

The

# LIVESTOCK and MEAT SITUATION

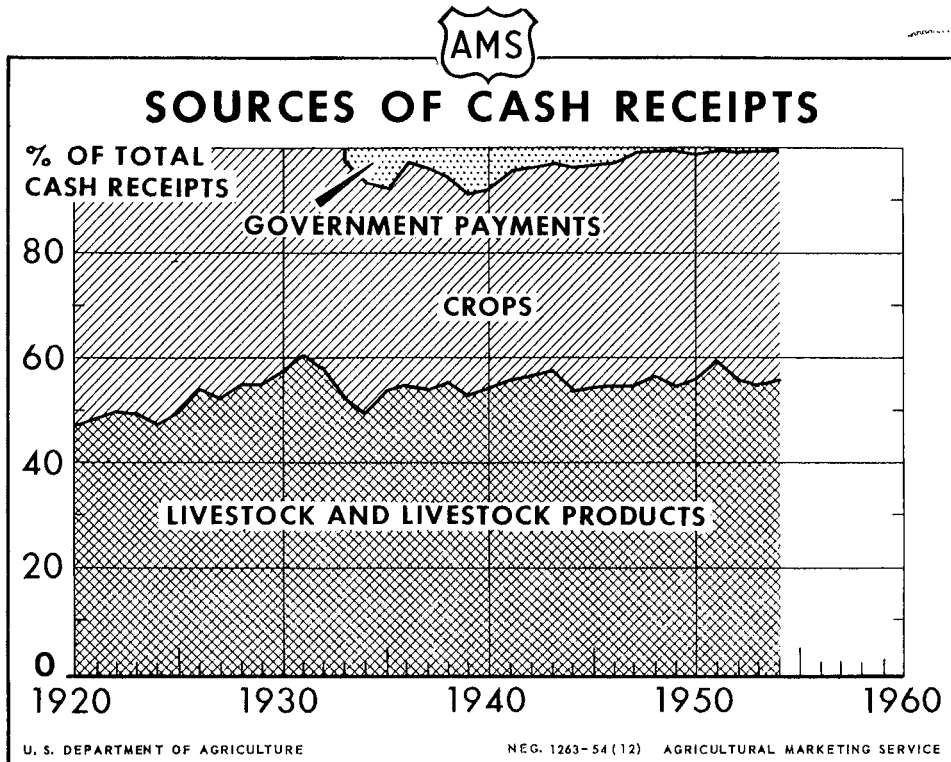
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JAN. 7, A. M.  
1955

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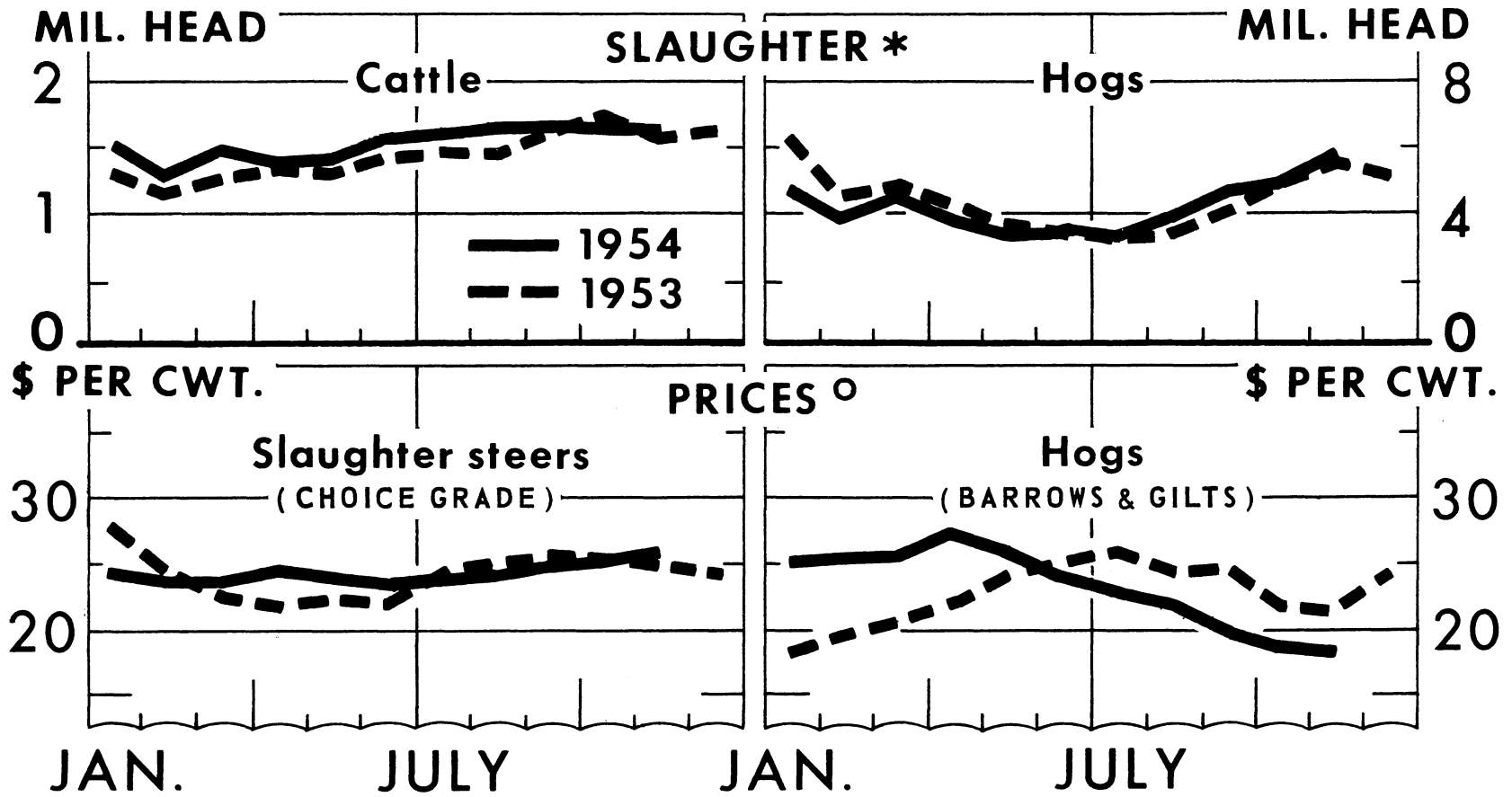
In the last 35 years an increasing part of all cash receipts to farmers has come from livestock. The export market for crops is relatively less important now than previously, while livestock products have gained a growing prominence in the diets of American consumers.

Dairy products accounted for the uptrend in proportion of receipts from livestock during the 1920's. Since then,

the relative position of dairying has declined and that of meat animals has increased. The percentage of receipts from hogs and poultry has edged upwards the last 2 decades. And throughout the 35 years, cattle and calves have provided a steadily increasing proportion of all cash receipts, exceeding dairy products since 1943. (See chart, page 14).

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

# SLAUGHTER AND PRICES OF CATTLE AND HOGS



\* FEDERALLY INSPECTED

° AT CHICAGO

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THE LIVESTOCK AND MEAT SITUATION  
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Approved by the Outlook and Situation Board, January 3, 1955

## SUMMARY

Cattle slaughter failed to increase during the fall of 1954 as in most years, and in September the rate dropped below a year earlier for the first time since March, 1952. The let-up this fall probably ushered in a period of comparative stability in cattle slaughter. Similarly, prices of cattle, while fluctuating grade by grade, are not likely to show any pronounced general trend in the next year or so.

Slaughter of cattle and calves in 1954 probably totaled about 39.4 million head, 7 percent more than 1953 slaughter. Cattle slaughter was up 6 percent and calf slaughter, 9 percent. Based on these slaughter data, a small reduction in the number of cattle on farms January 1, 1955 seems indicated. A decrease was most likely in steers and heifers. Although cow and heifer slaughter was up substantially from the low levels of a year earlier, the cow herd probably was not reduced. (Estimates of the January inventory will be released February 14.)

Cattle slaughter this winter is expected to be very nearly as large as last winter. It probably will include about as many cows, fewer grass steers, and as many or more fed steers as last winter. However, for several weeks the supply of highly finished fed steers will continue seasonally short, and the price spread between top and lower grades will likely remain wide. The spread is expected to narrow as prices for fed cattle decline seasonally and prices for grass cattle increase during late winter and early spring.

Although the beef supply may be no larger or a bit smaller this winter than last, the output of pork will be greater. A considerable number of hogs remained on hand January 1 from the 1954 spring pig crop, which was up 12 percent from 1953. The fall pig crop increased 16 percent.

Moreover, a further increase of 5 percent in 1955 spring farrowings was planned by farmers on December 1, indicating more hogs for slaughter throughout most or all of 1955. The increase over a year earlier will be greatest in the spring and least in the fall. Prices of hogs will likely show a seasonal recovery from the early-December low. However, through the spring they will be considerably below the unusually high prices of a year ago. Hog prices in the fall may not be down greatly from the comparable prices of the past fall.

Prices of lambs have been fairly steady since August. Their seasonal increase this winter may not equal that of last winter, when a sharp rise was followed by an even sharper spring decline.

Beef output for 1955 will likely decrease slightly from 1954, and lamb output may be down, but with pork output up the red meat total may be a little larger than last year.

#### REVIEW AND OUTLOOK

##### Cattle Slaughter Less Than Year Ago; Prices Widen Between Grades

The rate of cattle slaughter failed to make its usual seasonal increase this past fall. Instead, it was relatively stable from mid-July to late December. Beginning in mid-September the rate was below the very high rate of a year before. It stayed below the rest of the year.

The stability in fall slaughter was partly due to dry weather which forced many cattle into early sale during the summer. It also reflected a larger diversion of feeder cattle to feedlots instead of slaughter. But it is significant too in signaling a probable halt to the 3-year uptrend in cattle slaughter. Until September, slaughter in each month since March 1952--a period of  $2\frac{1}{2}$  years--had exceeded the previous year. Though its continuous expansion has stopped, cattle slaughter will stay large.

Prices of cattle were generally as high or higher this fall than last. Prices of feeder cattle and the higher grades of slaughter cattle showed considerable strength. In late December Choice and Prime slaughter steers were \$1.50 to \$3.50 per 100 pounds higher than 3 months earlier, and as much higher than in December 1953. Prices of slaughter cows and lower grades of slaughter steers failed to share in the fall advance. Cow prices at year's end were a little below the previous year.

##### 1954 Slaughter Probably Exceeded Production

Slaughter of cattle and calves in 1954 probably totaled about 39.4 million head. Although no data on production are yet available, this number slaughtered probably exceeded the number of calves born less death losses. Accordingly, a small reduction in the January 1, 1955 inventory probably occurred. (Estimates of the inventory will be available February 14).

