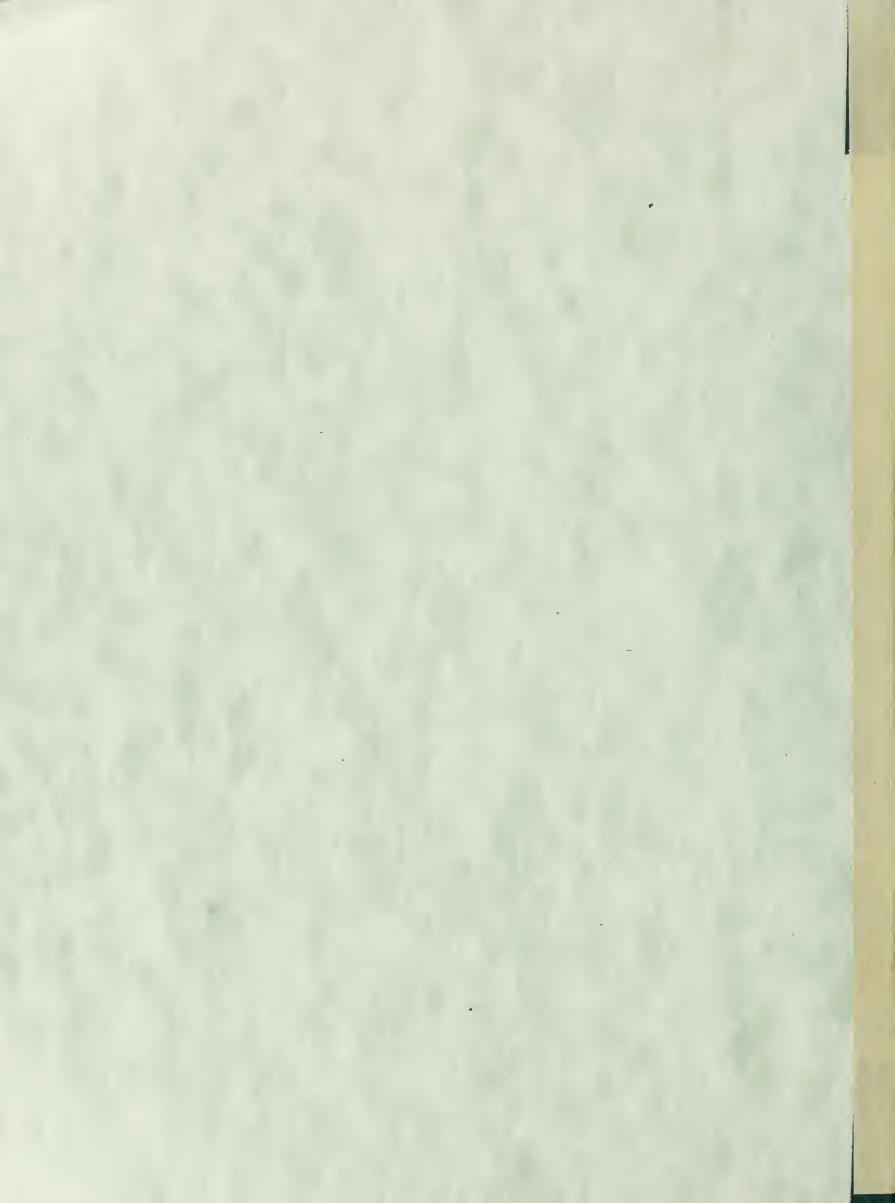
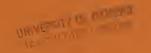
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1964
40th annual

SUMMARY OF ILLINOIS FARM BUSINESS RECORDS

Commercial Farms:

PRODUCTION
COSTS
INCOME
INVESTMENTS

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE COOPERATIVE EXTENSION SERVICE CIRCULAR 915



Source of Data

This report is based on data obtained from farm business records on 6,200 Illinois farms. It is the 40th in a series of annual summaries of such records obtained from farmers cooperating with the Department of Agricultural Economics and the Illinois Farm Bureau Farm Management Service.

At present about 1 out of every 9 full-time commercial farmers (farmers with \$10,000 or more of gross sales) in Illinois is enrolled in this service. The service has grown steadily, and in 1965 there were 10 associations in 102 counties served by 39 full-time fieldmen. Participation in this farm business analysis service is voluntary, and cooperating farmers pay a fee for the services received.

Year	Associa- tions	Counties partici- pating	Fieldmen employed	Farmers enrolled	
1940	3	23	3	680	
1945		54	9	1,830	
1950		59	15	2,760	
1955		89	24	4,501	
1960		100	33	5,494	
1965	10	102	39	6,366	

Over 95 percent of the 6,200 farms in this report fall within the size of business of Economic Classes I, II, and III, as defined in the 1959 Census of Agriculture. These three classes include farms selling \$10,000 or more of farm products per year.

The segment of Illinois agriculture that includes Economic Class I, II, and III farms is often referred to as "commercial farming." In 1959 commercial farms represented 40 percent of the total number of farms and 63 percent of the land area; they produced 79 percent of the value of products sold from Illinois farms.

Although the record-keeping farms are largely

within the first three economic classes, they are not proportionately distributed among the groups. Farms are identified as Economic Class I if they sell more than \$40,000 worth of products a year. In 1959, the Census of Agriculture identified 5,699 Illinois farms in Economic Class I. Almost one-fourth of these farms were enrolled in the Illinois Farm Bureau Farm Management Service program. There were 38,848 Economic Class III farms in the 1959 Census of Agriculture (farms with sales ranging from \$10,000 to \$19,999); only 3.7 percent of these farms were enrolled in the record-keeping program.

The data presented in this report are group averages identified by size of business, type of farm, and quality of soil found on the farm. Where segments of Illinois agriculture are identified by these criteria, the data from record-keeping farms may be used with reasonable confidence, even though the record-keeping farms as a group do not represent a cross-section of all commercial farms in the state.

The farm management program on which this report is based is designed to aid Illinois farmers in two ways: (1) through the individual farm business analysis provided to the farmers who are active members of the program and (2) through the comprehensive information provided to farm management extension and research workers and other individuals working with and assisting Illinois farmers with the problems resulting from a changing and dynamic agriculture.

This report provides current information on production, costs, income, and investments in the farm business for different groups of farms and farm enterprises. Some specific uses for these data are to provide physical and dollar measures of performance on individual farms, guides for planning farming operations, and data for financial budgeting and planning.

Organization of the Report

Except for a comparison of cost and income changes on selected samples of farms, this report contains annual data for the calendar year 1964, including descriptive facts, inputs or costs, and output or income data about the farms and their livestock enterprises.

The incomes reported in Tables 1 through 3 for four types of farms in northern Illinois and three types in southern Illinois are indicative of the income, costs, and farm earnings experienced in 1964 by selected segments of Illinois farms. Similar data for 1963 and a 10-year average provide a comparison with other years.

Data for all the major livestock enterprises for

1964 are included in Tables 4 through 10. Because a large proportion of the feed grains and roughage produced on Illinois farms is marketed through livestock, the margins of income from livestock enterprises are important in interpreting the economic results of farming operations.

Tables 12 through 16 report costs, returns, financial summaries, investments, land use, and crop yields for several sizes and types of farms in northern and southern Illinois. The definitions of terms and accounting measures that precede these tables will aid in using the data.

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SUMMARY OF ILLINOIS FARM BUSINESS RECORDS, 1964

Farm business trends in 1964

The basic source of income on Illinois farms is crop production. Year-to-year variations in net farm income are related to variable climatic conditions and their effect on crop yields. In 1964, average corn yields for the state as reported by the Illinois Crop Reporting Service were 78 bushels an acre—down 7 bushels an acre from the record yields of 1963.

Rainfall during the growing season was below normal. The southern half of Illinois was adversely affected by an extended dry period in August. According to crop reporting estimates, corn yields for the four southern crop reporting districts ranged from 17 to 20 bushels an acre below 1963 yields. On the other hand, 1964 corn yields in the northern one-third of Illinois were from 2 to 5 bushels above the 1963 yields.

Crop and livestock prices. Another major determinant of change in farm income is the price farmers receive for crop and livestock products. In 1964, market prices received by farm account cooperators for all grain crops were very close to 1963 price levels. Wheat was the only exception, although the drop in market price from 1963 to 1964 was offset in part by direct payments to farmers that participated in the 1964 wheat program.

Market prices for hogs, milk, and eggs in 1964 were very close to 1963 levels. Although average market prices for fed cattle in 1964 were \$1.08 per hundred-weight below the 1963 average, the prices paid for replacement feeder cattle were even lower, about \$3.50 below 1963 levels.

Farming adjustments. The number of farms in Illinois was estimated at 141,000 in 1964. The average number of acres per farm was 213, compared with 176 acres per farm in 1955.1 In addition to the increase in size of farm, other adjustments are taking place on Illinois farms. Studies of farm records reveal that farmers are using more intensive land-use patterns, increasing the size of livestock enterprises on specialized farms, and eliminating small livestock enterprises on general farms. Even though the size of farm and the sizes of livestock enterprises have increased, the average months of labor per farm has changed very little in the past ten years. The combined effect of increased size of business and the adoption of outputincreasing technology has greatly increased total farm production per man.

Income changes on Illinois farms

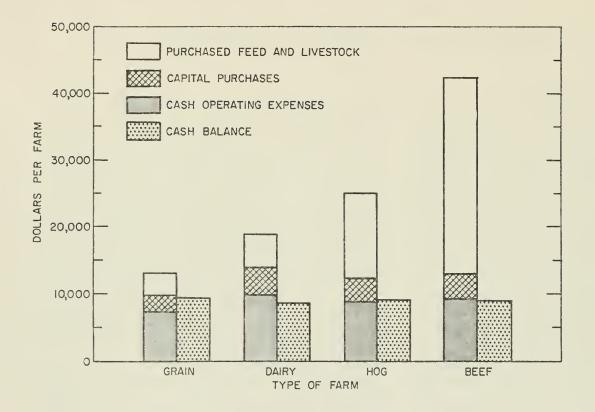
Comparative costs and returns between years and among major types of farming in northern and southern Illinois are reported in Tables 1 to 3. The separation of farms into northern and southern Illinois is based on soil-type regions, and divides the state approximately on an east-west line from Mattoon to Jacksonville. The sample of farms ranged between 180 and 259 acres in size, and averaged about 220 acres. Labor used on farms of this size averaged 14 months on grain farms, 16 months on hog and beef farms, and 20 months on dairy farms. The data in these tables are presented as if the farms were all owner-operated. Landlord and tenant shares of the business were combined where farms were leased.

Size of farm, type of farm, quality of soil, and managerial inputs were held reasonably constant over time by the sampling procedure used in selecting farms within each type of farm. Variations between 1963, 1964, and the 10-year average are due to changes in farm prices and costs, weather, and internal farming adjustments made within each system of farming. The data in these tables are particularly helpful for evaluating changes in farm costs and returns within a particular size and type of farm, and making comparisons between types of farming. The data do not reflect over-all farming adjustments resulting from farm enlargement or major changes in resource use.

The farm and family earning measure includes returns to the farm family for all unpaid labor, interest on invested capital, and managerial inputs used in farming. Changes in value of farm inventories and value of farm products consumed are included as income. Farm and family earnings are calculated by accounting methods that are generally comparable to the accrual method of calculating taxable farm income for the federal income tax. Important differences in accrual income tax accounting methods are the provision for capital gains on livestock sales, and the inclusion of interest paid as a farm expense.

The cash balance figure is the amount taken out of the farm business to pay for living costs, income and social security taxes, interest, and debt repayment and to add to savings. Purchases of new capital investments for the farm business have been included with total cash expenditures. Although the cash balance figure reflects the cash position of the farm business, it is influenced by purchase and sale transactions of feed and livestock, and changes in liabilities and borrowed funds.

¹ Illinois Cooperative Crop Reporting Service, Bulletin 65-1.



