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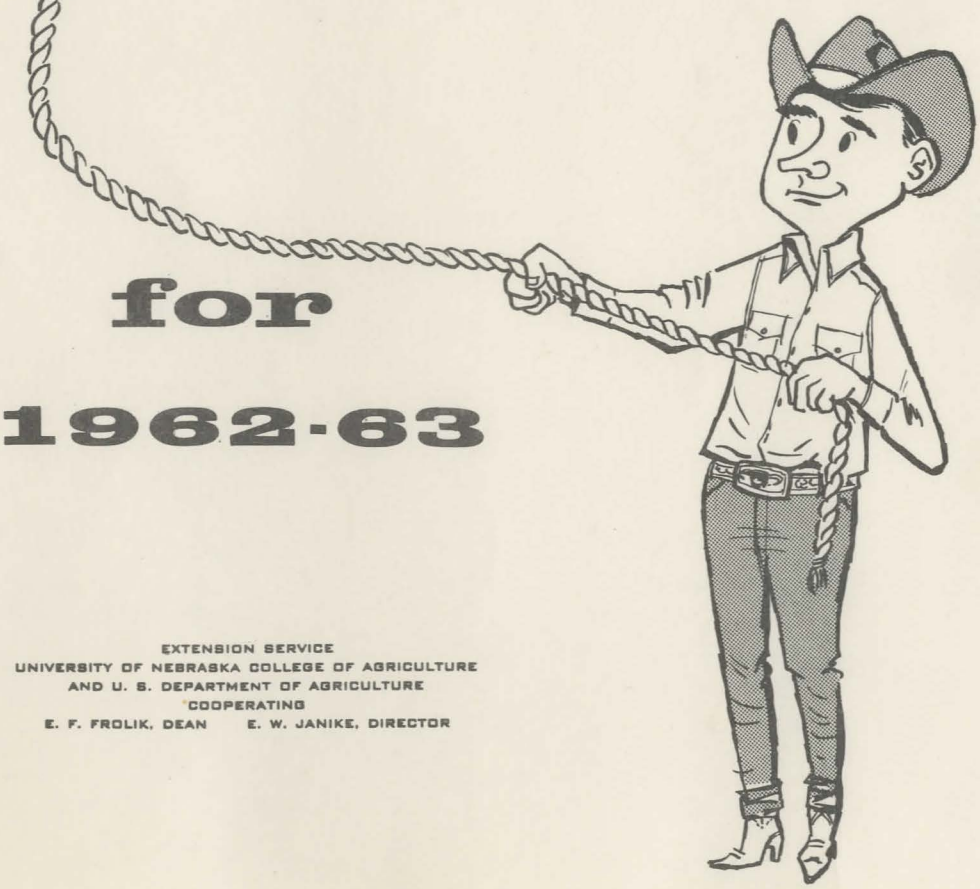

for 1962-63

EXTENSION SERVICE
UNIVERSITY OF NEBRASKA COLLEGE OF AGRICULTURE
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NEBRASKA LIVESTOCK AND FEED ROUNDUP FOR 1962-1963 1/

THE BUSINESS OUTLOOK FOR 1962-63

Our economy is not running at full capacity. The outlook depends on government action that may be taken later this year with regard to the level of taxation and/or outlay. With no government action the level of economic activity will continue to rise slowly as it has the past year. But, because of about a 1 3/4 percent increase in population, the increase in activity would provide little or no increase in real income per person.

The economic indicators for future activity are unclear. Unemployment is still high, about 5 1/3 percent of the labor force. The labor force has remained constant during this period but cannot be expected to remain constant very long. With a moderate increase in the labor force and counter-cyclical government action, unemployment in 1963 should remain a little below four million.

Another economic indicator is the order-sales ratio. During the past six months this ratio has been declining due mostly to the impact of low steel orders. This is a fair indicator of production as a percent of capacity the following six months and plant and equipment expenditures another six months later. Thus, while plant and equipment expenditures have been increasing this year, they can be expected to remain stable or decline somewhat during the first half of 1963.

Federal Government's 1962-63 budgeted purchases of goods and services is higher than a year earlier; and while revenues are expected to be higher, the deficit is expected to increase. State and local government also have the trend of more expenditures for goods and services and also a continued deficit. This government activity and the counter-cyclical action that can be taken will support general economic activity and prevent any sharp break.

Housing construction has been at a high level with a high proportion (30 percent) being multiple dwelling units. These multiple dwelling units are being built in face of high vacancy rates because of tax write-offs. This high rate of housing construction is not expected to continue. FHA mortgage interest has continued a slight decline from 1960 but is expected to remain stable for the coming year.

Gross National Product is expected to increase slowly, about as fast as population increases plus a small price rise. Disposable personal income during the first half of 1963 will increase in total but not per capita. Consumer expenditures may increase a smaller percent because of a higher level of saving.

The sluggish projection of our economy for the coming year is based on no change in the presently planned level of taxation or government outlay for goods and services. Counter-cyclical government activity would increase disposable consumer income, demand, employment and the demand for most livestock products.

Agricultural Income

The alternative government counter-cyclical policies will have little effect on the domestic market for farm products. Returns to farmers will depend to a large extent on agricultural policy, farm output, and accompanying prices for farm products.

In recent years a 10 percent increase in consumer income has been accompanied by

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1/ Prepared by Fred Olson, Phil Henderson, E. E. Peterson, Extension Economists; and Paul Guyer and Ted Doane, Extension Animal Husbandmen.

about a 9 percent increase in retail expenditures for food. Nearly all of any increase in the retail expenditures for food has been taken up by the marketing bill with little or no increase in the farm value.

Gross farm income for 1962 will show a modest gain over '61. This modest gain will be largely offset by rising production expenses leaving realized net incomes of farm operators about the same as '61. With existing farm programs and prospective trends in economic activity for 1963, we may do well to maintain farm incomes around 1962 levels.

Exports of farm products during 1962-63 probably will be less than last year. Wheat exports may total 100 million bushels less than the 715 million in 1961-62. Soybean exports will probably just hold its own this year. Exports of farm products equal about 15 to 16 percent of farm output. Export programs continue to assist nearly half of agricultural exports.

Farm output this year, according to earlier indications, is down about 1 percent from last year. Such a decline, mostly in grains, will result in a further reduction in carryover stocks of wheat and feed grains.

The per capita consumption of food is very stable, increasing slightly slower than the increase in population. This stability in total consumption has masked fairly pronounced changes in the diet. Among the livestock products, which are normally responsive to income and price changes, declines in per capita consumption of dairy products, eggs and pork in recent years have offset increases in per capita consumption of beef and poultry.

Meat consumption per person this year will be about the same as last year; the same amount of beef and veal, more pork and less lamb. Poultry consumption will be down two pounds from the almost thirty-eight pounds consumed per person in 1961. The output and consumption of red and poultry meat next year is expected to increase some from 1962. The downward drift in per capita consumption of dairy products and eggs will likely continue into 1963.

Credit Availability

The availability and cost of credit to livestock producers is determined by general business conditions in the economy as a whole and by the profit outlook for livestock enterprises. Technological advances are being applied to livestock production as well as to crops and create a need for more capital per farm and better managerial ability.

For 1962-63 credit availability and terms are expected to be as favorable as in the past two years. Efficiently-operated, well-managed livestock farms and ranches will experience little difficulty in obtaining adequate financing for 1962-63. Operators of units which produce less than $10,000 gross cash income will continue to have trouble because of limited debt-repaying ability.

As cattle feeding moves more toward a year-round operation, it needs continuous financing rather than seasonal financing. This means that intermediate or long term credit is needed in place of short term credit. The provisions of the Agricultural Act of 1961 will continue to fill some gaps in the farm credit picture.

Meat Supplies and Demand

The build-up of cattle numbers, especially beef cattle, since 1957 has reached a point where a high level of beef production will be sustained through 1962, 1963, and 1964. Beef output in 1961 was over 15.2 billion pounds, and will be about 15.5 billion pounds this year. A further gain is expected in 1963, but the increase will

be moderate, about in line with population growth.

