FARM FINANCIAL RECORD STUDIES

1922-23-24

ANNUAL FARM BUSINESS REPORTS PREPARED FROM RECORDS KEPT IN THE ILLINOIS FARM FINANCIAL RECORD BOOK FOR 14 AREAS FOR 1924; 10 AREAS FOR 1923; AND 8 AREAS FOR 1922.

Prepared by the Department of Farm Organization and Management of the University of Illinois.

Reports are included for 14 areas in 1924; 10 areas for 1923; and 8 areas for 1922, and are filed in the following order:

For 1924

1. Adams, McDonough, and Hancock Counties
2. Champaign, Ford and McLean Counties
3. Clinton County
4. Douglas, Moultrie, Coles and Clark Counties
5. Henry, Marshall-Putnam, and Whiteside Counties
6. Jo Daviess, Stephenson and Ogle Counties
7. LaSalle County
8. Macoupin, Jersey and Greene Counties
9. Monroe and Randolph Counties
10. Saline and Gallatin Counties
11. Tazewell, Logan, Macon and McLean Counties
12. Wabash, Edwards, Richland and Lawrence Counties
13. Woodford County
14. Will County

For 1923

1. Clinton County
2. Ford County
3. Gallatin County
4. Jersey County
5. Jo Daviess County
6. Kane County
7. McDonough County
8. Monroe County
9. Wabash County
10. Woodford County

For 1922

1. Clinton County
2. Coles County
3. Jo Daviess County
4. Kane County
5. Lawrence County
6. Lee County
7. Monroe County
8. Woodford County

STATEMENT CONCERNING ENCLOSED DATA

The year 1922 represents the initial preparation of individual county reports for those counties where the Farm Adviser has cooperated in the Farm Management Extension work. In a number of instances, the reports included too few farms to justify a report excepting as a means of encouraging the county to develop the project.

This same statement would apply to many of the counties for which reports were prepared for the year 1923. However, it will be noted that an increased number of records were completed in the different counties in 1923.

In 1924 the policy was adopted of preparing separate county reports for those counties completing thirty or more records. Counties having a fewer number of completed records were combined with other counties in the same general farming type area, giving a sufficient number of records to justify a separate report in most instances.

The policy followed in preparing the reports for the three years was intended to encourage the cooperating counties to secure sufficient records to give a good volume of data for a separate county report. From an extension point of view, this is highly desirable, as the Farm Adviser is usually quite well acquainted with all the individual farms and it gives him a better opportunity of studying the factors influencing farm earnings and assisting the cooperating farmers in improving the organization and operation of their farms.

H. C. M. Case

ANNUAL FARM BUSINESS REPORT

ADAMS, McDONOUGH, HANCOCK COUNTIES - 1924

Prepared by H.C.M. Case, M.L. Mosher, K. H. Myers*

The 51 farmers in these three counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 5.34% on an average investment of $ 43,653 after figuring their own time at about $600 per year. These farms averaged 202.2 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $723 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 51 farms in comparison with those of more profitable and less profitable farms. The 17 most profitable farms earned 9.15% on the investment, while the least profitable group made only 1.99%. Expressed as the Labor and Management wage, the better group made an average labor income of $2330 while the least profitable group lacked $830 of having anything left to pay the manager for his own labor and management, a difference of $3160. In comparing the more profitable farms with the least profitable it will be noted that the 17 more profitable farms averaged over 30 acres smaller in size, but had a larger percent of tillable land. This should be considered in comparing the efficiency with which equipment, machinery, and labor is used.

The records show that the more profitable group had much larger crop yields than the least profitable group. The more profitable farms received 30% larger returns for every $100. invested in all productive livestock and the same was true for each class of livestock, with the exception of poultry. They received 57.6% of their income from livestock compared with 90.0% on the least profitable farms. The more profitable farms then had larger crop yields and better livestock, and while a smaller percentage of their returns came from livestock their total income from livestock was greater. There was little difference in the efficiency with which man labor was used on the two groups. The upper group made the better use of horse labor. The use of man and horse labor should be considered in relation to the method in which livestock is handled, and the efficiency with which it is handled.

For every $100. taken in, the 17 most profitable farms had an expense of $38.38, while the 17 least profitable farms had an expense of $73.41. This may be due to any one of a large number of items of cost. It may be due to low income as well as to high expenses. Whatever it is due to, low expenses per $100. income are essential to profitable farming. The more profitable farms received $17.91 larger gross returns per acre and their expenses were only $1.38 more per acre than on the 17 least profitable farms, giving as a result the net receipts of $20.70 per acre as compared with $4.17 per acre on the 17 least profitable farms.

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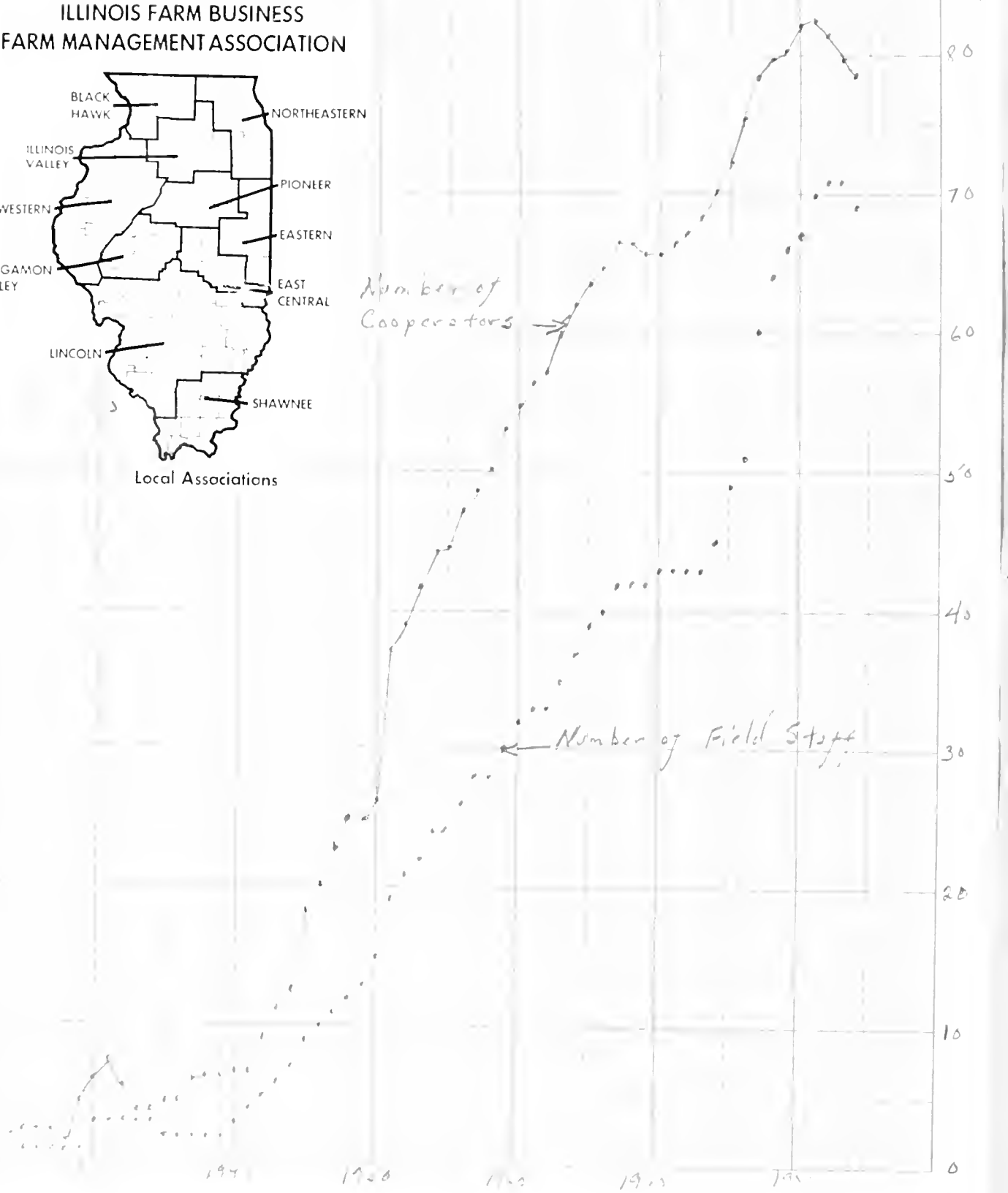
*R. E. Miller, R. C. Doneghue, and J.H. Lloyd, farm advisers in Adams, McDonough, and Hancock Counties, respectively, cooperated in supervising and collecting the records used in this report.

ILLINOIS FARM BUSINESS FARM MANAGEMENT ASSOCIATION

Local Associations



A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Adams, McDonough, Hancock Counties

Factors helping to analyze the farm business	Your farm	Average of 51 farms	17 most profitable farms	17 least profitable farms
Rate Earned	%	5.34%	9.15	1.99
Labor & Management Wage	$	$723.	2330.	-830
Size of Farm - Acres		202.2	185.9	218.0
Crop Yields - Corn - Bushels		41.2	47.8	32.2
Oats - Bushels		42.4	47.0	37.6
Wheat - Bushels		24.9	22.9	19.3
Percent of land area Tillable	%	90.1%	95.6	84.4
Percent of tillable land in legumes	%	9.7%	7.7	10.5
Returns per $100. invested in all productive livestock	$	$140.85	164.80	123.40
For $100 in - Cattle	$	$ 92.90	109.15	84.40
- Swine	$	$179.04	216.00	152.70
- Poultry	$	$170.00	174.55	171.10
Percent of gross Income from Livestock	%	69.4%	57.6	90.0
Man Labor Cost per Acre	$	$ 5.90	6.10	5.76
Crop Acres per Man		74.6	76.5	76.1
Crop Acres per Horse		23.2	21.8	18.2
		18.5	20.3	18.9
Expense per $100. gross Income	$	$ 51.30	38.38	73.41
Machinery Cost per Acre	$	$ 2.04	2.55	1.66
Building & Fencing cost per Acre	$	$ 1.12	1.02	1.13
Gross Receipts per Acre	$	$ 23.66	33.59	15.68
Total Expenses per Acre	$	$ 12.14	12.89	11.51
Net Receipts per Acre	$	$ 11.52	20.70	4.17

Adams, McDonough, Hancock Counties 1924

	Your farm	Average of 51 farms	17 most profitable farms	17 least profitable farms
1. Capital Investment - Total	$	$43653	$42061	$45779
2. Land	$	33442	32492	35308
3. Farm Improvements	$	3850	3300	4099
4. Machinery and Equipment	$	1417	1558	1352
5. Feed and Supplies	$	2179	2260	1859
6. Livestock	$	2765	2451	3161
7. Horses	$	573	618	587
8. Cattle	$	957	708	1198
9. Sheep	$	58	87	46
10. Swine	$	1034	907	1173
11. Poultry	$	143	131	157
12. Receipts - Net Increases - Total	$	$ 4784	$6245	$3419
13. Feed and Grain	$	1342	2437	291
14. Labor off Farm	$	65	123	2
15. Miscellaneous	$	58	89	49
16. Livestock - Total	$	3319	3596	3077
17. Horses	$	----	----	----
18. Cattle	$	693	751	737
19. Sheep	$	79	175	22
20. Swine	$	2139	2292	1923
21. Poultry	$	106	118	95
22. Egg Sales	$	132	116	161
23. Dairy Sales	$	170	144	139
24. Expenses - Net Decreases - Total	$	$ 1668	$1630	$1720
25. Farm Improvements	$	227	190	246
26. Livestock	$	24	22	32
27. Horses	$	24	22	32
28. Cattle	$			
29. Sheep	$			
30. Swine	$			
31. Poultry	$			
32. Machinery and Equipment	$	413	475	361
33. Feed and Supplies	$	---	---	---
34. Livestock Expense other than feed		65	58	60
35. Crop Expenses	$	159	153	164
36. Labor hired	$	408	367	465
37. Taxes, Insurance, etc.	$	332	343	350
38. Miscellaneous	$	40	22	42
39. Receipts less Expenses	$	$3116	$4615	$1699
40. Operator's and Unpaid Family Labor		786	767	790
41. Net Income from Investment	$	2330	3848	909
42. Farms with Tractor - Percent	%	53.9	50.0	52.9
43. Value of land per Acre	$	165	175	162
44. Total Investment per Acre	$	216	226	210

Find Your Farm Leaks -(Adams, McDonough, Hancock Counties - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Percent Income from L.S	Man Lab. Cost per Acre	Crops Acres per			Expense per $100 Income	Gross Recep. per Acre	Size of farm
									Man	Horse				
	Corn	Oats	Wheat	Cattle	Hogs	Poultry				Tractor	No Trac.			
12.50	62	70	39	163	319	310	97	2.50	110	37	26	16	45	377
11.50	59	66	37	153	299	290	93	3.00	105	35	25	21	42	352
10.50	56	62	35	143	279	270	89	3.50	100	33	24	26	39	327
9.50	53	58	33	133	259	250	85	4.00	95	31	23	31	36	302
8.50	50	54	31	123	239	230	81	4.50	90	29	22	36	33	277
7.50	47	50	29	113	219	210	77	5.00	85	27	21	41	30	252
6.50	44	46	27	103	199	190	73	5.50	80	25	20	46	27	227
5.50	41	42	25	93	179	170	69	6.00	75	23	19	51	24	202
4.50	38	38	23	83	159	150	65	6.50	70	21	18	56	21	177
3.50	35	34	21	73	139	130	61	7.00	65	19	17	61	18	152
2.50	32	30	19	63	119	110	57	7.50	60	17	16	66	15	127
1.50	29	26	17	53	99	90	53	8.00	55	15	15	71	12	102
0.50	26	22	15	43	79	70	49	8.50	50	13	14	76	9	77
-0.50	23	18	13	33	59	50	45	9.00	45	11	13	81	6	52
-1.50	20	14	11	23	39	30	41	9.50	40	9	12	86	3	27
-2.50	17	10	9	13	19	10	37	10.00	35	7	11	91	0	2

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT
CHAMPAIGN, FORD, AND McLEAN* COUNTIES - 1924

Prepared by H.C.M.Case, M.L.Mosher, K.H.Myers**

The 52 farmers in the three counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 7.43% on an average investment of $54,118 after figuring their own time at $600 per year. These farms averaged 223.3 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent. interest on the total investment, amounted to $1868 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 52 farms in comparison with those of more profitable and less profitable farms. The 17 most profitable farms earned 10.41% on the investment, while the least profitable group made 4.34%. Expressed as the Labor and Management wage, the better group made an average labor income of $3808. while the least profitable group had only $164 left to pay the manager for his own labor and management, a difference of $3644. In comparing the more profitable farms with the least profitable it will be noted that the 17 more profitable farms averaged over 40 acres larger in size, making it possible to use equipment, machinery, and labor to greater advantage.

The records show that the more profitable group had larger crop yields than the least profitable group. Both groups had considerable land in legume crops. The more profitable farms received over 30% larger returns for every $100.00 invested in productive livestock and the same was true for each class of livestock. They received only 23.8% of their income from livestock compared with 38.4% on the least profitable farms. The more profitable farms then had larger crop yields and better livestock, and while the more profitable farms received a smaller percentage of their return from livestock the total income from livestock was greater on these farms. The livestock returns, however, should be interpreted in the light of the discussion on page 5. They also handled about 12.5 acres more crops with each man and 4.5 acres more crops with each horse where tractors were used, than did the least profitable group, a factor which was responsible for a slightly lower labor cost per acre.

For every $100.00 taken in, the 17 most profitable farms had an expense of $30.41 while the 17 least profitable farms had an expense of $52.04. This may be due to any one of a large number of items of cost, but as shown, the more profitable farms kept the machinery expense, and building and fencing expenses, as well as other operating expenses, at a lower figure per acre. This may be due in part to the size of the farms, but low expenses in relation to income is essential to profitable farming. The more profitable farms received $11.41 larger gross returns per acre and their expenses were $1.65 less per acre than on the 17 least profitable farms, giving as a result the net receipts of $24.43 per acre as compared with only $11.37 per acre on the 17 least profitable farms.

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* Records in the east part of McLean county only, were used in this report.

** C. C. Burns, G. T. Swaim, and H. Fahrnkopf, farm advisers in Champaign, Ford and McLean counties respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

CHAMPAIGN, FORD, AND McLEAN COUNTIES

Factors helping to analyze the farm business	Your farm	Average of 52 farms.	17 most profitable farms.	17 least profitable farms.
Rate Earned	%	7.43%	10.41%	4.34%
Labor & Management Wage	$	1868.00	3808.00	164.00
Size of Farm - Acres		223.3	255.3	214.1
Crop Yields - Corn - Bushels		40.7	44.7	38.2
Oats - Bushels		49.0	51.1	48.5
Wheat - Bushels		18.7	20.0	18.0
Percent of land area Tillable	%	95.0	94.7	95.3
Percent of tillable land in legumes	%	16.0	12.3	16.7
Returns per $100. invested in all productive livestock	$	118.45	133.10	99.00
For $100. in - Cattle	$	86.75	112.20	47.70
- Swine	$	154.85	188.40	136.10
- Poultry	$	148.60	169.00	141.60
Percent of gross Income from Livestock	%	28.5	23.8	38.4
Man Labor Cost per Acre	$	4.99	4.74	5.03
Crop Acres per Man		107.1	114.1	101.4
Crop Acres per Horse(With tractor)		28.2	29.6	25.1
(Without tractor)		19.9	19.6	19.7
Expense per $100. gross income	$	38.82	30.41	52.04
Machinery Cost per Acre	$	1.76	1.63	1.91
Building & Fencing cost per Acre	$	1.15	.95	1.69
Gross Receipts per Acre	$	29.44	35.11	23.70
Total Expenses per Acre	$	11.43	10.68	12.33
Net Receipts per Acre	$	18.01	24.43	11.37

CHAMPAIGN, FORD, AND McLEAN COUNTIES

		Your farm	Average of 52 farms	17 most profitable farms	17 least profitable farms
1.	Capital investment - Total	$ _____	54118	59920	56089
2.	Land	$	44303	49354	45287
3.	Farm Improvements	$	3571	3706	4354
4.	Machinery and Equipment	$	1397	1463	1375
5.	Feed and Supplies	$	2637	3163	2323
6.	Livestock	$	2210	2234	2750
7.	Horses	$	713	738	829
8.	Cattle	$	675	736	836
9.	Sheep	$	123	200	62
10.	Swine	$	548	403	868
11.	Poultry	$	151	157	155
12.	Receipts - Net Increases - Total	$ _____	6576	8964	5075
13.	Feed and Grain	$	4620	6719	3071
14.	Labor off Farm	$	66	100	30
15.	Miscellaneous	$	17	12	23
16.	Livestock - Total	$	1873	2133	1951
17.	Horses	$	---	3	---
18.	Cattle	$	358	660	159
19.	Sheep	$	128	77	64
20.	Swine	$	886	771	1300
21.	Poultry	$	118	171	66
22.	Egg Sales	$	115	122	140
23.	Dairy Sales	$	268	329	222
24.	Expenses - Net Decreases - Total	$ _____	1889	1959	2028
25.	Farm Improvements	$	256	242	362
26.	Livestock	$	26	---	28
27.	Horses	$	26	---	28
28.	Cattle	$			
29.	Sheep	$			
30.	Swine	$			
31.	Poultry	$			
32.	Machinery and Equipment	$	393	415	408
33.	Feed and Supplies	$	---	---	---
34.	Livestock Expense other than feed		38	38	41
35.	Crop Expense	$	230	270	198
36.	Labor Hired	$	451	442	466
37.	Taxes, Insurance, etc.	$	465	520	501
38.	Miscellaneous	$	30	32	24
39.	Receipts Less Expenses	$	4687	7005	3047
40.	Operators & Unpaid Family Labor	$	664	767	613
41.	Net Income from Investment	$	4023	6238	2434
42.	Farms with Tractor - Percent	%	67.3%	88.2%	58.8%
43.	Value of land per Acre	$	198.	193.	212.
44.	Total Investment per Acre	$	242.	235.	262.

Find Your Farm Leaks - (Champaign, Ford, and McLean Counties - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate	Bushels per Acre of			Returns per $100 Invested in			Percent	Man Lab.	Crop Acres per			Expense	Gross	Size
							Income	Cost per	Man	Horse		per $100	Recep.	of
Earned	Corn	Oats	Wheat	Cattle	Hogs	Poultry	from L.S.	Acre		Tractor	No Trac.	Income	per Acre	Farm
14.50	62	70	26	192	295	290	77	1.50	156	42	27	4	43	363
13.50	59	67	25	177	275	270	70	2.00	149	40	26	9	41	343
12.50	56	64	24	162	255	250	63	2.50	142	38	25	14	39	323
11.50	53	61	23	141	235	230	56	3.00	135	36	24	19	37	303
10.50	50	58	22	132	215	210	49	3.50	128	34	23	24	35	283
9.50	47	55	21	117	195	190	42	4.00	121	32	22	29	33	263
8.50	44	52	20	102	175	170	35	4.50	114	30	21	34	31	243
7.50	41	49	19	87	155	150	28	5.00	107	28	20	39	29	223
6.50	38	46	18	72	135	130	21	5.50	100	26	19	44	27	203
5.50	35	43	17	57	115	110	14	6.00	93	24	18	49	25	183
4.50	32	40	16	42	95	90	7	6.50	86	22	17	54	23	163
3.50	29	37	15	27	75	70	0	7.00	79	20	16	59	21	143
2.50	26	34	14	12	55	50	0	7.50	72	18	15	64	19	123
1.50	23	31	13	- 3	35	30	0	8.00	65	16	14	69	17	103
0.50	20	28	12	-18	15	20	0	8.50	58	14	13	74	15	83
-0.50	17	25	11	-33	- 5	0	0	9.00	51	12	12	79	13	63

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT

CLINTON COUNTY - 1924.

Prepared by H.C.M. Case, M.L. Mosher, K.H. Myers*

The 58 farmers in your county who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 4.73% on an average investment of $17,212 after figuring their own time at about $500 per year. These farms averaged 164 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $448 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726. per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 58 farms in comparison with those of more profitable and less profitable farms. The 19 most profitable farms earned 9.16% on the investment, while the least profitable group lacked 0.19% of breaking even. Expressed as the Labor and Management wage, the better group made an average labor income of $1243. while the least profitable group lacked $302 of having anything left to pay the manager for his own labor and management, a difference of $1545. In comparing the more profitable farms with the least profitable it will be noted that both groups of farms were the same size and both had about the same percent of tillable land.

As shown on page 2, the more profitable group received larger crop yields than did the least profitable group. Both groups of farms had considerable land in legume crops. The upper group received a 20% larger return for each $100 invested in productive livestock, and in each class of livestock, but their livestock represented only 68.2% of the total gross income compared to 83.6% on the lower group. However, the better farms had much larger incomes from the farm as a whole and from livestock. The more profitable farms then had larger crop yields, better livestock, and a larger total income from livestock. Generally the more strictly grain farms with livestock well handled paid better in 1924 than the more strictly livestock farms. This is an abnormal condition, however, and no interpretation should be given without reading the explanation of prices given on page 5. There was no difference in the efficiency with which man and horse labor was used. The upper group had a higher man labor cost per acre. This should be considered in relation to the amount of livestock and the returns secured from livestock. The upper group received twice as much income from livestock. The larger amount of livestock demands more labor, increasing the cost per acre.

For every $100 taken in, the 19 most profitable farms had an expense of $55.30, while the 19 least profitable farms had an expense of $101.70. This may be due to any one of the large number of factors. It may be due to low income as well as to high expenses. Whatever it be due to, low expenses per $100 income is essential to profitable farming. The more profitable farms received $11.48 larger gross returns per acre and their expenses were only $1.55 per acre more than on the 19 least profitable farms, giving as a result the net receipts of $9.75 per acre as compared with a loss of $.18 per acre on the 19 least profitable farms.

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*C. H. Rehling, farm adviser in Clinton County, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Clinton County

Factors helping to analyze the farm business	Your farm	Average of 50 farms	19 most profitable farms	19 least profitable farms
Rate Earned	%	4.73	9.16	- 0.19
Labor & Management Wage	$	448.	1243.	-302.
Size of Farm - Acres		164.0	164.8	164.3
Crop Yields - Corn - Bushels		26.7	30.2	21.3
Oats - Bushels		30.1	33.5	28.2
Wheat - Bushels		8.1	11.4	5.9
Percent of land area Tillable	%	81.5	82.4	80.7
Percent of tillable land in legumes	%	14.3	13.4	16.2
Returns per $100. invested in all productive livestock	$	154.45	172.95	141.35
For $100. in - Cattle	$	146.10	163.30	131.90
- Swine	$	121.20	157.90	106.00
- Poultry	$	202.10	225.75	193.10
Percent of gross Income from Livestock	%	73.0	68.2	83.6
Man Labor Cost per Acre	$	6.10	6.65	5.84
Crop Acres per Man		64.9	65.4	65.1
Crop Acres per Horse		21.2	21.2	21.9
Expense per $100. gross Income	$	68.74	55.30	101.70
Machinery Cost per Acre	$	1.44	1.64	1.33
Building & Fencing cost per Acre	$	1.22	1.39	1.23
Gross Receipts per Acre	$	15.87	21.81	10.33
Total Expenses per Acre	$	10.91	12.06	10.51
Net Receipts per Acre	$	4.96	9.75	- .18

Clinton County

	Your farm	Average of 58 farms	19 most profitable farms	19 least profitable farms
1. Capital Investment - Total	$ _____	17212	17506	15200
2. Land	$	10568	10409	9518
3. Farm Improvements	$	2022	3124	2393
4. Machinery and Equipment	$	1090	1026	991
5. Feed and Supplies	$	1069	1105	894
6. Livestock	$	1655	1042	1404
7. Horses	$	449	491	377
8. Cattle	$	816	962	643
9. Sheep	$	10	15	10
10. Swine	$	120	97	155
11. Poultry	$	260	277	219
12. Receipts - Net Increases - Total	$ _____	2604	3595	1698
13. Feed and Grain	$	589	960	213
14. Labor off Farm	$	100	170	62
15. Miscellaneous	$	14	12	3
16. Livestock - Total	$	1901	2453	1420
17. Horses	$	---	3	---
18. Cattle	$	169	189	125
19. Sheep	$	9	16	8
20. Swine	$	159	201	148
21. Poultry	$	112	99	122
22. Egg Sales	$	408	508	314
23. Dairy Sales	$	1044	1437	703
24. Expenses - Net Decreases -Total	$ _____	941	1144	853
25. Farm Improvements	$	200	229	202
26. Livestock	$	7	---	22
27. Horses	$	7		22
28. Cattle	$			
29. Sheep	$			
30. Swine	$			
31. Poultry	$			
32. Machinery and Equipment	$	237	270	219
33. Feed and Supplies	$	---	---	---
34. Livestock Expense other than feed		25	37	20
35. Crop Expenses	$	145	176	141
36. Labor hired	$	156	253	86
37. Taxes, Insurance, etc.	$	144	153	133
38. Miscellaneous	$	27	26	30
39. Receipts less Expenses	$ _____	1663	2451	845
40. Operator's and Unpaid Family Labor		849	844	874
41. Net Income from Investment	$	814	1607	- 29
42. Farms with Tractor - Percent	%	20.7	21.0	26.3
43. Value of land per Acre	$	64	63	58
44. Total Investment per Acre	$	105	106	92

Find Your Farm Leaks - (Clinton County --1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of Corn	Bushels per Acre of Oats	Bushels per Acre of Wheat	Returns per $100 Invested in Cattle	Returns per $100 Invested in Hogs	Returns per $100 Invested in Poultry	Percent Income from L.S.	Man Lab. Cost per Acre	Crop Acres per Man	Crop Acres per Horse	Expense per $100 Income	Gross Recep. per Acre	Size of Farm
11.75	48	51	15	216	261	342	100	2.50	100	35	0	30	234
10.75	45	48	14	206	241	322	97	3.00	95	33	9	28	224
9.75	42	45	13	196	221	302	93	3.50	90	31	19	26	214
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-2.25	6	9	1	76	-19	62	45	9.50	30	7	139	2	94
-3.25	3	6	0	66	-39	42	41	10.00	25	5	149	0	84

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ANNUAL FARM BUSINESS REPORT
Douglas, Moultrie, Coles, and Clark* Counties - 1924

Prepared by H. C. M. Case, M. L. Mosher, K. H. Myers**

The 32 farmers in the four counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 8.22% on an average investment of $40,366.00 after figuring their own time at about $600.00 per year. These farms averaged 200 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $1816.00 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726.00 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The table on page 2 shows the average results of the 32 farms in comparison with those of more profitable and less profitable farms. The 10 most profitable farms earned 11.86% on the investment, while the least profitable group made only 3.94%. Expressed as the Labor and Management wage, the better group made an average labor income of $3330.00, while the least profitable group had only $120 left to pay the manager for his own labor and management, a difference of $3710. In comparing the more profitable farms with the least profitable, it will be noted that the 10 more profitable farms averaged over 30 acres larger in size, making it possible to use equipment, machinery and labor to greater advantage.

The records show that the more profitable group had larger crop yields than the least profitable group. In the first group 95.8% of the land area was tillable, while in the second group 87.2% was tillable land. Both groups had considerable legume crops. There was little difference in the returns per $100 invested in livestock. The lower group had better returns in the more important classes of livestock than did the upper group. The more profitable group, then, had better crop yields, and slightly better returns per $100 invested in livestock, but less grain was marketed through livestock than in the lower group. This is an unusual condition resulting from the price situation. Further explanation of the unusual condition of prices is given on page 5. This is probably temporary and should not be considered a basis for changing the system of production to one which includes less livestock. Farms with the best paying classes of livestock made more money than farms with a small amount of income from livestock last year.

For every $100.00 taken in, the 10 most profitable farms had an expense of $29.30, while the 10 least profitable farms had an expense of $61.05. This may be due to any one of a large number of items of cost, but as shown, the more profitable farms kept the machinery expenses and building and fencing expenses as well as other operating expenses at a lower figure per acre. While this may be due in part to the size of the farms, usually, low expenses per $100.00 mean that no unnecessary expenditures are made. The more profitable farms received $16.53 larger gross returns per acre and their expenses were $1.27 less per acre than on the 10 least profitable farms, giving as a result the net receipts of $25.30 per acre as compared with only $7.50 per acre on the 10 least profitable farms.

* Records from the Northwest part of Clark County only were used.

