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NO. 383

# The Biggest Little Pig Market in the World

#### Kenneth E. Egertson and Philip M. Raup

The feeder pig market at Little Falls, Minnesota is advertised as the "Largest Little Pig Market in the World." Records show a total of 118,137 feeder pigs marketed in 1954; 189,535 in 1955; and 139,018 in 1956.

The total in 1955 consisted of 11,500 lots, averaging 16 feeder pigs each, and exceeded the total marketed for all Minnesota auctions that year by approximately 23,000 feeder pigs.

The origin of the feeder pig market at Little Falls is difficult to trace, since no records of any sort were kept prior to 1953. Apparently, the present market is the outgrowth of one originally started by local lumber interests.

In later years, farmers began to use its facilities for marketing agricultural commodities, and subsequently feeder pigs. The early market operated on an "open" basis, with no controls or restrictions of any kind imposed on it.

With the rapid expansion in receipts came a disease problem that threatened to destroy the market. It was temporarily closed in September 1952, due to a serious outbreak of vesicular exanthema and hog cholera.

The disease problem has since been solved. No major disease outbreaks have occurred since the Little Falls City Council and individual parties interested in the well-being of the market took positive steps to control it.

A disease ordinance of June 26, 1953, has effectively controlled the sale of diseased pigs by requiring sellers to verify that they have owned the pigs 21 days or more prior to the date of the sale. This is considered to be a safe quarantine period against most hog diseases.

If the seller has not owned them 21 days, he is required to indicate where and from whom they were purchased. This, in effect, permits legal recourse in case diseased pigs are sold.



Fig. 1. Number of feeder pigs marketed through Little Falls, by counties, 1954.

The market is held on a street in Little Falls. It is a unique market in that it is one of the few direct buyerto-seller markets in the state. There are no auctioneers, commission men, pens, or sales rings involved. Feeder pigs are sold from the trucks in which they are hauled. Bargaining for an acceptable price is carried out directly between buyer and seller. There is no selling or yardage charge levied.

The market is held only on Saturdays. Hours of operation are from approximately 3:00 A.M. to 9:00 A.M. in the warm months and 4:00 A.M. to 9:00 A.M. in the colder months. During the peak season the total number of pigs sold on any one Saturday often reaches 5,000. The average weekly marketings in 1954 was 2,270 pigs.

Feeder pigs sold through the market are 6-8 weeks old. The average weight is around 40 pounds. Eighty percent are sold before being castrated, and around 95 percent of them are sold without vaccination.

Sellers from 41 Minnesota counties marketed pigs at the Little Falls market in 1954 (figure 1). However, the bulk of the receipts came from within 75 miles of Little Falls.

The nine major supply counties (those supplying 1,000 pigs or more) were symmetrically centered around the market, and establish a well defined "core" supply area. These nine counties in the core area supplied 94 percent of the pigs marketed, whereas the remaining 32 counties furnished only 6 percent of total receipts.

Morrison County farmers alone furnished 53,016 feeder pigs, or 44 percent, of the 118,137 pigs marketed in 1954.

Feeder pig production is a well established livestock enterprise in this area. Sample data collected by the Department of Agricultural Economics, University of Minnesota, show that 68 percent of all hogs marketed in 1956 from neighboring Benton, Crow Wing, and Todd Counties were sold as feeders.

In general, it can be said that feeder pig production takes place in this area because (1) there is not enough corn raised relative to grain consuming ani-



Fig. 2. Proportion of monthly marketings of feeder pigs consigned by farmers and dealers, 1954. (Continued on pages 2 and 3)

## What Can You Pay for Feeder Pigs?

#### S. A. Engene and L. M. Day

Many farmers have become interested in feeder pigs because of strong hog prices. That raises the question, what can they pay for feeder pigs?

There is no single answer to this question; each farmer must figure it for his circumstances. The accompanying table gives a simple form for the calculations.