Beef prices also are affected by supplies of competing meats and their prices in relation to beef. Total meat production in 1962 at nearly 36 billion pounds will be only slightly above 1961 with cutbacks in poultry, lamb and veal and small increases in pork and beef.

Meat consumption per person in 1962 is estimated at 197 pounds, two pounds less than last year.

Table 1. Per Capita Consumption of Meat in the U. S. (Pounds)

Meat	1935-39 Average	1947-49 Average	1956	1961	1962
Beef	55.6	65.6	85.4	88.0	88.0
Veal	8.1	9.7	9.5	5.7	5.5
Lamb and Mutton	6.8	4.8	4.4	5.1	5.0
Pork (excluding lard)	56.5	68.4	67.4	62.2	62.5
Total red meat (carcass weight)	127.0	148.5	166.7	161.0	161.0
Chicken (ready-to-cook)	13.4	18.7	24.6	30.3	29.5
Turkey (ready-to-cook)	2.2	3.3	5.2	7.5	7.2
Total meat	142.6	170.5	196.5	198.8	196.8

Wholesale beef prices increased about $4 a hundredweight during the summer months and are expected to hold steady until slaughter increases this fall. The summer rise was caused by slightly smaller supplies and strong consumer demand.

Consumer increases and demand for meat will hold up well in 1963, increasing about in line with population growth. Disposable incomes of consumers will receive a boost during the year when the promised income tax cut goes into effect. Some of these additional dollars will be spent for meat.

FEED GRAIN SUPPLIES AND PRICES

The total supply of feed grains and other concentrates for the 1961-62 feeding season will be about 5 percent less than last year. Both a lower carryover and smaller production accounted for this decrease in supply. Growing conditions in the main corn and grain sorghum areas have been excellent this year and high yields are expected.

August 1 estimates of acreage, yield and production of important feed crops in Nebraska and U. S. are shown in Table 2.

A corn for grain crop of 3,550 million bushels is expected this year, about 74 million less than last year. Since a crop of this size will be less than utilization, some reduction in the carryover will be possible in 1962-63 for the second consecutive year. Nebraska's corn acreage this year is 380 thousand acres less than in 1961. The U. S. average yield per acre will be just slightly less than the all-time record set last year. The yield in Nebraska was forecast at a little below 1961, but may be increased as a result of timely rains in August.

The 1961 sorghum crop forecast at 485 million bushels or 271 cwt., a one percent increase from last year. Here in Nebraska a crop of about 75 million bushels is expected, slightly more than last year, but over twice the 1951-60 average.

The oats and barley crops will be practically the same in the United States. The production of oats will be about 1030 million. The barley crop of 419 million bushels will be practically the same as last year.

Hay production will be 116 million tons, about the same as last year, but still above average. Nebraska will produce about .6 million more tons than last year, ten percent more than last year, and five percent more than the 1951-60 average.

Pasture conditions are excellent over the nation except for parts of Colorado, New Mexico and western Texas. There are also excellent prospects for winter wheat pasture this fall with volunteer wheat coming along fine and excellent subsoil for seeded winter wheat pasture. The seeded winter wheat pasture will depend on timely rains after it is seeded.

The total of feed concentrates in 1962-63 will be about 242.1 million tons, about 14 million less than last year (see Table 3). The number of grain consuming animal units will be higher so the concentrate per animal unit will be down from 1.52 tons but well above the 1956-60 average. The feeding rate per animal unit will probably about equal last year's .91 tons, a record level.

Stable Feed Prices

Feed grain prices will be the same for the 1962-63 feeding season as they were last year. The support prices will be the same for all grain except barley which will be reduced by two to three cents. Because of the changes in feed grain production and the government price support program, the prices received by farmers have not been the same as support prices and probably will not be same for the coming feeding season. During the past season the average prices received by Nebraska farmers for November to April was about 20 cents below the support prices for corn and grain sorghum and was higher for oats.

Corn and grain sorghum prices will decline seasonally this fall as the harvest progresses. Market prices will be below the support level until next spring; how much below will depend on the amount of feed grain not eligible for price

Table 2. Feed Crop Acreage and Production, Nebraska and U. S., Estimated as of August 1, 1962, with Comparisons

Area and Crop	Acreage for harvest			Unit	Yield per acre			Production		
	Average 1951-60	1961	1962		Average 1951-60	1961	1962	Average 1951-60	1961	1962
Nebraska	(Thousand acres)							(Millions)		
Corn for grain	5,857	5,426	5,046	Bu.	36.5	51.5	55.0	216.3	279.4	277.5
Oats	1,770	1,067	939	Bu.	26.0	32.0	32.0	44.9	34.1	30.0
Soybeans for beans	142	277	309	Bu.	21.7	25.5	29.0	3.1	7.1	9.0
Sorghum grain	-----	-----	-----	Cwt.	----	----	----	34.8	62.6	75.4
Alfalfa	1,894	1,711	1,797	Tons	2.0	2.2	2.2	3.7	3.7	4.0
Wild hay	3,006	2,860	2,831	Tons	0.7	0.7	0.8	2.1	2.0	2.3
United States	(Million acres)							(Millions)		
Corn for grain	68.6	58.7	57.5	Bu.	45.7	61.8	61.7	3,128	3,624	3,550
Oats	34.2	24.1	23.1	Bu.	37.2	42.1	44.6	1,261	1,013	1,030
Barley	12.6	13.0	12.9	Bu.	29.0	30.3	32.4	366	393	418
Soybeans for beans	19.0	27.3	27.9	Bu.	21.6	25.3	25.2	417	693	703
Sorghum grain	-----	-----	-----	Cwt.	----	----	----	338	482	485
All hay	72.2	67.1	66.9	Tons	1.56	1.74	1.73	112	117	116

Table 3. Estimated Feed Concentrate Supplies, U. S., 1956-60 Average 1961, 1962 Year Beginning October

Source	Average 1956-60	1961	1962
	(Million short tons)		
Carryover	58.6	84.7	73.0
Production			
Corn	96.4	101.5	98.5
Oats	19.3	16.2	16.0
Barley	10.3	9.4	9.4
Sorghum grains	14.2	13.5	13.5
Total	140.2	140.6	137.4
Imports	0.6	0.5	0.5
Wheat and Rye Fed	1.9	1.7	1.7
By-products Fed	26.6	28.7	29.5
Total supply	227.8	256.2	242.1
Grain-consuming Animal Units (Mil.)	164.4	168.5	170.5
Supply per Animal Unit (Ton)	1.35	1.52	1.42
Concentrates Fed Per Animal Unit (Ton)	0.83	0.91	----

supports and the selling prices and practices of the Commodity Credit Corporation.

Protein feed prices for the coming year will be about the same as they have been the past year as indicated by the fairly large crop and the prospect is for a not so large export demand.

Feed grain should be bought in late fall at seasonally low prices.

Table 4. Nebraska Feed Grain Prices

		Average Received by Farmers	Support Price Range
		November '61 - April '62	1962 Crop
Corn	bu.	$ .93	$1.13-$1.20
Oats	bu.	.65	.58- .64
Sorghum grain	cwt.	1.53	1.75- 1.96
Barley	bu.	.82	.81- .99

BEEF CATTLE OUTLOOK

The outlook for profits from feeding cattle in 1962-63 appears not quite as favorable as results for 1961-62. The slaughter prices in calendar 1963 are expected to be practically the same as they are in 1962. Prices received by ranchers this fall will be higher than a year ago because of good range conditions and because of prospects of good winter wheat pastures. Feed costs during 1962-63 will be the same as a year earlier and slightly higher prices for feeder cattle should make slightly smaller profits for most feeding systems.

Cattle Numbers

Total cattle numbers have been increasing moderately for the past three years. All of this increase has been in the beef sector. The expansion has been moderate and can be handled at fairly stable prices unless upset by over optimism on the part of producers or by major changes in business conditions or international affairs.

