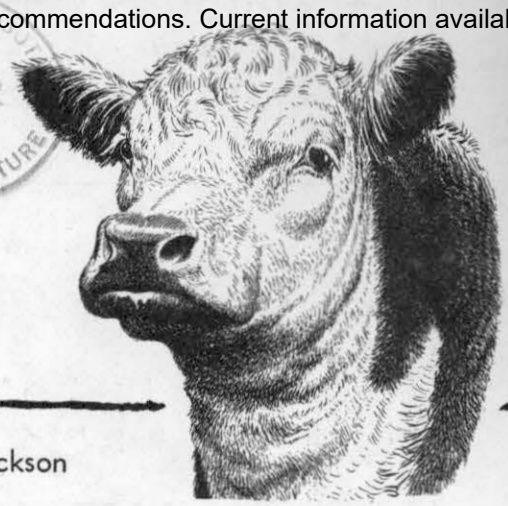
CATTLE FEEDER'S GUIDE

1962 - 1963



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THE OUTLOOK IN BRIEF

Feeder cattle prices are expected to be slightly higher than last year's levels. Feedlot costs will be the same with similar prices on feed grains in 1963 as in 1962. Fat cattle prices in 1963 will not likely be as high as in 1962. This adds up to an outlook for somewhat lower labor returns in the year ahead. The following information is designed to help the cattle feeder appraise his profit prospects and plan his cattle feeding operations for 1962-63.

GUIDE POSTS

8/62
14000

AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF MINNESOTA — U.S. DEPARTMENT OF AGRICULTURE
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TYPICAL FEEDLOT REQUIREMENTS AND COSTS

TABLE 1. FEED AND LABOR REQUIREMENTS [1] (per head purchased)

	Feeder grade weight	Slaughter grade weight	Month on farm	Gain		Feed Required Per Head Purchased							Labor [4] Per Head	
						With Corn Silage [3]				With Legume-Grass Silage or Hay				
				total	per day	corn	protein	silage	hay	corn	protein	hay eq. [2]	40 hd.	100 hd.
	lbs.	lbs.		lbs.	lbs.	bu.	lbs.	ton	ton	bu.	lbs.	ton	hours	
STEER CALVES														
Dry Lot														
Liberal grain	Ch.425	Ch.1025	9	600	2.2	48	300	1.5	.8	62	400	.5	10	6
Liberal roughage	Gd-Ch 425	Ch.1025	11	600	1.8	41	360	3.1	.5	53	225	1.4	11	7
Pasture Fed	Gd-Ch 425	Gd-Ch 1025	12	600	1.5	40 (past. - .3-.4A)	190	2.4	.5	49 (past. - .3-.4A)	100	1.3	11	7
HEIFER CALVES														
Dry Lot														
Liberal grain	Gd-Ch 400	Ch. 850	8	450	1.9					48	250	.6	8	6
Liberal roughage	Gd-Ch 400	Ch. 850	9	450	1.6	34	300	1.8	.5	41	180	1.1	9	6
YEARLING STEERS														
Dry Lot														
Liberal grain	Gd-Ch 650	Ch. 1150	7	500	2.3	44	280	2.0	.6	61	200	.6	6	4
Liberal roughage	Gd-Ch 650	Ch. 1150	8	500	2.2	36	340	3.0	.4	50	100	1.4	7	5
Maximum Roughage (common steers)	Med-Com. 700	Std-Gd. 1050	6	350	1.9	10	200	3.0	.2	24	45	1.0	6	4
HEAVY STEERS														
Dry Lot														
Liberal grain	Gd. 850	Ch. 1200	5	350	2.3					50	150	.4	5	4
Liberal roughage	Gd-Ch 850	Gd-Ch 1200	5	350	2.2	28	160	2.5	.3	37	75	1.1	5	4

1/ These feeding systems were set up by adapting existing data on feeding trials and feed requirements from Minnesota, South Dakota, Ohio, North Dakota, Iowa, Nebraska, Purdue and Illinois sources. They have been checked with "Beef Cattle Rations" Farm & Home Fact Sheet No. 6, and "Nutrient Requirements of Beef Cattle" Publication 579 of the National Research Council. These feed requirements and weight gains are based on normal shrinkage and a 2 percent death loss.

2/ For feeding and management suggestions for each program, see Animal Husbandry Fact Sheet No.6, "Beef Cattle Rations" by Jacobs & Arthaud.

3/ One ton corn silage + 70# protein = .3 T. hay + 4 bu. corn. One ton alfalfa-grass silage = 1/3 T. hay. One ton oat silage + 50# protein = 1/3 T. hay.

4/ These labor requirements are based on a Minnesota labor study reported in Station Bulletin 451, "Labor Used in Cattle Feeding."

