# Seasonal Changes in Prices of Major Alabama Farm Commodities and Feeds **Purchased**

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# Seasonal Changes in Prices of Major Alabama Farm Commodities and Feeds Purchased

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DEASONAL PRICE VARIATIONS, caused by fluctuations in volume of products and seasonal changes in consumer demand, represent a major problem facing producers of agricultural products. Since the problem is one that recurs year after year, knowledge of factors causing the price variations can be important not only to producers but to handlers and processors of agricultural products.

Large expenditures of time, effort, and money have been made to overcome undesirable effects of seasonal price fluctuations. Accomplishments of such efforts include (1) development of new varieties that extend production periods and which have a longer storage life; (2) improved storage methods and facilities which maintain product quality over an extended storage period; and (3) changed production and management practices that aid in adjusting to seasonal price changes.

Information about prices is more valuable to the individual producer now than in the past. Production units are larger now, so there is a greater volume of products to be marketed. Current prices are at a relatively higher level, and this increases the probability of wide price changes.

Federal farm programs do not stabilize farm prices as they did during the 1950's and early 1960's. Passage of the Food and Agricultural Act in 1965, together with amendments in 1968 and

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1970, lowered the Commodity Credit Corporation (CCC) loan rate on major commodities to a level below open market prices. As a result, producers of those commodities must give attention to factors that affect prices in an open market. And the market that the agricultural industry in the United States is producing for now is a world market. Growing interest in developing countries toward improving human diets, along with international balance of payments situation and monetary devaluations, has had important effects on farm commodity demand and prices. These factors will increasingly influence prices of United States farm products in the future.

#### METHOD OF STUDY

Due to unprecedented changes in commodity prices and input costs in 1973 and 1974, data for the 10-year period 1963-72 were used in analyzing seasonal patterns. Data for 1973 and 1974 are shown separately and compared with the 10-year averages. Mid-month prices received and paid by Alabama farmers, as reported by the Alabama Crop and Livestock Reporting Service, United States Department of Agriculture, were used in all calculations. The study included seasonal price movements of 11 commodities sold and 5 commodities purchased by Alabama farmers. Price data were not available for some months during the summer. As a result, the monthly movement columns in Table 5 for cotton in the 3 summer months will not add to 10 as they do for other months and other commodities.

Tables include all data shown in the charts, except the range in prices and indexes. Additional information is reported in the tables, however, such as the number of times a monthly average price was the highest or lowest during the 10-year period. In some cases, the number of highs and/or lows exceeded 10 because the high or low price occurred in more than 1 month. Using corn as an example, in 2 years out of the 10 the January average price was equal to the highest for the year; in 4 years of the 10-year period, however, the January average price for corn was equal to the lowest for the year.

Use of the index of variation and index of irregularity is illustrated, using data on corn from Table 8. If the average price for a bushel of corn in a given year is expected to be a \$1.50, the market price can be estimated by multiplying the index of varia-

tion for March corn in decimal form (1.02) times the expected yearly average price (\$1.50): \$1.50 x 1.02 = \$1.53. Therefore, the expected price for March would be \$1.53. If this expected price for March is multiplied by the index of irregularity in decimal form it shows the amount by which the price could be expected to vary above and below the estimated price -\$1.53 x .18 = .28. The average price for March would range between \$1.81 and \$1.25 (\$1.53 + .28 = \$1.81 and \$1.53 - .28 = \$1.25).

In the top part of each figure, the solid line shows the average price for each month during the 10-year period. Shaded portions show the area in which price could be expected to fall two-thirds of the time. The scale on the left of the chart shows prices in dollars and cents; the one on the right shows prices as a percent of the overall 10-year average price. The index of variation can be read directly from the solid line by use of the right hand scale.

The bottom part of each figure shows the number of times that the average price in a given month was above or below the average for the previous month. Use of this portion of the figures is illustrated as follows, using Figure 8 as an example: During the 10-year period, the average price for corn in February was higher than the January average price 8 out of the 10 years; it was lower than the January average price once and the same as the January average once. When no change in price occurred from one month to the next, bars in the chart show less than 10 years.

#### LIVESTOCK AND LIVESTOCK PRODUCTS1

Growing importance of livestock and livestock products in Alabama was reflected in cash farm receipts. The proportion of cash farm receipts derived from the sale of livestock and livestock products rose from 56 percent in 1963 to 68 percent in 1972. Receipts from these sales rose above those of the previous year in each year except 1967, and were 73 percent greater in 1972 than in 1963. The value of broilers exceeded that of other commodities except in 1972, when receipts from cattle and calves were the greatest. Seasonal changes in prices generally were greater for livestock and livestock products than for crops.

<sup>&</sup>lt;sup>1</sup> Includes poultry.

#### Eggs

Prices for eggs received by producers continued to change among seasons more than prices of other farm commodities. The December average price was 8.7 cents (24 percent) higher than the low average price in May, Table 1 and Figure 1. Prices followed the normal pattern of declining during April and May; although prices in October were the lowest only once, that month had price drops 8 times in the 10 years. In both July and November, prices rose from the previous month 9 out of the 10 years.

In addition to seasonal changes, the general level of egg prices fluctuated through wide ranges. The annual average price in 1969 rose 16 percent from the 1968 average, whereas the annual average in 1972 was 23 percent below that of 1970. The price of 34.1 cents per dozen in 1972 was the lowest annual average in 28 years.

Egg production increased in Alabama during the decade. Although the peak production of 2,861 million eggs was in 1971, 1972 production was 42 percent greater than in 1963. Nationally, Alabama rose from 12th to 7th in production.

Eggs were third among farm commodities in cash receipts, ac-

Table 1.	Eggs:	Average	SEASONAL	VARIATION	$\mathbf{OF}$	Alabama	FARM	PRICES,
			196	63-72				

		_				Monthly movement			
	Sea	sonal aver	age	Nun	$aber^1$	т.	Times	TT:	
Month	Index of	Index of	Price,	of ti	mes	Times up from	$\operatorname{down}$	Times same as	
	variation	irreg cents ner		High	Low	previous month	from previous month	provious	
Jan	107	14	43.0	4	0	4	6	0	
Feb	104	12	41.7	1	0	3	7	0	
Mar	103	10	41.5	0	0	f 4	4	2	
Apr	95	11	38.0	0	0	0	9	1	
May		9	35.6	0	6	0	9	1	
June	90	8	36.2	0	3	6	3	1	
July	96	10	38.7	0	1	9	1	0	
Aug		9	38.9	0	0	6	4	0	
Sept	103	11	41.5	2	0	8	1	1	
Oct		11	40.1	0 .	1	2	8	0	
Nov	106	11	42.4	0	0	9	1	0	
Dec	110	12	44.3	<b>4</b>	0	7	3	0	
Total Av.	1,200 100	128 11	481.9 40.16	11	11	58	56	6	

<sup>&</sup>lt;sup>1</sup>When the high or low price occurred in more than 1 month, each month was reported as a high or low.

counting for 13 percent of total cash farm receipts in 1970. The percentage dropped to 9 percent in 1972 because of relatively low prices.

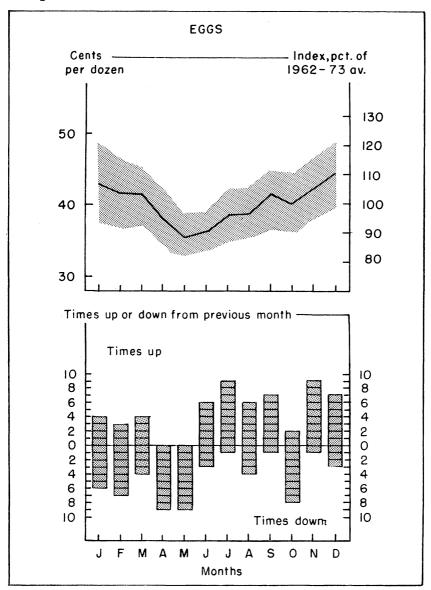


FIG. 1. Eggs: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

#### **Broilers**

The proportional change from the low to high price within the year for broilers was second only to the amount of change in prices of eggs. Average broiler prices peaked in July and then constantly declined to the seasonal low in December, Table 2 and Figure 2. The greatest change in price from one month to the next occurred between December and January when there was a 10 percent increase. Prices rose in January 9 out of the 10 years, and continued to rise in February 7 of the 10 years. In April, the average dropped to the January level before rising 9 percent to the July high.

Broiler prices appeared to remain relatively stable among years with 2.4 cents per pound representing the greatest difference between annual average prices. Proportionally, however, this was a 16.4 percent change. Prices changed an average of 7 percent from one year to the next, and the number of years when there was an increase from the previous year was the same as the number when there was a decrease.

The number of broilers grown in the State increased each year as Alabama maintained its ranking of third among states through-

Table 2. Broilers: Average Seasonal Variation of Alabama Farm Prices, 1963-72

						Mon	thly move	ment
Month	Seas Index of variation	Index of irreg- ularity		of t	nber¹ mes Low	Times up from previous month	Times down from previous month	Times same as previous month
Jan Feb		8 7	13.2 14.0	1 3	0	9	1 3	0
Mar Apr	99	8 9	13.8 13.2	1	$0 \\ 2 \\ 0$	2 0	3 7	5 3
May June July	105	9 9 8	13.6 13.9 14.4	1 5	0	6	2 3 2	$\frac{1}{1}$
Aug Sept	102 100	9 7	13.6 13.3	$\overset{\circ}{0}$	0	$\overset{\circ}{0}$	$\frac{10}{7}$	$\frac{1}{0}$
Oct Nov Dec	. 93	9 9 10	$12.4 \\ 12.4 \\ 11.9$	0 0 0	3 1 6	1 5 1	9 4 6	0 1 3
Total Av	1,200	103 9	159.7 13.3	13	12	46	57	17

<sup>&</sup>lt;sup>1</sup> See Table 1.

out the period. The number of broilers grown in 1972 exceeded the number in 1963 by 75 percent. Sale of broilers brought in between 18 and 24 percent of total cash farm receipts.