Cash expenditures and cash balance on 220-acre farms in northern Illinois, 1964. (Fig. 1)

Table 1. — Average Selected Total Farm Items on Northern Illinois 180-259 Acre Farms

		Grain farm	19		Hog farm	c c		Dairy farn	ne
Items	1964	1963	1955-64 average	1964	1963	1955-64 average	1964	1963	1955-64 average
Number of farms	136	124	124	99	128	125	52	55	51
Total acres	229 81	228 81	226 81	224 77	224 76	221 77	219 71	219 72	218 71
Total cash salesLess purchased feed and livestock	\$24,604 3,030	\$204,034	\$20,362 3,062	\$39,062 13,740	\$35,110 13,019	\$31,964 12,175	\$28,463 4,552	\$28,530 5,600	\$24,750 4,773
Net cash sales	112	21,010 31 113 21,154	17,300 387 141 17,828	25,322 -1,053 195 24,464	$ \begin{array}{r} 22,091 \\ -648 \\ \hline 179 \\ \hline 21,622 \end{array} $	19,789 603 228 20,620	23,911 727 308 24,946	22,930 46 273 23,249	19,977 499 320 20,796
Cash operating expenses	\$ 8,468 2,659	\$ 7,926 2,712 10,516	\$ 6,609 2,584 8,635	\$10,105 3,491 10,868	\$ 9,689 3,708 8,225	\$ 8,000 3,223 9,397	\$10,732 4,154 10,060	\$10,358 3,994 8,897	\$ 8,931 3,662 8,203
Unpaid labor charge	2,768 7,236 5,913 1,323	2,862 7,654 5,559 2,095	2,617 6,018 5,088 930	2,991 7,877 6,271 1,606	2,969 5,256 5,874 -618	2,805 6,592 5,298 1,294	3,500 6,560 5,926 634	3,245 5,652 5,731 -79	3,129 5,074 5,085 -11
Total cash income ^a	14,100	\$24,129 14,140 9,989	\$20,463 12,024 8,439	$\begin{array}{ c c c }\hline \$39,142\\ 26,908\\ \hline 12,234\\ \hline \end{array}$	$\begin{array}{r} \$35,156 \\ 27,064 \\ \hline 8,092 \end{array}$	\$32,107 23,557 8,550	$\begin{array}{r} \$28,593 \\ \hline 19,644 \\ \hline 8,949 \end{array}$	$\frac{$28,709}{19,306}$ $\frac{9,403}{}$	$\begin{array}{r} \$24,906 \\ 17,541 \\ \hline 7,365 \end{array}$
FARM INVESTMENT Livestock inventory Grain inventory	4,118 11,506	4,141 10,777	3,973 9,268	13,889 11,239	13,997 10,279	11,893 9,365	12,937 7,727	13,074 8,021	11,024 7,506
Remaining capital cost in: Machinery Buildings and fence Soil fertility Auto Value of land (current basis) Total farm investment	124 700 106,521	5,673 9,209 175 682 100,657 131,314	5,366 10,052 375 695 90,042 119,771	7,307 15,684 142 818 95,417 144,496	6,744 15,364 206 675 87,778 135,043	6,609 12,976 389 740 79,985 121,957	8,263 21,391 93 811 84,128 135,350	7,905 20,565 225 667 80,225 130,682	7,626 17,448 274 687 71,423 115,988

a Includes sales or purchases of capital items.

The investment per farm is for January 1 of each year. Physical quantities of grain and livestock are valued at farm market prices. Machinery, buildings, soil fertility, and auto are valued at remaining capital cost; that is, original cost less depreciation charged to date. Land is priced at current values. A basic value is established for each farm, based on a soil productivity rating and is adjusted to a current value each year by using an index of land prices in Illinois.

Figs. 1 and 2 show a summary of the financial transactions for different types of farms in northern and southern Illinois. The dollars represented by the left part of the bar for each type of farm are cash expenditures; the amount to the right represents the cash balance taken out of the farm business.

In comparing financial transactions among types of farms, the basic difference is the extent to which purchase and sale transactions of feed and livestock are involved in the farming operations. On grain farms, for example, purchased feed and livestock made up only 25 percent of the total cash expenditures. On the other extreme, the purchase of feed and livestock on north-

Table 2. — Selected Total Farm Items on 180-259 Acre Northern Illinois Beef Farms

Items	1964	1963	1955-64 average
Number of farms	45	50	70
Total acres	223 78	225 75	221 76
Total cash sales Less purchased feed and live-	\$55,959	\$51,997	\$45,724
stock	28,793	29,858	26,280
Net cash sales	27,166 -1,394 241	$ \begin{array}{r} 22,139 \\ -4,631 \\ 245 \end{array} $	19,444 616 252
Value of farm production	26,013	17,753	20,312
Cast operating expenses	\$10,979 4,188	\$ 9,086 4,038	\$ 8,413
Farm and family earnings	10,846	4,629	8,179
Unpaid labor charge Returns to capital and manage-	2,815	2,966	2,733
ment	8,031 7,478 553	1,663 6,937 -5,274	5,446 6,172 -726
Total cash income ^a	\$56,015 43,166	\$52,153 43,033	\$46,041 38,593
Cash balance	12,849	9,120	7,448
FARM INVESTMENT Livestock inventory Grain inventory	26,949 12,306	30,164 11,241	22,186 10,881
Remaining capital cost in: Machinery Buildings and fence Soil fertility Auto Value of land (current basis)	8,072 22,555 151 851 98,336	7,388 18,000 135 708 88,882	7,202 17,171 369 790 81,041
Total farm investment	169,220	156,518	139,640

a Includes sales or purchases of capital items.

ern Illinois beef-cattle farms represents 69 percent of the total cash expenditures.

The influence of soil quality on volume of business is illustrated by comparing the same types of farms (Figs. 1 and 2). Land area is the same, about 220 acres per farm, but the lower soil productivity in southern Illinois is reflected in the much smaller volume of business for the southern Illinois grain, dairy, and hog farms than for comparable types of farms in northern Illinois. The data presented in these charts summarize five years of financial transactions. Data for different types of farms in 1964, 1963, and the 1955-1964 average are reported in Tables 1, 2, and 3.

Northern Illinois farms

Grain farms. Farm and family earnings on northern Illinois 220-acre grain farms in 1964 were 5 percent below 1963, but 16 percent above the 1955-1964 average (Table 1). Weather was a factor in the change in earnings on grain farms in 1964. Crop yields on northern Illinois grain farms, although below those in 1963, were still above the long-time average.

Cash operating expenses increased by more than \$500 per farm on grain farms. Most of this increase was for the purchase of fertilizer. The total investment per farm in 1964 for this sample of grain farms was over \$139,000. These farms employed an average of 13.5 months of labor.

Hog farms. Farm and family earnings on northern Illinois hog farms increased from \$8,225 in 1963, to \$10,868 in 1964 (Table 1). Crop yields for 1964 in the major hog producing region of west-central Illinois were about equal to 1963 yields. The average market price for hogs in 1964 was \$14.81, compared with \$14.86 per 100 pounds in 1963. The total pounds of pork and beef produced per farm increased by 4 percent in 1964 over 1963.

Cash operating expenses continued to increase in 1964 over 1963, and were 26 percent above the 1955-1964 average. Investment per farm was over \$144,000 in 1964, with 15.9 months of labor employed on this sample of farms.

Hog farms have become more specialized in recent years. The average pounds of pork produced per farm on 220-acre northern Illinois hog farms has doubled since 1951-1952. The increase in size of the hog enterprise was a net addition to the farm business and did not replace other livestock enterprises.

Dairy farms. Farm and family earnings on the sample northern Illinois dairy farms increased from \$8,897 in 1963 to \$10,060 in 1964. The increase in earnings on northern Illinois dairy farms was largely from higher crop yields and a resulting reduction in

the purchase of livestock feed in 1964. Farm operating costs increased \$534 per farm from 1963 to 1964.

The number of dairy cows per farm averaged 40 cows in 1964, up from 37 cows in 1963, and 16 more than the 24 cows per farm in 1955.

Beef farms. Farm earnings on northern Illinois beef farms recovered from the very low levels experienced in 1963. The farm and family earnings of \$10,846 on 220-acre northern Illinois beef farms was 2.3 times greater than 1963 earnings, and 33 percent above the 1955-1964 average.

Most of the recovery in farm earnings from 1963 to 1964 on northern Illinois beef farms resulted from an increase in total volume of cattle and hogs marketed, a reduction in the dollars spent for purchased feed and livestock, and an improvement in crop yields.

The sum of cash operating expenses and depreciation increased by 21 percent from 1963 to 1964, but was only 10 percent above farm operating costs in 1962. Because of the very low earnings in 1963, beefcattle farms delayed or reduced cash operating expenses in an attempt to hold expenses in line with reduced net income. With the recovery of net farm income in 1964, farm operating costs increased sharply.

Southern Illinois farms

Grain farms. Farm and family earnings on southern Illinois 220-acre grain farms averaged \$6,388, a drop of \$2,642 per farm below the record income levels in 1963. The 1964 farm earnings, however, were only 1 percent below the 1955-1964 average.

Total value of farm production in 1964 dropped \$3,000 below 1963. Lower crop yields accounted for all of the drop in gross farm income, either through reduced crop sales or lower inventories.

Cash operating expenses in 1964 declined by \$253 per farm from 1963. Southern Illinois grain farmers reduced purchases of capital items from an average of \$3,109 in 1963 to \$2,283 in 1964, evidently in an attempt to maintain a net cash balance in 1964 equal to 1963 levels.

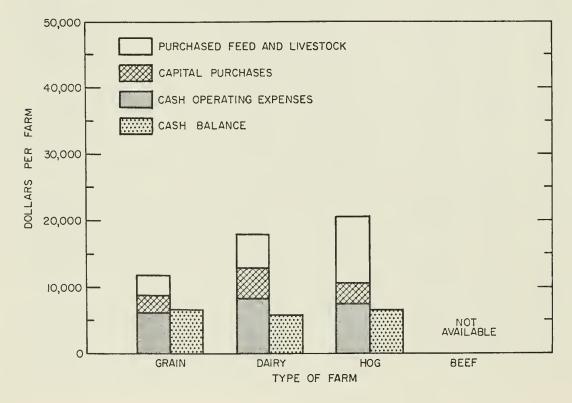
Hog farms. Farm and family earnings on southern Illinois 220-acre hog farms averaged \$6,070 in 1964, only two-thirds as much as in 1963, and 11 percent below the 1955-1964 average.

As was the situation with southern Illinois grain farms, much lower crop yields on hog farms in 1964 reduced cash sales of crops and resulted in a big decrease in value of crop inventories at the end of 1964.

With the downward adjustment in net farm earnings, cash operating expenses also were lower in 1964.

Dairy farms. Farm and family earnings on 220-acre southern Illinois dairy farms in 1964 were \$6,942, 25 percent below the record earnings of \$9,216 in 1963, but only 6 percent below the 1955-1964 average.

The dairy farms had higher net farm earnings in 1964 than either the grain or hog farms. Increased sales of livestock and livestock products was one factor explaining the higher earnings on dairy farms; also, dairy farms with more of their cropland in hay and pasture crops were affected less by dry weather.



Cash expenditures and cash balances on 220-acre farms in southern Illinois, 1964. (Fig. 2)

Table 3. — Average Selected Total Farm Items on Southern Illinois 180-259 Acre Farms

		Grain farn	ıs		Hog farms			Dairy farms		
Items	1964	1963ь	1955-64 average	1964	1963	1955-64 average	1964	1963	1955-64 average	
Number of farms	32	30	41	51	26	41	55	25	44	
Total acres	222 35	219 36	222 38	219 35	227 37	220 36	220 31	217 28	217 31	
lotal cash sales		\$19,850 2,840	\$15,840 2,651	\$29,993 11,226	\$30,208 10,747	\$23,442 8,758	\$26,855 5,900	\$23,779 4,765	\$20,932 4,570	
Net cash sales Inventory change Farm products consumed Value of farm production	-922 160	$ \begin{array}{r} \$17,010 \\ 1,350 \\ \underline{161} \\ 18,521 \end{array} $	$$13,189 \\ 714 \\ 167 \\ \hline 14,070$	$ \begin{array}{r} \$18,767 \\ -2,121 \\ 150 \\ \hline 16,796 \end{array} $	\$19,461 1,248 174 20,883	\$14,684 709 251 15,644	$ \begin{array}{r} \$20,955 \\ -837 \\ 330 \\ \hline 20,448 \end{array} $	\$19,014 2,136 405 21,555	\$16,362 919 353 17,634	
Cash operating expenses	$\frac{6,862}{2,274}$ $\frac{6,388}{6,388}$	$\begin{array}{r} 7,115 \\ 2,376 \\ \hline 9,030 \end{array}$	$\frac{5,419}{2,212}$ $\frac{6,439}{6}$	$ \begin{array}{r} 8,131 \\ 2,595 \\ \hline 6,070 \end{array} $	$\frac{8,692}{2,829}$ $\frac{2,829}{9,362}$	6,405 2,393 6,846	$ \begin{array}{r} 9,888 \\ 3,618 \\ \hline 6,942 \end{array} $	$ \begin{array}{r} 8,782 \\ 3,557 \\ \hline 9,216 \end{array} $	$\begin{array}{r} 7,179 \\ 3,082 \\ \hline 7,373 \end{array}$	
Unpaid labor charge	2,829 3,559 2,851 708	2,852 6,178 2,558 3,620	2,555 3,884 2,401 1,483	3,035 3,035 3,148 -113	3,262 6,100 3,161 2,939	2,780 4,066 2,581 1,485	3,241 3,701 3,378 323	3,346 5,870 2,903 2,967	3,105 4,268 2,651 1,617	
Total cash income ^a	$\frac{\$18,840}{11,699} \\ \hline 7,141$	$\frac{$19,881}{12,735}$ $\frac{7,146}{7}$	\$15,959 10,517 5,442	$\begin{array}{r} \$30,215\\ 21,997\\ \hline 8,218 \end{array}$	$\frac{\$30,363}{23,587} \\ \hline 6,776$	\$23,542 18,035 5,507	$\begin{array}{r} \$26,861 \\ 19,848 \\ \hline 7,013 \end{array}$	$\frac{$23,824}{18,313}$ $\frac{5,511}{}$	\$21,018 15,895 5,123	
FARM INVESTMENT Livestock inventory	4,039 7,711	3,671 5,989	3,014 4,833	9,131 7,269	9,753 6,092	7,479 5,152	10,590 6,520	9,877 4,540	7,806 4,359	
Remaining capital cost in: Machinery. Buildings and fence. Soil fertility. Auto Value of land (current basis). Total farm investment.	6,165 5,895 108 519 40,738 65,175	5,234 4,968 244 524 38,153 58,783	5,341 4,782 389 579 36,350 55,288	5,987 9,054 257 577 38,359 70,634	5,953 9,576 402 453 38,717 70,946	4,960 6,616 468 592 32,936 58,203	9,272 12,399 197 636 34,929 74,543	8,629 9,907 320 459 30,420 64,152	7,697 9,117 386 586 28,849 58,800	

