Livestock to Feed or Feed to Livestock

Livestock Drought Management

Introduction

Your livestock and forage inventories will be key to informing you what your needs or feeding gaps are. Your inventory and finances will help identify feed gaps and determine which option is most feasible, economical and practical for you and your operation. The options below may assist in determining where or how best to source the additional feed resources.

Option 1: Bring Feed to Livestock

1. Feed requirement for the herd and the timeframe that feeding covers

Consider the volume of feed required for the herd and the timeframe that feeding covers. In general, use an intake of 2.2% body weight then adjust for the moisture content of the feed. In this examples hay is at +/- 13% moisture.

Animal needs

Please note: if you know your animal intakes use them; if not, the following will put you in the ballpark. For steps to calculate feed quantity refer to the BC Livestock Drought Management Guide (pages 20 & 21) found here.

Animal	**Animal weight**	**Dry Matter Intake (DMI)** at 2.2% body weight **(lb per day)**	As-fed daily intake **(lb per day)**	**Hay as-fed** at 13% moisture **(lb per month)***
Mature cow	1,300 lb	29 lb	35 lb	1,200 lb
Beef yearling	Averaging 800 lb through feeding period	18 lb	20 lb	700 lb
Beef bull	1,700 lb	38 lb	45 lb	1,500 lb
Horse	1,300 lb	29 lb	35 lb	1,200 lb
Sheep or Goat (use 3% of body weight for DMI)		5 lb	6 lb	200 lb

*assume mid quality hay and very modest feeding losses.

Hay Equivalent

One ton (2,000 lb/ton) of hay supports approximately:

- One mature cow or one horse for 1.6 months
- One beef yearling for 3.3 months
- One sheep or goat for 10 months (or five animals for 2 months)

2. **What is the feed quality?**

   Consider asking or getting the hay tested to ensure you are purchasing forage that will complement what you already have. Feed testing helps determine:

   - Nutrient value
   - Suitability for animal class and livestock growth stage
   - Related nutrient requirements needed for a productive herd or flock, and whether supplementation is required

3. **What are the hay transportation requirements?**

   Consider:

   - Number of trips or loads of hay required
   - Load size as there can be notable variation on load size depending on bale type and weight
     - With bales that weigh 1,400 to 1,600 lb load weights can range from 20 tons to 42+ tons depending upon licensing, loading and bale shape and weight. Generally, most conventional loads tend to be in the 26 to 28 ton range with Super B's exceeding 32 ton. **Please note:** Check with your hauler as to what load weight they are able to haul.
   - Trailer type
     - Bale weights being the same, typically Super B's haul more than B-trains and 53 feet step deck.
   - Trucking costs vary depending upon the situation, for example:
     - Backhaul opportunities
     - Road surface (not all haulers or trailer types are suited to some gravel roads)
     - Able to haul yourself
     - This year (2026) there may also be a fuel surcharge

4. **What other costs may apply?**

   Your additional costs may include:

   - Feeding costs (i.e., yardage)
   - Animal health treatments
   - Incremental storage costs

Option 2: Bring Livestock to Feed

1. **How long will livestock stay?**
   Consider how long the cows will be there and if calving is involved will they be calved there or brought home to calve. Keep in mind transportation timing.

2. **What does the host charge?**
   Determine:
   - Cost of feed --- per day per animal, or?
   - Yardage --- what does that cover?
   - Vet and health costs?
   - Is there a pasture rate, will it be followed by a feed rate?
   - Calving costs

3. **What transportation is required?**
   Typical cattle liner capacities:

Livestock Type	Animals per Load
Mature Cows	38-40 depending upon size
Pregnant Cows	36-38 (returning) due to their additional size
Cow-Calf Pairs	~30 (returning)
Yearlings	Numbers vary with body weight and size. Return loads may be smaller (i.e., less animals) due to weight gain.

4. **Management Compatibility**

Before moving livestock:

- ☐ Confirm management guidelines or marketing strategy aligns (e.g., grass fed, organic, etc.)
- ☐ Discuss health protocols
- ☐ Do you require a contract to ensure expectations are understood?
- ☐ Additional aspects that need to be addressed (e.g., relative to liability, insurance, number of days on your ranch prior to turn-out)

Cost Comparison Considerations

Transportation costs for one load of hay and one cattle liner load are often similar over the same distance. However:

- Cattle liner may travel slower than hay (1 to 1.5 hours depending upon roads on a 10-hour trip (one-way))
- Super B hay units would likely cost more than a liner
- Multiple trips may be required

Yardage and health costs can significantly influence the final decision.

Example (1): 240 mature cows need feed for 3.5 months. For sake of an example this looks at mid-November to end of February, so cows are back on farm to calve, presumably you already have the feed at home. Adjust to your reality.