##### Fewer Steers, More She-Stock Slaughtered in 1954

The 39.4 million slaughter in 1954 was up 7 percent from 1953. The increase for cattle was 6 percent, and for calves, 9 percent. According to data for slaughter under Federal inspection, 2 percent fewer steers were slaughtered last year than in 1953 but cow slaughter was up 13 percent and heifer slaughter was 20 percent larger (table 1). At the beginning of 1954, steer inventories were 11 percent below 1953. Consequently,

the mere 2 percent cut in steer slaughter reflects a high rate of slaughtering young steers (classed as "calves" in the January inventory). This makes it likely that a reduction in steer inventories will be reported for January 1, 1955. The increase in cow slaughter probably was not large enough to cause a net reduction in cow inventories.

### 1955 Slaughter to Include

#### Many Cows

Prospects for cattle slaughter in 1955 are governed by these factors:

1. The supply of all steers for slaughter will be limited by the reduced inventories. The year's total steer slaughter may be less than 1954.

A faster rate of slaughtering than of producing steers, causing diminished steer inventories and eventually reduced slaughter, is typical of the present phase of the cattle cycle. It is a major factor retarding further increases in total cattle slaughter and beef supply.

2. Fully as many, and probably more, fed steers will be available for slaughter in 1955 than in 1954. Therefore, the supply of lower grade, non-fed, steers will in all probability be smaller.
3. Cow slaughter will probably equal 1954 and might be larger. Cow herds will be culled closely. The rate of culling--and of cow slaughter--will depend a great deal on circumstances during the year, particularly weather and range conditions and price trends. Cattle numbers have reached such high levels, and prices low levels, where producers are sensitive to any pressures of short feed supply, low incomes, or limited finances.
4. Calf slaughter will again be a fairly large proportion of the cattle-and-calf total and it could increase a little.

From these considerations, the most likely prospect is for cattle slaughter in 1955 to be no greater, and possibly a bit smaller, than in 1954; and for calf slaughter to be as large or a little larger. With favorable weather and prices, combined cattle and calf slaughter would definitely be less than in 1954. Under unfavorable conditions it would be larger.

### No Marked Price Trends Likely

The recent widening price spread between top and lower grades of cattle is primarily a seasonal trend. This is the time of year when many cattle are shipped to slaughter in partly finished condition after cleaning up corn fields or receiving short feeding in the feedlot. The abundant supply holds down prices for middle and lower grades. The spread in prices will likely continue rather wide for a few weeks, when marketings of partly finished steers will continue sizable. Marketings of cows also will stay large and they may about equal those of last winter, when cow slaughter was unusually big for the season.

Table 1.- Number of cattle slaughtered under Federal inspection, by class, 1954 compared with 1953

Month	Steers		Heifers		Cows		Calves	
	1954	1953	1954	1953	1954	1953	1954	1953
	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head
January	774	709	250	179	487	390	546	453
February	673	692	201	165	400	287	518	422
March	825	802	212	153	440	308	660	535
April	806	869	173	152	402	304	598	541
May	815	854	155	122	429	319	561	504
June	881	890	166	135	474	371	622	586
July	837	849	198	165	537	431	640	616
August	773	774	234	178	585	492	649	602
September	761	781	244	189	588	618	706	687
October	732	752	223	219	621	755	738	776
November	684	693	202	183	681	690	694	658
December		779		208		625		634
Year 1/	2/9,300	9,445	2/2,450	2,049	2/6,300	5,591	2/7,600	7,013

1/ Computed from unrounded numbers.

2/ Includes estimate for December.

Compiled from Market News, Livestock Division.

Sometime during the winter, prices of fed cattle are likely to begin a seasonal decline. Prices of grass cattle will probably strengthen as the grazing season approaches. The price spread between grades will be narrowed.

Chances still appear good for high grade fed cattle to average as high in price this year as last. Although the supply of fed beef will be fully as large, the total beef supply may not be quite equal to last year. Demand for beef has displayed consistent strength and will continue strong. It is possible that seasonal declines in prices of fed cattle may be greatest near the end of the spring-summer marketing season. A high proportion of cattle purchased last fall for feeding, as reported from Corn Belt markets, was of light weight. About 15 percent fewer steers weighing more than 900 pounds were shipped from markets last fall than the previous fall. The number of steers of less than 900 pounds was nearly the same as last year, while calf shipments were down 27 percent (table 2). These lighter weights could result in delayed marketings and delayed declines in prices. However, this prospect is by no means certain. Feeders have a wide range of choice in length of feeding and the feeding period could be shortened and the time of marketing advanced. Also, the rate of new placements on feed will affect the size of late-season marketings. Placements this winter might be less than last winter and spring, when they were much above average.

Table 2.- Number of stocker and feeder cattle shipped from 8 mid-west markets, by weight groups, fall of 1954 compared with 1953 1/

Class and weight	Aug.-Dec. total		Percentage change
	1954	1953	
	<u>Number</u>	<u>Number</u>	<u>Percent</u>
Steers			
1,001 lb. and up	13,954	19,194	-27.3
901 lb.-1,000 lb.	36,325	40,303	- 9.9
801 lb.-900 lb.	86,676	86,266	+ .5
701 lb.-800 lb.	143,669	149,518	- 3.9
501 lb.-700 lb.	319,443	318,518	+ .3
Total	600,067	613,345	- 2.2
	<u>Pounds</u>	<u>Pounds</u>	
Average weight of steers <u>2/</u>	708	715	- 1.0
	<u>Number</u>	<u>Number</u>	
Calves	427,675	337,289	+26.8
Cows, heifers and bulls	196,166	164,657	+19.1

1/ Markets are Chicago, Kansas City, Omaha, S. St. Paul, Sioux City, Denver, Ft. Worth and Oklahoma City. 2/ Simple average of monthly averages.

#### Hog Slaughter at Peak in December; Prices Down

Slaughter of hogs increased seasonally this fall to a peak in early December, the traditional time of maximum slaughter. This year's peak was 2 weeks later than the November high in 1953.

Slaughter was later in 1954 even though farrowings were earlier. About 27 percent of all spring farrowings came before March 1 in 1954, compared with 23 percent in 1953. The late slaughter must be attributed to (1) improved confidence in stability of hog prices, which was evident in the spring of 1954 and was reinforced by the unchanged hog price level from mid-September to early November; and (2) delayed harvest of corn in the Corn Belt and increased hogging off of corn fields.

This year's return to late-fall marketings demonstrates once again the latitude available to producers in raising and feeding hogs. By speeding or slowing feeding rates, and by selling at lighter or heavier weights, the dates at which hogs are brought to market weights can be advanced or delayed several weeks.

Hogs were fed to heavier weights this fall than last. Barrows and gilts at 8 midwest markets in October to December averaged 6 pounds heavier than in the same months of 1953.

Producers who held hogs for December sale at heavy weight generally lost money from doing so. Prices of medium weight hogs dropped \$1.00 per 100 pounds in 4 weeks while prices of heavy barrows declined \$2.00 or more. The spread between 180-200 and 240-270 pound barrows and gilts at Chicago was \$1.55 in December. This exceeded the previous postwar December high of \$1.24 in December 1948.

Hog Slaughter to Exceed Last  
Winter; 1954 Fall Pig Crop  
Up 16 Percent

Hog slaughter will decrease seasonally during the first two months of 1955 but it will likely continue above a year earlier. As producers have been holding hogs longer and to heavier weights, a sizable number nearly ready for market probably were carried over on January 1. Of more importance to winter-spring slaughter is the increased supply of hogs to be available from the 16 percent larger 1954 fall pig crop. A considerable number of hogs from that crop will be marketed in February and later.

The 16 percent increase in fall pigs was made up of a 14 percent rise in number of sows farrowing and a 1 percent gain to a new record size of litters (table 3).

Farrowings of fall pigs were increased 19 percent in June-August and 8 percent in September-November (table 4). This continued a trend toward earlier farrowing that began several years ago. (See article, page 17.)

5 Percent Rise in Spring Farrowings  
Planned by Producers

Farmers' intentions on December 1 were to have 5 percent more sows farrow spring pigs this year than last. The increase is general, although several Southern and Western States, particularly dry States such as the Carolinas, Georgia and Colorado, are either reducing spring farrowings or failing to increase. The modest rise in total spring farrowings results from the satisfactory prices received for hogs during most of 1954; and from the above average corn crop in the Central and Northern Corn Belt. As another factor, total production of all feed grains in the United States was up 3 percent from 1953, even though the corn crop of 2,965 million bushels was down 7 percent. Crops of oats, barley, and grain sorghums were large.

The status of price support programs on corn can have much to do with the number of hogs produced. When there is no support or government storage, hog production each year fluctuates according to the size of the corn crop. When supports on corn are available at a price high enough to induce storage from big crops, and all producers are eligible, hog production is considerably insulated from the size of the crop in a given year. If allotments must be complied with before a loan can be received, the sensitivity of hog production to the size of each year's corn crop is intermediate, being influenced by the degree of compliance.



Table 3 .- Number of sows farrowing, pigs saved and pigs saved per litter, spring and fall pig crops, United States, by regions, 1948 to date

## SPRING PIG CROP

Year	North Atlantic	North Central		South Atlantic	South Central	Western	United States
	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands
Sows farrowing							
1948	153	2,111	3,718	608	987	256	7,833
1949	165	2,394	4,319	633	1,053	256	8,820
1950	145	2,554	4,568	631	1,048	228	9,174
1951	153	2,625	4,855	683	1,026	249	9,591
1952	157	2,442	4,041	721	904	215	8,480
1953	136	2,219	3,600	597	603	145	7,300
1954 1/	127	2,410	4,034	625	716	168	8,080
1955 2/	131	2,532	4,240	632	760	174	8,469
Pigs saved							
1948	1,010	14,052	24,062	3,714	6,030	1,600	50,468
1949	1,107	15,909	27,835	3,909	6,570	1,639	56,969
1950	920	16,177	28,905	3,971	6,534	1,428	57,935
1951	1,016	17,238	31,463	4,273	6,430	1,587	62,007
1952	1,072	16,421	26,994	4,601	5,846	1,336	56,270
1953	942	15,313	24,635	3,910	3,947	956	49,703
1954 1/	870	16,805	27,962	4,179	4,798	1,114	55,728
1955 2/							58,500
Pigs saved per litter	Number	Number	Number	Number	Number	Number	Number
1948	6.58	6.65	6.47	6.11	6.11	6.26	6.44
1949	6.73	6.65	6.44	6.17	6.24	6.39	6.46
1950	6.36	6.33	6.33	6.29	6.23	6.26	6.31
1951	6.63	6.57	6.48	6.26	6.27	6.38	6.47
1952	6.83	6.72	6.68	6.38	6.47	6.23	6.64
1953	6.92	6.90	6.84	6.55	6.55	6.59	6.81
1954 1/	6.87	6.98	6.93	6.69	6.70	6.61	6.90
1955 2/							6.90
FALL PIG CROP							
Sows farrowing	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands
1948	126	1,609	1,690	551	904	190	5,070
1949	123	1,800	1,941	565	951	188	5,568
1950	119	1,970	2,183	561	924	166	5,923
1951	126	1,991	2,237	610	879	189	6,032
1952	118	1,781	1,976	555	684	143	5,257
1953	96	1,660	1,842	464	574	115	4,751
1954 1/	166	1,897	2,074	527	685	135	5,424
Pigs saved							
1948	865	10,917	11,184	3,452	5,717	1,223	33,358
1949	831	11,925	12,694	3,531	6,059	1,235	36,275
1950	815	13,289	14,674	3,552	5,998	1,076	39,404
1951	872	13,346	14,690	3,968	5,704	1,224	39,804
1952	818	11,972	13,252	3,559	4,420	940	34,961
1953	661	11,309	12,310	3,084	3,788	757	31,809
1954 1/	739	12,954	14,135	3,501	4,547	890	36,766
Pigs saved per litter	Number	Number	Number	Number	Number	Number	Number
1948	6.88	6.78	6.62	6.27	6.32	6.43	6.58
1949	6.77	6.62	6.54	6.25	6.37	6.55	6.52
1950	6.83	6.74	6.72	6.33	6.49	6.50	6.65
1951	6.92	6.70	6.57	6.51	6.49	6.47	6.60
1952	6.97	6.72	6.71	6.44	6.46	6.56	6.65
1953	6.91	6.75	6.68	6.65	6.60	6.58	6.70
1954 1/	7.01	6.83	6.82	6.64	6.64	6.57	6.78

1/ Preliminary

2/ Number indicated to farrow from intentions as of December 1, 1954. Average number of pigs per litter with allowance for trend used to calculate indicated number of pigs saved.