Table 5. Beef Cattle on U.S. Farms and Ranches, January 1, 1958-63

Class	1958	1960	1961	1962	1963*
			(Million Head)		
Cows, 2 years and over	24.1	26.4	27.0	28.1	29.0
Heifers, 1-2 years	5.9	7.0	7.0	7.2	7.7
Calves	18.3	20.4	29.7	21.7	22.5
Steers, 1 year and over	9.3	10.6	11.0	11.0	11.1
Bulls	1.6	1.7	1.7	1.7	1.7
TOTAL	59.2	66.1	67.4	69.7	72.0

*Estimated

The big question deals with expected cow slaughter. Cow and calf slaughter has been low since 1957 while steer and heifer slaughter has increased. The age of the cows should be getting older based on the Federally inspected slaughter. If this is the case, a large cow slaughter can be expected this fall as some of the range areas have experienced larger death loss this past year with older cows.

Feeder Cattle

Prices of most classes of feeder cattle are expected to average about $2.00 to $4.00 a hundredweight higher this fall than the September-December period of 1961. This means that cattle feeder prices will be stable at the present level, but $2.00 to $3.00 higher than they were during the first six months of this year.

The supply of feeder cattle for the feedlots may be slightly lower than a year ago because of excellent range conditions and the possible demand for stocker cattle in the wheat pasture areas. The low rate of cow slaughter in

the past five years means that cow replacement in breeding herds will increase. This will reduce the number of heifers available to put on feed. The 1962 calf crop of 40.5 million head was 1 1/2 percent above that of a year ago. Here in Nebraska the increase in calf crop was 2.4 percent. Imports from Canada may be down somewhat because of re-building of their herds after drought in the provinces last year.

The demand for feeders for feeding will be about the same as a year ago with the same expected slaughter prices and feed grain prices. This demand will tend to spread throughout the year as more and more of the feeding is done in large lots with year-round operations. This means that range producers will need to have feeder calves and cattle available during a larger part of the year. There is also a trend to buying younger cattle that will be fed to lighter weights to meet some of the specifications of some food retailers.

With a possibility of more feeders coming off the wheat pasture and range in the spring, it is expected that feeder prices next spring may not be as high as they will be this fall.

Slaughter Cattle

Fed cattle prices for the rest of 1962 will be steady to strong especially in the eastern part of the United States. Prices after October 1 will depend to some extent upon the marketing in August and September. This could mean that prices during the last quarter of this year could be down if slaughter drops during August and September.

If we have more cow slaughter this fall we could expect the lower grades of beef to be lower in price in relation to your higher grades of beef. This indicates that feeding better quality cattle would have more advantage this year than last year.

For 1963 as a whole we expect slaughter prices for fed cattle to be the same as they were for 1962. But there are uncertainties as to when the cattle will be marketed because of the quantities that may be staying on the range or going on winter wheat pasture rather than as a steady stream into the feedlot. Staying on the range or wheat pasture for longer periods of time would mean that cattle probably would be coming to the fed market at heavier weights than they have been in the past two years. A better indication of the nearby slaughter prices will come from the quarterly Cattle on Feed Reports. This information would be much improved if it were available monthly as they are for Colorado, Arizona, and California.

Returns from cattle feeding during 1962-63 season should be slightly less than for the 1961-62 season for most feeding systems. No one system of feeding seems to have any clear-cut advantage over others for the coming year except that quality cattle fed to a higher grade may have an advantage depending upon the cow slaughter. A wider spread between the upper and lower grades of slaughter cattle can be expected next year than prevailed in 1962.

Table 6. Average Price, Stocker and Feeder Steers 500 lbs. and Over, 10 Markets, 1955-62.*

Month	1955	1956	1957	1958	1959	1960	1961	1962
Jan.	$19.80	$16.65	$17.30	$23.50	$27.45	$23.60	$24.56	$23.45
Febr.	19.70	16.55	17.55	24.00	26.50	24.05	23.97	23.60
Mar.	20.40	16.80	18.85	25.50	27.65	24.90	24.09	24.05
Apr.	20.50	17.30	20.00	26.20	28.50	25.30	24.05	24.87
May	18.95	17.00	20.05	26.45	28.50	24.34	22.44	23.91
June	18.65	16.40	19.90	25.30	27.40	22.66	21.88	23.55
July	17.60	16.50	20.25	25.55	26.75	21.66	21.55	------
Aug.	17.30	17.35	20.35	24.80	26.25	21.20	22.90	------
Sept.	17.75	17.45	20.30	26.25	26.05	21.58	23.05	------
Oct.	17.95	17.40	20.80	26.70	24.95	21.95	23.28	------
Nov.	16.90	17.05	21.30	27.20	23.75	22.97	23.39	------
Dec.	15.40	16.15	22.40	26.35	22.95	23.81	23.81	------
Year	18.25	17.05	20.25	25.85	26.15	23.02	23.28	------

*Source: Livestock Market News, AMS, USDA, Washington, D. C.

Imports of Meat and Cattle

Importation of cattle from Canada and Mexico and beef and veal from other countries is governed to a large extent by our domestic prices, the feed and pasture conditions in these exporting countries and export quotas that have been established from time to time by Mexico.

Most of the meat imported is the frozen boneless meat of lower grades that can be used for manufacturing purposes. With a higher cow slaughter in the United States, this would reduce the prices for manufacturing beef and would cut the imports of this type of meat. In the past three years the importation of cattle and beef has amounted from about 6 to 8 percent production.

Table 7. United States Imports of Cattle and Beef Compared With Production, 1950-61

Cattle and calves and beef and veal

Year	Imports				Total Meat Production	Imports as a percentage of production
	Live animals		Meat	Total 2/		
	Number	Meat Equivalent 1/				
	1,000 head	Mil. Lb.	Mil. Lb.	Mil. Lb.	Mil. Lb.	pct.
1950	438	157	348	505	10,764	4.7
1951	220	91	484	575	9,896	5.8
1952	138	47	429	476	10,819	4.4
1953	177	62	271	333	13,953	2.4
1954	71	35	232	267	14,610	1.8
1955	296	93	229	322	15,147	2.1
1956	141	43	211	254	16,094	1.6
1957	703	221	395	616	15,728	3.9
1958	1,126	340	909	1,249	14,516	8.6
1959	688	191	1,063	1,254	14,588	8.6
1960	645	163	775	938	15,835	5.9
1961	1,023	250	1,037	1,287	15,296	8.4
1962					15,500	

1/ Estimated at 53 percent of the liveweight of all dutiable imports of cattle.

2/ Canned and other processed meats have been converted to their carcass weight equivalent.

DUAL GRADING OF BEEF

What It Is

by Ted H. Doane

Beginning July 1, 1962, a new beef grading system was offered to the industry on a trial basis for one year. It is called "The Dual Grading System." The Agricultural Marketing Service (AMS) of the USDA has developed an accurate method of determining the yield of boneless, closely-trimmed, retail cuts from the chuck, rib, loin, and round of beef carcass. Thus a yield grade in addition to a quality grade can be used for each carcass.

Definition of Dual Grading

Dual grading uses two criteria, (1) the quality grade such as we have now--Prime, Choice, Good, etc., and (2) the yield grade, known as "cutability" to some people. (The yield grade is not dressing %.)

The final grade is a combination of quality and yield. For example, Choice yield No. 1 is of choice quality which has a very high percent of edible meat in the carcass.

Why the Dual Grading System is Being Initiated

The dual grading system was developed to meet consumer desire for tender, juicy, and flavorsome beef with the least amount of waste fat. The system attempts to identify the quality of beef and also the amount of fat in a carcass.

This means of identifying the carcasses will help the retailer and packer buy or sell a product which will have a relatively assured amount of meat, with the designated quality. It can also help the producer, breeder, and feeder identify and expand the production of meatier animals with less waste fat. The consumers benefit by being able to buy meat of specified quality and fat content.

One of the shortcomings of the present market grades is that little consideration is given to the amount of excess fat that must be trimmed before retailing. The new system of yield grading will identify this problem and the market should reflect differences in yield through price variations for carcasses of various grades.

Administration

The program is handled by the Federal Graders of the Livestock Division of the Agricultural Marketing Service. They will give both the quality grade (Prime, Choice, etc.) and the yield grade (cutability).