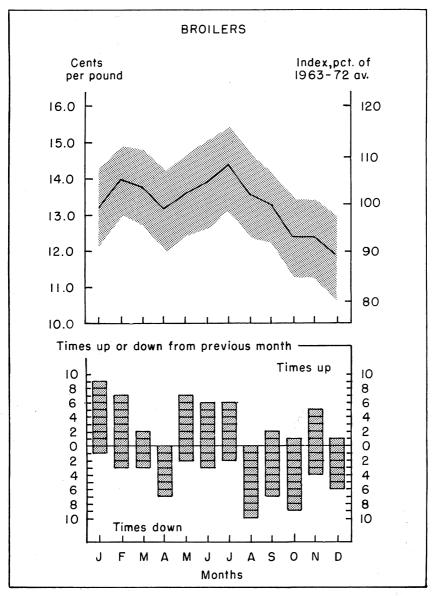


FIG. 2. Broilers: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

### Hogs

The seasonal pattern for hog prices showed some change from that of the previous decade. Prices continued to be high in the summer months, but there was not as much decrease during the fall months as in previous years. The high monthly average price occurred in December during 4 years and in July during 3 years, Table 3 and Figure 3. The low price for the year was recorded twice in December, however, with the 10-year average for this month being 8 percent lower than the corresponding average for July. The annual low price was in January 5 of the 10 years, but the 10-year average was lowest in April. Prices in May and June rose above prices of the previous months in all 10 years. They dropped in April in 9 years.

The level of hog prices rose during the 1963-72 period. The average was \$17.94 per hundredweight during the first half of the decade and \$20.52 during the last half. The greatest change from one year to another was a 44 percent increase between 1971 and

1972.

Hog production increased in Alabama between 1963 and 1972. Although there were decreases in numbers from the previous year in 1963, 1964, 1965, and 1972, production in 1972 was 34 percent greater than in 1963.

Table 3. Hogs: Average Seasonal Variation of Alabama Farm Prices, 1963-72

		_				Mon	thly move	ment
_		sonal avei		Nun	$aber^1$	TT:	Times	Times
Month	Index of	Index of	Price,	of t	imes	Times up from	$\operatorname{down}$	same as
	variation	irreg- dollars ularity per cwt.		High	Low	previous month	from previous month	previous
Jan	95	24	18.39	1	5	7	3	0
Feb		$\overline{24}$	19.25	1	0	6	4	0
Mar	96	21	18.52	0	0	3	6	1
Apr	92	20	17.70	0	3	1	9	0
May		19	18.84	0	0	10	0	0
June		17	20.08	1	0	10	0	0
July	108	16	20.90	3	0	6	2	2
Aug	106	18	20.54	0	0	4	6	0
Sept.	103	18	19.97	1	0	2	7	1
Oct		20	19.71	0	0	3	6	1
Nov	98	22	18.91	0	0	1	8	1
Dec	100	27	19.38	4	2	5	f 4	1
Total Av		$\frac{246}{21}$	232.19 $19.35$	11	10	58	55	7

<sup>&</sup>lt;sup>1</sup> See Table 1.

The proportion of total cash farm receipts resulting from the sale of hogs ranged between 5.4 percent in 1963 and 9.0 percent in 1969. The average during 1963-72 was 7.1 percent.

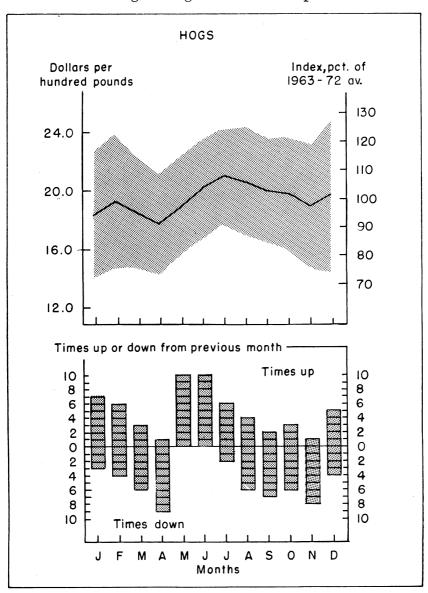


FIG. 3. Hogs: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

#### Calves

Prices of calves (under 1 year old) did not vary widely among seasons. The low was in November, 10 percent below the peak in March, Table 4 and Figure 4. The 10-year average prices for the months of May through August were remarkably close.

Although prices of calves did not exhibit wide seasonal changes, they were exceptionally variable from one year to the next. Annual average prices increased every year after 1964, with rate of increase exceeding 25 percent in 2 of the years. The increase averaged 11.7 percent annually between 1963 and 1972. The average index of irregularity was 28, the highest for any commodity.

The number of calves born in Alabama increased every year and was 22 percent greater in 1972 than in 1963.

Table 4.	Calves:	AVERAGE SEASONAL VARIATION OF ALABAMA
		FARM PRICES, 1963-72

		_	_			Mon	thly move	ment	
	Seas	onal aver	age¹	Nun	nber²	Times	Times	Times	
Month	Index of	Index of		of ti	mes	up from	down	same as	
<b>1.20</b>	variation	irreg- dollars ularity per cwt		High	Low	previous month	from previous month	previous month	
Jan	98	24	26.99	0	5	9	0	1	
Feb	103	26	28.34	1	0	9	1	0	
Mar	106	27	29.02	2	0	6	1	3	
Apr	104	24	28.45	2	0	5	5	0	
May		24	28.33	1	0	4	4 5	2	
June	101	27	27.74	1	0	4	5	1	
July	100	29	27.58	1	0	3	6	1	
Aug		29	27.41	0	0	4	6	0	
Sept.	97	31	26.77	0	1	2	7	1	
Oct		32	26.42	0	0	3	7	0	
Nov	96	34	26.30	1	1	5	5	0	
Dec	96	32	26.46	2	3	6	4	0	
Total Av		339 28	329.55 27.48	11	10	60	51	9	

<sup>&</sup>lt;sup>1</sup> Adjusted for trend.

<sup>&</sup>lt;sup>2</sup> See Table 1.

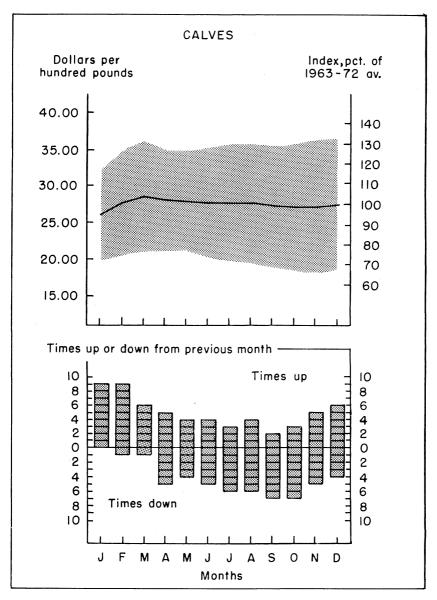


FIG. 4. Calves: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10 year average = 100).

#### **Beef Cattle**

Seasonal prices for beef cattle in Alabama reflect demands for and supplies of cattle to be placed on pastures or in feedlots. Prices were highest in April and lowest in November, Table 5 and Figure 5. Although the average January price was 4 percent higher than the average November price, the annual low occurred in January 4 times out of the 10 years. The January price rose above prices in December 9 times, and in October the price dropped from the September level 9 times.

There was a general rise in the price of beef cattle during the decade as increases were registered every year except 1963 and 1964. The average annual change was 9.5 percent. The average price of \$32.00 per hundredweight in 1972 was 74 percent above the 1963 average price.

Both production and slaughter of beef cattle underwent wide changes between 1963 and 1972. Beef cow numbers increased 37 percent between 1963 and 1972, while commercial cattle slaughter increased 58 percent.

Cash receipts from the sale of cattle and calves were 2.6 times

Table 5. Beef Cattle: Average Seasonal Variation of Alabama Farm Prices, 1963-72

						Mon	thly move	ment
-	Seas	onal aver	age¹		nber²	Times	Times	Times
Month	Index of	Index of	Price,	of ti	mes	up from	down	same as
	variation	irreg- ularity	dollars per cwt.	High	Low	previous month	from previous month	previous month
Jan	99	21	21.70	0	4	9	0	1
Feb	102	25	22.20	1	0	7	3	0
Mar	103	21	22.56	3	0	7	3	0
Apr	104	20	22.72	4	0	6	2 5	2
May	103	21	22.56	0	0	5	5	0
June	102	22	22.40	2	0	4	6	0
July	102	22	22.20	1	0	5	5	0
Aug		24	21.88	0	0	3	5	0
Sept.	98	24	21.42	0	0	2	7	1
Oct	95	26	20.86	0	2	1	9	0
Nov	95	27	20.82	0	$\overline{2}$	5	4	1
Dec	97	27	21.16	1	2	6	2	2
Total	1,200	283	262.48	12	10	60	53	7
Av	100	24	21.87					

<sup>&</sup>lt;sup>1</sup> Adjusted for trend.

<sup>&</sup>lt;sup>2</sup> See Table 1.

greater in 1972 than in 1963. The proportion of total cash farm receipts derived from the sale of cattle and calves increased from 13 percent in 1963 to 22 percent in 1972.