^a Includes sales or purchases of capital items. ^b Revised from data appearing in Cir. 891.

LIVESTOCK ENTERPRISES

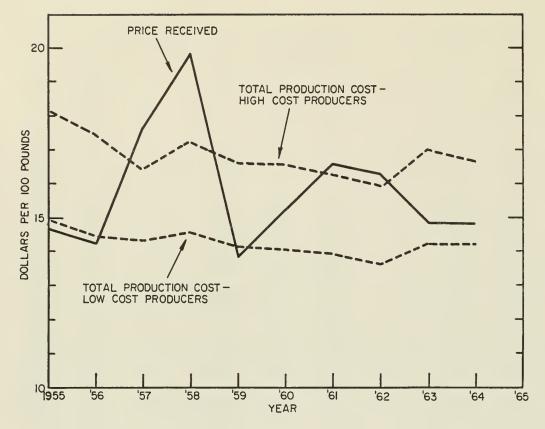
Table 4 shows the returns per \$100 feed fed to various livestock enterprises, and the price of corn during each of the past 15 years. Fifteen-year (1950-1964) averages are also shown. The difference between the return figure and \$100 feed cost represents the margin available to pay cash expenses other than feed, labor, depreciation on equipment, and interest on investment, and also to provide for profit.

The margin needed to cover non-feed costs varies with the kind of livestock and depends on the proportion of total production costs represented by feed. The 15-year averages represent the approximate level of returns at which farmers have been willing to maintain livestock production. This average may not represent break-even returns on all farms because some farmers may discount market prices for some resources used in producing livestock. If a farmer already has facilities for livestock, he need only cover operating costs to continue production. However, when he views livestock production as a new or long-run enterprise, he hopes to cover all costs — fixed and variable — or he may not undertake the enterprise.

As individual farmers try to increase profits, they tend to curtail livestock production when returns per \$100 of feed fed are below the 15-year average, and to increase production when returns are above average. This tendency on the part of producers causes supplies of livestock products to fluctuate.

The hog enterprise is the best illustration. Since 1953 the pattern of hog returns has been to exceed the 15-year average for two to three years, and then to fall below for one to two years. This pattern is referred to as the hog cycle and is related to the supply and demand for pork. If this same pattern continues, hog returns in 1965 should be above average.

Feeder-cattle returns were below the 15-year average in five of the past six years. Returns have barely been enough to cover market prices for home-grown feeds and other variable cash costs incurred by the average feeder in this period.



Average price received for all hogs sold compared to the estimated cost of hog production on Illinois record-keeping farms, 1955 to 1964. (Fig. 3)

Unless there is a let-up in the expansion of cattle feeding or a reduction in cattle numbers to bring beef supplies into balance with demand, there may not be much permanent improvement in cattle feeding returns. It is more difficult to identify cyclic income movements over a 15-year period in the beef cattle industry because it is more complex and adjusts more slowly than other livestock enterprises.

Dairy and poultry returns fluctuate less than beef cattle returns from year to year. In both enterprises, 15-year average returns are below the margin needed to cover all fixed and variable costs. The implication

Table 4. — Returns per \$100 Feed Fed to Different Classes of Livestock

Year	Beef cow herds	Dairy cow herds	cattle	Native sheep raised	sheep	Hogs	Poultry	Yearly price of corn
1950 1951 1952 1953 1954	170 99 64	173 187 175 147 141	170 142 86 81 126	177 171 67 84 97	182 111 44 113 119	152 127 116 178 154	122 137 116 148 104	\$1.35 1.66 1.65 1.44 1.46
1955 1956 1957 1958	103 134 162	168 177 189 199 191	106 117 143 144 112	103 137 138 98 102	100 108 113 47 61	109 142 172 180 114	142 133 136 142 123	1.28 1.30 1.15 1.10 1.10
1960 1961 1962 1963 1964	139 149 117	200 196 190 171 174	117 116 148 88 112	108 110 126 126 124	122 108 112 118 124	164 164 159 131 142	157 150 144 141 141	1.03 1.01 .98 1.11 1.12
1950-64 average	125	179	121	118	105	147	136	\$1.25

is that these enterprises compete most favorably on farms with plentiful labor, capital, and management resources that have few alternative uses.

The business of raising livestock is very competitive. Average profit margins are very narrow. Large numbers of farmers are willing to stay in business as long as their returns cover only operating costs. Expansion plans involving large investments for new facilities should be based on estimated returns that are high enough to cover all costs. Fluctuations in livestock returns also involve a risk in years when returns are low.

Hog enterprises

The information in Table 5 is based on a sample of 712 farms farrowing ten or more litters per year. Farms were omitted from the sample if the number of hogs purchased exceeded 10 percent of pigs weaned. This eliminated from the sample those farms with combined farrowing and feeder-pig operations. Feeder-pig enterprise information is included in Table 6.

Returns per \$100 feed fed to hogs were \$142 in 1964, only \$5 below the 1950-1964 average. The fluctuation in these returns above and below the 15-year average (\$15 below in 1963) is related to changes in supplies of and demand for pork and to the price of corn. The supply of pork per capita, the average price received per 100 pounds of pork sold, and the average price per bushel of corn fed (see Table 4) were about the same in 1964 as in 1963.

Table 5. - Hog Enterprises, 1964

Items	All farms	High- return farms	Low- return farms
Number of farms	712	108	165
Average per farm			
Pounds of pork produced Total returns Value of feed fed Returns per \$100 feed fed Returns above feed per	12,167 142	120,249 \$18,472 11,105 166	109,739 \$15,576 12,801 122
litter	76		
Number of litters farrowed Pigs farrowed per litter Pigs weaned per litter Number of pigs weaned	67 9.1 7.5 502	68 9.4 7.7 525	64 8.9 7.3 463
Number that died after weaning	17 1,495 1.3	11 1,109	19 1,630
Weight per hog sold	236	234	238
Price received per 100			
pounds	\$ 14.81	\$ 15.01	\$ 14.60
Feed cost per 100 pounds produced Feed per 100 pounds pro- duced	10.38	9.24	11.66
Farm grains, lb	335	290	370
Commercial feeds, lb	62	60	71
Total concentrate, lb. Pasture (pasture days)	397 .8	350 . 8	.8
Cost per 100 pounds of commercial feeds	\$ 5.76	5 \$ 5.57	\$ 5.82
Cost per 100 pounds of concentrates	2.58	3 2.61	2.62

Corn produced in 1963 but fed in 1964 was reported to be of excellent quality. This was verified on many farms when bushels of corn delivered to market overran the rated capacity of the storage bins. It is believed that this contributed to a reduction of 12 pounds of farm grains to produce 100 pounds of pork in 1964 as compared with 1963. The 1964 average of 7.5 pigs weaned per litter was the highest ever recorded and boosted weight produced per litter 85 pounds above 1963. The average size of hog enterprise on all record-keeping farms has increased at the rate of about 3 litters per year, from 41 litters (288 pigs weaned) per farm in 1955, to 67 litters (502 pigs weaned) in 1964.

The high-return group of farms (low-cost producers) in Table 5 had returns per \$100 feed fed that ranged from \$160 to \$179, and the low-return group (high-cost producers) ranged from \$110 to \$129. The greatest differences between high- and low-return groups were feed conversions and feed costs per 100 pounds produced.

The high-return farms used 80 pounds less farm grains and 11 pounds less commercial feeds to produce 100 pounds pork than the low-return farms. This saving in feed was equivalent to about 1,718 bushels of corn and 6.6 tons of protein per farm, or about \$2,700.

Other differences show 0.4 more pigs weaned per litter, 0.6 percent lower death loss, and 41 cents per 100 pounds higher selling price for pork sold for the high-return farms. There are wide variations in profits from swine enterprises on individual farms since these same differences between high- and low-return farms occur each year.

The hog enterprise has been a profitable business for the farmers in the high-return group (low-cost producers). Fig. 3 compares the total cost of production of the low-cost producers (high-return group of record-keeping farms) with the average annual price received for all hogs sold on record-keeping farms from 1955 to 1964. Total production costs include feed and non-feed inputs. The actual feed costs incurred on the record-keeping farms were used. Non-feed costs were estimated from detailed cost studies at \$5 per 100 pounds over the 10-year period.

The average price received for all hogs sold was above production costs for the low-cost producers in 7 of the 10 years, and about equal to production costs in 3 years. The price received was above the production costs of high-cost producers 4 out of the 10 years. If this favorable relationship between hog prices and production costs continues in the years ahead, it should encourage increased hog production on Illinois farms.

Feeder-cattle and feeder-pig enterprises

Calendar-year operations for feeder-cattle and feeder-pig enterprises are presented in Table 6. These involve weights and values on partly finished animals purchased in prior years as well as on animals purchased in the current year.

Table 6. — Feeder-Cattle and Feeder-Pig Enterprises, 1964

Items	Feeder cattle	Feeder pigs
Number of farms	413	100
Average per farm		
Total pounds produced	72,733	64,853
Total returns	\$14,866	\$ 7,698
Value of feed fed	13,249	6,323
Returns per \$100 fed fed	112	122
Pounds of death loss	1,298	1,071
Percent of pounds produced	1.8	1.7
Average weight purchased	563	52
Price paid per 100 pounds	\$ 21.26	\$ 26.11
Price received per 100 pounds	21.92	15.11
Feed cost per 100 pounds produced	18.22	9.75
Feed per 100 pounds produced		
Grain, lb	538	331
Protein and mineral feeds, lb	59	52
Total concentrates, lb	597	383
Hay, lb	135	
Silage, Ib	643	
Pasture (pasture days)	3	

Pork produced per farm from feeder-pig enterprises was 64,853 pounds in 1964 (see Table 6), more than two and one-half times the 25,461 pounds produced per farm in 1955. Farmers were not only buying more feeder pigs per farm but healthier pigs. Death loss has dropped steadily the past four years from 2.7 percent of weight produced in 1960, to 1.7 percent in 1964. Returns follow the cyclical pattern of the sow and litter enterprise. Returns per \$100 feed fed averaged \$122 in 1964.

The 72,733 pounds of beef produced per farm in 1964 (Table 6), is 50 percent greater than production in 1958. Returns per \$100 feed fed for feeder-cattle enterprises was \$112 in 1964. This is approaching the past 6-year average return of \$115, but is still at an unprofitable level for the average farmer.

Some adjustments in feeding programs to compensate for the long period of low profit margins are taking place. Weight produced per farm in 1964 was 3.7 percent below 1963. Average weight purchased was down 10 pounds per steer. Price paid for feeders bought in 1964 was \$3.54 per 100 pounds below 1963, while price received for cattle sold in 1964 was down only \$1.08.