The Grades and Their Implications

1. Quality grade--USDA Prime, Choice, Good, etc. is the same as old system and will not be changed. It designates quality of meat such as marbling, color, texture, and firmness in relation to maturity.

2. Yield grade--USDA 1 to 6--The No. 1 grade indicates the highest yield and the No. 6 grade the lowest. To determine the yield grade, the following factors are evaluated: (1) thickness of outside fat at the 12th rib, (2) area of rib eye, (3) kidney and pelvic fat in percent, and (4) carcass weight.

By using these factors, the grader can estimate the saleable portion of meat from the boneless, closely-trimmed chuck, loin, rib, and round. The grades are:

Yield Grade	Percentage of boneless, closely-trimmed round, loin, rib and chuck
1	53.1% and up
2	50.8 - 53.0%
3	48.5 - 50.7%
4	46.2 - 48.4%
5	43.9 - 46.1%
6	Under 43.9%

Grades are Independent of Each Other

Regardless of the quality grade, a carcass has a specific yield. That is, if the yield grade is No. 2, the quality grade (Choice) will not change it. The yield grade No. 2 is expected to yield the same percentage of weight in trimmed retail cuts in all quality grades.

During the past year the Livestock Division of USDA's Agricultural Marketing Service has conducted pilot grading programs in packing companies to field-test dual grading. Two four-week studies indicated that about one-half of the nearly 13,000 carcasses involved qualified for a yield grade of No. 3. Another 25 percent yield graded No. 1 or 2. The remaining 25 percent were graded No. 4, 5, or 6.

The present USDA beef grades take into consideration both quality and conformation. There is a small proportion of the carcasses that have a Choice quality but are graded Good because their conformation grade does not reach Choice. Of the carcasses which graded Choice under conventional standards, 5.6 percent would have graded Prime under the dual grading system, and 14 percent of those which graded Good under conventional standards would have graded Choice using dual grading.

The dual grading service is available to members of the trade (packers, etc.) who wish to use it and pay for it on a fee basis. The firm using the quality grade is not required to use the yield grade. The program will be given a one-year trial. It may or may not be accepted.

It is noteworthy that regardless of the outcome of this particular program, the method of obtaining the retail yield grade probably will be useful to the livestock and meat industry in attempting to meet the changing trends of the future.

Implications

by Fred L. Olson

Beef grading helps determine beef market value. The question of whether or not to grade might be compared to the question of whether or not we should weigh slaughter cattle. Slaughter cattle are usually sold on a hundredweight basis rather than by the head because the total value of animal is related to its weight. This is because consumers buy meat by the pound. Consumers also prefer boneless, closely-trimmed rounds, loins, ribs, and chucks.

Cutability Risk and Buying Cost

Here is where dual grading comes in. The added yield grade gives the proportion of high value retail cuts. A Good grade carcass with 52% of high valued retail cuts

is worth far more than a Good grade carcass with only 44% of high valued retail cuts. The retailer, especially the small retailer, has less value or cutability risk in buying carcasses that are graded for yield. The retail yield grade system of dual grading was proposed and will be tried for the same reason that we sell our slaughter cattle on a hundredweight basis rather than by the head; it is a more accurate method of determining value.

The meat buyer for a retail store at present can buy over the phone, or buy on inspection by picking out those carcasses that he feels will yield him the greatest return; or if the quantity purchased is large enough, he can buy meat according to his specifications. For the retailers buying on inspection the buyers with the best judgment, usually those buying large quantities, have the advantage. The buyers purchasing without inspection or specification receive carcasses of all retail yields (high through low). If all buyers purchase without inspection or specification, their average would be near the market average. But with a larger proportion of the meat sold on inspection or according to specification, the average yields would be lower for those buying without inspection or specification. In other words, the average yield of this meat would be lower than the market average if inspection or specifications mean anything.

This brings us back to comparative costs between Federal grading and each buyer inspecting his own purchases. If the Federal grader is grading for the same things that the retailer is looking for (quality and yield), he should be more proficient (because grading is his business) and more economical (because each carcass is evaluated by only one person and not by several buyers).

Wide Range in Carcass Values

Dual grading will result in a wider range of carcass values. The wide range in total retail values of all the retail cuts will remain the same, but this range in values will be more accurately reflected back to the owner of the beef carcass.

The retail sales values of 600 pound Choice grade carcasses for the lower, middle and upper thirds in percentages of weight in retail cuts are published monthly by the Livestock Division, Agricultural Marketing Service, U.S. Department of Agriculture.

For May, 1962 these values were:

	Low Third	Middle Third	High Third
Percentage of carcass weight in retail cuts	69.7%	74.3%	78.9%
Retail sales value per cwt. of carcass[1]	$ 60.60	$ 64.10	$ 67.60
Wholesale-retail spread per cwt. of carcass[2]	15.69	15.69	15.69
Wholesale value per cwt. of carcass	44.91	48.41	51.91
per 600# carcass or 1,000# animal	269.46	290.46	311.46
Wholesale value of by-products per 1,000# animal	15.00	15.00	15.00
Wholesale value of carcass and by-products per 1000# animal	284.46	305.46	326.46
Slaughtering costs and by-product and carcass transportation costs per 1,000# animal[3]	31.00	31.00	31.00
Live animal value per 1,000# animal	253.46	274.46	295.46
per cwt. of animal	25.35	27.45	29.55

1/ Values are calculated from prices furnished to the Marketing Economics Division of the Economic Research Service by a large number of selected retailers throughout the country.

2/ Difference between the retail value and the wholesale value as determined from a weighted average price of 600# Choice grade carcasses in New York, Chicago, Los Angeles, San Francisco, and Seattle.

3/ Difference between wholesale value and weighted average price of 1,000# Choice grade steers at 20 leading public stockyards.

These values reflect differences within the Choice grade. The lower and upper third groups do not represent extremes, but rather are intended to represent carcasses typical of the lower third and upper third of the total range in retail cut yields encountered in 600 pound Choice grade carcasses.

Those livestock markets close to the East and West Coasts received higher prices than those markets more distant. The level of prices is not important in this comparison; but the range within this specific grade, weight, and dressing percentage, because of the variation in retail value, is important. These wholesale-retail spreads, value of by-products, and slaughtering and transportation costs should be independent of and not vary with the percentage of carcass weight in retail cuts.

The average wholesale value of a Choice 600 pound carcass of the low third of percentage of carcass weight in retail cuts was $42.00 less than the average of the high thirds:

$$\begin{array}{r} \$311.46 \\ -\ 269.46 \\ \hline 42.00 \end{array}$$

About two-thirds of the Choice 600 pound carcass fell between $269.46 and $311.68; about one-sixth had a value of less than $269.46; and another one-sixth had a value of more than $311.46.

Retail yield grading will place the carcasses in six groups, not three; and the basis will be the percentage of boneless, closely-trimmed rounds, loins, ribs, and chucks--not the total percentage of retail cuts. Boneless, closely-trimmed rounds, loins, ribs, and chucks are the highest valued part of the carcass and account for about 80 percent of the total value.

Paying the Producer and Feeder for Quality

Reflecting this range of carcass values back to the feeder and producer is another problem. The efficiency of reflecting carcass values back to the livestock producer is low without yield grading, as the relationship between carcass and liveweights (dressing percentages) is not perfect, and carcass grades are not completely determinable on the live animal. Retail yield grades, like quality grades and carcass yields, can be determined only to a limited extent in the live animal. Retail yield grades create a wide range between low and high carcass values. If the range between low and high live prices does not increase when retail yield grading is used, then the efficiency is lowered in reflecting carcass values back to the feeder.

To reflect the full range between low and high carcass values back to the feeder when animals are sold on a live basis the following conditions need to exist:

1. Not one, but several buyers must be able to recognize the low and high valued carcasses due to quality grade, carcass yield, and retail yield in live animal; and

2. The commission men or feeders selling direct must be able to recognize low and high valued carcasses in the live animal.