** F.W. Garrett, C.C.Turner, Melvin Thomas, and W.W. Merritt, farm advisers in Douglas, Moultrie, Coles, and Clark Counties, respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Douglas, Coles, Moultrie, and Clark Counties

Factors helping to analyze the farm business	Your farm	Average of 32 farms	10 most profitable farms	10 least profitable farms
Rate Earned	%	8.22%	11.36%	3.94%
Labor & Management Wage	$	$ 1816.	$ 3830.	$ 120.
Size of Farm - Acres		200.0	225.7	192.5
Crop Yields - Corn - Bushels		45.0	48.9	43.4
Oats - Bushels		44.0	44.7	41.5
Wheat - Bushels		22.1	23.6	22.1
Percent of land area Tillable	%	91.3	95.8	87.2
Percent of tillable land in legumes	%	15.8	12.9	19.8
Returns per $100. invested in all productive livestock	$	142.10	150.30	145.45
For $100. in - Cattle	$	100.90	71.45	95.00
- Swine	$	199.30	198.35	210.00
- Poultry	$	146.05	160.85	151.35
Percent of gross income from livestock	%	35.4	22.2	54.0
Man Labor Cost per Acre	$	5.16	5.03	5.30
Crop Acres per Man		91.5	90.8	88.5
Crop Acres per Horse (With tractor)		27.7	27.8	22.9
(Without tractor)		18.2	17.7	19.5
Expense per $100. gross Income	$	40.01	29.30	61.05
Machinery Cost per Acre	$	1.36	1.46	1.51
Building & Fencing cost per Acre	$	.87	.78	1.11
Gross Receipts per Acre	$	27.64	35.78	19.25
Total Expenses per Acre	$	11.06	10.48	11.75
Net Receipts per Acre	$	16.58	25.30	7.50

DOUGLAS, MOULTRIE, COLES, AND CLARK COUNTIES

		Your farm	Average of 32 farms	10 most profitable farms	10 least profitable farms
1.	Capital Investment - Total	$	$40366	$48109	$36553
2.	Land	$	32869	39395	29133
3.	Farm Improvements	$	3015	3397	3271
4.	Machinery and Equipment	$	1048	1184	998
5.	Feed and Supplies	$	1525	2394	1261
6.	Livestock	$	1909	1659	1890
7.	Horses	$	606	751	629
8.	Cattle	$	696	769	724
9.	Sheep	$	94	142	30
10.	Swine	$	403	352	430
11.	Poultry	$	105	115	77
12.	Receipts - Net Increases - Total	$	5528	8075	3705
13.	Feed and Grain	$	3503	6191	1652
14.	Labor off Farm	$	16	26	3
15.	Miscellaneous	$	50	65	48
16.	Livestock - Total	$	1959	1793	2002
17.	Horses	$	---	---	---
18.	Cattle	$	292	68	244
19.	Sheep	$	35	48	25
20.	Swine	$	1122	1341	1160
21.	Poultry	$	105	116	116
22.	Egg Sales	$	67	77	38
23.	Dairy Sales	$	338	143	419
24.	Expenses - Net Decreases - Total	$	1518	1569	1588
25.	Farm Improvements	$	173	177	214
26.	Livestock	$	35	40	39
27.	Horses	$	35	40	39
28.	Cattle	$			
29.	Sheep	$			
30.	Swine	$			
31.	Poultry	$			
32.	Machinery and Equipment	$	298	330	291
33.	Feed and Supplies	$	---	---	---
34.	Livestock Expense other than feed	$	37	28	49
35.	Crop Expense	$	211	212	208
36.	Labor hired	$	337	338	347
37.	Taxes, Insurance, etc.	$	401	425	399
38.	Miscellaneous	$	26	19	41
39.	Receipts less Expenses	$	4010	6506	2117
40.	Operators & Unpaid Family Labor	$	694	797	674
41.	Net Income from Investment	$	3316	5709	1443
42.	Farms with Tractor - Percent	%	46.9%	60%	30%
43.	Value of land per Acre	$	164	175	151
44.	Total Investment per Acre	$	202	213	190

Find Your Farm Leaks - (Douglas, Moultrie, Coles, and Clark Counties 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Percent Income from L.S.	Man Lab. Cost per Acre	Crops Acres per			Expense per $100 Income	Gross Recep. per Acre	Size of Farm
	Corn	Oats	Wheat	Cattle	Hogs	Poultry			Man	Horse Tractor	Horse No Trac.			
15.25	59	58	28	171	339	286	90	1.66	140	42	32	5	42	340
14.25	57	56	28	161	319	266	89	2.16	133	40	30	10	40	320
13.25	55	54	27	151	299	246	80	2.66	126	38	28	15	38	300
12.25	53	52	26	141	279	226	71	3.16	119	36	26	20	36	280
11.25	51	50	25	131	259	206	62	3.66	112	34	24	25	34	260
10.25	49	48	24	121	239	186	53	4.16	105	32	22	30	32	240
9.25	47	46	23	111	219	166	44	4.66	98	30	20	35	30	220
8.25	45	44	22	101	199	146	35	5.16	91	28	18	40	28	200
7.25	43	42	21	91	179	126	26	5.66	84	26	16	45	26	180
6.25	41	40	20	81	159	106	17	6.16	77	24	14	50	24	160
5.25	39	38	19	71	139	86	8	6.66	70	22	12	55	22	140
4.25	37	36	18	61	119	66	0	7.16	63	20	10	60	20	120
3.25	35	34	17	51	99	46	0	7.66	56	18	8	65	18	100
2.25	33	32	16	41	79	26	0	8.16	49	16	6	70	16	80
1.25	31	30	15	31	59	6	0	8.66	42	14	4	75	14	60
.25	29	28	14	21	39	0	0	9.16	35	12	2	80	12	40

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT

HENRY, MARSHALL-PUTNAM AND WHITESIDE COUNTIES - 1924

Prepared by H.C.M. Case, N.L. Mosher, K.H. Myers*

The 41 farmers in the four counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 7.42% on an average investment of $46,855 after figuring their own time at about $600 per year. Those farms averaged 208.5 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $1725 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 41 farms in comparison with those of more profitable and less profitable farms. The 14 most profitable farms earned 10.94% on the investment, while the least profitable group made 3.70%. Expressed as the Labor and Management wage, the better group made an average labor income of $3778, while the least profitable group had only $54 left to pay the manager for his own labor and management, a difference of $3724. In comparing the more profitable farms with the least profitable it will be noted that the 14 more profitable farms averaged over 45 acres larger in size, and had a larger percentage of tillable land. This should be considered in comparing the efficiency with which equipment, machinery, and labor is used.

The records show that the more profitable group had better crop yields, especially corn and wheat, than the lower group. Both groups had considerable land in legume crops. The records indicate that there was very little difference in the amount of livestock kept, or in the efficiency with which livestock was handled on the two groups of farms. The fact that only 82.5% of the land area in the lower group was tillable compared with 94.5 in the upper group, and the fact that livestock made up 91.0% of the gross income in the lower group compared with 41.3% in the upper group, indicates that livestock was a more important source of income on the lower group. The more profitable farms received as much income from livestock, but due to larger size and a larger percent of tillable land they were able to produce a larger surplus of feed which was marketed direct. Studies over a long period of years indicate that farms on which a considerable part of the grain is marketed through livestock, return a better income than those on which a large part of the grain is marketed direct. 1924 was an exception to this due to the abnormal price situation, which is further explained on page 5 of this report.

For every $100. taken in, the 14 most profitable farms had an expense of $33.12, while the 14 least profitable farms had an expense of $59.85. This may be due to any one of a large number of items of cost. It may be due to low income as well as to high expense. Whatever it be due to low expenses per $100 income are essential to profitable farming. The more profitable farms received $17.01 larger gross returns per acre and their expenses were only $0.06 more per acre than on the 14 least profitable farms, giving as a result the net receipts of $25.32

*J. W. Whisenand, F.E. Fuller, and L.O.Wise, farm advisers in Henry, Marshall-Putnam and Whiteside counties, respectively, cooperated in supervising and collecting the records used in this report.

per acre as compared with 8.37 per acre on the 14 least profitable farms. A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Henry, Marshall-Putnam and Whiteside Counties.

Factors helping to analyze the farm business	Your farm	Average of 41 farms	14 most profitable farms	13 least profitable farms
Rate Earned	%	7.42%	10.94	3.70
Labor and Management Wage	$	$1725.	3778.	54.
Size of Farm - Acres		208.5	231.2	186.0
Crop Yields - Corn - Bushels		41.8	43.8	34.4
- Oats - Bushels		54.9	54.0	53.4
Wheat - Bushels		28.1	28.1	14.9
Percent of land area Tillable	%	85.5%	94.7	82.5
Percent of tillable land in legumes	%	16.2%	16.4	17.5
Returns per $100. invested in all productive livestock	$	$126.95	135.35	137.70
For $100. in - Cattle	$	$ 88.90	86.15	108.00
- Swine	$	$167.35	170.50	160.85
- Poultry	$	$157.20	167.50	185.20
Percent of gross Income from Livestock	%	59.4%	41.3	91.0
Man Labor Cost per Acre	$	$ 6.21	6.71	6.07
Crop Acres per Man		80.6	88.2	79.6
Crop Acres per Horse (With tractor)		24.6	20.9	32.4
(Without tractor)		16.9	15.4	19.2
Expense per $100. gross Income	$	$ 42.80	33.12	59.85
Machinery Cost per Acre	$	$ 2.20	2.19	2.00
Building & Fencing cost per Acre	$	$ 1.16	.90	1.11
Gross Receipts per Acre	$	$ 29.15	37.86	20.85
Total Expenses per Acre	$	$ 12.48	12.54	12.48
Net Receipts per Acre	$	$ 16.67	25.32	8.37

Henry, Marshall-Putnam, Whiteside Counties.

	Your Farm	Average of 41 farms	14 most profitable farms	13 least profitable farms
1. Capital Investment - Total	$	$46855	$53533	$42146
2. Land	$	35358	42044	30930
3. Farm Improvements	$	4869	5058	4506
4. Machinery and Equipment	$	1457	1330	1510
5. Feed and Supplies	$	1973	2082	2115
6. Livestock	$	3198	3019	3085
7. Horses	$	598	603	645
8. Cattle	$	1489	1200	1319
9. Sheep	$	29	17	17
10. Swine	$	953	1050	986
11. Poultry	$	129	149	118
12. Receipts - Net Increases - Total	$	$ 6079	$ 8754	$ 3878
13. Feed and Grain	$	2368	4975	263
14. Labor off Farm	$	61	121	40
15. Miscellaneous	$	39	46	45
16. Livestock - Total	$	3611	3612	3530
17. Horses	$	----	----	----
18. Cattle	$	944	671	1042
19. Sheep	$	61	69	63
20. Swine	$	2053	2313	1905
21. Poultry	$	119	127	122
22. Egg Sales	$	101	145	103
23. Dairy Sales	$	333	287	295
24. Expenses - Net Decreases - Total	$	$ 1756	$ 2001	$ 1467
25. Farm Improvements	$	243	209	206
26. Livestock	$	28	42	35
27. Horses	$	28	42	35
28. Cattle	$			
29. Sheep	$			
30. Swine	$			
31. Poultry	$			
32. Machinery and Equipment	$	458	507	373
33. Feed and Supplies	$	---	---	---
34. Livestock Expense other than feed	$	51	41	57
35. Crop Expenses	$	171	181	162
36. Labor hired	$	449	653	232
37. Taxes, Insurance, etc.	$	322	335	312
38. Miscellaneous	$	34	33	40
39. Receipts less Expenses	$	$ 4323	$ 6753	$ 2411
40. Operator's and Unpaid Family Labor	$	846	898	854
41. Net Income from Investment	$	3477	5855	1557
42. Farms with Tractor - Percent	%	61.0	64.3	69.2
43. Value of land per Acre	$	170.	182.	166.
44. Total Investment per Acre	$	225.	232.	226.

Find Your Farm Leaks - (Henry, Marshall-Putnam, Whiteside Co's. - 1934)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate	Bushels per Acre of			Returns per $100 Invested in			Percent Income	Man Lab. Cost per	Crops Acres Per			Expense per $100	Gross Recep.	Size of
									Man	Horse				
Earned	Corn	Oats	Wheat	Cattle	Hogs	Poultry	from L.S.	Acre		Tractor	No Trac.	Income	per Acre	Farm
14.50	70	76	42	159	272	297	94	2.75	116	39	31	1	43	303
13.50	66	73	40	149	257	277	89	3.25	111	37	29	7	41	298
12.50	62	70	38	139	242	257	84	3.75	106	35	27	13	39	283
11.50	58	67	36	129	227	237	79	4.25	101	33	25	19	37	268
10.50	54	64	34	119	212	217	74	4.75	96	31	23	25	35	253
9.50	50	61	32	109	197	197	69	5.25	91	29	21	31	33	238
8.50	46	58	30	99	182	177	64	5.75	86	27	19	37	31	223
7.50	42	55	28	89	167	157	59	6.25	81	25	17	43	29	208
6.50	38	52	26	79	152	137	54	6.75	76	23	15	49	27	193
5.50	34	49	24	69	137	117	49	7.25	71	21	13	55	25	178
4.50	30	46	22	59	122	97	44	7.75	66	19	11	61	23	163
3.50	26	43	20	49	107	77	39	8.25	61	17	9	67	21	148
2.50	22	40	18	39	92	57	34	8.75	56	15	7	73	19	133
1.50	18	37	16	29	77	37	29	9.25	51	13	5	79	17	118
0.50	14	34	14	19	62	17	24	9.75	46	11	3	85	15	103
-0.50	10	31	12	9	47	0	19	10.25	41	9	1	91	13	88

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fod any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts accured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers of meat animals in 1924 did not fare so well as they might

expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre, and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT
JO DAVIESS, STEPHENSON, OGLE COUNTIES - 1924

Prepared by H.C.M.Case, M.L.Mosher, K.H.Myers*

The 51 farmers in the three counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 3.75% on an average investment of $31,448.00 after figuring their own time at about $600.00 per year. These farms averaged 180.1 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $183. as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726.00 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 51 farms in comparison with those of more profitable and less profitable farms. The 17 most profitable farms earned 7.23% on the investment, while the least profitable group made only 0.66%. Expressed as the Labor and Management wage, the better group made an average labor income of $1267.00, while the least profitable group lacked $869.00 of having anything left to pay the manager for his own labor and management, a difference of $2136.00. In comparing the more profitable farms with the least profitable it will be noted that the 17 more profitable farms averaged over 40 acres smaller in size, but had a larger percent of crop land. This should be considered in comparing the efficiency with which equipment, machinery, and labor is used.

The records show that the more profitable group had larger crop yields and a larger percentage of the tillable land in legume crops. The more profitable farms received over 30% larger returns for every $100.00 invested in productive livestock and the same was true for each class of livestock, with the exception of poultry. They received 83.4% of their income from livestock compared with 89.3% on the least profitable farms. The more profitable farms then had larger crop yields and better livestock, but a slightly smaller percentage of their returns from livestock although their total returns from livestock were greater. The 17 least profitable farms handled more crop acres per man and per horse and had a lower man labor cost per acre than did the 17 most profitable. This should be considered in relation to the amount of livestock and the returns secured from livestock. It will be noted that the more profitable farms received larger returns from the sale of hogs and dairy products, which would mean a demand for labor that would lessen the amount of crops one man and one horse would handle.

For every $100.00 taken in, the 17 most profitable farms had an expense of $48.00, while the 17 least profitable farms had an expense of $90.90. This may be due to any one of a large number of items of cost, but low expenses per $100.00 income are essential to profitable farming. The more profitable farms received $13.80 larger gross returns per acre and their expenses were only $1.94 more per acre than on the 17 least profitable farms, giving as a result the net receipts of $12.85 per acre as compared with only $0.99 per acre on the 17 least profitable farms.

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* V. J. Banter, W. A. Herrington, and D. E. Warren, farm advisers in Jo Daviess, Stephenson, and Ogle Counties, respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

JO DAVIESS, STEPHENSON, OGLE COUNTIES

Factors helping to analyze the farm business	Your farm	Average of 51 farms	17 most profitable farms	17 least profitable farms
Rate Earned	%	3.75%	7.23	0.66
Labor & Management Wage	$	$ 183.	$ 1267.0	$- 869.
Size of Farm - Acres		180.1	172.8	215.0
Crop Yields - Corn - Bushels		34.0	39.3	30.0
Oats - Bushels		40.0	48.8	34.7
Percent of land area Tillable	%	82.8%	83.3	73.3
Percent of tillable land in legumes	%	16.5%	21.7	19.8
Returns per $100. invested in all productive livestock	$	118.75	129.40	95.25
For $100. in - Cattle	$	80.45	95.00	52.80
- Swine	$	187.15	192.80	176.60
- Poultry	$	163.90	156.00	157.30
Percent of gross Income from livestock	%	92.1%	83.4	89.3
Man Labor Cost Per Acre	$	6.03	6.32	5.05
Crop Acres per Man		67.4	70.1	71.1
Crop Acres per Horse(With Tractor)		26.1	25.2	29.4
(Without Tractor)		18.5	20.7	20.0
Expense per $100. gross income	$	63.70	48.00	90.90
Machinery Cost per Acre	$	1.85	1.95	1.56
Building & Fencing cost per Acre	$	.95	.97	.84
Gross Receipts per Acre	$	18.05	24.73	10.93
Total Expenses per Acre	$	11.49	11.88	9.94
Net Receipts per Acre	$	6.56	12.85	.99

JO DAVIESS, STEPHENSON, OGLE COUNTIES

		Your farm	Average of 51 farms	17 most profitable farms	17 least profitable farms
1.	Capital Investment - Total	$ _____	31448	30688	32578
2.	Land	$	21508	20875	22810
3.	Farm Improvements	$	4388	4115	4483
4.	Machinery and Equipment	$	1261	1200	1266
5.	Feed and Supplies	$	1510	1476	1482
6.	Livestock	$	2781	3022	2537
7.	Horses	$	451	466	404
8.	Cattle	$	1451	1620	1297
9.	Sheep	$	65	14	99
10.	Swine	$	659	778	582
11.	Poultry	$	155	144	155
12.	Receipts - Net Increases - Total	$ _____	3251	4273	2351
13.	Feed and Grain	$	189	624	169
14.	Labor off Farm	$	22	31	23
15.	Miscellaneous	$	45	52	58
16.	Livestock - Total	$	2995	3566	2101
17.	Horses	$	---	---	---
18.	Cattle	$	422	643	370
19.	Sheep	$	74	19	116
20.	Swine	$	1444	1679	1027
21.	Poultry	$	93	83	101
22.	Egg Sales	$	164	136	143
23.	Dairy Sales	$	798	1006	344
24.	Expenses - Net Decreases - Total	$ _____	1230	1290	1167
25.	Farm Improvements	$	172	170	181
26.	Livestock	$	13	20	16
27.	Horses	$	13	20	16
28.	Cattle	$			
29.	Sheep	$			
30.	Swine	$			
31.	Poultry	$			
32.	Machinery and Equipment	$	332	339	335
33.	Feed and Supplies	$	---	---	---
34.	Livestock Expense other than feed		57	62	42
35.	Crop Expense	$	123	118	103
36.	Labor hired	$	245	331	116
37.	Taxes, Insurance, etc.	$	266	230	346
38.	Miscellaneous	$	22	20	28
39.	Receipts less Expenses	$	2021	2983	1184
40.	Operators & Unpaid Family Labor	$	840	762	970
41.	Net Income from Investment	$	1181	2221	214
42.	Farms with Tractor - Percent	%	33.3%	41.2%	35.3%
43.	Value of land per Acre	$	120.	121.	106.
44.	Total Investment per Acre	$	175.	177.	151.

Find Your Farm Leaks - (Jo Daviess, Stephenson, Ogle Counties - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of		Returns per $100 Invested in			Percent Income from L.S.	Man Lab. Cost per Acre	Crops Acres per			Expense per $100 Income	Gross Recep. per Acre	Size of Farm
	Corn	Oats	Cattle	Hogs	Poultry			Man	Horse Tractor	Horse No Trac.			
10.75	55	61	150	362	269		2.50	102	40	26	29	39	285
9.75	52	58	140	337	254		3.00	97	38	25	34	36	270
8.75	49	55	130	312	239		3.50	92	36	24	39	33	255
7.75	46	52	120	287	224	100	4.00	87	34	23	44	30	240
6.75	43	49	110	262	209	98	4.50	82	32	22	49	27	225
5.75	40	46	100	237	194	96	5.00	77	30	21	54	24	210
4.75	37	43	90	212	179	94	5.50	72	28	20	59	21	195
3.75	34	40	80	187	164	92	6.00	67	26	19	64	18	180
2.75	31	37	70	162	149	90	6.50	62	24	18	69	15	165
1.75	28	34	60	137	134	88	7.00	57	22	17	74	12	150
.75	25	31	50	112	119	86	7.50	52	20	16	79	9	135
- .25	22	28	40	87	104	84	8.00	47	18	15	84	6	120
-1.25	19	25	30	62	89	82	8.50	42	16	14	89	3	105
-2.25	16	22	20	37	74	80	9.00	37	14	13	94	0	90
-3.25	13	19	10	12	59	78	9.50	32	12	12	99	0	75
-4.25	10	16	0	- 13	44	76	10.00	27	10	11	104	0	60

HOW TO STUDY YOUR FARM RECORD

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of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

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Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT
LASALLE COUNTY - 1924

Prepared by H.C.M.Case, M.L.Mosher, E.H.Myers*

The 34 farmers in your county who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 7.22% on an average investment of $67,670 after figuring their own time at $600 per year. These farms averaged 247.3 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent. interest on the total investment, amounted to $2106 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represents an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 34 farms in comparison with those of more profitable and less profitable farms. The 11 most profitable farms earned 9.64% on the investment, while the least profitable group made 5.31%. Expressed as the Labor and Management wage, the better group made an average labor income of $3348, while the least profitable group had $763 left to pay the manager for his own labor and management, a difference of $2785. In comparing the more profitable farms with the least profitable, it will be noted that there was little difference in the size of farm in the two groups, a fact which should be considered in comparing the efficiency with which equipment, machinery, and labor was used.

The records show that crop yields were fairly uniform on all the farms. Both groups had a considerable acreage in legume crops. The more profitable group had a little larger percentage of tillable land than the lower group. The more profitable farms received a 50% higher return for each $100. invested in productive livestock, and also in each separate class of livestock. Both groups received about one-third of their income from livestock but the income was much larger on the more profitable farms. While there was little difference in the efficiency with which horse labor was used, the lower group worked more crop acres per man and had a lower man labor cost per acre. This should be considered in relation to the amount of livestock kept and the returns secured from livestock. It should be noted that the more profitable farms received a much larger income from livestock, especially dairy products, which demands more labor and decreases the number of acres one man can handle.

For every $100 taken in, the 11 more profitable farms had an expense of $34.29, while the least profitable farms had an expense of $46.50. This may be due to any of a large number of items of cost. It may be due to low income as well as high expenses. Whatever it be due to, low expenses in relation to the gross income is essential to profitable farming. The more profitable farms received $10.89 larger gross returns per acre and their expenses were only $0.22 more than on the 11 least profitable farms, giving as a result the net receipts of $26.05 as compared with $15.38 on the lower group of farms.

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* W. W. McLaughlin and R. W. Cross, farm advisers in LaSalle County, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

LA SALLE COUNTY

Factors helping to analyze the farm business	Your farm	Average of 34 farms	11 most profitable farms	11 least profitable farms
Rate Earned	%	7.22%	9.64	5.31
Labor & Management Wage	$	$ 2106.	3548.	763.
Size of Farm - Acres		247.3	235.2	226.8
Crop Yields - Corn - Bushels		41.8	41.9	42.8
Oats - Bushels		54.7	55.0	51.3
Wheat - Bushels		27.2	27.7	24.6
Percent of land area Tillable	%	91.0%	95.8	89.7
Percent of tillable land in legumes	%	14.8%	13.5	17.4
Returns per $100. invested in all productive livestock	$	123.05	158.05	107.50
For $100. in - Cattle	$	94.20	144.00	72.20
- Swine	$	165.30	192.50	149.50
- Poultry	$	138.50	188.30	129.00
Per cent of gross income from livestock	%	32.8	34.7	34.1
Man Labor Cost per Acre	$	5.92	6.73	5.62
Crop Acres per Man		76.3	82.1	91.9
Crop Acres per Horse (With Tractor)		28.0	28.8	29.8
(Without Tractor)		20.3	20.8	17.1
Expense per $100 gross income	$	39.52	34.29	46.50
Machinery Cost per Acre	$	2.36	2.69	2.61
Building & Fencing cost per Acre	$	1.39	.99	1.77
Gross Receipts per Acre	$	32.67	39.64	28.75
Total Expenses per Acre	$	12.91	13.59	13.37
Net Receipts per Acre	$	19.76	26.05	15.38

LA SALLE COUNTY

		Your farm	Average of 34 farms	11 most profitable farms	11 least profitable farms
1.	Capital Investment - Total	$ _____	67670	63559	65700
2.	Land	$	53730	52377	50118
3.	Farm Improvements	$	5786	3436	8108
4.	Machinery and Equipment	$	2101	2156	1987
5.	Feed and Supplies.	$	3205	3021	2772
6.	Livestock	$	2848	2559	2715
7.	Horses	$	898	799	727
8.	Cattle	$	1101	1150	1001
9.	Sheep	$	178	145	149
10.	Swine	$	551	369	693
11.	Poultry	$	120	106	145
12.	Receipts - Net Income - Total	$ _____	8079	9323	6521
13.	Feed and Grain	$	5347	6036	4241
14.	Labor off farm	$	50	44	35
15.	Miscellaneous	$	32	3	20
16.	Livestock - Total	$	2650	3240	2225
17.	Horses	$	---	---	---
18.	Cattle	$	464	585	232
19.	Sheep	$	259	125	313
20.	Swine	$	1103	1091	994
21.	Poultry	$	98	186	62
22.	Egg Sales	$	82	63	129
23.	Dairy Sales	$	644	1190	495
24.	Expenses - Net Decreases - Total	$ _____	2328	2213	2237
25.	Farm Improvements	$	344	233	401
26.	Livestock	$	17	23	35
27.	Horses	$	17	23	35
28.	Cattle	$			
29.	Sheep	$			
30.	Swine	$			
31.	Poultry	$			
32.	Machinery and Equipment	$	585	633	593
33.	Feed and Supplies	$	---	---	---
34.	Livestock Expense other than feed		62	43	84
35.	Crop Expense	$	247	257	214
36.	Labor hired	$	599	600	479
37.	Taxes, Insurance, etc.	$	438	383	395
38.	Miscellaneous	$	36	41	36
39.	Receipts less Expenses	$	5751	7110	4284
40.	Operators & Unpaid family labor	$	865	984	795
41.	Net Income from Investment	$	4886	6126	3489
42.	Farms with Tractor - Percent	%	64.7	72.7	54.5
43.	Value of land per Acre	$	217.	223.	221.
44.	Total Investment per Acre	$	274.	270.	290.

Find Your Farm Leaks - (LaSalle County - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors namedat the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of Corn	Bushels per Acre of Oats	Bushels per Acre of Wheat	Returns per $100 Invested in Cattle	Returns per $100 Invested in Hogs	Returns per $100 Invested in Poultry	Percent Income from L.S.	Man Lab. Cost per Acre	Crops Acres per Man	Crops Acres per Horse Tractor	Crops Acres per Horse No Trac.	Expense per $100 Income	Gross Recep. per Acre	Size of Farm
14.25	56	83	41	199	305	279	82	2.50	132	42	27	61	47	387
13.25	54	79	39	184	285	259	75	3.00	124	40	26	58	45	367
12.25	52	75	37	169	265	239	68	3.50	116	38	25	55	43	347
11.25	50	71	35	154	245	219	61	4.00	108	36	24	52	41	327
10.25	48	67	33	139	225	199	54	4.50	100	34	23	49	39	307
9.25	46	63	31	124	205	179	47	5.00	92	32	22	46	37	287
8.25	44	59	29	109	185	159	40	5.50	84	30	21	43	35	267
7.25	42	55	27	94	165	139	33	6.00	76	28	20	40	33	247
6.25	40	51	25	79	145	119	26	6.50	68	26	19	37	31	227
5.25	38	47	23	64	125	99	19	7.00	60	24	18	34	29	207
4.25	36	43	21	49	105	79	12	7.50	52	22	17	31	27	187
3.25	34	39	19	34	85	59	5	8.00	44	20	16	28	25	167
2.25	32	35	17	19	65	39	0	8.50	36	18	15	25	23	147
1.25	30	31	15	4	45	19	0	9.00	28	16	14	22	21	127
0.25	28	27	13	-11	25	- 1	0	9.50	20	14	13	19	19	107
-0.75	26	23	11	-26	5	-21	0	10.00	12	12	12	16	17	87

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays:

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT

MACOUPIN, JERSEY, GREENE COUNTIES - 1924

Prepared by H.C.M. Case, M.L. Mosher, K.H. Myers*

The 41 farmers in these counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 4.63% on an average investment of $25,401 after figuring their own time at about $600 per year. These farms averaged 174.3 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $482 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 41 farms in comparison with those of more profitable and less profitable farms. The 13 most profitable farms earned 10.32% on the investment, while the 13 least profitable farms lacked 2.18% of breaking even. Expressed as the Labor and Management wage, the better group made an average labor income $2037 while the least profitable group lacked $667, of having anything left to pay the manager for his own labor and management, a difference of $2704. In comparing the more profitable farms with the least profitable it will be noted that the 13 more profitable farms averaged 25 acres larger in size, a fact which should be considered in comparing the efficiency with which buildings and fencing, equipment, machinery, and labor is used.

The table show that the more profitable farms had larger crop yields than the less profitable farms. The farms in the upper group had a higher percentage of the total land area tillable. Both groups had quite a large acreage of legume crops. The more profitable farms received a higher return for each $100 invested in productive livestock. The same was true for each class of livestock with the exception of hogs. While they received only 61.3% of their gross income from livestock compared with 87.9% from that source in the lower group, their total income from livestock, and the income from the farm as a whole, was three times that of the lower group. The more profitable group of farms then, got larger crop yields, and better returns on the investment of livestock, and a larger total income from livestock than the less profitable farms. There was little difference in the number of crop acres handled per man or per horse. It will be noted that the dairy sales in the higher group amounted to nearly four times as much as in the lower group. A large amount of livestock, especially dairy cattle, demand more labor, decreasing the number of acres one man can handle. The larger amounts of dairy products and the favorable prices received for these products as explained on page 5, probably helps in a large way to account for the better income from the better group of farms.

For every $100 taken in, the 13 most profitable farms had an expense of $543.56 while the 13 least profitable farms had an expense of $124.60. This may be due to any one of a large number of items of cost. It may be due to low income as well as high expenses. Whatever it be due to, low expenses in relation to the gross income is essential to profitable farming. The more profitable farms received $18.63 larger gross returns per acre and their expenses were $0.50 less per acre than on the 13 least profitable farms, giving as a result the net receipts of $16.51 per acre as compared with a loss of $2.62 per acre on the 13 least profitable farms.

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*E.W. Rusk, R.L.Eyman, and E.M. Phillips, farm advisers in Macoupin, Jersey, and Greene counties respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Macoupin, Jersey, Greene Counties

Factors helping to analyze the farm business	Your farm	Average of 41 farms	13 most profitable farms	13 least profitable farms
Rate Earned	%	4.63%	10.32	- 2.18
Labor & Management Wage	$	$482.	2037	-667
Size of Farm - Acres		174.3	170.6	145.9
Crop Yields - Corn - Bushels		31.1	37.8	19.3
Oats - Bushels		34.5	37.7	30.6
Wheat - Bushels		7.2	9.3	5.4
Percent of land area Tillable	%	83.4%	88.9	79.1
Percent of tillable land in legumes	%	18.0%	15.5	16.8
Returns per $100. invested in all productive livestock	$	$136.20	148.35	138.00
For $100. in - Cattle	$	$100.80	134.60	90.20
- Swine	$	$218.30	188.85	202.10
- Poultry	$	$205.00	205.00	195.90
Percent of gross Income from Livestock	%	71.2%	61.3	87.9
Man Labor Cost per Acre	$	$ 6.65	7.04	6.83
Crop Acres per Man		61.6	60.7	57.2
Crop Acres per Horse		17.7	16.5	16.8
Expense per $100. gross Income	$	$ 63.75	43.56	124.60
Machinery Cost per Acre	$	$ 1.59	2.00	1.56
Building & Fencing cost per Acre	$	$ .77	.75	.85
Gross Receipts per Acre	$	$ 18.61	29.26	10.63
Total Expenses per Acre	$	$ 11.87	12.75	13.25
Net Receipts per Acre	$	$ 6.74	16.51	- 2.62

Macoupin, Jersey, and Greene Counties.