Pounds of grain and pounds of hay used per 100 pounds of beef produced have dropped steadily since 1960, from 644 to 538 pounds, and from 182 to 135 pounds respectively, while pounds of silage used has increased steadily from 458 to 643 pounds per 100 pounds of beef produced. Feed costs per 100 pounds produced, however, remains about the same. The shift to the use of more corn silage in the ration reflects attempts by feeders to increase production from existing land by intensifying the crop system and to reduce labor by mechanizing the feeding operation.

These data do not show the wide variation in profits that exist among cattle feeding programs and individual feeders. More farmers are now feeding more than one drove of cattle each year to provide a better utilization of fixed investments in mechanized feedlots. The increase in investments and complexity of the cattle feeding operation makes good records more important than ever to evaluate returns to resources used in cattle feeding.

Dairy enterprises

The minimum size of herd included in this analysis was 10 milk cows. The average size of dairy herd was 35.5 cows in 1964, compared with 21.8 cows per farm on all record-keeping farms in 1955.

Returns per \$100 feed fed to dairy enterprises in

Table 7. — Dairy Cattle Enterprises, 1964

Items	All farms	Pastur	e days per an	imal unit
Items	All latilis	0	1-119	120+
Number of farms	346	54	156	136
Average per farm				
Number of cows in herd	35.5	45.3	35.2	31.9
Number of milk cows	35.4	45.3	35.1	31.8
Percent of milk cows	4.6	4 111		
dry	16 56.7	15 72.0	16 55.9	16 51.6
Pounds of beef pro-	30.7	72.0	33.9	31.0
duced	19,020	27,496	18,065	16,750
Total returns	\$17,230	\$23,000	\$16,887	\$15,332
Value of feed fed	9,880	13,862	9,671	8,540
Returns per \$100 feed fed	174	166	175	180
Returns above feed per				
milk cow	208	202	206	214
Total pounds of milk	400 002	E41 040	200 206	260 660
Pounds of milk per	409,893	541,840	399,286	369,668
milk cow	11,579	11,961	11,376	11,625
Pounds of butterfat per	125	420	A 20	420
milk cow	435	439	438	429
Pounds of beef per cow in herd	536	607	515	525
Pounds of death loss	1,309	1,802	1,205	1,233
Percent of pounds	·	·	Ť	
produced Feed cost per unit ^a	6.9 \$ 16.46	6.6 \$ 16.97	6.7 \$ 16.68	7.4 \$ 15.90
Price received for:	φ 10.40	φ 10.91	φ 10.00	φ 13.90
100 lb. milk	3.70	3.75		3.6
100 lb. beef Feed per unit of milk	14.60	14.09	14.37	15.12
and beef, pounds				
Grain, lb	252	270	244	252
Protein and miner- als, lb	61	64	66	52
Total concen-	01	04	00	32
trates, lb	313	334	310	304
Hay and dry rough- age, lb	359	300	358	396
Hay silage and soil-	339	300	336	390
age, lb	239	491	257	66
Corn and other silage, lb	666	828	714	510
Pasture (pasture	000	020	,11	310
days)	9		8	15
Pasture days per ani- mal unit	91		81	155
	/ -		0.	100

a 1,000 pounds of milk or 100 pounds of beef.

1964 (Table 7) was \$174, \$5 below the 1950-1964 average. Feed costs per 1,000 pounds of milk or 100 pounds of beef produced were 56 cents lower, and price received for milk was 8 cents per 100 pounds higher in 1964 than in 1963. These changes were more than enough to offset the effect of lower beef prices of \$1.30 per 100 pounds.

Dairy farmers have reduced the amount of pasture and increased the amounts of grain and silage fed. Pasture days per unit (1,000 pounds of milk or 100 pounds of beef) remained at 15 days prior to 1959, but since 1960 has declined steadily to 9 days in 1964.

Table 8. — Beef Cow Enterprises, 1964

Items	All farms	Calves sold	Calves fed out
Number of farms	255	101	122
Average per farm			
Number of cows in herd Animal units in herd	$\frac{28.4}{40.8}$	32.0 40.6	25.5 41.6
Total pounds produced Total returns Value of feed fed Returns per \$100 feed fed	19,452 \$ 3,382 3,156 107	17,324 \$ 2,861 2,684 107	21,050 \$ 3,770 3,537 107
Pounds of beef per cow in herd	685	542	825
sold	739 929	571 850	891 919
duced Feed cost per unit ^a Price received per 100	\$ 4.8 \$ 16.22	\$ 4.9 \$ 15.49	\$ 4.4 \$ 16.80
pounds	20.14	20.05	20.36
Feed per unit of milk and beef			
Grain, lb Protein and mineral	193	67	273
feeds, lb	22	11	27
Total concentrates, lb Hay and dry roughage,	215	78	300
1b	569	675	507
Hay silage, lb	$\begin{array}{c} 34 \\ 207 \end{array}$	82 166	$\frac{11}{260}$
Pasture (pasture days)	39	50	32
Pasture days per animal unit	187	213	162

a 1,000 pounds of milk or 100 pounds of beef.

The dairy herds in Table 7 were divided into three groups: herds with no pasture days per animal unit, 1 to 119 days, and 120 days or more. Each year a few more herds have been adopting the practice of feeding cows in drylot. The size of the dairy herd averaged 45.3 cows on farms with no direct grazing compared with 31.9 cows on farms using a full pasture season.

The main difference among these three groups of dairy herds is the amount of land required per cow to produce roughage. When hay and pasture yields are figured at 150 pasture days and 3 tons per acre respectively, the farms with drylot feeding required only 1.2 acres per cow to produce grass-legume forages, while the farms with over 120 pasture days per animal unit used 2.6 acres. Milk production per cow did not vary greatly, but was highest on the farms with drylot feeding.

Returns above feed cost ranged from \$202 per milk cow on farms using no direct grazing, to \$214 per cow on farms using a full pasture season. Part of the additional costs of harvesting roughage to be fed in drylot are included in the cost of feed. Farmers using the drylot system must relate the higher cost of feed

to the increased returns that may result either from shifting land from pasture to grain crops or from an increase in size of dairy herd on fixed acres of hay and pasture.

Beef-cow herds

The minimum size of a beef-cow herd included in Table 8 was 10 or more cows. Farms with combinations of cow herds and purchased feeder cattle were not included. In addition to an analysis of all farms, Table 8 shows an analysis of farmers with cow herds who sold calves at weaning time, comparing them with those who finished their calves to slaughter weights. The average size of cow herd on all farms has changed little since 1956, ranging from 25 to 28 cows. This reflects the decision of the majority of Illinois farmers to maintain a beef-cow herd as a supplemental enterprise to market nonsalable feeds and labor.

Returns per \$100 feed fed to beef-cow herds in 1964 averaged \$107. This return was the lowest since 1956 and follows the pattern of returns from 1953 to 1955 when cow herds had very low returns following several years of low feeder-cattle returns.

In 1964, farms that sold calves received \$6 per cow above value of feed fed, and farms that sold cattle at slaughter weights received \$9 per cow above value of feed fed. If those who sold slaughter cattle had deducted charges for the added labor, buildings, and capital required, it would have been more profitable to sell calves at weaning than to feed them out.

Poultry enterprises

The minimum size of flock included in Table 9 is 100 hens. The average size of flock, omitting farms with less than 100 hens, has increased from 284 hens in 1954 to 680 in 1964. In the same period, pounds of concentrates per dozen eggs or $1\frac{1}{2}$ pounds of weight produced have declined steadily each year from 7.2 in 1954 to 5.8 pounds in 1964. Eggs per hen increased steadily from 192 to 210 from 1954 to 1959, and have ranged from 213 to 208 eggs per hen since 1960.

Larger flocks received more returns above feed cost per hen than the smaller flocks (see Table 9). Farms with over 2,000 hens had returns above feed cost per hen of \$1.76, compared with only 59 cents on farms with 100-299 hens. This difference may not reflect the actual contribution of poultry laying flocks to farm income, since small flocks may utilize inputs of labor, equipment, and buildings that have limited alternative uses. However, the higher production per hen on the farms with larger flocks indicates better management and a potentially higher return for labor and capital.

Table 9. — Poultry Enterprises, 1964

		Number of hens per farm							
Items	All farms 101-299		300-749		750-1,999		Over 2,000		
Number of farms	195		104		48		33		10
Average per farm									
Pounds of poultry produced Total returns	\$ 3,203	\$	628 806 695 116	\$2,0	233 053 611 127	\$ 6	,351 ,486 ,594 141	\$22	,475 ,825 ,066 162
hen	1.38		. 59		1.00		1.49		1.76
Average number of hens Eggs produced per hen Percent production Feed requirement units ^a	680 208 57 12,939		189 184 50 314	:	440 201 55 214		,273 221 60 ,676		,991 210 58 ,674
Feed cost per unit		\$	7.1	\$.20	\$	5.6	\$	5.2
Cost per 100 pounds of concentrates	\$ 3.02 .07 .31	\$	2.96 .09 .30	\$	3.07 .08 .30	\$	3.16 .07 .32	\$	2.88 .07 .31

^a One dozen eggs or 1.5 pounds of weight produced.

Sheep enterprises

Sheep production is a minor enterprise on record-keeping farms. The minimum size of enterprise in Table 10 was set at 3 animal units. One animal unit of sheep is defined as 750 pounds of liveweight. The sheep enterprises were divided into native ewe flocks and feeder-lamb operations. Returns per \$100 feed fed in 1964 were \$124 for native flocks and \$124 for feeder sheep. These returns were similar to those received in 1963, and were above the 15-year average of \$118 for native flock and \$105 for feeder sheep.

Table 10. — Sheep Enterprises, 1964

Items	Native flocks	Feeder sheep
Number of farms	97	11
Average per farm		
Pounds of wool and mutton produced. Total returns	3,625 \$ 705 566 124	16,822 \$ 3,421 2,757 124
Percent lamb crop	123 531 14.6 \$ 15.61 21.80	2,964 17.6 \$ 16.33 20.93 19.58
Feed per 100 pounds produced Concentrates, lb	224 585 33 38	568 129

DEFINITION OF TERMS AND ACCOUNTING MEASURES

Soil-productivity rating

An average index representing the inherent productivity (low level of management) of all tillable land in the farm. Individual soil types on each farm are assigned an index ranging downward from 100.

Type of farm

Sampling technique. The records in each size group for northern Illinois were sampled to provide a proportional representation of all farms of that size range according to the 1959 census.

Grain farms. Farms where the value of feed fed to livestock was less than one-half of the feed and grain returns and value of feed to dairy or poultry was not more than one-sixth of the feed and grain returns.

Hog or beef farms. Farms where the value of feed fed to livestock was more than one-half of the feed and grain returns and either hog or beef-cattle enterprises

received more than one-half of the value of feed fed.

Dairy or poultry farms. Farms where the value of feed fed to livestock was more than one-half of feed and grain returns and either dairy or poultry enterprises received more than one-third of the value of feed fed.

Cost items

Value of feed fed. Includes grains priced at the farm average as follows: corn — \$1.12 per bushel; oats — 63 cents per bushel; barley — 86 cents per bushel; soybeans — \$2.56 per bushel; rye — \$1.13 per bushel; wheat — \$1.65 per bushel. Commercial feeds were priced at actual cost, hay and silage at farm values, and pasture at 13 cents per animal unit pasture day. A pasture day represents an intake of approximately 20 to 25 pounds of dry matter. It has been defined as 16 pounds of total digestible nutrients (TDN) from pasture.

Cash operating expenses. Includes annual cash outlays for non-depreciable items of fertilizer, machinery repairs, machine hire, gas and oil, electricity and telephone, farm share of auto, hired labor, seed and crop expense, taxes, building repairs, livestock and miscellaneous expense, and cash rent, plus annual net depreciation on machinery, buildings, and fertility. It does not include cash outlays for feed and livestock since these have been deducted from gross receipts in computing the value of farm production (adjusted gross receipts).

Table 11. — Average Prices Received and Paid by Farm Record Keepers

	19	64	19	63
	Northern Illinois	Southern Illinois	Northern Illinois	Southern Illinois
Grain prices				
Corn, sold. Soybeans, sold. Oats, sold. Wheat, sold. Corn, purchased. Oats, purchased.	2.58 .64 1.43 1.14	\$1.15 2.51 .68 1.39 1.13 .80	\$1.14 2.52 .67 1.86 1.13	\$1.13 2.54 .73 1.80 1.16 .82
Livestock prices				
Hogs, all weights Fat cattle, all weights Feeder cattle, all weights,	. 21.		\$14 23	
prices paid	21	. 26 . 60	24 15	
Sheep, all weights	. 21.	. 80	19.	
PoultryMilk.	3	. 07 . 70		.08 .62
Eggs		.31		32

Machinery and equipment. Includes machinery and equipment depreciation, machinery repairs, machine hire, gas and oil, electricity and telephone, and farm share of auto.