TABLE 2. FEEDLOT COSTS [1]

Feeding Program	Cost per 100# weight gain		Cost Per Head Purchased					
	Feed cost	Total cost	Feed [2]	Misc. cash $1.10/100#	Interest 7%	Labor $1.50/hr.	Bldgs. & equip. $.75/100#	Total cost per head purchased [3]
STEER CALVES								
Liberal grain								
Choice 425-1025#	$15.00	$20.25	$90	$7	$6	$15	$4	$122
Liberal roughage								
Good-choice 425-1025#	15.00	20.75	90	7	7	16	4	124
Pasture fed								
Good-choice 425-1025#	14.00	20.00	84	7	8	16	4	119
HEIFER CALVES								
Liberal grain								
Good-choice 400-850#	15.75	21.50	71	5	4	12	4	96
Liberal roughage								
Good-choice 400-850#	15.50	21.75	70	5	5	13	4	97
YEARLING STEERS								
Liberal grain								
Choice 650-1150#	16.50	21.50	83	5	7	9	4	108
Liberal roughage								
Good-choice 650-1150#	16.25	22.00	82	5	8	11	4	110
Maximum roughage								
Medium-common 700-1050#	13.00	19.00	46	4	5	9	3	67
HEAVY STEERS - 2 yr. old								
Liberal grain								
Good-choice 850-1200#	18.75	24.50	66	4	6	7	3	86
Liberal roughage								
Good-choice 850-1200#	17.50	23.25	61	4	6	7	3	81
BEEF COWS								
850-1050#	18.50	25.50	37	2	4	6	2	51

1/ These feedlot costs are based on the feed and labor requirement for the typical feeding programs outlined on page 2.

2/ Feed prices used are: corn, $1.05 per bu.; protein, $4.00 per 100#; hay, $18.00 per ton; corn silage, $8.00 per ton.

3/ Feedlot costs are based on weight gain and feed requirements under actual feedlot conditions.

APPRAISE YOUR PROFIT PROSPECTS 1962-63

STEP 1: CHECK NET SELLING PRICE NEEDED TO COVER COSTS [1]

The following Table 3 shows the net selling price [1] needed to cover costs for five common feeding programs. Compare these with your estimate of market conditions in the year ahead and appraise your chances for profit. The feeder cost in the table is based on present average indications for the fall feeder market. The feeder price includes transportation cost to the farm of $1.00 per cwt. Feedlot costs are based on average costs which are shown in Tables 1 and 2 on pages 2 and 3. Use the blanks provided to compare your own estimates.

The key here is the anticipated price of feeders this fall. Changing the cost of feeders by $1.00 per 100 pounds will change the net selling price needed approximately $.40 for steer calves; $.50 for heifer calves; $.60 for yearlings; and $.70 for 2-year-olds.

Changing the price of corn $.10 per bushel will change the net selling price per 100 pounds needed approximately $.50 for steer calves; $.45 for heifer calves; $.50 for good-choice yearlings; $.10 for common steers and $.40 for 2-year-old steers.

TABLE 3. NET SELLING PRICE NEEDED TO COVER COSTS [1]

FEEDING PROGRAM	Feeder Cost at the Farm [2]		Feedlot Cost [3] Feed, int., misc. cash, labor, bldgs.	Total Cost	Net Selling Price Needed to Cover		Profit [4]
	Per 100#	Per Hd.	Per Hd.	Per Hd.	Fdr., feed, int. & misc. cash cost Per 100#	Total Cost (inc. labor & bldg.) Per 100#	Prospects
Steer Calves 425-1025#							
Good-choice	$31.00	$132	$122	$254	$22.95	$24.80	fair
	29.00	123	122	245	20.05	23.90	average
Your Estimate	____	____	____	____	____	____	____
Heifer Calves 400-850#	28.00	112	96	208	22.60	24.50	fair
	26.00	104	96	200	21.65	23.55	average
Your Estimate	____	____	____	____	____	____	____
Yearling Steers							
Good-choice							
650-1150#	27.00	176	108	284	23.55	24.70	fair
	25.00	163	108	271	22.45	23.55	average
Common 700-1050#	20.00	140	67	207	18.60	19.70	fair
Your Estimate	____	____	____	____	____	____	____
Heavy Steers 850-1200#	24.50	208	86	294	23.70	24.50	fair
Good-choice	23.50	200	86	286	23.00	23.85	fair
Your Estimate	____	____	____	____	____	____	____

1/ The net selling price is the market price for slaughter cattle less trucking, commission and yardage costs. These costs are about $.60-$1.00 per 100 pounds liveweight.

2/ The feeder cost includes transportation cost to the farm.

3/ Feedlot costs are spelled out in detail in the tables on pages 6 and 7.

4/ Profits as indicated here are expected returns above all feedlot costs including labor at $1.50 per hour. Average profit prospects means about an even chance; fair profit prospects means less than an even chance; and good profit prospects mean more than an even chance for returns above feedlot costs including labor.