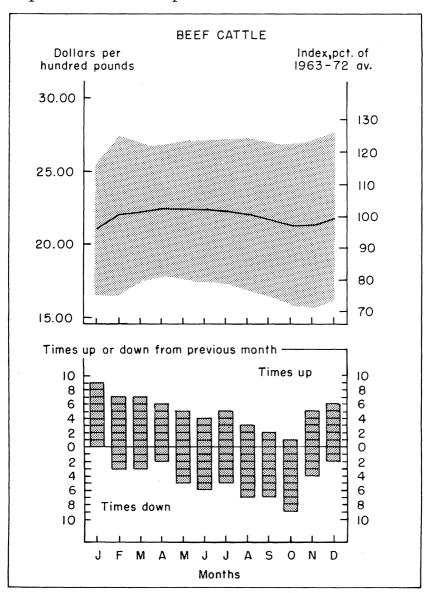


FIG. 5. Beef cattle: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

#### Milk

Monthly average prices for milk moved within a range of 8 percent from the low to the high. Prices were lowest in May and June and highest in November, Table 6 and Figure 6.

In all 10 years, prices rose above the level of the previous month in September and October and dropped in March and December from the previous month. The February price was down from the January price 8 times, and the April price was down from the March price in 9 of the 10 years.

Annual average prices rose each year except one; that year had a decrease of \$0.01 per hundredweight. Most increases were small, with the greatest between-year difference being 5 percent.

The proportion of total cash farm receipts accounted for by the sale of dairy products (largely fluid milk) was stable. The percentage varied between 6.4 and 7.5 and averaged 6.7 during the 10-year period. Production of milk decreased 4 percent between 1962 and 1969, but increased 7 percent between 1969 and 1972. A major reason for the relative stability in milk prices was that a state agency set the price at which milk could be sold.

Table 6. Milk: Average Seasonal Variation of Alabama Farm Prices, 1963-72

		_				Monthly movement				
Month .	Seasonal average  Index of Index of Price,			Number <sup>1</sup> of times		Times	Times down	Times same as		
Wolter	variation	irreg- ularity	dollars per cwt.	High	Low	previous month	from previous month	previous month		
Jan	101	10	6.50	0	0	6	1	3		
Feb	101	10	6.45	1	0	1	8	1		
Mar	99	10	6.34	0	1	0	10	0		
Apr	98	11	6.25	0	0	1	9	0		
May	97	11	6.21	0	5	0	5	5		
June	97	11	6.20	0	6	3	4	3		
July	98	10	6.26	0	1	7	0	3		
Aug	98	11	6.29	0	1	7	$^2$	1		
Sept.	101	11	6.50	0	0	10	0	0		
Oct	103	10	6.62	2	0	10	0	0		
Nov	104	9	6.69	9	0	8	1	1		
Dec	103	10	6.61	0	0	0	10	0		
Total	1,200	124	76.92	12	14	53	50	17		
Av	100	10	6.41							

<sup>&</sup>lt;sup>1</sup> See Table 1.

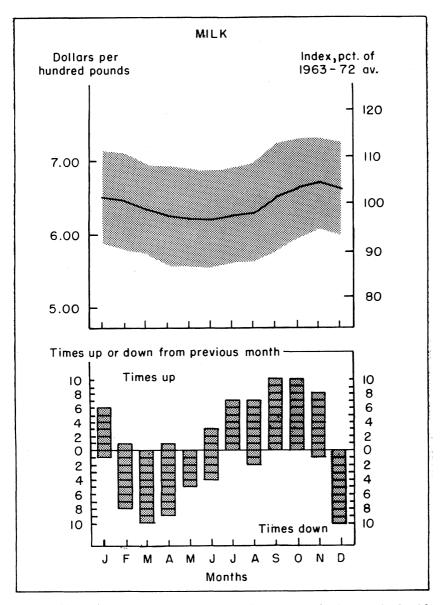


FIG. 6. Milk: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

#### **CROPS**

Total acreages and values of crops changed little between 1963 and 1972. However, significant changes occurred with individual crops. Acreages of cotton and corn harvested dropped 30 and 52 percent, respectively. Acres of soybeans harvested increased from 176,000 in 1963 to 800,000 in 1972. The 1972 acreage of soybeans exceeded that for any other crop.

Seasonal changes in prices of major crops were not as great as seasonal changes for livestock and livestock products. Major factors contributing to price stability were government programs and storeability of the crops.

#### Wheat

Average price for wheat was lower in June and July than in other months, Table 7 and Figure 7. Prices averaged the same for these months during the 1963-72 period. There was a gradual rise from July to the peak price in February. The most consistent price change was the decrease in May and June from the previous months. The 10 percent change from low to peak prices was about the same as occurred during the previous decade.

Table 7.	WHEAT:	AVERAGE	SEASONAL	VARIATION	OF.	Alabama
		FARM P	RICES, 1963	3-72		

	Sea	sonal aver	age			Mon	thly move	ment
Month	Index of variation	Index of irreg-ularity  Price, dollars per bushel		Number¹ of times High Low		Times up from previous month	Times down from previous month	Times same as previous month
Jan Feb Mar.	105 105 105	16 15 14	1.57 1.58 1.57	3 6 5	0 0 1	7 5 1	1 0 3	2 5 6
Apr May June	104 97	14 15 15	1.56 1.45 1.42	$\begin{matrix} 3 \\ 0 \\ 1 \end{matrix}$	0 3 2	3 0 0	2 9 9	5 1 1
July Aug. Sept.	95 96 97	14 15 14	1.42 1.44 1.46	0 0 0	3 3 3	3 3 5	4 4 2	3 3 3
Oct Nov Dec.	- •	15 15 17	1.48 1.50 1.55	0 2 3	2 2 2	3 6 4	1 2 0	6 2 6
Total		178 15	18.00 1.50	23	21	40	37	43

<sup>&</sup>lt;sup>1</sup> See Table 1.

Production of wheat in Alabama increased during the 1963-72 period. Most of the increase came after passage of the Food and Agricultural Act in 1965. Annual average production jumped

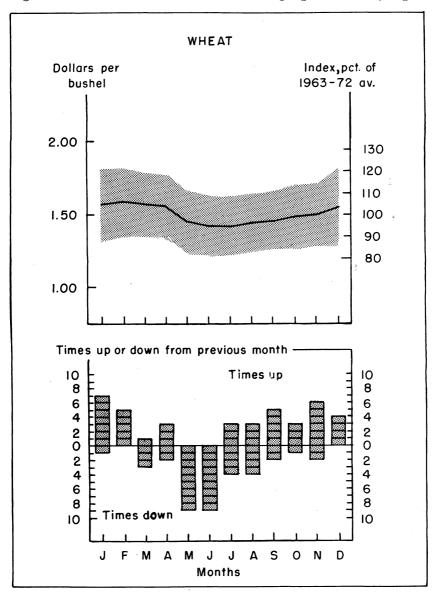


FIG. 7. Wheat: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

from 1.40 million bushels for the years 1963-66 to 2.65 million bushels for 1967-72, an increase of 89 percent. Fluctuations in wheat prices were greater after 1965 than in previous years.

#### Corn

Corn prices continued to follow the same seasonal pattern in 1963-72 as during the previous decade. The principal differences were that prices did not fall as low during the last quarter of the year, nor rise as much during the second quarter. Prices were lowest in October and November and highest in June and July, Table 8 and Figure 8. There was only a 11 percent change (\$0.14 per bushel) from the low to the high.

Annual average prices were relatively stable. The average price per bushel was \$1.35, which was \$0.01 higher than the average during the 1953-62 period.

Production of corn declined in Alabama even though this was a period when utilization was increasing. Annual average production was 37.8 million bushels during the first 5 years of the period, but dropped to 22.9 million bushels in the last 5 years. This represented approximately a 39 percent decrease in annual

Table 8.	Corn:	AVERAGE SEASONAL VARIATION	$\mathbf{OF}$	Alabama
		Farm Prices, 1963-72		

	Sea	sonal aver	age			Mon	thly move	ment
Month	Index of variation	Index of irreg- ularity	Price, dollars per bushel	of t	nber¹ imes Low	Times up from previous month	Times down from previous month	Times same as previous month
Jan	99	10	1.33	2	4	10	0	0
Feb	102	9	1.37	1	0	8	1	1
Mar	102	9	1.38	2	0	5	1	4
Apr		9	1.38	1	0	4	1	5
May		8	1.39	2	0	4	2	$\frac{4}{5}$
June	104	8	1.40	4	0	5	0	5
July	104	8	1.40	3	0	3	5	2
Aug		6	1.37	1	0	2	6	2 2
Sept	98	10	1.32	1	0	3	7	0
Oct	93	12	1.26	0	3	1	8	1
Nov	94	13	1.26	1	4	3	3	4
Dec	97	13	1.31	3	0	9	0	1
Total Av		115 10	16.17 1.35	21	11	57	34	29

<sup>&</sup>lt;sup>1</sup> See Table 1.

production. Acres of corn harvested in Alabama were exceeded by acres of another crop in 1970 for the first time since 1932. Acreage of cotton exceeded that of corn prior to 1932 but acreage

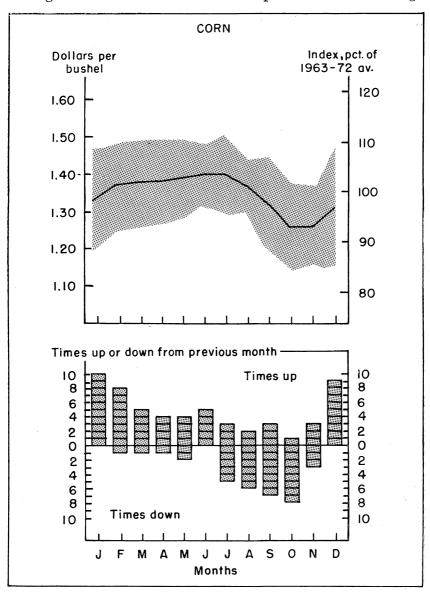


FIG. 8. Corn: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

of soybeans was greater in 1970. Although acreage of cropland devoted to its production was the second largest among crops, corn sales contributed less than 1.5 percent of cash farm receipts because of the large proportion that was fed on farms where produced.