		Your Farm	Average of 41 farms	13 most profitable farms	13 least profitable farms
1.	Capital Investment - Total	$	25,401	27,314	17,462
2.	Land	$	13,084	19,216	11,360
3.	Farm Improvements	$	2,728	3,290	2,036
4.	Machinery and Equipment	$	1,054	1,184	1,019
5.	Feed and Supplies	$	1,498	1,402	1,639
6.	Livestock	$	2,037	2,222	1,408
7.	Horses	$	462	593	357
8.	Cattle	$	993	1037	543
9.	Sheep	$	42	18	20
10.	Swine	$	410	431	356
11.	Poultry	$	130	143	132
12.	Receipts - Net Increases - Total		3245	4993	1552
13.	Feed and Grain	$	783	1783	----
14.	Labor off Farm	$	75	118	91
15.	Miscellaneous	$	76	29	97
16.	Livestock - Total	$	2311	3063	1364
17.	Horses	$	3	57	---
18.	Cattle	$	232	249	114
19.	Sheep	$	87	151	32
20.	Swine	$	913	970	581
21.	Poultry	$	125	128	119
22.	Egg Sales	$	149	167	145
23.	Dairy Sales	$	802	1341	373
24.	Expenses - Net Decreases - Total		1263	1388	1132
25.	Farm Improvements	$	137	128	125
26.	Livestock	$	----	----	44
27.	Horses	$			44
28.	Cattle	$			
29.	Sheep	$			
30.	Swine	$			
31.	Poultry	$			
32.	Machinery and Equipment	$	278	341	228
33.	Feed and Supplies	$	---	---	42
34.	Livestock Expense other than feed		49	60	44
35.	Crop Expenses	$	194	122	270
36.	Labor hired	$	353	414	194
37.	Taxes, Insurance, etc.	$	218	262	165
38.	Miscellaneous	$	34	61	20
39.	Receipts less Expenses	$	1982	3605	420
40.	Operator's and Unpaid Family Labor		806	787	802
41.	Net Income from Investment	$	1176	2818	-382
42.	Farms with Tractor - Percent	%	31.7	30.8	23.1
43.	Value of land per Acre	$	104.	113.	78.
44.	Total Investment per Acre	$	146.	160.	120.

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Rate Earned	Bushels per Acre of Corn	Bushels per Acre of Oats	Bushels per Acre of Wheat	Returns per $100 Invested in Cattle	Returns per $100 Invested in Hogs	Returns per $100 Invested in Poultry	Percent Income from L.S.	Man Lab. Cost per Acre	Crops Acres per Man	Crops Acres per Horse	Expense per $100 Income	Gross Recep. per Acre	Size of Farm
11.60	52	49	2014	206	323	345	---	3.25	97	32	8	40	280
10.60	49	47	13	191	308	325	100	3.75	92	30	16	37	265
9.60	46	45	12	176	293	305	96	4.25	87	28	24	34	250
8.60	43	43	11	161	278	285	91	4.75	82	26	32	31	235
7.60	40	41	10	146	263	265	86	5.25	77	24	40	28	220
6.60	37	39	9	131	248	245	81	5.75	72	22	48	25	205
5.60	34	37	8	116	233	225	76	6.25	67	20	56	22	190
4.60	31	35	7	101	218	205	71	6.75	62	18	64	19	175
3.60	28	33	6	86	203	185	66	7.25	57	16	72	16	160
2.60	25	31	5	71	188	165	61	7.75	52	14	80	13	145
1.60	22	29	4	56	173	145	56	8.25	47	12	88	10	130
.60	19	27	3	41	158	125	51	8.75	42	10	96	7	115
-.40	16	25	2	26	143	105	46	9.25	37	8	104	4	100
-1.40	13	23	1	11	128	85	41	9.75	32	6	112	1	85
-2.40	10	21	0	- 4	113	65	36	10.25	27	4	120	0	70
-3.40	7	19	0	-19	98	45	31	10.75	22	2	128	0	55

HOW TO STUDY YOUR FARM RECORD

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expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre, and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT

MONROE, RANDOLPH COUNTIES - 1924

Prepared by H.C.M. Case, M.L. Mosher, K.H. Myers*

The 23 farmers in these two counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 4.99% on an average investment of $16,207 after figuring their own time at about $550 per year. These farms averaged 175 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $540 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

By comparing your own record with the average results of the 23 farms in Monroe and Randolph counties on which records were kept last year you may find at what point you can strengthen the organization of your own farm. The tables on pages 2 and 3 show the average results of the 23 farms and the results of your farm. These tables will help you to analyze your own record.

The results of several years of study of a large number of records similar to your own, show that a few factors determine, to a large extent, the net farm income, (1) Good crop yields are necessary to secure a good income. On these farms, while the average wheat yield was 12.8 bushels per acre, the individual farms showed a range of from 5 to 35 bushels. Corn and oats also showed wide differences. (2) Returns per $100 invested in productive livestock is a comparative measure of the efficiency of livestock. This measure showed a range on these farms of from $43 to $270 income for each $100 invested. The percent of total income from livestock shows the importance of livestock in the system of farming followed. Records over a period of years show that as an average, farms on which a considerable part of the grain crops is marketed through livestock return a better income than those on which little livestock is kept. Last year was an exception to this in some instances since the grain farmer in many areas earned more than the livestock man, with the possible exception of dairymen. The explanation of this as given on page 5, shows this to be an abnormal situation. The one year's results should not be made the basis for changes in the system of farming followed unless supported by other reliable data, secured over a long period of time. (3) The efficiency of man and horse labor is measured in terms of crop acres per man or per horse. On these farms this varied from 55 to 110 acres worked per man and from 9 to 44 acres worked per horse. The type of farming followed must be considered in comparing these factors but it is evident that there are wide differences in the efficiency with which different men operate their farms. (4) The expense per $100 gross income is a measure of the relation of expense to income. This varied from $39 to $170 in this area. To make a more detailed comparison of this item such things as man labor cost per acre, machinery cost per acre, and buildings and fencing cost per acre may be compared. Whatever it be due to, low expense in relation to the gross income is essential to profitable farming. A detailed statement of the farm

*P. G. Ewald and E. C. Secor, farm advisers in Monroe and Randolph counties respectively, cooperated in supervising and collecting the records used in this report.

earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Monroe, Randolph Counties.

Factors helping to analyze the farm business	Your Farm	Average of 23 farms
Rate Earned	%	4.99%
Labor & Management Wage	$	$ 540.
Size of Farm - Acres		175.0
Crop Yields - Corn - Bushels		30.4
Oats - Bushels		28.0
Wheat - Bushels		12.8
Percent of land area Tillable	%	77.9%
Percent of tillable land in legumes	%	21.2%
Returns per $100. invested in all productive livestock	$	$ 142.00
For $100. in - Cattle	$	$ 113.50
- Swine	$	$ 166.75
- Poultry	$	$ 203.75
Percent of gross Income from Livestock	%	38.3%
Man Labor Cost per Acre	$	5.95
Crop Acres per Man		64.6
Crop Acres per Horse		21.0
Expense per $100 gross income	$	$ 69.50
Machinery Cost per Acre	$	$ 1.87
Building & Fencing cost per Acre	$	$ .68
Gross Receipts per Acre	$	$ 15.11
Total Expense per Acre	$	$ 10.50
Net receipts per Acre	$	$ 4.61

Monroe, Randolph counties

	Your farm	Average of 23 farms
1. Capital Investment - Total	$ _____	$ 16207
2. Land	$	10713
3. Farm Improvements	$	2037
4. Machinery and Equipment	$	1210
5. Feed and Supplies	$	1131
6. Livestock	$	1063
7. Horses	$	366
8. Cattle	$	364
9. Sheep	$	17
10. Swine	$	132
11. Poultry	$	144
12. Receipts - Net Increases - Total	$ _____	$ 2644
13. Feed and Grain	$	1501
14. Labor off Farm	$	37
15. Miscellaneous	$	94
16. Livestock - Total	$	1012
17. Horses	$	----
18. Cattle	$	106
19. Sheep	$	2
20. Swine	$	262
21. Poultry	$	103
22. Egg Sales	$	196
23. Dairy Sales	$	343
24. Expenses - Net Decreases - Total	$ _____	$ 931
25. Farm Improvements	$	119
26. Livestock	$	13
27. Horses	$	13
28. Cattle		
29. Sheep		
30. Swine		
31. Poultry		
32. Machinery and Equipment	$	328
33. Feed and Supplies	$	---
34. Livestock Expense other than feed	$	11
35. Crop Expense	$	165
36. Labor hired	$	135
37. Taxes, Insurance, etc.	$	149
38. Miscellaneous	$	11
39. Receipts less Expenses	$ _____	$ 1713
40. Operators and Unpaid Family Labor	$	907
41. Net Income from Investment	$	806
42. Farms with Tractor - Percent	%	43.5
43. Value of land per Acre	$	62.
44. Total Investment per Acre	$	93.

Find Your Farm Leaks - (Monroe, Randolph Counties - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Percent Income from L.S.	Man Lab. Cost per Acre	Crop Acres per		Expense per $100 Income	Gross Recep. per Acre	Size of Farm
	Corn	Oats	Wheat	Cattle	Hogs	Poultry			Man	Horse			
12.00	51	49	20	184	237	309	73	2.50	110	35	14	29	280
11.00	48	46	19	174	227	294	68	3.00	95	33	22	27	265
10.00	45	43	18	164	217	279	63	3.50	90	31	30	25	250
9.00	42	40	17	154	207	264	58	4.00	85	29	38	23	235
8.00	39	37	16	144	197	249	53	4.50	80	27	46	21	220
7.00	36	34	15	134	187	234	48	5.00	75	25	54	19	205
6.00	33	31	14	124	177	219	43	5.50	70	23	62	17	190
5.00	30	28	13	114	167	204	38	6.00	65	21	70	15	175
4.00	27	25	12	104	157	189	33	6.50	60	19	78	13	160
3.00	24	22	11	94	147	174	28	7.00	55	17	86	11	145
2.00	21	19	10	84	137	159	23	7.50	50	15	94	9	130
1.00	18	16	9	74	127	144	18	8.00	45	13	102	7	115
.00	15	13	8	67	117	129	13	8.50	40	11	110	5	100
-1.00	12	10	7	57	107	114	8	9.00	35	9	118	3	85
-2.00	9	7	6	47	97	99	3	9.50	30	7	126	1	70
-3.00	6	4	5	37	87	84	0	10.00	25	5	134	0	55

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 3[illegible]¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 20¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of neighbors who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from diseases and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT

SALINE, GALLATIN COUNTIES - 1924

Prepared by H.C.M. Caso, M.L. Mosher, K.H. Myers*

The 17 farmers in these two counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 5.43% on an average investment of $22,764. afterfiguring their own time at about $475. per year. Those farms averaged 177 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent interest on the total investment, amounted to $569 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

By comparing your own record with the average results of the 17 farms in Saline and Gallatin counties on which records were kept last year, you may find at what points you can strengthen the organization of your own farm. The tables on pages 2 and 3 show the average results of the 17 farms, and the results from your own farm. These tables should help you to analyze your own record.

The results of several years of study of records similar to your own, show that a few important factors determine, to a large extent the size of the net farm income. (1) Good crop yields are necessary to secure a good income. On these 17 farms, while the average corn yield was 35.0 bushels per acre, the individual farms show a range of from 11 bushels to 60 bushels per acre. Other crops showed similar differences. (2) Returns per $100. invested in productivelivestock is a comparative measure of the efficiency of livestock. On those farms a variation of from $69 to $347 return for each $100 invested, was found. The percent of total income which livestock represents shows the importance of livestock in the system of farming followed. Records over a period of years show that farms on which a considerable part of the grain is marketed through livestock return a better income than those on which little livestock is kept. Last year was an exception to this on some farms since in many grain farmers earned a better income than the livestock man, with the possible exception of dairymen. The explanation of this as given on page 5 shows this to be an abnormal condition due to prices. No changes should be made in the system of farming followed, on the basis of the one year's records, unless supported by other reliable data secured over a longer period of time. (3) The efficiency of man and horse labor is measured in terms of crop areas per man and per horse. This varied from 36 to 110 acres worked per man, and from 8 to 25 acres worked per horse on these farms. The type of farming followed must be considered in comparing these factors but it is evident that there are wide differences in the efficiency with which different men operate their farms. (4) The expense per $100 gross income is a measure of the relation of expense to income. This varied on these farms from $32 to $98 last year. This difference may be due to any of a large number of factors. To make a more detailed comparison, such things as man labor cost per acre, machinery cost, and buildings and fencing cost per acre may be compared. Whatever it be due to, low expenses in relation to the gross income is essential to profitable farming.

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* J.E. Whitchurch and C. W. Simpson, farm advisers in Saline and Gallatin counties, respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Saline, Gallatin Counties

Factors helping to analyze the farm business	Your farm	Average of 17 farms
Rate Earned	%	5.43 %
Labor & Management Wage	$	$ 569.
Size of Farm - Acres		177.0
Crop Yields - Corn - Bushels		35.0
Oats - Bushels		38.1
Wheat- Bushels		15.3
Percent of land area Tillable	%	87.7%
Percent of tillable land in legumes	%	19.1%
Returns per $100. invested in all productive livestock	$	$ 150.25
For $100. in - Cattle	$	$ 94.80
- Swine	$	$ 200.90
- Poultry	$	$ 190.70
Percent of gross Income from Livestock	%	41.0 %
Man Labor Cost per Acre	$	$ 4.71
Crop Acres per Man		61.4
Crop Acres per Horse		16.3
Expense per $100. gross income	$	$ 57.45
Machinery Cost per Acre	$	$ 1.32
Building & Fencing cost per Acre	$	$ .83
Gross Receipts per Acre	$	$ 16.41
Total Expenses per Acre	$	$ 9.42
Net Receipts per Acre	$	$ 6.99

Saline, Gallatin Counties

	Your Farm	Average of 17 farms
1. Capital Investment - Total	$ _____	$ 22764
2. Land	$	17245
3. Farm Improvement	$	2159
4. Machinery and Equipment	$	759
5. Feed and Supplies	$	1220
6. Livestock	$	1381
7. Horses	$	542
8. Cattle	$	401
9. Sheep	$	10
10. Swine	$	252
11. Poultry	$	176
12. Receipts - Net Increases - Total	$ _____	$ 2904
13. Feed and Grain	$	1624
14. Labor off Farm	$	59
15. Miscellaneous	$	33
16. Livestock - Total	$	1188
17. Horses	$	7
18. Cattle	$	148
19. Sheep	$	15
20. Swine	$	440
21. Poultry	$	136
22. Egg Sales	$	207
23. Dairy Sales		235
24. Expenses - Net Decreases - Total	$ _____	$ 963
25. Farm Improvements	$	156
26. Livestock	$	---
27. Horses	$	---
28. Cattle	$	
29. Sheep	$	
30. Swine	$	
31. Poultry	$	
32. Machinery and Equipment	$	233
33. Feed and Supplies	$	---
34. Livestock Expense other than feed	$	26
35. Crop Expense	$	154
36. Labor hired	$	129
37. Taxes, Insurance, etc.	$	251
38. Miscellaneous	$	14
39. Receipts less Expenses	$ _____	$ 1941
40. Operators and Unpaid Family Labor	$	705
41. Net Income from Investment	$	1236
42. Farms with Tractor - Percent	%	30.0%
43. Value of land per Acre	$	97
44. Total Investment per Acre	$	129

Find Your Farm Leaks - (Saline, Gallatin Counties 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Percent Income from L.S.	Man Lab. Cost per Acre	Crop Acres Per		Expense per $100 Income	Gross Recep. per Acre	Size of Farm
	Corn	Oats	Wheat	Cattle	Hogs	Poultry			Man	Horse			
12.40	56	52	29	235	340	330	96	8.25	96	30	23	30.50	282
11.40	53	50	27	215	320	310	88	7.75	91	28	28	28.50	267
10.40	50	48	25	195	300	290	80	7.25	86	26	33	26.50	252
9.40	47	46	23	175	280	270	72	6.75	81	24	38	24.50	237
8.40	44	44	21	155	260	250	64	6.25	76	22	43	22.50	222
7.40	41	42	19	135	240	230	56	5.75	71	20	48	20.50	207
6.40	38	40	17	115	220	210	48	5.25	66	18	53	18.50	192
5.40	35	38	15	95	200	190	40	4.75	61	16	58	16.50	177
4.40	32	36	13	75	180	170	32	4.25	56	14	63	14.50	162
3.40	29	34	11	55	160	150	24	3.75	51	12	68	12.50	147
2.40	26	32	9	35	140	130	16	3.25	46	10	73	10.50	132
1.40	23	30	7	15	120	110	8	2.75	41	8	78	8.50	117
0.40	20	28	5	- 5	100	90	0	2.25	36	6	83	6.50	102
-0.60	17	26	3	-25	80	70		1.75	31	4	88	4.50	87
-1.60	14	24	1	-45	60	50		1.25	26	2	93	2.50	72
-2.60	11	22	0	-65	40	30		.75	21	0	98	0.50	57

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT

TAZEWELL, LOGAN, MACON, and McLEAN* COUNTIES - 1924

Prepared by H.C.M. Case, M.L. Mosher, K.H.Myers**

The 30 farmers in the four counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 7.26% on an average investment of $59,691 after figuring their own time at about $600 per year. These farms averaged 232.5 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent. interest on the total investment, amounted to $1904 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 30 farms in comparison with those of more profitable and less profitable farms. The 10 most profitable farms earned 10.12% on the investment, while the least profitable group made only 3.83%. Expressed as the Labor and Management wage, the better group made an average labor income of $3462, while the least profitable group lacked $974 of having anything left to pay the manager for his own labor and management, a difference of $4436. In comparing the more profitable farms with the least profitable it will be noted that the 10 more profitable farms averaged over 35 acres larger in size, making it possible to use equipment, machinery and labor to greater advantage.

As shown on page 2, the more profitable group received larger crop yields than did the least profitable group. Both groups of farms had considerable land in legume crops. The more profitable farms received a larger return for each $100 invested in productive livestock, and while their livestock represented only 29.8% of the total gross income compared to 36.9% on the lower group, they received a larger total income from livestock as well as from the farm as a whole. The more profitable farms then had larger crop yields and better livestock and a larger income from livestock but a smaller percentage of the total income from livestock. This indicates that the farms receiving the major part of their income from the sale of grains and with livestock well handled paid better in 1924 than the farms receiving most of their income from livestock. This is an abnormal condition, due to the price situation, however, and no interpretation should be attempted without reading the explanation given on page 5. They also handled about 24 acres more crops with each man and about 3 acres more crops with each horse than did the least profitable group, a factor which was responsible for a lower labor cost per acre.

For every $100 taken in, the 10 most profitable farms had an expense of $32.15, while the 10 least profitable farms had an expense of $60.17. This may be due to any one of a larger number of items of cost, but as shown, the more profitable farms kept the machinery expenses and building and fencing expenses as well as other operating expenses at a lower figure per acre. This is probably due in part to the difference in the size of farms. Whatever it is due to is well known that low expenses in relation to the total income is essential to profitable farming. The more profitable farms received $9.75 larger gross returns per acre and their expenses were $3.95 less per acre than on the 10 least profitable farms, giving as a result the net receipts of $23.77 per acre as compared with only $10.07 per acre on the 10 least profitable farms.

*Records in the east part of McLean Co. were used in the Champaign,Ford Co. Report.
**R.E.Arnet, J.H.Checkley, E.E.Walworth and H.Fahrnkopf, farm advisers in Tazewell, Logan, Macon, and McLean Co., respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Tazewell, Logan, Macon and McLean Counties.

Factors helping to analyze the farm business	Your farm	Average of 30 farms	10 most profitable farms	10 least profitable farms
Rate Earned	%	7.26%	10.12	3.83
Labor & Management Wage	$	1904.	3462.	-974.
Size of Farm - Acres		232.5	240.4	204.5
Crop Yields - Corn - Bushels		46.8	49.2	45.1
Oats - Bushels		54.3	56.1	53.1
Wheat -Bushels		20.5	24.1	19.2
Percent of land area Tillable	%	93.8%	91.1	95.1
Percent of tillable land in legumes	%	12.5%	12.6	14.7
Returns per $100. invested in all productive livestock	$	$140.60	148.25	129.50
For $100 in Cattle	$	$ 91.50	121.00	70.00
Swine	$	$198.30	205.65	155.50
Poultry	$	$118.60	91.50	111.45
Percent of gross Income from Livestock	%	34.0%	29.8	36.9
Man Labor Cost per Acre	$	$ 5.37	5.01	5.76
Crop Acres per Man		88.7	101.5	77.4
Crop Acres per Horse (With tractor)		27.5	28.2	26.0
(Without tractor)		18.6	18.9	14.8
Expense per $100. gross Income	$	$ 40.65	32.15	60.17
Machinery Cost per Acre	$	$ 2.55	1.88	3.86
Building & Fencing cost per Acre	$	$ .96	.92	1.17
Gross Receipts per Acre	$	$ 31.39	35.03	25.28
Total Expenses per Acre	$	$ 12.73	11.26	15.21
Net Receipts per Acre	$	$ 18.66	23.77	10.07

Tazewell, Logan, Macon, McLean Counties.

	Your farm	Average of 30 farms	10 most profitable farms	10 least profitable farms
1. Capital Investment - Total	$	59691	56435	53741
2. Land	$	48385	45745	42300
3. Farm Improvements	$	4143	3688	4525
4. Machinery and Equipment	$	1673	1409	2028
5. Feed and Supplies	$	3065	3308	2741
6. Livestock	$	2420	2285	2147
7. Horses	$	791	720	746
8. Cattle	$	747	857	574
9. Sheep	$	61	23	1
10. Swine	$	683	547	669
11. Poultry	$	138	138	157
12. Receipts - Net Increases - Total		7298	8421	5170
13. Feed and Grain	$	4695	5796	3112
14. Labor off Farm	$	71	16	128
15. Miscellaneous	$	49	101	21
16. Livestock - Total	$	2483	2508	1909
17. Horses	$	---	---	11
18. Cattle	$	323	382	129
19. Sheep	$	155	18	220
20. Swine	$	1423	1245	1139
21. Poultry	$	75	30	84
22. Egg Sales	$	88	88	93
23. Dairy Sales	$	419	745	233
24. Expenses - Net Decreases - Total	$	2201	2042	2197
25. Farm Improvements	$	223	221	240
26. Livestock	$	23	40	---
27. Horses	$	23	40	
28. Cattle	$			
29. Sheep	$			
30. Swine	$			
31. Poultry	$			
32. Machinery and Equipment	$	593	452	790
33. Feed and Supplies	$	---	---	---
34. Livestock Expense other than feed		62	36	94
35. Crop Expense	$	283	320	256
36. Labor hired	$	490	541	265
37. Taxes, Insurance, etc.	$	433	408	479
38. Miscellaneous.	$	44	24	73
39. Receipts less Expenses	$	5097	6379	2973
40. Operator's and Unpaid Family Labor		759	665	914
41. Net Income from Investment	$	4338	5714	2059
42. Farms with Tractor - Percent	%	56.3%	30.0	70.0
43. Value of land per Acre	$	208	190	207.
44. Total Investment per Acre	$	257	235	265.

Find Your Farm Leaks -(Tazewell, Logan, Macon, McLean Counties - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Percent Income from L.S.	Man Lab. Cost per Acre	Crops Acres per			Expense per $100 Income	Gross Recep. per Acre	Size of farm
	Corn	Oats	Wheat	Cattle	Hogs	Poultry			Man	Horse Tractor	Horse No Trac.			
14.25	68	75	35	197	338	259	90	2.00	131	42	26	6	45	372
13.25	65	72	33	182	318	239	82	2.50	125	40	25	11	43	352
12.25	62	69	31	167	298	219	74	3.00	119	38	24	16	41	332
11.25	59	66	29	152	278	199	66	3.50	113	36	23	21	39	312
10.25	56	63	27	137	258	179	58	4.00	107	34	22	26	37	292
9.25	53	60	25	122	238	159	50	4.50	101	32	21	31	35	272
8.25	50	57	23	107	218	139	42	5.00	95	30	20	36	33	252
7.25	47	54	21	92	198	119	34	5.50	89	28	19	41	31	232
6.25	44	51	19	77	178	99	26	6.00	83	26	18	46	29	212
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3.25	35	42	13	32	118	39	2	7.50	65	20	15	61	23	152
2.25	32	39	11	17	98	19	0	8.00	59	18	14	66	21	132
1.25	29	36	9	2	78	-1		8.50	53	16	13	71	19	112
.25	26	33	7	-13	58	-21		9.00	47	14	12	76	17	92
-.75	23	30	5	-28	38	-41		9.50	41	12	11	81	15	72

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

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ANNUAL FARM BUSINESS REPORT

WABASH, EDWARDS, RICHLAND, AND LAWRENCE COUNTIES - 1924.

Prepared by H.C.M. Case, M. L. Mosher, K. H. Myers*

The 41 farmers in these counties who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 7.23% on an average investment of $20,085 after figuring their own time at about $450.00 per year. These farms averaged 174.3 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 percent interest on the total investment, amounted to $902.00 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726.00 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The tables on pages 2 and 3 show the average results of the 41 farms in comparison with those of more profitable and less profitable farms. The 13 most profitable farms earned 13.96% on the investment, while the least profitable group made only 1.65%. Expressed as the Labor and Management wage, the better group made an average labor income of $1940, while the least profitable group lacked $249, of having anything left to pay the manager for his own labor and management, a difference of $2189.00. In comparing the more profitable farms with the least profitable it will be noted that the 13 more profitable farms averaged 35 acres smaller in size, a fact which should be noted in comparing the efficiency with which equipment, machinery and labor is used.

The records show that the more profitable group had larger crop yields and a larger percentage of the tillable land in legume crops. The more profitable farms received a much larger return for every $100.00 invested in productive livestock and for each class of livestock. They received 62.8% of their income from livestock compared with 70.4% on the least profitable farms, but due to the larger returns on the more profitable farms, they received a larger income from livestock. The more profitable farms then had larger crop yields, better livestock and a larger income from livestock. The least profitable group handled about 13 acres more crops with each man but about 2.5 acres less with each horse than did the most profitable group, a factor which was responsible for a slightly higher man labor cost per acre on the most profitable group.

For every $100.00 taken in, the 13 most profitable farms had an expense of $43.90 while the 18 least profitable farms had an expense of $81.80. This may be due to any one of a large number of items of cost. It may be due to low income as well as to high operating expense, but low expense per $100.00 income is essential to profitable farming. The more profitable farms received $15.86 larger gross returns per acre and their expenses were only $3.39 more per acre than on the 13 least profitable farms, giving as a result the net receipts of $14.18 per acre as compared with only $1.71 per acre on the 13 least profitable farms.

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*F. A. Fisher, H. C. Gilkerson, W.B. Bunn, and H.C. Wheeler, farm advisers in Wabash, Edwards, Richland and Lawrence counties, respectively, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Wabash, Edwards, Richland and Lawrence Counties.

Factors helping to analyze the farm business		Your farm	Average of 41 farms	13 most profitable farms	13 least profitable farms
Rate Earned	%		7.23%	13.96%	1.65%
Labor & Management Wage	$		$902.	1940.	-249.
Size of Farm - Acres			174.3	159.4	194.3
Crop Yields - Corn - Bushels			41.7	44.5	31.8
Oats - Bushels			35.5	34.3	33.9
Wheat- Bushels			12.3	12.6	9.9
Percent of land area Tillable	%		80.5	72.7	78.6
Percent of tillable land in legumes	%		21.8	26.4	21.4
Returns per $100. invested in all productive livestock	$		$157.10	241.40	95.60
For $100. in - Cattle	$		$107.70	228.55	53.05
- Swine	$		$247.15	268.00	208.60
- Poultry	$		$197.55	256.05	151.70
Percent of gross Income from Livestock	%		55.0%	62.8 %	70.4
Man Labor Cost per Acre	$		$ 5.14	5.85	4.04
Crop Acres per Man			72.5	64.9	77.7
Crop Acres per Horse			21.4	20.8	18.4
Expense per $100. gross Income	$		$ 54.25	43.90	81.80
Machinery Cost per Acre	$		$ 1.24	1.60	.88
Building & Fencing cost per Acre	$		$ .72	.61	.67
Gross Receipts per Acre	$		$ 18.23	25.29	9.43
Total Expenses per Acre	$		$ 9.89	11.11	7.72
Net Receipts per Acre	$		$ 8.34	14.18	1.71

Wabash, Edwards, Richland, and Lawrence counties

	Your farm	Average of 41 farms	13 most profitable farms	13 least profitable farms
1. Capital Investment - Total	$	$20085	$16202	$20206
2. Land	$	14724	11507	14612
3. Farm Improvements	$	1845	1602	1944
4. Machinery and Equipment	$	764	702	675
5. Feed and Supplies	$	1218	1034	1070
6. Livestock	$	1534	1357	1905
7. Horses	$	443	413	473
8. Cattle	$	626	494	950
9. Sheep	$	23	21	10
10. Swine	$	293	268	309
11. Poultry	$	144	161	163
12. Receipts - Net Increases - Total	$	3177	4032	1832
13. Feed and Grain	$	1327	1345	450
14. Labor off Farm	$	71	129	55
15. Miscellaneous	$	31	24	28
16. Livestock - Total	$	1748	2534	1299
17. Horses	$	---	---	---
18. Cattle	$	206	183	283
19. Sheep	$	34	34	5
20. Swine	$	742	813	579
21. Poultry	$	92	150	49
22. Egg Sales	$	198	290	177
23. Dairy Sales	$	476	1064	206
24. Expenses - Net Decreases - Total	$	1036	1062	884
25. Farm Improvements	$	126	97	131
26. Livestock	$	29	31	27
27. Horses	$	29	31	27
28. Cattle	$			
29. Sheep	$			
30. Swine	$			
31. Poultry	$			
32. Machinery and Equipment	$	217	255	172
33. Feed and Supplies	$	---	---	---
34. Livestock Expenses other than feed	$	20	23	18
35. Crop Expense	$	167	162	124
36. Labor hired	$	209	224	171
37. Taxes, Insurance, etc.	$	238	224	218
38. Miscellaneous	$	30	46	23
39. Receipts less Expenses	$	2141	2970	948
40. Operator's and Unpaid Family Labor	$	687	709	615
41. Net Income from Investment	$	1454	2261	333
42. Farms with Tractor - Percent	%	31.7	30.8	23.1
43. Value of land per Acre	$	85.	72	75
44. Total Investment per Acre	$	115	102	104

Find Your Farm Leaks - (Wabash, Edwards, Richland, Lawrence counties - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate	Bushels per Acre of			Returns per $100 Invested in			Percent Income	Man Lab. Cost per	Crop Acres per		Expense	Gross	Size
Earned	Corn	Oats	Wheat	Cattle	Hogs	Poultry	from L.S.	Acre	Man	Horse	per $100 Income	Recep. per A.	of Farm.
14.25	63	57	19	178	387	303	97	1.75	129	35	12	32	240
13.25	60	54	18	168	367	288	91	2.25	121	33	18	30	235
12.25	57	51	17	158	347	273	85	2.75	113	31	24	28	225
11.25	54	48	16	148	327	258	79	3.25	105	29	30	26	215
10.25	51	45	15	138	307	243	73	3.75	97	27	36	24	205
9.25	48	42	14	128	287	228	67	4.25	89	25	42	22	195
8.25	45	39	13	118	267	213	61	4.75	81	23	48	20	185
7.25	42	36	12	108	247	198	55	5.25	73	21	54	18	175
6.25	39	33	11	98	227	183	49	5.75	65	19	60	16	165
5.25	36	30	10	88	207	168	43	6.25	51	17	66	14	155
4.25	33	27	9	78	187	153	37	6.75	49	15	72	12	145
3.25	30	24	8	68	167	138	31	7.25	41	13	78	10	135
2.25	27	21	7	58	147	123	25	7.75	33	11	84	8	125
1.25	24	18	6	48	127	108	19	8.25	25	9	92	6	115
0.25	21	15	5	38	107	93	13	8.75	17	7	98	4	105
-0.75	18	12	4	28	87	78	7	9.25	9	5	104	2	95

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers of meat animals in 1924 did not fare so well as they might

expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre, and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays.