STEP 2: FIGURE THE "BREAK EVEN" PRICE FOR FEEDER CATTLE

Once you have established an "Outlook Price" for slaughter cattle in the coming feeding year, you can determine the "Break Even" price for feeder cattle this fall. This "Break Even" price is the price that could be paid for feeders and still cover feedlot costs. Feedlot costs include feed, interest, buildings and equipment, miscellaneous cash and labor at $1.50 per hour. These "Break Even" estimates can be used for two purposes:

1. To aid you in deciding the "top" price you are willing to pay for different grade and quality feeders.

2. To help you to determine the grade and quality feeders that are comparatively better buys.

With the net selling price listed in Table 4 and average feedlot costs, note the estimated "Break Even" price for feeders of various weights and grades. This "Break Even" price is the purchase price for feeder cattle "laid in" at the farm. Thus the market quotation would need to be $.40 - $1.50 per cwt. lower depending on your own trucking and handling costs.

The key here is your estimate of the "Outlook Price" for slaughter cattle. For every $ 1.00 per cwt. change in the net selling price expected, 1/ the "Break Even" feeder price will change $2 - $3 per cwt. for calves, $1.50 for yearlings, and $1.20 for 2-year-olds.

TABLE 4. FEEDER CATTLE "BREAK EVEN" PRICE

With an Expected Net Selling Price 1/		"Break Even" Price 2/ for Feeders this Fall		
Spring 1963		Yearling Steers 3/		
Price Range	Slaughter Grade	Feeder Grade	650#	750#
$24 - $25	High Choice	Choice	$25 - $27	$24 - $25
23 - 24	Low Choice	Good	23 - 25	22 - 24
21 - 22	Good	Medium	21 - 23	20 - 22
19 - 20	Standard	Common	19 - 21	17 - 19
Fall 1963		Steer Calves 3/		
Price Range	Grade	Feeder Grade	350#	425# 500#
$25 - $26	High Choice	Choice	$35-$37	$32-$34 $29-$31
24 - 25	Low Choice	Good-Choice	32- 34	29- 31 26- 28
22 - 23	Good	Medium-Good	26- 29	24- 27 22- 25
YOUR ESTIMATE				
_____	_____	_____	_____	_____ _____
_____	_____	_____	_____	_____ _____

1/ The net selling price is the market price for slaughter cattle less trucking, commission and yardage costs.
2/ The "Break Even" price is the purchase price for feeder cattle "laid in" at the farm. It is the price that could be paid for feeders and still cover feedlot cost at the stated net selling price for slaughter cattle.
3/ For heifer calves and yearling heifers the "Break Even" price is $2 - $3 below steers.

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21 - 22	Good	Medium	21 - 23	20 - 22
19 - 20	Standard	Common	19 - 21	17 - 19
Fall 1963		Steer Calves 3/		
Price Range	Grade	Feeder Grade	350#	425# 500#
$25 - $26	High Choice	Choice	$35-$37	$32-$34 $29-$31
24 - 25	Low Choice	Good-Choice	32- 34	29- 31 26- 28
22 - 23	Good	Medium-Good	26- 29	24- 27 22- 25
YOUR ESTIMATE				
_____	_____	_____	_____	_____ _____
_____	_____	_____	_____	_____ _____

1/ The net selling price is the market price for slaughter cattle less trucking, commission and yardage costs.
2/ The "Break Even" price is the purchase price for feeder cattle "laid in" at the farm. It is the price that could be paid for feeders and still cover feedlot cost at the stated net selling price for slaughter cattle.
3/ For heifer calves and yearling heifers the "Break Even" price is $2 - $3 below steers.

STEP 3: COMPARE THE EFFECT OF FEEDLOT COST ON NET SELLING PRICE AND "BREAK EVEN" FEEDER PRICE

Since feed is 65 to 75 percent of total feedlot costs, variations here can greatly offset your appraisal of profit prospects in the coming feeding season. Note the following table which indicates the effect of varying feed cost of the "Net Selling Price Needed." For example, with steer calves purchased at $29.00 per cwt., the net selling price needed with a $.15 per pound of gain feed cost is $23.95 per cwt. With a $.17 per pound of gain feed cost the net selling price is $25.10.

