only 3.5 bushels per acre. 11 acres were pastured entirely, $1\frac{1}{2}$ acres used as fall cover crop. Total yield, 737 bushels; average yield per acre, 10.4 bushels. Total value, \$921.25.

3 farmers seeded $1\frac{1}{2}$ bushels per acre, 2 seeded $1\frac{1}{2}$ bushels per acre, and 1 farmer seeded 1 bushel per acre, while one seeded 2 bushels per acre.

5 farmers used 200# 16% acid phosphate per acre, one used 300# per acre, and 1 used 100# per acre.

Farm No. 38 is best on rye production.

Buckwheat

4 farmers grew buckwheat. There were 23 acres in the crop, producing a total yield of 436 bushels. Average yield per acre, 19 bushels. Total value of crop, \$547.50.

All farmers used 16% acid phosphate, 200# per acre, but one, and he used 100# per acre.

2 seeded 1 bushel per acre, 1 seeded 5 pecks per acre, and 1 did not report rate of seeding.

75
Hay - timothy & clover

Parm No.	Acres in crop	Mixture used	Yield per A in T	Total amt. yield sold	Quality	Fertilizer per A.	When ap - plied	Rate of seeding	How stored	Total value
1	15	timothy & clover	1 1/2	22 1/2	good	-	-	-	-	-
2	50	clover, timothy, herd's grass	1 1/2	75	25	good	200# - 16%	seeding wheat	12# mixture barn & stack	\$405.00
3	12	timothy & clover	1 1/2	18	-	fair	200# - 16%	seeding wheat	1 1/2 gal. " stack	1350.00
4	18	timothy & clover	1 1/2	27	-	good	200# - 16%	drill at seeding	12# mixture barn & stack	324.00
5	9	timothy & clover	1 1/2	13 1/2	-	good	200# - 16%	seeding wheat	1 gal. each barn	486.00
6	10	Orchard, bluegrass, alsike, sapling, timothy, sweet clover	2	20	-	fine	300# - 16%	seeding wheat	1 1/2 gal. stack	243.00
								drill at seeding	1 Bu. orchard, blue grass, 7 qts. mixed, 5 qts. timothy stack	360.00
7	20	timothy & clover	1	20	-	good	200# - 16%	seeding wheat	12# timothy; 15 Clo. barn & stack	360.00
8	10	timothy & clover	2	20	2	good	-	-	1 gallon each stack	360.00
9	80	timothy & clover	1	60	-	fair	-	-	1 gallon each stack	1080.00
10	11	timothy & clover	1 1/2	5 1/2	baled	fair	-	-	1 gal. clo; 1 1/2 T. stack	99.00
11	-									
12	10	timothy & clover	2	20	2	good	200# - 16%	seeding wheat	1 gallon each stack & barn	\$360.00
13	9	timothy & clover	2 1/2	22 1/2	-	good	-	-	1 gallon each stack & barn	405.00
14	-									
15	15	mixture	2	30	-	good	200# - 16%	seeding wheat	25# mixture stack & barn	540.00
16	5	timothy & clover	1 1/2	7 1/2	-	good	-	-	1 gal. T; 1/2 gal. C. stack	130.00
17	90	timothy & clover	1 1/2	135	-	good	200# - 16%	seeding wheat	1 gal. each stack	2430.00
18	20	timothy & clover	1 1/2	30	-	good	200# - 16%	seeding wheat	16# stack & barn	540.00
19	10	timothy & clover	1 1/2	15	-	good	200# - 16%	seeding wheat	1 1/2 gallon each stack & barn	270.00
20	65	timothy & clover	1 1/2	81 1/2	5 T.	good	-	-	- barn & stack	1462.50
21	24	timothy & clover	2	49	18	good	200# - 10-4	seeding grass	1 1/2 gal. each barn & stack	864.00
22	8	timothy & clover	1	8	-	fair	-	-	1 gal. each barn	144.00
23	20	timothy & clover	1	20	-	good	200# - 16%	seeding wheat	1 gallon each stack	360.00
24	30	timothy & clover	2	60	-	good	200# - 16%	seeding wheat	1 gallon each stack	1080.00
25	100	sapling & timothy	2	200	0	good	-	-	1 gallon each stack	3600.00
26	26	timothy & clover	1 1/2	39	-	good	200# - 16%	seeding wheat	1 gallon each stack & barn	702.00
27	10	timothy & clover	1	10	-	medium	-	-	1 gallon each stack	180.00
28	30	mixture	2	60	-	good	200# - 16%	seeding wheat	14# stack	1080.00
29	3	blue grass, orchard, timothy,	2	6	-	good	-	-	2 gallons of mixt. barn	108.00
30	8	timothy, clover, red top	1 1/2	12	6	medium	200# - 16%	seeding wheat	9# barn & stack	216.00
31	30	timothy, clover	1 1/2	45	-	medium	200# - 16%	seeding wheat	12# pounds stack	810.00
32	7	timothy, clover	1 1/2	7	-	medium	200# - 16%	seeding wheat	1 gallon each stack	126.00
33	14	orchard grass, timothy, clover	1 1/2	21	-	medium	-	-	12# mixture barn & stack	378.00
34	25	mixed grass	3	75	-	fair	-	-	- barn & stack	1350.00
35	12	timothy, clover	1	12	-	good	manure	winter	5# clover; 1 1/2 gal. T barn & stack	1216.00
36	40	timothy & clover	1 1/2	60	-	good	-	-	1 1/2 gal. barn, & stack	1080.00
37	-									
38	90-	timothy & clover	1 1/2	135	18	good	200# - 16%	seeding wheat	1 gallon each barn & stack	2497.50
39	-									
40	17	timothy & clover	1 1/2	25 1/2	-	good	-	-	1 gallon each barn & stack	459.00
41	30	timothy & clover	1 1/2	45	-	good	200# - 16%	grass seeding	1 gallon each barn & stack	810.00
42	5	timothy & clover	1 1/2	7 1/2	-	good	200# - 16%	seeding wheat	1 1/2 gallon each stack	135.00
43	8	timothy & clover	2	16	-	fine	225# - 16%	seeding grass	2 gal. T.; 1 gal. C; barn	288.00
44	25	timothy & clover	1 1/2	37 1/2	all	good	-	-	1 gallon each barn, stack	675.00
45	14	timothy & clover	1 1/2	24 1/2	12	good	200# - 3-3-3	seeding grass	1 gallon each barn, stack	441.00
46	14	timothy & clover	1 1/2	21	-	good	-	-	1 " clover; 2 gal. T barn	378.00
47	8	timothy & clover	1 1/2	12	-	good	-	-	1 gallon each barn, stack	216.00
48	16	timothy & clover	2	32	-	good	-	-	1 gallon each barn, stack	576.00
49	99	timothy & clover	2	198	100 L 80 A good 25 B 19 A fair	good	300# - 16%	at seeding	8# clover barn, stack	4950.00
50	20	timothy & clover	1 1/2	30	-	good	-	-	10# timothy 1 gallon each barn, stack	540.00

