

UNIVERSITY OF IDAHO

AGRICULTURAL EXPERIMENT STATION

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UNIVERSITY OF HAWAII

SEP 11 1945

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Wartime Growth and Decline of Hog Production in the Northern Idaho Cash-Grain Area

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Summary

1. An analysis of the records of the Community Hog Pool at Moscow, Idaho, for the years 1941 to 1944, inclusive, gives the history of production trends of hogs and economic forces operating thereon in the northern Idaho grain area which includes Latah, Nez Perce, Clearwater, Lewis and Idaho counties.
2. After some decline in the number of hogs sold by the pool in 1941 from that of the previous 3 years, increases of about 50 percent over 1941 occurred in 1942 and 1943. About two-thirds of this increase was lost in 1944. The prospects for 1945 are below those of any of the last 8 years.
3. Seasonal fluctuations in this area are evident. For top hogs, October and November were the high points of marketing for spring pigs while May was the peak for fall pigs. For heavy sows sales were normally large in October and November. In 1943, a year of liquidation, August was unusually high in sales of heavy sows as was November. Sales of sows were also very high in the spring of 1944. Thus late 1943 and early 1944 were in great contrast with 1941 when sales of sows were very low because hog production was expanding.
4. Nearly all members marketed one or more hogs during a 15-month period at the height of the production peak. About half of all members of the pool sold less than 14 top hogs each while less than 8 percent sold more than 56 each during this period.
5. Numbers of top hogs sold per 100 acres of cropland ranged from an average of 4.7 for members with 800 or more acres of crop land to 94 per 100 acres of crop land for pool members with less than 50 acres of crop land.
6. Weights of top hogs increased from an average of 206 pounds in 1944 to 217 pounds in 1943 and 1944.
7. On most farms in this area hogs have been a decidedly small side line.
8. Lack of specialized hog equipment together with high feed prices relative to the level of support prices after the middle of 1943, loss of confidence because of partial failure to maintain support prices and highly satisfactory returns from cash grain and peas explains the rapid liquidation of breeding stock late in 1943 and early in 1944.
9. Wheat is the basic grain of this area and barley and oats must compete with it for land, consequently prices of feed

grains and wheat tend on the average to remain on about the same level in terms of feed units. Up until about 1936 wheat had, as a general rule with few exceptions, remained too high in price to be fed to hogs. Since that time wheat and feed grain prices in this area have compared favorably with prices of corn in the corn belt and hog production has become economically possible. For the future any permanent expansion in the hog enterprise on the farms of this cash-grain area will rest upon wheat continuing over a period of years at or near corn belt feed-grain prices. A willingness of more farmers to change to year around employment in caring for livestock is also essential.