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS
WILL COUNTY - 1924

Prepared by H.C.M.Case, M.L.Mosher, K.H.Myers*

The 34 farmers in your county who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 6.25% on an average investment of $42,807.00 after figuring their own time at $600.00 per year. These farms averaged 188.2 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent. interest on the total investment, amounted to $1126.00 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726.00 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The table on page 2 shows the average results of the 34 farms in comparison with those of more profitable and less profitable farms. The 11 most profitable farms earned 9.64% on the investment, while the least profitable group made only 2.61%. Expressed as the Labor and Management wage, the better group made an average labor income of $2739. while the least profitable group lacked $452. of having anything left to pay the manager for his own labor and management, a difference of $3191.00. In comparing the more profitable farms with the least profitable it will be noted that the 11 more profitable farms averaged over 50 acres larger in size, making it possible to use equipment, machinery and labor to greater advantage.

The records show that the more profitable group had larger crop yields and a larger percentage of the tillable land in legume crops. The more profitable farms received over 35% larger returns for every $100.00 invested in productive livestock and the same was true for each class of livestock. Also they received 57.6% of their income from livestock compared with only 49.2% on the least profitable farms. The more profitable farms then had larger crop yields, better livestock and a larger percentage of their return from livestock. They also handled about 9 acres more crops with each man and 3 acres more crops with each horse than did the least profitable group, a factor which was responsible for a slightly lower labor cost per acre.

For every $100.00 taken in, the 11 most profitable farms had an expense of $41.30 while the 11 least profitable farms had an expense of $71.70. This may be due to any one of a large number of items of cost, but as shown, the more profitable farms kept the machinery expenses and building and fencing expenses as well as other operating expenses at a lower figure per acre. While this may be due in part to the size of the farms, usually, low expenses per $100 income mean that no unnecessary expenditures are made. The more profitable farms received $10.46 larger gross returns per acre and their expenses were $1.88 less per acre than on the 11 least profitable farms, giving as a result the net receipts of $19.78 per acre as compared with only $6.44 per acre on the 11 least profitable farms.

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* J. F. Hedgcock and R. F. Clark, farm advisers in Will County, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Factors helping to analyze the farm business		Your Farm	Average of 34 farms.	11 most profitable farms.	11 least profitable farms.
Rate Earned	%		6.26%	9.64%	2.61%
Labor & Management Wage	$		$1126.	$2739.	$-452.
Size of Farm - Acres			188.2	223.2	168.1
Crop Yields - Corn - Bushels			31.2	35.7	24.8
Oats - Bushels			53.7	55.2	51.8
Wheat - Bushels			29.7	31.0	27.1
Percent of land area Tillable	%		95.6	91.8	97.5
Percent of tillable land in legumes	%		15.1	18.9	15.2
Returns per $100. invested in all productive livestock	$		120.85	139.60	103.15
For $100. in - Cattle	$		101.95	128.90	93.60
- Swine	$		147.50	154.20	122.70
- Poultry	$		169.00	194.20	132.60
Percent of gross Income from Livestock	%		52.8	57.4	49.2
Man Labor Cost per Acre	$		6.47	6.18	6.43
Crop Acres per Man			80.3	87.1	77.9
Crop Acres per Horse(With tractor)			26.2	31.7	27.3
(Without tractor)			23.1	19.7	20.2
Expense per $100.00 gross income	$		50.43	40.85	70.83
Machinery Cost per Acre	$		2.89	2.85	3.10
Building & Fencing cost per Acre	$		1.42	1.29	1.59
Gross Receipts per Acre	$		28.74	33.52	22.06
Total Expenses per Acre	$		14.50	13.74	15.62
Net receipts per Acre	$		14.24	19.78	6.44

Will County

	Your farm	Average of 34 farms.	11 most profitable farms.	11 least profitable farms.
1. Capital Investment - Total	$	$42807	$45788	$41503
2. Land	$	31459	33869	30657
3. Farm Improvements	$	4691	4374	4731
4. Machinery and Equipment	$	1949	2211	1908
5. Feed and Supplies	$	1970	2224	1812
6. Livestock	$	2738	3110	2395
7. Horses	$	600	602	623
8. Cattle	$	1425	1637	1227
9. Sheep	$	16	14	13
10. Swine	$	539	725	348
11. Poultry	$	158	132	184
12. Receipts - Net Increases - Total	$	5409	7481	3709
13. Feed and Grain	$	2379	3059	1764
14. Labor off Farm	$	88	56	84
15. Miscellaneous	$	86	66	37
16. Livestock - Total	$	2856	4300	1824
17. Horses	$	---	4	---
18. Cattle	$	522	1237	174
19. Sheep	$	59	15	13
20. Swine	$	977	1489	428
21. Poultry	$	95	113	95
22. Egg Sales	$	172	147	148
23. Dairy Sales	$	1031	1295	966
24. Expenses - Net Decreases - Total	$	1906	2225	1861
25. Farm Improvements	$	268	288	267
26. Livestock	$	13	--	30
27. Horses	$	13	--	30
28. Cattle	$			
29. Sheep	$			
30. Swine	$			
31. Poultry	$			
32. Machinery and Equipment	$	545	637	522
33. Feed and Supplies	$	-	-	-
34. Livestock Expense other than feed	$	97	108	102
35. Crop Expense	$	207	247	206
36. Labor hired	$	396	539	316
37. Taxes, Insurance, etc.	$	319	370	303
38. Miscellaneous	$	61	36	115
39. Receipts less Expenses	$	3503	5256	1848
40. Operators and Unpaid Family Labor	$	822	841	766
41. Net Income from Investment	$	2681	4415	1082
42. Farms with Tractor - Percent	%	67.6%	72.7%	63.6%
43. Value of land per Acre	$	167	152	182
44. Total Investment per Acre	$	227	205	247

Find Your Farm Leaks - (Will County - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate Earned	Bushels per Acre of Corn	Bushels per Acre of Oats	Bushels per Acre of Wheat	Returns per $100 Invested in Cattle	Returns per $100 Invested in Hogs	Returns per $100 Invested in Poultry	Percent Income from L.S.	Man Lab. Cost per Acre	Crops Acres per Man	Crops Acres per Horse Tractor	Crops Acres per Horse No Trac.	Expense per $100 Income	Gross Recep. per Acre	Size of Farm
13.25	59	89	51	242	260	337	95	3.00	122	40	30	15	43	293
12.25	55	84	48	222	244	313	89	3.50	116	38	29	20	41	278
11.25	51	79	45	202	228	289	83	4.00	110	36	28	25	39	263
10.25	47	74	42	182	212	265	77	4.50	104	34	27	30	37	248
9.25	43	69	39	162	196	241	71	5.00	98	32	26	35	35	233
8.25	39	64	36	142	180	217	65	5.50	92	30	25	40	33	218
7.25	35	59	33	122	164	193	59	6.00	86	28	24	45	31	203
6.25	31	54	30	102	148	169	53	6.50	80	26	23	50	29	188
5.25	27	49	27	82	122	145	47	7.00	74	24	22	55	27	173
4.25	23	44	24	62	106	121	41	7.50	68	22	21	60	25	158
3.25	19	39	21	42	90	97	35	8.00	62	20	20	65	23	143
2.25	15	34	18	22	74	73	29	8.50	56	18	19	70	21	128
1.25	11	29	15	2	58	49	23	9.00	50	16	18	75	19	113
0.25	7	24	12	-20	42	25	17	9.50	44	14	17	80	17	98
-1.25	3	19	9	-40	26	1	11	10.00	38	12	16	85	15	83
-2.25	0	14	6	-60	10	-23	5	10.50	32	10	15	90	13	68

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

Different factors which we wish to call to your attention include the following:

1. Total Farm Earnings. These are shown first in terms of the rate earned on the total farm investment, and second, in terms of the Labor and Management wage. However, in studying the farm earnings you will be interested in noting the last three items on page 2 which show the wide differences between the one-third most profitable and the one-third least profitable farms in the gross receipts and the total expenses per acre, and in the resulting difference in the net receipts per acre. These wide differences in farm earnings call for an analysis of a number of different factors which affect the farm earnings. These factors are included in the following discussion in which we endeavor to point out why these different factors are of special importance.

2. Crop Yields. Good crop yields are one essential requirement for good incomes. Cost of production studies on 18 farms in one community showed that the cost of producing a bushel of corn varied from 39¢ on one farm to 79¢ per bushel on another farm for the same year. Similar differences occurred on other crops. A large part of the difference in cost is due to the difference in yield per acre. It is not uncommon to find a difference of 25¢ a bushel in the cost of producing corn which can be attributed directly to the difference in the yield per acre since most items of cost do not increase as the yield increases. When crop yields are low one can well afford to study the practices of men who secure higher yields. In order to determine what is responsible for these differences attention should be given to the rotation of crops, quality and variety of seed, use of legumes and manure, use of limestone and phosphate where needed, preparation of seed bed, cultivation, protection from disease and insects, and drainage.

3. Returns from Livestock. One of the best measures of the efficiency of livestock, in these records, is the returns per $100.00 invested. The returns per $100.00 worth of feed fed any class of livestock, however, gives you more reliable information as to whether the efficiency of that class of livestock may be improved. You are urged, therefore, to keep the feed record on pages 38 and 39 of the farm account book, at least for the livestock from which you receive considerable income. As evidence of the wide variation in livestock efficiency on farms, cost accounts secured on 18 farms in the same community showed a range in the cost of feed in producing pork of $4.18 to $8.81 per 100 pounds gain in weight for the same year.

The per cent. of total receipts from livestock enables one to know how large a factor livestock is in determining the farm income. On some farms where livestock represented a considerable part of the income in 1924 the earnings were reduced due to the abnormal price situation. As compared with the five-year average of farm prices from 1909 to 1914 the prices of meat animals in 1924 were only 9% higher than for the five-year period, while the prices of grains were 29% and the prices of dairy products and eggs were 37% higher. This means that farms which were heavy producers

of meat animals in 1924 did not fare so well as they might expect to do on an average of a number of years when compared with either grain or dairy farms. In spite of this fact the larger proportion of livestock returns on the better farms indicate that good livestock properly handled paid even under the adverse price situation.

Success with livestock, as with crop production, depends upon a number of factors among which the following should be noted: Raising a large per cent. of young animals, sanitation, prevention of disease, ability in buying and selling livestock, keeping animals of good quality, good feeding practices - especially the growing of sufficient legume forage to supply most of the protein requirements, careful purchasing of additional protein and mineral supplements when needed, and the economical use of roughage which is available on all farms.

Some men are more successful than others in handling livestock. It is not recommended that anyone quickly change his practice and suddenly go into extensive feeding or breeding operations. It is better to work gradually into the livestock business, building up either breeding or feeding operations as he finds that livestock is filling a place in his system of farming.

4. Use of Man and Horse Labor. One of the best measures of the use of labor is the number of crop acres worked per man or per horse when the farms are of the same general type. When the cost of man labor and horse labor are noted it emphasizes at once the importance of watching these items of expense and arranging the organization of the farm to make efficient use of labor.

Cost accounting data secured on 18 farms in the same community for the same year show that the net cost of keeping a work horse ranged from $63.76 to $124.15; or an average of $93.08 per horse. When it is considered that a horse usually works about 20 acres of crops when a tractor is not employed, it means that horse labor costs will range from $3.50 to over $6.00 per acre on different farms. This wide range in the cost of horse labor is dependent not only on the number of acres handled with one horse, but also upon the economy with which the horse is fed and whether or not other items of expense are kept at a low figure. The careful planning of a rotation of crops is probably one of the best ways to reduce both man and horse labor costs. A rotation should be chosen so that as uniform an amount of man and horse labor is required from early spring until late fall as possible. Frequently the size of certain enterprises within the farm business may be adjusted to utilize the available family labor to advantage. Feeding down crops and keeping enough livestock to utilize labor during the seasons when farm work is light are other definite means of increasing the efficiency with which labor is used. Repeated study of farm records over the state indicate that occasionally a man may reduce the amount of both man labor and horse labor to a point where lower profits are secured from both crop and livestock enterprises because of a lack of well directed labor. It is usually found, however, that the more profitable farms not only secure larger yields per acre, but they handle a larger acreage per worker or per horse.

5. Expense per $100. Gross Income. This is a measure of thrift in all parts of the farm business. It does not misrepresent a farm which has a large expense if the income is correspondingly high. However, it is a well-known principle in all business organization that expenses must be kept low in proportion to income if the business is to prove profitable. Cost accounts kept on 18 farms in the same community showed that the annual building expense per acre varied from $1.42 to $6.63 per acre; the annual expense for fences varied from $ .32 to $2.36 per acre; and machinery and equipment expenses varied from $ .83 per acre to $2.46. These data show how much more efficient some farmers are than others in keeping expenses low.

Farmers who are most successful in keeping expenses low in proportion to the income plan their work so as to make the labor of themselves and members of the family as productive as possible. Enterprises are included in the farm business that utilize available labor at all seasons of the year. While they secure good varieties of seed, in so far as possible, they raise and prepare their own seed. Rainy days and off seasons are used to repair buildings, fences, machinery, and harness. This prolongs the life of equipment, saves in the purchase of new equipment and also saves paying out money for highly paid skilled labor. By having equipment in shape they also save the expense incident to delay in the busy season caused by broken machinery or fences, which might have been prevented by timely repair.

6. Size of Farm. In most types of farming there is a limit to the amount of product which can be profitably secured per acre. When one finds his farm is smaller than the more profitable farms in his locality and his income is low even though he has good crop yields and good returns from livestock, a weakness is frequently found in the small size of farm. This situation may be remedied by buying or renting additional land or changing the type of farming to a more highly intensive or specialized type which will bring a larger volume of production. It must be recognized, however, that some men have more ability than others in handling a large sized business. Some men may find their farm is considerably larger than the best paying farms, but the income is low because of too large an area handled from one point. Some farmers may find that they can secure a larger net profit by renting out some land and doing more efficient work on a smaller acreage. It is a well-known principle of farm management that a farm must be large enough to utilize capital in the form of buildings, machinery and other equipment, and labor in an economical way. Just how large the farm should be, however, is a question which depends upon the ability of the operator himself as a manager.

Balanced Farming Pays

Each of the factors previously discussed plays a part in determining farm profits. Full success in farming requires that all parts of the farmer's business be given attention. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator returns which will enable him to maintain a good standard of living for his family.

ANNUAL FARM BUSINESS REPORT
WOODFORD COUNTY - 1924

Prepared by H.C.M.Case, M.L.Mosher, K.H.Myers*

The 101 farmers in your county who kept farm records in 1924 in the book prepared by the Extension Service earned a rate of 7.24% on an average investment of $58,565.00 after figuring their own time at about $600.00 per year. These farms averaged 208.1 acres in size. The Labor and Management wage which represents what a man has left as pay for his own work and managing ability after paying all expenses and allowing 5 per cent. interest on the total investment, amounted to $1890.00 as an average for all farmers. The value of the food products furnished the home and the use of the dwelling house represent an income in addition to that shown. On 11 farms in Champaign and Piatt counties a careful record was kept of these two items, the value of which amounted to $726.00 per farm at farm prices.

A comparison with other farmers in your community will help you to find at what point you can strengthen your farm. The table on page 2 shows the average results of the 101 farms in comparison with those of more profitable and less profitable farms. The 34 most profitable farms earned 9.83% on the investment, while the least profitable group made only 4.36%. Expressed as the Labor and Management wage, the better group made an average labor income of $3564. while the least profitable group had an average of $204.00, a difference of $3360.00. In comparing the more profitable farms with the least profitable it will be noted that the 34 more profitable farms averaged over 23 acres larger in size, making it possible to use equipment, machinery and labor to greater advantage.

As shown on page 2, the more profitable group received larger crop yields than did the least profitable group. They also had a larger percent of tillable land on their farms and both groups of farms had considerable land in legume crops. They received a 25% larger return for each $100. invested in productive livestock, but their livestock represented only 30.2% of the total gross income compared to 40.7% on the lower group. The more profitable farms then had larger crop yields and better livestock but a smaller percentage of their return from livestock. This indicates that the more strictly grain farms with livestock well handled paid better in 1924 than the farms with more livestock. This is an abnormal condition, however, and no interpretation should be given without reading the explanation of prices given on page 5. They also handled about 12.5 acres more crops with each man and 3 acres more crops with each horse than did the least profitable group, a factor which was responsible for a slightly lower labor cost per acre.

For every $100. taken in, the 34 most profitable farms had an expense of $30.13, while the 34 least profitable farms had an expense of $50.55. This may be due to any one of a large number of items of cost, but as shown, the more profitable farms kept the machinery expenses and building and fencing expenses as well as other operating expenses at a lower figure per acre. While this may be due in part to the size of the farms, usually, low expenses per $100. income mean that no unnecessary expenditures are made. The more profitable farms received larger gross returns per acre and their expenses were less per acre than on the 34 least profitable farms, giving as a result the net receipts of $27.61 per acre as compared with only $11.90 per acre on the 34 least profitable farms.

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* P. E. Johnston and L. J. Berry, farm advisers in Woodford County, cooperated in supervising and collecting the records used in this report.

A detailed statement of the farm earnings is given on page 3, while on page 4 you will find a chart on which you may plot the results from your own farm which will show at what points your farm showed strength or weakness.

Factors helping to analyze the farm business	Your farm	Average of 101 farms	34 most profitable farms	34 least profitable farms
Rate Earned	%	7.24%	9.83%	4.36%
Labor & Management Wage	$	$1890.	$3564.	$204.
Size of Farm - Acres		208.1	218.6	195.5
Crop Yields - Corn - Bushels		48.0	49.8	44.5
Oats - Bushels		50.8	51.1	49.1
Wheat - Bushels		24.4	28.3	23.7
Percent of land area Tillable	%	89.5	95.4	82.5
Percent of tillable land in legumes	%	11.4	9.4	13.1
Returns per $100. invested in all productive livestock	$	119.30	129.80	104.80
For $100. in - Cattle	$	72.30	76.10	57.50
- Swine	$	169.25	183.00	152.70
- Poultry	$	166.66	169.25	163.30
Percent of gross Income from Livestock	%	33.9	30.2	40.7
Man Labor Cost per Acre	$	5.82	5.68	5.80
Crop Acres per Man		90.7	95.5	83.0
Crop Acres per Horse(With tractor)		24.7	25.1	22.2
(Without tractor)		19.9	22.0	17.3
Expense per $100. gross Income	$	37.47	30.13	50.55
Machinery Cost per Acre	$	2.04	1.81	2.24
Building & Fencing cost per Acre	$	.97	.88	1.00
Gross Receipts per Acre	$	32.58	39.52	24.07
Total Expenses per Acre	$	12.21	11.91	12.17
Net Receipts per Acre	$	20.37	27.61	11.90

WOODFORD COUNTY

		Your farm	Average of 101 farms	34 most profitable farms	34 least profitable farms
1.	Capital Investment - Total	$ _____	$58565	$61370	$53340
2.	Land	$	47531	50094	43286
3.	Farm Improvements	$	3824	3509	3569
4.	Machinery and Equipment	$	1568	1500	1631
5.	Feed and Supplies	$	2987	3472	2347
6.	Livestock	$	2655	2795	2507
7.	Horses	$	842	896	777
8.	Cattle	$	910	987	851
9.	Sheep	$	65	48	40
10.	Swine	$	697	734	693
11.	Poultry	$	141	130	146
12.	Receipts - Net Increases -Total	$ _____	6779	8640	4706
13.	Feed and Grain	$	4399	5959	2703
14.	Labor off Farm	$	26	37	17
15.	Miscellaneous	$	54	34	68
16.	Livestock - Total	$	2300	2610	1918
17.	Horses	$	2	2	---
18.	Cattle	$	404	466	301
19.	Sheep	$	75	83	23
20.	Swine	$	1328	1567	1138
21.	Poultry	$	89	95	77
22.	Egg Sales	$	144	122	166
23.	Dairy Sales	$	258	275	213
24.	Expenses - Net Decreases -Total	$ _____	1762	1820	1660
25.	Farm Improvements	$	203	193	194
26.	Livestock	$	---	---	6
27.	Horses	$	---	---	6
28.	Cattle	$			
29.	Sheep	$			
30.	Swine	$			
31.	Poultry	$			
32.	Machinery and Equipment	$	426	395	438
33.	Feed and Supplies	$	---	---	---
34.	Livestock Expense other than feed		46	42	44
35.	Crop Expense	$	191	218	166
36.	Labor hired	$	433	460	414
37.	Taxes, Insurance, etc.	$	432	482	371
38.	Miscellaneous	$	31	30	27
39.	Receipts less Expenses	$ _____	5017	6820	3046
40.	Operators and Unpaid Family Labor	$	779	783	719
41.	Net Income from Investment	$	~~4328~~ 4238	6037	2327
42.	Farms with Tractor - Percent	%	53.4%	52.9%	50.0%
43.	Value of land per Acre	$	228	229	221
44.	Total Investment per Acre	$	281	281	273

Find Your Farm Leaks - (Woodford County - 1924)

The numbers just above the line across the middle of the page are approximately the average for your county for the factors named at the top of the page. By drawing a line across each column at the number measuring the efficiency of your farm in that factor, you can compare your efficiency with that of other farmers in your community.

Rate	Bushels per Acre of			Returns per $100 Invested in			Percent Income	Man Lab. Cost per	Crops Acres per			Expense per $100	Gross Recep.	Size of
									Man	Horse				
Earned	Corn	Oats	Wheat	Cattle	Hogs	Poultry	from L.S.	Acre		Tractor	No Trac.	Income	per Acre	Farm
14.25	76	86	46	212	310	336	90	2.50	132	46	27	3	54	348
13.25	72	81	43	192	290	312	82	3.00	126	43	26	8	51	328
12.25	68	76	40	172	270	288	74	3.50	120	40	25	13	48	308
11.25	64	71	37	152	250	264	66	4.00	114	37	24	18	45	288
10.25	60	66	34	132	230	240	58	4.50	108	34	23	23	42	268
9.25	56	61	31	112	210	214	50	5.00	102	31	22	28	39	248
8.25	52	56	28	92	190	190	42	5.50	96	28	21	33	36	228
7.25	48	51	25	72	170	166	34	6.00	90	25	20	38	33	208
6.25	44	46	22	52	150	142	26	6.50	84	22	19	43	30	188
5.25	40	41	19	32	130	118	18	7.00	78	19	18	48	27	168
4.25	36	36	16	12	110	94	10	7.50	72	16	17	53	24	148
3.25	32	31	13	-8	90	70	2	8.00	66	13	16	58	21	128
2.25	28	26	10	-28	70	46	0	8.50	60	10	15	63	18	108
1.25	24	21	7	-48	50	22		9.00	54	7	14	68	15	88
0.25	20	16	4	-68	30	-2		9.50	48	4	13	73	12	68
-0.75	16	11	1	-88	10	-26		10.00	42	1	12	78	9	48

HOW TO STUDY YOUR FARM RECORD

We shall endeavor in the following discussion to point out the importance of certain factors in their influence on the farm profits. Cost of production data will frequently be referred to. The cost of producing farm products has been studied during the past twelve years in different parts of Illinois. While your record does not permit determining the cost of producing separate products on your farm, the information from your farm does enable you to learn whether the different parts of your business correspond favorably with other farms in your community. A study of a group of farm records from any community always impresses one with the fact that each farmer can profit at some point from studying the results obtained by his more efficient farmer neighbors.

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SUMMARY OF 606 RECORDS BY AREAS

1 9 2 4

County or Area	Jo Daviess Stephenson Ogle	Will	La Salle	Whiteside Henry Marshall-Putnam	Adams Hancock McDonough	Woodford	Champaign Ford McLean*
1. Rate Earned	3.75%	6.26%	7.22%	7.42%	5.34%	7.24%	7.43%
2. Labor & Management wage	$ 183.	1126.	2106.	1725.	723.	1890.	1868.
3. Size of Farm	180.1	188.2	247.3	208.5	202.2	208.1	223.3
4. Percent of Land Tillable	82.8%	95.6%	91.0%	85.5%	90.1%	89.5%	95.0%
5. Percent of Tillable Land in Legumes	16.5%	15.1%	14.8%	16.2%	9.7%	11.4%	16.0%
6. Crop Yields - Corn - (Bu.)	34.0	31.2	41.8	41.8	41.2	48.0	40.7
Oats - (Bu.)	40.0	53.7	54.7	54.9	42.4	50.8	49.0
Wheat- (Bu.)	----	29.7	27.2	28.1	24.9	24.4	18.7
7. Percent of gross income from Livestock	92.1%	52.8%	32.8%	59.4%	69.4%	33.9%	28.5%
8. Returns per $100. invested in productive Livestock.	$ 118.75	120.85	123.05	126.95	140.85	119.30	118.45
9. For $100.- Cattle	$ 80.45	101.95	94.20	88.90	92.90	72.30	86.75
10. Swine	$ 187.15	147.50	165.30	167.35	179.04	169.25	154.85
11. Poultry	$ 163.90	169.00	138.50	157.20	170.00	166.66	148.60
12. Man labor cost per acre	$ 6.03	6.47	5.92	6.21	5.90	5.82	4.99
13. Crop acres per Man	67.4	80.3	76.3	80.6	74.6	90.7	107.1
14. Crop acres per Horse	21.4	27.2	25.3	22.1	21.1	22.6	25.5
15. Percent of Farm with Tractor	33.3 %	67.6%	64.7%	61.0%	53.9%	53.4%	67.3%
16. Gross Receipts per acre	$ 18.05	28.74	32.67	29.15	23.66	32.58	29.45
17. Total expense per acre	$ 11.49	14.50	12.91	12.48	12.14	12.21	11.42
18. Net income per acre	$ 6.56	14.24	19.76	16.67	11.52	20.37	18.02
19. Value of land per acre	$ 120.00	167.00	217.00	170.00	165.00	228.00	198.00
20. Total investment per acre	$ 175.00	227.00	274.00	225.00	216.00	281.00	242.00
21. Number of records in report	$ 51.00	34.00	34.00	41.00	51.00	101.00	52.00

*Records in the east part of McLean County were used in this report.

SUMMARY OF 606 RECORDS BY AREAS
1 9 2 4

County or Area	Macon Logan Tazewell McLean*	Douglas Coles Moultrie Clark**	Macoupin Jersey Greene	Clinton	Monroe Randolph	Edwards Wabash Richland Lawrence	Saline Gallatin
1. Rate Earned	7.26%	8.22%	4.63%	4.73%	4.99%	7.23%	5.43%
2. Labor & Management wage	$1904	1816	482.	448.	540.	902.	569.
3. Size of Farm	232.5	200.0	174.3	164.0	175.0	174.3	177.0
4. Percent of Land Tillable	93.8%	91.3%	83.4%	81.5%	77.9%	80.5%	87.7%
5. Percent of Tillable Land in Legumes	12.5%	15.8%	18.0%	14.3%	21.2%	21.8%	19.1%
6. Crop Yields - Corn - (Bu.)	46.8	45.0	31.1	26.7	30.4	41.7	35.0
Oats - (Bu.)	54.3	44.0	34.5	30.1	28.0	35.5	38.1
Wheat- (Bu.)	20.5	22.1	7.2	8.1	12.8	12.3	15.3
7. Percent of gross income from Livestock	34.0%	35.4%	71.2%	73.0%	38.3%	55.0%	41.0%
8. Returns per $100. invested in productive livestock	140.60	142.10	136.20	154.45	142.00	157.10	150.25
9. For $100. - Cattle	91.50	100.90	100.80	146.10	113.50	107.70	94.80
10. Swine	198.30	199.30	218.30	121.20	166.75	247.15	200.90
11. Poultry	118.60	146.05	205.00	202.10	203.75	197.55	190.70
12. Man labor cost per Acre	5.37	5.16	6.65	6.10	5.95	5.14	4.71
13. Crop acres per Man	88.7	91.5	61.6	64.9	64.6	72.5	61.4
14. Crop acres per Horse	23.4	22.6	17.7	21.2	21.0	21.4	16.3
15. Percent of Farm with Tractor	56.3%	46.9%	31.7%	20.7%	43.5%	31.7%	30.0%
16. Gross Receipts per acre	31.39	27.64	18.61	15.87	15.11	18.23	16.41
17. Total expense per acre	12.73	11.06	11.87	10.91	10.50	9.89	9.42
18. Net income per acre	18.66	16.58	6.74	4.96	4.61	8.34	6.99
19. Value of land per acre	208.00	164.00	104.00	64.00	62.00	85.00	97.00
20. Total investment per acre	257.00	202.00	146.00	105.00	93.00	115.00	129.00
21. Number of records in report	30.00	32.00	41.00	58.00	23.00	41.00	17.00

*Records in the West part of McLean County were used in this report. **Records in the northwest part of Clark County were used in this report.

SUMMARY OF 606 RECORDS BY AREAS 1924.

County or area	Jo Daviess Stephenson Ogle	Will	La Salle	Henry Marshall Putnam Whiteside	Adams McDonough Hancock	Woodford	Champaign Ford McLean*
Capital Investment - Total	31448	42807	67670	46855	43653	58565	54118
Land	21508	31459	53730	35358	33442	47531	44303
Farm Improvements	4388	4691	5786	4869	3850	3824	3571
Machinery and Equipment	1261	1949	2101	1457	1417	1568	1397
Feed and Supplies	1510	1970	3205	1973	2179	2987	2637
Livestock	2731	2738	2848	3198	2765	2655	2210
Receipts - Total	3251	5409	8079	6079	4784	6779	6576
Feed and Grain	189	2379	5347	2368	1342	4399	4620
Livestock	2033	1653	1924	3177	3017	1898	1490
Labor off Farm	22	88	50	61	65	26	66
Miscellaneous	45	86	32	39	58	54	17
Dairy Sales	798	1031	644	333	170	258	268
Egg Sales	164	172	82	101	132	144	115
Expenses - Total	1230	1906	2328	1756	1668	1762	1889
Livestock	13	13	17	28	24	---	26
Farm Improvements	172	268	344	243	227	203	256
Machinery and equipment	332	545	585	458	413	426	393
Feed and Supplies	---	---	---	---	---	---	---
Livestock Expense	57	97	62	51	65	46	38
Crop Expense	123	207	247	171	159	191	230
Labor Hired	245	396	599	449	408	433	451
Taxes, Insurance, etc.	266	319	438	322	332	432	465
Miscellaneous	22	61	36	34	40	31	30
Receipts less Expenses	2021	3503	5751	4323	3116	5017	4687
Operators Labor	574	585	604	591	577	580	551
Unpaid Family Labor	266	237	261	255	209	199	113
Net Income from Investment	1181	2681	4886	3477	2330	4238	4023

*Records from the east part of McLean County were used in this report.

SUMMARY OF 606 RECORDS BY AREAS 1924.