92% farms grow mixed hay

Total acreage, 1172

Total yield, 1889 $\frac{1}{2}$ tons.

Average per acre, 1.6 tons.

Total value, \$35,102.00.

Amount sold, only 356 tons. (65 $\frac{1}{2}$ tons of this was baled).

4, or 48% of the farmers, sowed 16% acid phosphate alone to clover.

21 farmers of the 24 sowed 200# at wheat seeding.

2 sowed 300# per acre, and one farmer 225# per acre.

1 farmer sowed 200# 3-8-3 per acre.

1 farmer sowed 200# 10-4 per acre.

1 farmer top dressed in winter with manure.

46% of the farmers reported no fertilizer to clover.

5 farmers, or 10%, made special preparation of seed bed.

The rate of seeding is from 9 pounds to 2 gallons per acre.

The most common practice is to seed 1 gallon of clover and 1 gallon of timothy per acre.

30% of the farmers stacked all hay.

50% of the farmers barked all they could, and stacked rest.

12% of the farmers put all the hay in the barn.

Farms No. 6, 21, 24, 49 are outstanding in growing mixed hay. Farm No. 6 is especially outstanding from the mixture used and rate of seeding. Two tons of hay were cut per acre, and from August 4th on he grazed 40 hogs and 4 horses.

28% of the farmers raised clover hay.

Total acreage, 147; total yield, 247½ tons.

Average yield per acre, 1.7 tons; total value of crop, \$4575.00.

8 of the 14 farmers used sapling, 4 used common red, 1 used alsike and common red mixed, and 1 farmer did not give variety.

28 tons were sold, baled.

5 of the 14 farmers used 16% phosphate, 200#. 4 sowed at seeding of wheat, 1 drilled in spring.

1 farmer made a special preparation for clover, and sowed 200# of 10-4 fertilizer, at the time of seeding grass.

1 sowed 200# of a mixed fertilizer at grass seeding.

7 farmers reported no use of fertilizer on clover.

4 seeded at the rate of 1½ gallons per acre, 8 at the rate of 1 gallon per acre, 1 at the rate of 14 pounds, and 1 at the rate of 12 pounds per acre.

4 stacked all clover, 6 barned all clover, and 4 barned all they could, and then stacked out.

Farms No. 13, 25, 38, are leading farms in growing clover hay.

