



Grazing Aftermath Straw & Chaff

Buyer's Perspective

09-September-09

Managing Business Stress
Options, Information & Tools for Alberta Producers

Broad-based dry conditions pinch cow/calf producers from two sides:

- 1) Grazing days fall short of expectations
- 2) On-farm and regional feed supplies are diminished, which increases short term costs.

Typically, the first reaction to a shortened grazing season is to purchase higher priced feeds in anticipation of a longer feeding season. However, short term options do exist to acquire cereal aftermath that extends grazing into the fall, which will reduce the costs of wintering the cow herd. A partial budget can be a valuable tool in assessing these options.

Budget: Graze Cereal Aftermath or Feed?

An example scenario guides producers to incorporate their own specific realities in their own budgets. This approach estimates available grazing days from an aftermath parcel, grazing costs, and then how much this would reduce feeding costs for a similar number of days. If advantages (reduced costs) exceed disadvantages (increased costs), then pursue the grazing opportunity.

The grazing budget (added costs) assumes:

- 155 acres of aftermath for 200 cows (1,400 lbs)
- Available straw and chaff will meet the cows' nutritional needs
- Miscellaneous operating, labour and fixed costs is included¹.
- Round trip trucking to the rented grazing location costs \$20/head
- Starting baseline rental rate is \$25/acre
- Dry matter availability and utilization efficiency are estimated for barley straw on black soils².

The budget solves for available grazing days and unit grazing costs.

The feeding budget (reduced costs), assumes:

- Hay is costed into the herd at \$60/ton
- Feeding yardage at \$0.70/cow/day³

The budget solves for feeding costs incurred if the cows were not grazed.

Given the variation in cow size from farm-to-farm, budget results are quoted in \$ / Animal Unit Day

Partial Budget			
Decision to be made: <u>Should I rent cereal aftermath to graze my cows or feed them?</u>			
Disadvantages:	\$ / AUD	Advantages:	\$ / AUD
Added Costs:		Added Revenues:	
Supplemental Feed	\$0.00		
Misc. Operating	\$0.02		
Hired Trucking	\$0.54		
Labour	\$0.05		
Rent	\$0.52		
Oth. Fixed Costs	\$0.02		
Subtotal:	\$1.15	Subtotal:	
Reduced Revenue:		Reduced Costs:	
		Feed	\$1.26
		Yardage	\$0.50
Subtotal:		Subtotal:	\$1.76
Total Disadvantages:		Total Advantages:	
	\$1.15		\$1.76
Net Advantage (Disadvantage): <u>\$0.61 / AUD</u>			
Other Considerations: (eg. Labour, Capital availability, Risk, Tax considerations)			
Assumes: - acreage is fenced with water available;			
- nutritional requirements are met without supplementing straw & chaff aftermath			
Tenant bears yield risk			

(AUD). Convert to a per cow basis by multiplying by a factor of “average cow weight/1,000”.

Details of the scenario, including pricing, costing and utilization are listed in the section “Partial Budget Estimates and Parameters”.

The Budgeted “Result”

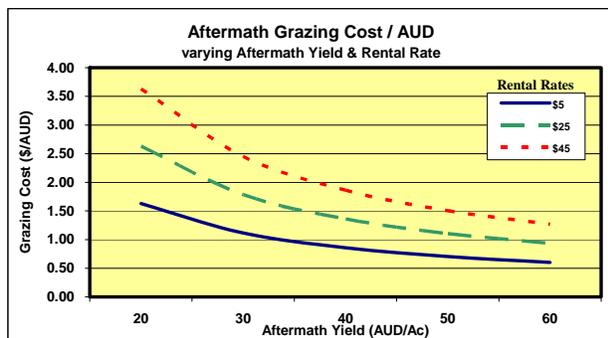
The partial budget table (above) lists the scenario analysis outcome. Added costs of grazing tally \$1.15/AUD. Reduced feeding costs amount to \$1.76/AUD of feeding days replaced by grazing days. The net advantage for this scenario is \$0.61/AUD, suggesting the operator would be better off to pursue grazing the aftermath.

The risk of these options can be examined through a sensitivity analysis of key factors. The charts and tables on the following page show the sensitivity of unit costs and profitability to straw and chaff yield for a few rental rate scenarios.