Labor. Includes actual hired labor costs plus family and operator's labor charged in 1964 at \$225 and \$215 a month respectively for northern and southern Illinois.

Interest charge on capital. Interest charged at 5 percent on January 1 inventory of remaining capital investment in grain, livestock, machinery, buildings, soil fertility, and farm share of auto, plus 4 percent interest on bare land priced at current land values.

Total nonfeed costs. All cash operating expenses, depreciation, and imputed charges for unpaid labor and interest on capital. Purchased feeds and livestock are omitted.

Value of land (current basis). A basic value on bare land is established for each farm according to the soil-productivity rating. This basic value is adjusted each year according to the index of land prices in Illinois as reported by the USDA.

Return items

Feed and grain returns. The sum of grain and feed sales, value of all feeds fed (except milk), and change in value of feed and grain inventories less the value of feed purchased.

Value of farm production. Total cash sales of products and services, less purchased feed and livestock, plus change in inventory values of grain and livestock, plus value of farm products consumed.

Farm and family earnings. Value of farm production less cash operating expenses and depreciation. This figure includes the return to the farm and family for unpaid labor, interest on invested capital, and returns to management.

Labor and management earnings. Farm and family earnings less the value of family labor and interest charge on capital invested. It is the residual return to operator's labor and management efforts.

Capital and management earnings. Farm and family earnings less a charge for all unpaid (operator and family) labor.

Management returns. The residual surplus left after a charge for unpaid labor and interest charge on capital are deducted from farm and family earnings.

Table 12. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern Illinois, 1964

		1						20					19
56-75	500+ 58	643 540 70 61	179 416	\$ 5,316 2,307 9,964 5,482 3,495	1,084 1,107 12,561	41,912	\$ 2,453 45,870 2,038 50,361 8,449	1.20	\$57,846 304 58,150	3,117 3,078 19,962 6,969 33,126	\$25,024 -1,426 647 136	24,381 11,137 21,010	32.67
RATING	340-499 80	416 369 69 26	3.2 105 307	\$ 3,398 1,734 7,032 4,110 2,372	547 8,533	29,304 6,085	\$ 2,033 30,510 1,366 33,909 4,605			2,606 2,839 13,503 4,563 23,511			31.58
WITH SOIL	260-339 39	306 269 69 10	.4 120 244	\$ 2,705 1,431 6,108 3,372 1,756	514 396 6,413	23,318 4,671	$\begin{array}{c} \$ \ 1,053 \\ 22,806 \\ 1,467 \\ \hline 25,326 \\ 2,008 \end{array}$	1.09	\$30,319 381 30,700	2,268 1,420 10,593 4,735 19,016	\$11,684 -1,393 912 88	11,291 6,668 8,421	27.52
N FARMS	180-259 33	232 212 69 28	63 233	\$ 2,093 1,223 4,224 2,951 1,392	310 369 402 4,911	18,081 3,719	$\begin{array}{c} \$ \ 1,004 \\ 17,034 \\ 694 \\ \hline 18,732 \\ 651 \end{array}$	17,291		1,814 1,369 7,915 1,882 12,980	\$ 9,077 -62 -800 74	8,289 3,252 5,562	23.97
GRAIN	Under 180 20	147 134 68 41		\$ 1,546 1,201 3,340 2,402 1,174	3,389 3,389	13,948 1,432	$\begin{array}{c} \$ & 456 \\ 11,300 \\ 1,166 \\ \hline 12,922 \\ -1,026 \end{array}$.93	\$14,563 463 $15,026$	318 625 6,363 2,168 9,474	\$ 5,552 -730 -309 32	4,545 1,145 2,363	16.07
	650+ 56	816 749 84 4	.1 265 479	\$ 8,107 2,941 13,573 7,661 5,313	1,810 1,770 796 20,401	62,378 9,694	\$ 1,987 71,785 2,218 75,990 13,612	1.22	\$87,757 204 87,961	5,160 3,689 29,869 9,600 48,318	\$39,643 -3,061 1,211 143	37,936 16,312 34,013	41.68
ING 76-100	500-649 83	559 518 85 29	.2 184 344	\$ 5,437 2,608 10,335 5,713 3,685	1,322 1,136 618 14,558	45,412 7,106	$\begin{array}{c} \$ 1,512 \\ 49,271 \\ 1,823 \\ \hline 52,606 \\ 7,194 \end{array}$	1.16	\$61,919 505 62,424	4,475 2,749 21,150 8,243 36,617	\$25,807 -2,229 1,208 139	24,925 9,867 21,752	38.91
SOIL RATING	340-499 146	408 385 85 85 31	.3 102 313	\$ 3,963 1,931 7,705 4,352 2,897	1,070 595 10,864	34,304 5,386	\$ 1,251 37,126 1,415 39,792 5,488	1.16	\$44,921 221 45,142	2,193 2,480 15,916 5,547 26,136	\$19,006 -561 698 105	19,248 8,150 16,352	40.09
GRAIN FARMS WITH	260-339	301 281 85 85 31	.5 83 221	\$ 2,846 1,573 5,911 3,342 2,122	656 576 412 8,103	25,541 3,994	\$ 1,033 26,750 1,173 28,956 3,415	1.13	\$32,867 181 33,048	1,594 1,965 10,918 3,603 18,080	\$14,968 -450 -265 98	14,351 6,099 11,518	38.27
GRAIN FAR	180-259 103	228 214 85 73	75 240	\$ 1,957 1,200 4,860 3,111 1,650	530 418 400 6,234	20,360 $4,152$	\$ 1,068 19,856 975 21,899 1,539	19,182	\$25,469 141 $25,610$	1,241 1,740 8,645 2,833 14,459	\$11,151 -713 -8 124	10,554 4,186 7,773	34.09
	Under 180 33	156 148 86 86 43	.2 42 188	\$ 1,396 1,131 3,924 2,916 1,305	403 326 311 4,441	16,153 $2,989$	\$ 503 14,151 1,410 16,064 -89	.99	\$18,605 414 $19,019$	$ \begin{array}{c} 1,613\\ 1,058\\ 6,421\\ 3,815\\ \hline 12,907 \end{array} $	\$ 6,112 51 837 79	7,079 2,563 4,352	27.90
	Range in size (total acres)	Size of farm (acres)	Dairy cows, number	DOLLAR COSTS PER FARM Soil fertility. Buildings and fence. Machinery and equipment. Labor. Taxes.	Seed expense	Total non-feed costs	DOLLAR RETURNS PER FARM Livestock returns above feed cost Feed and grain returns Other cash income Total value of farm production Management returns	Farm production per \$1.00 of non-feed costsFarm production per man	FINANCIAL SUMMARY Cash sales of products and services Sales of capital items Total cash income	Purchased livestock	Cash balance. Inventory change. Capital change. Farm products consumed.	Farm and family earnings. Labor and management earnings. Capital and management earnings.	Capital and management earnings per acre

Table 12a. - Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern Illinois, 1964

	+00+828	9.84 4.27 18.45 10.15 84.94	93.25 77.60 15.65	214802121127. 20.	2 8	66 25 25 41 17 02 62.06	44.3 27.2 7.2 3.7 9.6 6.0	92.9 29.0 42.5 50.9
56-75	500-	69.		\$ 5,175 1411 674 1,633 3,885 2,392 2,1115 3,371 7,7	\$10,568 23,492	14,166 17,993 325 1,141 229,417 297,102 462.	4.2	6245
RATING		\$ 9.21 4.70 19.06 11.14 82.68	91.89 79.41 12.48	\$ 3,314 \$ 84 1,210 2,536 1,550 1,550 1,258 3,175 3,60	\$ 6,943 16,609	$ \begin{array}{c} 9,523\\ 14,870\\ 174\\ 780\\ 152,192\\ 201,091\\ 483.39 \end{array} $	44.4 24.6 4.6.6 7.6 8.3 9.2 9.2 9.2	90.4 28.9 47.5 49.2
WITH SOIL	1 80 ~	\$ 10.06 5.32 22.70 12.53 84.78	94.14 86.68 7.46	\$ 2,666 39 318 1,113 1,972 1,468 1,097 502 2,870 1,8	\$ 5,762	7,212 12,739 87 814 112,118 150,692	48.5 7.0 7.0 5.3 8.3	88.9 27.9 39.0 35.9
FARMS	180-259	9.87 5.77 19.92 13.92 80.35	88.36 85.29 3.07	2,020 73 73 278 945 1,299 903 513 805 2,727 2,727	3,387	5,450 9,858 139 656 87,082 15,642	46.8 20.3 7.6 5.6 7.9 11.4	87.7 29.9 40.9 60.8
GRAIN	Under 180 20	\$ 11.54 \$ 8.97 24.93 17.93 84.33	$96.43 \\ 104.09 \\ -7.66$	\$ 1,532 \$ 366 \$ 366 \$ 835 \$ 873 \$ 643 \$ 472 \$ 626 \$ 2,182 \$ 10.4	\$ 2,424 \$ 6,007	4,411 10,471 47 923 54,376 78,659 1	56.2 16.0 4.2 8.5 5.1	92.9 28.1 44.3 53.6
	650+	\$ 10.82 3.93 18.12 10.23 95.84	101.45 83.28 18.17	\$ 7,931 176 176 176 2,200 3,477 1,048 3,738 3,923 3,02 13.2	\$14,291	18,327 28,129 331 1,249 381,882 484,402 593.63	44.5 4.7.7 4.8.8 8.8	106.7 30.9 46.3 63.7
NG 76-100		\$ 10.50 \$ 5.03 \$ 11.03 \$ 95.12	101.56 87.67 13.89	\$ 5,287 \$ 678 150 678 1,930 4,021 2,489 2,489 2,546 2,546 3,173 9.3	\$ 8,964 \$ 29,024	13,570 23,033 269 11,175 268,897 344,932 617.05	45.4 30.1 7.4 3.7 7.1	104.8 30.9 45.2 60.6
SOIL RATING		\$ 10.29 5.02 20.01 111.30 96.43	103.36 89.10 14.26	\$ 3,865 98 1,389 2,840 1,389 1,388 1,456 2,896 5,7	\$ 6,190 21,750	10, 769 18, 332 176 880 198, 946 257, 043 630.01	45.5 30.1 7.7 3.2 6.4 5.7	105.6 31.0 45.9 59.2
11		\$ 10.13 5.60 21.04 11.89 95.20	103.05 90.90 12.15	\$ 2,750 351 1,222 2,088 1,397 1,397 1,087 5,083 2,833 2,833 1,9	\$ 4,459 16,053	8,073 15,037 189 793 146,815 191,419 635.94	28.3 7.1 7.1 2.8 7.4 6.4	101.8 30.9 44.7 58.8
GRAIN FARMS WITH	180-259 103	\$ 9.14 5.61 22.71 14.54 92.78	102.33 95.14 7.19	\$ 1,901 56 371 829 1,565 1,110 585 866 330 2,781 1.3	\$ 4,352	5,940 11,078 118 714 112,749 147,238 645.78	47.2 26.6 6.5 6.5 6.5 8.5 8.5	99.8 31.2 45.8 58.3
	Under 180 33	\$ 9.43 7.64 26.51 19.70 95.61	108.54 109.14 60	\$ 1,339 261 261 870 1,395 871 341 644 189 2,727 2,727	\$ 3,238	4,976 8,423 106 707 78,241 104,468 669.67	53.2 20.4 4.4 6.7 8.9	103.4 32.2 47.2 54.5
	Range in size (total acres)		Total value of farm production Total non-feed costs	TEMS ication. ate depreciation. naintenance ment depreciation I supplies.	FARM INVESTMENT Livestock inventory	s)	PERCENT OF TILLABLE LAND IN Corn and corn silage. Soybeans. Wheat. Other small grains. Diverted acres.	CROP YIELDS, bushels per acre Corn
	Range in size	COSTS AN TILLAB Soil fertility Buildings an Machinery a Labor	Total value Total non-fe Management	SELECTED COST I Fertilizer, annual appl Lime and rock phosph Building repairs and n Building depreciation. Machinery and equip Machinery repairs and Machinery hire Gasoline and oil Hired labor charge Total months of labor Months of labor hired	FARM INV Livestock in Grain invent	Machinery Capit Machinery Machinery Machinery Machinery Auto	PERCENT Corn and co Soybeans Wheat Other small Diverted acr All hay and	CROP YIELDS, CornSoybeans Wheat

Table 13. -- Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern Illinois, 1964