# All Hay

Changes in prices of hay were gradual from one month to the next. The greatest change in average monthly price was between April and May when there was a drop of 4 percent, Table 9 and Figure 9. Lowest average prices were in July and August, but the annual low price occurred most often in September and October. In all 10 years, prices were lower in June than in May and November prices were higher than October prices. The highest average price was in March although the annual high occurred in December one more time than it did in March. The difference between the average low and high prices was 11 percent.

Annual average prices for hay remained relatively stable, with 10 percent being the maximum change between years. The range from low to high annual averages during the period was 21 per-

Table 9.	ALL	Hay	BALED:	Average	SEASONAL	VARIATION	$\mathbf{OF}$	Alabama
			FAR	M PRICES	, 1963-72			

		_				Mont	thly move	ment
Month	Seas Index of	sonal aver Index of	rage Price,		nber¹ mes	Times up from	Times down	Times
Wollen	variation	irreg- ularity	dollars per ton	High	Low	previous month	from previous month	same as previous month
Jan	104	6	28.17	1	0	7	1	2
Feb	105	7	28.46	3	0	6	2 5	2
Mar	106	8	28.69	3	0	5	5	0
Apr	103	6	27.80	0	0	1	9	0
May	99	7	26.88	0	0	1	7	2
June	96	6	25.99	0	2	0	10	0
July	95	6	25.88	0	2	3	4	3
Aug	95	7	25.85	0	3	4	5	1
Sept	96	7	25.98	0	<b>4</b>	5	4	1
Oct	98	8	26.45	0	4	5	2	3
Nov	100	7	27.06	0	0	10	0	0
Dec	103	7	27.84	4	0	8	1	1
Total Av		83 7	$325.05 \\ 27.09$	11	15	55	50	15

<sup>&</sup>lt;sup>1</sup> See Table 1.

cent. The average price of \$27.09 for the 1963-72 period was \$1.80 per ton higher than during the 1953-62 period.

Production of hay increased at a faster rate than the increase

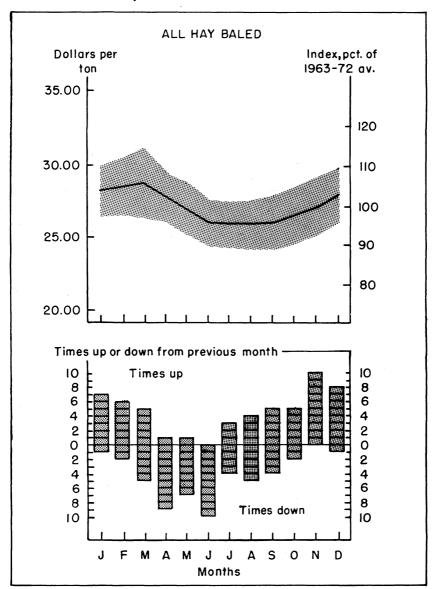


FIG. 9. All hay baled: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

in numbers of cattle and calves. This was particularly true during the last half of the 1963-72 period. Annual production of hay during 1968-72 averaged 7.7 percent greater than the annual average for the previous 5 years, while the comparable increase in number of cattle and calves was 4.3 percent.

#### Cotton Lint

Cotton prices followed the general pattern of reaching a low at the end of one harvest season and gradually rising until the next harvest began. The change was only 7 percent from low to high monthly average price, Table 10 and Figure 10. The July price was highest in 5 years, while the December price was lowest 6 out of 10 years. Decreases in October, November, and December were the most consistent seasonal price changes.

Cotton was among the commodities for which the level of price was affected by the Food and Agricultural Act of 1965. This legislation established a domestic price support level below the world market price. The result was a 29 percent drop in annual average price in just 1 year — from 30.14 cents per pound in 1965

Table 10. Cotton Lint: Average Seasonal Variation of Alabama Farm Prices, 1963-72

		_				Mont	hly move	ment²	
	Seasonal average			$Number^1$		Times	Times	Times	
Month	Index of	Index of irreg-	Price, cents per		imes	up from	$rac{ ext{down}}{ ext{from}}$	same as	
	variation	ularity	pound	rign	Low	previous month	previous month	previous month	
Jan	98	20	25.6	1	4	5	3	2 3	
Feb	99	21	25.7	1	1	6	1	3	
Mar	99	20	25.8	2	1	4	1	5	
Apr	101	19	26.4	2	0	7	0	3	
May	102	19	26.6	2	0	3	1	6	
June	101	20	26.4	2	0	5	2	2	
July	103	19	26.8	5	0	5	1	3	
Aug	99	17	25.7	0	0	2	5	2	
Sept.	102	15	26.7	1	0	6	3	0	
Oct		15	26.3	1	0	3	7	0	
Nov	99	15	25.8	0	1	2	8	0	
Dec	96	17	25.2	2	6	3	7	0	
Total	1,200	219	313.0	23	13	51	39	26	
Av	100	18	26.1						

<sup>&</sup>lt;sup>1</sup> See Table 1.

<sup>&</sup>lt;sup>2</sup> Totals for June, July, August, and September do not equal 10 because there was no price reported for June, July, and August in 1972.

to 21.54 cents in 1966. Annual average prices have been variable since 1965 in contrast to rather stable prices prior to that time. The change in annual prices after 1965 averaged 16.5 percent.

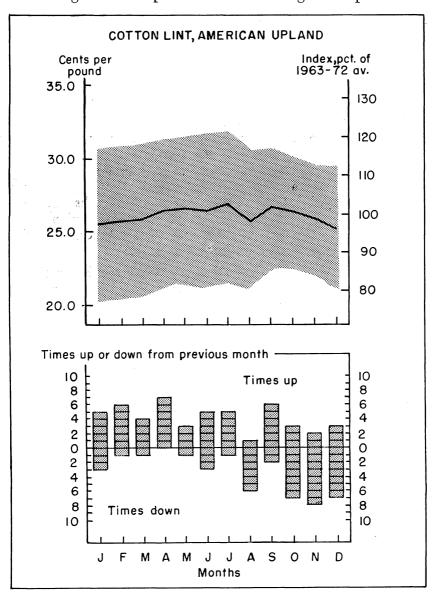


FIG. 10. Cotton lint, American upland: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

A reduction in national and state acreage allotments affected cotton production in Alabama. The reduction amounted to 28 percent for the State. This plus substantial increases in poultry and livestock production reduced the proportion of cash farm receipts derived from cotton from 24 percent in 1963 to 8 percent in 1972.

# Soybeans

There was relatively little change in average monthly prices for soybeans during the 1962-73 period. The greatest change was a 10 cents per bushel drop between December and January, Table 11 and Figure 11. Between March and July there was only a 2 cents per bushel fluctuation in average prices. July registered the annual high price in 3 out of the 10 years, and the high occurred at least once in 9 of the 12 months. The annual low occurred most often in January and November. The most consistent rises were in February and December, while the most consistent drops were in August and October.

Annual average prices fluctuated relatively more than monthly averages. The range was from 14 percent below to 37 percent above the 10-year average.

Table 11.	Soybeans:	AVERAGE SEASONAL VARIATION OF	F Alabama
		Farm Prices, 1963-72	

	Sea	sonal aver	age			Mon	thly move	ment
Month	Index of variation	Index of irreg-ularity	Price, dollars per bushel	of ti	nber¹ imes Low	Times up from previous month	Times down from previous month	Times same as previous month
Jan	98	8	2.64	0	4	5	1	4
Feb	100	7	2.69	2	0	8	0	4 2 5
Mar	101	8	2.72	2	0	4	1	5
Apr	101	9	2.73	2	0	4	3	3 <b>5</b> 3
May	101	10	2.72	2	0	3	2	5
June	101	10	2.72	0	0	2	5	3
July		10	2.74	3	1	4	5	1
Aug	100	10	2.71	1	0	2	7	$\frac{1}{5}$
Sept	99	11	2.68	1	0	0	5	5
Oct	98	11	2.66	0	2	3	6	1
Nov	99	13	2.67	1	3	5	$rac{4}{2}$	1
Dec	101	16	2.74	2	1	7	2	1
Total Av		$\frac{123}{10}$	$32.42 \\ 2.70$	16	11	47	41	32
***************************************								

<sup>&</sup>lt;sup>1</sup> See Table 1.

The increase in production of soybeans was one of the major changes in Alabama agriculture during the 1963-72 period. Production was increased in 7 of the 10 years. The 15.4 million

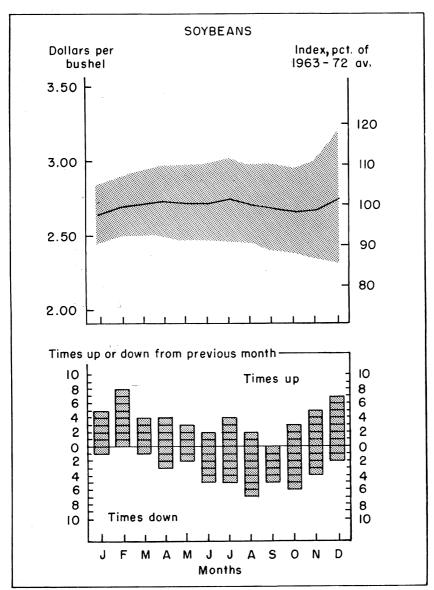


FIG. 11. Soybeans: Average monthly price and index number of prices received, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

bushel production in 1972 was 4 times greater than production in 1963. This boosted the proportion of cash farm receipts derived from the sale of soybeans from 1.8 percent in 1963 to 6.1 percent in 1973.

#### FEEDS PURCHASED

The quantity of processed feed used in Alabama increased as the livestock industry expanded. The value of feed used by farm operators in 1972 was almost double that used in 1963. Although feed milling facilities were expanded, they were not sufficient to mill the volumes of feeds needed.