If only one buyer is able to recognize low and high value carcasses in a live animal, he will buy all of the high valued animals at the same price that the other buyers are paying for lower valued animals, leaving no difference in the price of these low and high valued animals. Furthermore, if commission men or feeders in the private treaty method of selling are not able to recognize the low and high value carcasses in the live animal, the buyers, even though there may be several buyers, would purchase the high-valued animals at a price higher than the low valued animals; but the difference does not reflect the full difference at the retail level. Both the buyers and sellers of live animals must have a complete knowledge of the retail yields in the live animal before all of the difference in retail values are reflected back to the feeders and producers.

The cattle industry is interested in producing meat that fits consumer demand. This is quality meat, produced in quantity at a low cost. There is a wide range in the ability of various strains, producers, and feeders in producing large quantities of quality meat at low cost. Improvements in the cattle industry will come much faster when superior producers, feeders, and strains of cattle are rewarded in the market. Retail yield grading is one of the important steps in rewarding the superior producers, feeders, and strains of cattle.

OUTLOOK FOR LAMB FEEDING

The prices of slaughter lambs should continue about $2.00 above last year for the rest of 1962 and throughout 1963. The number of lambs on hand January 1, 1963 should be about 4 percent below last year based upon the lamb crop of this year, the slaughter up until now, and expected slaughter for the rest of the year.

As we go into 1963, we should be able to expect a more normal pattern of lamb marketing with less bunching. Many of the range producers are applying new technology to the production of lambs and reducing the labor requirements of range production. Feeder lambs will be about 17 to 19 cents on the range.

A referendum will be held during the period of September 10-21 among wool and lamb producers on a new agreement to finance advertising, promotion, and other market development activities. Similar referendums were held in 1955 and 1959. The outcome of this referendum will not affect the incentive payment program which was continued under the extension of the National Wool Act last year.

An affirmative vote on this referendum, if approved by producers, will again authorize reductions from payments which cannot exceed one cent per pound of shorn wool or five cents per cwt. of liveweight on lambs for four more years. All producers who have old sheep or lambs for any one period of at least thirty days since January 1, 1962 will be eligible to vote. Ballots will be sent to producers before September 10 by County ASC offices and are to be returned to those offices by September 21. The program is approved if a yes vote is cast by more than two-thirds of the individual producers voting or producers owning more than two-thirds of the sheep represented in the referendum.

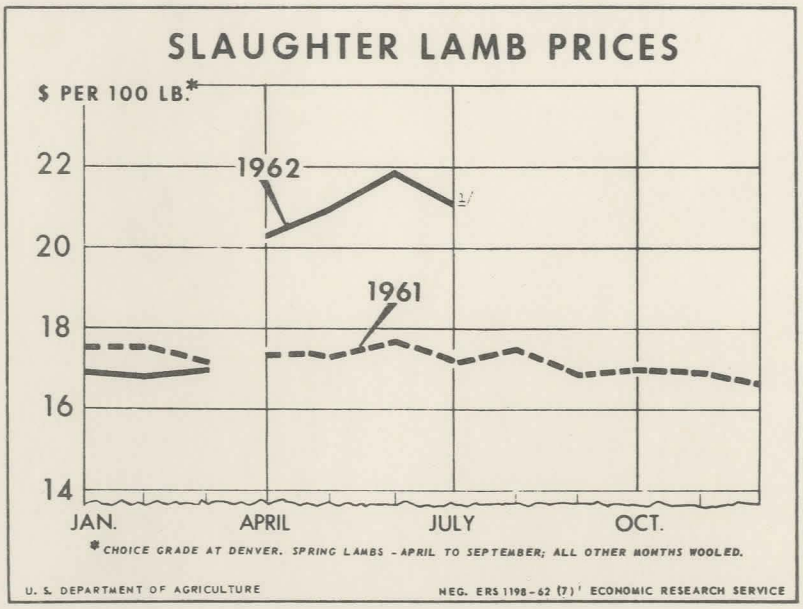

Figure 4

1/July is Midnomth Price.

OUTLOOK FOR HOG FEEDING

The prices for hogs can be expected to stay above last year, up until October. Due to the larger proportion of the spring pig crop being farrowed in the latter months, the prices after October will be slightly below last year. The prices of hogs are largely dependent on the price of beef. If we have a heavy slaughter of beef in the last three months of this year, it could have a depressing effect on the price of hogs.

It is too early to tell about the hog outlook for 1963. With stable feed prices and normal profits on hogs this year, there should be little change in the pig crop in 1963.

Present intentions indicate that there was a 4 percent increase in the number of sows to farrow during June, July and August; and will be a 2 percent increase in the number to farrow during September, October, and November.

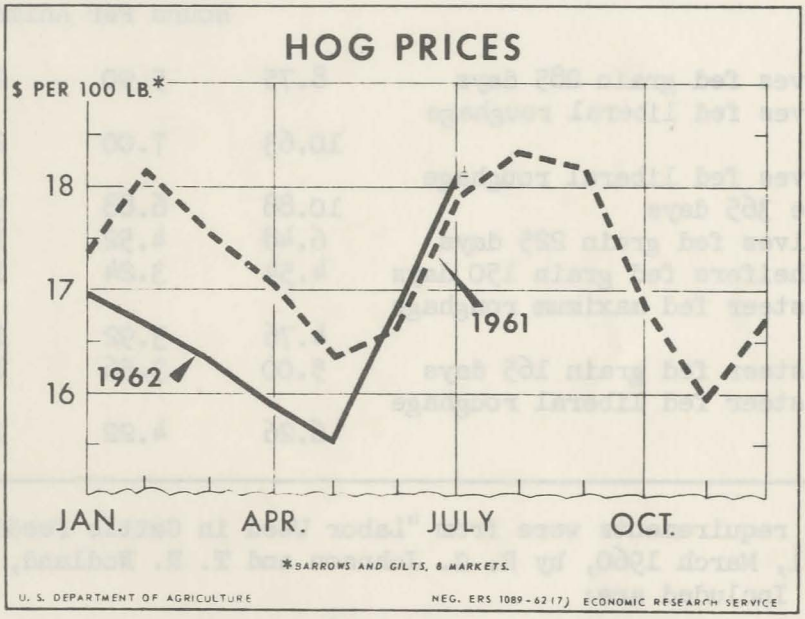

Figure 3

1/July is Midmonth Price.

HOW TO COMPUTE BREAK-EVEN FEEDER PRICES

Following are charts of some eight livestock feeding systems giving the break-even feeder prices for various slaughter prices, feed costs per hundredweight of gain, and number of head per lot when all current costs are covered. They are offered as an aid in determining whether or not to buy feeders to fill your feed lot. Depreciation and interest on bunks, fences and other equipment is not included. Lower feeder prices need to be paid in order to cover these fixed costs.

Break-even feeder prices are given for a 40-, 120-, 1000-, and 5000-head feed lot. The only difference in these examples are the labor requirements. Total hours per animal were as follows:

Feeding system	Number of head in lot			
	40 1/	120 1/	1000 2/	5000 2/
	Hours Per Animal			
425# steer calves fed grain 285 days	8.75	5.90	2.45	1.80
425# steer calves fed liberal roughage 330 days	10.63	7.00	2.82	2.06
425# steer calves fed liberal roughage plus pasture 365 days	10.88	6.88	3.10	2.26
400# heifer calves fed grain 225 days	6.48	4.52	1.96	1.45
650# yearling heifers fed grain 150 days	4.54	3.24	1.34	1.02
650# yearling steer fed maximum roughage 180 days	4.76	3.92	1.59	1.20
700# yearling steer fed grain 165 days	5.00	3.56	1.47	1.11
700# yearling steer fed liberal roughage 195 days	6.26	4.22	1.71	1.28

1/ These labor requirements were from "Labor Used in Cattle Feeding," Station Bulletin 451, March 1960, by R. G. Johnson and T. R. Nodland, University of Minnesota. Included are:

1. Hay Feeding of bales stored nearby.
2. Grain feeding with a wagon and shovel.
3. Silage feeding from an upright silo.
4. Bedding.
5. Watering and observing.
6. Care and treatment of sick animals.
7. Pasturing.
8. Feed grinding.
9. Manure disposal.
10. Miscellaneous.