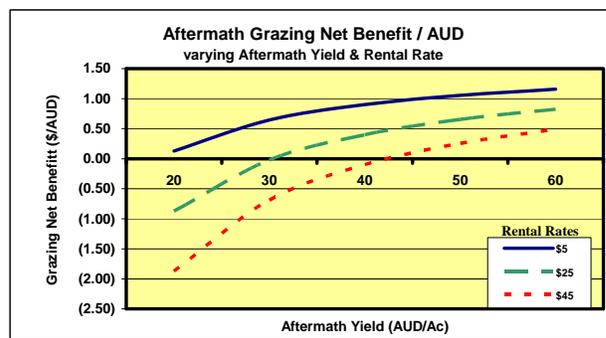
Other Considerations

In any budgeting process, it's important to identify the “other considerations” that can affect profitability and risk, such as:

- Check your average cow weights. This will affect available grazing days.
- Does the straw and chaff meet nutritional needs? Supplemental feeding comes at an added cost.
- Firm up the costing estimates. Use actual costs for yardage, trucking, hay price, etc.



		AUD's / Acre				
		20	30	40	50	60
Rent (\$/Acre)	5.00	1.63	1.12	0.86	0.71	0.60
	15.00	2.13	1.45	1.11	0.91	0.77
	25.00	2.63	1.78	1.36	1.11	0.94
	35.00	3.13	2.12	1.61	1.31	1.10
	45.00	3.63	2.45	1.86	1.51	1.27



		Grazing Dry Matter Yield (AUD's/Acre)				
		20	30	40	50	60
Rent (\$/Acre)	5.00	0.13	0.64	0.90	1.05	1.16
	15.00	(0.37)	0.31	0.65	0.85	0.99
	25.00	(0.87)	(0.02)	0.40	0.65	0.82
	35.00	(1.37)	(0.36)	0.15	0.45	0.66
	45.00	(1.87)	(0.69)	(0.10)	0.25	0.49

- Check the straw yield and use efficiency. How much is available and how effectively your cows can use it is critical.
- The benefit of manure or straw to the soil is not accounted for.

Remember, this analysis evaluates a short term opportunity. It is not an indication of “normal” cow herd costs.

Home Stretch

This analysis shows how to assess the profitability of acquiring crop aftermath to extend your grazing season. If there's potential to work with neighbors⁴ to lay in grazing, ask the questions, do the budgets, negotiate the deal, and make the choice that improves your bottom line.

Dale A. Kalie

Sr. Economist: Production Economics
Economics & Competitiveness Division

Questions:

Please call the Ag-Info Centre at 310-FARM

- Grazing cost estimates for these items derived from “[Swath Grazing – Interesting Concept, But Does It Pay?](#)”, AgriProfit\$ Technical Bulletin, Alberta Agriculture, Dec./02.
- Estimates of barley straw and chaff production on black soils and cow utilization derived from “[Increasing Cow/Calf Profitability Using Straw and Chaff/Straw Feedstuffs](#),” Alberta Agriculture, Agdex 420/50-2, Jan./08.
- Yardage cost estimates drawn from “[Yardage – The Cost Beyond Feed](#)”, AgriProfit\$ Technical Bulletin, Alberta Agriculture, June/04.
- To view a similar process from the crop producer's point of view, see “[Grazing Aftermath Straw & Chaff – Seller's Perspective](#)”, AgriProfit\$ Technical Bulletin, Alberta Agriculture, Sept./09

Partial Budget Assumptions & Parameters

Estimated Unit Costs of Grazing

"Added Costs"	\$/AUD	\$/Cow	\$/Day
Supplemental Feed	0.00	0.00	0.00
Operating Costs	0.02	0.75	5.60
Hired Trucking	0.54	20.00	0.75
Labour	0.05	1.86	14.00
Rent	0.52	19.38	145.45
Other Fixed Costs	0.02	0.75	5.60
Total	1.15	42.73	171.41

Round Trip Truck Cost \$20.00 /Cow
Rental Rate \$25.00 /Acre

AUD's / Acre 48.1
Acres Available 155
Cows to Graze 200
Cow Weight 1,400 lbs.
AF Lbs Req'd/AUD 30.0
DM Lbs Req'd/AUD 26.6
Grazing Available

AUD's 7,459
Days Grazed 27

Crop Grain Yield 55.0 bu./ac
Est. Straw Yield/bu 45.0 lbs.
Straw Util. Efficiency 50.0%
Est. Chaff Yield/bu 7.5 lbs.
Chaff Util. Efficiency 50.0%
Avg. Straw/Chaff DM% 88.5%
AF Straw & Chaff Avail. 1,444 lbs./ac
DM Straw & Chaff Avail. 1,278 lbs./ac

Estimated Unit Feeding Costs

"Reduced Costs"	\$/AUD
Feed	1.26
Yardage	0.50
Total	1.76

AF Lbs Hay / AUD 30.0
Hay Cost (\$/ton) 60.00