County or Area	Macon Logan Tazewell McLean*	Douglas Coles Moultrie Clark**	Macoupin Jersey Greene	Clinton	Monroe Randolph	Wabash Edwards Richland Lawrence	Saline Gallatin
Capital Investment - Total	59691	40366	25401	17212	16207	20085	22764
Land	48385	32869	18084	10568	10716	14724	17245
Farm Improvements	4148	3015	2728	2822	2087	1845	2159
Machinery and Equipment	1673	1048	1054	1098	1210	764	759
Feed and Supplies	3065	1525	1498	1069	1131	1218	1220
Livestock	2420	1909	2037	1655	1063	1534	1381
Receipts - Total	7298	5528	3245	2604	2644	3177	2904
Feed and Grain	4695	3503	783	589	1501	1327	1624
Livestock	1976	1554	1360	449	473	1074	746
Labor off Farm	71	16	75	100	37	71	59
Miscellaneous	49	50	76	14	94	31	33
Dairy Sales	419	338	802	1044	343	476	235
Egg Sales	88	67	149	408	196	198	207
Expenses - Total	2201	1518	1263	941	931	1036	963
Livestock	23	35	---	7	13	29	---
Farm Improvements	223	173	137	200	119	126	156
Machinery and Equipment	593	298	278	237	328	217	233
Feed and Supplies	---	---	---	---	---	---	---
Livestock Expense	62	37	49	25	11	20	26
Crop Expense	283	211	194	145	165	167	154
Labor Hired	490	337	353	156	135	209	129
Taxes, Insurance, etc.	483	401	218	144	149	238	251
Miscellaneous	44	26	34	27	11	30	14
Receipts Less Expenses	5097	4010	1982	1663	1713	2141	1941
Operators Labor	551	518	576	494	544	452	471
Unpaid Family Labor	208	176	230	355	363	235	234
Net Income from Investment	4338	3316	1176	814	806	1454	1236

*Records in the west part of McLean County were used in this report
**Records in the northwest part of Clark County were used in this report.

SUMMARY OF FARM BUSINESS RECORDS (1)
CLINTON COUNTY - 1923.

Twenty-one Clinton County farmers who kept farm business records in 1923 earned an average rate of 4.54% on an average capital investment of $20,302. Seven of the twenty-one farmers received an average of 9.52% on their investment, while seven others lacked .31% of their investment, of paying their operating expenses, a difference of 9.83%. In terms of money, this means that the seven more efficient of these twenty-one farmers received an average net income of approximately $2,000 more than was received by the seven whose farms showed the lowest net incomes.

The following table will help enable each Clinton County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are most likely to occur	Your Farm	Average of 21 Farms	Seven Most Profitable Farms	Seven Least Profitable Farms
Rate Earned on Investment	%	4.54%	9.52%	- .31%
Labor and Management Wage	$	$401.	$1238.	$ -571.
Crop Yields - Corn - Bushels		25.6	25.1	18.0
Oats - Bushels		38.4	41.5	33.4
Wheat - Bushels		20.1	20.9	17.0
Returns per $100 Invested (2) in all Productive Live Stock	$	$157.04	$ 164.02	$ 136.94
For $100 in Horses	$	$- 7.00	$- 12.53	$- 10.43
For $100 in Cattle	$	$151.44	$ 154.19	$ 128.17
For $100 in Sheep	$	$------	$-------	$ ------
For $100 in Swine	$	$115.87	$153.43	$ 87.15
For $100 in Poultry	$	$190.30	$ 196.11	$ 181.71
Percent of Income from Livestock	%	67.4%	64.8%	76.5%
Crop Acres per Man		52.3	47.7	53.8
Crop Acres per Horse		20.6	20.7	19.6
Expense per $100 Gross Income	$	$ 68.17	$ 52.11	$ 102.94
Size of Farm - Acres		162.7	135.1	170.3

(1) Records secured and summarized by the Clinton County Farm Bureau, Breese, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois Cooperating.

(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from Clinton County Records - 1923 (Cont'd)

		Your Farm	Average of 21 Farms	Seven Most Profitable Farms	Seven Least Profitable Farms
1	Value of Land per Acre	$	$ 98	$ 96	$ 97
2	Capital Investment - Total	$	$ 20,302	$ 16,654	$ 20,168
3	Land	$	$ 16,187	$ 13,235	$ 13,526
4	Buildings (1)	$	$ --------	$ --------	$ --------
5	Machinery and Equipment	$	$ 1,328	$ 877	$ 1,073
6	Feed and Supplies	$	$ 1,059	$ 844	$ 926
7	Live stock - Total	$	$ 2,679	$ 1,699	$ 1,643
8	Horses	$	$ 474	$ 365	$ 435
9	Cattle	$	$ 866	$ 948	$ 841
10	Sheep	$	$ 3	$ 8	$ --
11	Swine	$	$ 129	$ 127	$ 99
12	Poultry	$	$ 255	$ 251	$ 238
13	Receipts-Net Increases-Total	$	$ 2,867	$ 3,314	$ 2,035
14	Feed and Supplies	$	$ 769	$ 947	$ 412
15	Miscellaneous	$	$ 143	$ 217	$ 16
16	Live Stock - Total	$	$ 1,953	$ 2,149	$ 1,637
17	Horses	$	$ - 32	$ - 44	$ - 46
18	Cattle	$	$ 150	$ 149	$ 140
19	Dairy Products	$	$ 1,163	$ 1,302	$ 952
20	Sheep	$	$ 4	$ 9	$ ---
21	Swine	$	$ 146	$ 201	$ 95
22	Poultry	$	$ 142	$ 103	$ 185
23	Eggs	$	$ 363	$ 401	$ 302
24	Miscellaneous	$	$ 13	$ 27	$ 7
25	Expenses--Net Decreases--Total	$	$ 957	$ 932	$ 1,008
26	Farm Improvements	$	$ 183	$ 183	$ 206
27	Machinery and Equipment	$	$ 298	$ 233	$ 349
28	Feed and Supplies	$	$ ---	$ ---	$ ---
29	Cash Expenses	$	$ 477	$ 516	$ 452
30	Receipts less Expenses	$	$ 1,910	$ 2,331	$ 1,027
31	Operator and Family Labor	$	$ 983	$ 785	$ 1,120
32	Net Income from Investment	$	$ 921	$ 1,585	$ - 93
33	Investment per Acre	$	$ 124.73	$ 123.27	$ 118.43
34	Gross Receipts per Acre	$	$ 17.80	$ 24.53	$ 12.57
35	Total Expenses per Acre	$	$ 12.14	$ 12.78	$ 12.93
36	Net Receipts per Acre	$	$ 5.66	$ 11.75	$ - .36
37	Man Labor per Total Acres	$	$ 6.75	$ 8.92	$ 7.04
38	Farms with Tractors - Percent	%	14.3%	0.0%	14.3%
39	Acres of Land in all Crops		119.5	109.1	128.1
40	Corn - Acres		29.6	21.3	34.0
41	Oats - Acres		18.0	15.0	17.0
42	Wheat - Acres		47.9	43.9	55.0
43	Legumes- Acres		13.7	10.6	11.7

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find Your Farm Leaks - (Clinton County - 1923)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
9.75	47	59	41	255	325	400	94	42	26
9.50	46	58	40	250	315	390	92	41	28
9.25	45	57	39	245	305	380	90	40	30
9.00	44	56	38	240	295	370	88	39	32
8.75	443	55	37	235	285	360	86	38	34
8.50	42	54	36	230	275	350	84	37	36
8.25	41	53	35	225	265	340	82	36	38
8.00	40	52	34	220	255	330	80	35	40
7.75	39	51	33	215	245	320	78	34	42
7.50	38	50	32	210	235	310	76	33	44
7.25	37	49	31	205	225	300	74	32	46
7.00	36	48	30	200	215	290	72	31	48
6.75	35	47	29	195	205	280	70	30	50
6.50	34	46	28	190	195	270	68	29	52
6.25	33	45	27	185	185	260	66	28	54
6.00	32	44	26	180	175	250	64	27	56
5.75	31	43	25	175	165	240	62	26	58
5.50	30	42	24	170	155	230	60	25	60
5.25	29	41	23	165	145	220	58	24	62
5.00	28	40	22	160	135	210	56	23	64
4.75	27	39	21	155	125	200	54	22	66
4.50	26	38	20	150	115	190	52	21	68
4.25	25	37	19	145	105	180	50	20	70
4.00	24	36	18	140	95	170	48	19	72
3.75	23	35	17	135	85	160	46	18	74
3.50	22	34	16	130	75	150	44	17	76
3.25	21	33	15	125	65	140	42	16	78
3.00	20	32	14	120	55	1130	40	15	80
2.75	19	31	13	115	45	120	38	14	82
2.50	18	30	12	110	35	110	36	13	84
2.25	17	29	11	105	25	100	34	12	86
2.00	16	28	10	100	15	90	32	11	88
1.75	15	27	9	95	5	80	30	10	90
1.50	14	26	8	90	0	70	28	9	92
1.25	13	25	7	85	5	60	26	8	94
1.00	12	24	6	80	-15	50	24	7	96
.75	11	23	5	75	-25	40	22	6	98
.50	10	22	4	70	-35	30	20	5	100
.25	9	21	3	65	-45	20	18	4	102
.00	8	20	2	60	-55	10	16	3	104
- .25	7	19	1	55	-65	0	14	2	106
- .50	6	18	-	50	-75	-10	12	1	108
- .75	5	17	-	45	-85	-20	10	-	110

Factors Which Merit Special Attention

Rate Earned on Investmen - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The feeding down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from liv stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
FORD COUNTY - 1923

Nine Ford County farmers who kept farm business records in 1923 earned an average rate of 4.06% on an average capital investment of $60,152. Three of the nine farmers received an average of 6.48% on their investment, while three others received only 2.33% of their investment, a difference of 4.15%. In terms of money, this means that the three more efficient of these nine farmers received an average net income of approximately $2500 more than was received by the three whose farms showed the lowest net incomes.

The following table will help enable each Ford County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are likely to occur	Your Farm	Average of 9 Farms	Three Most Profitable Farms	Three Least Profitable Farms
Rate Earned on Investment	%	4.06%	6.48%	2.33%
Labor and Management Wage	$	$-110.	$1475.	$-1576.
Crop Yields - Corn - Bushels		47.9	50.4	48.6
Oats - Bushels		41.5	44.4	41.3
Wheat - Bushels		23.0	15.8	29.6
Returns per $100 Invested (2) in all Productive Live-stock	$	$ 88.35	$ 111.67	$ 74.15
For $100 in Horses	$	$ .72	$- 1.16	$ 9.05
For $100 in Cattle	$	$ 55.10	$ 88.93	$ 40.08
For $100 in Sheep	$	$ 40.47	$ 49.21	$ 26.61
For $100 in Swine	$	$ 130.66	$ 129.45	$ 126.40
For $100 in Poultry	$	$ 160.00	$ 176.86	$ 178.57
Percent of Income from Livestock		50.2	42.6	84.0
Crop Acres per Man		99.5	124.0	91.6
Crop Acres per Horse		23.2	27.0	20.3
Expense per $100 Gross Income	$	$ 50.10	$ 40.18	$ 62.60
Size of Farm - Acres		231.4	253.3	267.7

(1) Records secured and summarized by the Ford County Farm Bureau, Gibson City, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.

(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from Ford County Records - 1923 (Cont'd)

		Your Farm	Average of 9 Farms	Three Most Profitable Farms	Three Least Profitable Farms
1	Value of Land per Acre	$	$ 207	$ 300	$ 219
2	Capital Investment - Total	$	$ 60,152	$ 68,213	$ 75,430
3	Land	$	$ 47,983	$ 50,367	$ 58,617
4	Buildings (1)	$	$ 4,872	$ 4,893	$ 6,797
5	Machinery and Equipment	$	$ 1,273	$ 1,605	$ 1,372
6	Feed and Supplies	$	$ 2,653	$ 3,012	$ 2,890
7	Live Stock - Total	$	$ 3,371	$ 3,037	$ 5,755
8	Horses	$	$ 960	$ 793	$ 1,573
9	Cattle	$	$ 1,266	$ 909	$ 2,466
10	Sheep	$	$ 92	$ 187	$ 90
11	Swine	$	$ 886	$ 931	$ 1,470
12	Poultry	$	$ 166	$ 216	$ 155
13	Receipts-Net Increases-Total	$	$ 4,892	$ 6,258	$ 4,693
14	Feed and Supplies	$	$ 2,318	$ 3,929	$ 683
15	Miscellaneous	$	$ 28	$ 10	$ 58
16	Live Stock - Total	$	$ 2,545	$ 2,919	$ 3,959
17	Horses	$	$ 7	$- 9	$ 139
18	Cattle	$	$ 736	$ 1,023	$ 1,060
19	Dairy Products	$	$ 157	$ 143	$ 199
20	Sheep	$	$ 34	$ 78	$ 25
21	Swine	$	$ 1,299	$ 1,178	$ 2,229
22	Poultry	$	$ 137	$ 234	$ 132
23	Eggs	$	$ 141	$ 202	$ 143
24	Miscellaneous	$	$ 34	$ 70	$ 32
25	Expenses-Net Decreases-Total	$	$ 1,939	$ 2,139	$ 2,454
26	Farm Improvements	$	$ 308	$ 257	$ 436
27	Machinery and Equipment	$	$ 328	$ 491	$ 343
28	Feed and Supplies	$	$ ---	$ ---	$ ---
29	Cash Expenses	$	$ 1,303	$ 1,411	$ 1,675
30	Receipts less Expenses	$	$ 2,953	$ 4,669	$ 2,245
31	Operator and Family Labor	$	$ 511	$ 567	$ 483
32	Net Income from Investment	$	$ 2,442	$ 4,102	$ 1,762
33	Investment per Acre	$	$ 260.00	$ 249.65	$ 281.60
34	Gross Receipts per Acre	$	$ 21.15	$ 27.09	$ 17.59
35	Total Expenses per Acre	$	$ 8.40	$ 8.64	$ 9.21
36	Net Receipts per Acre	$	$ 12.75	$ 18.45	$ 8.38
37	Man Labor per Total Acres	$	$ 4.29	$ 4.20	$ 4.28
38	Farms with Tractors - Percent	%	55.5%	66.7%	66.7%
39	Acres of Land in all Crops		175.0	206.7	183.3
40	Corn - Acres		92.3	110.3	89.3
41	Oats - Acres		46.0	68.3	37.7
42	Wheat - Acres		25.9	24.0	38.0
43	Legumes- Acres		3.3	4.0	0.0

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find your Farm Leaks - (Ford County - 1923)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
9.00	88	82	43	155	330	360	160	43	10
8.75	86	80	42	150	320	350	157	42	12
8.50	84	78	41	145	310	340	154	41	14
8.25	82	76	40	140	300	330	151	40	16
8.00	80	74	39	135	290	320	148	39	18
7.75	78	72	38	130	280	310	145	38	20
7.50	76	70	37	125	270	300	142	37	22
7.25	74	68	36	120	260	290	139	36	24
7.00	72	66	35	115	250	280	136	35	26
6.75	70	64	34	110	240	270	133	34	28
6.50	68	62	33	105	230	260	130	33	30
6.25	66	60	32	100	220	250	127	32	32
6.00	64	58	31	95	210	240	124	31	34
5.75	62	56	30	90	200	230	121	30	36
5.50	60	54	29	85	190	220	118	29	38
5.25	58	52	28	80	180	210	115	28	40
5.00	56	50	27	75	170	200	112	27	42
4.75	54	48	26	70	160	190	109	26	44
4.50	52	46	25	65	150	180	106	25	46
4.25	50	44	24	60	140	170	103	24	48
4.00	48	42	23	55	130	160	100	23	50
3.75	46	40	22	50	120	150	97	22	52
3.50	44	38	21	45	110	140	94	21	54
3.25	42	36	20	40	100	130	91	20	56
3.00	40	34	19	35	90	120	88	19	58
2.75	38	32	18	30	80	110	85	18	60
2.50	36	30	17	25	70	100	82	17	62
2.25	34	28	16	20	60	90	79	16	64
2.00	32	26	15	15	50	80	76	15	66
1.75	30	24	14	10	40	70	73	14	68
1.50	28	22	13	5	30	60	70	13	70
1.25	26	20	12	0	20	50	67	12	72
1.00	24	18	11	- 5	10	40	64	11	74
.75	22	16	10	-10	0	30	61	10	76
.50	20	14	9	-15	-10	20	58	9	78
.25	18	12	8	-20	-20	10	55	8	80
.00	16	10	7	-25	-30	0	52	7	82
-.25	14	8	6	-30	-40	-10	49	6	84
-.50	12	6	5	-35	-50	-20	46	5	86
-.75	10	4	4	-40	-60	-30	43	4	88
-1.00	8	2	3	-45	-70	-40	40	3	90
-1.25	6	-	2	-50	-80	-50	37	2	92
-1.50	4	-	1	-55	-90	-60	34	1	94

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The freeing down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
GALLATIN COUNTY - 1923

Eleven Gallatin County farmers who kept farm business records in 1923 earned an average rate of 1.65% on an average capital investment of $25,256. Four of the eleven farmers received an average of 3.66% on their investment, while four others lacked .80% of their investment of paying their operating expenses, a difference of 4.46%. In terms of money, this means that the four more efficient of these eleven farmers received an average net income of approximately $1125 more than was received by the four whose farms showed the lowest net incomes.

The following table will help enable each Gallatin County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are most likely to occur	Your Farm	Average of 11 Farms	Four Most Profitable Farms	Four Least Profitable Farms
Rate Earned on Investment		1.65%	3.66%	-.80%
Labor and Management Wage		$-375.	$ 626.	$-828.
Crop Yields - Corn - bushels		37.9	51.5	37.6
Oats - bushels		----	----	----
Wheat- bushels		14.5	12.4	15.2
Returns per $100 invested in all Productive Live-stock (2)		$ 132.14	$ 131.32	$ 103.17
For $100 in Horses		$- 5.05	$- 5.07	$- 1.93
For $100 in Cattle		$ 82.47	$ 49.32	$ 124.90
For $100 in Sheep		-----	-----	-----
For $100 in Swine		$ 151.21	$ 199.61	$ 65.55
For $100 in Poultry		$ 179.02	$ 214.64	$ 128.76
Per cent of Income from Live Stock		51.4%	44.1%	59.9%
Crop Acres per Man		68.7	65.9	52.8
Crop Acres per Horse		20.1	18.5	16.2
Expense for $100 Gross Income		$ 79.14	$ 60.56	$ 112.94
Size of Farm - Acres		196.3	176.0	207.5

(1) Records secured and summarized by the Gallatin County Farm Bureau, Ridgway, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.
(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from Gallatin County Records - 1923 (Cont'd)

		Your Farm	Average of 11 Farms	Four Most Profitable Farms	Four Least Profitable Farms
1.	Value of Land per Acre		$ 101	$ 110	$ 82
2	Capital Investment - Total	_____	$ 25,256	$ 24,092	$ 21,853
3	Land		$ 19,734	$ 19,200	$ 16,944
4	Buildings(1)		$ 2,165	$ 2,110	$ 1,889
5	Machinery and Equipment		$ 736	$ 801	$ 603
6	Feed and Supplies		$ 1,102	$ 1,363	$ 743
7	Live Stock - Total		$ 1,519	$ 1,518	$ 1,674
8	Horses		$ 646	$ 632	$ 792
9	Cattle		$ 296	$ 368	$ 322
10	Sheep		$ 31	$ 80	$ 7
11	Swine		$ 334	$ 254	$ 376
12	Poultry		$ 212	$ 183	$ 176
13	Receipts-Net Increases-Total	_____	$ 2,001	$ 2,322	$ 1,360
14	Feed and Supplies		$ 916	$ 1,226	$ 512
15	Miscellaneous		$ 57	$ 72	$ 33
16	Live Stock - Total		$ 1,028	$ 1,024	$ 815
17	Horses		$ - 31	$ - 31	$ -14
18	Cattle		$ 78	$ 135	$ 62
19	Dairy Products		$ 154	$ 29	$ 326
20	Sheep		$ - 3	$ - 11	$ 2
21	Swine		$ 439	$ 444	$ 205
22	Poultry		$ 92	$ 141	$ 74
23	Eggs		$ 276	$ 262	$ 148
24	Miscellaneous		$ 25	$ 55	$ 13
25	Expenses-Net Decreases-Total	_____	$ 957	$ 847	$ 806
26	Farm Improvements		$ 103	$ 123	$ 81
27	Machinery and Equipment		$ 200	$ 156	$ 147
28	Feed and Supplies		$ ---	$ ---	$ ---
29	Cash Expenses		$ 653	$ 568	$ 577
30	Receipts less Expenses	_____	$ 1,044	$ 1,474	$ 544
31	Operator and Family Labor		$ 627	$ 559	$ 730
32	Net Income from Investment		$ 417	$ 915	$ - 176
33	Investment per Acre		$ 128.68	$ 142.00	$ 105.28
34	Gross Receipts per Acre		$ 10.20	$ 13.19	$ 6.55
35	Total Expenses per Acre		$ 8.07	$ 7.99	$ 7.40
36	Net Receipts per Acre	_____	$ 2.13	$ 5.20	$ - .85
37	Man Labor per Total Acres		$ 4.04	$ 3.65	$ 4.39
38	Farm with Tractors		4	1.	1
39	Acres of Land in all Crops		131.7	125.0	105.5
40	Corn - Acres		43.3	34.2	45.2
41	Oats - Acres		----	----	----
42	Wheat- Acres		61.1 ~~61.1~~	61.0	45.9
43	Legumes - Acres		20.9	17.0	16.8

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find Your Farm Leaks

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 gross income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
8.00	90		40	210	400	430	144	45	30
7.75	88		39	205	390	420	141	44	32
7.50	86		38	200	380	210	138	43	34
7.25	84		37	195	370	400	135	42	36
7.00	82		36	190	360	390	132	41	38
6.75	80		35	185	350	380	129	40	40
6.50	78		34	180	340	370	126	39	42
6.25	76		33	175	330	360	123	38	44
6.00	74		32	170	320	350	120	37	46
5.75	72		31	165	310	340	117	36	48
5.50	70		30	160	300	330	114	35	50
5.25	68		29	155	290	320	111	34	52
5.00	66		28	150	280	310	108	33	54
4.75	64		27	145	270	300	105	32	56
4.50	62		26	140	260	290	102	31	58
4.25	60		25	135	250	280	99	30	60
4.00	58		24	130	240	270	96	29	62
3.75	56		23	125	230	260	93	28	64
3.50	54		22	120	220	250	90	27	66
3.25	52		21	115	210	240	87	26	68
3.00	50		20	110	200	230	84	25	70
2.75	48		19	105	190	220	81	24	72
2.50	46		18	100	180	210	78	23	74
2.25	44		17	95	170	200	75	22	76
2.00	42		16	90	160	190	72	21	78
1.75	40		15	85	150	180	69	20	80
1.50	38		14	80	140	170	66	19	82
1.25	36		13	75	130	160	63	18	84
1.00	34		12	70	120	150	60	17	86
.75	32		11	65	110	140	57	16	88
.50	30		10	60	100	130	54	15	90
.25	28		9	55	90	120	51	14	92
.00	26		8	50	80	110	48	13	94
- .25	24		7	45	70	100	45	12	96
- .50	22		6	40	60	90	42	11	98
- .75	20		5	35	50	80	39	10	100
-1.00	18		4	30	40	70	36	9	102
-1.25	16		3	25	30	60	33	8	104
-1.50	14		2	20	20	50	30	7	106
-1.75	12		1	15	10	40	27	6	108
-2.00	10		-	10	0	30	24	5	110
-2.25	8		-	5	-10	20	21	4	112
-2.50	6		-	0	-20	10	18	3	114
-2.75	4		-	- 5	-30	0	15	0	116

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept~~. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The feeding down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
JERSEY COUNTY - 1923

Eleven Jersey County farmers who kept farm business records in 1923 earned an average rate of 3.72% on an average capital investment of $21,294. Four of the eleven farmers received an average of 6.86% on their investment, while four others lacked 1.08% of their investment of paying their operating expenses, a difference of 7.94%. In terms of money, this means that the four more efficient of these eleven farmers received an average net income of approximately $1690 more than was received by the four whose farms showed the lowest net incomes.

The following table will help enable each Jersey County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are most likely to occur	Your Farm	Average of 11 Farms	Four Most Profitable Farms	Four Least Profitable Farms
Rate Earned on Investment	%	3.72%	6.86%	- 1.08%
Labor and Management Wage	$	$ 238.00	$1002.50	$-355.25
Crop Yields - Corn - Bushels		48.9(3)	46.4(4)	32.3(5)
Oats - Bushels		37.9(6)	40.2(7)	30.0(5)
Wheat - Bushels		20.0(8)	16.3(7)	9.0(5)
Returns per $100 invested (2) in all Productive Live-stock	$	$ 147.92	$ 139.85	$ 141.74
For $100 in Horses	$	$- 10.27	$- 2.81	$- 14.79
For $100 in Cattle	$	$ 123.21	$ 135.11	$ 106.39
For $100 in Sheep	$	$ 70.00	$ 63.24	$ 59.37
For $100 in Swine	$	$ 185.28	$ 187.94	$ 212.54
For $100 in Poultry	$	$ 161.02	$ 131.03	$ 135.42
Per cent of Income from Livestock	%	67.8%	63.7%	68.3%
Crop Acres per Man		61.9(9)	58.6	35.3(7)
Crop Acres per Horse		17.3(9)	16.7	12.7(7)
Expense per $100 Gross Income	$	$ 70.59	$ 51.68	$ 108.56
Size of Farm - Acres		165.9	168.7	167.5

(1) Records secured and summarized by the Jersey County Farm Bureau, Jerseyville, Illinois, and the Departmentof Farm Organization and Management, University of Illinois cooperating.
(2) The average investment at the beginning and end of the year was used in finding these factors.
(3) Seven farms. (4) Three farms. (5) One farm. (6) Five farms. (7) Two farms
(8) Six farms. (9) Nine farms.

Data from Jersey County Records - 1923 (Cont'd)

		Your Farm	Average of 11 Farms	Four Most Profitable Farms	Four Least Profitable Farms
1	Value of Land per Acre	$	$ 98	$ 121	$ 64
2	Capital Investment - Total	$ _____	$ 21,294	24,875	$ 14,203
3	Land	$	$ 16,212	$ 20,367	$ 10,840
4	Buildings (1)	$	$ 1,506	$ 1,325	$ 1,313
5	Machinery and Equipment	$	$ 731	$ 759	$ 517
6	Feed and Supplies	$	$ 1,036	$ 576	$ 1,040
7	Live Stock - Total	$	$ 1,810	$ 1,847	$ 1,184
8	Horses	$	$ 503	$ 341	$ 337
9	Cattle	$	$ 552	$ 404	$ 445
10	Sheep	$	$ 176	$ 387	$ 65
11	Swine	$	$ 477	$ 627	$ 251
12	Poultry	$	$ 102	$ 57	$ 25
13	Receipts-Net Increases-Total	$ _____	$ 2,683	$ 3,531	$ 1,770
14	Feed and Supplies	$	$ 835	$ 1,258	$ 311
15	Miscellaneous	$	$ 19	$ 23	$ 28
16	LivesStock - Total	$	$ 1,829	$ 2,250	$ 1,231
17	Horses	$	$- 45	$- 10	$- 47
18	Cattle	$	$ 145	$ 178	$ 170
19	Dairy Products	$	$ 421	$ 339	$ 325
20	Sheep	$	$ 135	$ 277	$ 38
21	Swine	$	$ 952	$ 1,383	$ 589
22	Poultry	$	$ 91	$ 44	$ 46
23	Eggs	$	$ 70	$ 32	$ 84
24	Miscellaneous	$	$ 60	$ 6	$ 27
25	Expenses-Net Decreases-Total	$ _____	$ 1,187	$ 1,110	$ 1,217
26	Farm Improvements	$	$ 141	$ 151	$ 79
27	Machinery and Equipment	$	$ 204	$ 178	$ 174
28	Feed and Supplies	$	$ ---	$ ---	$ ---
29	Cash Expenses	$	$ 842	$ 781	$ 964
30	Receipts less Expenses	$ _____	$ 1,496	$ 2,421	$ 553
31	Operator and Family Labor	$	$ 704	$ 715	$ 707
32	Net Income from Investment	$	$ 792	$ 1,706	$ 154
33	Investments per Acre	$	$ 128.35	$ 147.45	$ 85.33
34	Gross Receipts per Acre	$	$ 16.24	20.93	$ 10.76
35	Total Expenses per Acre	$	$ 11.47	$ 10.32	$ 11.68
36	Net Receipts per Acre	$ _____	$ 4.77	$ 10.11	$- .92
37	Man Labor per Total Acres	$	$ 5.91	$ 6.32	$ 5.53
38	Farms with Tractors - Per cent	%	18.2%	25.0%	35.0%
39	Acres of Land in all Crops		96.2(2)	114.7	44.5(3)
40	Corn - Acres		45.5(4)	59.0(5)	10.0( )
41	Oats - Acres		10.4(3)	15.0(6)	6.0(7)
42	Wheat - Acres		38.3(8)	29.0(3)	15.0(7)
43	Legumes-Acres		10.8(2)	15.5	1.0(3)
44					

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.
(2) Nine farms. (3) Two farms, (4) Eight Farms. (5) Three farms. (6) Five farms
(7) One farm. (8) Six Farms.

Find Your Farm Leaks - (Jersey County 1923)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per$100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
9.00	91	80	41	230	395	370	125	38	28
8.75	89	78	40	225	385	360	122	37	30
8.50	87	76	39	220	375	350	119	36	32
8.25	85	74	38	215	365	340	116	35	34
8.00	83	72	37	210	355	330	113	34	36
7.75	81	70	36	205	345	320	110	33	38
7.50	79	68	35	200	335	310	107	32	40
7.25	77	66	34	195	325	300	104	31	42
7.00	75	64	33	190	315	290	101	30	44
6.75	73	62	32	185	305	280	98	29	46
6.50	71	60	31	180	295	270	95	28	48
6.25	69	58	30	175	285	260	92	27	50
6.00	67	56	29	170	275	250	89	26	52
5.75	65	54	28	165	265	240	86	25	54
5.50	63	52	27	160	255	230	83	24	56
5.25	61	50	26	155	245	220	80	23	58
5.00	59	48	25	150	235	210	77	22	60
4.75	57	46	24	145	225	200	74	21	62
4.50	55	44	23	140	215	190	71	20	64
4.25	53	42	22	135	205	180	68	19	66
4.00	51	40	21	130	195	170	65	18	68
3.75	49	38	20	125	185	160	62	17	70
3.50	47	36	19	120	175	150	59	16	72
3.25	45	34	18	115	165	140	56	15	74
3.00	43	32	17	110	155	130	53	14	76
2.75	41	30	16	105	145	120	50	13	78
2.50	39	28	15	100	135	110	47	12	80
2.25	37	26	14	95	125	100	44	11	82
2.00	35	24	13	90	115	90	41	10	84
1.75	33	22	12	85	105	80	38	9	86
1.50	31	20	11	80	95	70	35	8	88
1.25	29	18	10	75	85	60	32	7	90
1.00	27	16	9	70	75	50	29	6	92
.75	25	14	8	65	65	40	26	5	94
.50	23	12	7	60	55	30	23	4	96
.25	21	10	6	55	45	20	20	3	98
.00	19	8	5	50	35	10	17	2	100
- .25	17	6	4	45	25	0	14	1	102
- .50	15	4	3	40	15	-10	11	-	104
- .75	13	2	2	35	5	-20	8	-	106
-1.00	11	-	1	30	0	-30	5	-	108
-1.25	9	-	-	25	- 5	-40	3	-	110

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The feeding down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
JO DAVIESS COUNTY - 1923

Eleven Jo Daviess County farmers who kept farm business records in 1923 earned an average rate of 3.4% on an average capital investment of $25,291. Four of the eleven farmers received an average of 8.3% on their investment, while four others received only .6%, a difference of 7.7%. In terms of money, this means that the four more efficient of these eleven farmers received an average net income of approximately $1950 more than was received by the four whose farms showed the lowest net incomes.