2/ These labor requirements were from "Improved Methods and Facilities for Commercial Cattle Feedlots," MRR No. 517, Transportation and Facilities Research Division, AMS, USDA, Washington 25, D. C. The 1000-head lot used a self-mixing, self-unloading truck method of feeding. The 5000-head lot used a mixing mill and self-unloading truck method of feeding. The mill had a capacity of 20 tons per hour. The requirements for a 10,000-head lot also were computed but there was very little improvement over the 5000 lot and were not published.

For the 1000- and 5000-head lot the variable costs of machinery and equipment (fuel, electricity and maintenance) were included. These variable costs amounted to 20 percent of the total equipment cost for a 1000-head lot and 31 percent for the 5000-head lot.

The costs used in this example are very specific and may not fit your situation. You need to use your own costs to figure your own break-even feeder prices. Here is how it is done. Using a 700 lb. yearling good to choice steer fed 165 days to 1,100 lb. and choice grade with a daily gain of 2.4 pounds, take the total expected value of the slaughter animal and subtract all variable or current costs except those associated with the price of the feeder steer. This gives the net value of the feeder steer. The break-even price of the feeder is obtained by multiplying the feeder weight by one (1) plus the interest rate and death rate for the feeding period and dividing this product into the net value obtained above.

Slaughter weight	X	Expected price	=	Gross value	Your figure
1,100#	X	$25.00	=	$275.00	_____
	Minus				

Feed costs of $20.00 per hundredweight of gain				
46 bu. corn @ $1.26[1]	=	58.00		
100# protein @ $4.00	=	4.00		
0.9 T. alfalfa @ $20	=	18.00		
			80.00	_____
Marketing costs				
1100# @ 60¢/cwt.			6.60	_____
Cost of buying feeder				
Commission		2.00		
Vaccination		.50		
Trucking		1.00		
			3.50	_____
Labor				
$1\frac{1}{4}$ min./day or				
3.56 hrs. @ $1.25			4.45	_____
Taxes[2]				
Omaha Average price		$ 24.00		_____
		- 1.00		- 1.00
		$ 23.00		_____
		X 75%		X 75%
		17.25		_____
		X 700#		
		$120.75		_____
		X 120%	for cattle on feed more than 80 days	X 120%
		$144.90		_____
		X 35%		X 35%
		$ 50.72		_____
		X 70 mills		
			3.55	_____

[1] For purchased feed use the price delivered to the farm. For home produced feed use the alternative cash price F.O.B. the farm.

[2] According to LB 130 passed by the 1961 Legislature.

Interest on feed

$\$79.33 \times \frac{165 \text{ days}}{365 \text{ days}} \times 7\% \times \frac{1}{2} = \$1.25$

Other variable costs

	Per Day
Veterinary	$.002
Salt & Min.	.002
Rep. & Misc.	.006
	$.010 X 165 days = $1.65

Total variable non-feeder costs	$101.00
Net value of feeder	175.00
Divide by feeder weight (700#)	
Net value of feeder with no death loss or interest cost	$ 25.00
Break-even Feeder price with 6% interest cost and 3% yearly death loss	$ 23.80/cwt.

CHART 1 425# GOOD TO CHOICE CALVES FED LIBERAL GRAIN 285 DAYS, SOLD AT 1025# AND CHOICE GRADE

Break-Even Feeder Prices for 6% Interest Rate, $1.25 Wage Rate, Various Slaughter Prices, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Prices Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$23.30	$25.60	$27.80	$30.00	$32.30	$34.50	$36.80	$39.00	$41.20	$43.40	$45.70
	16.00	17.90	20.20	22.40	24.60	26.90	29.10	31.40	33.60	35.80	38.99	40.30
	20.00	12.50	14.80	17.00	19.20	21.50	23.70	26.00	28.20	30.40	32.60	34.90
	24.00	7.10	9.40	11.60	13.80	16.10	18.30	20.60	22.80	25.00	27.20	29.50
120	$12.00	$24.10	$26.40	$28.60	$30.80	$33.10	$35.30	$37.50	$39.80	$42.00	$44.20	$46.50
	16.00	18.70	21.00	23.20	25.40	27.70	29.90	32.10	34.40	36.60	38.80	41.10
	20.00	13.30	15.60	17.80	20.00	22.30	24.50	26.70	29.00	31.20	33.40	35.70
	24.00	7.90	10.20	12.40	14.60	16.90	19.10	21.30	23.60	25.80	28.00	30.30
1000	$12.00	$24.80	$27.00	$29.30	$31.50	$33.70	$36.00	$38.20	$40.40	$42.70	$44.90	$47.10
	16.00	19.40	21.60	23.90	26.10	28.30	30.60	32.80	35.00	37.30	39.50	41.70
	20.00	14.00	16.20	18.50	20.70	22.90	25.20	27.40	29.60	31.90	34.20	36.30
	24.00	8.60	10.80	13.00	15.30	17.50	19.80	22.00	24.20	36.50	28.70	30.90
5000	$12.00	$25.00	$27.20	$29.50	$31.70	$33.90	$36.20	$38.40	$40.60	$42.90	$45.10	$47.40
	16.00	19.60	21.80	24.10	26.30	28.50	30.80	33.00	35.20	37.50	39.70	42.00
	20.00	14.20	16.40	18.70	20.90	23.10	25.40	27.60	29.80	32.10	34.30	36.60
	24.00	8.80	11.00	13.30	15.50	17.80	20.00	22.20	24.40	26.70	28.90	31.20

1/ Feed requirement goals: Corn, 63 bushels; Protein, 180 pounds, Alfalfa hay, 0.6 tons; Pasture, 40 days; Average daily gain, 2.1 pounds. For 1962-63 the feed cost per cwt. of gain should be $15.00 to $16.00.

CHART 2 425# GOOD TO CHOICE CALVES FED LIBERAL ROUGHAGE 330 DAYS, SOLD AT 1025# AND CHOICE GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rates, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Prices Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$22.40	$24.70	$26.90	$29.10	$31.30	$33.50	$35.70	$37.90	$40.10	$42.40	$44.60
	16.00	17.10	19.30	21.50	23.70	25.90	28.10	30.40	32.60	34.80	37.00	39.20
	20.00	11.70	13.90	16.10	18.40	20.60	22.80	25.00	27.20	29.40	31.60	33.80
	24.00	6.40	8.60	10.80	13.00	15.20	17.40	19.60	21.80	24.00	26.30	28.50
120	$12.00	$23.40	$25.60	$27.90	$30.10	$32.30	$34.50	$36.70	$38.90	$41.10	$43.30	$45.60
	16.00	18.10	20.30	22.50	24.70	26.90	29.10	31.30	33.60	35.80	38.00	40.20
	20.00	12.70	14.90	17.10	19.30	21.60	23.80	26.00	28.20	30.40	32.60	34.80
	24.00	7.30	9.60	11.80	14.00	16.20	18.40	20.60	22.80	25.00	27.20	29.40
1000	$12.00	$24.20	$26.40	$28.70	$30.90	$33.10	$35.30	$37.50	$39.70	$41.90	$44.10	$46.40
	16.00	18.90	21.10	23.30	25.50	27.70	29.90	32.10	34.30	36.60	38.80	41.00
	20.00	13.50	15.70	17.90	20.10	22.40	24.60	26.80	29.00	31.20	33.40	35.60
	24.00	8.10	10.40	12.60	14.80	17.00	19.20	21.40	23.60	25.80	28.00	30.30
5000	$12.00	$24.50	$26.70	$28.90	$31.10	$33.30	$35.50	$37.80	$40.00	$42.20	$44.40	$46.60
	16.00	19.10	21.30	23.60	25.80	28.00	30.20	32.40	34.60	36.80	39.00	41.20
	20.00	13.80	16.00	18.20	20.40	22.60	24.80	27.00	29.20	31.40	33.70	35.90
	24.00	8.40	10.60	12.80	15.00	17.20	19.40	21.70	23.90	26.10	28.30	30.50

1/ Feed requirement goals: Corn, 40 bushels; Protein 285 pounds; Alfalfa hay, 0.5 tons; Corn silage equivalent, 2.5 tons; Pasture, 40 days; Average daily gain, 1.8 pounds.