Alfalfa Hay

Farm No.	Acres in crop	Yield per A. in tons	Total yield	Amount sold	Quality	Fertilizer per acre	When applied	Rate of seeding	How stored	Total value
2	1	4	4	none	good	200# - 16%	drilled in with grass	15#	barn	88.00
4	4½	2	9	none	good	300# - 16%	at seeding of grass	20#	barn	198.00
7	2	2	4	none	good	200# - 16%	At seeding of wheat	15#	barn	88.00
9	3	2	2½	none	fair	-	-	15#	barn	49.50
27	2	1	2	none	medium	-	-	8#	stack & barn	44.00
28	6	just planted	-	-	-	200# - 16%	At seeding of grass	12#	-	-
30	7	3	21	-	medium	200# - 16%	Drilled - seeding of grass	20#	barn & stack	462.00
40	9	2½	22½	-	good	300# - 3-3-3	At seeding of grass	15#	barn & stack	495.00
41	1	2	2	-	good	300# - 16%	At seeding of grass	15#	barn	44.00
46	1	3	3	-	good	-	-	15#	barn	66.00

Soybean Hay

Farm No.	Acres in crop.	Variety	Yield per A. in tons	Total yield tons	Amount sold	Quality	Fertilizer per acre.	When applied	Rate of seeding	How stored	Total value
8	2	Virginia Mammoth Yellow	2	4	-	good	200# - 16%	at planting	1 bu.	barn	80.00
16	3	Mammoth Yellow	1½	3½	-	good	200# - 3-8-3	at planting	5 pecks	barn	75.00
19	2	Virginia	1½	3	-	good	150# - 16%	at planting	1 bu.	barn	66.00
22	3	Virginia	1½	4½	-	good	200# - 16%	at planting	3 pecks	barn	99.00
27	4	Mammoth Yellow Wilson	2	8	-	good	200# - 16%	at planting	1 bu.	barn	161.00
39	4	Mammoth yellow Virginia	3	12	-	good	200# - 16%	at planting	1 bu.	barn	240.00
49	10	Virginia	1	10	all	fair	300# - 16%	at planting	2 bu.	barn	200.00
50	1½	Virginia German Millet	2	3	-	good	100# - 16%	at planting	1 bu. 1 pk. millet	barn	60.00

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Alfalfa

20% of the farms have some alfalfa

Total acreage, 36½.

Total tons raised, 69½.

Average per farm, 1.9 tons.

Total value, \$1554.50.

6 farmers out of 10 raising alfalfa, sowed 16% phosphate at seeding of alfalfa, 200 to 300#.

1 farmer out of the 10 used 300# 3-8-3 fertilizer.

3 farmers out of the 10 used no fertilizer.

Common rate of seeding is 15 pounds per acre.

All stored in barn, 3 farmers having to stack part of crop.

Farms No. 1, 7, 30, and 40 are outstanding in yields.

Soybeans

16% of the farms grew soybeans for hay.

Total acreage, 29½.

Total tons weighed, 48½. Value of crop, \$980.00.

Average per farm, 1.6 tons.

50% used Mammoth yellow (1 Wilson & Mammoth Yellow).

50% seeded Virginia.

87.5% seeded only acid phosphate at the rate of 200#.

12.4% used 3-8-3, 200# per acre, at planting.

Average rate of planting, 1 bushel; all stored in barn.

Farms No. 8, 37, and 39 are best on growing soybeans.

**

10% of farmers cut pure timothy. Total acres, 5.3. Total yield, 71.3 tons. Average yield per acre, 1.4 tons. Total value of crop, \$1426.00. Average rate of seeding, 1½ gallons. All used 200# 16% phosphate at wheat seeding.

Farm No. 42 is outstanding in growing timothy, also farms 32 and 46 are good.

**

2 farms grew orchard grass. Total acreage, 11; total yield, 17 tons. Total value, \$306.00; average rate of seeding, 1 bushel.

**

1 farm grew german millet. Acreage, 6; 12 tons, value of crop, \$216.00. 200# 16% phosphate was used. Rate of seeding, 1 bushel. Crop stacked.

2 farms grew meadow grass hay. Acreage, 18. Average yield per acre, 2 tons; total yield, 36 tons; total value, \$648.00. All stacked.

56% of farmers follow rotation of corn, wheat, grass 2 years.
20% of farmers follow rotation of corn, wheat 2 year, grass.
6% of farmers did not give a rotation (3 were orchard farms).
1 farmer runs 2 years corn, wheat, grass.
1 farmer grows corn every year. This man is dairying on a small farm. He plants crimson clover in corn and manures heavily each year.