Table 13a. — Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern Illinois, 1964

	HOG FAR	MS	WITH SOIL R	RATING 76-	76-100	НОС	FARMS	WITH SOIL	RATING 56	56-75
Range in size (total acres)	. Under 180 . 52	180-259 60	260-339 45	340-499 32	500+ 18	Under 180 37	180-259	260-339	340-499 50	500+ 32
COSTS AND RETURNS PER TILLABLE ACRE Soil fertility. Buildings and fence. Machinery and equipment. Labor. Feed and grain returns.	\$ 8.59 11.27 30.51 22.22 85.12	\$ 8.63 8.97 27.71 118.73 90.99	8.93 7.70 26.51 15.88 92.43	\$ 10.63 8.03 25.34 16.61 94.04	\$ 10.20 9.20 25.43 14.06 94.08	\$ 7.42 10.59 31.25 25.95 76.54	\$ 9.57 11.57 26.56 17.38 81.72	\$ 9.31 7.93 27.29 15.71 80.18	\$ 9.80 \$ 8.25 \$ 24.88 \$ 16.05 \$ 81.63	10.80 8.14 22.45 15.77 84.47
Total value of farm production		$\frac{125.45}{115.83}$ $\frac{9.62}{}$		$\frac{123.25}{109.82}$ $\frac{13.43}{13.43}$	117.79	125.06 122.04 3.02	116.77	113.30 101.73 11.57	$\frac{111.65}{101.24}$ $\frac{101.24}{10.41}$	$\frac{110.81}{99.76}$ $\frac{99.76}{11.05}$
SELECTED COST ITEMS Fertilizer, annual application	\$ 1,217 55 509	\$ 1,693	3,	\$ 3,708 98 975	\$ 5,173	\$ 948 16 347	\$ 1,799 48 660	\$ 2,251 68 609		\$ 4,944 145 1,170
Building depreciation. Machinery and equipment depreciation. Machinery repairs and supplies.		1,289 1,809 1,359	1,459 2,489 1,749	1,898 3,005 2,408	2,881 3,105 3,105	1,030 1,255 877	1,573 1,689 1,166	1,366 2,365 1,732	1,656 2,572 2,111	2,665 2,857 2,787
Machinery hire			614 1,249 1,015	1,021 1,532 2,603	1,396 2,407 3,235		587 846 395	1,168 850	1,369 1,623	1,876 4,106
Unpaid labor charge. Total months of labor. Months of labor hired.	2,847 14.4 11.8	3,011 16.6 3.2	3,210 18.3 4.0	3,343 24.2 9.3	4,037 30.3 12.4	2,809 14.6 2.1	2,959 14.8 1.6	3,063 17.2 3.6	3,481 21.7 6.2	3,322 28.7 14.0
FARM INVESTMENT Livestock inventory. Grain inventory.	\$11,625 8,542	\$14,788	\$16,456 14,458	\$21,375 19,811	\$31,270 27,536	\$10,056 6,537	\$12,506 10,310	\$13,783 12,286	\$21,219 13,627	\$32,822 23,311
Machinery Buildings and fence Soil fertility.	13,5	7,411 15,591 025	8,829 17,849 112	11,877 18,979 232	16,998 36,353 174	4,728 10,060 30	7,145 15,827 95	8,201 14,307 122 731	9,911 17,460 145	14,272 26,796 304 694
Value of land (current basis) Total farm investment Total farm investment per acre	$\frac{71,741}{111,517}$.35	133,750 192,151 651.36	28	265,810 379,054 613.36	$\begin{array}{c} 51,972 \\ 84,056 \\ \hline 571.81 \end{array}$	79,848 126,524 557.37	99,478 148,908 496.36	. 93	203,258 $301,457$ 445.28
PERCENT OF TILLABLE LAND IN Corn and corn silage	63			63.8 10.9	61.0		55.1 9.9	51.7	53.1	
Wheat.		1.8	8.9	4.80 4.00	8.83	1.6	9.4 9.4 4.6	n n n	5.9 4.0 6.9	2.9.1 2.4.0
Diverted acres	15.7			2.2	12.7		3.0	15.0	15.8	
CROP YIELDS, bushels per acre	00 3	9 00	100	9 90			86.4			
Soybeans.	31	31.8	33.2	32.0	34.7	31.5	29.4	30.4		
Wheat	44.8	43.3	43.9 59.4	43.6 57.8	41.9	37.3 52.6	40.7 51.6	37.8	38.0 53.2	58.0 52.2

Table 14. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Southern Illinois, 1964

	GRAI	GRAIN FARMS	WITH SOIL		5-55	НОС	FARMS	WITH SOIL	, RATING	5-55
Range in size (total acres)	180-259 32	260-339 47	340-499	500-649 48	650+ 53	Under 180 19	180-259	260-339 58	340-499	500+ 36
Size of farm (acres). Acres of tillable land. Soil rating on tillable land. Hens, number.	222 201 35 35 61	301 275 35 83	419 356 33 53	562 466 32 83	904 713 35 26	134 111 32 54	219 185 35 58	298 240 32 95	401 310 32 43	679 482 31 84
Darry cows, number	59.1 297	63 297	306	3.7 348	4.0 236 402	58, 1,351	118 1,095	168 1,281	181 1,512	296 2,052
DOLLAR COSTS PER FARM Soil fertility. Buildings and fence. Machinery and equipment. Labor.	\$ 1,857 821 4,143 3,251	\$ 2,359 989 5,393 3,233	\$ 3,331 1,200 6,396 3,860	\$ 4,568 1,541 8,549 4,589	\$ 6,961 2,179 12,009 6,597	\$ 1,349 1,170 4,050 3,470	\$ 2,037 1,385 4,484 3,620	\$ 2,569 1,492 5,989 3,863	\$ 3,460 1,928 7,202 4,824	\$ 5,337 2,420 9,742 6,071
Taxes	820 424 308 335	1,061 551 510 332	1,188 812 593 449	1,573 902 842 608	2,468 1,425 1,393	004 286 204 930	780 377 352 726	1,019 562 551 667	1,242 696 630 1,059	1,833 913 965 1,262
Interest charge on capital	$\frac{2,851}{14,816}$ $\frac{4,343}{4}$	$\frac{3,674}{18,102}$ $\frac{4,360}{4}$	$\frac{4,360}{22,189}$	5,872 29,044 7,414	9,145 43,014 9,335	$\frac{2,320}{14,383}$ $15,400$	$\frac{3,148}{16,909}$ $13,661$	$\frac{3,796}{20,508}$	$\frac{4,899}{25,940}$	7,002 35,545 26,986
DOLLAR RETURNS PER FARM Livestock returns above feed cost. Feed and grain returns. Other cash income. Total value of farm production. Management returns.	\$ 1,187 13,722 615 15,524 708	$\begin{array}{c} \$ \ 1,246 \\ 17,783 \\ \hline 959 \\ \hline 19,988 \\ 1,886 \end{array}$	$\begin{array}{c} \$ \ 1,483 \\ 21,883 \\ 1,280 \\ \hline 24,646 \\ 2,457 \end{array}$	\$ 1,971 29,368 1,575 32,914 3,870	\$ 2,309 46,339 2,521 51,169 8,155	\$ 6,218 7,100 347 13,665 -718	$\begin{array}{c} \$ \ 4,892 \\ 11,002 \\ 902 \\ \hline 16,796 \\ -113 \end{array}$	$\begin{array}{c} \$ 5,628 \\ 14,287 \\ 1,038 \\ \hline 20,953 \\ 445 \end{array}$	$\begin{array}{c} \$ & 6,927 \\ 18,450 \\ 1,403 \\ \hline 26,780 \\ 840 \end{array}$	$\begin{array}{c} \$ \ 9,349 \\ 29,400 \\ 1,613 \\ \hline 40,362 \\ 4,817 \end{array}$
Farm production per \$1.00 of non-feed costs	12,673		1.11 $16,804$	1.13 $18,989$	$\frac{1.19}{21,101}$	10,379	.99	$\frac{1.02}{14,368}$	$\frac{1.03}{14,608}$	18,005
FINANCIAL SUMMARY Cash sales of products and services	\$18,834 6 18,840	\$25,580 28 25,608	\$30,984 137 31,121	\$40,881 392 $41,273$	\$60,166 366 60,532		\$29,993 222 30,215	$$35,602 \\ 82 \\ \hline 35,684$	\$42,770 87 42,857	$$59,774 \\ 40 \\ \overline{59,814}$
Purchased livestock. Purchased feed. Cash operating expenses. Purchase of capital items. Total cash expenditures.	855 1,693 6,862 2,289 11,699	1,555 1,765 8,622 4,273 16,215	$ \begin{array}{c} 1,698 \\ 2,408 \\ 11,417 \\ 4,213 \\ \hline 19,736 \end{array} $	$\begin{array}{c} 3,897 \\ 2,673 \\ 15,108 \\ 7,130 \\ \hline 28,808 \end{array}$	3,945 2,939 23,091 9,294 39,269	$\begin{array}{c} 2,275\\ 10,414\\ 6,975\\ 3,429\\ \hline 23,093 \end{array}$	$\begin{array}{c} 4,022\\ 7,204\\ 8,131\\ 2,640\\ \hline 21,997 \end{array}$	$\begin{array}{c} 3,574 \\ 9,026 \\ 10,364 \\ 4,843 \\ \hline 27,807 \end{array}$	$\begin{array}{c} 4,112 \\ 9,596 \\ 13,669 \\ 4,520 \\ \hline 31,897 \end{array}$	6,188 13,074 19,446 6,776 45,484
Cash balance Inventory change Capital change Farm products consumed	\$ 7,141 -922 9	\$ 9,393 -2,403 1,193 131	\$11,385 -2,385 663 153	\$12,465 -1,624 1,968 227	\$21,263 -2,341 1,945 228		\$ 8,218 -2,121 -177 -177	\$ 7,877 -2,236 1,354 187	\$10,960 -2,541 417 259	\$14,330 -374 1,512 224
Farm and family earningsLabor and management earnings	6,388 3,268 3,559 16.03		9,816 5,022 6,817 16.27	13,036 6,423 9,742 17.33	21,095 10,757 17,300 19.14	96	6,070 2,454 3,035 13.86	7,182 3,014 4,241 14.23	9,095 3,405 5,739 14.31	15,692 7,397 11,819 17.41

Table 14a. - Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Southern Illinois, 1964

Table 15. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern and Southern Illinois, 1964