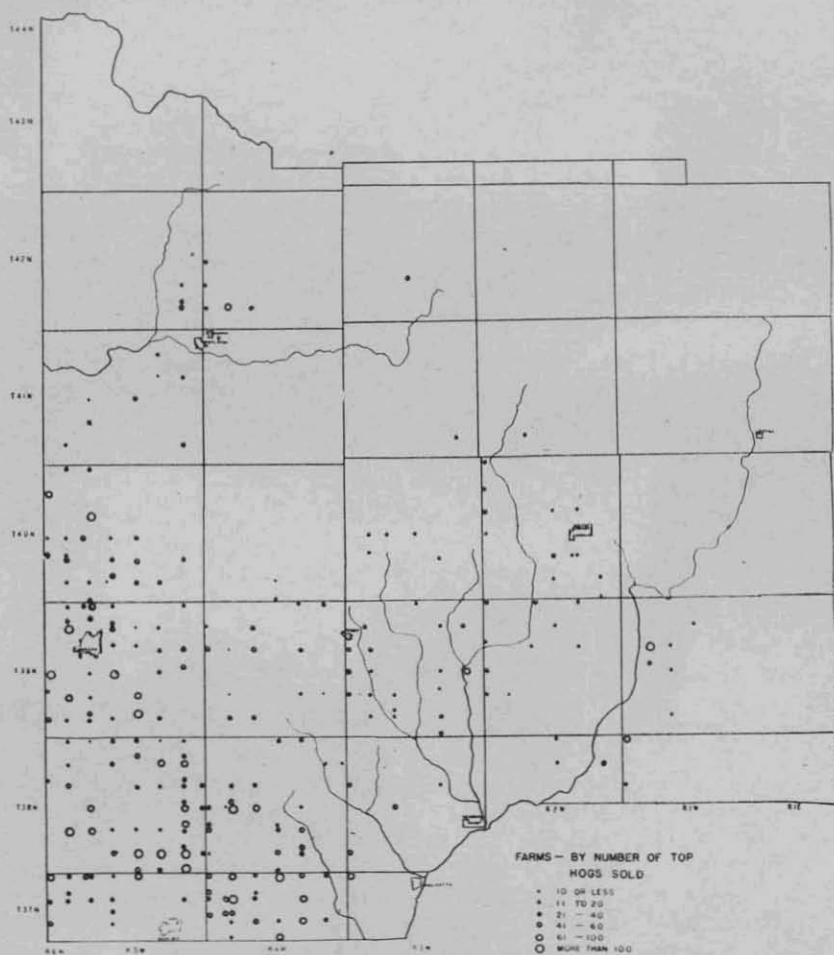


Figure 1.—Location of farms by number of tops sold in Latah County, July 19, 1942—October 18, 1943.

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FIGURE 1. ...
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Wartime Growth and Decline of Hog Production in the Northern Idaho Cash-Grain Area¹

PAUL A. EKE*

IN this study an attempt has been made to obtain a comprehensive view of the production and price situation with respect to hogs in the cash-grain area of northern Idaho. Within this area there were four hog pool auctions and two general community auctions which handled hogs during the years 1941 to 1944, inclusive, which this study covers. The great bulk of the hogs of this area were handled by these auctions and nearly all went to the same markets of Spokane, Yakima, Portland, Tacoma and Seattle. Prices would therefore vary but slightly for any of the pools for any particular week. The prices of feed grains, supplements, materials and labor were about the same throughout this area, as were the general competitive conditions within which the hog enterprise fits into the farm organization. For this reason a study of the records of the Community Hog Pool at Moscow is considered representative of what happened elsewhere in this northern Idaho area.

A better understanding of the future prospects for a hog enterprise on farms of this area is anticipated from giving farmers access to these records. As a means to this end, five steps were taken:

1. The growth and decline of hog numbers (as represented by pool marketings) in the Moscow area for the years 1941-1944 was traced.

2. The location of farms with hog enterprises in Latah County was mapped by combining the pool records with the records of the Agricultural Adjustment Administration.

3. The size of the hog enterprise was ascertained for each farm marketing through the pool.

4. Seasonal fluctuations in total numbers marketed were traced.

5. Seasonal fluctuations in market prices of top hogs and sows were traced by showing in chart form weekly prices of each.

As above stated nearly all of the information for these steps was found in the records of the Community Hog Pool which operates at Moscow. Since the war commenced there has been practically no other market outlet for hogs because of gasoline and tire shortages and restrictions. Records are therefore almost a complete compilation of all hogs produced for market² in Latah County and territory to the west in Washington which includes the trade centers of Uniontown, Colton, Pullman, and Palouse (*See Table 1*). This area has a radius of about 20 to 25 miles. Figure 1 shows the location

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¹This study ends with the year 1944 even though the war is still continuing. At this writing hog production is continuing its downward trend which became evident late in 1944. There are prospects for some increase in the fall pig crop in 1945. A study was made of the Moscow area as representing conditions in the northern Idaho cash-grain area.

²Hogs butchered for home use were excluded.

Table 1.—Total number of hogs marketed by the Community Hog Pool at Moscow and total cash received for all years operated.

Year	1936-1944	
	No. hogs received	Cash received
*1936	7,791	\$160,681.11
1937	14,419	287,650.93
1938	18,994	328,021.05
1939	18,121	246,843.58
1940	19,154	228,541.75
1941	15,312	317,566.35
1942	23,199	673,426.39
1943	23,617	740,729.70
1944	18,389	555,281.58
	158,997	\$3,538,742.44

*From April 18th to end of year.

of hog raisers in Latah County. It was not feasible for the Idaho Agricultural Experiment Station to locate farms on the Washington side of the area. On this map farms are classified by the number of top hogs marketed through the pool. Numbers marketed ranged from less than 10 to over 100 head for a 15-month period.