Farm No.	No. apple trees and age	yield in bus. & bbls.	total value	Orchard		total value	total value small fruits	Management			Sprays		How often pruned
				No. peach trees and age	yield bus.			cultivated crop	grass crop	Fertilizer	How often sprayed	No. sprays applied	
1	200 - 4 yrs. & up	20 bu.	\$20.00	12 - 5 yrs.	15	\$22.50	\$10.00	Every 2 yrs.	-	On crop	yearly	1	yearly
2	30 - old; 40 - 3 yrs.	failed	-	-	-	-	-	buckwheat; potatoes	-	Manure	-	-	yearly
3	25 - 15 yrs; 15 - 30 yrs;	200 bu.	200.00	25 - 8 & 10 yrs.	10	15.00	25.00	Every 3 yrs. trees cult.	-	Manure; 16%	-	-	yearly
4	200 - 10 yrs. & up	didn't gather	-	-	-	-	-	-	-	-	-	-	2 yrs.
5	30 - 12 yrs. & up	50 bu.	50.00-	-	-	-	15.00	-	-	-	-	-	yearly
6	60 - 15 yrs.	60 bu.	60.00	60 - 6 yrs.	50 bu.	50.00	15.00	potatoes; soybeans	-	800#-4-8-12	-	-	yearly
7	150 - 11 yrs.	150 bu.	150.00	-	-	-	15.00	every 3 yrs.	-	-	yearly	1	yearly
8	40 - 15 yrs.	100 bu.	100.00	6	5 bu.	5.00	10.00	every 3 yrs.	grass 2 yr.	manure	-	-	occasionally
9	12 - 6 yrs.	-	-	-	-	-	500.00	every year	-	-	every 2 yr.	winter	2 yrs.
10	1620 - 25 yrs.	1800 bu. 3 cases bulk culls	7350.00	4 acres 11 yrs.	400 bu.	500.00	-	plow every 2 yr.	clover	200# bone M. 100# -10-2 drilled; 500# around trees.	yearly	dormant codling moth	yearly
11	15 - 8 yr; 20 - 5 yr.	20 bu.	20.00	3	-	-	25.00	berries cult.	-	-	-	-	yearly
12	25 - old; 25 - 10 yrs.	-	-	-	-	-	buy	every 3 yrs.	-	-	-	-	yearly
13	45 - 18 yrs.	75 bu.	75.00	-	-	-	25.00	corn & grain	grass	-	-	-	yearly
14	30 - 5 to 25 yrs.	-	-	-	-	-	35.00	potatoes or corn	-	manure	-	-	yearly
15	100 - 17 yrs.	270 bu.	270.00	-	-	-	-	cult. trees yrly.	-	-	yearly	dormant	yearly
16	50 - 15 yrs. & up	60 bu.	60.00	6	8	8.00	50.00	every 3 yrs. corn.	-	manure on corn crop	every 2 2	dormant pink spray	yearly
17	40 old trees	40	40.00	-	-	-	20.00	oats	grass	-	-	-	once in 15 yrs.
18	36 - 20 yrs.	100 bu.	100.00	-	-	-	-	-	-	-	-	-	once in 3 yrs.
19	50	50	50.00	-	-	-	100.00	berry cult.	sod	-	-	-	yearly
20	65 - 16 yrs.	150 bu.	150.00	-	-	-	buy	cultivate land	-	manure	yearly	dor. Bor.	yearly
21	46 - 14 yrs.	30 bu.	50.00	6	6	6.00	15.00	-	-	-	-	-	yearly
22	1800 - 12 yrs.	600 bbl.	1850.00	-	-	-	-	soybeans-buckwheat	-	4# NaNO ₃ on trees	-	dormant oil pink spray	yearly
23	20 - old; 20 - 2 & 3 yrs.	20 bu.	30.00	2	3	3.00	10.00	every 3 years	sod	-	-	-	-
24	15 - 8 & up	-	-	-	-	-	-	crop every 2 yrs.	-	-	yearly	dormant	yearly
25	16 - old	320 bu.	320.00	50	25	25.00	-	corn; potatoes	clover	-	-	-	5 - 10 yrs.
26	15 - 15 yrs; 35 - 1&2 yr;	50 bu.	50.00	10 - 7 yrs.	10	10.00	10.00	corn; potatoes	clover	manure	-	-	yearly
27	30 - 25 yrs.	50 bu.	50.00	10 - 7 yrs.	10	10.00	10.00	-	-	-	-	-	1 year
28	120 - 25 yrs.	120 bu.	120.00	-	-	-	-	Small crop 2 yrs.	-	-	-	-	-
29	11 - 4 yrs. & up	-	-	-	-	-	30.00	work around trees	-	-	yearly	dor. Bor.	yearly
30	10 - 15 yrs.	20	20.00	6 - 4 yrs.	-	-	10.00	-	-	-	yearly	P.G.	yearly
31	-	-	-	-	-	-	-	-	-	-	-	-	-
32	15 - 4 yrs.	-	-	-	-	-	10.00	-	-	-	-	-	-
33	25 - 1 yrs.	-	-	-	-	-	-	-	-	-	-	-	2-3 yrs.
34	50	250 bu.	250.00	-	-	-	50.00	-	-	-	-	-	every 3 yrs
35	4 - 15 yrs.	very few	-	-	-	-	15.00	every 3 yrs.	-	-	-	-	yearly
36	40 - 6 yrs; 75 - old	very few	-	-	-	-	5.00	every 3 yrs.	-	-	-	-	yearly
37	30 - 40 yrs.	5 bu.	5.00	-	-	-	buy	corn each year	-	manure	-	-	last year
38	50 - old	-	-	10 - 2 yrs.	-	-	-	-	-	-	-	-	-
39	1200 - 12 yrs.	500 bbl; 50 boxes	1967.50	100	-	-	-	7 acres clear cultivation	-	2# NaNO ₃ , 4# Phos. each tree	yearly	dormant pink, 10d. cod. moth, 2 Bordeaux	yearly
40	20 - old; 40 - 5 & 15 yr.	30 bu.	30.00	18 - 3 yrs.	-	-	15.00	young or.	yearly	manure crop	yearly	dor. Arse- nate lead	yearly