The price a farmer can afford to pay for a feeder pig depends on several factors. The three most important are: (1) the value of the finished hog, (2) the cost of raising the feeder pig up to market weight, and (3) the death loss.

The first figure the farmer needs is the probable value or income from the finished hog. To get this, he must estimate the probable time he will sell the hog, and the probable weight and price. A discussion of farmers' forecasts of hog prices is on page 3 of this issue.

To illustrate, Mr. Jones wants to buy some 35 pound feeder pigs in late May. He plans to have them ready for market at 225 pounds in October. He estimates the price in October to be \$16.00. His expected income is \$36.00 (225 lbs. x \$16.00); he enters this on the first line of the table. This value is the net value at the farm.

Mr. Brown also plans to buy some pigs of the same weight. He, however, plans to sell them at 200 pounds. He sizes up the market differently, and expects to get \$17.00. His expected income from one hog is \$34.00. The second step is to estimate the probable costs. Of these, feed is by far the biggest.

As an average, it will take about 350 pounds of corn and 50 pounds of protein supplement to put on 100 pounds of gain, or 665 pounds (12 bu.) of corn and 100 pounds of protein supplement

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<sup>1</sup>Calculated from Feed Consumption and Marketing Weight of Hogs, L. J. Atkinson and J. W. Klein, USDA Technical Bulletin 894. July, 1945.

to bring a feeder pig from 35 pounds to a market weight of 225.

This feed requirement is based on experimental results.1 It also checks closely with the average quantities of feeds used by the members of the Southeast and Southwest Minnesota Farm Management Services.

The figures above show what the average farmer will do. Individual farmers will do better or worse. A few will need only 10½ bushels of corn and 85 pounds of protein supplement to bring a pig from 35 to 225 pounds. Others will use more than 14 bushels of corn and 120 pounds of protein.

The feed needed will vary from year to year for any farmer. Also, it takes more feed to put a pound of gain on a 225 pound hog than on a 200 pound hog.

Each farmer must then determine how much feed he is likely to need. Good records of his own hog operations is the best base.

Mr. Jones is an average hog man. According to his records it takes 12 bushels of corn and 100 pounds of supplement to bring a feeder pig from 35 pounds to 225 pounds. Corn on his farm is worth \$1.15. The total cost for 12 bushels is \$13.80. At \$5.00 a hundredweight, his cost of supplement is \$5.00.

The most efficient producers could cut \$3.00 or more from this. The least efficient, of course, would have higher costs.

Mr. Brown is a superior hog man, so he will expect to use less feed than Mr. Jones. Also, he will sell his hogs at 200 pounds instead of 225. He estimates  $9\frac{1}{2}$ bushels of corn and 65 pounds of supplement per pig. Using the same prices, the cost of  $9\frac{1}{2}$  bushels of corn is \$10.92 and of 65 pounds of supplement is \$3.25.

Although feed is the largest item of cost, other costs must be considered. These are labor, shelter, equipment, interest, and veterinary. As a rule-ofthumb for average conditions, these costs are about one-fifth of the feed

What Can I Pay for a Feeder Pig?

	5			Exar	nples
Item of cost		Jones	Brown		
Income	(lbs. x \$_	)	\$	\$36.00	\$34.00
Cost:					
Corn	(bu. x \$_	)	\$	\$13.80	\$10.92
Supplement	(lbs. x \$_	)	\$	\$ 5.00	\$ 3.25
Other	•		\$	\$ 3.76	\$ 2.83
Total			\$	\$22.56	\$17.00
Net			\$	\$13.44	\$17.00
Survival rate				% 95%	95%
Possible price (\$_	Net >	Survival)	\$	\$12.77	\$16.15

**MINNESOTA** farm business

#### NOTES

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costs. This is \$3.76 for Jones and \$2.83 for Brown.

The total production cost is \$22.56 for Jones and \$17.00 for Brown. This is the cost of bringing the feeder pig from purchase weight up to sale weight.

