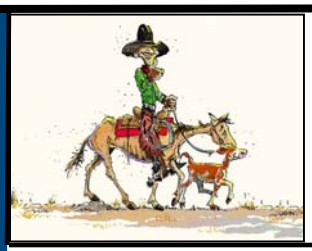

Beef Cow-Calf Operation Reduction Strategies

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During periods of severe drought, many Alberta cow-calf producers may be forced to adjust cow numbers to fit available feed supplies.

Producers' herds are typically the result of many years of breeding and selection. With feed shortages, cost of replacement feed and increased grazing costs, this may be an opportune time to consider some longer term financial strategies for your operation. Profitability, farm cash flow, personal living expenses and taxes are some of the key issues.

Common Questions Areas

Producers have an array of production and management options to make feed supplies meet their needs. Can you do some swath grazing? Is there stubble grazing or other aftermath grazing nearby? Are you going to harvest reasonable straw supplies? What about leasing? If you want to sell all your cows, can you arrange an option to buy back some cows next year? Are there some under-utilized capital assets than can be sold without affecting the core cow-calf operation? Is it worthwhile to investigate feeding options that cut down on wasted feed? Are the cows in good condition and can that be used to your advantage?

On this latter note, if your cows start calving after March and are in excellent shape at the start of the winter they may be able to sacrifice some body condition without creating calving or rebreeding problems. You could allow an average Body Condition Score (BCS) of 3.5 to fall to an average of 3.0, then feed more and better feed in the six weeks before calving in spring to restore the desired cow condition. This strategy is based on early weaning this fall, allowing the cow to put on weight while gain is less costly.

Start with Matching "Feed to Need"

If the beef cow-calf business figures in your long-term future plans, what are some ways to address the problem: "how can our breeding program be preserved but still have cow numbers in line with this year's expected winter feed supply and potentially diminished pasture carrying capacity next summer?" Here's a stepwise process to give you clarity in matching "feed to need".

First take an honest look at your actual and projected feed supply: both winter feeding and next summer's grazing. Count your bales, get an accurate sample weight and convert to tons (or tonnes if you prefer). Add any greenfeed, silage or straw to be harvested. Estimate how much fall grazing you will have and determine when you think you will start feeding.

Convert your feed supply estimate to a dry matter basis by multiplying the quantity by one minus the appropriate moisture level. For baled hay, this is typically in the range of 11-15% moisture, so you'd multiply the quantity by (1 - 0.15). Similarly, for silage at roughly 65% moisture, the calculation would be quantity times (1 - 0.65). This then, is your feed available, in dry matter, to get you through to the spring.

The next step is to realistically estimate your winter feeding days. Many farmers would use May 20 for turn-out to pasture in the spring, but given the close grazing due to the drought, mid-June as an end date for feeding might be a better bet. For example, if you think you will start feeding November 1, then you have 227 days until June 15, next year.

How much feed will you need? Dry matter needed per cow per day can be estimated by multiplying average cow weight by 2.5%. Daily forage intake may be reduced by balancing the diet for protein and providing an energy supplement. Providing sufficient rumen degradable protein will improve the efficiency of forage use. There are many types of energy supplements available ranging from whole grains to pellets with minerals and protein included. As noted in the AAFRD article, "Cow Corn Rations" (1) reducing daily dry matter intake to below 2% of mature cow weight for cows fed a diet high in corn grain with a limited good quality roughage is possible. For further assistance, consult with a beef nutritionist for help in ration formulation.

Multiplying your daily per cow estimate by projected days on feed yields an indication of the draw each cow will put on your feed stocks. Then, multiplying this per cow estimate by cows on hand shows your total requirements for the feeding season. Compare total requirements to feed available to determine your projected shortfall. Consider adding a high and low estimate to cover off a range of possible scenarios, for example, a short warmer winter, or a longer, colder winter with considerable snow.

A step-by-step example of matching feed supplies to cow-calf operation needs is provided on the attached pages (2). Calculations are based on an average case. An analysis of a safety margin for extra days, cold and/or wastage should be included.

Possible Strategies – Matching "Need to Feed"
If your intent is to maintain at least a portion of your breeding herd, this becomes a priority in the options you lay out. Maintaining feeders becomes a lower priority call on feeds. Culling activities focus on cow performance and best cow-herd management practices.

During a drought year, often at the top of the list is to wean early. It is more efficient to feed a calf directly rather than providing milk through its mother. Using herd performance and best management practices (like pregnancy checking) as a guide, the attached table provides a number of cow herd reduction options for after weaning, ordered from least severe to complete herd sale. Strategies 1 to 4 would be considered as normal practices for many cow-calf operations depending on whether or not calves were backgrounded.

Other options to selling your cow herd are:

- Use of custom lots
- Feed only (calve elsewhere). Costs are about $2.25-$2.75 per day plus trucking at this time (August 2002)
- Feed and calving
- Keep a core herd and custom feed other cattle (with feed supplied by owner)
- Sell all with an option to buy back in the future (fixed price or negotiated price with an arbitration or mediation option)
- If nearing retirement, consider selling all with a lease back, producer note or agreement for sale.
- Buy a ranch or share of a ranch elsewhere which has a good supply of feed

If potential income tax liability is relatively high, consider forming an operating livestock or farming company (for general information see AAFRD publication Agdex 812-12 "Farming as a Corporation). See your accountant and/or lawyer for individual professional advice.