Orchard (concluded)

41	300 - 8 yrs.	not bearing	-	-	-	-	-	-	corn every 2 years	crimson clover	manure crop	-	-	yearly
42	30 - old	very few	-	6	-	-	10.00	-	every 3 yrs.	-	manure	-	-	yearly
43	30 - 15 yrs.	20 bu.	20.00	6 - 15yrs.	8 bu.	8.00	15.00	-	-	-	-	-	-	every 2 yrs.
44	75 - 40 yrs.	20 bu.	20.00	-	-	-	40.00	-	-	sod	-	-	-	last year
45	100 - 15 yrs.	50 bu.	50.00	30	-	-	480.00	berry cutl.	-	-	-	yearly	pink spray	yearly
46	30 - 25 yrs.	75 bu.	75.00	-	-	-	15.00	once in 10 yr.	-	manure & fert.	-	-	-	each 3 yrs.
47	20 - 3 yrs. & up	20 bu.	20.00	4 - 7 yrs.	8	8.00	20.00	each 2 yrs corn	clover	2# 16% to each tree	yearly	dormant	yearly	yearly
48	50 - 18 yrs.	50 bu.	50.00	12	7	7.00	100.00	-	sod - hog pasture	manure	-	-	-	every 3 yrs.
50	30 - old; 15 - 3 yrs.	100 bu.	100.00	50 - 2 yrs.	-	-	15	potatoes & dig about trees	clover	manure	-	-	-	yearly

48 farms reported apple orchards. Total trees, 7326. 863 of these trees are too young to bear. Total yield of orchards:

2560 bushels
 50 boxes
 2900 barrels
 3 ~~cases~~^{cars} bulk ~~cases~~^{cars}
 10565 bushels, 3 ~~cases~~^{cars} bulk apples.
 total income, \$13,757.00.

Total number peach trees, 600; yield, 980 bushels; income, \$668.00.

Total income from small fruits, \$1735.00; total income from all fruits, \$16,160.00.

29% of farmers practice no orchard management.

33% of farmers crop orchard in cultivated crop every two to three years.

5 of this 29% follow rotation in orchard of corn, grain, clover. 3 farmers keep the orchard in sod. 1 farmer lows every 2 years and seeds to clover. 4 farmers crop corn every 3 years and follow with clover. 3 cultivate berries in the orchard. 5 do clean cultivation.

60.4% of the farmers use no fertilizer on orchard.

27.0% of the farmers manure crops that are cultivated in orchard.

3 farmers put fertilizer around trees.

Farm No. 10, 200# bone meal, 100# -19-2, drilled per acre. Additional 500# of mixture drilled around the trees.

Farm No. 22, 4 pounds nitrate of soda around weak trees, less around the strong ones.

Farm No. 39, 2# nitrate of soda and 4# acid phosphate to each tree.

70% farmers do no spraying; 27% spray yearly;

3% spray once in two years; 10% spray only with winter spray; 17% spray with two or more sprays during year; 70% prune yearly, 14% prune every two to three years, and 11% prune occasionally.

Farms No. 9, 10, 19, 22, 39, 45. are outstanding in fruit production.