The following table will help enable each Jo Daviess County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management and Factors in which leaks are most likely to occur.	Your Farm	Average of 11 Farms	Four Most Profitable Farms	Four Least Profitable Farms
Rate Earned on Investment		3.4%	8.3%	.6%
Labor and Management Wage	$	$ 73.	$1070.	$-1009.
Crop Yields - Corn - Bushels		48.0	51.3	47.1
Oats - Bushels		37.5	31.6	42.1
Wheat - Bushels		----	----	----
Returns per $100 invested (2) in All Productive Live-Stock	$	$ 106.45	$ 142.32	$ 76.96
For $100 in Horses	$	$- 2.87	$- .94	$- 7.53
For $100 in Cattle	$	$ 78.81	$ 124.54	$ 46.93
For $100 in Sheep	$	$ 6.94	$- 39.81	$ 148.08
For $100 in Swine	$	$ 174.24	$ 181.90	$ 140.25
For $100 in Poultry	$	$ 166.38	$ 198.11	$ 168.37
Per cent of Income from Livestock		93.1	86.9	99.7
Crop Acres per Man		49.3	60.2	69.8
Crop Acres per Horse		16.3	17.7	19.2
Expense per $100 Gross Income	$	$ 65.23	$ 50.46	$ 89.72
Size of Farm - Acres		172.1	131.1	232.3

(1) Records secured and summarized by the Jo Daviess County Farm Bureau, Elizabeth, Illinois and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.
(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from Jo Daviess County Records - 1923 (Cont'd)

		Your Farm	Average of 11 Farms	Four Most Profitable Farms	Four Least Profitable Farms
1	Value of Land per Acre		$ 100	$ 91	$ 107
2	Capital Investment - Total		$ 25,291	$ 17,943	$ 33,795
3	Land		$ 17,184	$ 11,077	$ 24,375
4	Buildings (1)		$ 3,212	$ 2,538	$ 3,612
5	Machinery and Equipment		$ 897	$ 714	$ 1,112
6	Feed and Supplies		$ 1,339	$ 1,252	$ 1,587
7	Live Stock - Total		$ 2,660	$ 2,362	$ 3,109
8	Horses		$ 424	$ 444	$ 395
9	Cattle		$ 1,414	$ 962	$ 1,839
10	Sheep		$ 49	$ 109	$ 26
11	Swine		$ 623	$ 687	$ 708
12	Poultry		$ 149	$ 160	$ 141
13	Receipts-Net Increases-Total		$ 2,327	$ 2,782	$ 1,959
14	Feed and Supplies		---	$ 118	---
15	Miscellaneous		$ 29	$ 53	$ 4
16	Live Stock - Total		$ 2,298	$ 2,611	$ 1,955
17	Horses		$ - 12	$ - 4	$ - 27
18	Cattle		$ 363	$ 378	$ 395
19	Dairy Products		$ 799	$ 907	$ 478
20	Sheep		$ 3	$ - 31	$ 38
21	Swine		$ 864	$ 1,020	$ 765
22	Poultry		$ 124	$ 73	$ 189
23	Eggs		$ 146	$ 242	$ 107
24	Miscellaneous		$ 12	$ 25	$ 9
25	Expenses-Net Decreases-Total		$ 796	$ 645	$ 1,135
26	Farm Improvements		$ 142	$ 107	$ 204
27	Machinery and Equipment		$ 184	$ 175	$ 176
28	Feed and Supplies		$ 65	$ --	$ 264
29	Cash Expenses		$ 404	$ 362	$ 492
30	Receipts less Expenses		$ 1,531	$ 2,137	$ 823
31	Operator and Family Labor		$ 674	$ 650	$ 622
32	Net Income from Investment		$ 857	$ 1,487	$ 201
33	Investment per Acre		$ 140.95	$ 147.80	$ 148.68
34	Gross Receipts per Acre		$ 14.32	$ 24.73	$ 8.61
35	Total Expenses per Acre		$ 9.34	$ 12.47	$ 7.73
36	Net Receipts per Acre		$ 4.98	$ 12.26	$ .88
37	Man Labor per Total Acres		$ 4.35	$ 5.41	$ 3.39
38	Farms with Tractors - Per cent		27.2	25.0	25.0
39	Acres of Land in all Crops		71.0	75.2	96.0
40	Corn - Acres		21.3	20.5	32.0
41	Oats - Acres		16.1	22.5	16.5
42	Wheat - Acres		3.0	1.5	5.5
43	Legumes - Acres		7.0	1.2	17.0

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficienty for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
9.00	92	82		190	390	390	114	38	22
8.75	90	80		185	380	380	111	37	24
8.50	88	78		180	370	370	108	36	26
8.25	86	76		175	360	360	105	35	28
8.00	84	74		170	350	350	102	34	30
7.75	82	72		165	340	340	99	33	32
7.50	80	70		160	330	330	96	32	34
7.25	78	68		155	320	320	93	31	36
7.00	76	66		150	310	310	90	30	38
6.75	74	64		145	300	300	87	29	40
6.50	72	62		140	290	290	84	28	42
6.25	70	60		135	280	280	81	27	44
6.00	68	58		130	270	270	78	26	46
5.75	66	56		125	260	260	75	25	48
5.50	64	54		120	250	250	72	24	50
5.25	62	52		115	240	240	69	23	52
5.00	60	50		110	230	230	66	22	54
4.75	58	48		105	220	220	63	21	56
4.50	56	46		100	210	210	60	20	58
4.25	54	44		95	200	200	57	19	60
4.00	52	42		90	190	190	54	18	62
3.75	50	40		85	180	180	51	17	64
3.50	48	38		80	170	170	48	16	66
3.25	46	36		75	160	160	45	15	68
3.00	44	34		70	150	150	42	14	70
2.75	42	32		65	140	140	39	13	72
2.50	40	30		60	130	130	36	12	74
2.25	38	28		55	120	120	33	11	76
2.00	36	26		50	110	110	30	10	78
1.75	34	24		45	100	100	27	9	80
1.50	32	22		40	90	90	24	8	82
1.25	30	20		35	80	80	21	7	84
1.00	28	18		30	70	70	18	6	86
.75	26	16		25	60	60	15	5	88
.50	24	14		20	50	50	12	4	90
.25	22	12		15	40	40	9	3	92
.00	20	10		10	30	30	6	2	94
-.25	18	8		5	20	20	3	1	96
-.50	16	6		0	10	10	-	-	98
-.75	14	4		- 5	0	0	-	-	100

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The cutting down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
KANE COUNTY - 1923

Nine Kane County farmers who kept farm business records in 1923 earned an average rate of 4.6% on an average capital investment of $40,220. Three of the nine farmers received an average of 6.9% on their investment, while three others received only 1.4% of their investment, a difference of 5.5%. In terms of money, this means that the three more efficient of these nine farmers received an average net income of approximately $2200 more than was received by the three whose farms showed the lowest net incomes.

The following table will help enable each Kane County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management and Factors in which leaks are most likely to occur	Your Farm	Average of 9 Farms	Three Most Profitable Farms	Three Least Profitable Farms
Rate Earned on Investment		4.6%	6.9%	1.4%
Labor and Management Wage	$	$ 577.	$1568.	$-641.
Crop Yields - Corn - Bushels		37.8	(3) 39.4	42.6
Oats - Bushels		46.7	43.4	54.3
Wheat - Bushels		21.9	32.4	30.0
Returns per $100 Invested (2) in all Productive Livestock	$	$ 146.66	$ 145.44	$ 117.68
For $100 in Horses	$	$- 7.11	$- 7.83	$- 3.33
For $100 in Cattle	$	$ 147.41	$ 149.52	$ 119.34
For $100 in Sheep	$	---	---	---
For $100 in Swine	$	$ 115.98	$ 38.84	$ 94.14
For $100 in Poultry	$	$ 152.78	$ 141.55	$ 213.75
Per cent of Income from Livestock		94.3	89.4	95.5
Crop Acres per Man		55.5	58.6	81.1
Crop Acres per Horse		20.8	24.1	27.9
Expense per $100 Gross Income	$	$ 63.77	$ 51.71	$ 86.84
Size of Farm - Acres		141.2	162.7	126.5

(1) Records secured and summarized by the Kane County, Farm Bureau, Geneva, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, cooperating.
(2) The average investment at the beginning and end of the year was used in finding these factors.
(3) Average corn yields on two farms only.

Data from Kane County Records - 1923 (Cont'd)

		Your Farm	Average of 9 Farms	Three Most Profitable Farms	Three Least Profitable Farms
1	Value of Land per Acres	$	$ 196	$ 188	$ 216
2	Capital Investment - Total	$	$ 40,220	$ 43,879	$ 40,200
3	Land	$	$ 27,628	$ 30,567	$ 27,350
4	Buildings (1)	$	$ 5,781	$ 5,392	$ 5,856
5	Machinery and Equipment	$	$ 1,379	$ 1,489	$ 1,612
6	Feed and Supplies	$	$ 1,681	$ 2,105	$ 1,565
7	Live Stock - Total	$	$ 3,751	$ 4,326	$ 3,818
8	Horses	$	$ 546	$ 453	$ 528
9	Cattle	$	$ 2,668	$ 3,393	$ 2,382
10	Sheep	$	---	---	----
11	Swine	$	$ 358	$ 180	$ 778
12	Poultry	$	$ 179	$ 299	$ 130
13	Receipts-Net Increases-Total	$	$ 4,968	$ 5,950	$ 4,324
14	Feed and Supplies	$	---	---	----
15	Miscellaneous	$	$ 171	$ 317	$ 195
16	Live Stock - Total	$	$ 4,797	$ 5,633	$ 4,129
17	Horses	$	$ - 38	$ - 39	$ - 17
18	Cattle	$	$ 219	$ 412	$ 202
19	Dairy Products	$	$ 3,856	$ 4,686	$ 2,884
20	Sheep	$	$ 46	---	---
21	Swine	$	$ 402	$ 67	$ 761
22	Poultry	$	$ 101	$ 133	$ 102
23	Eggs	$	$ 182	$ 315	$ 177
24	Miscellaneous	$	$ 29	$ 58	$ 22
25	Expenses-Net Decreases-Total	$	$ 2,127	$ 1,807	$ 2,682
26	Farm Improvements	$	$ 248	$ 318	$ 199
27	Machinery and Equipment	$	$ 328	$ 290	$ 517
28	Feed and Supplies	$	$ 405	$ 80	$ 684
29	Cash Expenses	$	$ 1,146	$ 1,118	$ 1,282
30	Receipts less Expenses	$	$ 2,841	$ 4,143	$ 1,642
31	Operator and Family Labor	$	$ 999	$ 1,102	$ 1,073
32	Net Income from Investment	$	$ 1,841	$ 3,042	$ 569
33	Investment per Acre	$	$ 284.84	$ 269.69	$ 317.78
34	Gross Receipts per Acre	$	$ 36.00	$ 38.71	$ 34.18
35	Total Expenses per Acre	$	$ 22.96	$ 20.01	$ 29.68
36	Net Receipts per Acre	$	$ 13.04	$ 18.70	$ 4.50
37	Man Labor per Total Acres	$	$ 10.79	$ 10.82	$ 11.68
38	Farms with Tractors - Per cent		44.4	66.7	33.3
39	Acres of Land in all Crops		108.8	(2)136.5	148.5
40	Corn - Acres		45.2	(2) 70.0	29.0
41	Oats - Acres		21.1	(2) 28.0	18.3
42	Wheat - Acres		7.0	8.0	1.3
43	Legumes - Acres		11.8	12.6	10.2

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.
(2) Averages of two farms only.

Find Your Farm Leaks - (Kane County - 1923)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of Corn	Oats	Wheat	Returns per $100 Invested in Cattle	Hogs	Poultry	Crop Acres per Man	Horse	Expense per $100 Gross Income
10.00	82	92	44	255	335	370	121	43	20
9.75	80	90	43	250	325	360	118	42	22
9.50	78	88	42	245	315	350	115	41	24
9.25	76	86	41	240	305	340	112	40	26
9.00	74	84	40	235	295	330	109	39	28
8.75	72	82	39	230	285	320	106	38	30
8.50	70	80	38	225	275	310	103	37	32
8.25	68	78	37	220	265	300	100	36	34
8.00	66	76	36	215	255	290	97	35	36
7.75	64	74	35	210	245	280	94	34	38
7.50	62	72	34	205	235	270	91	33	40
7.25	60	70	33	200	225	260	88	32	42
7.00	58	68	32	195	215	250	85	31	44
6.75	56	66	31	190	205	240	82	30	46
6.50	54	64	30	185	195	230	79	29	48
6.25	52	62	29	180	185	220	76	28	50
6.00	50	60	28	175	175	210	73	27	52
5.75	48	58	27	170	165	200	70	26	54
5.50	46	56.	26	165	155	190	67	25	56
5.25	44	54	25	160	145	180	64	24	58
5.00	42	52	24	155	135	170	61	23	60
4.75	40	50	23	150	125	160	58	22	62
4.50	38	48	22	145	115	150	55	21	64
4.25	36	46	21	140	105	140	52	20	66
4.00	34	44	20	135	95	130	49	19	68
3.75	32	42	19	130	85	120	46	18	70
3.50	30	40	18	125	75	110	43	17	72
3.25	28	38	17	120	65	100	40	16	74
3.00	26	36	16	115	55	90	37	15	76
2.75	24	34	15	110	45	80	34	14	78
2.50	22	32	14	105	35	70	31	13	80
2.25	20	30	13	100	25	60	28	12	82
2.00	18	28	12	95	15	50	25	11	84
1.75	16	26	11	90	5	40	22	10	86
1.50	14	24	10	85	0	30	19	9	88
1.25	12	22	9	80	- 5	20	16	8	90
1.00	10	20	8	75	-15	10	13	7	92
.75	8	18	7	70	-25	0	10	6	94
.50	6	16	6	65	-35	-10	7	5	96
.25	4	14	5	60	-45	-20	4	4	98
.00	2	12	4	55	-55	-30	1	3	100
- 25	-	10	3	50	-65	-40	-	2	102

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The cutting down of crops and use of enough live stock to utilize labor in seasons when the work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
MCDONOUGH COUNTY - 1923

Eighteen McDonough County farmers who kept farm business records in 1923 earned an average rate of 2.7% on an average capital investment of $45,770. Six of the eighteen farmers received an average of 6.08% on their investment, while six others received only .23% of their investment, a difference of 5.85%. In terms of money, this means that the six more efficient of these eighteen farmers received an average net income of approximately $2575 more than was received by the six whose farms showed the lowest net incomes.

The following table will help enable each McDonough County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are most likely to occur	Your Farm	Average of 18 Farms	Six Most Profitable Farms	Six Least Profitable Farms
Rate Earned on Investment	%	2.70%	6.08%	$ .23%
Labor and Management Wage	$	$-506.89	$ 963.67	$-1754.00
Crop Yields - Corn - Bushels		56.3	61.6	49.5
Oats - Bushels		43.9	45.8	42.9
Wheat - Bushels		25.5	26.9	24.4
Returns per $100 Invested (2) in all Productive Live-stock	$	$ 117.95	$ 133.47	$ 102.25
For $100 in Horses	$	$- .24	$- 4.64	$- 11.41
For $100 in Cattle	$	$ 85.72	$ 61.02	$ 72.62
For $100 in Sheep	$	$ 48.08	$ 39.33	$ 44.34
For $100 in Swine	$	$ 137.46	$ 156.92	$ 139.44
For $100 in Poultry	$	$ 207.74	$ 195.88	$ 184.45
Per cent of Income from Livestock		69.8%	50.9%	63.4%
Crop Acres per Man		71.6	83.5	64.5
Crop Acres per Horse		16.5	19.4	22.3
Expense per $100 Gross Income	$	$ 69.10	$ 43.95	$ 95.85
Size of Farm - Acres		201.8	176.8	232.3

(1) Records secured and summarized by the McDonough County Farm Bureau, Macomb, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.
(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from McDonough County Records - 1923 (Cont'd)

		Your Farm	Average of 18 Farms	Six Most Profitable Farms	Six Least Profitable Farms
1	Value of Land per Acre	$	$ 182	$ 192	$ 173
2	Capital Investment - Total	$ _____	$ 45,770	$ 42,802	$ 48,530
3	Land	$	$ 36,720	$ 34,033	$ 40,131
4	Buildings (1)	$	$ 3,256	$ 2,882	$ 3,714
5	Machinery and Equipment	$	$ 1,177	$ 1,345	$ 969
6	Feed and Supplies	$	$ 1,579	$ 1,861	$ 1,668
7	Live Stock - Total	$	$ 3,037	$ 2,680	$ 2,048
8	Horses	$	$ 670	$ 652	$ 655
9	Cattle	$	$ 936	$ 403	$ 744
10	Sheep	$	$ 44	$ 18	$ 66
11	Swine	$	$ 1,237	$ 1,471	$ 459
12	Poultry	$	$ 150	$ 136	$ 124
13	Receipts-Net Increases-Total	$ _____	$ 3,369	$ 4,497	$ 2,619
14	Feed and Supplies	$	$ 357	$ 1,792	$ 719
15	Miscellaneous	$	$ 213	$ 337	$ 174
16	Live Stock - Total	$	$ 2,799	$ 2,368	$ 1,726
17	Horses	$	$ - 2	$ - 31	$ - 73
18	Cattle	$	$ 726	$ 158	$ 509
19	Dairy Products	$	$ 163	$ 125	$ 149
20	Sheep	$	$ 26	$ 14	$ 26
21	Swine	$	$ 1,568	$ 1,798	$ 893
22	Poultry	$	$ 111	$ 139	$ 67
23	Eggs	$	$ 184	$ 155	$ 124
24	Miscellaneous	$	$ 22	$ 9	$ 30
25	Expenses-Net Decreases-Total	$ _____	$ 1,461	$ 1,335	$ 1,649
26	Farm Improvements	$	$ 177	$ 161	$ 192
27	Machinery and Equipment	$	$ 317	$ 385	$ 253
28	Feed and Supplies	$	$ ---	$ ---	$ ---
29	Cash Expenses	$	$ 967	$ 789	$ 1,204
30	Receipts less Expenses	$ _____	$ 1,908	$ 3,162	$ 970
31	Operator and Family Labor	$	$ 669	$ 559	$ 857
32	Net Income from Investment	$	$ 1,239	$ 2,603	$ 113
33	Investment per Acre	$	$ 226.80	$ 242.09	$ 208.91
34	Gross Receipts per Acre	$	$ 19.86	$ 26.26	$ 11.71
35	Total Expenses per Acre	$	$ 13.72	$ 11.54	$ 11.23
36	Net Receipts per Acre	$ _____	$ 6.14	$ 14.72	$ .48
37	Man Labor per Total Acres	$	$ 4.84	$ 4.40	$ 5.61
38	Farms with Tractors - Per cent	%	33.3%	33.3%	33.3%
39	Acres of Land in all Crops		126.3	130.9	141.5
40	Corn - Acres		63.4	66.9	65.5
41	Oats - Acres		12.2	18.4	14.3
42	Wheat- Acres		28.3	23.8	39.7
43	Legumes-Acres		13.8	11.5	16.0

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find Your Farm Leaks - (McDonough County 1923)

The numbers just above the line across the middle of this page ... are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
8.25	100	88	47	195	360	430	138	39	26
8.00	98	86	46	190	350	420	135	38	28
7.75	96	84	45	185	340	410	132	37	30
7.50	94	82	44	180	330	400	129	36	32
7.25	92	80	43	175	320	390	126	35	34
7.00	90	78	42	170	310	380	123	34	36
6.75	88	76	41	165	300	370	120	33	38
6.50	86	74	40	160	290	360	117	32	40
6.25	84	72	39	155	280	350	114	31	42
6.00	82	[illegible]	38	150	270	340	111	30	44
5.75	80	68	37	145	260	330	108	29	46
5.50	78	66	36	140	250	320	105	28	48
5.25	76	64	35	135	240	310	102	27	50
5.00	74	62	34	130	230	300	99	26	52
4.75	72	60	33	125	220	290	96	25	54
4.50	70	58	32	120	210	280	93	24	56
4.25	68	56	31	115	200	270	90	23	58
4.00	66	54	30	110	190	260	87	22	60
3.75	64	52	29	105	180	250	84	21	62
3.50	62	50	28	100	170	240	81	20	64
3.25	60	48	27	95	160	230	78	19	66
3.00	58	46	26	90	150	220	75	18	68
2.75	56	44	25	85	140	210	72	17	70
2.50	54	42	24	80	130	200	69	16	72
2.25	52	40	23	75	120	190	66	15	74
2.00	50	38	22	70	110	180	63	14	76
1.75	48	36	21	65	100	170	60	13	78
1.50	46	34	20	60	90	160	57	12	80
1.25	44	32	19	55	80	150	54	11	82
1.00	42	30	18	50	70	140	51	10	84
.75	40	28	17	45	60	130	48	9	86
.50	38	26	16	40	50	120	45	8	88
.25	36	24	15	35	40	110	42	7	90
.00	34	22	14	30	30	100	39	6	92
- .25	32	20	13	25	20	90	36	5	94
- .50	30	18	12	20	10	80	33	4	96
- .75	28	16	11	15	0	70	30	3	98
-1.00	26	14	10	10	-10	60	27	2	100
-1.25	24	12	9	5	-20	50	24	1	102
-1.50	22	10	8	0	-30	40	21	-	104
-1.75	20	8	7	- 5	-40	30	18	-	106
-2.00	18	6	6	-10	-50	20	15	-	108

Factors Which Merit Special Attention

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Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

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The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The feeding down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
MONROE COUNTY - 1923

Nine Monroe County farmers who kept farm business records in 1923 earned an average rate of 3.35% on an average capital investment of $25,462. Three of the nine farmers received an average of 5.06% on their investment, while three others received only 1.03% of their investment, a difference of 4.03%. In terms of money, this means that the three more efficient of these nine farmers received an average net income of approximately $1025 more than was received by the three whose farms showed the lowest net incomes.

The following table will help enable each Monroe County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are likely to occur.	Your Farm	Average of 9 Farms	Three Most Profitable Farms	Three Least Profitable Farms
Rate Earned on Investment	%	3.35%	5.06%	1.03%
Labor and Management Wage	$	$- 2.44	$ 371.33	$- 124.00
Crop Yields - Corn - Bushels		42.1	41.6	28.2
Oats - Bushels		26.2	27.2	20.7
Wheat - Bushels		18.2	19.3	14.2
Returns per $100 Invested (2) in all Productive Live-stock	$	$ 151.20	$ 153.31	$ 152.15
For $100 in Horses	$	$- 11.83	$- 11.68	$- 9.78
For $100 in Cattle	$	$ 171.14	$ 139.81	$ 221.34
For $100 in Sheep	$	$ ---	$ ---	$ ---
For $100 in Swine	$	$ 99.53	$ 121.21	$ 83.13
For $100 in Poultry	$	$ 201.78	$ 250.85	$ 134.02
Per cent of Income from Livestock	%	38.8%	29.4%	48.5%
Crop Acres per Man		69.6	75.2	38.9
Crop Acres per Horse		26.6	33.2	19.5
Expense per $100 Gross Income		$ 73.66	$ 66.84	$ 89.04
Size of Farm - Acres		192.5	249.6	150.3

(1) Records secured and summarized by the Monroe County Farm Bureau, Waterloo, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.
(2) The average investment at the beginning and end of the year was used in finding these factors

Data from Monroe County Records - 1923 (Con^t'd)

		Your Farm	Average of 9 Farms	Three Most Profitable Farms	Three Least Profitable Farms
1	Value of Land per Acre	$	$ 88	$ 99	$ 72
2	Capital Investment - Total	$ _____	$ 25,462	$ 37,745	$ 15,222
3	Land	$	$ 16,954	$ 24,728	$ 10,857
4	Buildings (1)	$	$ 3,084	$ 4,087	$ 2,088
5	Machinery and Equipment	$	$ 2,722	$ 4,604	$ 783
6	Feed and Supplies	$	$ 1,376	$ 2,647	$ 680
7	Live Stock - Total	$	$ 1,326	$ 1,680	$ 804
8	Horses and Mules	$	$ 501	$ 565	$ 373
9	Cattle	$	$ 270	$ 407	$ 162
10	Sheep	$	$ 7	$ ---	$ ---
11	Swine	$	$ 342	$ 495	$ 144
12	Poultry	$	$ 205	$ 213	$ 1[illegible]
13	Receipts-Net Increases-Total	$ _____	$ 3,233	$ 5,760	$ 1,436
14	Feed and Supplies	$	$ 1,661	$ 3,177	$ 716
15	Miscellaneous	$	$ 315	$ 838	$ 24
16	Live Stock - Total	$	$ 1,255	$ 1,694	$ 696
17	Horses	$	$ - 56	$ - 63	$ - 34
18	Cattle	$	$ 64	$ 85	$ 63
19	Dairy Products	$	$ 415	$ 505	$ 304
20	Sheep	$	$ 5	$ ---	$ ---
21	Swine	$	$ 355	$ 617	$ 140
22	Poultry	$	$ 147	$ 136	$ 48
23	Eggs	$	$ 305	$ 403	$ 149
24	Miscellaneous	$	$ 20	$ 11	$ 28
25	Expenses-Net Decreases-Total	$ _____	$ 1,710	$ 3,040	$ 735
26	Farm Improvements	$	$ 172	$ 126	$ 180
27	Machinery and Equipment	$	$ 805	$ 1,641	$ 194
28	Feed and Supplies	$	$ ---	$ ---	$ ---
29	Cash Expenses	$	$ 733	$ 1,273	$ 361
30	Receipts less Expenses	$ _____	$ 1,523	$ 2,719	$ 701
31	Operator and Family Labor	$	$ 672	$ 810	$ 544
32	Net Income from Investment	$	$ 852	$ 1,909	$ 157
33	Investment per Acre	$	$ 132.26	$ 151.22	$ 101.27
34	Gross Receipts per Acre	$	$ 16.79	$ 23.07	$ 9.55
35	Total Expenses per Acre	$	$ 12.37	$ 15.42	$ 8.51
36	Net Receipts per Acre	$ _____	$ 4.42	$ 7.65	$ 1.04
37	Man Labor per Total Acres	$	$ 4.99	$ 5.37	$ 4.31
38	Farms with Tractors - Per cent	%	55.5%	100.0%	33.3%
39	Acres of Land in all Crops		128.3	188.2	87.7
40	Corn - Acres		28.6	46.6	11.0
41	Oats - Acres		7.7	9.0	9.0
42	Wheat- Acres		72.8	116.0	52.[illegible]
43	Legumes-Acres		14.6	7.7	9.[illegible]

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find Your Farm Leaks (Monroe County - 1922)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
8.50	84	47	39	275	310	410	132	48	32
8.25	82	46	38	270	300	400	129	47	34
8.00	80	45	37	265	290	390	126	46	36
7.75	78	44	36	260	280	380	123	45	38
7.50	76	43	35	255	270	370	120	44	40
7.25	74	42	34	250	260	360	117	43	42
7.00	72	41	33	245	250	350	114	42	44
6.75	70	40	32	240	240	340	111	41	46
6.50	68	39	31	235	230	330	108	40	48
6.25	66	38	30	230	220	320	105	39	50
6.00	64	37	29	225	210	310	102	38	52
5.75	62	36	28	220	200	300	99	37	54
5.50	60	35	27	215	190	290	96	36	56
5.25	58	34	26	210	180	280	93	35	58
5.00	56	33	25	205	170	270	90	34	60
4.75	54	32	24	200	160	260	87	33	62
4.50	52	31	23	195	150	250	84	32	64
4.25	50	30	22	190	140	240	81	31	66
4.00	48	29	21	185	130	230	78	30	68
3.75	46	28	20	180	120	220	75	29	70
3.50	44	27	19	175	110	210	72	28	72
3.25	42	26	18	170	100	200	69	27	74
3.00	40	25	17	165	90	190	66	26	76
2.75	38	24	16	160	80	180	63	25	78
2.50	36	23	15	155	70	170	60	24	80
2.25	34	22	14	150	60	160	57	23	82
2.00	32	21	13	145	50	150	54	22	82
1.75	30	20	12	140	40	140	51	21	84
1.50	28	19	11	135	30	130	48	20	88
1.25	26	18	10	130	20	120	45	19	90
1.00	24	17	9	125	10	110	42	18	92
.75	22	16	8	120	0	100	39	17	94
.50	20	15	7	115	-10	90	36	16	96
.25	18	14	6	110	-20	80	33	15	98
.00	16	13	5	105	-30	70	30	14	100
- .25	14	12	4	100	-40	60	27	13	102
- .50	12	11	3	95	-50	50	24	12	104
-.75	10	10	2	90	-60	40	21	11	106
-1.00	8	9	1	85	-70	30	18	10	108
-1.25	6	8	-	80	-80	20	15	9	110
-1.50	4	7	-	75	-90	10	12	8	112

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The fitting down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
WABASH COUNTY - 1923

Twenty-four Wabash County farmers who kept farm business records in 1923 earned an average rate of 3.5% on an average capital investment of $22,595. Eight of the twenty-four farmers received an average of 6.9% on their investment, while eight others received only .2%, a difference of 6.7%. In terms of money, this means that the eight more efficient of these twenty-four farmers received an average net income of approximately $1500 more than was received by the average of the eight whose farms showed the lowest net income.

The following table will help enable each Wabash County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are most likely to occur	Your Farm	Average of 24 Farms	Eight Most Profitable Farms	Eight Least Profitable Farms
Rate Earned on Investment		3.5%	6.9%	.2%
Labor and Management Wage	$	$ 149.	$ 965.	$-461.
Crop Yields - Corn - bushels		47.4	54.5	41.7
Oats - bushels		10.1	25.3	19.4
Wheat - bushels		17.7	19.3	16.4
Returns per $100 invested in all Productive Live-stock (2)	$	$ 104.39	$ 123.97	$ 134.56
For $100 in Horses	$	$- 11.28	$- 11.45	$- 17.33
For $100 in Cattle	$	$ 65.98	$ 74.97	$ 121.20
For $100 in Sheep	$	$ 94.45	$ 120.31	$ 28.46
For $100 in Swine	$	$ 147.55	$ 147.96	$ 149.44
For $100 in Poultry	$	$ 192.90	$ 257.08	$ 134.69
Per cent of Income from Live Stock		50.5	40.3	64.4
Crop Acres per Man		65.4	65.2	64.1
Crop Acres per Horse		18.7	23.6	16.7
Expense per $100 Gross Income	$	$ 68.62	$ 54.27	$ 97.46
Size of Farm - Acres		163.0	155.6	145.9

(1) Records secured and summarized by the Wabash County Farm Bureau, Mt. Carmel, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.