TABLE 5. NET SELLING PRICE NEEDED TO COVER ALL COST AT VARIOUS LEVELS OF FEEDER PRICES AND FEEDLOT COSTS

A. STEER CALVES: 425-1025#

Purchase Price Per Hundredweight	Feed Cost Per Pound of Gain		
	$.13	$.15	$.17
$31.00	$23.60	$24.75	$25.95
29.00	22.75	23.95	25.10
27.00	21.90	23.10	24.25
25.00	21.10	22.25	23.45

EXAMPLE

B. YEARLING STEERS: 650-1150#

Purchase Price Per Hundredweight	Feed Cost Per Pound of Gain		
	$.14	$.16	$.18
$27.00	$23.50	$24.40	$25.25
25.00	22.40	23.25	24.15
23.00	21.25	22.15	23.00
21.00	20.15	21.00	21.85

C. TWO-YEAR-OLD STEERS: 850-1200#

Purchase Price Per Hundredweight	Feed Cost Per Pound of Gain		
	$.15	$.17	$.19
$25.00	$23.75	$24.35	$24.90
24.00	23.05	23.60	24.20
22.00	21.60	22.20	22.80
20.00	20.20	20.80	21.40

PLANNING YOUR FEEDING PROGRAM

STEP 1: WHAT ARE YOUR PROFIT PROSPECTS?

Since performance and feedlot costs vary considerably, figure your own profit prospects based on your own conditions.

Two factors are generally known at the beginning of any feeding period: (1) the price of feeders, and (2) value of feed to be fed. With this worksheet and your own feeding results from past years you can figure your profit prospects for the coming year. By following the procedure outlined, you can calculate the selling price you need to cover all costs in the feedlot. By comparing this necessary price with your expectations of future selling price conditions, you can estimate profit prospects. Every cattle feeder needs to do this before buying cattle.

1. Determine Cost of Producing Finished Animal

Your Estimate

(a) Cost of feeder _____ weight x $_____ price = $_____

(b) Transportation cost to the farm _____

(c) Feedlot costs per head:

Feed Cost	Amount	x	Price	=	Cost
Corn (bu.)	_____	x	_____	=	_____
Small grain (bu.)	_____	x	_____	=	_____
Supplement (lbs.)	_____	x	_____	=	_____
All hay (tons)	_____	x	_____	=	_____
Silage (tons)	_____	x	_____	=	_____
Pasture (days)	_____	x	_____	=	_____
			TOTAL FEED COSTS		_____

Estimated Other Costs

Interest $_____ orig. cost/head x _____ int. rate for months on feed _____

Miscellaneous costs = _____ cwt. gain x $1.10/cwt. _____

Buildings and equipment = _____ cwt. gain x $.75/cwt. _____

Labor cost _____ hrs./head x $_____ per hour = _____

TOTAL COST PER HEAD _____

2. Determine Net Selling Price You Need to Cover Costs*

Divide: $\frac{\text{Total Cost per Head}}{\text{Sale Weight}}$ = _____ = [ ]

3. Your Estimated Sale Value of Steer

_____ cwt. x $_____ net selling price* = value/head _____

EXPECTED PROFIT OR LOSS PER HEAD [ ]

* Net Selling Price is market price less cost of trucking, commission, yardage, etc.

STEP 2: FIT YOUR CATTLE FEEDING PROGRAM TO YOUR FARM

An important step in planning your feeding program for the coming year is to balance the feeding program with your feed supply. How many cattle will your roughage supply feed? How much corn will be needed to finish your cattle? Will you need to buy added feed or will there be roughage and corn left over for other livestock or for sale? How much borrowed capital will be needed? The following worksheet can guide you in your planning and assist in presenting your case to the lender.

1. Determine Amount of Roughage Available (Hay Equivalent Tons)

Hay		_____	tons
One-third of corn silage tonnage	=	_____	tons
One-third of grass silage tonnage	=	_____	tons
Acres pasture _____ x .6 hay yield*	=	_____	tons
Total Hay Equivalent		_____	tons

2. Determine Number of Head this Roughage Will Feed and the Amount of Grain Needed

Total hay equivalent tons _____ = _____ number feeders
Hay equivalent per head** _____

3. Determine Grain Required to Finish Cattle to Market Grade

Number head _____ x bu. corn _____	=	_____	total bushels needed
Corn equivalent available		_____	bushels
Balance: a. need to purchase		_____	bushels
b. available for other livestock or sale		_____	bushels

4. Building and Lot Space Required

	Sq. ft. Required	Sq. ft. Available
Loafing barn space		
Number head _____ x sq. ft./hd =	_____	_____
(15-25 sq. ft./hd. calves; 25-30 sq. ft./hd. yearlings and 2-year-olds)		
Unpaved lot		
Number head _____ x 200-300 sq. ft./hd. =	_____	_____
Paved lot		
Number head _____ x 50-70 sq. ft./hd. =	_____	_____

5. Capital Requirements

Number cattle _____ x cost/hd.	_____ =	_____
Purchased feed		
Corn	_____	_____
Protein	_____	_____
Equipment		_____
Other _____		_____
	TOTAL	_____
Own capital available		_____
Amount to be borrowed		_____

* Assumes 40 percent waste in pasturing.
** See feed requirements on page 2 or use your own.