Pasture

Farm No.	Acres in pasture	Quality	Practices in fertilizing and improving	Animals pastured per acres
1	74	fair	cover thin places with manure	4 acres per head
2	200	good	feed on poor spots	1 acre per head
3	30	medium	keep down wild growth	1 acre per 1½ head
4	100	good	none	1 acre per head
5	23	good	none	2 acres per head
6	160	good	keep down wild growth	4 acres per head
7	200	fair	none	5 acres per head
8	200	good	none	4 acres per head
9	238	fair to good	manure and feed on poor spots	4 acres per head
10	-			
11	11	good	fertilizer and manure in rotation	1½ acres per head
12	85	good	none	3 acres per head
13	55	good	grazing, manure poor spots	2 acres per head
14	35	fair	none	3 acres per head
15	150	fine	none	3 acres per head
16	25	fair	none	3 acres per head
17	250	good	none	4 acres per head
18	50	fair	manure on weak spots	3½ acres per head
19	30	medium	manure on weak spots	3 acres per head
20	125	good	manure on weak spots, & change from field to field	2 acres per head
21	223	good	manure on weak spots	3 acres per head
22	90	fair	none	3 acres per head
23	60	good	feed on poor spots	3 acres per head
24	135	fair	none	2½ acres per head
25	400	good	none	3 acres per head
26	180	good	manure on weak spots	3 acres per head
27	25	medium	-	3 acres per head
28	150	medium	-	2½ acres per head
29	30	good	manure	1 acre per head
30	210	medium	rotation pasture, turn under sage & red top clover	6 acre per head
31	150	medium-	none	4 acres per head
32-	50	medium	none	4 acres per head
33-	1400	good	none	4 acres per head
34	150	good	none	4 acres per head
35	25	good	nothing; animals on it	3 acres per head
36	300	medium	nothing; animals on it	3 acres per head
37	14	good	feed on pasture	1 acre per head
38	264	good	none	3 acres per head
39	5	fair	manure	1 acre per head
40	139	fair to good	feed on poor spots	3 acres per head
41	30	good	none	1 acre per head
42	60	good	manure & straw on thin spots	3 acres per head
43	174	good	manure on poor spots	4 acres per head
44	50	good	manure on poor spots	3 acres per head
45	18	good	none	3 acres per head
46	197	medium	manure & feed on poor spots	3 acres per head
47	129	good	manure on poor spots	3 acres per head
48	75	good	manure on poor spots, and feed on thin places	3 acres per head
50	300	good	manure and feed on poor spots	4 acres per head

All farms except one had pasture land, the one exception being an orchard farm.

39% of the farms do nothing to improve the pasture land.

61% of the farms put manure, and feed on the thin spots.

2 farms of this 61% only cut down wild growth.

The average number of acres per animal for pasture is from 3 to 4 acres.

6 farms graze 1 acre per head, but in most every case it is only night pasture.

No. Farm	Amount per acre and frequency of applications	Crops applied to
1	1 T. in 20 years	corn
2	1 T. yearly	grass
3	none	
4	none	
5	Once; 500#	wheat & grass
6	Once; 1 ton	grass
7	none	
8	none	
9	Once; 1000#	corn
10	none	
11	none	
12	none	
13	none	
14	none	
15	none	
16	2 tons every 10 years	corn
17	none	
18	2 tons last year	grass
19	none	
20	1 ton 2 years ago	wheat, grass, clover
21	none	
22	none	
23	none	
24	Once, 3-4- tons	corn
25	none	
26	none	
27	none	
28	1000 pounds	alfalfa
29	yearly, $\frac{1}{2}$ to 1 ton	corn, wheat, grass
30	1 ton on part of land	alfalfa
31	none	
32	none	
33	500#	corn
34	none	
35	none	
36	last year, 1 ton	wheat
37	none	
38	none	
39	none	
40	part of land every year; $1\frac{1}{2}$ T. per A	grass
41	this year, 2 T rock & 1 T. burnt	alfalfa
42	only once; $1\frac{1}{2}$ T.	corn
43	none	
44	1 T.; none for 5 years	grass
45	none	
46	last 3 years; 500 to 1000#	grass
47	none	
48	none	
49	1 T. every 4 years;	grass
50	1 T. every 6 years	grass & wheat

4% of the farmers have used some lime.

12% of the 44% have used lime only once.

5% of the 44% are liming part of land yearly.

24% use lime somewhere in their rotation.

More lime is applied to grass than any other crop.

The next crop to receive lime is corn, and then wheat.

13 of the 22 farmers using lime, use burnt lime.

4 " " " " " " " hydrated lime.

2 " " " " " " " " and burnt lime.

2 " " " " " " " ground rock.

95% of the farmers using lime report good returns from its use. Only one man reported results not as good as expected, but he reported favorable results from its use.