Fluctuations in prices of processed feeds resemble those of prices of manufactured products. More effective control of factors affecting supply and demand for feeds have resulted in greater stability of seasonal prices than exists for raw farm products.

## Soybean Meal

Variations among average monthly prices for soybean meal were relatively small, Table 12 and Figure 12. The increase from the low in May and June to the high in December amounted to

TABLE	12.	Soybean	MEAL:	Average	Seasonal	VARIATION	OF	Alabama
			Fai	RM PRICES	. 1963-72			

		_				Mon	thly move	ment
	Seasonal average			Nun	$\mathrm{nber}^{\scriptscriptstyle{1}}$	Times	Times	Times
Month	Index of	Index of	Price,	of ti	imes	up from	$\operatorname{down}$	same as
	variation	irreg- ularity	dollars per cwt.	High	Low	previous month	from previous month	previous month
Jan	100	7	5.01	3	4	5	3	2
Feb	100	7	5.04	3	1	6	1	3
Mar	100	7	5.01	0	2	1	5	4
Apr	99	8	4.96	0	3	1	6	3
May	98	9	4.93	0	<b>4</b>	3	3	4
June	98	10	4.93	0	2	4	2	4
July	100	11	5.03	1	4	5	2	3
Aug	100	12	5.05	3	1	6	1	3
Sept	101	12	5.10	2	2	5	3	2
Oct	100	12	5.03	1	0	4	2	4
Nov	101	15	5.08	3	2	4	3	3
Dec	103	22	<b>5.</b> 18	3	2	4	3	3
Total Av		134 11	60.35 5.03	19	27	48	34	38

<sup>&</sup>lt;sup>1</sup> See Table 1.

only 5 percent. This difference was probably due to a relatively greater demand for meal to be used as feed in the winter months.

There was no one month when price was consistently highest

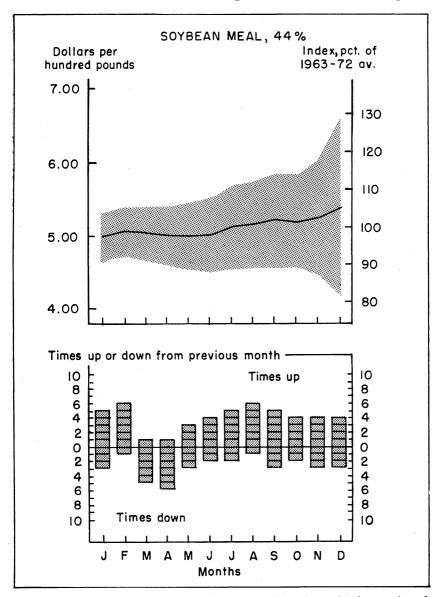


FIG. 12. Soybean meal, 44 percent: Average monthly price and index number of prices paid, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

or lowest. The most times that the annual high price occurred in a given month was three, while the low came in a given month four times. Price remained the same in consecutive months 38 times in the 120 months.

Annual average prices rose gradually between 1963 and 1971, but there was a sharp rise in 1972. The increase was 18 percent between 1971 and 1972, as compared with a 20 percent rise during the preceding 9 years (1963-71).

Demand for soybean meal as a protein supplement in feeds increased with expansion in poultry and livestock production. Although production of soybeans in the State quadrupled, processing facilities were not expanded to provide adequate supplies of meal. Thus, large quantities were shipped into Alabama.

#### Cottonseed Meal

Average prices of cottonseed meal remained relatively stable throughout the year, Table 13 and Figure 13. The difference between the low average price in June and the high average price in December was 4 percent. Although December prices averaged higher than September prices for the 10-year period, the price in September was high or equal to the high in 5 of the 10 years.

Table 13.	COTTONSEED	MEAL:	Average	SEASONAL	VARIATION	OF	Alabama
		FARM	PRICES,	1963-72			

		•	_			Mon	thly move	ment
Month	Seas Index of variation	index of irreg- ularity	Price, dollars	Num of ti High	mes	Times up from previous month	Times down from previous month	Times same as previous month
Jan	101 100 99 98 99 100 101 99 99	10 10 10 10 10 10 10 10 11 11 12 13 19	4.61 4.61 4.61 4.55 4.51 4.48 4.53 4.59 4.60 4.53 4.51 4.65	4 4 3 2 0 1 2 2 5 2 1 3	3 2 0 1 3 3 3 2 1 3 5 3	5 2 3 1 1 3 6 7 5 1 4 6	3 1 2 5 4 4 1 2 1 6 4	2 7 5 4 5 3 3 1 4 3 2 4
Total Av		$\frac{136}{11}$	$54.78 \\ 4.57$	29	29	44	33	43

<sup>&</sup>lt;sup>1</sup> Adjusted for trend.

<sup>&</sup>lt;sup>2</sup> See Table 1.

Price increased above the previous month most often in August, and decreased from the previous month most often in October.

The annual average price for cottonseed meal rose 34 percent

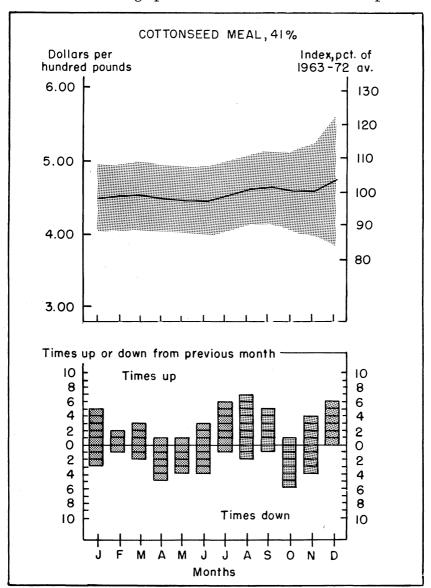


FIG. 13. Cottonseed meal, 41 percent: Average monthly price and index number of prices paid, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

during the 1963-72 period. The average change in annual average price was 6 percent.

A decrease in production of cotton in Alabama meant a decrease in the volume of cottonseed. Cash receipts from the sale of cottonseed were only two-thirds as great in 1972 as in 1962.

#### **Broiler Grower Ration**

A continuous demand for feed and adequate supplies of basic feed ingredients contributed to a relatively stable price for broiler grower ration. Average monthly price quotations showed a 4 percent variation within the season during the period 1963-72, Table 14 and Figure 14.

Prices paid for broiler grower feed were approximately 11 percent higher in 1972 than in 1963. Most of the increase occurred in 1970 and 1972.

Table 14. Broiler Grower Ration: Average Seasonal Variation of Alabama Farm Prices, 1963-72

		_				Mon	thly move	ment	
	Seasonal average Index of Price,			Number <sup>1</sup> of times		Times	Times down	Times	
Month	Index of variation	irreg- ularity	dollars per ton			up from previous month	from previous month	same as previous month	
Jan		4	88	1	3	5	2	2	
Feb		4	89	2	2	4	3	3	
Mar	100	3	89	1	2	1	3	6	
Apr		4	88	1	1	1	4	5	
May		4	88	0	3	4	$oldsymbol{4}$	2	
June	100	$oldsymbol{4}$	89	2	1	6	0	4	
July	100	5	89	1	2	$oldsymbol{4}$	5	1	
Aug	101	4	90	1	0	5	2	3	
Sept	101	5	90	4	3	5	4	1	
Oct	101	5	90	2	2	3	4	3	
Nov	100	6	89	1	1	2	5	3	
Dec	102	9	91	2	0	4	4	2	
Total Av	1,200 100	57 5	1,070 89	18	20	44	40	35 \	

<sup>&</sup>lt;sup>1</sup> See Table 1.

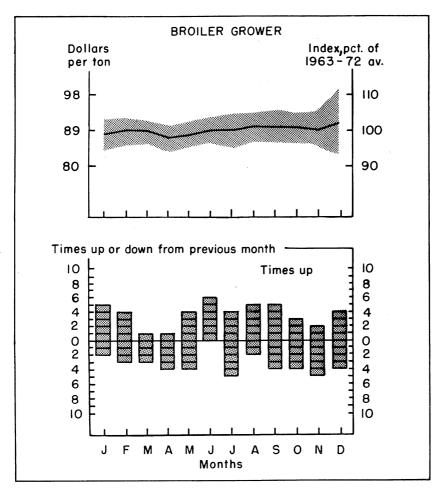


FIG. 14. Broiler grower: Average monthly price and index number of prices paid, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

# Mixed Dairy Feed

Prices of mixed dairy feed were relatively stable throughout the year, with only a 3 percent change from the low to the high monthly average price, Table 15 and Figure 15. In December the price rose above the November price in 9 of the 10 years, but the amount of change was small.

The annual average price in 1972 was about 18 percent higher than in 1963. The greatest single-year change was in 1971 when there was a 5 percent increase over the previous year.

Table 15. Mixed Dairy Feed: Average Seasonal Variation of Alabama Farm Prices, 1963-72

	_					Mon	thly move	ment
	Sea	sonal aver		Number		Times	Times	Times
$\mathbf{M}$ onth	${\rm Index}\ of$	Index of irreg-	Price, dollars		imes	up from	$\begin{array}{c} \operatorname{down} \\ \operatorname{from} \end{array}$	same as
	variation	ularity	per ton	High	Low	previous month	previous month	previous month
Jan	101	6	72	5	2	7	0	2
Feb	101	6	72	4	0	4	2	4
Mar	101	7	72	3	1	2	$oldsymbol{4}$	<b>4</b>
Apr	99	6	71	1	2	1	6	3
May	99	6	71	0	1	3	5	2
June	99	6	71	1	2	2	5	3
July	99	7	71	0	1	4	4	2
Aug		7	71	O	1	$oldsymbol{4}$	1	$\frac{2}{5}$
Sept	101	7	72	2	0	$oldsymbol{4}$	3	3
Oct	99	8	71	1	2	3	5	2
Nov	100	8	71	0	2	3	$oldsymbol{4}$	3
Dec	102	10	73	2	0	9	0	1
Total	1,200	84	858	19	14	46	39	34
Av	100	7	71.50					

<sup>&</sup>lt;sup>1</sup> See Table 1.