Table 4.- Number of sows farrowing and percentage distribution by months, fall season, United States, 1948 to date

Year	Number of sows farrowing							Total
	June	July	Aug.	Sept.	Oct.	Nov.		
	head	head	head	head	head	head	head	head
1948	727	570	985	1,525	871	392	5,070	
1949	731	618	1,172	1,760	901	386	5,568	
1950	710	610	1,285	1,891	1,004	423	5,923	
1951	819	673	1,350	1,827	987	376	6,032	
1952	809	658	1,209	1,559	734	288	5,257	
1953	683	624	1,196	1,319	646	283	4,751	
1954	821	770	1,397	1,413	689	334	5,424	
	Percentage of total sows farrowing							
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1948	14.3	11.3	19.4	30.1	17.2	7.7	100.0	
1949	13.1	11.1	21.1	31.6	16.2	6.9	100.0	
1950	12.0	10.3	21.7	31.9	17.0	7.1	100.0	
1951	13.6	11.1	22.4	30.3	16.4	6.2	100.0	
1952	15.4	12.5	23.0	29.6	14.0	5.5	100.0	
1953	14.4	13.1	25.2	27.8	13.6	5.9	100.0	
1954	15.1	14.2	25.8	26.0	12.7	6.2	100.0	

In 1954, about 40 percent of all commercial corn producers complied with allotments and were eligible for loans. Non-compliance was large enough to make hog production more responsive to the corn crop than in previous years when there were no allotments and all producers were eligible for loans. If the corn outturn had been very large, the substantial non-compliance would have led to a sizable increase in farrowings. But since the harvest was below average, non-compliance had much less effect on hog production and probably contributed no more than a few percentage points to the increase in 1955 spring farrowings.

#### Seasonal Rise in Hog Prices Likely

Prices of hogs are expected to undergo a seasonal increase in early weeks of 1955 from their early-December low. However, prices throughout the first half of the year will remain substantially below the record prices reached at times in the spring of 1954.

Hog prices are not likely to decline next summer as they did last summer, and by fall may be fairly close to the prices of last fall.

#### Lamb Prices Steady; Seasonal Rise Due

From September through December the price of Choice and Prime slaughter lambs at Chicago hovered around \$20.00 per 100 pounds. Slaughter during this period averaged less than a year before. Lambs, like cattle, had

moved to slaughter early. In addition, more lambs may have been held back for breeding. The new, higher supports for wool probably encouraged some producers to expand their herds.

Prices of lambs are likely to rise seasonally this winter. The increase could be substantial, largely because the number of lambs fed will again be rather small. Poor condition of wheat pastures has prevented a large volume of feeding. However, the increase in lamb prices is not likely to equal last winter's \$5.50 advance (per 100 pounds)--an increase that was followed by an even greater spring decline.

Cold Storage Stocks  
of Meat Above Last Year;  
at About Average Level

Holdings of meat in cold storage at the beginning of 1955 probably exceeded the small stocks of a year earlier. Stocks of pork, upped 112 million pounds during October and November (almost twice last year's rate), on December 1 were larger than a year before. They were of about average size for the date. Stocks of beef on December 1 were less than in December 1953 but they, too, were of about average size.

United States-Mexican  
Border Reopened

On December 31, 1954, the Secretary of Agriculture reopened the United States-Mexican border to imports of all livestock and fresh meat products. The border had been closed to most products since May 23, 1953, when an outbreak of foot-and-mouth disease occurred in Mexico. No imports into the United States of susceptible animals (cattle, hogs, sheep and goats) and their fresh, chilled or frozen products are permitted from any country where foot-and-mouth disease is known to exist.

Imports of cattle and beef from Mexico in 1955 are expected to be the equivalent of around 200,000 to 300,000 head. The estimate is made by the Foreign Agricultural Service on the basis of current conditions in the two countries. The maximum possible is 346,000 head, which is the quota--divided equally by half years--established by the Mexican Government. The prospective imports are less than the average of the last 4 years, when cattle and beef imports from Mexico were the equivalent of 350,000 head of cattle each year. Certain canned, cooked, pickled or cured meat products were allowed to enter continuously during those years, but imports of live cattle were permitted only between September 1, 1952 and May 23, 1953. During 1940-44 imports of live cattle from Mexico averaged around 450,000 head annually.

Imports are expected to be smaller than in several past years chiefly because drought reduced cattle herds in some areas of Mexico, and because prices in the United States are less attractive now than a few years ago.

## MEAT ANIMALS A RISING SOURCE OF INCOME TO FARMERS

by Harold F. Breimyer

Over the years livestock and their products have provided an increasing part of all cash receipts to farmers, and for more than 2 decades meat animals have been a growing proportion of the livestock total. In the early 1920's, livestock and livestock products made up about 48 percent of all farm cash receipts. The percentage rose to 60 percent by 1931. In the middle 1930's, when Government payments became a sizable source of income, the percentage coming from livestock decreased. But it soon began to climb again and recently has amounted to 55 to 59 percent of all receipts. (See cover chart and table 5.)

The trend toward more receipts from livestock and less from crops attests to two major changes in American agriculture. The first is the lessening relative importance of export markets for United States farm products. Export outlets are still very significant to cotton, wheat and tobacco, but total farm exports are smaller relative to total income now than they once were. The second major change is the shift of domestic demand for food toward livestock products. With the exceptions of butter and lard, products of livestock have enjoyed a growing position in the diets of American consumers. As their incomes have risen, consumers have increased materially their demand for those products.

The 1920's were the heyday for dairy products. More cash receipts came from them than from any other group of commodities, and their percentage increased sharply during that decade to highs in 1931-32. (See chart, page 14.) The share of dairy products decreased beginning in the middle 1930's as margarine encroached on the market for butter, and trended downward for a number of years thereafter.

Poultry and eggs and the meat animals came in to take up the deficit. For poultry and eggs the increase in proportion of total receipts has been slow. It is less than might be expected from the substantial rise in production and consumption of poultry meat, which in the last 15 years has amounted to 11 pounds, or 67 percent, per person. Receipts from hogs have made a small net proportionate gain. A depressed market for lard and increasing disfavor for the fat cuts of pork has prevented as much rise in the income-producing position of hogs as of cattle. Yet hogs have made a positive relative improvement, and provide more of all income now than they did in the 1930's.

Sheep and lambs, always a rather small source of total income, have lost ground in recent years. Sheep production is smaller now than it was for many years.

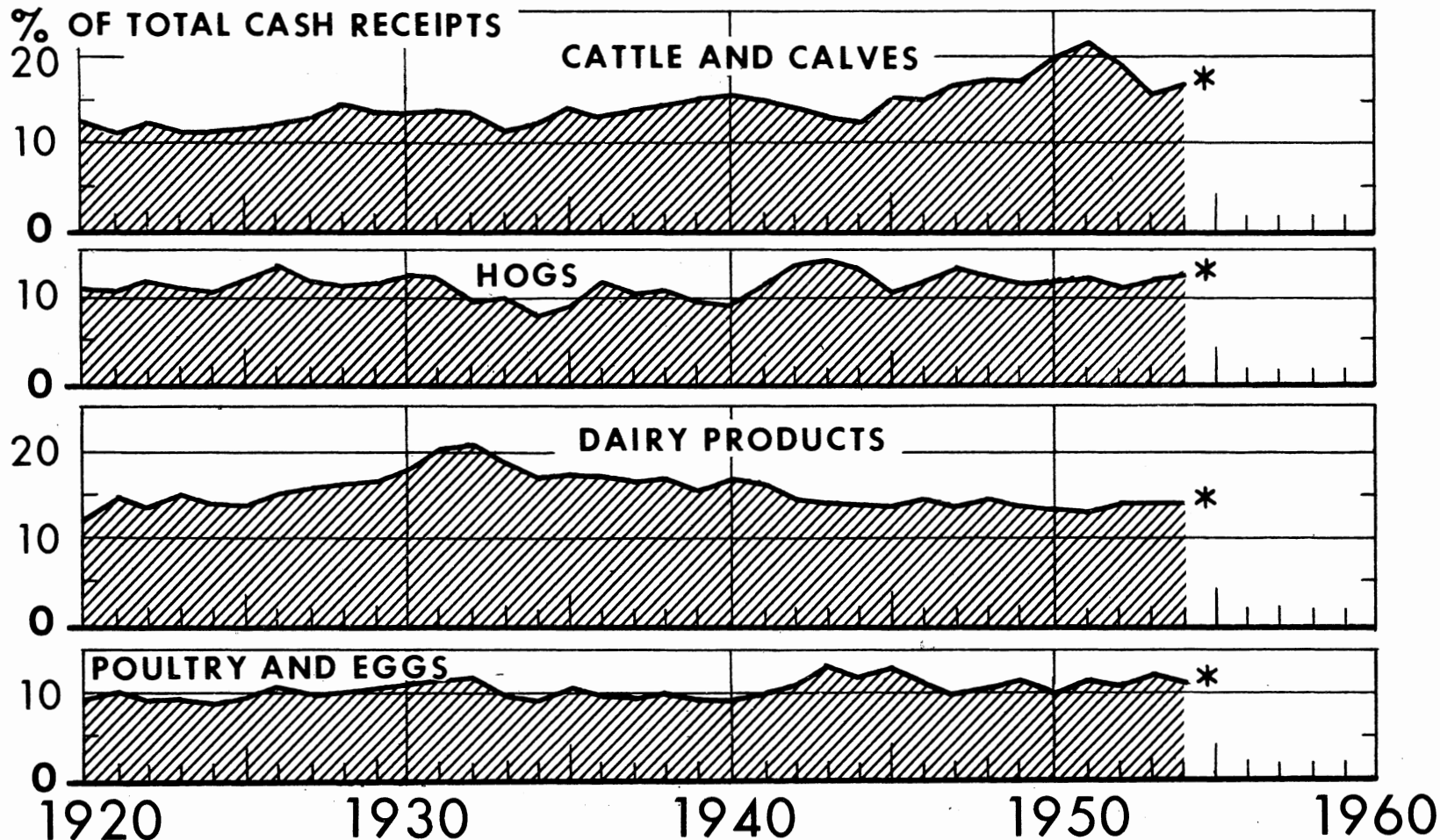
The biggest and most consistent increases in income have come from cattle and calves. Starting from 11 to 12 percent of all receipts in the early 1920's, the share from them rose to a high of 21 percent in 1951 and has averaged 17 to 18 percent in all recent years. Since 1943, cattle have supplanted dairy products as leading producer of income. They more than any other kind of livestock have offset the declining demand for butter and held up the contribution from livestock to total farm income.