Manure

Farm No.	Tons saved	How stored	Crops applied to	How applied to corn	How applied to grass and wheat	Form used	Results noted
1	105	stable	corn, wheat, grass	plowed under	top dressing		
2	150	stable	corn, silage	after plowing	-		
3	20	stable	corn - wheat	plowed under	-		
4	30	stable & shed	wheat, corn, potatoes	after plowing	top dressing	burnt	better yields on all crops
5	20	stable & yard	corn, wheat, grass	after plowing	top dressing	burn over	good
6	170	stable	corn, grass	after plowing	top dressing		
7	15	stable	wheat, grass	after plowing	-		
8	200	shed	corn, wheat, grass	after plowing & plowed under	top dressing	hydrated	good, especially clover
9	200	stable	corn, wheat, grass	plowed under	top dressing	burnt	excellent
10	-						
11	30	stable	corn	plowed under	-	burnt	good
12	200	stable & yard	corn, wheat, grass	plowed under	top dressing		
13	150	stable	corn, wheat, grass	plowed under	top dressing		
14	25	stable	corn, wheat, grass	after plowing	top dressing		
15	50	stable	corn, wheat, grass	plowed under	top dressing		
16	25	stable	corn	plowed under, after plowing	-		
17	100	stable & shed	wheat, grass	-	top dressing		
18	150	shed	corn, wheat	plowed under	top dressing	burnt	good
19	40	shed	corn, wheat	plowed under	top dressing		
20	75	shed	corn, wheat	plowed under	top dressing		
21	20	stable	wheat, corn, pasture	after plowing	plowed land	hydrated	none yet
22	35	yard	garden, wheat, orchard	-	top dressing	burnt	better grass and clover
23	50	stable	corn, wheat	plowed under	top dressing		
24	75	yard	corn, wheat	after plowing	top dressing		
25	200	stable	grass, corn	after plowing	top dressing		
26	150	stable	wheat, corn	after plowing if fine plowed under if coarse	top dressing	burnt	better crops all around
27	50	stable	corn, wheat, oats	plowed under	top dressing		
28	60	stable	corn, silage	after plowing	-		
29	130	stable	corn, wheat, grass	plowed under	top dressing	hydrated	good
30	40	shed	corn	plowed under	-	burnt	excellent results
31	52	stable	corn, wheat, meadow	after plowing	top dressing	burnt	good; where not used, alfalfa failed.
32	-	stable	corn, wheat	after plowing	top dressing		
33	-	-	-	-	-		
34	10	stable-	corn	plowed under	-	hydrated	increase in all crops
35	6	stable	corn, wheat, grass	after plowing	top dressing		
36	150	stable	corn and grass	plowed under	top dressing		
37	100	shed	corn	plowed under	-	burnt	wheat crop looking good
38	150	stable & shed	corn & wheat	plowed under	-		
39	6	pit	orchard, garden	-	top dressing on orchard		
40	85	shed	corn, wheat, grass	plowed under	top dressing		
41	100	stable	corn, grass	plowed under & after plowing	top dressing	burnt	good with all crops
42	100	stable	corn, wheat	plowed under	top dressing	ground rock or burnt	good results on alfalfa
43	30	stable	corn, wheat, grass	plowed under	top dressing	burnt	good results
44	25	stable	corn, wheat, grass	plowed under	top dressing		
45	50	stable	corn, grass	plowed under	top dressing		
46	75	stable	corn, grass, wheat	plowed under	top dressing	burnt	good
47	145	stable	wheat, grass	plowed under	top dressing		
48	75	stable	corn	plowed under	-	hydrated & burnt	not as good as expected
49	400	shed & pit	corn and grass	plowed under	top dressing		
50	200	stable	corn, wheat, grass	plowed under	top dressing	ground rock burnt & hydrated	good good

96% of farms save some manure.

1 barn did not report the number of tons saved.

47 farms saved 4304 tons.

68% of the farms use stable method and haul direct to land.

15% of the farms used shed method of preserving the manure.

9% of the farms use the stable and yard method.

2% use the stable and shed method.

1% use the pit method.

1% use both pit and shed method.

25 farmers plow manure under for corn.

14 farmers apply manure to corn after plowing.

5 farmers plow under or apply on top plowed land for corn, depending on fineness of manure.

4 apply all to wheat, grass, garden or orchard.

All manure applied to wheat and grass is put on by top dressing.