Feed to Livestock:

Hay requirement	240 cows * 3.5 months * 1,200 lb/month / 2,000 lb/ton = 504 tons of hay
Hay purchase cost	504 tons * $200/ton = $100,800.00
Hay transportation cost	504 ton at 28 ton/load = 18 loads * $230/hr * 20 hr/load = $82,800.00 (10 hr one way)
Total hay costs delivered	= $183,600.00 or ○ $364.00 per ton ○ At 4,200 lb (2.1 ton) per cow = $764.40 per cow for 3.5 months

Plus, your feeding (yardage) and health costs.

Livestock to Feed:

Hay requirement	240 cows * 3.5 months * 1,200 lb/month / 2,000 lb/ton = 504 tons of hay
Hay purchase cost	504 tons * $200/ton = $100,800.00
Cow transportation cost	40 cows per liner = 12 trips (includes their return) = 12 trips * 21.0 hours * $230.00/trip = $57,960.00 (added 1 hr for loaded liner)
Total costs to feed and move cows	= $158,760.00 ($662.00 per cow) for 3.5 months

Plus, yardage and health costs and perhaps a small trailer trip for 12 cows if the return trip only carries 38 pregnant cows.

Livestock to Feed advantage would be $24,840.00 ($104.00 per cow). That would need to cover the difference between at home feeding and health costs and the "away" yardage and health costs and any additional transportation costs to return them home.

For simplicity in the examples, feed costs were based on hay that was purchased from the same location as the livestock could be overwintered and assumed that hay would be fed to the livestock in both locations for the periods indicated. It is quite likely the feed costs for livestock being moved to be fed would be different, e.g., a combination of hay, silage, pasture, etc. Therefore, it will be important to compare the actual feed and feeding costs against the cost of bringing feed "home" for the livestock. Perhaps you are offered a day rate per cow then substitute that rate for the hay costs above. Check what that rate covers (e.g., yardage, health minus vet costs, etc.) and add those costs in or not as appropriate.

Example (2): 240 mature cows need feed for 2.0 months. Cows will be back on farm to calve, presumably you already have the feed at home. Adjust to your reality.

Feed to Livestock:

Hay requirement	240 cows * 2 months * 1,200 lb/month / 2,000 lb/ton = 288 tons of hay
Hay purchase cost	288 ton * $200.00 /ton = $57,600.00
Hay transportation cost	288 ton at 28 ton/load = 10 loads * $230/hr * 20 hr/load = $46,000.00 (10 hr one way)
Total hay costs delivered	= $103,600.00 or ○ $360.00 per ton ○ At 2,400 lb (1.2 ton) per cow = $432.00 per cow for 2 months

Plus, your feeding (yardage) and health costs.

Livestock to Feed:

Hay requirement	240 cows * 2 months * 1,200 lb/month / 2,000 lb/ton = 288 tons of hay
Hay purchase cost	288 tons * $200 / ton = $57,600.00
Cow transportation cost	40 cows per liner = 12 trips (includes their return) = 12 trips * 21.0 hours * $230.00 / trip = $57,960.00 (added 1 hr for loaded liner)
Total costs to feed and move cows	= $115,560.00 ($482.00 per cow) for 2 months

Plus, yardage and health costs and perhaps a small trailer trip for 12 cows if the return trip only carries 38 pregnant cows.

Feed to Livestock advantage of $11,960.00 or $49.80 per cow and any additional difference from the yardage and health care estimates.

Summary

Before choosing whether to move feed or move live

- ☐ Current forage inventory
- ☐ Livestock inventory and feed requirements
- ☐ Expected feeding period
- ☐ Financial capacity and cash flow
- ☐ Available transportation options
- ☐ Feeding, yardage and health costs

Created in partnership with BCCA

Find more information:

BC Livestock Drought Management Guide:

BC Livestock Drought Management Guide.pdf

SCAN ME

Contact AgriServiceBC:

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Worksheet – To Print and use for your operation

Cost Category	Feed to Livestock ($)	Livestock to Feed ($)
Transportation		
Transportation		
Feed 1		
Feed 2		
Feed 3		
Feed Total*		
Yardage/Feeding		
Health/Veterinary		
Calving		
Other Costs		
TOTAL COST		
Cost per Animal		

* sum of all costs, may have multiple feed types and costs

Result

- Feed to Livestock Total: $ _____
- Livestock to Feed Total: $ _____
- Difference: $ _____

The lower-cost option is: _____

Remember to consider non-financial factors such as management compatibility, livestock health, calving location, labour availability, risk, and transportation logistics when making a final decision.