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If you have questions or require further assistance on this topic, please call the AgInfo-Center at 1-866-882-7677

Beef Cow-Calf Operation Herd Reduction Strategies

#	Herd Reduction Strategy	Pro	Con
1	Sell steer calves weighing more than 450 lbs.	Saleable product Saves backgrounding feed	May cause tax issues if you sell 2 calf crops in 1 year
2	Sell heifer calves weighing more than 400 lbs.	Saleable product, will not give another calf until fall of 2004 No tax drought deferral	Potential tax issues as above Loss of genetics
3	Cull Open Cows	No freeloaders allowed Tax deferral may be available	May be depressed prices due to over-supply
4	Sell steer and heifer calves weighing less than 450 and 400 lbs. respectively	Less feed required this winter which then be used to feed a mature cow with income in 2003. Could custom feed if partial budget looks favourable	May be severe price discounts for smaller animals (less than 250 lbs) More pens may be needed Higher quality feed needed May be profitable to feed all calves to 400+ lbs. before sale
5	Bred heifers Sell heifers less than 45 days pregnant Cull small (less than 65% of mature cow weight)	Less to feed Narrow the calving window More efficient and profitable cow herd in the future	Potential tax issues
6	Sell bulls	One bull eats as much as 1.5 cows Could use AI & one clean-up bull if facilities would permit	Loss of breeding power Cash flow needed to purchase or lease bulls in 2003
7	Cull mature cows which would normally be culled for age, structure in the falls of 2003, 2004 & 2005	Saves more feed	Loss of income from potential higher calf prices (2003 – '06) in the present cattle cycle
8	Cull cows for performance e.g. weans (adjusted 205 day weight) a calf less than 35% of mature cow weight	Saves more feed Identifies cows which don't milk as they could	Sell cows which still raise a calf at a profit
9	Cull cows that are late, for example, more than 45 days from desired calving date	Saves more feed Reduces calving window Focuses on cows which are more profitable	Sell cows which still raise a calf at a profit
10	Cull 2, 3 & 4 year old cows which calved after the first 21 days of breeding season	Saves more feed Reduces calving window Focuses management & scarce feed on cows which are the most efficient & profitable	Loss of cows which are likely still profitable (just not as profitable as those which remain)
12	Sell All	Lets pastures rest No winter feed concerns Could lease or custom graze your pasture in 2003	Depressed prices. Loss of all breeding stock and genetics that fits your resources & management Replacement cows could be very expensive to purchase 2003 or 2004 Loss of identity as a beef cow-calf producer

Example of Estimating Feed, Needs and a Strategy to Bring Them Together

Estimated feeding days:
- 227 days of winter feeding (Nov. 1st - June 15th)

85 cows & 15 bred heifers:
- average weight 1,200 pounds

3 bulls:
- average weight 2,200 pounds

Feed required – Cows & Bred Heifers:
- Per head per day estimate:
  1,200 lbs/head x 0.025 = 30 lbs
  of forage dry matter (DM)
- Feed required per day:
  30 lbs/head x 100 head = 3,000 lbs/day
- For winter season:
  3,000 lbs/day x 227 days = 681,000 lbs
  681,000 lbs / 2,000 lbs/ton = 340.5 tons

Feed required – Bulls:
- Per head per day estimate:
  2,200 lbs/head x 0.025 = 55 lbs
- Feed required per day:
  55 lbs/head x 3 head = 165 lbs/day
- For winter season:
  165 lbs/day x 227 days = 37,455 lbs
  37,455 lbs / 2,000 lbs/ton = 18.7 tons

Total feed required:

Cows:	340.5
Bulls:	+ 18.7
Total	= 359.2 tons of DM

Feed available:
- 60 round bales of hay
  @ 1,200 pounds each
  @ 15% moisture:
  60 bales x 1,200 lbs/bale x (1 - 0.15) =
  = 30.6 tons (DM)

- 200 tons of mixed cereal silage
  @ 65% moisture
  200 tons x (1- 0.65) = 70.0 tons of DM

- 50 bales of barley straw
  (estimated, not combined yet)
  @ 900 pounds each
  @ 15% moisture:
  50 bales x 900 lbs/bale x (1- 0.15) = 19.1 tons

Total winter feed available:

Hay:	30.6
Silage:	+ 70.0
Straw:	+ 19.1
Total	= 119.7 tons of DM

Deficit = (359.2 – 119.7) = 239.5 tons

A Possible Solution
- Sell all calves
- Assume keep 9 bred heifers and sell 6
- Sell 6 open cows
- Sell 15 older cows for various problems
- Sell 3 bulls
- Sell 10 cows that ordinarily would go next year
- Sell 10 cows that ordinarily would go the year after that
- Sell 10 late calvers
- Sell 8 cows for performance issues

Total sold: 65 cows/heifers and 3 bulls
Remainder: 35 cows and bred heifers
Feed requirements:
35 cows x 30 lbs/head/day = 1,050 lbs/day
x 227 days / 2000 lbs/ton = 119.2 tons of DM

Feed available = 119.7 tons of DM

Surplus = 0.5 tons