Table 5.- Cash receipts from farm marketings and government payments, with percentage distribution, United States, 1920-53

Year	Total cash receipts and Government payments	Receipts from								All crops	Government payments
		Livestock and livestock products				Meat animals					
		Total <sup>1/</sup>	Dairy products	Poultry and eggs	Total	Hogs	Cattle and calves	Sheep and lambs	Total		
Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.		
Average:											
1920-24 :	9,811	4,729	1,346	912	2,343	1,071	1,121	151	5,082	---	
1925-29 :	10,918	5,793	1,672	1,092	2,889	1,296	1,382	211	5,125	---	
1930-34 :	6,471	3,590	1,204	688	1,615	680	811	124	2,766	115	
1935-39 :	8,433	4,559	1,409	814	2,196	856	1,174	166	3,395	479	
1940-44 :	15,593	8,643	2,300	1,754	4,386	2,013	2,102	271	6,282	668	
1945-49 :	27,215	14,920	3,776	2,960	7,983	3,178	4,436	369	11,841	454	
1950 :	28,611	15,976	3,719	2,821	9,248	3,184	5,678	386	12,352	283	
1951 :	33,085	19,612	4,250	3,668	11,365	3,902	7,001	462	13,187	286	
1952 :	32,968	18,445	4,566	3,453	10,153	3,512	6,251	390	14,248	275	
1953 <sup>2/</sup> :	31,626	17,263	4,370	3,759	8,852	3,649	4,887	316	14,150	213	
Percent of total receipts and payments											
Average:	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
1920-24 :	100.0	48.2	13.7	9.3	23.9	10.9	11.4	1.6	51.8	---	
1925-29 :	100.0	53.1	15.3	10.0	26.5	11.9	12.7	1.9	46.9	---	
1930-34 :	100.0	55.5	18.6	10.6	25.0	10.5	12.6	1.9	42.7	1.8	
1935-39 :	100.0	54.1	16.7	9.7	26.0	10.2	13.9	1.9	40.2	5.7	
1940-44 :	100.0	55.4	14.8	11.2	28.1	12.9	13.5	1.7	40.3	4.3	
1945-49 :	100.0	54.8	13.8	10.9	29.3	11.7	16.3	1.3	43.5	1.7	
1950 :	100.0	55.8	13.0	9.9	32.3	11.1	19.8	1.4	43.2	1.0	
1951 :	100.0	59.3	12.8	11.1	34.4	11.8	21.2	1.4	39.8	.9	
1952 :	100.0	56.0	13.8	10.5	30.8	10.7	19.0	1.1	43.2	.8	
1953 <sup>2/</sup> :	100.0	54.6	13.8	11.9	28.0	11.5	15.5	1.0	44.7	.7	
Percent of total excluding government payments											
Average:											
1930-34 :	100.0	56.5	18.9	10.8	25.4	10.7	12.8	1.9	43.5		
1935-39 :	100.0	57.3	17.7	10.2	27.6	10.8	14.8	2.0	42.7		
1940-44 :	100.0	57.9	15.4	11.7	29.4	13.5	14.1	1.8	42.1		
1945-49 :	100.0	55.8	14.1	11.1	29.8	11.9	16.6	1.3	44.2		
1950 :	100.0	56.4	13.1	10.0	32.6	11.2	20.1	1.3	43.6		
1951 :	100.0	59.8	13.0	11.2	34.6	11.9	21.3	1.4	40.2		
1952 :	100.0	56.4	14.0	10.6	31.0	10.7	19.1	1.2	43.6		
1953 <sup>2/</sup> :	100.0	55.0	13.9	12.0	28.2	11.6	15.6	1.0	45.0		

<sup>1/</sup> Includes wool, horses, mules, mohair, honey, beeswax, and bees, not itemized.<sup>2/</sup> Preliminary.

# SHARES OF CASH RECEIPTS FROM LIVESTOCK



\* 1954 PARTLY FORECAST

This uptrend in receipts from cattle has many origins: a basic preference for beef, expressed as incomes rise; the shift of population from farm to city; increased use of refrigeration, both for home freezers and retail distribution, which is of more benefit to beef than to pork; and others. Furthermore, though rates of beef consumption per person have increased a lot the last few years, a greater change over time has been improvement in quality. Much of the rise in farmers' receipts from cattle reflects the higher average price received by virtue of the better beef types and grades of animals produced and sold. More of all cattle are now of beef breeds, as dairy stock have been a decreasing part of total cattle numbers and marketings. Also, the breeding of beef cattle has been improved.

Review of past trends raises interesting questions about sources of income in the future. Total cash receipts to farmers have declined moderately the last 2 or 3 years. Part of the decrease is traceable to a shrinking of foreign outlets for crops, which had expanded greatly during and after the war but were reduced when buying countries increased their own food production. What farm products will be the strongest income producers in years ahead?

Some of the past changes will remain. Consumption of animal fat will doubtless continue below earlier times. On the other hand, demand for fluid milk and solids-not-fat will likely expand, so that dairy products may at least hold stable as income source. Current progress in raising more meat type and fewer fat hogs will help to hold the market for pork.

Prices for cattle were reduced drastically about 2 years ago, due to vastly expanded slaughter. Cattle are not highly profitable just now. But their uptrend as a source of income in the past was steep. Will cattle prove to be the bulwark of farmers' incomes in years ahead? The data, charts and analysis just presented do not present a certain answer. Yet there seems much reason to expect cattle prices to recover following the immediate adjustment period. If trends in the past are enduring, a reasonable expectation would be for incomes from cattle to be a major and a rising contribution to all cash receipts from farming in the longer period ahead.

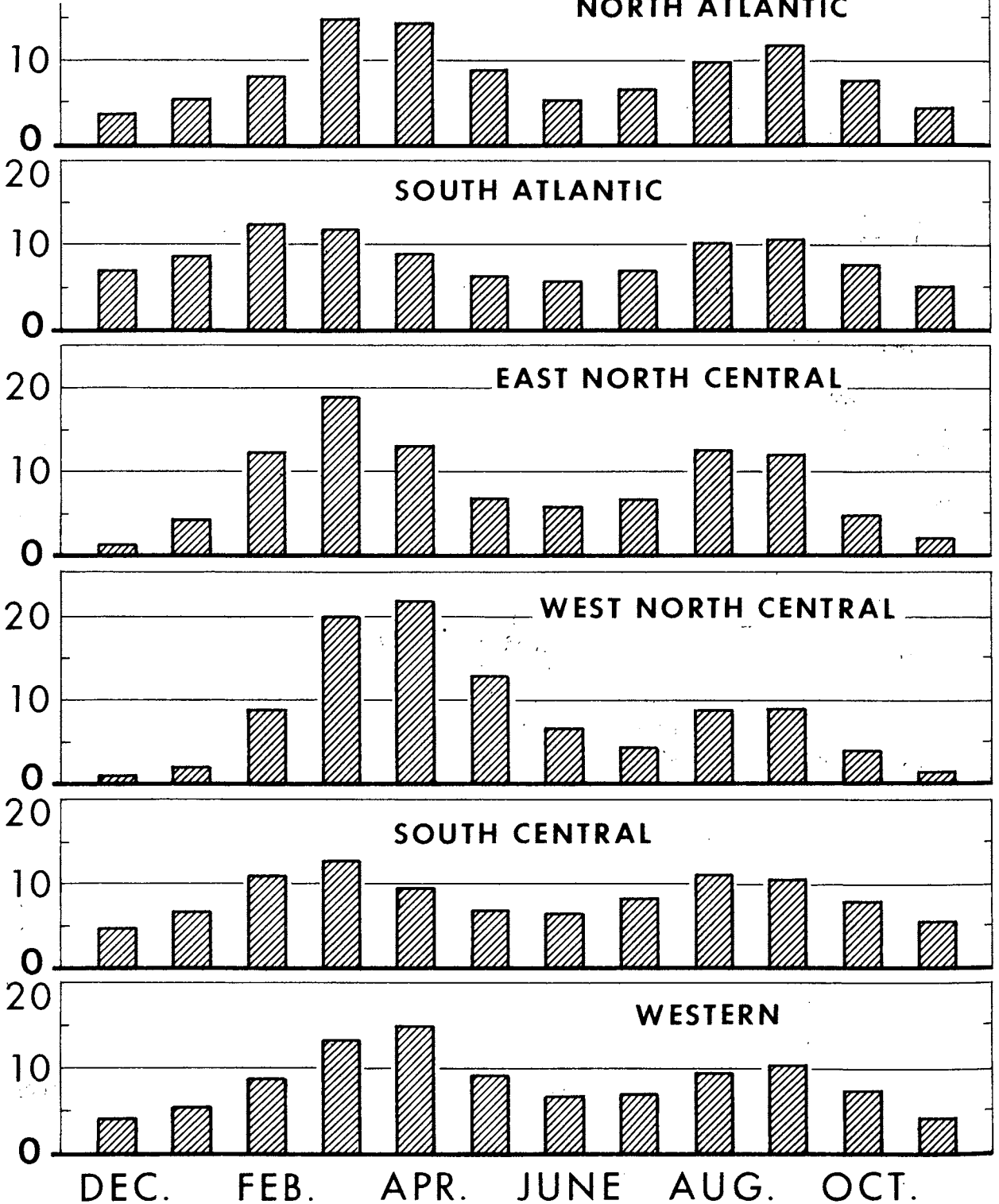
#### REGIONAL DIFFERENCES IN SEASON OF FARROWING

by Charlotte Kause

Of the two pig crops each year, spring and fall, the spring crop is always the larger. In all but 3 years since 1924, 60 percent or more of all pigs were born in the spring season from December 1 to May 31. Within each season the middle months (March-April and August-September) tend to have the most farrowings. Over time, the concentration of farrowings in a few months has been reduced, as the fall pig crop has become larger relative to the spring crop and farrowings have been moved earlier within each season. (The growing relative importance of the fall crop was described in this Situation of December 1950, and changes in months of farrowings for Indiana are reported in the article that begins on page 17 of this issue.)

