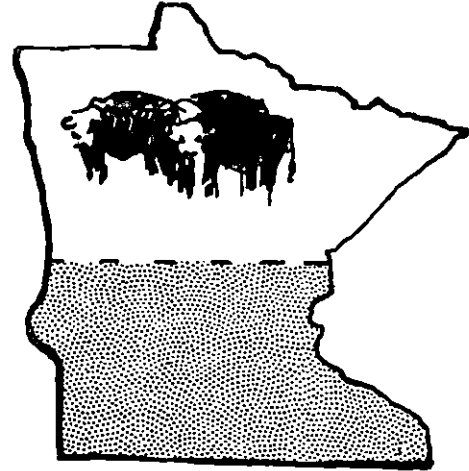


# Beef Cow Herd Planning Guide



## Should I Produce Feeder Cattle in Northern Minnesota

The demand for fed beef in the United States continues to grow. To supply the need for feeder animals requires an annual addition of over one million cows to the national herd. Can northern Minnesota share in this growth? Can beef cows compete with other enterprises in northern Minnesota?

Beef cows can compete with other enterprises for the use of resources on northern Minnesota farms under the following location, resource and management conditions:

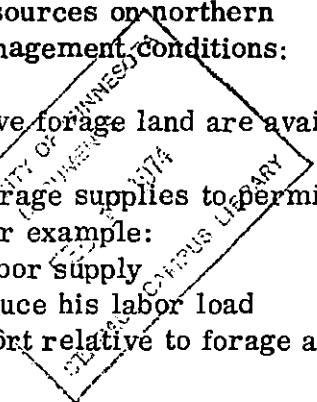
- LOCATION: ● Where large acreages of fairly productive forage land are available.
- RESOURCES: ● Where labor is too limited relative to forage supplies to permit more labor intense livestock enterprises. For example:
- where off-farm employment limits labor supply
  - where the older farmer wishes to reduce his labor load
  - on a large acreage where labor is short relative to forage acres.
- MANAGEMENT: ● Able to limit winter feed costs to \$70/cow.
- Able to obtain a 90% calf crop with a 450 lb. average weaning weight.
  - Able to market 80% choice calves.
  - Able to handle a 200 cow herd if a full-time specialized operation is desired.

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# Planning Information

**TOTAL INCOME** - Total sales per cow or for the total herd, should be estimated by adding steer calf sales, heifer calf sales and cull cow sales. The example assumes that under average management steer calves will weigh 440 pounds at the farm and 410 pounds at the market, heifer calves will shrink from 410 pounds to 385 pounds. A like shrink of 6% is assumed for the heavier calves. A long-run planning price of \$48 to \$50 per cwt. for choice steer calves is suggested for the 1970's.

**CASH COSTS** - For making cash flow projections it will be helpful to first total only cash costs that are incurred by the beef cow operation, excluding feed production costs.

**Purchased Feed** - Any purchased feed expenses should be included in this category. Mineral, salt and feed additives should be included plus a charge for about 5 bushels of oats.

**Health** - Medicine, sprays and veterinarian costs.

**Breeding** - Annual bull depreciation costs or artificial insemination.

**Fuel and Electricity** - This should include only that portion of the fuel and electricity chargeable directly to the beef cow herd.

**Insurance and Taxes** - Includes insurance on building and cattle and taxes on buildings.

**Repairs** - All repairs of buildings and equipment that is used exclusively for beef cows should be included plus a share of the repair bill on power units that are used only partly for the beef cow enterprise.

**Interest Paid** - Includes all interest actually paid on cattle or beef facility or equipment loans.

**Marketing** - Costs of selling cattle include advertising, transportation, commission, yardage or any other costs incurred for selling.

**Hired Labor** - Include any special labor for beef plus that share of other hired labor that applies to the cow herd.

**RETURN OVER CASH COSTS** - This can be used along with returns over cash costs from crops and other enterprises to make cash flow projections for the farm business.

**Forage Production Costs** - Since forage production is primarily for utilization by the beef herd, cash costs of that production might be used as a basis of feed costs rather than using a market value for the feed (since market may be quite limited). Example assumes a production cost of about \$15/ton for hay; a requirement of about 3 tons of hay per cow unit and an acre of improved pasture needing an annual \$10 input cost.

**RETURN TO LABOR, FACILITIES AND COW EQUITY CAPITAL** - This is the amount available to pay capital repayment and labor costs. Interest on debt capital was charged under cash costs so remaining capital costs are for building and equipment amortization and any capital repayment required on beef herd loan. If these are subtracted out, a residual can be determined for labor and management. Alternatively, a labor charge can be subtracted out and a rate of return calculated on equity capital.