Production Situation

From a slight decline of hog production during 1939 and 1940 from the year 1938 (a new peak for this area) hog numbers commenced to rise in 1941 and reached an all-time peak for Idaho as well as for this area in 1942 and 1943. There was considerable decline for the year 1944 even though record numbers of hogs were marketed early in 1944. Figure 2 shows the marketing of tops and heavy sows by the Community Hog Pool at Moscow by months for the years 1941-1944, inclusive. Seasonal fluctuations in marketings are revealed on this figure also. For top hogs, October and November were the high points of marketings for spring pigs while May was the peak for fall pigs. For heavy sows sales were large in October and November and also in June and July. For the year 1943, August was unusually high in sales of heavy sows as was November. Sales of sows were also high in the spring of 1944. This reveals the severe liquidation of breeding stock at that time which was a time of current and prospective less favorable¹ feed prices and hog price relationship. Of some value to show how hog cycles develop one should note the extremely low marketings of heavy sows in 1941 following naturally a program of increasing hog numbers which occurred at that time. The Government was urging increased production in 1941 and feed prices were then relatively low as compared to government floor price guarantees on hogs.

In order to secure a picture of the size of hog enterprises on individual farms, individual marketing of hogs were tabulated for the 15-month period, July 19, 1942 until October 18, 1943. This period included most of the high crest of production and market-

¹For statistics see Idaho Agricultural Experiment Station Bulletin No. 260—*Thirty-five Years of Farm Prices to Idaho Farmers.*

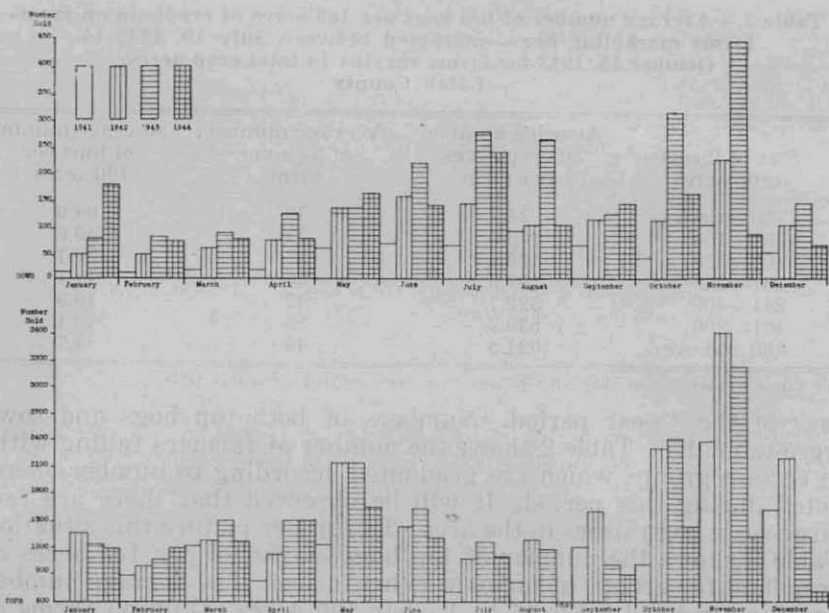


Figure 2.—Monthly marketing of sows and tops at Community Hog Pool at Moscow, 1941-1942-1943-1944.

Table 2. — Number of farmers marketing hogs within certain number groupings of top hogs and sows from July 19, 1942 to October 18, 1943.