# SOWS FARROWING BY MONTHS, 1954

% OF REGION TOTAL





There are marked regional differences in seasonal pattern of farrowing. In the figure on page 16 the percentage of the total number of sows farrowing in each month of 1954 is plotted for each region. The peak in spring farrowings centered about March. In the colder West North Central and Western regions it was April. In the Southern States where temperatures are milder, February farrowings were as numerous as March. September was the leading fall month in most regions, but by only a small margin over August. For both spring and fall seasons, farrowings were generally earlier in Southern regions than in the North.

Farrowings also are less variable in the Southern regions of warmer temperatures. Greatest monthly variations in farrowings are in the North Central States--the Corn and Hog Belt. Most extreme of all is the West North Central region, where 22 percent of all 1954 farrowings came in April while less than 1 percent were in December.

As a numerical measure of the degree of variability in farrowings by months, a coefficient of variation was computed. This figure (the standard deviation divided by the mean) can be used as an index that shows the differences between regions. The values for the coefficient are as follows:

West North Central	0.83
East North Central	.63
North Atlantic	.45
West	.41
South Central	.30
South Atlantic	.29

These indexes reflect the same differences between regions in variability of farrowings as are seen visually from the chart. They provide an accurate ranking of the regions. They show that farrowings change most from month to month in the North Central regions, and more in the North Atlantic than the West. The South Atlantic had in 1954 an even more uniform seasonal pattern than the South Central region.

#### TRENDS IN MONTHLY FARROWINGS AND LITTER SIZE IN INDIANA

by Robert E. Straszheim

Agricultural Estimating Service  
Lafayette, Indiana

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:  
: The preceding article summarized differences in seasonal :  
: timing of farrowings by regions in 1954. The following :  
: describes changes in the number of farrowings by months :  
: and in size of litters by months for 1938 to date, in a :  
: leading Corn Belt State. :  
:

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Hog producers in Indiana have learned to counteract the influence of weather on the season of farrowing. They have increased their number of December-February farrowings from 25 percent of the spring crop total before the war to 48 percent in 1954. Fall season farrowings also have been moved earlier, with more pigs now being farrowed in the summer. At the same time, the size of litter saved in both the cold of mid-winter and the heat of mid-summer has risen appreciably.

Table 6.- Pigs saved per litter in Indiana by months, 1938-1954

LMS-75

- 18 -

Year	Spring crop							Fall crop						
	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average	June	July	Aug.	Sept.	Oct.	Nov.	Average
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1938	5.44	5.91	6.64	6.77	6.73	6.98	6.69	6.52	6.48	6.38	6.69	6.71	6.75	6.60
1939	6.64	6.24	6.28	6.30	6.35	6.83	6.36	6.43	6.51	6.66	6.56	6.72	6.59	6.60
1940	6.27	4.82	5.66	5.99	6.47	6.84	6.05	6.66	6.35	6.50	6.65	6.79	6.65	6.61
1941	6.09	6.48	6.42	6.56	6.91	7.09	6.67	6.57	5.97	6.63	6.90	6.90	6.94	6.75
1942	6.80	6.24	6.25	6.74	6.89	7.16	6.73	6.45	6.41	6.54	6.66	6.60	6.50	6.58
1943	6.22	5.76	5.73	6.07	6.41	6.80	6.19	6.43	6.24	6.22	6.50	6.57	6.80	6.42
1944	5.87	5.65	6.12	6.35	6.56	7.02	6.40	6.52	6.38	6.55	6.81	6.73	6.74	6.67
1945	6.50	5.61	6.57	6.95	6.76	6.98	6.79	6.15	6.71	6.44	6.67	6.89	6.76	6.60
1946	5.86	6.19	6.72	6.89	6.78	6.97	6.81	6.05	6.35	6.51	6.88	6.80	6.37	6.62
1947	7.67	6.05	5.76	6.09	6.44	6.07	6.14	6.11	6.57	6.43	6.60	6.56	7.00	6.52
1948	5.67	6.32	6.63	6.64	6.98	6.84	6.72	6.27	6.42	6.59	6.84	7.21	6.95	6.73
1949	6.83	5.85	6.80	6.73	6.88	6.91	6.76	5.98	6.38	6.63	6.61	6.85	6.33	6.54
1950	6.67	6.90	5.83	6.29	6.61	6.69	6.33	6.29	6.80	6.70	6.91	6.79	6.68	6.75
1951	6.58	6.07	6.56	6.70	6.88	6.43	6.63	6.34	6.91	6.81	6.66	7.06	7.00	6.76
1952	6.80	6.37	6.73	6.86	6.95	6.91	6.80	6.22	6.55	6.83	6.65	6.83	7.00	6.66
1953	6.55	7.26	7.19	7.01	6.77	6.62	7.00	6.56	6.54	6.82	7.06	7.07	7.06	6.83
1954	7.38	6.86	7.33	7.02	6.97	7.06	7.11							
Average:														
1938-41	6.11	5.86	6.25	6.40	6.62	6.94	6.44	6.54	6.33	6.54	6.70	6.78	6.73	6.64
1951-54 1/	6.83	6.64	6.95	6.90	6.89	6.76	6.88	6.37	6.67	6.82	6.79	6.99	7.02	6.75

1/ 1951-53 for fall crop.

These are findings of a special study made in the Indiana office of Agricultural Estimates. Tabulations by months of farrow were made from the pig surveys of June and December each year. In each survey farmers are asked to report the number of sows farrowing by months and the season total number of pigs saved. Numbers of pigs are not given by individual months. It was obviously possible to match farrowings and pigs saved, so as to obtain average litter size by months, only from reports from farms on which all the sows (for each season) farrowed in a single month. This greatly reduces the size of sample, which in turn increases sample variability. However, despite this handicap the analysis is believed accurate enough to indicate the general trends in size of litter saved by months in the last 16 years.

Information reported on litter size by months is of value in describing and explaining the changes taking place in the seasonal pattern of marketing hogs. To improve forecasts of hog marketings, the need has often been expressed for added information on time of farrowing, and even more especially for data on number of pigs saved per litter by months and the relation of weather to litter size. If such data were available for a sufficient period, it would be possible to appraise the effect of weather at farrowing time in any year on the number of pigs expected to be saved per litter. In this way the market analysts could allow for weather at farrowing when making their market forecasts for 6 to 8 months hence.

#### More Spring Pigs Born Early

Spring pigs are being farrowed much earlier now than a few years ago. Before the war, 25 percent of all spring farrowings came before March 1. This percentage gradually declined during World War II and in 1946 the 3-month total was only 19 percent of all the spring sows. (See upper chart, page 20.) In the spring of 1954, however, 48 percent of all the spring sows farrowed in December, January and February.

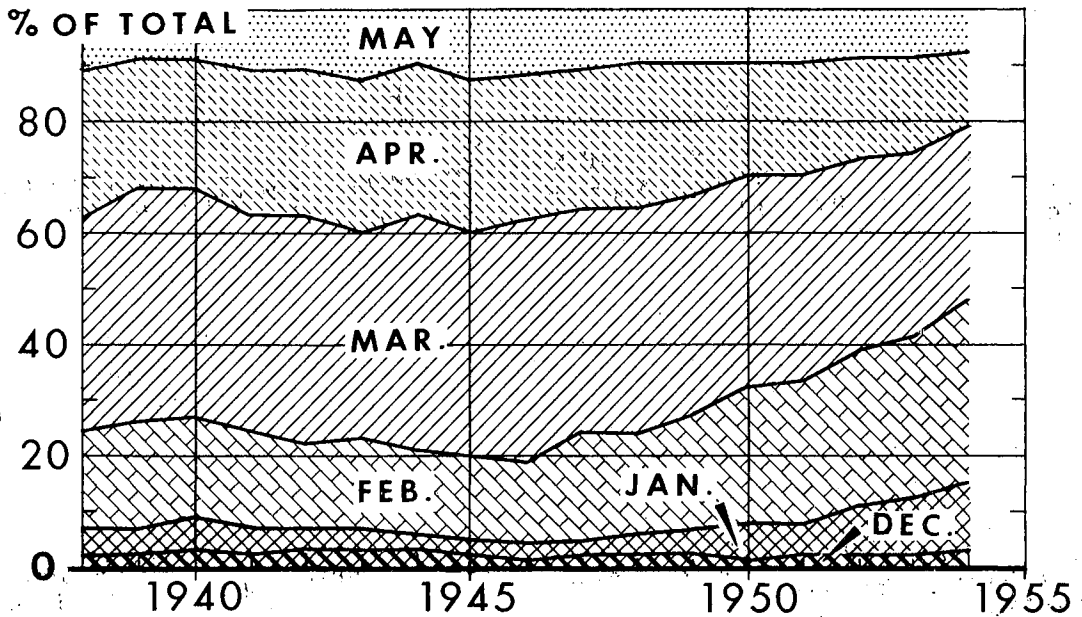
Since many hog farms are using the two litter system and the same sows generally farrow both litters, the fall litters also are being farrowed earlier. June-August farrowings were 37 to 40 percent of the fall-season total before the war. In 1954 they were 64 percent. (See lower chart, page 20.)

#### Litter Size Increasing in Winter and Summer

The trend since 1946 toward farrowing in mid-winter and mid-summer, when weather hazards are most severe, does not mean that the year-average number of pigs saved per litter has become smaller. On the contrary, the size of litter saved in the winter has been increased a great deal and that in the summer also has risen. The differences in litter size saved by months have been nearly eliminated, and the yearly average has increased.

Greater success with winter litters now is partially due to the increasing use of artificial heat on early pigs made possible through the extension of electricity to farms. The remainder of the increase in these months and the moderate increase in several other months is due to general management practices such as more careful selection of breeding stock and better feeding.