(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from Wabash County Records - 1923 (Cont'd)

		Your Farm	Average of 24 Farms	Eight Most Profitable Farms	Eight Least Profitable Farms
1	Value of Land per Acre	$ -	$ 103	$ 106	$ 101
2	Capital Investment - Total	$	$ 22,595	$ 22,890	$ 19,543
3	Land	$	$ 16,769	$ 16,516	$ 14,633
4	Buildings (1)	$	$ 2,086	$ 2,448	$ 1,929
5	Machinery and Equipment	$	$ 784	$ 1,115	$ 695
6	Feed and Supplies	$	$ 1,045	$ 1,173	$ 775
7	Live Stock - Total	$	$ 1,911	$ 1,637	$ 1,461
8	Horses	$	$ 559	$ 474	$ 460
9	Cattle	$	$ 784	$ 615	$ 332
10	Sheep	$	$ 36	$ 54	$ 30
11	Swine	$	$ 371	$ 322	$ 466
12	Poultry	$	$ 161	$ 172	$ 173
13	Receipts-Net Increases-Total	$	$ 2,510	$ 3,434	$ 1,775
14	Feed and Supplies	$	$ 1,122	$ 1,838	$ 583
15	Miscellaneous	$	$ 120	$ 221	$ 47
16	Live Stock - Total	$	$ 1,268	$ 1,374	$ 1,144
17	Horses	$	$ - 59	$ - 51	$ - 73
18	Cattle	$	$ 227	$ 317	$ 41
19	Dairy Products	$	$ 272	$ 144	$ 365
20	Sheep	$	$ 37	$ 78	$ 9
21	Swine	$	$ 487	$ 458	$ 577
22	Poultry	$	$ 86	$ 136	$ 34
23	Eggs	$	$ 196	$ 272	$ 169
24	Miscellaneous	$	$ 22	$ 17	$ 22
25	Expenses-Net Decreases-Total	$	$ 1,071	$ 1,089	$ 1,090
26	Farm Improvements	$	$ 167	$ 179	$ 157
27	Machinery and Equipment	$	$ 282	$ 356	$ 296
28	Feed and Supplies	$	$ 13	---	$ 40
29	Cash Expenses	$	$ 608	$ 552	$ 597
30	Receipts less Expenses	$	$ 1,440	$ 2,345	$ 685
31	Operator and Family Labor	$	$ 652	$ 775	$ 638
32	Net Income from Investment	$	$ 788	$ 1,570	$ 46
33	Investment per Acre	$	$ 138.65	$ 147.07	$ 133.97
34	Gross Receipts per Acre	$	$ 15.40	$ 22.06	$ 12.16
35	Total Expensesper Acre	$	$ 10.57	$ 11.97	$ 11.84
36	Net Receipts per Acre	$	$ 4.83	$ 10.09	$ .32
37	Man Labor per Total Acres	$	$ 5.12	$ 6.08	$ 5.28
38	Farms with Tractors - Per cent		61.6	62.5	37.5
39	Acres of Land in all Crops		107.9	120.7	97.4
40	Corn - Acres		34.5	32.1	32.3
41	Oats - Acres		15.3	6.8	8.9
42	Wheat - Acres		38.6	33.7	32.6
43	Legumes - Acres		9.8	7.1	14.1

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find Your Farm Leaks - (Wabash County - 1923)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor, as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
9.00	92	54	40	175	370	410	132	41	24
8.75	90	52	39	170	360	400	129	40	26
8.50	88	50	38	165	350	390	126	39	28
8.25	86	48	37	160	340	380	123	38	30
8.00	84	46	36	155	330	370	120	37	32
7.75	82	44	35	150	320	360	117	36	34
7.50	80	42	34	145	310	350	114	35	36
7.25	78	40	33	140	300	340	111	34	38
7.00	76	38	32	135	290	330	108	33	40
6.75	74	36	31	130	280	320	105	32	42
6.50	72	34	30	125	270	310	102	31	44
6.25	70	32	29	120	260	300	99	30	46
6.00	68	30	28	115	250	290	96	29	48
5.75	66	28	27	110	240	280	93	28	50
5.50	64	26	26	105	230	270	90	27	52
5.25	62	24	25	100	220	260	87	26	54
5.00	60	22	24	95	210	250	84	25	56
4.75	58	20	23	90	200	240	81	24	58
4.50	56	18	22	85	190	230	78	23	60
4.25	54	16	21	80	180	220	75	22	62
4.00	52	14	20	75	170	210	72	21	64
3.75	50	12	19	70	160	200	69	20	66
3.50	48	10	18	65	150	190	66	19	68
3.25	46	8	17	60	140	180	63	18	70
3.00	44	6	16	55	130	170	60	17	72
2.75	42	4	15	50	120	160	57	16	74
2.50	40	2	14	45	110	150	54	15	76
2.25	38	-	13	40	100	140	51	14	78
2.00	36	-	12	35	90	130	48	13	80
1.75	34	-	11	30	80	120	45	12	82
1.50	32	-	10	25	70	110	42	11	84
1.25	30	-	9	20	60	100	39	10	86
1.00	28	-	8	15	50	90	36	9	88
.75	26	-	7	10	40	80	33	8	90
.50	24	-	6	5	30	70	30	7	92
.25	22	-	5	0	20	60	27	6	94
.00	20	-	4	-5	10	50	24	5	96
-.25	18	-	3	-10	0	40	21	4	98
-.50	16	-	2	-15	-10	30	18	3	100
-.75	14	-	1	-20	-20	20	15	2	102
-1.00	12	-	-	-25	-30	10	12	1	104
-1.25	10	-	-	-30	-40	0	9	-	106
-1.50	8	-	-	-35	-50	-10	6	-	108

Factors Which Merit Special Attention

Rate Earned on Investment - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. ~~kept.~~ In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The feeding down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FARM BUSINESS RECORDS (1)
WOODFORD COUNTY - 1923

Ninety-five Woodford County farmers who kept farm business records in 1923 earned an average rate of 3.15% on an average capital investment of $55,411. Thirty-two of the ninety-five farmers received an average of 5.28% on their investment, while thirty-two others received only 1.08% of their investment, a difference of 4.20%. In terms of money, this means that the thirty-two more efficient of these ninety-five farmers received an average net income of approximately $2325 more than was received by the thirty-two whose farms showed the lowest net incomes.

The following table will help enable each Woodford County farmer who kept these records to find some of the leaks in his farm business, if there have been such leaks in his business.

Rate Earned, Labor and Management Wage and Factors in which Leaks are most likely to occur		Your Farm	Average of 95 Farms	32 Most Profitable Farms	32 Least Profitable Farms
Rate Earned on Investment	%		3.15%	5.28%	1.08%
Labor and Management Wage	$		$-447.	$734.	$-1511.
Crop Yields - Corn - Bushels			48.6	50.1	49.6
Oats - Bushels			48.3	49.7	49.0
Wheat - Bushels			24.5	26.7	24.0
Returns per $100 Invested (2) in all Productive Live-stock	$		$ 101.63	$119.63	$ 85.13
For $100 In Horses	$		$- 2.53	$- 4.66	$- 1.65
For $100 in Cattle	$		$ 78.07	$109.77	$ 54.59
For $100 in Sheep	$		$ 45.05	$ 87.72	$ 26.26
For $100 in Swine	$		$ 121.07	$136.17	$ 107.70
For $100 in Poultry	$		$ 156.64	$166.90	$ 134.04
Percent of Income from Livestock	%		43.5%	48.0%	44.4%
Crop Acres per Man			86.7	90.0	83.3
Crop Acres per Horse			21.6	22.9	19.8
Expense per $100 Gross Income	$		$ 60.34	$ 46.53	$ 82.41
Size of Farm - Acres			204.2	207.3	195.8

(1) Records secured and summarized by the Woodford County Farm Bureau, Eureka, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois cooperating.

(2) The average investment at the beginning and end of the year was used in finding these factors.

Data from Woodford County Records - 1933 (Cont'd)

		Your Farm	Average of 95 Farms	32 Most Profitable Farms	32 Least Profitable Farms
1	Value of Land per Acre	$	$ 215	$ 215	$ 215
2	Capital Investment - Total	$ _____	$ 55,431	$ 55,607	$ 53,621
3	Land	$	$ 49,191	$ 44,587	$ 45,377
4	Buildings (1)	$	$ 3,876	$ 3,634	$ 4,305
5	Machinery and Equipment	$	$ 1,604	$ 1,485	$ 1,758
6	Feed and Supplies	$	$ 2,830	$ 2,833	$ 2,769
7	Live Stock - Total	$	$ 2,863	$ 3,119	$ 2,712
8	Horses	$	$ 889	$ 849	$ 870
9	Cattle	$	$ 858	$ 924	$ 887
10	Sheep	$	$ 120	$ 265	$ 48
11	Swine	$	$ 848	$ 933	$ 814
12	Poultry	$	$ 148	$ 146	$ 152
13	Receipts-Net Increases-Total	$ _____	$ 4,353	$ 5,487	$ 3,250
14	Feed and Supplies	$	$ 2,372	$ 2,755	$ 1,725
15	Miscellaneous	$	$ 79	$ 83	$ 63
16	Live Stock - Total	$	$ 1,902	$ 2,649	$ 1,452
17	Horses	$	$- 22	$- 39	$- 14
18	Cattle	$	$ 491	$ 826	$ 342
19	Dairy Products	$	$ 196	$ 264	$ 110
20	Sheep	$	$ 41	$ 63	$ 13
21	Swine	$	$ 948	$ 1,280	$ 783
22	Poultry	$	$ 84	$ 101	$ 67
23	Eggs	$	$ 140	$ 141	$ 124
24	Miscellaneous	$	$ 23	$ 15	$ 37
25	Expenses-Net Decreases-Total	$ _____	$ 1,923	$ 1,851	$ 2,005
26	Farm Improvements	$	$ 244	$ 206	$ 271
27	Machinery and Equipment	$	$ 453	$ 392	$ 530
28	Feed and Supplies	$	$ ---	$ ---	$ ---
29	Cash Expenses	$	$ 1,226	$ 1,253	$ 1,205
30	Receipts less Expenses	$ _____	$ 2,431	$ 3,636	$ 1,245
31	Operator and Family Labor	$	$ 686	$ 687	$ 662
32	Net Income from Investment	$	$ 1,744	$ 2,949	$ 583
33	Investment per Acre	$	$ 271.36	$ 269.28	$ 273.86
34	Gross Receipts per Acre	$	$ 21.48	$ 26.60	$ 16.33
35	Total Expenses per acre	$	$ 12.94	$ 12.38	$ 13.95
36	Net Receipts per Acre	$ _____	$ 8.54	$ 14.22	$ 2.38
37	Man Labor per Total Acres	$	$ 5.42	$ 5.58	$ 5.41
38	Farms with Tractors - Percent	%	56.4%	40.6%	71.0%
39	Acres of Land in all Crops		164.9	171.0	152.4
40	Corn - Acres		84.0	83.6	77.2
41	Oats - Acres		51.4	50.5	47.6
42	Wheat - Acres		11.2	13.6	8.0
43	Legumes-Acres		10.1	11.6	7.2

(1) The investment in buildings, machinery and equipment, etc. at the beginning of the year was used here.

Find Your Farm Leaks (Woodford County -11923)

The numbers just above the line across the middle of this page are approximately the averages for your county for the factors as named at the tops of the columns. By drawing a line across each column at the point where the number represents your efficiency for that factor as given on page 1 of this report, you can see where your efficiency is above the average and where it is below the average.

Rate Earned	Bushels per Acre of			Returns per $100 Invested in			Crop Acres per		Expense per $100 Gross Income
	Corn	Oats	Wheat	Cattle	Hogs	Poultry	Man	Horse	
8.50	90	90	45	185	330	340	150	43	18
8.25	88	88	44	180	320	360	147	42	20
8.00	86	86	43	175	310	350	144	41	22
7.75	84	84	42	170	300	340	141	40	24
7.50	82	82	41	165	290	330	138	39	26
7.25	80	80	40	160	280	320	135	38	28
7.00	78	78	39	155	270	310	132	37	30
6.75	76	76	38	150	260	300	129	36	32
6.50	74	74	37	145	250	290	126	35	34
6.25	72	72	36	140	240	280	123	34	36
6.00	70	70	35	135	230	270	120	33	38
5.75	68	68	34	130	220	260	117	32	40
5.50	66	66	33	125	210	250	114	31	42
5.25	64	64	32	120	200	240	111	30	44
5.00	62	62	31	115	190	230	108	29	46
4.75	60	60	30	110	180	220	105	28	48
4.50	58	58	29	105	170	210	102	27	50
4.25	56	56	28	100	160	200	99	26	52
4.00	54	54	27	95	150	190	96	25	54
3.75	52	52	26	90	140	180	93	24	56
3.50	50	50	25	85	130	170	90	23	58
3.25	48	48	24	80	120	160	87	22	60
3.00	46	46	23	75	110	150	84	21	62
2.75	44	44	22	70	100	140	81	20	64
2.50	42	42	21	65	90	130	78	19	66
2.25	40	40	20	60	80	120	75	18	68
2.00	38	38	19	55	70	110	72	17	70
1.75	36	36	18	50	60	100	69	16	72
1.50	34	34	17	45	50	90	66	15	74
1.25	32	32	16	40	40	80	63	14	76
1.00	30	30	15	35	30	70	60	13	78
.75	28	28	14	30	20	60	57	12	80
.50	26	26	13	25	10	50	54	11	82
.25	24	24	12	20	0	40	51	10	84
.00	22	22	11	15	-10	30	48	9	86
-.25	20	20	10	10	-20	20	45	8	88
-.50	18	18	9	5	-30	10	42	7	90
-.75	16	16	8	0	-40	0	39	6	92
-1.00	14	14	7	-5	-50	-10	36	5	94
-1.25	12	12	6	-10	-60	-20	33	4	96
-1.50	10	10	5	-15	-70	-30	30	3	98
-1.75	8	8	4	-20	-80	-40	27	2	100
-2.00	6	6	3	-25	-90	-50	24	1	102

Factors Which Merit Special Attention

Rate Earned on Investmen - The rate earned on the investment is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. In regions where the average investment is small, the Labor and Management Wage is also an excellent measure of managing ability. Anyone whose rate earned on the total farm investment or whose Labor and Management Wage is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of legumes, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Live Stock - Where any considerable part of the income of a farm is from live stock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of live stock.

Per cent of Income from Live Stock - In a region where the best paying farms receive a large proportion of their income from live stock, the less successful farmers will do well to consider increasing their income from live stock. This may be done by improving the quality of live stock, by better feeding, sanitary and breeding methods or by increasing the amount of live stock kept. In order to improve the quality of live stock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the live stock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. It costs approximately $100 per year to keep one work horse when one includes present feed costs, depreciation, interest on investment, barn room, harness costs, etc. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best reduce the man and horse labor costs. A rotation should be chosen, so as to avoid having a very large labor requirement at any one time, so as to require a uniform amount of man and horse labor from early spring until late fall, and so as to utilize the family labor to best advantage. The feeding down of crops and use of enough live stock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some

men have reduced the amount of both man and horse labor to a point where crop yields and returns from live stock are reduced because of lack of sufficient well directed labor.

Expense per $100 Gross Income - This is a measure of thrift in all parts of the farm business. Farm records show that men who keep expenses low in proportion to their incomes are men who practice more or less of the following things. They plan their work so as to do as much as possible themselves or with family labor. After getting a few good breeding females, they raise their own breeding stock except for the purchase of pure bred sires. Insofar as feasible they raise and prepare their own seeds. They utilize rainy days and off seasons to repair buildings, fences, machinery and harness. This saves the purchase of much new equipment, the paying out of high wages for skilled labor for such repairs as they can readily do themselves and also saves the expense incident to delay caused by broken machinery or fences during the busy season.

Size of Farm - When one finds that his farm is smaller than the most profitable farms in his locality and his income is low even though he has good crop yields and good returns from live stock, he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Closing Suggestions

1. Leaks in the farm business are most likely to occur along the line of these factors which have been discussed, namely:

a. Crop yields
b. Returns from investment in live stock
c. The proportion of returns from live stock
d. Use of man labor
e. Use of horse labor
f. Expenses in proportion to income
g. Size of farm

2. A careful comparison of a man's farm business record beside those of several other men farming under similar conditions will enable him to find the leaks in his farm business.

3. There can be no improvement without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

4. It is the well balanced farm that pays. One may have good crop yields and make good use of live stock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from live stock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF TWENTY-FIVE FARM BUSINESS RECORDS
CLINTON COUNTY - 1922

Records secured and summarized by the Clinton County Farm Bureau, Breese, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Twenty-five Clinton County farmers earned an average interest rate of 1.7% on an average capital investment per farm of $19,367 in 1922. Six of these farmers received an average of 5.6% interest on their investment while six others lacked an average of 2.0% of earning any interest.

The following table gives rather complete data for the twenty-five farms, for the six farms which earned the highest interest rates and for the six farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

CLINTON COUNTY SUMMARY
1 9 2 2

	Your Farm	Average of 25 Farms	6 Highest Farms	6 Lowest Farms
1. Size of Farm		163.9	151.2	161.0
2. Value of Land per Acre		$ 98	$ 80	$ 102
3. Capital Investment - Total		$19367	$15899	$17075
4 &5. Land and Buildings		$15402	$12054	$13745
6. Machinery and Equipment		$ 1306	$ 910	$ 1048
7. Feed and Supplies		$ 827	$ 857	$ 731
8. Livestock - Total		$ 1832	$ 2078	$ 1551
9. Horses		$ 589	$ 651	$ 510
10. Cattle		$ 892	$ 1053	$ 758
11. Sheep		$ 2	$ 0	$ 0
12. Swine		$ 83	$ 49	$ 91
13. Poultry		$ 266	$ 325	$ 192
14. Receipts - Net Increases-Tot.		$ 2212	$ 2865	$ 1424
15. Feed and Supplies		$ 597	$ 652	$ 562
16. Miscellaneous		$ 116	$ 49	$ 73

	Your Farm	Average of 25 Farms	6 Highest Farms	6 Lowest Farms
17. Livestock - Total		$ 1499	$ 2164	$ 789
18. Horses		$ -25	$ 12	$ -92
19. Cattle		$ 904	$ 1317	$ 438
20. Sheep		$ - 1	$ 00	$ 0
21. Swine		$ 114	$ 164	$ 78
22. Poultry		$ 504	$ 670	$ 358
23. Miscellaneous		$ 3	$ 1	$ 7
24. Expenses-Net Decreases-Total		$ 979	$ 884	$ 1050
25. Farm Improvements		$ 168	$ 192	$ 190
26. Machinery and Equipment		$ 272	$ 234	$ 245
27. Feed and Supplies		$ 25	$ 34	$ 0
28. Cash Expenses		$ 514	$ 424	$ 615
29. Receipts less Expenses		$ 1233	$ 1981	$ 374
30. Operators and Unpaid Family Labor		$ 906	$ 1085	$ 723
31. Net Income from Investment		$ 327	$ 896	$ -349
32. Rate of Interest Earned		1.7%	5.6%	- 2.0%
33. Labor and Management Wage		$ 141	$ 656	$ -765
3				
34. Investment per Acre		$ 123	$ 105	$ 127
35. Gross Receipts per Acre		$ 13.49	$ 18.94	$ 8.84
36. Total Expense per Acre		$ 11.50	$ 13.02	$ 11.01
37. Net Receipts per Acre		$ 1.99	$ 5.92	$ - 2.17
38. Man Labor Cost per Total Acre		$ 6.40	$ 7.69	$ 6.45
39. Crop Acres per Man		57.0	48.7	61.8
40. Crop Acres per Horse		19.3	14.3	17.8
41. Percent of Farms with Tractor		4.0%	16.6%	0.0%
42. Percent of Land in Crops		78.7%	72.5%	84.4%
43. Corn - Acres		29.4	30.8	22.8
44. Yield				
45. Oats - Acres		15.4	9.8	15.8
46. Yield				
47. Wheat-Acres		46.1	37.0	45.0
48. Yield				
49. Legumes - Acres		20.8	24.3	9.5
50. Percent of Receipts from L.S.		67.7%	75.5%	55.3%
51. Returns for $100 Invested in L.S.		$ 120.81	$ 146.00	$ 87.93
52. " " " in Horses		$ -4.55	$ 2.00	$-19.75
53. " " " " Cattle		$ 104.30	$ 128.20	74.25
54. " " " " Sheep		$ 18.75	0	0
55. " " " " Swine		$ 110.20	$ 217.20	$ 75.20
56. " " " " Poultry		$ 174.30	$ 180.70	$194.00

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 32) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48)- Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

   A. Crop yields, including the rotation of crops
   B. Returns on the investment in livestock
   C. The proportion of returns from livestock
   D. Use of Man Labor
   E. Use of Horse Labor
   F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF SEVEN COLES COUNTY FARM BUSINESS RECORDS
COLES COUNTY - 1922

Records secured and summarized by the Coles County Farm Bureau, Charleston, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Seven Coles County Farmers earned an average interest rate of 4.7% on an average capital investment per farm of $42917 in 1922. The following table gives rather complete data for the seven farms. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

COLES COUNTY SUMMARY
1922

	Average of 7 Farms	Your Farm
1. Size of Farm	174.3	
2. Value of Land per Acre	$ 194	
3. Capital Investment - Total	$42917	
4. Land	$33809	
5. Building	$ 4216	
6. Machinery and Equipment	$ 1241	
7. Feed and Supplies	$ 1240	
8. Livestock - Total	$ 3411	
9. Horses	$ 777	
10. Cattle	$ 966	
11. Sheep	$ 65	
12. Swine	$ 486	
13. Poultry	$ 117	
14. Receipts - Net Increases Total	$ 4299	
15. Feed and Supplies	$ 1666	
16. Miscellaneous	$ 60	
17. Livestock - Total	$ 3573	
18. Horses	$ 1	
19. Cattle	$ 999	
20. Sheep	$ 46	
21. Swine	$ 1369	
22. Poultry	$ 142	
23. Miscellaneous	$ 16	
24. Expenses - Net Decreases - Total	$ 1682	
25. Farm Improvements	$ 301	
26. Machinery and Equipment	$ 417	
27. Feed and Supplies	$ 29	
28. Cash Expenses	$ 935	
29. Receipts less expenses	$ 2617	

	Average of 7 Farms	Your Farm
30. Operator and Unpaid Family Labor	$ 594	
31. Net income from Investment	$ 2023	
32. Rate of Interest earned	4.7%	
33. Labor and Management Wage	$ 279	
34. Investment per acre	$ 246	
35. Gross receipts per acre	$ 24.66	
36. Total expense per acre	$ 13.05	
37. Net receipts per acre	$ 11.61	
38. Man labor cost per total acre	$ 5.73	
39. Crop acres per man	~~91.9~~ 59.7	
40. Crop acres per horse	18.4	
41. Percent of farms with tractors	28.5%	
42. Percent of land in crops	73.4%	
43. Corn - acres	56.4	
44. Yield	53.3	
45. Oats - Acres	20.3	
46. Yield	26.4	
47. Wheat - Acres	20.8	
48. Yield	24.7	
49. Legumes - Acres	29.1	
50. Receipts from livestock	59.8%	
51. Return for $100 invested in L.S.	$ 141.00	
52. Return for $100 in Horses	$ - - - -	
53. " " " " Cattle	$ 90.50	
54. " " " " Sheep	$ 65.50	
55. " " " " Swine	$ 258.00	
56. " " " " Poultry	$ 120.00	

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 32) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48)- Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

A. Crop yields, including the rotation of crops
B. Returns on the investment in livestock
C. The proportion of returns from livestock
D. Use of Man Labor
E. Use of Horse Labor
F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF EIGHT FARM BUSINESS RECORDS
JO DAVIESS COUNTY - 1922

Records secured and summarized by the Jo Daviess County Farm Bureau, Elizabeth, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Eight Jo Daviess County farmers earned an average interest rate of 5.0% on an average capital investment per farm of $30,103 in 1922. Two of these farmers received an average of 7.9% interest on their investment while two others earned an average of 2.4% interest.

The following table gives rather complete data for the eight farms, for the two farms which earned the highest interest rates and for the two farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

JO DAVIESS COUNTY SUMMARY
1922

	Your Farm	Average of 8 Farms	Two Best Farms	Two Poorest Farms
1. Size of Farm		$ 170	$ 150	$ 155
2. Value of Land per Acre		$ 141	$ 96	$ 122
3. Capital Investment - Total		$30103	$23705	$ 25468
4. Land		$20963	$14398	$ 19000
5. Buildings		$ 4569	$ 4930	$ 2580
6. Machinery and Equipment		$ 1181	$ 1428	$ 944
7. Feed and Supplies		$ 1040	$ 864	$ 1267
8. Livestock - Total		$ 2350	$ 2085	$ 1377
9. Horses		$ 661	$ 450	$ 330
10. Cattle		$ 1189	$ 1238	$ 858
11. Sheep		$ 18	$ 5	
12. Swine		$ 343	$ 279	$ 375
13. Poultry		$ 139	$ 113	$ ~~[illegible]~~
14. Receipts-Net Increases-Total		$ 3345	$ 3591	$ 2259
15. Feed and Supplies		$ 964	$ 995	$ 222
16. Miscellaneous		$ 98	$ 223	$ 73

	Your Farm	Average of 8 Farms	Two Best Farms	Two Poorest Farms
17. Livestock - Total		$ 2283	$ 2373	$ 1964
18. Horses		$ 10	$ 15	$ - 53
19. Cattle		$ 890	$ 915	$ 909
20. Sheep		$ 36	$ 7	[illegible]
21. Swine		$ 1047	$ 1152	$ 1022
22. Poultry		$ 267	$ 284	$ 83
23. Miscellaneous		$ 33	$	$ 3
24. Expenses-Net Decreases-Total		$ 1117	$ 1164	$ 1110
25. Farm Improvements		$ 236	$ 231	$ 254
26. Machinery and Equipment		$ 214	$ 267	$ 162
27. Feed and Supplies		$ 22		$ 90
28. Cash Expenses		$ 645	$ 666	$ 604
29. Receipts less Expenses		$ 2223	$ 2427	$ 1149
30. Operators and Unpaid Family Labor		$ 714	$ 540	$ 517
31. Net Income from Investment		$ 1514	$ 1887	$ 632
32. Rate of Interest Earned		5.0%	7.9%	2.4
33. Labor and Management Wage		$ 486	$ 1191	$ -154
34. Investment per Acre		$ 177	$ 158	$ 164
35. Gross Receipts per Acre		$ 19.67	$ 23.94	$ 14.57
36. Total Expense per Acre		$ 10.77	$ 11.36	$ 10.50
37. Net Receipts per Acre		$ 8.90	$ 12.58	$ 4.07
38. Man Labor Cost per Total Acre		$ 5.98	$ 4.49	$ 5.01
39. Crop Acres per Man		49.00	68.2	36.0
40. Crop Acres per Horse		16.3	17.4	13.5
41. Percent of Farms with Tractors		25.0%	50.0%	0.0%
42. Percent of Land in Crops		54.7%	52.3%	34.8%
43. Corn - Acres		30.0	37.0	16.0
44. Yield		56.4	45.0	65.0
45. Oats - Acres		13.0	10.0	17.0
46. Yield		36.5	34.9	39.5
47. Wheat - Acres		4.0	2.0	10.0
48. Yield		16.2	26.0	17.3
49. Legumes - Acres		15.0	23.0	11.0
50. Percent of Receipts from Livestock		68.2%	66.0%	86.9%
51. Return for $100 invested in Liverstock		$111.00	$110.00	$96.00
52. Returns for $100 in Horses		$ 2.00	$ 3.00	$-16.00
53. " " " " Cattle		$ 69.00	$148.00	$ 65.00
54. " " " " Sheep		$ 206.00	$280.00	
55. " " " " Swine		$ 182.00	$159.00	$174.00
56. " " " " Poultry		$ 164.00	$163.00	$ 68.00

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 32) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48) - Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

   A. Crop yields, including the rotation of crops
   B. Returns on the investment in livestock
   C. The proportion of returns from livestock
   D. Use of Man Labor
   E. Use of Horse Labor
   F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF THIRTEEN FARM BUSINESS RECORDS
KANE COUNTY - 1922

Records secured and summarized by the Kane County Farm Bureau, Geneva, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Thirteen Kane County farmers earned an average interest rate of 3.2% on an average capital investment per farm of $45,356 in 1922. Four of these farmers received an average of 5.3% interest on their investment while four others earned an average of 0.4% interest.

The following table gives rather complete data for the thirteen farms, for the four farms which earned the highest interest rates and for the four farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

KANE COUNTY SUMMARY
1 9 2 2

	Your Farm	Average of 13 Farms	Four Best Farms	Four Poorest Farms
1. Size of Farm		164	165	142
2. Value of Land per Acre		$ 206	$ 228	$ 188
3. Capital Investment-Total		$45356	$50208	$35771
4. Land		$33685	$37750	$26901
5. Buildings		$4752	$ 4881	$ 3113
6. Machinery and Equipment		$ 1593	$ 1524	$ 1302
7. Feed and Supplies		$ 1464	$ 1600	$ 1386
8. Livestock - Total		$ 3862	$ 4453	$ 3069
9. Horses		$ 614	$ 537	$ 613
10. Cattle		$ 2745	$ 3006	$ 2208
11. Sheep				
12. Swine		$ 344	$ 736	$ 150
13. Poultry		$ 159	$ 173	$ 98
14. Receipts -Net Increase-Tot.		$ 4568	$ 5705	$ 3349
15. Feed and Supplies		$ 531	$ 403	[illegible]
16. Miscellaneous		$ 273	$ 219	[illegible]

	Your Farm	Average of 13 Farms	Four Best Farms	Four Poorest Farms
17. Livestock - Total		$ 3964	$ 5083	$ 3554
18. Horses		$ -35	$ - 25	$ - 15
19. Cattle		$ 2961	$ 4001	$ 2630
20. Sheep		$ 116		$ 377
21. Swine		$ 444	$746	$ 419
22. Poultry		$ 256	$ 342	$ 140
23. Miscellaneous		$ 22	$ 19	$ 3
24. Expenses-Net Decreases-Total		$ 2268	$ 1939	$ 2993
25. Farm Improvements		$ 430	$ 220	$ 797
26. Machinery and Equipment		$ 445	$ 435	$ 385
27. Cash Expenses		1256	$ 1188	$ 1521
28. Feed and Supplies		$ 137	$ 96	$ 290
29. Receipts less Expenses		$ 2300	$ 3766	$ 856
30. Operators and Unpaid Family Labor		$ 857	$ 1091	$ 700
31. Net Income from Investment		$ 1443	$ 2675	$ 156
32. Rate of Interest Earned		3.2%	5.3%	0.4%
33. Labor and Management Wage		$ -333	$ 665	$-1123
34. Investment per Acre		$ 277	$ 302	$ 251
35. Gross Receipts per Acre		$ 27.85	$ 34.57	$ 27.10
36. Total Expenses per Acre		$ 19.05	$ 18.36	$ 26.00
37. Net Receipts per Acre		$ 8.80	$ 16.21	$ 1.10
38. Man Labor Cost per Tot. Acre		$ 7.95	$ 9.12	$ 9.48
39. Crop Acres per Man		55.5	49.6	48.5
40. Crop Acres per Horse		21.9	20.7	21.7
41. Percent of Farms with Tractor		38.4%	25.0%	0.0%
42. Percent of Land in Crops		73.1%	72.1%	80.0%
43. Corn - Acres		41.0	46.0	40.0
44. Yield		56.9	60.5	51.5
45. Oats - Acres		19.0	20.0	16.0
46. Yield		55.7	62.3	43.7
47. Wheat - Acres		8.0	7.5	4.0
48. Yield		29.6	24.0	30.0
49. Legumes		16.0	29.0	9.0
50. % Receipts from Livestock		82.4%	89.9%	92.3%
51. Returns for $100 Invested in Livestock		$ 115.20	$ 122.30	$ 141.90
52. Returns for $100 in Horses		$ -5.98	$ -4.67	$ -2.45
53. " " " " Cattle		$ 105.70	$ 120.60	$ 117.80
54. " " " " Sheep				
55. " " " " Swine		$ 132.70	$ 109.20	$ 226.65
56. " " " " Poultry		$ 158.30	$ 193.00	$ 147.00

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 33) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48)- Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

   A. Crop yields, including the rotation of crops
   B. Returns on the investment in livestock
   C. The proportion of returns from livestock
   D. Use of Man Labor
   E. Use of Horse Labor
   F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF ELEVEN FARM BUSINESS RECORDS

LAWRENCE COUNTY - 1922

Records secured and summarized by the Lawrence County Farm Bureau, Lawrenceville Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Eleven Lawrence County farmers earned an average interest rate of 1.4% on an average capital investment per farm of $24948 in 1922. Three of these farmers received an average of 4.2% interest on their investment while three others earned an average of 0.02% interest.