Top hogs		Sows	
Number marketed	Number of farmers in each group	Number marketed	Number of farmers in each group
0	180	0	484
1 to 7	345	1	230
8 to 14	188	2	122
15 to 21	86	3	74
22 to 28	62	4	50
29 to 35	42	5	33
36 to 42	42	6	22
43 to 49	26	7	12
50 to 56	24	8	10
57 to 63	15	9	6
64 to 70	16	10 to 14	14
71 to 77	7	15 to 19	3
78 to 84	8	20 and over	12
85 to 91	6		
92 to 99	0		
100 to 125	11		
126 to 150	7		
151 and over	6		
Total	1072	Total	1072

Table 3.—Average number of top hogs per 100 acres of cropland on farms marketing hogs—marketed between July 19, 1942 to October 18, 1943 for farms varying in total crop acres.—Latah County

Size of farms crop acres	Average number of crop acres per farm	Average number of tops per farm	Average number of tops per 100 acres
50 or less	31.9	30	94.0
51—100	75.0	23	30.6
101—160	136.6	37	27.1
161—240	197.6	35	17.7
241—400	322.7	42	19.8
401—800	539.3	55	10.1
800 and over	1021.5	49	4.7

All farms marketing less than 10 top hogs have been omitted from this table.

ings of the 4-year period. Numbers of both top hogs and sows were tabulated. Table 2 shows the number of farmers falling within certain groups which are graduated according to numbers marketed during this period. It will be observed that there are few large-scale hog raisers in the area. To further picture this situation Table 3 shows the number of top hogs marketed per 100 acres of cropland for groups of farms varying in size. The average number per farm ranged from 94 to 4.7 per 100 acres. Only on farms of less than 50 acres did hogs consume anywhere near the total amount of grain produced on those farms. On most farms in this area hogs have been a decidedly small side line compared with cash grain and peas. About 50 top hogs per farm was the average number for the larger farms with 20 to 40 as an average for groups of smaller farms. Lack of specialized hog equipment and buildings and unwillingness to do much chore labor are important contributing factors to this situation. This together with high feed prices relative to the level of the governmentally supported price, loss of confidence from a partial failure in the fall of 1943 to maintain even this price, and highly satisfactory net returns from cash crops, probably explains the rather violent liquidation that occurred with breeding sows in the fall of 1943 and spring of 1944.

For the same 15-month period mentioned above (July 19, 1942-October 18, 1943) numbers, weights and total returns of the various

Table 4.—Number, weights, receipts and percentage of total weights of all classes marketed from July 19, 1942 to October 18, 1943

Grade	Number	Weight	Percentage of total weight	Receipts
Tops	22,433	4,670,314	73	\$645,742.62
Overweights	1,927	499,109	8	65,479.05
Heavies	1,089	233,030	4	30,068.20
Sows	2,345	943,033	14	109,239.14
Stags	140	64,820	1	5,844.30
Totals	27,934	6,410,306	100	\$856,373.31

purchased 10.1 bushels of wheat while in the fall of 1944 this had risen to 10.6 bushels. During normal prewar times this price relationship would probably have been an inducement to continue raising hogs, but with cash prices of wheat and peas at extremely profitable levels, a greater margin of profit was necessary to give comparable rewards. Moreover after the failure of price supports to hold for two weeks in November of 1943 when a large percentage of the spring pigs went to market, farmers made estimates at these support levels rather than at ceiling levels. The 1943 fall pig crop had a support price of \$13.75 for tops—Spokane basis, while the spring and fall pig crops of 1944 were assured only \$12.50 for tops. Early in 1945 this support price was raised to \$13.00, while late in 1944 ceiling prices went to \$15.50—Spokane basis. These increases were, however, too late to influence to any extent increases in the spring pig crop of 1945. Even at this latter support level feeding wheat will not be sufficiently profitable unless prices continue near ceiling levels for several months. Even at ceiling prices of about \$15.00 for top hogs, 100 pounds of live hog will buy only about 11 bushels of wheat. This is decidedly much less profitable than in 1941 and 1942 and early 1943, when 100 pounds of live hog would buy from 12 to 14.6 bushels of wheat. Moreover, during those years, Government wheat could be bought at somewhat lower prices than quoted to the farmers on the market. Barley at that time could also be bought at some savings over prices paid to farmers for wheat.

TABLE 2
WHEAT AND HOG PRICES IN IDAHO, 1941-1945

Year	Wheat Price (per bushel)	Hog Price (per 100 lbs)
1941	12.50	14.60
1942	13.00	14.00
1943	13.75	12.50
1944	12.50	11.00
1945	13.00	11.00