The feed cost per cwt. of gain should be $15.00 to $16.00 for 1962-63.

CHART 3 425# GOOD TO CHOICE CALVES FED LIBERAL ROUGHAGE PLUS PASTURE 365 DAYS, SOLD AT 1025# AND CHOICE GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rate, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Price Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$22.10	$24.30	$26.50	$28.70	$30.80	$33.00	$35.20	$37.40	$39.60	$41.80	$44.00
	16.00	16.70	18.90	21.10	23.30	25.50	27.70	29.90	32.10	34.30	36.50	38.70
	20.00	11.40	13.60	15.80	18.00	20.20	22.40	24.60	26.80	29.00	31.20	33.30
	24.00	6.10	8.30	10.50	12.70	14.80	17.00	19.20	21.40	23.60	25.80	28.00
120	$12.00	$23.20	$25.40	$27.60	$29.70	$31.90	$34.10	$36.30	$38.50	$40.70	$42.90	$45.10
	16.00	17.80	20.00	22.20	24.40	26.60	28.80	30.90	33.20	35.40	37.60	39.80
	20.00	12.40	14.70	16.90	19.10	21.30	23.40	25.60	27.80	30.00	32.20	34.40
	24.00	7.20	9.40	11.50	13.70	15.90	18.10	20.30	22.50	24.70	26.90	29.10
1000	$12.00	$23.80	$26.00	$28.20	$30.40	$32.60	$34.80	$37.00	$39.20	$41.40	$43.60	$45.80
	16.00	18.50	20.70	22.90	25.10	27.20	29.40	31.60	33.80	36.00	38.20	40.40
	20.00	13.10	15.30	17.50	19.70	21.90	24.10	26.30	28.50	30.70	32.90	35.10
	24.00	7.80	10.00	12.20	14.40	16.60	18.80	21.00	23.20	25.40	27.60	29.70
5000	$12.00	$24.10	$26.30	$28.50	$30.70	$32.90	$35.00	$37.20	$39.40	$41.60	$43.80	$46.00
	16.00	18.80	20.90	23.10	25.30	27.50	29.70	31.90	34.10	36.30	38.50	40.70
	20.00	13.40	15.60	17.80	20.00	22.20	24.40	26.60	28.80	31.00	33.20	35.40
	24.00	8.10	10.30	12.50	14.70	16.80	19.00	21.20	23.40	25.60	27.80	30.00

1/ Feed requirement goals: Corn, 36 bushels; Protein, 150 pounds; Alfalfa hay, 0.5 tons; Corn silage equivalent, 2.1 tons; Pasture, 120 days; Average daily gain, 1.7 pounds.
The feed cost per cwt. of gain should be $14.00 to $15.00 for 1962-63.

CHART 4 400# GOOD TO CHOICE HEIFER CALVES FED LIBERAL GRAIN 225 DAYS, SOLD AT 850# AND CHOICE GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rate, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Prices Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$22.40	$24.40	$26.40	$28.30	$30.30	$32.30	$34.30	$36.30	$38.30	$40.30	$42.30
	16.00	18.00	20.00	22.00	24.00	26.00	28.00	30.00	32.00	34.00	36.00	37.90
	20.00	13.70	15.70	17.70	19.70	21.70	23.60	25.60	27.60	29.60	31.60	33.60
	24.00	9.30	11.30	13.30	15.30	17.30	19.30	21.30	23.30	25.30	27.30	29.30
120	$12.00	$22.90	$24.90	$26.90	$28.90	$30.90	$32.90	$34.90	$36.90	$38.90	$40.90	$42.90
	16.00	18.60	20.60	22.60	24.60	26.60	28.60	30.60	32.50	34.50	36.50	38.50
	20.00	14.20	16.20	18.20	20.20	22.20	24.20	26.20	28.20	30.20	32.20	34.20
	24.00	9.90	11.90	13.90	15.90	17.90	19.90	21.90	23.90	25.80	27.80	29.80
1000	$12.00	$23.40	$25.40	$27.40	$29.40	$31.40	$33.40	$35.40	$37.40	$39.40	$41.40	$43.40
	16.00	19.10	21.10	23.10	25.10	27.10	29.10	31.10	33.10	35.00	37.00	39.00
	20.00	14.80	16.80	18.70	20.70	22.70	24.70	26.70	28.70	30.70	32.70	34.70
	24.00	10.40	12.40	14.40	16.40	18.40	20.40	22.40	24.40	26.40	28.40	30.30
5000	$12.00	$23.60	$25.60	$27.60	$29.60	$31.60	$33.60	$35.60	$37.60	$39.60	$41.60	$43.60
	16.00	19.30	21.30	23.30	25.30	27.30	29.30	31.20	33.20	35.20	37.20	39.20
	20.00	15.00	16.90	18.90	20.90	22.90	24.90	26.90	28.90	30.90	32.90	34.90
	24.00	10.60	12.60	14.60	16.60	18.60	20.60	22.50	24.50	26.50	28.50	30.50

1/ Feed requirement goals: Corn, 45 bushels; Protein, 150 pounds; Alfalfa hay, 0.6 tons; Average daily gain, 2.0 pounds. The feed cost per cwt. of gain should be $14.00 to $16.00 for 1962-63.

CHART 5 650# GOOD TO CHOICE YEARLING HEIFERS FED GRAIN INTENSIVELY 150 DAYS, SOLD AT 950# AND CHOICE GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rate, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Prices Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$19.90	$21.30	$22.70	$24.10	$25.50	$26.80	$28.20	$29.60	$31.00	$32.40	$33.80
	16.00	18.10	19.50	20.90	22.30	23.70	25.00	26.40	27.80	29.20	30.60	32.00
	20.00	16.30	17.70	19.10	20.50	21.80	23.20	24.60	26.00	27.40	28.80	30.20
	24.00	14.50	15.90	17.30	18.70	20.00	21.40	22.80	24.20	25.60	27.00	28.40
120	$12.00	$20.20	$21.50	$22.90	$24.30	$25.70	$27.10	$28.50	$29.90	$31.20	$32.60	$34.00
	16.00	18.40	19.70	21.10	22.50	23.90	25.30	26.70	28.10	29.40	30.80	32.20
	20.00	16.60	17.90	19.30	20.70	22.10	23.50	24.90	26.20	27.60	29.00	30.40
	24.00	14.80	16.10	17.50	18.90	20.30	21.70	23.10	24.40	25.80	27.20	28.60
1000	$12.00	$20.40	$21.80	$23.20	$24.60	$26.00	$27.30	$28.70	$30.10	$31.50	$32.90	$34.30
	16.00	18.50	20.00	21.40	22.80	24.20	25.50	26.90	28.30	29.70	31.10	32.50
	20.00	16.80	18.20	19.60	21.00	22.40	23.70	25.10	26.50	27.90	29.30	30.70
	24.00	15.00	16.40	17.80	19.20	20.50	21.90	23.30	24.70	26.10	27.50	28.90
5000	$12.00	$20.50	$21.90	$23.30	$24.70	$26.00	$27.40	$28.80	$30.20	$31.60	$33.00	$34.30
	16.00	18.70	20.10	21.50	22.80	24.20	25.60	27.00	28.40	29.80	31.20	32.50
	20.00	16.90	18.30	19.60	21.00	22.40	23.80	25.20	26.60	28.00	29.40	30.70
	24.00	15.10	16.50	17.80	19.20	20.60	22.00	23.40	24.80	26.20	27.60	28.90

1/ Feed requirement goals: Corn, 38 bushels; Protein, 60 pounds; Alfalfa hay, 0.5 tons; Average daily gain, 2.1 pounds. The feed cost per cwt. of gain should be $17.00 to $19.00 for 1962-63.