# Estimating Income Above Costs Per Cow

	Average Management	Good Management	<u>Your Estimate</u>	
			Per Cow	Total
Percent calf crop	85%	90%	_____	_____
Average farm weaning weight	425#	450#	_____	_____
Average terminal selling weight	400#	425#	_____	_____
<b>GROSS RETURNS PER BEEF COW</b>				
Return for steer calves (A)				
410# x 48¢ x 42% =	\$ 83		_____	_____
440# x 50¢ x 45% =		\$ 99	_____	_____
Return for heifer calves (B)				
385# x 43¢ x 23% =	\$ 38		_____	_____
410# x 44¢ x 25% =		\$ 45	_____	_____
Return for cull breeding heifers				
\$300 per head x 5%	\$ 15	\$ 15	_____	_____
Return for cull cows (D)				
14% of 1055# @ \$28 =	<u>\$ 41</u>	<u>\$ 41</u>	_____	_____
<b>TOTAL INCOME PER COW (A + B + D)</b>	<b>\$177</b>	<b>\$200</b>	_____	_____
<b>CASH COSTS PER BEEF COW UNIT</b>				
Purchased feed - grain, mineral, salt, vitamins	\$ 5	\$ 6	_____	_____
Health	3	3	_____	_____
Annual bull replacement	7	10	_____	_____
Fuel and electricity	3	3	_____	_____
Insurance and taxes	1	1	_____	_____
Repairs on buildings and equipment	2	2	_____	_____
Interest paid on beef cows and facilities	24	24	_____	_____
Marketing	5	6	_____	_____
Hired labor	2	2	_____	_____
<b>TOTAL CASH COSTS</b>	<u>\$ 52</u>	<u>\$ 57</u>	_____	_____
<b>RETURN TO LAND, LABOR AND EQUITY CAPITAL</b>	<b>\$125</b>	<b>\$143</b>	_____	_____
Forage production costs	<u>\$ 55</u>	<u>\$ 55</u>	_____	_____
<b>RETURN TO LABOR, FACILITIES AND COW EQUITY CAPITAL</b>	<b>\$ 70</b>	<b>\$ 88</b>	_____	_____

# Decision Making Aids

Beef cow operators must decide whether to sell their feeders (1) in the fall as weaning calves, (2) winter them and sell in the spring or (3) after wintering them, pasture them and sell in the fall as yearlings. Alternatively, they can feed to slaughter weights (see Cattle Feeders Guide).

To compare the profitability of these alternatives they can: (1) estimate probable increase in value of the feeder, (2) estimate the likely additional costs of wintering and pasturing a feeder, and (3) compare the expected added income with the added costs to help determine whether the difference is worth the risk of holding.

**ADDED RETURN:** Estimate probable increase in value of feeder. In projecting future sales value of heavier feeders remember that heavier feeders bring fewer dollars per hundredweight. Also, feeder prices are usually lowest in the fall and highest in the spring. The examples use typical price relationships and weight gains.

**ADDED COSTS:** Estimate added cash costs first. The return over cash costs figure can be useful in making cash flow projections. Then place a value on home produced resources and estimate what returns you expect to your labor and management. Is it worth the risk?

Item	Wintering a Calf (425# - 625#)		Pasturing a Yearling (625# - 750#)	
	Typical	Estimate	Typical	Estimate
<b>ADDED RETURNS</b>				
Sales Value at end of period	(44¢) \$275	_____	(41¢) \$308	_____
Minus Beginning Value of Feeder	(50¢) 212	_____	(44¢) 275	_____
<b>Added Returns</b>	<b>\$ 63</b>	_____	<b>\$ 33</b>	_____
<b>ADDED CASH COSTS</b>				
Mineral and salt	1	_____	2	_____
Health and death loss	2	_____	2	_____
Repairs	1	_____	1	_____
Interest paid	9	_____	7	_____
Miscellaneous	2	_____	1	_____
Marketing	2	_____	1	_____
<b>Total Cash Costs</b>	<b>\$ 17</b>	_____	<b>\$ 14</b>	_____
<b>Return Over Cash Costs</b>	<b>46</b>	_____	<b>19</b>	_____
<b>COST OF HOME PRODUCED RESOURCES</b>				
Bedding vs. manure value	0	_____	--	_____
Grain (250 lbs. at 2.5¢)	6	_____	--	_____
Hay (2500 lbs. at 1¢)	25	_____	--	_____
Pasture (\$3.00/head/mo.)	--	_____	12	_____
<b>Total Feed and Bedding Cost</b>	<b>\$ 31</b>	_____	<b>\$ 12</b>	_____
<b>RETURN TO LABOR AND SHELTER</b>	<b>\$ 15</b>	_____	<b>\$ 7</b>	_____