The following table gives rather complete data for the eleven farms, for the three farms which earned the highest interest rates and for the three farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

LAWRENCE COUNTY SUMMARY
1 9 2 2

	Your Farm	Average of 11 Farms	Three Best Farms	Three Poorest Farms
1. Size of Farm		186	115	178
2. Value of Land per Acre		$ 108	$ 68	$ 145
3. Capital Investment - Total		$24948	$11702	$32220
4. Land		$20047	$ 7817	$25713
5. Buildings		$ 1950	$ 1520	$ 2648
6. Machinery and Equipment		$ 811	$ 327	$ 862
7. Feed and Supplies		$ 735	$ 661	$ 858
8. Livestock - Total		$ 1405	$ 1377	$ 2139
9. Horses		$ 554	$ 535	$ 989
10. Cattle		$ 368	$ 392	$ 583
11. Sheep		$ 47	$ 72	$ 100
12. Swine		$ 292	$ 233	$ 270
13. Poultry		$ 144	$ 145	$ 197
14. Receipts-Net Increase - Total		$ 1889	$ 1556	$ 1607
15. Feed and Supplies		$ 706	$ 486	$ 547
16. Miscellaneous		$ 44	$ 12	$ 11

	Your Farm	Average of 11 Farms	Three Best Farms	Three Poorest Farms
17. Livestock - Total		$1139.	$1058.	$1249.
18. Horses		$ -18	$ -76	$ 21.
19. Cattle		$ 193	$ 263	$ 296.
20. Sheep		$ 31	$ 57	$ 57
21. Swine		$ 638	$ 530	$ 602
22. Poultry		$ 283	$ 263	$ 250
23. Miscellaneous		$ 12	$ 21	$ 23
24. Expenses-Net Decreases -Total		$ 995	$ 618	$1001
25. Farm Improvements		$ 178	$ 141	$ 167
26. Machinery and Equipment		$ 215	$ 78	$ 234
27. Feed and Supplies				
28. Cash Expenses		$ 602	$ 399	$ 600
29. Receipts less Expenses		$ 894	$ 938	$ 606
30. Operators and Unpaid Family Labor		$ 539	$ 441	$ 600
31. Net Income from Investment		$ 355	$ 497	$ 6
32. Rate of Interest Earned		1.4%	4.2%	0.02%
33. Labor and Management Wage		$-428	$ 323	$-1059
34. Investment per Acre		$ 134	$ 102	$ 181
35. Gross Receipts per Acre		$ 10.15	$ 13.53	$ 9.02
36. Total Expenses per Acre		$ 8.25	$ 9.21	$ 8.99
37. Net Receipts per Acre		$ 1.90	$ 4.32	$ 0.03
38. Man Labor per Total Acres		$ 3.82	$ 4.46	$ 4.55
39. Crop Acres per Man		81.2	70.8	67.7
40. Crop Acres per Horse		20.0	12.0	15.1
41. Farms with Tractors, Percent		27.2%	00.0%	33.3%
42. Percent of Land in Crops		69.4%	70.0%	54.0%
43. Corn - Acres		41.0	17.0	32.0
44. Yield		36.0	38.9	38.9
45. Oats - Acres		9.0		11.0
46. Yield		4.0		3.0
47. Wheat - Acres		48.0	27.0	23.0
48. Yield		12.6	10.7	5.2
49. Legumes - Acres		16.0	29.0	15.0
50. Receipts from Livestock		60.2%	67.9%	77.7%
51. Returns for $100 Invested in Livestock		$137.00	$128.00	$ 105.00
52. Returns for $100 in Horses		$ -3.00	$ -2.00	$ 2.00
53. " " " " Cattle		$ 53.00	$ 67.00	$ 40.00
54. " " " " Sheep		$ 67.00	$ 80.00	$ 58.00
55. " " " " Swine		$222.00	$190.00	$ 215.00
56. " " " " Poultry		$194.000	$180.00	$ 132.00

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 32) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48)- Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

   A. Crop yields, including the rotation of crops
   B. Returns on the investment in livestock
   C. The proportion of returns from livestock
   D. Use of Man Labor
   E. Use of Horse Labor
   F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF FIFTEEN FARM BUSINESS RECORDS
LEE COUNTY - 1922

Records secured and summarized by the Lee County Farm Bureau, Amboy, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Fifteen Lee County farmers earned an average interest rate of 4.9% on an average capital investment per farm of $60,529 in 1922. Five of these farmers received an average of 8.1% interest on their investment while five others earned an average of 2.0%.

The following table gives rather complete data for the fifteen farms, for the five farms which received the highest interest rates, and for the five farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

LEE COUNTY SUMMARY
1 9 2 2

	Your Farm	Average of 15 Farms	5 Highest Farms	5 Lowest Farms
1. Size of Farm		254.6	267.6	273.8
2. Value of Land per Acre		213	215	209
3. Capital Investment - Total		$60529	$64549	$64322
4&5. Land and Buildings		$54124	$57542	$57223
6. Machinery and Equipment		$ 1636	$ 1791	$ 1705
7. Feed and Supplies		$ 1735	$ 1792	$ 2138
8. Livestock - Total		$ 3034	$ 3434	$ 3256
9. Horses		$ 945	$ 1199	$ 752
10. Cattle		$ 1238	$ 1082	$ 1740
11. Sheep		$ 66	$ 132	$ 36
12. Swine		$ 644	$ 843	$ 621
13. Poultry		$ 141	$ 168	$ 107
14. Receipts-Net Increases		$ 5732	$ 8315	$ 4507
15. Feed and Supplies		$ 2598	$ 3786	$ 1551
16. Miscellaneous		$ 81	$ 1	$ 40

	Your Farm	Average of 15 Farms	5 Highest Farms	5 Lowest Farms
17. Livestock - Total		$ 3053	$ 4528	$ 2916
18. Horses		$ -75	$ -102	$ -62
19. Cattle		$ 1223	$ 1674	$ 1523
20. Sheep		$ 264	$ 664	$ 33
21. Swine		$ 1379	$ 1936	$ 1261
22. Poultry		$ 227	$ 383	$ 137
23. Miscellaneous		$ 35	$ 33	$ 24
24. Expenses-Net Decreases-Total		$ 2077	$ 2319	$ 2414
25. Farm Improvements		$ 242	$ 264	$ 248
26. Machinery and Equipment		$ 509	$ 424	$ 696
27. Feed and Supplies		$ 3	$	$ 10
28. Cash Expenses		$ 1323	$ 1631	$ 1460
29. Receipts less Expenses		$ 3655	$$ 5996	$ 2093
30. Operators and Unpaid Family Labor		$ 679	$ 727	$ 760
31. Net Income from Investment		$ 2976	$ 5269	$ 1333
32. Rate of Interest Earned		4.9%	8.1%	2.0%
33. Labor and Management Wage		$ 480	$ 2542	$-1343
34. Investment per Acre		$ 238	$ 241	$ 234
35. Gross Receipts per Acre		$ 20.52	$ 31.07	$ 16.46
36. Total Expense per Acre		$ 10.82	$ 11.37	$ 11.59
37. Net Receipts per Acre		$ 11.69	$ 19.70	$ 4.87
38. Man Labor Cost per Total Acre		$ 4.66	$ 5.14	$ 4.82
39. Crop Acres per Man		80.3	77.7	82.8
40. Crop Acres per Horse		22.5	24.0	25.7
41. Per cent of Farms with Tractors		20.0%	20.0	40.0
42. Per cent of Land in Crops		72.5%	79.0%	71.4%
43. Corn - Acres		92.7	99.6	87.8
44. Yield		53.6	56.8	53.7
45. Oats - Acres		54.1	69.0	50.8
46. Yield		47.3	53.7	44.1
47. Wheat - Acres		9.8	4.4	13.0
48. Yield		23.5	25.0	20.1
49. Legumes - Acres		9.3	3.8	11.4
50. % Receipts from Livestock		53.2%	54.4%	64.7%
51. Returns for $100 Invested in L.S.		$ 102.97	$ 160.17	$ 96.54
52. " " " in Horses		$ -8.40	$ -8.89	$ -8.92
53. " " " " Cattle		$ 79.56	$ 113.37	$ 78.49
54. " " " " Sheep		$ 252.19	$ 316.40	$ 58.51
55. " " " " Swine		$ 182.81	$ 179.14	$ 165.71
56. " " " " Poultry		$ 161.73	$ 216.87	$ 131.34

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 32) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48)- Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

   A. Crop yields, including the rotation of crops
   B. Returns on the investment in livestock
   C. The proportion of returns from livestock
   D. Use of Man Labor
   E. Use of Horse Labor
   F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF TEN FARM BUSINESS RECORDS
MONROE COUNTY - 1922

Records secured and summarized by the Monroe County Farm Bureau, Waterloo, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Ten Monroe County Farmers earned an average interest rate of 3.7% on an average capital investment per farm of $23,320 in 1922. Three of these farmers received an average of 6.9% interest on their investment while three others lacked an average of 0.9% of earning any interest.

The following table gives rather complete data for the ten farms, for the three farms which earned the highest interest rates and for the three farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records.

MONROE COUNTY SUMMARY
1922

	Your Farm	Average of 10 Farms	Three Best Farms	Three Poorest Farms
1. Size of Farm		191	~~184~~ 202	168
2. Value of Land per Acre		$ 83	$ 104	$ 63
3. Capital Investment - Total		$23320	$30471	$15546
4. Land		$15889	$20989	$10650
5. Buildings		$ 2864	$ 3154	$ 1826
6. Machinery and Equipment		$ 2374	$ 3029	$ 1335
7. Feed and Supplies		$ 1047	$ 1759	$ 829
8. Livestock - Total		$ 1146	$ 1560	$ 906
9. Horses		$ 555	$ 592	$ 481
10. Cattle		$ 251	$ 444	$ 178
11. Sheep		$ 8		$ 25
12. Swine		$ 200	$ 323	$ 112
13. Poultry		$ 132	$ 201	$ 110
14. Receipts-Net Increases-Total		2999	$ 4760	$1609
15. Feed and Supplies		$ 1602	$ 2554	$ 788
16. Miscellaneous		$ 267	$ 326	$ 94

	Your Farm	Average of 10 Farms	Three Best Farms	Three Poorest Farms
17. Livestock - Total		$1130.	$1880	$ 727
18. Horses		$ -72	$-150	$ -34
19. Cattle		$ 327	$ 621	$ 177
20. Sheep		$ 3		$ 8
21. Swine		$ 454	$ 714	$ 234
22. Poultry		$ 395	$ 686	$ 274
23. Miscellaneous		$ 23	$ 9	$ 18
24. Expenses-Net Decreases Total -		$1424	$1754	$1140
25. Farm Improvements		$ 152	$ 274	$ 160
26. Machinery and Equipment		$ 502	$793	$ 262
27. Feed and Supplies				
28. Cash Expenses		$ 770	$ 687	$ 726
29. Receipts less Expenses		$1575	$3006	$ 461
30. Operators and Unpaid Family Labor		$ 705	$ 893	$ 609
31. Net Income from Investment		$ 870	$2113	$-148
32. Rate of Interest Earned		3.7%	6.9%	-0.9%
33. Labor and Management Wage		$ 129	$1049	$-468
34. Investment per Acre		$ 122	$ 151	$ 92
35. Gross Receipts per Acre		$ 15.73	$ 23.56	$ 9.57
36. Total Expense per Acre		$ 11.17	$ 13.10	$ 10.45
37. Net Receipts per Acre		$ 4.56	$ 10.46	$ -0.88
38. Man Labor Cost per Total Acre		$ 5.27	$ 5.38	$ 5.38
39. Crop Acres per Man		62.7	76.1	57.4
40. Crop Acres per Horse		23.7	26.2	23.5
41. Per cent of Farms with Tractors		40.0%	33.3%	0.0%
42. Percent of Land in Crops		64.8$	77.7%	65.3%
43. Corn - Acres		30.9	48.0	19.0
44. Yield		42.8	45.4	44.6
45. Oats - Acres		3.2	2.0	7.0
46. Yield		18.2	25.0	17.1
47. Wheat - Acres		59.0	76.0	54.0
48. Yield		13.8	12.8	12.4
49. Legumes - Acres		26.0	29.0	27.0
50. Percent Receipts from Livestock		37.7%	39.5%	45.1%
51. Return for $100 Invested in Livestock		$180.00	$191.00	$157.00
52. Returns for $100 in Horses		$-14.00	$-28.00	$ -7.00
53. " " " " Cattle		$131.50	$138.00	$109.00
54. " " " " Sheep		$ 35.70	$	$ 36.00
55. " " " " Swine		$180.67	$187.00	$166.00
56. " " " " Poultry		$246.00	$302.00	$215.00

FACTORS WHICH MERIT SPECIAL ATTENTION

Interest Earned (Line 38) - The rate of interest earned is an excellent indication of the managing ability of the farm operator. This is particularly true in regions where the average investment per farm is large. Anyone whose rate of interest earned on the total farm investment is below the average for his locality can well study the various factors which will indicate the source of a man's success or failure. In this way he may locate the source of his difficulty. The following paragraphs discuss the more important factors influencing farm earnings.

Crop Yields (Line 43 to 48)- Good crop yields are among the most definite of requirements for good incomes. One whose crop yields are low in comparison with others working land of equal natural value can well study the practices of men who secure higher yields. Men who secure the best yields pay special attention to rotation of crops, seed, drainage, use of clover, use of manure, use of limestone and phosphate where needed, preparation of seed beds, cultivation, and protection from diseases, and insects.

Returns from $100 Invested in Livestock (Line 51 to 56) - Where any considerable part of the income of a farm is from livestock, this item merits special attention. Where the returns are below the average a careful study of the practices on more successful farms may assist the operator to locate places where he can improve his methods. The difficulty may be in a low percentage of calves, pigs, lambs, etc. raised. It may be in lack of attention to sanitary arrangements and protection from disease. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of pure bred stock, it may be the inability to market the young stock at prices in accord with the value of the breeding stock kept. In case of stock feeding operations where feeders are purchased it may be in poor buying both as to time and price. It may be in not producing the quality of stock which the market demands. The growing of sufficient legume forage to supply most of the protein requirements, careful purchase and use of additional protein and mineral supplements, and the utilization of roughage are among other important factors which make possible the more economical production of livestock.

Per cent of Income from Livestock (Line 50) - In a region where the best paying farms receive a large proportion of their income from livestock, the less successful farms will do well to consider increasing their income from livestock. This may be done by improving the quality of livestock, by better feeding, sanitary and breeding methods or by increasing the amount of livestock kept. In order to improve the quality of livestock it has not usually proven profitable for a man to invest in a considerable number of high priced pure bred stock at one time. It is a more safe practice to grow the better stock by using good sires and occasionally picking up good females. Neither is it usually wise for a man who has never handled much stock to buy up a large breeding herd or go suddenly into extensive feeding operations. In any case it is better to work gradually into the livestock business, building up equipment, breeding herds and feeding operations slowly, as one learns to follow successful methods.

The Use of Man Labor and Horse Labor (Lines 39 and 40) - About sixty to eighty per cent of the cost of operating a farm, not including interest or rent charges, is for man labor and horse labor. If a tractor is used the labor is usually reduced, but the machinery expense is increased about in proportion. At present values of feed it costs approximately $100 per year to keep one work horse. If a man finds that he is working fewer crop acres per man or per horse than the average farmer working under similar conditions, he can well study his situation carefully with the idea of cutting down this expense. The changing to a more carefully planned rotation of crops is probably the way in which most men can best

reduce the man and horse labor costs. Such a rotation should be chosen so as to avoid having a very large labor requirement at any one time, and so as to require a uniform amount of man and horse labor from early spring until late fall. The feeding down of crops and use of enough livestock to utilize labor at seasons when field work is light are two other very definite means of increasing the efficiency in the use of labor. While the working of a large number of crop acres per man and per horse is desirable, a study of hundreds of records from over the state indicates that some men have reduced the amount of both man and horse labor to a point where crop yields and returns from livestock are reduced because of lack of sufficient well directed labor.

Size of Farm (Line 1)- When one finds that his farm is smaller than the most profitable farms in his locality and his income is low he may remedy the situation, by buying or renting additional land, or by gradually adopting a more intensive or more specialized type of farming. On the other hand, if he finds that his farm is larger than the best farms and his income is low, he may profit by renting out land, or by planning so as to do more efficient work on his present acreage.

Conclusion

1. Every farm operator can well afford to study his own farm business in the light of these factors which have been discussed.

   A. Crop yields, including the rotation of crops
   B. Returns on the investment in livestock
   C. The proportion of returns from livestock
   D. Use of Man Labor
   E. Use of Horse Labor
   F. Size of Farm.

2. There can be no improvement in farm management without some change in practices used. Carefully planned and slowly developed changes are more likely to result in increased incomes than are impulsive and sudden changes of methods.

3. It is the well balanced farm that pays. One may have good crop yields and make good use of livestock, but receive a small net income because of inefficient use of labor. Or one may work a large acreage per man and per horse, but fail because of low crop yields or poor returns from livestock. A well balanced farm with a fair degree of efficiency along all lines brings the operator good returns which enable him to maintain a high standard of living for his family.

SUMMARY OF NINETY-NINE FARM BUSINESS RECORDS
WOODFORD COUNTY - 1922

Records secured and summarized by the Woodford County Farm Bureau, Eureka, Illinois, and the Department of Farm Organization and Management, University of Illinois, Urbana, Illinois, co-operating.

Ninety-nine Woodford County farmers earned an average interest rate of 3.1% on an average capital investment per farm of $65,870 in 1922. Ten of these farmers received an average of 7% interest on their investment while ten others lacked an average of .1% of earning any interest.

The following table gives rather complete data for the ninety-nine farms, for the ten farms which earned the highest interest rates and for the ten farms which earned the lowest rates. A blank column has been left in order that those who kept the books may write in the records of their own farms in order to compare their work with others who kept similar records .

WOODFORD COUNTY SUMMARY

1922	Your Farm	Average of 99 Farms	Ten Best Farms	Ten Poorest Farms
1. Size of Farm		233	184	219
2. Value of Land per Acre		236	$ 246	$ 288
3. Capital Investment - Total		$65870	$55149	$75462
4. Land		$55097	$45248	$63196
5. Buildings		$ 4046	$ 3101	$ 5980
6. Machinery and Equipment		$ 1785	$ 1715	$ 1867
7. Feed and Supplies		$ 2182	$ 1897	$ 2066
8. Livestock - Total		$ 2758	$ 3189	$ 2253
9. Horses		344	$ 680	$ 833
10. Cattle		$ 872	$ 893	$ 654
11.				
11. Sheep		$ 85	$ 483	$ 18
12. Swine		$ 716	$ 1007	$ 656
13. Poultry		$ 141	$ 126	$ 92
14. Receipts-Net Increases-Total		$ 4827	$ 6223	$ 2086
15. Feed and Supplies		$ 2567	$ 2226	$ 2156
16. Miscellaneous		$ 162	$ 293	$ 40

	Your Farm	Average of 99 Farms	Ten Best Farms	Ten Poorest Farms
17. Livestock - Total		$2098	$3764	$ 770
18. Horses		$ -18	$ -32	$ -46
19. Cattle		$ 531	$ 728	$ 88
20. Sheep		$ 75	$ 410	$ 4
211. Swine		$1237	$2365	$ 589
22. Poultry		$ 245	$ 280	$ 112
23. Miscellaneous		$ 28	$ 13	$ 23
24. Expenses-Net Decreases-Total		$2149	$1761	$2348
25. Farm Improvements		$ 272	$ 205	$ 443
26. Machinery and Equipment		$ 503	$ 346	$ 511
27. Feed and Supplies		$ 6	$---	---
28. Cash Expenses		$1368	$1210	$1394
29. Receipts less Expenses		$2678	$4522	$ 618
30. Operator and Unpaid Family Labor		$ 585	$ 632	$ 703
31. Net Income from Invest.		$2093	$3890	$ -85
32. Rate of Interest Earned		3.1%	7.%	- .1%
33. Labor and Management wage		$-675	$1638	$-3324
34. Investment per Acre		$ 282	$ 300	$ 344
35. Gross Receipts per Acre		$ 20.72	$ 34.20	$ 13.52
36. Total Expenses per Acre		$ 11.74	$ 13.02	$ 13.92
37. Net Receipts per Acre		$ 8.98	$ 21.18	$ -.40
38				
38. Man Labor per Total Acres		$ 4.10	$ 4.98	$ 4.45
39. Crop Acres per Man		85.9	86.4	91.5
40. Crop Acres per Horse		21.8	24.7	21.4
41. Farms with Tractors		50.5%	60.0%	60.0%
42. Per cent of Land in Crops		68.6%	84.7%	80.4%
43. Corn - Acres		70.0	78.0	71.0
44. Yield		55.0	59.1	48.5
45. Oats - Acres		53.2	51.0	66.0
46. Yield		42.7	45.2	37.4
47. Wheat - Acres		7.3	11.0	211
48. Yield		26.8	28.8	23.8
49. Legumes - Acres		19.3	9.0	20.0
50. Receipts from Livestock		43.4%	59.9%	25.9%
51. Return for $100 Invested in Livestock		$107.30	$119.30	$58.87
52. For $100 in Horses		$- 1.93	$ -4.53	$- 3.60
53. " " " Cattle		$ 60.27	$ 69.60	$ 14.68
54. " " " Sheep		$ 75.00	$ 71.30	$ 28.05
55. " " " Swine		$147.40	$107.50	$ 80.94
56. " " " Poultry		$161.00	$187.65	$103.22

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Corn (acre basis) C hampaign and Piatt Counties 1922
Items of Expense and Income on Individual Farms Compared with Average and a Good Standard
Corn was husked from the standing stalk unless otherwise noted.

Farm Number	1	2	3*	4 husked	5	6	7	8**	12	13	Average of 17
Labor											
Man Hours	15.04	14.22	14.8	14.5	14.7	13.7	12.5	17.3	13.8	17.1	14.3
Horse Hours	39.33	32.76	32.4	36.4	32.1	36.1	38.7	43.3	42.1	40.8	34.6
Tractor Hours		.96	.4		1.5					.75	.79
Expenses											
Man Labor	$3.37	3.40	3.87	2.97	3.18	2.81	3.59	3.57	2.95	5.32	3.66
Horse Labor	4.64	4.72	3.59	4.85	3.79	8.91	4.58	7.02	7.68	6.03	5.05
Tractor		1.15	.73		1.05					.40	.72
Seed	.15	.13	.09	.08	.10	.34	.35	.28	.09	.09	.14
Machinery	.61	.89	.24	.54	1.07	2.06	1.10	1.34	1.41	.69	.86
Gen, Farm Expense	3.43	4.79	2.85	3.11	2.94	4.79	4.84	4.09	5.47	5.79	4.37
Miscellaneous		.15		1.04		.77		.01	.57	1.14	.29
Operating Expense	12.20	15.23	11.37	12.56	12.13	19.68	14.46	16.31	18.17	19.46	15.09
Interest on Investment at 5%	15.00	13.73	12.50	12.00	12.50	13.01	12.50	10.00	14.50	13.76	13.30
Total Expense	$27.20	28.96	23.87	24.56	24.63	32.69	26.96	26.31	32.67	33.22	28.39
Yield	47.7	39.0	58.9	31.3	60.2	56.1	41.4	49.8	52.3	54.3	48.
Net cost per bushel	.54	.73	.40	.78	.38	.56	.62	.47	.58	.59	.57
Income											
Grain	$27.20	21.86	31.79	18.37	33.07	32.13	23.66	26.96	29.81	30.95	26.92
Roughage					.11			.20			.01
Pasture	1.31	.27	.42	.18	1.72	.95	1.36	2.88	2.40	1.07	.85
Total Income	$28.51	22.13	32.21	18.55	34.90	33.08	25.02	30.04	32.21	32.02	27.78
Net Profit per Acre	$ 1.31	-6.83	8.34	-6.01	10.27	.39	-1.94	3.73	-.46	-1.20	-.61
Net Profit per Man Hour	$ .09	-.48	.56	-.41	.69	.03	-.15	.21	-.03	-.07	-.04
Man Hours per Bushel	.31	.36	.25	.46	.24	.24	.30	.35	.26	.31	.30

*Includes 10% Hogged Corn
**Includes 27% Hogged Corn

Oats (acre basis) Champaign and Piatt Counties - 1922

Items of Expense and Income on Individual Farms Compared with the Average and a Good Standard

Farm Number	1	2	3	4	5	6	7	8	12	13	Ave. of 13	Stan-dard
Labor												
Man Hours	5.5	8.9	7.3	6.1	7.4	6.1	5.02	6.5	6.4	8.7	6.5	7.
Horse Hours	10.9	9.16	13.8	11.2	14.6	13.8	11.3	12.1	14.3	17.1	12.5	16.
Tractor Hours		1.4								.17	.25	
Expenses												
Man Labor	$ 1.12	1.87	1.44	1.29	1.47	1.21	.99	1.35	1.53	1.96	1.35	1.40
Horse Labor	1.41	1.33	1.54	1.50	1.72	3.40	1.31	1.97	2.80	2.52	1.82	1.60
Tractor		1.78								.09	.25	
Seed	.95	1.04	1.10	1.07	1.08	1.02	.97	1.20	1.33	.87	1.04	1.20
Machinery	.37	.66	.20	.64	.59	1.15	.21	.78	.28	.44	.45	.50
Twine	.26	.17	.17	.20	.25	.21	.22	.26	.17	.21	.20	.25
Fuel	.08		.24	.16	.18	.05	.14	.22	.11	.10	.10	.15
Threshing	.90	.91	.52	.78	.78	.70	.87	.82	.81	.95	.73	.80
Gen. Farm Expense	1.30	3.01	1.42	1.30	1.48	1.53	1.91	1.54	2.61	2.89	2.02	1.60
Miscellaneous		.48									.03	.50
Operating Exp.	6.39	11.25	6.63	6.94	7.55	9.27	6.62	8.08	9.64	10.03	7.99	8.00
Int. on Investment @ 5%	15.00	13.30	12.50	12.00	12.50	13.00	12.50	8.51*	14.50	13.86	13.22	12.50
Total Expense	$21.39	24.55	19.13	18.94	20.05	22.27	19.12	16.59	24.14	23.89	21.21	20.50
Yield	30.	27.4	25.8	30.9	39.9	29.	38.6	41.	32.3	38.2	31.5	45.
Net Cost per Bushel	$ .58	.79	.67	.56	.43	.67	.42	.38	.56	.58	.59	.38
Income												
Grain	$ 8.11	7.14	6.99	8.35	10.79	8.14	10.42	11.07	8.74	10.33	8.45	12.15
Roughage	3.00	3.01	1.50	1.20	2.16	2.04	2.23	1.20	3.00	1.37	1.86	3.00
Pasture	.97		.44	.52	.87	.72	.65		2.62	.26	.58	.50
Total Income	12.08	10.15	8.93	10.07	13.82	10.90	13.30	12.27	14.36	11.96	10.89	15.65
Net Profit per Acre	-9.31	-14.40	-10.20	-8.87	-6.23	-11.37	-5.82	-4.32	-9.78	-11.93	-10.32	-4.85
Net Profit per Man Hr	-1.69	-1.60	-1.38	-1.46	- .84	-1.86	-1.15	- .67	-1.52	-1.36	-1.58	-.69
Man Hours per Bushel	.18	.33	.28	.20	.19	.21	.13	.16	.20	.23	.21	.16

*Part of field used for two crops

WHEAT (acre basis) Champaign and Piatt Counties 1922

Items of Expense and Income on Individual Farms Compared with average and a good standard

FARM NUMBER	1	2	8	9	11	Average	Standard
Labor							
Man Hours	12.09	11.2	13.9	11.8	17.1	12.4	12.
Horse Hours	30.13	12.	32.4	29.3	30.6	27.7	35.
Tractor Hours		2.05		.28	.94	.47	
Expenses							
Man Labor	$ 2.58	2.48	3.08	2.47	3.83	2.66	2.40
Horse Labor	3.51	1.90	4.08	5.15	3.95	4.24	3.50
Tractor Labor		2.98		.36	1.07	.64	
Seed	1.93	1.74	1.62	1.67	1.49	1.70	1.70
Machinery	.68	1.64	1.07	1.89	1.65	1.54	1.00
Twine	.29	.26	.33	.25	.29	.27	.30
Fuel	.17		.41		.34	.11	.20
Threshing	.73	1.20	1.06	*.67	1.13	.85	1.00
General Farm Expense	2.78	3.74	3.36	3.05	6.80	3.33	2.40
Miscellaneous			.43			.08	.50
Operating Expense	12.67	15.94	15.44	15.51	20.55	15.42	13.00
Interest on Investment @ 5%	15.00	13.60	10.00	12.50	13.75	12.51	12.50
Total Expense	$27.67	29.54	25.44	28.01	34.30	27.93	25.50
Yield	15.8	17.9	26.2	22.9	26.2	22.2	25.
Net cost per Bushel	1.58	1.43	1.25	1.06	1.24	1.10	.90
Income							
Grain	$15.03	18.00	26.23	22.22	26.50	21.74	25.
Roughage	2.27	3.97	2.88	1.92	1.75	2.43	2.50
Pasture	.44		.18	1.90		1.05	.50
Total Income	$17.74	21.97	29.29	26.04	28.25	25.22	28.00
Net Profit per Acre	$-9.93	-7.57	3.85	-1.97	-6.05	-2.71	2.50
Net Profit per Man Hour	$- .82	- .67	.27	- .17	- .35	- .22	.21
Man Hours per Bushel	.76	.62	.53	.51	.65	.56	.48

*Used own threshing outfit

Soy Beans (acre basis) Champaign and Piatt Counties 1922

Items of Expense and Income on Individual Farms Compared with Average and a Good Standard

Farm Number	2	3	4	5	9	10	13	Average	Standard
Labor									
Man Hours	11.5	15.4	13.1	15.6	13.8	14.2	11.2	13.9	14.
Horse Hours	21.3	40.1	27.3	28.2	35.1	26.7	27.6	31.4	3[illegible].
Tractor Hours	.62			1.88		1.5	1.8	.72	
Expenses									
Man Labor	$ 2.33	2.89	2.64	3.08	2.56	2.95	2.46	2.69	2.80
Horse Labor	3.06	4.44	3.66	3.33	7.03	3.65	4.07	5.10	3.80
Tractor Labor	.65			1.13		1.70	.98	.46	
Seed	1.57	1.35	1.59	1.91	1.90	1.64	2.23	1.85	1.80
Machinery	.75	.67	1.47	1.40	.89	1.43	.97	1.06	1.10
Twine	.23	.30	.22	.39	.30	.58	.18	.31	.40
Fuel		.64	.22	.58		.10	.25	.22	.20
Threshing	1.57	.96	.72	1.24	*1.02	2.15	.89	1.10	1.20
General Farm Expense	3.90	2.96	2.82	3.10	4.02	5.52	3.68	3.66	2.80
Miscellaneous									.50
Operating Expense	14.06	14.21	13.34	16.16	17.72	19.72	15.71	16.45	14.60
Interest on Investments 5%	14.25	12.50	12.00	12.50	12.50	13.75	12.50	12.59	12.50
Total Expense	$28.31	26.71	25.34	28.66	30.22	33.47	28.21	29.04	27.10
Yield	10.5	13.6	7.25	17.9	16.4	22.5	12.7	15.3	20.0
Net Cost per Bushel	$ 2.52	1.37	3.25	1.22	1.33	1.10	1.86	1.46	1.15
Income									
Grain	8.97	16.42	7.26	21.50	19.75	21.99	12.73	17.64	24.00
Roughage	1.88	4.71	1.78	6.78	6.26	8.60	4.59	5.58	4.00
Pasture		3.35			2.18			1.14	
Total Income	$10.85	24.48	9.04	28.28	28.19	30.59	17.32	24.36	28.00
Net Profit per Acre	-$17.46	-2.23	-16.30	-.38	-2.03	-2.88	-10.89	-4.68	.90
Net Profit per Man Hour	$-1.50	-.14	-1.24	-.02	- .15	- .20	- .97	-.34	.06
Man Hours per Bushel	1.09	1.13	1.82	.87	.84	.63	.88	.91	.7

* Used Own Threshing Outfit