The difference between income and total cost is our first estimate of the price the farmer can pay for the feeder pig. For Jones this is \$13.44. This must be adjusted for death loss.

To calculate the price the farmer can pay for a pig, multiply the probable rate of survival by the margins over cost per pig. For example, Jones expects a death loss of 5 percent, or a survival rate of 95 percent. Multiply this by the margin per pig (.95 x \$13.44); this gives a price of \$12.77 per pig. Brown expects the same death loss; he can pay \$16.15 for a pig.

If he pays this price he will expect to get market price for his feed, average wages for his labor, and cover his costs for shelter, equipment, and other items.

Finally, the farmer must consider the risks involved. These calculations have been based upon what he expects to happen. He cannot foresee the future, so he may make more than he expects, but also he may make less.

### Pia Market—

#### (Continued from page 1)

mal units to provide corn to fatten all the hogs, and (2) feeder pig production works in profitably as a supplementary enterprise with dairying.

In addition to the producers who sell feeder pigs through the market, about 50 licensed feeder pig dealers are actively engaged in selling feeder pigs at Little Falls. Dealers tend to be more active in the market during the winter months when receipts are low. Farmers, on the other hand, furnish more than 90 percent of the receipts during the high supply months of May, June, and July (figure 2).

A seasonal pattern marks the receipts of feeder pigs at the Little Falls market (figure 3).

To a large extent, feeder pigs are marketed 6-8 weeks after farrowing.

#### MAY 27, 1957

## Looking Ahead at Hog Prices

#### R. B. Zoller and S. A. Engene

A hog producer must look ahead. He must make his production plans many months before the hogs go to market. He adjusts production to the price he foresees at market time.

How do the forecasts of the various farmers differ? How certain are they of their forecasts? To get some information about these questions, members of the Southeast and Southwest Minnesota Farm Management Services were asked to forecast hog prices for each month from July through December, 1957. Their estimate is the average price of U. S. No. 1, 2, and 3 barrows and gilts, 200-220 pounds, on the South St. Paul Market.

Most of these farmers expected prices to drop throughout this period.<sup>1</sup> Most price forecasters also expect a downward trend.

Let us examine in greater detail their forecast for October. Their estimates were made in March, so they were looking ahead seven months.

The prices these farmers expected in October are summarized in table 1. The most common estimate was \$16.00 almost one-third of the farmers gave this price.

The next most common prices were

<sup>1</sup>Outlook Corner—Hog Prices, Minnesota Farm Business Notes, No. 381. April, 1957.

Marketings of feeder pigs at Little Falls are consequently high during the months of April, May, and June. June receipts are typically 42 percent heavier than the yearly average. Receipts decline during July and reach a low for the summer months in August.

This drop in receipts can be attributed to the fact that the largest share of the spring farrowings has been marketed and fall farrowings are not yet ready for market. Receipts peak again in October, signifying heavy farrowings in August, and decline in November and December before reaching the seasonal low in January.

Recorded monthly average prices received for feeder pigs over the three years 1954-56 do not show any consistent trend. No one month consistently stands out as the "best" month for marketing (table 1).

The best prices received in recent years for feeder pigs were in 1954 when the average yearly price was \$14.42 per Table 1. Estimated Price of Hogs for October, 1957\*, Members of Southeast and Southwest Minnesota Farm Management Services

Estimated price	Number of farmers
\$ 9.51-10.50	
10.51-11.50	
11.51-12.50	
12.51-13.50	
13.51-14.50	
14.51-15.50	
15.51-16.50	
16.51-17.50	
17.51-18.50	
18.51-19.50	
19.51-20.50	
20.51-21.50	
21.51-22.50	0
22.51-23.50	
All farmers	

\* Estimate made in March, 1957.

\$15.00 and \$17.00. Almost two-thirds of the farmers expected the price to be at or between these two prices.