Farm No.	CORN		silage		potatoes		Small grains		Hays		Orchard and small fruits			Pastures
	Income	Acres	Income	Acres	Income	Acres	Income	Acres	Income	Acres	Income	No. apple trees	No. peach trees	Acres
1	\$600.00	10	\$800.00	4	\$15.00	1/8	\$434.00	19	\$405.00	15	\$54.50	200	12	74
2	3656.25	65	1280.00	40	157.00	1/8	1350.00	45	2518.00	91	-	70	-	200
3	275.00	4	-	-	17.00	1/8	-	-	360.00	13	240.00	40	25	30
4	375.00	15	-	-	50.00	1/8	135.00	9	684.00	22 1/2	-	200	-	100
5	525.00	12	-	-	40.00	1/8	166.50	6	368.00	16	40.00	30	-	28
6	1012.50	16	144.00	3	108.00	1/8	266.25	15	720.00	30	125.00	60	60	160
7	437.50	10	-	-	10.00	1/8	183.50	9	448.00	22	165.00	150	-	200
8	552.50	18	384.00	6	-	-	263.50	11 1/2	728.00	20	115.00	40	6	200
9	1187.50	19	-	-	50.00	1	603.30	26	1129.50	63	505.00	12	-	238
10	-	-	-	-	-	-	-	-	153.00	14	7350.00	1620	125	-
11	230.00	5 1/2	-	-	18.00	1/8	82.00	4 1/2	122.75	5 1/2	45.00	35	3	11
12	750.00	12	-	-	42.00	1/8	477.00	16	360.00	10	-	50	-	85
13	568.75	8	400.00	4	30.00	1/8	147.00	9	729.00	15	105.00	45	-	55
14	782.50	15	-	-	15	1/8	225.00	8	144.00	8	35.00	30	-	35
15	656.25	15	-	-	70.00	1	378.25	15	702.00	18	270.00	90	-	150
16	375.00	10	-	-	30.00	1/9	88.00	4	313.00	11	125.00	65	6	25
17	1575.00	36	2800.00	35	80.00	1/9	464.00	56	2430.00	90	60.00	40	-	650
18	600.00	14	432.00	6	20.00	1/9	315.00	14	540.00	20	100.00	36	-	50
19	500.00	10	-	-	80.00	1/9	150.00	10	244.00	12	150.00	50	-	30
20	1200.00	24	640.00	8	37.50	1/9	888.00	24	1462.00	65	150.00	65	-	125
21	1375.00	22	-	-	50.00	1/9	-	-	1764.00	24	50.00	45	6	223
22	400.00	8	-	-	40.00	1/9	240.00	8	7350.00	17	2100.00	1800	-	90
23	562.00	9	-	-	20.00	1/9	186.00	10	360.00	20	30.00	40	2	60
24	789.50	9	-	-	40.00	1/9	607.00	13	1080.00	30	-	15	-	135
25	2000.00	40	-	-	-	1/9	180.00	20	4680.00	130	360.00	16	50	300
26	1192.50	20	576.00	8	30	1/9	1442.00	55	4702.00	26	60.00	50	12	180
27	500.00	8	-	-	75.00	1/9	200.00	12	220.00	12	70.00	30	10	25
28	1500.00	30	640.00	10	25.00	1/9	937.00	40	1080.00	30	120.00	120	-	150
29	1100.00	16	1200.00	7	15.00	1/9	-	-	108.00	3	55.00	11	-	30
30	2791.25	20	-	-	50.00	1/9	240.00	14	678.00	27	10.00	10	6	210
31	1750.00	40	-	-	75.00	1/9	750.00	50	1350.00	45	-	-	-	150
32	500.00	8	-	-	50.00	1/9	157.50	7	234.00	11	10.00	15	-	50
33	4296.00	55	376.00	45	-	1/9	1350.00	60	378.00	14	-	-	-	1400
34	-	-	-	-	-	1/9	106.50	3	1350.00	25	300.00	50	-	150
35	390	8	-	-	35.00	1/9	97.50	5	216.00	12	15.00	40	-	25
36	1000.00	20	-	-	-	1/9	2050.00	75	1080.00	40	-	115	-	300
37	375.00	4	392.00	3 1/2	40.00	1/9	-	-	176.00	4	10.00	30	-	14
38	1750.00	35	640.00	8	150.00	1 1/2	1287.75	45	3052.50	105	-	50	10	264
39	625.00	10	-	-	130.00	1 1/2	-	-	240.00	4	1987.50	3200	100	15
40	2025.00	27	612.00	9	75.00	1 1/2	928.00	30	1143.00	33	45.00	60	18	109
41	1250.00	20	592.00	8	-	1 1/2	1065.00	48	850.00	31	-	300	-	30
42	962.00	14	-	-	15.00	1/5	583.00	24	423.00	13	-	30	-	60
43	1875.00	28	400.00	5	90.00	1/5	1520.00	40	288.00	8	40.00	30	6	174
44	-	-	-	-	75.00	1/5	-	-	1050.00	35	60.00	75	-	50
45	468.00	5	-	-	127.00	1/5	125.00	4	441.00	14	540.00	100	30	18
46	525.00	14	240.00	2	-	1/5	240.00	10	843.00	30	90.00	30	-	197
47	437.00	7	240.00	3	30.00	1/5	262.50	14	648.00	24	40.00	20	4	129
48	843.00	15	288	4	50.00	1/5	692.00	22	576.00	16	155.00	50	12	75
49	3125.00	50	3849.00	40	750.00	1/5	2057.50	80	5190.00	109	-	-	-	-
50	800.00	16	480.00	2 1/2	70.00	1/5	216.00	12	744.00	25 1/2	115.00	45	50	-