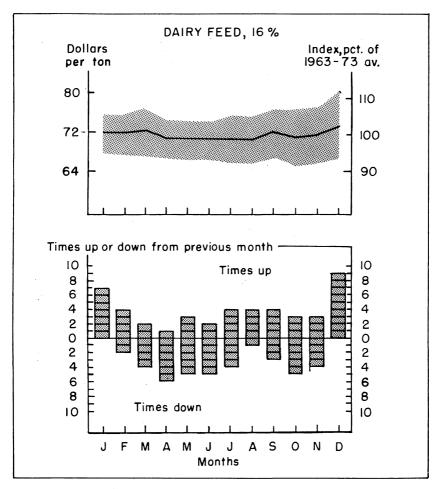


FIG. 15. Mixed dairy feed, 16 percent: Average monthly price and index number of prices paid, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

#### Layer Feed

Retail prices for layer feed were stable within years during the 1963-72 period and also showed only small changes between years. There was a \$2.00 per ton change from the low average prices in April and May to the high average in December, Table 16 and Figure 16. The greatest change in annual average prices was an 8 percent drop between 1967 and 1968. This change came during the second consecutive year of relatively low egg prices.

Table 16. Layer Feed: Average Seasonal Variation of Alabama Farm Prices, 1963-72

	_ •					Monthly movement		
Month	Seasonal average			Number <sup>1</sup>		Times	Times	Times
	Index of	Index of	Price,	of times		up from	down	same as
	variation	irreg- ularity	dollars per ton	High	Low	previous month	from previous month	previous month
Jan	100	4	85	3	4	4	3	2
Feb	100	4	85	2	1	5	1	$\frac{4}{5}$
Mar	100	3	85	2	0	1	4	5
Apr		4	84	1	3	2	4	4
May	99	3	84	2	2	3	3	4
June	100	3	<b>85</b>	1	2	3	1	6
July		4	85	1	1	5	2	3
Aug		$\frac{4}{5}$	85	0	0	4	4	2
Sept	100	5	85	4	1	6	4	0
Oct,		4	85	1	1	4	5	1
Nov		5	85	2	4	3	5	2
Dec	102	8	86	3	4	4	3	3
TOTAL	´- a a	51	1,019	22	23	44	39	36
Av	100	4	85					

<sup>&</sup>lt;sup>1</sup> See Table 1.

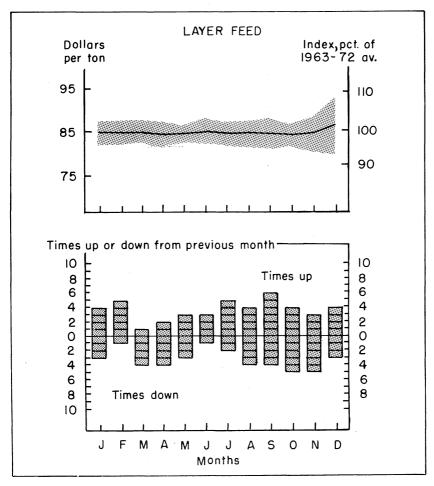


FIG. 16. Layer feed: Average monthly price and index number of prices paid, with area of ranges and change in price from previous month, Alabama, 1963-72 (10-year average = 100).

## CHANGES IN SEASONAL PRICE PATTERNS BETWEEN 1953-62 AND 1963-72

Seasonal price patterns do change, and knowledge of these changes is part of the value of seasonal price information. Changes in price patterns may be brought about by the development and adoption of new varieties and technology, which result in changes in production and marketing practices. Seasonal changes may also be affected by revisions in government programs.

The seasonal patterns that existed during 1953-62 were compared with those during 1963-72 for 11 farm commodities sold by Alabama farmers, Figure 17. Within-year changes averaged less for five commodities and greater for two commodities in

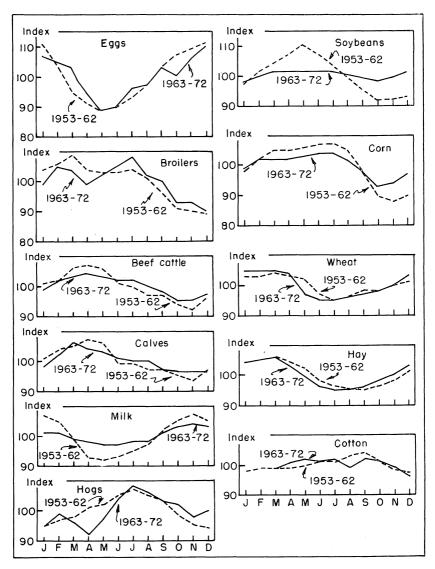


FIG. 17. Comparison of seasonal price patterns for selected poultry products, livestock and products, and crops, Alabama (1953-62 and 1963-72 = 100).

the 1963-72 period than in 1953-62. For four commodities the changes were the same during the two periods.

In addition to the amount of yearly change, there were important differences in individual monthly averages. Prices for some commodities reached the peak or low point during different months in the two periods. For example, the average monthly low price for hogs was in December during 1953-62 and in April during 1963-72. Egg prices rose in October in 8 of the 10 years during the earlier period, but they dropped in October in 8 of the 10 years during the later period. The commodity for which the seasonal pattern changed most was soybeans. There was only a 4 percent difference in the high and low average monthly prices for soybeans in the 1963-72 period, while the difference was 19 percent in the 1953-62 period.

# LEVELS AND FLUCTUATIONS IN ALABAMA FARM COMMODITY PRICES IN 1973 AND 1974

Any explanation of changes that occurred in farm prices in 1973 and 1974 must take into consideration events that happened in the immediately preceding years. Passage of the Food and Agricultural Act in 1965 set in motion forces to reduce inventories of food and feed grains. This was done in two ways. First, exporters of grain were encouraged to sell as much grain as possible in foreign markets, receiving an export subsidy as an incentive. Second, provisions of the Act discouraged producers from adding to inventories of grain by lowering the Commodity Credit Corporation (CCC) loan rate and making direct payments to agricultural producers. The combination of encouraging sales and discouraging additions to inventories resulted in the United States having small volumes of food and feed grains in reserve by 1971.

Supplies were limited when, in 1972, there was a short crop of food grains world wide. This provided the opportunity for exporters of food grains to make large-volume sales, and having been encouraged for several years to sell in foreign markets, they made the sales. Following drought conditions that reduced yield in 1972, United States grain farmers were faced with an unusually wet spring in 1973 that hampered planting operations to reduce size of that year's crop. During this time there were two devaluations of the dollar. The purchasing power of those coun-

tries that had dollars was increased, which resulted in their placing orders for more U.S. grain. The combination of these events, all happening within a relatively short period and occurring at a time when U.S. inventories were low, put much upward pressure on prices.

Sales of grains and soybeans to foreign markets disturbed the balance in the Nation's grain and livestock industries. The effects of these developments were reflected 2 years later in a relatively small number of hogs and a relatively large number of beef cattle needing to be placed in feedlots.

#### Livestock and Livestock Products

Prices for livestock and livestock products, except milk, rose to record peaks in 1973, Table 17 and Figure 18. Annual average

Table 17.	LIVESTOCK AND	Livestock	PRODUCTS:	Average Mid-Month
	FARM PRICES,	Alabama,	1974, 1973,	1963-72

	Eggs, cents/doz.			Broi	lers, cen	ts/lb	Hogs, dollars/cwt.		
Month ·								1973	1963-72
	1974	1973	1963-72	1974	1973	1963-72	1974		
Jan		49.0	43.0	21.0	16.5	13.2	39.50	29.90	18.39
Feb		41.0	41.7	22.0	18.5	14.0	39.80	32.70	19.25
Mar		48.0	41.5	21.0	22.5	13.8	35.80	36.30	18.52
Apr		46.0	38.0	19.5	25.5	13.2	30.30	34.70	17.70
May		45.0	35.6	18.5	23.5	13.6	27.20	34.10	18.84
June		54.2	36.2	17.0	24.0	13.9	24.20	36.60	20.08
July	44.5	50.8	38.7	19.0	26.0	14.4	34.00	39.40	20.90
Aug		73.4	38.9	19.0	36.0	13.6	34.90	55.90	20.54
Sept		67.0	41.5	21.5	30.0	13.3	34.00	42.30	19.97
Oct		62.1	40.1	21.0	24.0	12.4	36.70	40.70	19.71
Nov		59.3	42.4	23.0	17.0	12.4	36.80	41.00	18.91
Dec		67.1	44.3	22.0	18.6	11.9	38.20	38.70	19.38
Av	52.8	55.2	40.2	20.3	23.5	13.3	34.28	38.53	19.35
	Calve	s, dolla	rs/cwt.	Beef cattle, dollars/cwt.			Milk, dollars/cwt.		
	1974	1973	1963-72	1974	1973	1963-72	1974	1973	1963-72
Jan	50.10	49.90	26.99	40.60	35.90	21.70	9.75	7.40	6.50
Feb		54.50	28.34	40.70	39.00		9.85	7.90	6.45
Mar	44.80	63.40	29.02	37.50	43.10	22.56	10.20	7.75	6.34
Apr	41.50	56.90	28.45	35.40	31.60	22.72	10.30	7.70	6.25
May		57.40	28.33	33.60	42.50		10.00	7.75	6.21
June	31.80	54.20	27.74	28.70	42.60	22.40	9.85	7.85	6.20
July	27.00	57.60	27.58	27.60	43.10	22.20	10.00	8.10	6.26
Aug		65.40	27.41	26.20	50.00		10.00	8.25	6.29
Sept	23.70	56.60	26.77	25.20	44.90	21.42	10.00	9.10	6.50
Oct		52.30	26.42	21.00	40.80		10.30	9.70	6.62
Nov		45.40	26.30	18.70	35.90	20.82	10.30	9.75	6.69
Dec		45.00	26.46	20.50	36.20	21.16	10.20	9.75	6.61
Av	32.78	54.89	27.48	29.64	40.47	21.87	10.05	8.42	6.41