Some farmers, however, disagreed with these estimates. One said the most likely price for October was \$10.00. At the other extreme, one farmer expected \$23.00. Both of these men marketed about 150 hogs last year, so they are accustomed to thinking about hog prices.

To check their feeling of certainty about their estimates, all farmers were asked to estimate how high the October price might be. They were asked to



Range in deviation	Number of farmers	
\$ 025	17	
.2675	24	
.76-1.25	82	
1.26-1.75	24	
1.76-2.25	51	
2.26 or more	23	
All farmers		

set a price such that there was less than one chance in ten that it would go above that figure.

The ranges in estimates are summarized in table 2. Seventeen of these farmers said the price was not likely to be more than \$.25 above their best estimate. More than one-half (121 out of 221) said the price was not likely to be more than \$1.25 above their estimates. In other words, these men were fairly confident of their forecasts.

On the other hand, 23 said the actual price might be more than \$2.25 above their estimates. Four of them were so uncertain of conditions that they said prices might be at least \$5.00 higher than the most probable price.

The farmers were also asked to set the lowest probable price for October. Their estimates of the probable deviations downward were slightly bigger than those shown in table 2.

The forecasts made by these farmers may help others in their planning. The preceding article demonstrates the necessity of such forecasts when determining the value of feeder pigs.



Fig. 3. Average seasonal variation in marketings of feeder pigs at Little Falls, 1954-1956.

head. Prices ranged from a high of \$19.13 per head in February to a low of \$10.75 in July.

In 1955, the average yearly price received for feeders was \$9.52 per head. This was \$4.90 lower than in 1954. Highest average price of \$13.75 per head was received in January. Influenced by the low price received for slaughter hogs, the price for feeders dropped in December 1955 to a low of \$5.45 per head.

The trend in prices for 1956 was generally upward. Average monthly prices increased from a low of \$6.75 per head in January to a high of \$10.90 in December. Average price received for the year was \$8.58 per head.

#### Table 1. Average Monthly Prices Received for Feeder Pigs at Little Falls, 1954-1956 \*

Month	1954	1955	1956	
January	\$16.40	\$13.75	\$ 6.75	
February	19.13	12.25	7.50	
March	18.50	11.75	8.30	
April	17.43	11.35	8.56	
May	14.15	9.69	8.88	
June	11.90	8.75	8.20	
July	10.75	8.45	7.75	
August	11.63	7.88	8.44	
September	12.43	9.06	9.19	
October	13.44	8.30	9.00	
November	13.39	7.50	9.44	
December	13.90	5.45	10.90	

\* Prices quoted on per head basis.

# March and April 1957

Prepared by R. A. Andrews

Average Farm Prices for Minnesota March 1957, April 1955, 1956, 1957

	Mar. 1957	Apr. 1957	Apr. 1956	Apr.
····				
Wheat	\$ 2.08	\$ 2.07	\$ 2.14	\$ 2.22
Corn	1.06	1.07	1.29	1.23
Oats	.64	.64	.56	.66
Barley	.92	.92	.93	1.05
Rye	1.13	1.10	.99	1.01
Flax	2.95	2.84	3.51	2.92
Potatoes	.51	.45	2.10	2.00
Hay	16.10	15.90	15.40	16.20
Soybeans†	2.18	2.16	2.57	2.31
Hogs	16.80	17.50	14.30	16.10
Cattle	15.80	16.60	14.80	17.70
Calves	18.50	19.10	17.30	17.40
Sheep-lambs	19.99	19.79	17.43	18.84
Chickens	.106	.107	.172	.171
Eggs	.240	.250	.320	.300
Butterfat	.630	.630	.620	.620
Milk	3.15	3.10	3.05	2.95
Wool†	.49	.47	.40	.42

\* Average prices as reported by the USDA. † Not included in Minnesota farm price indexes.

The April 1957 Minnesota hog-corn ratio was the most favorable it has been since May 1954. This was primarily due to low corn prices. Corn prices reached the lowest April level since 1946.