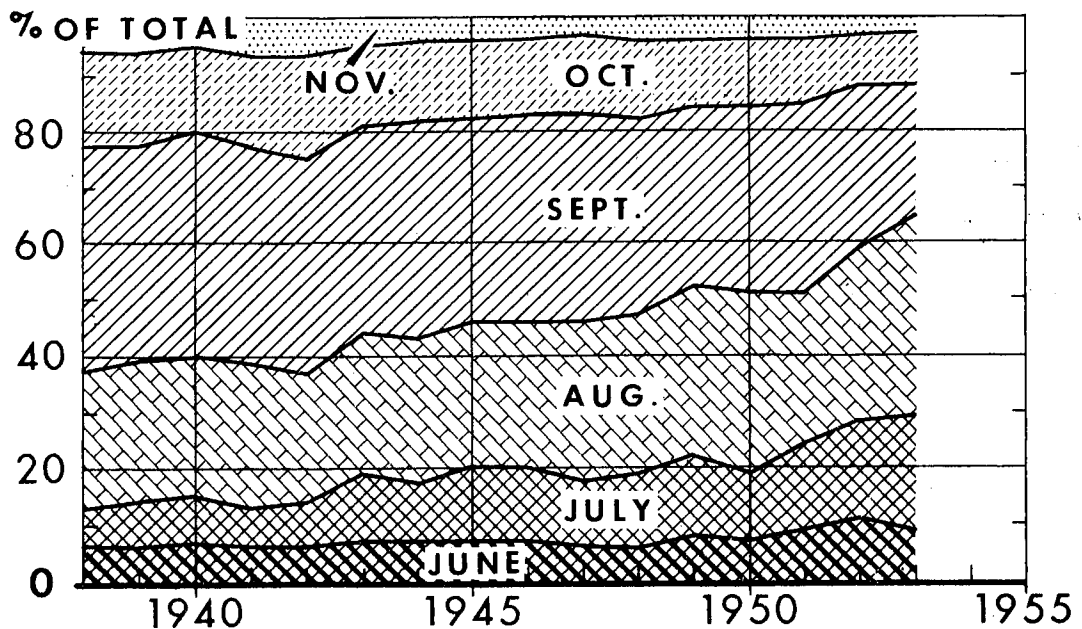
## MONTHLY DISTRIBUTION OF SPRING FARROWINGS, INDIANA



U. S. DEPARTMENT OF AGRICULTURE

NEG. 1291 - 54 (12) AGRICULTURAL MARKETING SERVICE

## MONTHLY DISTRIBUTION OF FALL FARROWINGS, INDIANA



U. S. DEPARTMENT OF AGRICULTURE

NEG. 1292 - 54 (12) AGRICULTURAL MARKETING SERVICE

From table 6 and the chart on page 22 it can be seen that for each of the months December through March, the average number of pigs saved per litter increased markedly from 1938 to 1954--as much as almost 1 pig per litter in January. For April the increase was smaller and for May and June there was a slight decrease. From July through November the upward trend in litter size was moderate, generally amounting to between one-fourth and one-half pig per litter. The data show the small differences remaining in litter size by months. In 1938-41 January litters were 5.86 pigs and February, 6.25, compared with a spring crop average of 6.44. In 1951-54, the 6.64 pigs in January were only a little below the spring figure of 6.88; and February, at 6.95 pigs, exceeded the spring average.

In the fall pig season, June is the only month for which the size of litter is much below the average for the season (table 6). Absence of improvement in May and June may reflect the tendency for the better producers to shift to early farrowing, leaving many May-June farrowings to less accomplished producers.

#### Weather an Influence on Size of Litters in Individual Years

Although differences in average litter size from month to month have been largely eliminated, the size still fluctuates a great deal at various times. In Indiana, data on weather conditions at time of farrow explain much of this sporadic variation.

For example, the small average litters in December 1937 came at a time when temperatures were 4 degrees below normal. The high average in December 1938 and December 1941 was accompanied by temperatures 1 and 5 degrees respectively above normal. The low averages of December 1943 and December 1945 were accompanied by temperatures averaging 5 and 9 degrees respectively below normal. The high average of December 1946 was accompanied by temperatures 4 degrees above normal while the low average in December 1947 was accompanied by temperatures 2 degrees below normal. The high December 1953 average was accompanied by temperatures 2 degrees above normal.

Other examples of possible effect of weather upon litter size are found in other months. The low averages of January 1940 and January 1945 were accompanied by temperatures 14 and 8 degrees respectively below normal, while the high averages of January 1950 and January 1953 were accompanied by temperatures 6 and 3 degrees respectively above normal. The high February 1938 average was accompanied by temperatures 5 degrees above normal, while the low average of February 1947 was accompanied by 12 degree below normal temperatures. The high March 1938 average was accompanied by temperatures 5 degrees above normal, while the low March 1947 and March 1950 averages were accompanied by temperatures 9 and 5 degrees respectively below normal.

Many of the May pigs, particularly during the last half of the month, are farrowed in the open in pasture fields. The low average of May 1947 was accompanied by temperatures 5 degrees below normal for the month and more than twice the normal amount of rainfall during the last two weeks.

# TRENDS IN PIGS SAVED PER LITTER, BY MONTHS, INDIANA

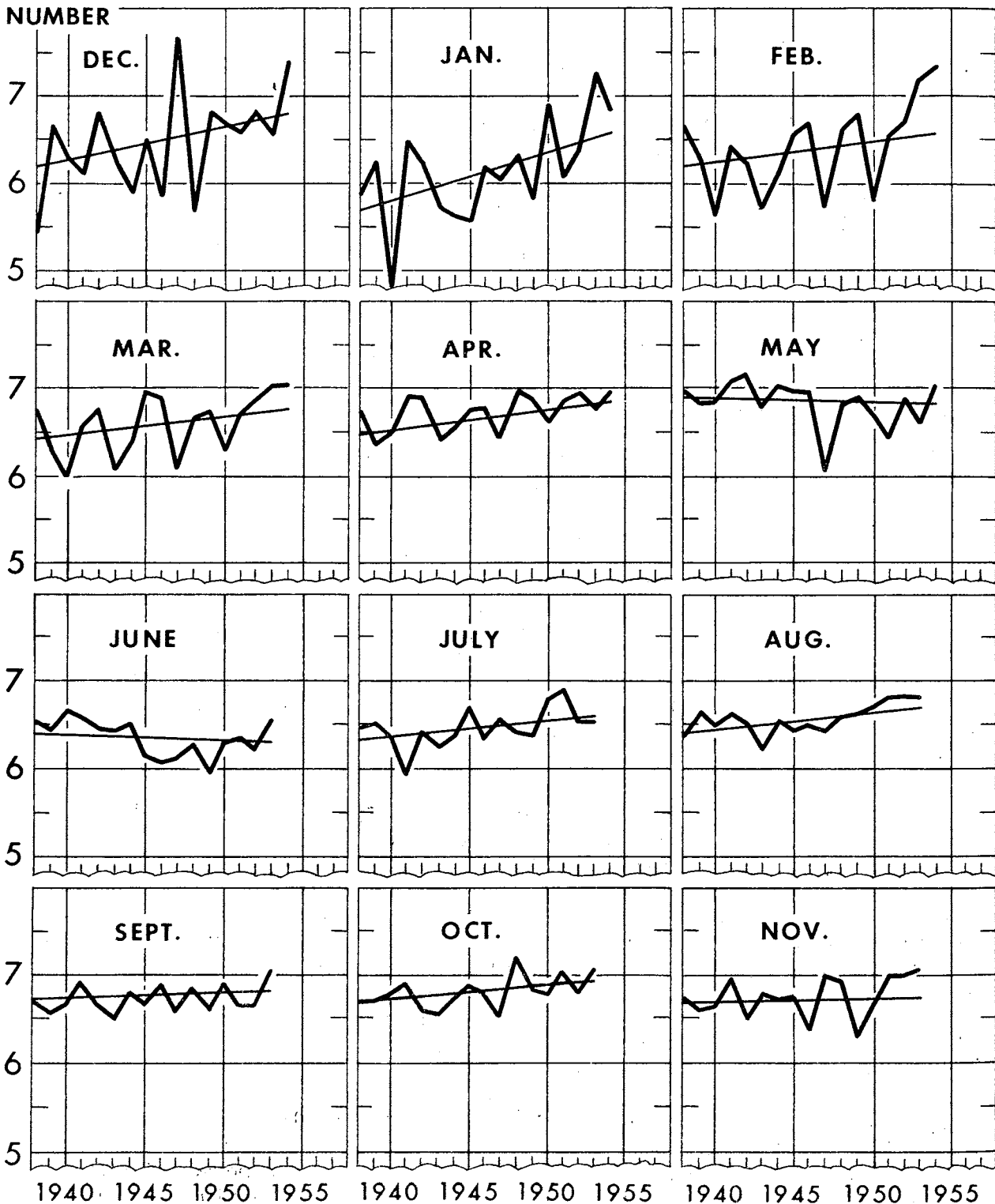


Table 7.- Mean temperatures at Indianapolis

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F
Average: 1921-50	31.1	33.1	41.9	52.7	63.5	73.5	78.0	75.9	69.2	58.2	43.6	33.2
1938	29.4	37.7	47.4	54.0	62.4	70.3	77.0	77.0	68.8	59.4	45.7	34.3
1939	35.9	33.2	43.8	49.6	65.8	74.8	76.2	74.6	72.4	58.7	42.7	36.1
1940	16.8	32.2	38.0	49.2	59.6	73.9	77.6	77.0	66.8	60.5	41.7	37.6
1941	31.2	28.1	36.4	59.0	66.9	73.9	78.0	76.3	71.8	60.4	45.6	38.6
1942	29.2	28.6	44.0	57.8	64.4	73.6	78.2	74.1	66.3	57.2	45.7	28.2
1943	28.2	31.7	35.8	47.7	61.2	74.8	75.8	74.5	61.8	53.4	37.9	28.6
1944	32.6	33.0	36.8	49.8	67.4	74.0	75.8	74.2	66.0	54.0	43.0	25.3
1945	22.8	32.0	51.2	52.6	56.4	68.1	72.4	72.1	67.4	52.2	42.2	23.9
1946	29.0	33.0	51.9	53.0	59.2	70.5	74.8	69.0	66.2	59.0	45.2	35.4
1947	33.7	22.5	32.8	50.6	58.3	68.0	70.6	79.0	66.4	62.4	37.8	31.6
1948	21.0	31.0	41.2	54.0	60.8	71.3	74.5	73.6	67.4	51.2	44.6	34.3
1949	34.0	35.0	41.0	50.2	63.1	73.4	78.2	73.8	60.6	59.2	42.3	35.8
1950	37.4	31.6	36.8	45.9	63.6	68.6	72.3	70.2	64.6	59.2	36.4	23.4
1951	30.9	32.1	39.1	49.9	66.0	71.5	75.9	73.8	64.9	59.6	37.2	32.7
1952	34.3	36.6	41.1	53.9	62.6	78.2	79.0	74.5	67.9	51.9	45.1	36.3
1953	34.4	37.2	43.4	49.0	66.3	77.4	77.7	76.4	69.1	60.6	45.6	34.5

Mean monthly temperatures at Indianapolis, the basis for the weather comparison, are summarized in table 7. Monthly temperatures tend to hide some of the temperature variation which may be responsible for reducing the number of pigs saved per litter. For example, if temperatures were 5 degrees above normal for 3 weeks out of a given month and 15 degrees below normal for the fourth week, the monthly average would be about normal. However, the one week of 15 degrees below normal temperature might be very damaging. A good example of this is February 1950 when the average number of pigs saved was small and temperatures averaged only one degree below normal. In that month temperatures averaged 9 degrees below normal the last two weeks, but this low was nearly offset by above normal temperatures during the first two weeks. Usually during a two-week period when temperatures average so much below normal, there would be several days when temperatures would be considerably below the two week average. In all probability the small litter size was due to the adverse weather during the last two weeks.

The foregoing is not intended to be a complete analysis of the effect of weather upon the number of pigs saved per litter, but merely to point out some of the conditions which have existed in the past and the possibility of using weather data as an additional factor in forecasting market supply of hogs. The better housing and equipment and newer methods have greatly reduced the effect of normal weather conditions on litter size, but have not ended susceptibility to the more extreme fluctuations in weather.