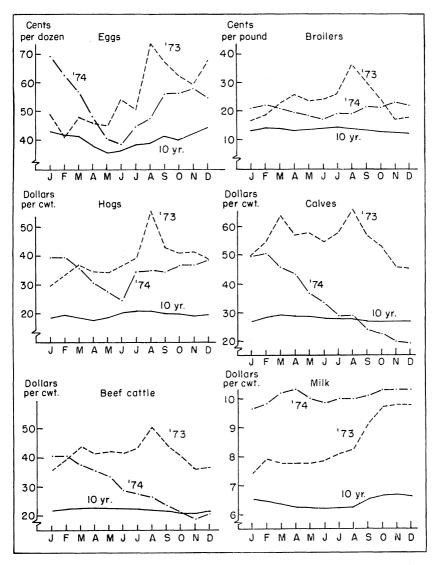


FIG. 18. Livestock and livestock products: Average mid-month farm prices, Alabama, 1974, 1973, and 1963-72.

prices received by producers for calves and hogs were almost double the 10-year average price, Figure 19. Beef cattle prices were 85 percent and broiler prices 77 percent above the 10-year average. Prices during some individual months reached much higher levels.

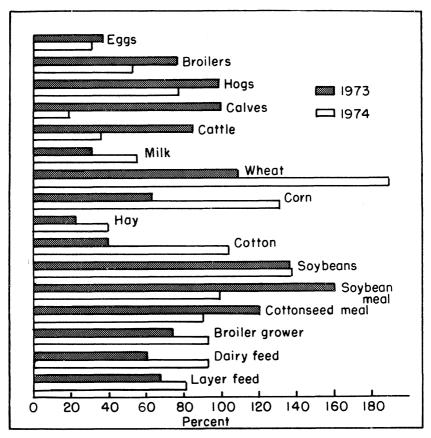


FIG. 19. Percentage that average 1973 and 1974 farm prices were above the 1963-72 average.

Following the peak prices of August 1973, prices began to decline and although lower in 1974 than in 1973, they remained much above the 10-year average for 1963-72. With these high prices, fluctuations from one month to the next were greater than when prices were at a low level. For example, the average between-month change in price in 1973 was 16 percent for broilers and 12 percent for beef cattle. These changes compare with 3.6 percent and 1.3 percent, respectively, for the same commodities over the 10-year period. Fluctuations of this magnitude are significant in that buyers, processors, and handlers of these commodities encounter much difficulty in attempting to plan for the future.

#### Crops

Prices for major crops rose in 1973, and continued to rise in 1974, Table 18 and Figure 20. The lone exception was soybeans. Prices of all major crops in 1974 were more than double the 10-year average price. As was the case with livestock and products, the average price change among months was great during both years. This fluctuation among months was generally greater in 1973 than in 1974.

Table 18. Selected Crops: Average Mid-Month Farm Prices, Alabama, 1974, 1973, and 1963-72

Month	Wheat, dollars/bu			Corr	ı, dollar	s/bu	All hay, dollars/ton		
Month	1974	1973	1963-72	1974	1973	1963-72	1974	1973	1963-72
Jan Feb Mar	5.10 5.40 5.00	$2.10 \\ 2.05 \\ 2.10$	1.57 1.58 1.57	2.83 3.03 3.04	$1.65 \\ 1.70 \\ 1.70$	1.33 1.37 1.38	35.00 35.00 34.00	33.50 33.50 34.50	28.17 28.46 28.69
Apr May June	$\frac{4.00}{3.25}$	2.15 2.23 2.50	1.56 1.45 1.42	2.80 2.60 2.75	1.75 1.86 2.34	1.38 1.39 1.40	34.50 34.00 36.00	32.00 32.00 32.00	27.80 26.88 25.99
July Aug Sept	$\frac{4.00}{4.25}$	2.56 4.25 4.40	1.42 1.44 1.46	3.00 3.50 3.40	2.34 3.00 2.51	1.40 1.37 1.32	37.00 38.50 40.50	32.00 33.00 33.00	25.88 25.85 25.98
Oct Nov Dec	$4.60 \\ 4.55 \\ 4.15$	4.30 4.30 4.60 3.13	1.48 1.50 1.55 1.50	3.45 3.50 3.50 3.12	2.41 2.45 2.67 2.20	1.26 1.26 1.31 1.35	41.00 43.50 44.50 37.79	31.50 34.00 35.00 33.00	26.45 27.06 27.84 27.09
	Cotton, cents/lb.					lars/bu.	• • • • • • • • • • • • • • • • • • • •		
	1974	1973	1963-72	1974	1973	1963-72			
Jan Feb Mar	65.0	29.5 29.0 31.0	25.6 25.7 25.8	5.85 6.05 6.00	3.95 5.30 5.90	2.64 2.69 2.72			
Apr May June		29.0 33.0	$26.4 \\ 26.6 \\ 26.4$	5.30 5.30 5.25	5.95 7.65 9.30	2.73 2.72 2.72			
July Aug Sept		54.5	26.8 25.7 26.7	5.90 7.50 7.30	7.50 8.00 6.25	2.74 $2.71$ $2.68$			
Oct Nov Dec Av	47.0 50.0 43.0	41.5 41.0 39.5 36.4	26.3 25.8 25.2 26.1	8.20 7.40 6.90 6.41	5.80 5.15 5.60 6.36	2.66 2.67 2.74 2.70			

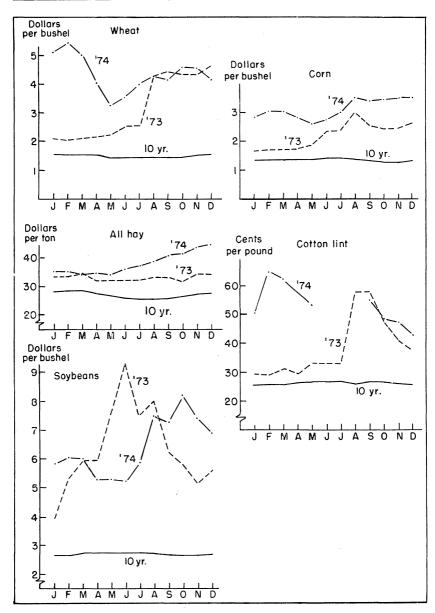


FIG. 20. Selected crops: Average mid-month farm prices, Alabama, 1974, 1973, and 1963-72.

#### **Purchased Feeds**

Prices of feed ingredients — soybean meal and cottonseed meal — rose rapidly in 1973, Table 19 and Figure 21. While dropping below these levels in 1974, prices of feed ingredients continued at almost 100 percent above the 10-year average. Mixed feed prices rose in 1973, but did not reach their highest level until 1974. Fluctuations from one month to the next increased tremendously. Whereas there was normally less than a 1 percent change among months, fluctuations in soybean meal prices approached 13 percent per month in 1973. Percentage changes in prices of these commodities among months continued to move through wide ranges.

Starting in 1972 there were many developments both inside

Table 19. Feed Purchased: Average Mid-Month Prices Paid by Farmers, Alabama, 1974, 1973, and 1963-72

	Г	ARMERS	, ALABAN	AA, 191	4, 1970	o, AND I	703-14			
Month		Soybean meal, dollars/cwt.			Cottonseed meal, dollars/cwt.			Broiler grower, dollars/ton		
	1974	1973	1963-72	1974	1973	1963-72	1974	1973	1963-72	
Jan Feb Mar.	11.50	9.70 $11.00$ $12.50$	5.01 5.04 5.01	$\begin{array}{c} 10.50 \\ 9.80 \\ 8.70 \end{array}$	8.00 8.40 9.10	4.61 4.61 4.61	175 179 170	$120 \\ 125 \\ 132$	88 89 89	
Apr May June	9.00	12.00 $12.50$ $17.00$	4.96 4.93 4.93	$7.70 \\ 6.70 \\ 6.60$	8.60 $9.40$ $11.00$	4.55 $4.51$ $4.48$	161 148 155	131 155 173	88 88 89	
July Aug Sept	10.50	17.00 17.50 13.50	5.03 5.05 5.10	7.30 9.70 9.30	11.00 $11.50$ $11.50$	4.53 4.59 4.60	$161 \\ 191 \\ 172$	164 182 176	89 90 90	
Oct Nov Dec Av	10.00	13.50 10.00 11.00 13.10	5.03 5.08 5.18 5.03	9.50 9.30 9.40 8.70	11.00 10.50 10.50 10.04	4.53 4.51 4.65 4.57	185 184 178 172	170 163 165 155	90 89 91 89	
		Mixed dairy feed, Layer feed, dollars/ton dollars/ton								
	1974	1973	1963-72	1974	1973	1963-72				
Jan Feb Mar	. 135	100 100 106	72 72 72	152 154 154	113 116 124	85 85 85				
Apr May June	125	$101 \\ 108 \\ 115$	71 71 71	145 132 138	$122 \\ 140 \\ 158$	84 84 85				
July Aug Sept.	. 152 . 147	115 130 119	$71 \\ 71 \\ 72$	$142 \\ 174 \\ 161$	151 179 159	85 85 85	ı			
Oct Nov Dec Av	. 150 . 151	124 123 134 115	71 71 73 72	168 169 163 154	153 146 148 142	85 85 86 85				

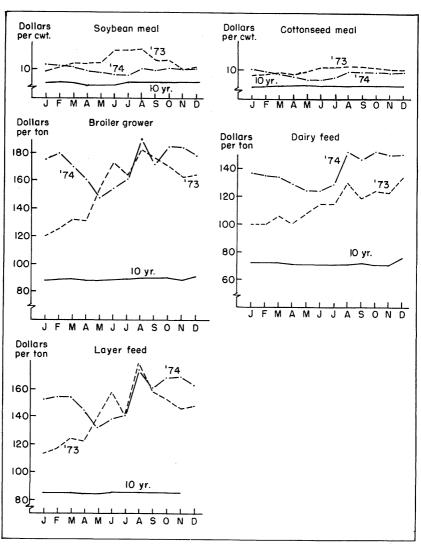


FIG. 21. Feeds purchased: Average mid-month prices paid by farmers, Alabama, 1974, 1973, and 1963-72.

and outside of agriculture that created new problems and intensified existing ones for the industry. Being a primary industry producing mainly raw materials, agriculture is exposed to the effects of economic changes ahead of and to a greater degree than are service industries. Adjustments to compensate for rapid economic developments are difficult to make because of the biological nature of agricultural production. Therefore, imbalances occur between agriculture and nonagricultural sectors, as well as within agriculture, which may result in alternating periods of good profits and great losses. The magnitudes of profits and losses are greater at high levels of costs and prices.