CHART 6 650# MEDIUM AND COMMON FEEDER STEERS FED MAXIMUM ROUGHAGE 180 DAYS, SOLD AT 1050# AND STANDARD AND GOOD GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rate, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Price Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$20.60	$22.10	$23.60	$25.10	$26.60	$28.20	$29.70	$31.20	$32.70	$34.30	$35.80
	16.00	18.20	19.70	21.20	22.70	24.30	25.80	27.30	28.80	30.40	31.90	33.40
	20.00	15.80	17.30	18.80	20.40	21.90	23.40	24.90	26.40	28.00	29.50	31.00
	24.00	13.40	14.90	16.50	18.00	19.50	21.00	22.50	24.10	25.60	27.10	28.60
120	$12.00	$20.90	$22.40	$23.90	$25.50	$27.00	$28.50	$30.00	$31.50	$33.00	$34.60	$36.10
	16.00	18.50	20.00	21.50	23.00	24.60	26.10	27.60	29.10	30.60	32.20	33.70
	20.00	16.10	17.60	19.10	20.60	22.20	23.70	25.20	26.70	28.30	29.80	31.30
	24.00	13.70	15.20	16.70	18.20	19.80	21.30	22.80	24.30	25.90	27.40	28.90
1000	$12.00	$21.10	$22.70	$24.20	$25.70	$27.30	$28.80	$30.30	$31.80	$33.40	$34.90	$36.40
	16.00	18.80	20.30	21.80	23.30	24.90	26.40	27.90	29.40	31.00	32.50	34.00
	20.00	16.40	17.90	19.40	21.00	22.50	24.00	25.50	27.00	28.60	30.10	31.60
	24.00	14.00	15.50	17.00	18.60	20.10	21.60	23.10	24.60	26.20	27.70	29.20
5000	$12.00	$21.30	$22.80	$24.30	$25.80	$27.40	$28.90	$30.40	$31.90	$33.40	$35.00	$36.50
	16.00	18.90	20.40	21.90	23.40	25.00	26.50	28.00	29.50	31.00	32.60	34.10
	20.00	16.50	18.00	19.50	21.00	22.60	24.10	25.60	27.10	28.60	30.20	31.70
	24.00	14.10	15.60	17.10	18.60	20.20	21.70	23.20	24.70	26.30	27.80	29.30

1/ Feed requirement goals: Corn, 15 bushels; Protein, 300 pounds; Corn silage equivalent, 4.0 tons; Average daily gain, 2.2 pounds. The feed cost per cwt. of gain should be about $17.00 for 1962-63.

CHART 7 700# GOOD TO CHOICE YEARLING STEERS FED GRAIN INTENSIVELY 165 DAYS, SOLD AT 1100# AND CHOICE GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rate, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Price Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$20.60	$22.10	$23.60	$25.10	$26.60	$28.10	$29.50	$31.00	$32.50	$34.00	$35.50
	16.00	18.40	19.90	21.40	22.90	24.30	25.80	27.30	28.80	30.30	31.80	33.30
	20.00	16.20	17.70	19.10	20.60	22.10	23.60	25.10	26.60	28.10	29.60	31.00
	24.00	13.90	15.40	16.90	18.40	19.90	21.40	22.90	24.40	25.80	27.30	28.80
120	$12.00	$20.90	$22.40	$23.80	$25.30	$26.80	$28.30	$29.80	$31.30	$32.80	$34.30	$35.70
	16.00	18.60	20.10	21.60	23.10	24.60	26.10	27.60	29.00	30.50	32.00	33.50
	20.00	16.40	17.90	19.40	20.90	22.40	23.80	25.30	26.80	28.30	29.80	31.30
	24.00	14.20	15.70	17.20	18.60	20.10	21.60	23.10	24.60	26.10	27.60	29.10
1000	$12.00	$21.10	$22.60	$24.10	$25.60	$27.10	$28.60	$30.00	$31.50	$33.00	$34.50	$36.00
	16.00	18.90	20.40	21.90	23.40	24.80	26.30	27.80	29.30	30.80	32.30	33.80
	20.00	16.70	18.20	19.60	21.10	22.60	24.10	25.60	27.10	28.60	30.00	31.50
	24.00	14.40	15.90	17.40	18.90	20.40	21.90	23.40	24.80	26.30	27.80	29.30
5000	$12.00	$21.20	$22.70	$24.10	$25.60	$27.10	$28.60	$30.10	$31.60	$33.10	$34.60	$36.10
	16.00	19.00	20.40	21.90	23.40	24.90	26.40	27.90	29.40	30.90	32.40	33.80
	20.00	16.70	18.20	19.70	21.20	22.70	24.20	25.70	27.20	28.60	30.10	31.60
	24.00	14.50	16.00	17.50	19.00	20.50	22.00	23.40	24.90	26.40	27.90	29.40

1/ Feed requirement goals: Corn, 46 bushels; Protein, 90 pounds; Alfalfa hay, 0.9 tons; Average daily gain, 2.4 pounds. The feed cost per cwt. of gain should be $17.00 to $19.00 for 1962-63.

CHART 8 700# GOOD TO CHOICE FEEDER STEER FED LIBERAL ROUGHAGE 195 DAYS, SOLD AT 1150# AND CHOICE GRADE

Break-Even Feeder Prices for Various Slaughter Prices, 6% Interest Rate, $1.25 Wage Rage, Feed Cost Per Hundredweight of Gain, and Number of Head Per Lot When All Variable Costs are Covered

Number of Head Per Lot	Feed Cost/Cwt. of gain 1/	Slaughter Price Per Cwt. $20.00	$21.00	$22.00	$23.00	$24.00	$25.00	$26.00	$27.00	$28.00	$29.00	$30.00
		Break-Even Feeder Price Per Cwt.										
40	$12.00	$20.70	$22.20	$23.80	$25.30	$26.90	$28.40	$30.00	$31.50	$33.00	$34.60	$36.10
	16.00	18.20	19.70	21.30	22.80	24.40	25.90	27.50	29.00	30.60	32.10	33.60
	20.00	15.70	17.20	18.80	20.30	21.90	23.40	25.00	26.50	28.10	29.60	37.10
	24.00	13.20	14.80	16.30	17.80	19.40	20.90	22.50	24.00	25.60	27.10	28.70
120	$12.00	$21.00	$22.60	$24.10	$25.70	$27.20	$28.80	$30.30	$31.80	$33.40	$34.90	$36.50
	16.00	18.50	20.10	21.60	23.20	24.70	26.30	27.80	29.40	30.90	32.40	34.00
	20.00	16.00	17.60	19.10	20.70	22.20	23.80	25.30	26.90	28.40	30.00	31.50
	24.00	13.60	15.10	16.60	18.20	19.70	21.30	22.80	24.40	25.90	27.50	29.00
1000	$12.00	$21.30	$22.80	$24.40	$25.90	$27.50	$29.00	$30.60	$32.10	$33.70	$35.20	$36.80
	16.00	18.80	20.40	21.90	23.50	25.00	26.60	28.10	29.60	31.20	32.70	34.30
	20.00	16.30	17.90	19.40	21.00	22.50	24.10	25.60	27.20	28.70	30.20	31.80
	24.00	13.80	15.40	16.90	18.50	20.00	21.60	23.10	24.60	26.20	27.70	29.30
5000	$12.00	$21.40	$23.00	$24.50	$26.10	$27.60	$29.20	$30.70	$32.20	$33.80	$35.30	$36.90
	16.00	18.90	20.50	22.00	23.60	25.20	26.70	28.20	29.80	31.30	32.80	34.40
	20.00	16.40	18.00	19.50	21.10	22.60	24.20	25.70	27.30	28.80	30.30	31.90
	24.00	14.00	15.50	17.00	18.60	20.10	21.70	23.20	24.80	26.30	27.90	29.40

1/ Feed requirement goals: Corn, 36 bushels; Protein, 315 pounds; Corn silage equivalent, 3.8 tons; Average daily gain, 2.2 pounds. The feed cost per cwt. of gain should be about $19.00 to $21.00 for 1962-63.