	DAIRY FAR	FARMS, N SOII	MS, NORTHERN SOIL RATING	ILLINOIS, OF	WITH	DAI	DAIRY FARMS, WITH SOI	MS, SOUTHERN I SOIL RATING OF	RN ILLINOIS, G OF 5-55	OIS,
	76-160	56-75	76-100	56-75	56-100					
Range in size (total acres)	Und 19	Under 180 38	180	180-259	260-339 27	Under 180 33	180-259 55	260-339	340-499	500+ 19
Size of farm (acres). Acres of tillable land. Soil rating on tillable land. Hens, number. Dairy cows, number.	149 145 83 86 86 31.9	147 124 67 62 32.6	222 200 82 120 44.9	218 183 67 61 38.1	295 254 70 190 51.1	148 124 32 58 58 31.0	220 187 31 82 36.2	300 250 27 56 38.3	392 332 28 100 50.2	675 508 33 86 86.5
Beef produced, hundredweight Pork produced, hundredweight	100	3 136	8 8	10 195	221	68	3 143	02	97	43 142
Soil fertility	\$ 1,086 1,462 5,041	\$ 662 1,639 4,530 3,368	\$ 1,763 2,782 7,362 4,759	\$ 1,182 2,177 5,767 4,467	\$ 1,762 2,871 8,383 5,785	\$ 1,021 1,073 4,714 3,961	\$ 1,652 1,705 6,205 4,523	\$ 2,475 1,620 6,572 4,800	\$ 2,690 2,270 8,417 6,014	\$ 4,855 3,314 12,626 8,848
Taxes. Seed expense.	1,339 1,339 142 140	~ ~	1,874 606 414	1,481 512 253	~ ~	314 314 156	,342 842 476 216	1,102 543 763	1,256 710 345	1,806 1,249 752
Livestock and miscellaneous expense.	1,225	1,026 3,834	1,837	1,210	1,707	2,377	1,128	1,202	1,468 5,182	2,169 8,618
Total non-feed costs	19,519 10,250	16,713 $10,155$	28,581 14,111	22,416 12,818	31,450 18,073	15,187 9,749	20,125 12,657	22,422 11,985	28,352 15,928	44,237 25,407
	\$ 7,269 12,246 619	\$ 7,441 9,640 520	\$ 9,889 17,468	\$ 8,400 14,143 840	\$11,275 21,248 1,232	\$ 7,213 7,452 650	\$ 7,997 11,654 797	\$ 8,744 13,330 757	\$10,808 17,711 1,444	\$13,629 31,221 1.864
Total value of farm production	20,134	17,601	28,463 -118	23,383	33,755	15,315	20,448	22,831 409	29,963 1,611	46,714
Farm production per \$1.00 of non-feed costs	13,966	14,081	17,250	14,464	16,399	10,043	12,088	12,122	13,219	15,029
FINANCIAL SUMMARY Cash sales of products and services	\$24,222	\$19,821	\$32,452	\$26,689	\$39,594 15	\$19,530	\$26,855	\$27,864	\$37,405	\$58,754
Total cash income	24,246	19,830	32,706	26,764	39,609	19,583	26,861	27,899	37,508	59,000
Purchased livestockPurchased feed Cash operating expenses	1,147 3,924 8,692	926 2,429 6,992	4,157 $12,902$	938 3,523 9,768	1,146 5,115 14,354	815 3,795 6,624	1,112 4,788 9,888	3,719 11,307	1,677 $5,443$ $13,965$	4,392 7,663 23,530
Purchase of capital items	$\frac{2,080}{15,843}$	$\frac{2,303}{12,650}$	$\frac{4,594}{22,252}$	4,256	$\frac{5,027}{25,642}$	$\frac{3,281}{14,515}$	4,060	4,894	$\frac{7,031}{28,116}$	$\frac{12,992}{48,577}$
Cash balance	\$ 8,403	\$ 7,180	\$10,454	\$ 8,279	\$13,967 90 384	\$ 5,068	\$ 7,013	\$ 6,993	\$ 9,392 -656	\$10,423 -429
Capital change Farm products consumed	219	259	291	316	331	318	330	306	334	3,014
Farm and family earnings. Labor and management earnings. Capital and management earnings.	8,529 3,315 5,267	7,635 3,582 4,722	10,427 2,554 7,066	9,896 3,629 6,334	14,004 4,997 9,962 33 77	6,095 2,701 2,505 16 92	6,942 2,883 3,701	7,694 2,982 4,254 14 18	10,822 4,191 6,793 17 33	15,452 5,023 11,095 16,44
capital and management earmings per acter	00.00			. 67		10.72	70.07	11.10		11.01

Table 15a. - Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern and Southern Illinois, 1964

	DAIRY FAR	ARMS, NC SOIL	MS, NORTHERN SOIL RATING	ILLINOIS, OF	WITH	DAI	DAIRY FARMS, SWITH SOIL	S, SOUTHERN I	RN ILLINOIS, OF 5-55	IS,
	76-100	56-75	76-100	56-75	56-100					
Range in size (total acres)	Under 180	180	180-	80-259	260-339	Under 180 33	180-259 55	260-339	340-499	500+ 19
COSTS AND RETURNS PER TILLABLE ACRE Soil fertility. Buildings and fence. Machinery and equipment. Labor. Feed and grain returns.	\$ 7.49 10.08 34.76 28.50 84.46	\$ 5.34 13.22 36.53 27.16 77.74	\$ 8.82 13.91 36.81 23.80 87.34	\$ 6.46 11.90 31.51 24.41 77.28	\$ 6.94 11.30 33.00 22.78 83.65	\$ 8.23 8.65 38.02 31.94 60.10	8 83 9.12 33.18 24.19 62.32	\$ 9.90 6.48 26.29 19.20 53.32	\$ 8.10 \\ 6.84 \\ 25.35 \\ 118.11 \\ 53.35 \\	\$ 9.56 6.52 24.85 17.42 61.46
Total value of farm production. Total non-feed costs. Management returns.	138.86 134.61 4.25	141.94 134.78 7.16	142.32 142.91 59	127.78 122.49 5.29	132.89 123.82 9.07	$\frac{123.51}{122.48}$ 1.03	109.35 107.62 1.73	$91.33 \\ 89.69 \\ \hline 1.64$	90.25 85.40 4.85	$\begin{array}{c} 91.96 \\ 87.08 \\ \hline 4.88 \end{array}$
SELECTED COST ITEMS Fertilizer, annual application Lime and rock phosphate depreciation. Building repairs and maintenance. Building depreciation. Machinery and equipment depreciation. Machinery hire. Gasoline and oil. Hired labor charge. Unpaid labor charge. Total months of labor. Months of labor hired.	\$ 1,035 1,147 1,1460 1,166 657 870 3,262 17.3	\$ 650 12,133 1,550 944 432 673 673 2,913 15.0 2.0	\$ 1,697 938 1,844 2,860 1,567 1,069 1,308 3,361 4.8	\$ 1,142 40 40 1,560 1,881 1,428 505 927 9027 3,562 3,562	\$ 1,708 841 2,030 2,991 2,015 656 1,743 4,042 6.7	\$ 930 366 1,628 1,033 622 371 3,590 1.6	\$ 1,551 101 619 1,086 2,225 1,442 694 694 965 1,282 3,241 3,241 5.2	\$ 2,290 1,011 2,424 1,652 688 688 956 1,360 3,440 22.6 6.6	\$ 2,550 1,432 3,399 2,083 669 1,286 1,986 4,029 8.5	\$ 4,606 1,155 2,159 2,159 3,468 698 2,138 4,491 4,357 17.0
FARM INVESTMENT Livestock inventory. Grain inventory. Remaining capital gost in:	\$ 9,604	\$ 9,853 4,981	\$15,204 9,350	\$11,930	\$17,190 11,405	\$ 8,803	\$10,590	\$10,866	\$16,654	\$26,795 13,792
	$\begin{array}{c} 4,928 \\ 13,359 \\ 108 \\ 910 \\ 71,395 \\ \hline 107,311 \\ 720.21 \end{array}$	5,610 15,170 34 818 50,272 86,738 590.05	$11,230 \\ 22,609 \\ 125 \\ 872 \\ 105,350 \\ 164,740 \\ 742.07$	6,944 20,849 78 78,696 122,287 560.95	12,136 24,782 98 1,025 108,144 174,780 592.47	$\begin{array}{c} 7,431\\ 7,618\\ 1618\\ 641\\ 23,898\\ \overline{52,324}\\ \overline{52,324} \end{array}$	9,272 12,399 197 636 34,929 74,543	$ \begin{array}{c} 11,220 \\ 11,016 \\ 417 \\ 731 \\ 43,778 \\ 85,648 \\ \end{array} $	14,507 15,949 298 546 58,264 115,298	22, 202 23, 738 569 877 105, 505 193, 478
PERCENT OF TILLABLE LAND IN Corn and corn silage. Soybeans. Wheat. Other small grains. Diverted acres. All hay and pasture crops.	44.7 6.9 2.2 10.9 3.6 27.0	39.4 1.4 15.9 11.2 41.0	46.7 4.8 1.7 10.7 4.4 30.1	46.0 3.6 1.0 12.8 22.2 33.6	41.8 8.4 1.7 10.9 6.8 28.1	35.7 7.4 111.9 2.5 1.2	37.2 15.7 14.8 1.3 2.6 27.6	35.5 16.3 16.3 28.2 28.2	33.4 20.4 15.1 15.1 20.3	40.5 18.6 13.2 2.0 2.6 21.9
CROP YIELDS, bushels per acre Corn Soybeans. Wheat. Oats.	93.6 25.2 488.5 65.5	89.1 26.1 51.9 59.1	95.1 31.0 46.4 61.2	84.7 28.2 36.0 63.5	92.1 28.8 40.6 62.2	55.8 18.6 39.7 50.5	57.1 21.4 42.3 52.7	48.5 19.5 40.7 39.8	55.6 19.2 38.2 45.1	58.2 22.9 41.4 47.8

Table 16. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern and Southern Illinois, 1964

POULTRY FARMS, NORTHERN ILL., SOIL RATING 56-100	Under 180 180-259		5.9 29 19 195 316	874 \$ 1,770 2,013 2,072 5,570 7,022 4,573 5,596		10404	\$ 9,218 \$13,968 11,180 18,781 971 560		$1.05 1.23 \\ 12,950 18,086$	\$40,535 \$55,427 3		5,098 6,786 12,819 16,858 8,345 12,551 5,182 4,384		9,094 \$14,947 -1,492 1,420 1,250 -460 243 106	9,095 16,013 3,726 8,918	46
	500+ 10	807 633 41 21	1,693	\$ 8,581 4,339 15,166 8,608		122	\$ 8,003 47,656 1,385		19,502	· · · · · · · · · · · · · · · · · · ·		52,779 10,641 29,711 11,392		\$17,887 -2,147 -1,450 310		15,000
BEEF CATTLE FARMS, SOUTHERN ILLINOIS, SOIL RATING 5-55	340-499	415 341 33 209	 882 429	\$ 4,212 2,363 8,883 4,761	1,460 661 709 928	$\frac{6,177}{30,154}$ $21,869$	\$ 3,953 22,185 2,504	$\frac{28,642}{-1,512}$		\$68,732	68,736	25,520 6,954 15,772 4,912	53,158	\$15,578 -7,803 -330 187	7,632	
BEEF CAT	260-339	293 235 32 114	7774	\$ 2,407 1,709 6,211 3,968	1,276 571 458 728	4,757 22,085 22,445	\$ 3,833 19,248 054	22,035	14,528	\$56,737	56,767	20,523 12,061 10,779 4,539	47,902	\$ 8,865 -2,502 1,037 384	2,494	4,707
CLINOIS	500+ 40	663 561 75 23	2,198 1,314	\$ 6,541 4,722 12,754 7,911	4,338 1,645 1,474 1,795	19,140 60,320 54,279	\$ 8,190 52,978 1,605	62,773	1.04	\$147,173	147,320	46,341 22,526 28,624 8,219	105,710	$$41,610 \\ -15,917 \\ -428 \\ 384$	5,204	32.57
E FARMS, NORTHERN ILLINOIS SOIL RATING 56-100	340-499	418 372 76 17	1,272 816	\$ 3,953 3,991 9,446 5,790	2,851 1,075 888 1,054	12,714 41,762 32,668	\$ 5,932 36,359 1,224	43,515	1.04		91,667	35,866 9,779 18,706 9,190	73,541	\$18,126 -2,584 1,881 309	17,732	
RATING	260-339 49	302 277 79 14	626.	\$ 2,798 2,759 7,026 3,915	2,349 803 636 958	9,481 30,725 25,158	\$ 4,684 27,365	33,144 2,419	$\frac{1.08}{23,395}$	\$67,991	190,89	21,719 7,688 13,397 4,213	47,017	\$21,050 -5,716 -654 276	5,089	39.40
CATTLE FA	180-259 45	223 202 78	883	\$ 2,260 2,289 6,156 3,696	1,730 623 370 858	00/1	\$ 4,399 20,536 1,078	26,013	$\frac{1.02}{19,883}$	\$55,959	56,015	20,725 8,068 10,979 3,394	43,166	\$12,849 -1,394 -850 241	10,846 3,128 8,021	
BEEF CATTL	Under 180 16	155 144 78 97	.2 665 450	\$ 1,376 1,881 4,726 3,015	1,308 411 350 685	$\begin{array}{c} 5,488 \\ \hline 19,240 \\ 16,376 \end{array}$	\$ 3,492 14,784	18,979	17,254	\$44,224	44,242	14,860 5,931 7,439 3,116	31,346	$$12,896 \\ -4,653 \\ -403 \\ 199$	8,039 2,425	33.72
	Range in size (total acres)	Size of farm (acres). Acres of tillable land. Soil rating on tillable land. Hens, number.	Dairy cows, number Beef produced, hundredweight Pork produced, hundredweight	DOLLAR COSTS PER FARM Soil fertility Buildings and fence. Machinery and equipment.	Taxes. Seed expense. Crop expense. Livestock and miscellaneous expense				Farm production per \$1.00 of non-feed costs	FINANCIAL SUMMARY Cash sales of products and services	Total cash income	Purchased livestock. Purchased feed. Cash operating expenses. Purchase of capital items.	Total cash expenditures	Cash balance. Inventory change. Capital change. Farm products consumed	Farm and family earnings	Capital and management earnings per acre

Table 16a. -- Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern and Southern Illinois, 1964