Potato prices, which continuously declined throughout the market season, reached the lowest level in April for any month since July 1941.

#### **Comparison of March and April Prices**

Commodity class	Average April prices as a percentage of average March prices		
Crops			
Livestock			
Livestock products			
All commodities			

## Minnesota Farm Prices The Outlook Corner — Corn and Hogs

**Table 1. Acres of Corn Planted** 

Period	U.S.	WNC*	NE†	South	West
	millions of acres				
1920-29	100	40	26	32	2
1930-39	102	41	23	35	3
1940-49	89	36	23	28	2
1950-54	82	35	24	22	ĩ
1955	81	35	25	20	i
1956	79	34	25	19	1
1957	74	31	24	18	1

\* West North Central States.

† East North Central and North Atlantic States.

Corn acreage is decreasing in the United States. It increased steadily to 100 million acres in 1909, stayed near there for two decades, and then rose to 113 million in 1934. Since then it has declined to an estimated 74 million acres in 1957.

Yields have gone up steadily, more than offsetting the drop in acreage. Production averaged 2.6 billion bushels for 1937 through 1941; it averaged 3.2 billion bushels for 1952 through 1956.

There also has been a shift in the location of the corn acreage, as shown in table 1. The total acreage has decreased in the seven west north central (Minnesota, Iowa, Missouri, states North Dakota, South Dakota, Nebraska, Kansas). There has been no change in the northern states east of the Mississippi. There has been a very sharp drop in the southern and western states.

Minnesota farmers have increased their corn acreage during this period. They have increased from 4.2 million acres in the 20's to 5.5 million acres from 1950 through 1956.

Hog production increased sharply during World War II, as shown by table 2. It has stayed high most of the time since then. This corresponds with the trend in corn production.

Most of the increase in hog production has been in the north central states, and particularly in the corn belt states. There also has been an increase in hogs in the southern states, particularly in the southeastern states.

During this period, Minnesota farmers increased slightly the number of pigs saved-from 5.6 million in 1925-1929, to 6.2 million in the last five years. All of this increase was in fall pigs. This increase is small when compared to the increased corn acreage in the state.

The gradual increase in corn production in the U.S. is likely to continue. Yields will go up more than acreages are likely to go down. Production in Minnesota probably will increase more rapidly than in the U.S., since our topography is suitable for corn and we have weaker competition from other crops than is true in the states farther east.

#### **Table 2.** Number of Pigs Saved

Period	U.S.	WNC	NE	South	West
<u></u>		milli	ons of	pigs	
1925-29	76	39	20	14	3
1930-34		38	21	14	3
1935-39	69	27	21	18	3
1940-44	96	40	30	22	4
1945-49	86	37	27	19	3
1950-54	92	42	30	18	2
1955	96	45	31	18	2
1956	90	39	31	18	2

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#### Indexes for Minnesota Agriculture \*

	Average April 1935-39	April 1957	April 1956	April 1955
U. S. farm price index	100	220.3	214.8	225.8
Minnesota farm price index	100	199.0	199.2	209.8
Minnesota crop price index	100	160.9	221.6	229.6
Minnesota livestock price index	100	229.0	197.4	226.7
Minnesota livestock products price index	100	184.0	193.2	189.2
Purchasing power of farm products				
United States	100	93.6	95.2	100.0
Minnesota	100	84.6	88.1	92.9
U. S. hog-corn ratio	12.5	14.4	10.8	12.2
Minnesota hog-corn ratio	15.4	16.4	11.1	13.1
Minnesota beef-corn ratio	12.6	15.5	11.5	14.4
Minnesota egg-grain ratio	13.7	9.8	11.9	10.8
Minnesota butterfat-farm-grain ratio	31.8	32.2	32.0	32.2

\* Minnesota index weights are the average of sales of the five corresponding months of 1935-1939. U.S. index weights are the average sales for 60 months of 1935-1939.

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