## RETURNS IN 6 CATTLE FEEDING PROGRAMS, 1953-54

by Earl E. Miller

Profits from cattle feeding in the 1953-54 feeding season recently ended were considerably above the poor returns of the previous season. With fed cattle prices and feeding costs generally quite stable during the year, higher profits were earned chiefly because feeder cattle were bought at cheaper prices in the fall of 1953. Prices of feeder stock were then at their low point of recent years, \$8.00 to \$10.00 per 100 pounds below the prices of the fall of 1952.

In general, more money was made last year in feeding lower grade than higher grade steers, and more in feeding steers than calves.

These observations are based on an analysis of costs and returns for six typical cattle feeding programs. 1/ Descriptions of the programs are based on reports of cattle feeding in Illinois. 2/ The 6 programs are representative of feeding operations in the Corn Belt, but do not apply to all the variations in the practices or experiences of individual feeders.

In each of the feeding examples studied, the calves or steers were assumed to have been purchased in Kansas City in the fall, shipped to the Corn Belt for fattening and sold in Chicago. The amount and kind of feed fed, the weight gain and the grade of finished animal are in line with the grade of feeder and the length of time on feed.

Details as to the kind of calves or steers fed, the time on feed, weight gain, and feed consumption per 100 pounds gain are shown in table 8. In most of the programs, feeders are not fed concentrates during the total feeding period but are considered to be first placed in stubble fields or on other fall pasture. The grade of slaughter animal produced was not reported in the Illinois feeding reports but was determined by comparing the price received with the quoted market price by grade at the time of sale. Feed consumption per 100 pounds gain is about average for Corn Belt feeding.

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1/ For a discussion of four of these programs for the feeding seasons 1946-47 to 1951-52 see Earl E. Miller, "Profits in 4 Different Cattle Feeding Programs," the Livestock and Meat Situation, Nov.-Dec. 1952. Two additional programs are included in the present study--short-term feeding of heifer calves and of Medium grade yearling steers.

2/ Fifteenth Annual Report of Feeder Cattle, University of Illinois Agricultural Experiment Station, September 1954, and earlier reports.



Table 8.- Weight gain and feed consumption in 6 typical  
Corn Belt cattle feeding programs 1/

Feeding program	Date bought	Date sold	Feed- ing period	Grade as feeder	Weight: when placed on feed	Grade when sold 2/	Weight: at end of feed	Total gain	Feed consumed per 100 pounds gain			
									Corn 3/	Supple- ment 4/	Hay 5/	Pasture
			Months		Pounds		Pounds	Pounds	Busheles	Pounds	Pounds	Days
<u>Calves</u>												
Heifer calves, short fed	Sept.- Oct.	May- June	8	Good & Choice	400	Choice	820	420	10.0	45.2	381	7.1
Steer calves, long fed	Sept.- Nov.	Aug.- Oct.	11	Good & Choice	420	Choice	940	520	9.2	40.4	385	13.5
<u>Yearlings</u>												
Medium steers, short fed	Sept.- Oct.	Jan.- Feb.	4	Medium	650	Good & Com'l.	830	180	13.3	44.4	389	5.6
Good steers, short fed	Sept.- Nov.	Apr.- June	7	Good	650	Choice & Prime	1,000	350	12.6	51.4	400	10.0
Good and Choice steers, long fed	Sept.- Nov.	July- Sept.	10	Good & Choice	650	Prime	1,100	450	12.0	42.2	400	16.7
<u>Heavy steers</u>												
Good heavy steers, short fed	Sept.- Nov.	March- May	6	Good	850	Choice & Prime	1,150	300	15.7	56.7	333	10.0

1/ Averages derived from annual reports of feeder cattle, University of Illinois Agricultural Experiment Station.

2/ Determined from reported selling price.

3/ Includes an allowance for corn silage.

4/ Soybean meal.

5/ Alfalfa hay.

In the comparisons, costs of feeder cattle are calculated from reported market prices at Kansas City. Feed costs are based on the feed and pasture consumption given in table 8 at average prices in the North Central States. Transportation and marketing costs are computed charges for moving feeder animals to the feed lot in the Corn Belt and for shipping fed animals to Chicago, plus selling expenses. All other costs such as labor, overhead, death loss, insurance or cost of minerals, vitamins or antibiotics are omitted. However, these costs may be nearly offset by returns from hogs in the feed lot and the value of manure.

#### Short Feeding of Heavy Steers Most Profitable in 1953-54

During the 1953-54 feeding season, the largest return per head over specified costs was made by short-feeding of heavy steers. The next largest was earned in long-term feeding of steer calves and yearling steers. Short-term feeding of other than heavy steers returned less profit per head. However, with the exception of heifer calves, returns per \$100 worth of feed fed were usually greater for shorter than for longer feeding periods. All programs showed sharp increases over the 1952-53 season.

The reasons for these differences in returns can be seen from the data in table 9. Two indicators of prospective profits in feeding are: (1) The price margin between cost of the feeder and the value of the fed cattle when sold; and (2) Costs of putting on gain. Price margins have more effect on profits from short term feeding, a more speculative venture, than from long term feeding, where cost of gain is more important because more weight is added. Price margins are usually narrower for younger and lower quality feeders than for older and higher grade stock. Feeders know it costs less to put 100 pounds of gain on a calf or on a feeder with less finish, and bid for feeders accordingly. Putting on high finish is most costly.

In the fall of 1953, price declines were greater (in percentage) for lower than for higher grade feeders. There was little confidence in fat cattle prices, and speculative interest was low. When selling prices turned out to be favorable in the spring and summer of 1954, profits in feeding were above average and, as noted, the feeding of heavy steers was the most profitable venture. This was the opposite of the previous season, when a negative price margin brought big losses to short term feeders but long feeding returned some profit despite the collapse in selling prices. Lower grade steer programs generally returned higher profits per \$100 worth of feed than did higher grade cattle in 1953-54.

#### Feeding Program Data as Guide to Feeding Outlook

Most feeders have a wide range of choice as to their feeding program--the kind of cattle they buy and the time of buying and selling. A wise choice has much to do with profits earned. As the data of table 9 show, returns per \$100 of feed cost in 1952-53 varied from a loss of \$50.00 (or half the feed cost) for the least profitable program to a profit of \$8.00 for the most profitable, and in 1953-54 returns from the various programs ranged from profits of \$34 to \$75.

Table 9.- Specified costs and net returns in feeding cattle, 6 Corn Belt programs, 1952-53 and 1953-54 feeding seasons

		1952-53 feeding season									
Feeding program	Price, per 100 lb.	Values per head								Net return over cost <sup>5/</sup>	
		Paid when bought <sup>1/</sup>	Received when sold <sup>2/</sup>	Margin	Feed-er <sup>3/</sup>	Feed-er <sup>3/</sup>	Trans-: port-: tion: and: market-: ing <sup>4/</sup>	Re-: ceipt: from: sale: of: fed: animal:	Per head	Per \$100 feed fed	
		Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
<u>Calves</u>											
Heifer calves, short fed	24.93	22.26	-2.67	99.72	89.31	10.99	200.02	182.53	-17.49	-19.58	
Steer calves, long fed	27.30	25.59	-1.71	114.66	105.62	11.80	232.08	240.55	8.47	8.02	
<u>Yearlings</u>											
Medium steers, short fed	21.19	22.30	1.11	137.74	48.16	12.23	198.13	185.09	-13.04	-27.08	
Good steers, short fed	24.73	22.13	-2.60	160.74	90.22	13.44	264.40	221.30	-43.10	-47.77	
Good and Choice steers, long fed	26.11	27.22	1.11	169.72	112.25	14.11	296.08	299.42	3.34	2.98	
<u>Heavy steers</u>											
Good heavy steers, short fed	24.23	23.14	-1.09	205.96	88.79	15.48	310.23	266.11	-44.12	-49.69	
<u>1953-54 feeding season</u>											
<u>Calves</u>											
Heifer calves, short fed	14.44	22.70	8.26	57.76	87.64	11.05	156.45	186.14	29.69	33.88	
Steer calves, long fed	17.90	24.82	6.92	75.18	105.72	12.01	192.91	233.31	40.40	38.21	
<u>Yearlings</u>											
Medium steers, short fed	12.78	20.95	8.17	83.07	45.08	12.11	140.26	173.88	33.62	74.58	
Good steers, short fed	16.12	24.32	8.20	104.78	88.24	13.46	206.48	243.20	36.72	41.61	
Good and Choice steers, long fed	17.58	26.17	8.59	114.27	111.78	14.19	240.24	287.87	47.63	42.61	
<u>Heavy steers</u>											
Good heavy steers, short fed	16.37	25.94	9.57	139.14	86.60	15.59	241.33	298.31	56.98	65.80	

<sup>1/</sup> Average price for months, weight and grade as identified in table 8, Kansas City. <sup>2/</sup> Average price for months and grade as identified in table 8, Chicago. <sup>3/</sup> Computed from feed consumption in table 8 at representative Corn Belt prices. <sup>4/</sup> Feeders to Corn Belt and fed cattle to Chicago, plus selling charges. <sup>5/</sup> Omits cost of labor, overhead, death loss; and credits for manure and gain on hogs.

In the fall of 1954, prices of lower grade feeders were up considerably from 1953 and were more nearly in line with the upper grades. From the prices paid it is possible to calculate in a rough way the possibilities for profit in the various feeding programs. This may be done by using the descriptive data of table 8. The detailed information on average feed requirements, average weight gain, and normal improvement in grade during feeding can help greatly in estimating the prospects for obtaining satisfactory returns. It is a means of arriving at the outlook for profits in feeding.

The realignment of feeder prices last fall largely removed the chance for extra profits from selecting lower grade stock for feeding. The data in table 10 are illustrative. They show the average prices paid for feeder calves and steers at Kansas City last fall, and the selling price for fed cattle at Chicago needed to break even. As an example of a further calculation, the last two columns show what profits would be if selling prices should average the same as last year. As was noted in the previous outlook review, prospects favor as high a price this year as last. These illustrative calculations suggest that profits in general will be less than last year, when they were above average; and that last year's substantial differences in profits between the various programs are being evened out this year. Feeders apparently adjusted their offering prices so that prospects for profits are once again as bright for long feeding of high grade stock as for other feeding programs.

Tables 8 and 10 provide a method of estimating the net return per head for each feeding program at any selling price, assuming there is no change in total costs. The program for feeding heifer calves lists a selling price of \$20.72 per 100 pounds as the break-even point. As the selling weight is 820 pounds, a selling price of \$21.72, one dollar above the break-even price, would result in a net return of \$8.20 per head (820 pounds at \$1.00 per 100 pounds). A selling price of \$19.72 would bring a loss of \$8.20. The net return per head can be similarly calculated for each feeding program and price.

But the significance of this review is not to forecast the profits this year. It is to present the set of specifications for 6 standard feeding programs given in table 8, which can be helpful in appraising comparative opportunities for profit when feeders are bought in the fall of 1955 or in any future year. 3/

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3/ In a number of States, the Extension Service or Experiment Stations make available similar information on feeding programs or budgets. This is highly useful, and is available on request to the Service or Station.