POULTRY FARMS, NORTHERN ILL, SOIL RATING 56-100	Under 180 180-259		7.05 \$ 8.47 16.23 9.91			172.33 159.37 163.85 129.62		6	33 30 30 30 30 30 30 30 30 30 30 30 30 3						19.8 22.1 4.6 9.4),194 \$ 9,655		3,078 10,609 2,057 20,886		611 708 513 106,307	04		.6 63	3.0	12.2 5.9	.1	>	5 84	30	53.3 50.5	
POI	Unde 1		64				1		ю ч	4 1	2,0,0	1,0		1,1	19.		\$10,1	0,1	8,0	,	58,513	104,2					V-8-7					_
SOUTHERN ING 5-55	500+ 10	,	\$ 13.56 6.85			90.12	,		\$ 8,387 194	$\frac{1,478}{2,861}$	6,340	3,563	2,700	4,716	35.1		\$52,854	067,07	20,922	367	869 151,108	279,324		51.4	13.4	4.	2.9	1.01	83.3	24.2	42.2	
BEEF CATTLE FARMS, SOUTHERN ILLINOIS, SOIL RATING 5-55	340-499		\$ 12.35			83.99			\$ 4,00/ 145	882 1 481	3,356	2,437	1,537	1,794	20.5		\$28,401	12,433	12,933	210	937	1		46.6	16.6	1.8	1.3	2:11	65.3	20.4	44.4	
BEEF CAT	260-339 12		\$ 10.24	26.43	73.40	93.77	21	Ç	\$ 2,520 81	721	2,211	1,452	1,214	3 077	18.2		\$24,864	17,144	7,414	135	644 49.309	105,002		40.1	16.8	1.1	12.4	F . 77	711.7	25.7	41.2	
LINOIS	500+ 40		\$ 11.66	22.73	94.43	111.89	4.37		\$ 0,394 147	1,402	4,527	3,344	2,374	3,855	31.0		\$79,340	31,941	17,472	230	1,302 261.638	435,130		60.4	10.1	6.5	w. √ ∞ ∝	0.			43.0	
E FARMS, NORTHERN ILLINOIS SOIL RATING 56-100	340-499		\$ 10.63	25.39	97.74	116.98	4.72	¢	\$ 5,815 138	864 2 127	3,496	2,417		2,525	23.3		\$42,885	443	12,649	218	743	231		65.1	0.0	0.∞.	3.6	0.71	100.2	30.8	41.5	
RMS, NOR RATING 5	260-339 49		\$ 10.10 9.96	25.36	98.79	119.65	8.73		\$ 2,741 57	942	2,598	1,514 730	1,262	859 3 056	3.4		\$31,954	10,740	10,190	138	933 134.386	216,504		58.8	8.1	9.6	5.4	0.01	101.2	32.3	44.8 62.5	
BEEF CATTLE FA	180-259 45		\$ 11.19 11.33	30.48	101.66	128.78	2.74	000	\$ 2,188 72	501	2,006	1,501	1,097	881 2 815	15.7		\$26,949		8,072	151		169,220 758 83		61.4	5.0 A	12.2	3.6	10.7	104.0	34.9	43.0 64.2	
BEEF C	Under 180 16		\$ 9.56 13.06	32.82	102.67	131.80	-1.82	4	\$ 1,300 76	534	7	947 441		203 2 813	13.2		\$20,643		7,149	278	914 69.747	7.		62.7	5.1 5.	13.0	12.3	7.01	101.5	36.1	40.7	
	Range in size (total acres)	COSTS AND RETURNS PER TILLABLE ACRE	Soil fertility. Buildings and fence.	Machinery and equipment	Feed and grain returns.	Total value of farm production	Management returns	SELECTED COST ITEMS	Fertilizer, annual application.	Building repairs and maintenance	Machinery and equipment depreciation	Machinery repairs and supplies	Gasoline and oil.	Hired labor charge	Total months of labor. Months of labor hired	FARM INVESTMENT	Livestock inventory		Machinery	Soil fertility.	Auto. Value of land (current basis).		PERCENT OF TILLABLE LAND IN	Corn and corn silage	Joy Dealls	Other small grains.	Diverted acresAll have and nasture crops	CROP VIELDS bushels ner acre	Corn.	Soybeans	WheatOats	

This report results from the cooperation of state and local Farm Bureau Farm Management Associations and staff members of the Department of Agricultural Economics at the University of Illinois. The information is for farmers and workers in farm management extension, teaching, and research and for others assisting Illinois farmers in business analysis. The report supplements work of FBFM fieldmen by providing comparative standards for farmers enrolled in the service.

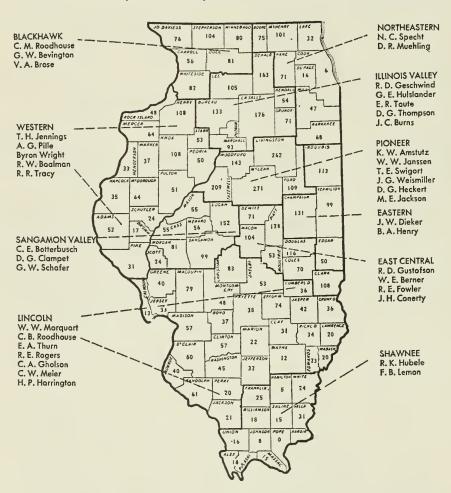
The cooperative effort of the university staff working with 39 fieldmen who are supported largely by fees paid by farmers makes this educational and service program possible. By participating in this program each farmer-cooperator (6,366 reporting this year) increases his chances for successful farm operation and contributes to the improvement of Illinois agriculture.

Each year more farmers are adopting improved production techniques based on studies of their farm records. Many crop farmers now plan for corn yields above 100 bushels per acre. The average dairy farmer has reduced acres of hay and pasture per cow by 17 percent since 1959 by substituting corn silage and increasing forage yields. Farm records are becoming more important for the individual farmer to evaluate his competitive position in the farming business.

We hope that this 40th Annual Report will be used to contribute to more profitable farm operation and a more desirable level of family living.

Harold G. Halcrow, Head Department of Agricultural Economics

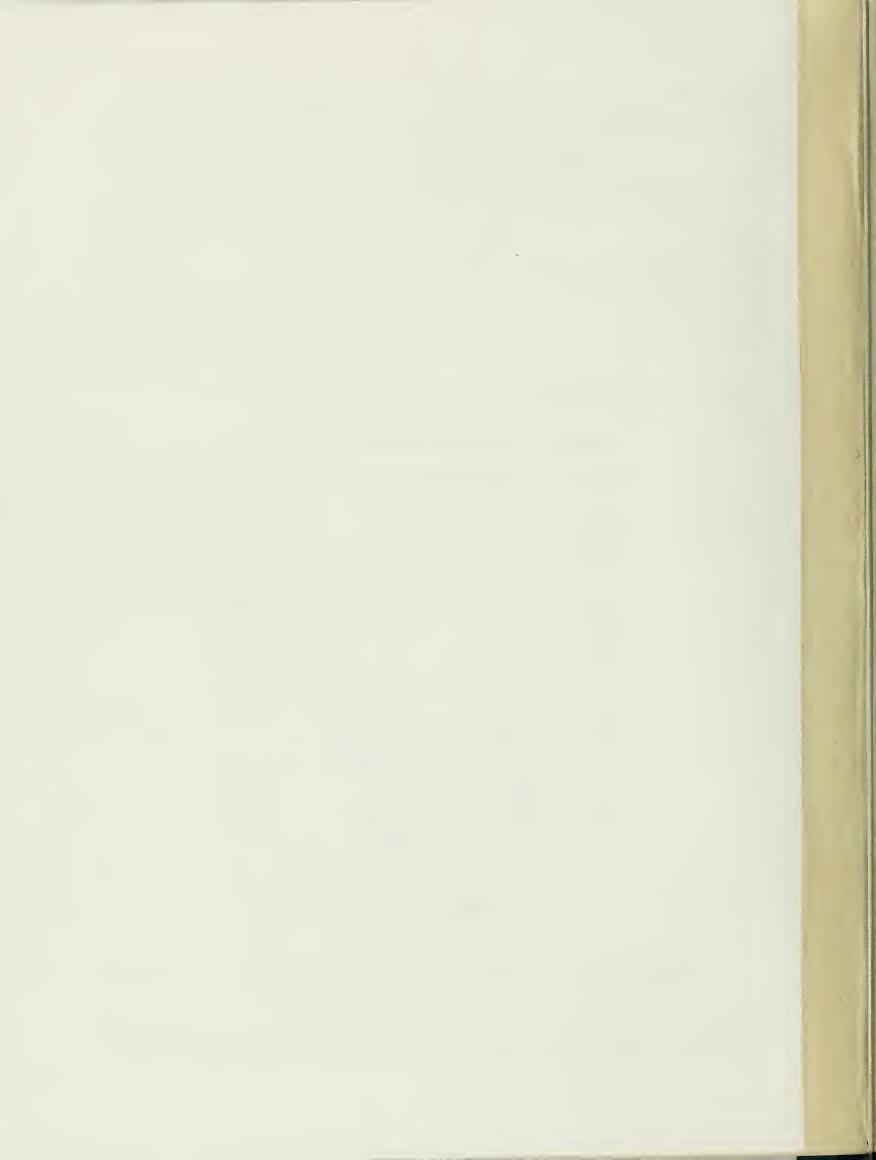
ASSOCIATIONS, FIELDMEN, AND COOPERATORS ENROLLED

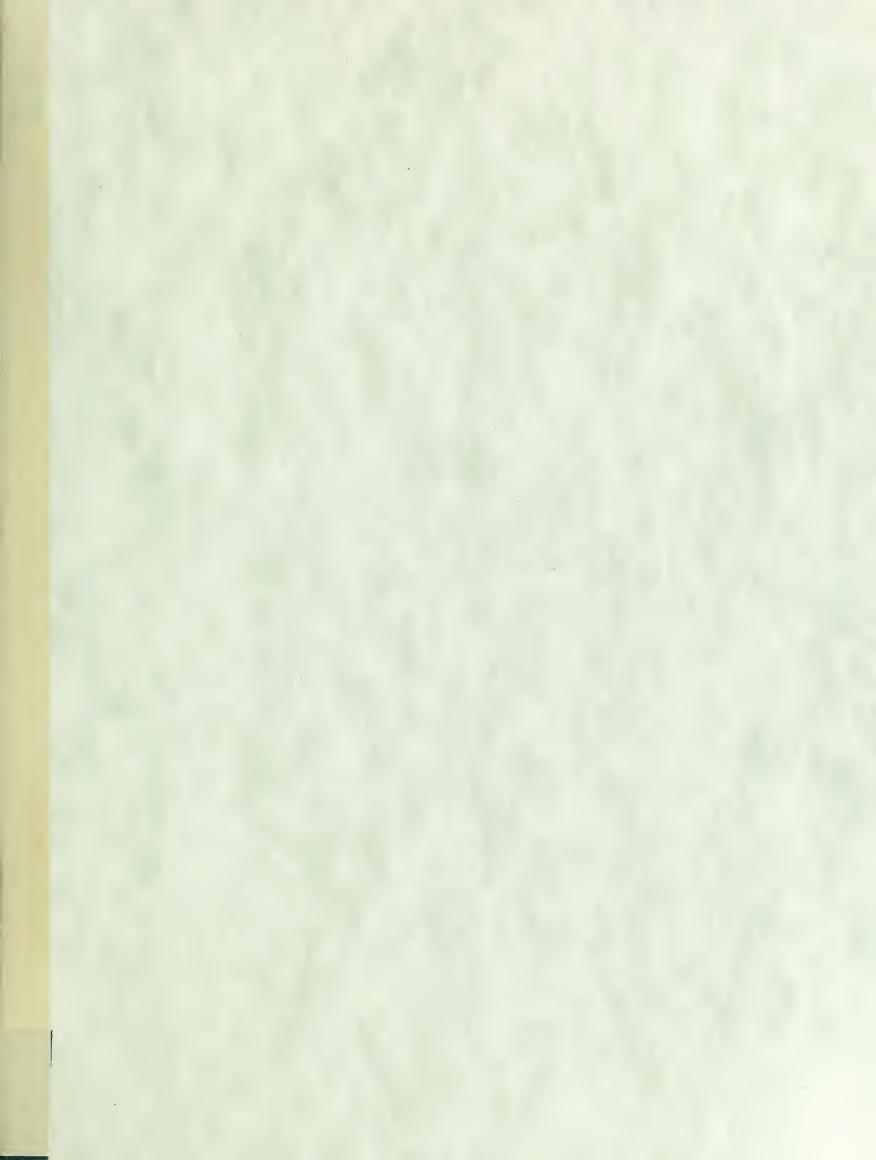


Prepared by A. G. Mueller and D. F. Wilken of the Department of Agricultural Economics.

Urbana, Illinois August, 1965







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