Operators of agricultural producing units are continuing to purchase an increasing proportion of resources used. The probability that prices paid for productive resources (machinery, labor, fertilizer, etc.) will not fall, and likely will rise, is supported by demands of unions, the government's support of minimum wages, and other expenditures of Federal funds. In the absence of some program to bring about stability, increased production costs will result in higher and more variable product prices similar to those experienced in 1973 and 1974. Capital requirements will be great and conditions will provide an opportunity for vertically organized firms using contracts to control an increasing proportion of agricultural production.

#### SUMMARY

Indexes of seasonal variation of prices for 11 commodities sold and 5 products purchased by Alabama farmers were calculated for the 10-year period, 1963-72. Mid-month prices received and paid by farmers in Alabama, as reported by the Alabama Crop and Livestock Reporting Service, U.S. Department of Agriculture, were used in all calculations. The overall general trend in seasonal variation during 1963-72 was toward reducing or stabilizing the amount of seasonal change in prices of farm commodities (see table below).

Commodity	Percentage increase from mont of lowest to month of highest average price			
	1953-72	1963-72		
Eggs	24.1	24.4		
Broilers	22.4	21.0		
Hogs	14.0	18.1		
Calves	14.6	10.3		
Beef cattle	16.3	9.1		
Milk	15.8	7.9		
Wheat	9.4	11.3		
Corn	21.5	11.1		
Hay	11.7	11.0		
Cotton lint	7.2	6.3		
Soybeans	19.2	3.8		
Soybean meal	6.3	5.1		
Cottonseed meal	8.5	3.8		
Broiler grower ration	3.7	3.4		
Dairy feed	2.7	2.8		
Layer feed	3.7	2.4		

The amount of seasonal variation increased for two commodities, hogs and wheat, but decreased or remained approximately the same for nine commodities sold and five products purchased. Reductions in seasonal changes were greatest for soybeans and corn.

Adjustments in farm production and marketing operations made on the basis of historical seasonal price patterns do not guarantee increased profits. Seasonal prices result from the forces of supply and demand (and sometimes influence of governmental action) peculiar to a given season and product. The material presented in the tables and charts should serve as guides in planning farm operations.

The information can be most helpful when used along with current data available on production and marketing for each particular commodity, as events that occurred in 1973 and 1974 clearly demonstrated.

#### **APPENDIX**

Average prices for 11 farm commodities that could be sold throughout the year are compared for the 1953-62, 1963-72, and 1973-74 periods in Appendix Table 1.

Prices increased for seven commodities and decreased for four commodities between the two 10-year periods. The increases can be explained partially by changes in demand. Consumer demands for livestock, livestock products, and soybean products increased. The drop in per capita consumption of eggs is probably reflected in the lower average price of eggs. Broiler prices decreased despite an increase in per capita consumption, at least partially because of increased efficiency in production and marketing. A change in Federal farm programs was a major factor in the price decrease for wheat and cotton.

In addition to changes in the level of annual average prices, there were changes in the variability of monthly prices for some commodities, Appendix Table 2.

Commodities for which price variability was reduced most were broilers and corn. Variability increased most often for cotton and wheat. For commodities such as soybeans, variability increased in some months and decreased in others. There was very little change in variability of prices for livestock.

Appendix Table 1. Average Prices Received by Farmers and Percentage Changes in Price, Eleven Commodities, Alabama, 1953-62, 1963-72, and 1973-74

		Α	verage pric	Percentage change		
Commodity	Unit	1953-62			1953-62- 1963-72	1963-72- 1973-74
Eggs	doz,	44.3¢	40.2¢	54.0¢	<b>—</b> 9.3	+34.3
Broilers	lb.	$18.8  \phi$	13.3¢	$21.9^{\phi}$	-29.3	+64.7
Hogs	cwt.	\$17.12	\$19.35	\$36.40	+13.0	+88.1
Calves	ewt.	\$18.69	\$27.48	\$43.84	+47.0	+59.5
Beef cattle	cwt.	\$15.45	\$21.87	\$35.06	+41.6	+60.3
Milk	cwt.	\$ 5.46	\$ 6.41	\$ 9.24	+17.4	+44.1
Wheat	bu.	\$ 1.86	\$ 1.50	\$ 3.73	-19.4	+148.7
Corn	bu.	\$ 1.34	\$ 1.35	\$ 2.66	+ 0.7	+97.0
Hay	ton	\$25.29	\$27.09	\$35.40	+ 7.1	+30.7
Cotton	lb.	$32.84^{\circ}$	26.08¢	44.80¢	-20.6	+71.8
Sovbeans	bu.	\$ 2.32	\$ 2.70	\$ 6.38	+16.4	+136.3

Appendix Table 2. Monthly Indexes of Irregularity, Eleven Farm Commodities, Alabama, 1953-62 and 1963-72

Month	Εş	ggs	Bro	ilers	Hogs		
	1953-62	1963-72	1953-62	1963-72	1953-62	1963-72	
January	12	14	22	8	20	24	
February	8	12	20	7	19	24	
March	8	.10	<b>2</b> 3	8	20	21	
April	8	11	26	9	19	20	
May	10	9	26	9	20	19	
June	11	8	27	9	18	17	
July	10	10	27	8	18	16	
August	10	. 9	29	9	15	18	
September	10	11	28	7	15	18	
October		11	28	9	14	20	
November		11	26	9	15	22	
December	13	12	19	10	18	27	
	Calves		$\mathbf{Beef}$	cattle	Milk		
	1953-62	1963-72	1953-62	1963-72	1953-62	1963-72	
January	23	24	23	21	4	10	
February		26	21	25	4	10	
March	22	27	21	21	6	10	
April	23	24	22	20	5	11	
May	22	24	22	21	6	11	
June	25	27	25	22	6	11	
July	25	29	25	22	6	10	
August	26	29	25	24	4	11	
			25	24	3	11	
September	27	31	27	24	3	11	
		31 32	27 26	24 26	2	10	
September	27				_		

Continued

Appendix Table 2 ( $Cont^{\prime}d$ .). Monthly Indexes of Irregularity, Eleven Farm Commodities, Alabama, 1953-62 and 1963-72

Month	Wł	neat	Co	orn	Hay		
	1953-62	1963-72	1953-62	1963-72	1953-62	1963-72	
January	7	16	21	10	11	6	
February	7	15	19	9	12	7	
March	7	14	.18	9	12	8	
April	7	14	17	9	13	6	
May	6	15	17	8	13	7	
June		15	17	6	8	6	
July	3	14	17	8	8	6	
August	4	15	15	6	7	7	
September	4	14	14	10	8	7	
October	5	15	14	12	10	8	
November	4	15	14	13	10	7	
December	5	17	13	13	9	7	
	Cot	tton	Soybeans				
	1953-62	1963-72	1953-62	1963-72			
January	5	20	12	8			
February		21	12	7			
March	4	20	13	8			
April	4	19	13	9			
May	3	19	14	10			
June	3	20	13	10			
July	3	19	13	10			
August	2 3	17	9	10			
September	3	15	9	.11			
October	5	15	8	11			
November		$\overline{15}$	13	13			
December	6	17	12	16			

# Alabama's Agricultural Experiment Station System AUBURN UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, livestock, forestry, and horticultural producers in each region in Alabama. Every citizen of the State has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



### Research Unit Identification



## Main Agricultural Experiment Station, Auburn.

- Tennessee Valley Substation, Belle Mina.
   Sand Mountain Substation, Crossville.
- 3. North Alabama Horticulture Substation, Cullman. 4. Upper Coastal Plain Substation, Winfield.
- 5. Forestry Unit, Fayette County.
- 6. Thorsby Foundation Seed Stocks Farm, Thorsby.
- 7. Chilton Area Horticulture Substation, Clanton.

- 7. Chilton Area Horticulture Substation, Cla
  8. Forestry Unit, Coosa County.
  9. Piedmont Substation, Camp Hill.
  10. Plant Breeding Unit, Tallassee.
  11. Forestry Unit, Autauga County.
  12. Prattville Experiment Field, Prattville.
  13. Black Belt Substation, Marion Junction.
  14. Tuskegee Experiment Field, Tuskegee.
  15. Lower Coastal Plain Substation, Camden.
  16. Forestry, Unit. Barbour, County.

- 16. Forestry Unit, Barbour County.17. Monroeville Experiment Field, Monroeville.
- Wiregrass Substation, Headland.
   Brewton Experiment Field, Brewton.
- 20. Ornamental Horticulture Field Station, Spring Hill.
- 21. Gulf Coast Substation, Fairhope.