Table 10.- Cost of feeder and prospective returns at specified selling prices in 6 Corn Belt feeding programs, 1954-55 feeding season

Feeding program	Purchase price per 100 lb. <u>1/</u>	Cost of feeder	Selling price per 100 lb. needed to break even <u>2/</u>	Net return if selling prices same as 1953-54	
				Per head	Per \$100 feed fed
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
<u>Calves</u>					
Heifer calves, short fed	17.16	68.64	20.72	16.00	18.00
Steer calves, long fed	20.72	87.02	22.15	25.00	23.00
<u>Yearlings</u>					
Medium steers, short fed	16.14	104.91	19.59	11.00	25.00
Good steers, short fed	19.09	124.08	22.86	15.00	16.00
Good and Choice steers, long fed	20.22	131.43	23.76	26.50	23.00
<u>Heavy steers</u>					
Good heavy steers, short fed	19.23	163.46	23.34	30.00	33.50

1/ Kansas City for appropriate time, weight and grade of feeder in table 8.

2/ Dollars per 100 pounds, Chicago, for appropriate time and grade, with estimated 1954-55 costs.

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Cash and gross receipts--March 5  
 Feeding:  
   Costs and returns--Aug. 25, Jan. 7 ('55)  
   Number on feed:  
     U. S.--March 5  
     California--Aug. 25  
   Outlook--Aug. 25, Oct. 15  
   Price margins in feeding--Aug. 25  
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   By class--March 5, Oct. 15  
   Projections of numbers and beef supply--May 7  
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Hogs:

Cash and gross receipts--March 5  
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   July 8, Oct. 15, Jan. 7 ('55)  
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Meat animals:

Cash and gross receipts--Mar. 5  
 As source of total income--July 8, Jan. 7 ('55)  
 Drought programs--May 7, Aug. 25  
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 Prices for selected classes--Mar. 5  
 Price received by farmers--Mar. 5, July 8  
 Slaughter--Mar. 5

Sheep and Lambs:

Cash and gross receipts--Mar. 5  
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 Costs and returns--May 7  
 Number on feed--Mar. 5  
 Lamb crop--Aug. 25  
 Mohair production and value--May 7  
 Liveweight of marketings--Mar. 5  
 Liveweight of production--Oct. 15  
 Liveweight of slaughter, per head--Mar. 5  
 Numbers on farms, Jan. 1:  
 By class--Mar. 5, Oct. 15  
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 Prices for selected classes--Mar. 5, Oct. 15  
 Price received by farmers and parity--Mar. 5  
 Receipts stockers and feeders, 8 Corn Belt States--Mar. 5  
 Slaughter--Mar. 5, Oct. 15  
 Wool production, price and income--May 7, Aug. 25, Oct. 15  
 Wool supports--Aug. 25, Oct. 15

## Selected price statistics for meat animals 1/

Item	Unit	1953		1954		
		Nov.	Dec.	Oct.	Nov.	Dec.
<b>Cattle and calves</b>						
Beef steers, slaughter	Dollars per					
Chicago, Prime .....	100 pounds	27.96	27.59	27.72	28.38	29.69
Choice .....	do.	25.03	24.37	25.37	25.85	26.53
Good .....	do.	21.07	21.21	22.71	22.59	22.94
Commercial .....	do.	16.87	17.18	18.65	18.57	18.13
Utility .....	do.	13.34	13.31	15.30	15.29	14.53
All grades .....	do.	24.83	23.65	25.42	26.11	26.21
Omaha, all grades .....	do.	22.81	22.02	23.39	24.23	
Sioux City, all grades .....	do.	23.05	22.37	23.72	24.53	24.32
<b>Cows, Chicago</b>						
Commercial .....	do.	12.04	11.85	12.75	12.30	12.03
Utility .....	do.	10.34	10.40	10.61	10.18	10.06
Canner and Cutter .....	do.	8.54	9.13	8.30	8.15	8.52
Vealers, Choice and Prime, Chicago .....	do.	22.10	23.12	22.58	20.62	21.58
Stocker and feeder steers, Kansas City 2/ .....	do.	17.56	17.63	18.84	19.36	19.23
Price received by farmers						
Beef cattle .....	do.	14.50	14.80	15.80	15.60	15.60
Calves .....	do.	14.50	15.60	16.00	15.60	15.90
<b>Hogs</b>						
<b>Barrows and gilts</b>						
Chicago						
160-180 pounds .....	do.	20.52	23.99	18.45	18.86	18.20
180-200 pounds .....	do.	21.16	24.59	18.94	19.29	18.58
200-220 pounds .....	do.	21.16	24.58	18.96	19.24	18.31
220-240 pounds .....	do.	21.14	24.40	18.96	19.05	18.01
240-270 pounds .....	do.	21.07	24.01	18.92	18.58	17.03
270-300 pounds .....	do.	21.48	23.60	18.76	18.24	16.47
All weights .....	do.	21.13	24.17	18.92	18.69	17.30
8 markets 3/ .....	do.	21.03	24.12	18.84	18.59	
Sows, Chicago .....	do.	18.95	21.06	17.23	16.47	14.76
Price received by farmers .....	do.	20.30	23.00	18.40	18.60	17.00
<b>Hog-corn price ratio 4/</b>						
Chicago, barrows and gilts .....	do.	14.4	15.5	12.0	12.6	11.3
Price received by farmers, all hogs .....	do.	15.3	16.3	12.7	13.6	12.2
<b>Sheep and lambs</b>						
<b>Sheep</b>						
Slaughter ewes, Good and Choice, Chicago ...	do.	6.09	6.44	5.09	5.96	5.87
Price received by farmers .....	do.	5.98	6.33	5.52	5.88	5.78
<b>Lambs</b>						
Slaughter, Choice and Prime, Chicago .....	do.	20.13	20.21	20.17	20.49	20.07
Feeding, Good and Choice, Omaha .....	do.	18.22	18.00	17.50	17.70	18.05
Price received by farmers .....	do.	17.10	17.30	17.60	17.70	17.50
<b>All meat animals</b>						
Index number price received by farmers						
(1910-14=100) .....		267	285	267	266	257
<b>Meat</b>						
<b>Wholesale, Chicago</b>						
Steer beef carcass, Choice, 500-600 pounds	100 pounds	40.62	39.69	41.35	43.15	44.00
Lamb carcass, Choice, 40-50 pounds .....	do.	41.42	40.42	42.88	42.66	41.34
<b>Composite hog products:</b>						
<b>Including lard</b>						
72.84 pounds fresh .....	Dollars	22.24	25.55	20.32	21.06	19.92
Average per 100 pounds .....	do.	30.53	35.08	27.90	28.91	27.35
71.19 pounds fresh and cured .....	do.	25.95	29.08	24.02	24.96	24.17
Average per 100 pounds .....	do.	36.45	40.85	33.74	35.06	33.95
<b>Excluding lard</b>						
56.19 pounds fresh and cured .....	do.	23.20	26.00	21.14	22.15	21.59
Average per 100 pounds .....	do.	41.29	46.27	37.62	39.42	38.42
<b>Retail, United States average</b>						
Beef, Choice grade .....	per pound	68.7	68.5	68.9	70.0	
Pork, excluding lard .....	do.	51.6	53.9	50.9	49.4	
Index number meat prices (BLS)						
Wholesale (1947-49=100) .....		84.3	88.2	85.3	85.9	

1/ Annual data for most series published in Statistical Appendix to this Situation, released March 5, 1954

2/ Average all weights and grades.

3/ Chicago, St. Louis N. S. Y., Kansas City, Omaha, Sioux City, S. St. Joseph, S. St. Paul, and Indianapolis.

4/ Number bushels of corn equivalent in value to 100 pounds of live hogs.



Selected marketing, slaughter and stocks statistics for meat animals and meats <sup>1/</sup>

Item	Unit	1953		1954		
		Nov.	Dec.	Oct.	Nov.	Dec.
<b>Meat animal marketings</b>						
Index number (1935-39=100) .....		200	169	198	210	
<b>Stocker and feeder shipments to</b>						
9 Corn Belt States	1,000					
Cattle and calves .....	head	643	286	939	815	
Sheep and lambs .....	do.	292	185	539	344	
<b>Slaughter under Federal inspection</b>						
<b>Number slaughtered</b>						
Cattle .....	do.	1,609	1,653	1,616	1,602	
Steers .....	do.	693	779	732	684	
Heifers .....	do.	183	208	223	202	
Cows .....	do.	690	625	621	681	
Calves .....	do.	658	634	738	694	
Sheep and lambs .....	do.	1,159	1,227	1,291	1,160	
Hogs .....	do.	5,540	5,194	5,178	5,841	
Percentage sows .....	Percent	5	5	6	6	
<b>Average live weight per head</b>						
Cattle .....	Pounds	958	974	950	960	
Calves .....	do.	229	219	236	217	
Sheep and lambs .....	do.	95	98	92	95	
Hogs .....	do.	234	240	232	240	
<b>Average production</b>						
Beef, per head .....	do.	509	525	516	514	
Veal, per head .....	do.	125	120	129	118	
Lamb and mutton, per head .....	do.	45	46	44	45	
Pork, per head <sup>2/</sup> .....	do.	134	137	132	137	
Pork, per 100 pounds live weight <sup>2/</sup> ..	do.	57	57	57	57	
Lard, per head .....	do.	33	34	33	34	
Lard, per 100 pounds live weight .....	do.	14	14	14	14	
<b>Total production</b>						
Beef .....	pounds	816	865	830	820	
Veal .....	do.	82	75	95	82	
Lamb and mutton .....	do.	52	57	56	52	
Pork <sup>2/</sup> .....	do.	744	711	682	799	
Lard .....	do.	180	178	171	199	
<b>Total commercial slaughter <sup>3/</sup></b>						
<b>Number slaughtered</b>						
Cattle .....	head	2,121	2,171	2,206	2,152	
Calves .....	do.	1,080	1,036	1,214	1,152	
Sheep and lambs .....	do.	1,316	1,377	1,453	1,315	
Hogs .....	do.	6,649	6,452	6,236	6,996	
<b>Total production</b>						
Beef .....	pounds	1,037	1,093	1,085	1,058	
Veal .....	do.	133	122	154	135	
Lamb and mutton .....	do.	58	64	63	59	
Pork <sup>2/</sup> .....	do.	888	873	820	950	
Lard .....	do.	207	208	197	227	
<b>Cold storage stocks first of month</b>						
Beef .....	do.	169	197	110	123	158
Veal .....	do.	15	18	12	15	19
Lamb and mutton .....	do.	11	11	7	8	9
Pork .....	do.	181	266	215	234	327
<b>Total meat and meat products <sup>4/</sup> .....</b>						
	do.	460	593	443	478	622

<sup>1/</sup> Annual data for most series published in Statistical Appendix to this Situation, released March 5, 1954<sup>2/</sup> Excludes lard.<sup>3/</sup> Federally inspected, and other wholesale and retail.<sup>4/</sup> Includes stocks of sausage and sausage room products, canned meats and canned meat products, and edible offals, in addition to the four meats listed.

