Dairy Feed: *a new cash crop*

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Wisconsin TEAM Forage

Cash Cropping Milk

Growing or selling corn silage and/or alfalfa to dairy farms vs. selling grain into traditional markets.

NEW? Yes & No

Cash Cropping Milk

- Why are there more of these contractual arrangements?
  - ➔ Dairy expansions on limited land base
  - ➔ Dairy start-ups
  - ➔ Many dairy farmers only want to concentrate on cows.
  - ➔ Need feed and acres to spread manure
  - ➔ “Grain” value vs. “feed” value

Grower Advantages

- Grower maintains an economic “stake” in the crop grown.
  - ➔ Different from land rental arrangements
  - ➔ Maintains Government program benefits
- If growing corn for silage:
  - ➔ Lower risk (planting date, low GDU’s, early fall frost)
  - ➔ Spread fall tillage operations
  - ➔ Not many management changes needed

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Grower Advantages

- If growing alfalfa:
  - ➔ High value crop compared to grains
  - ➔ Capitalize on crop rotation benefits
    - N credits, soil erosion control, yield enhancement of subsequent crop (+15%)
- Opportunity to utilize manure for both nutrient and soil quality characteristics.

Grower Disadvantages

- Fixed pricing based on yield
  - ➔ Overcome with floating price contract
- Grower becomes unsecured creditor
  - ➔ Good relationships are crucial
- Corn silage and alfalfa have higher nutrient removal rates
  - ➔ e.g. 80-90 lbs/A more K removed as silage vs. grain
  - ➔ Account for in value/price or replaced with manure

Grower Disadvantages

- Corn residue removed as silage
  - ➔ Impact conservation plan
  - ➔ May be negated with alfalfa in rotation
- Growing alfalfa is very different than growing grain crops.

Contract & Pricing Considerations

- Numerous approaches
  - ➔ No “one size fits all”
  - ➔ Examine existing contracts
  - ➔ Understand obligations (grow, harvest, manure etc.)
- Corn silage and alfalfa are often priced differently
- Simple yet effective

Corn Silage Contract & Pricing

- For starters.....figure expected return on dry grain. This sets a "floor price."
  - ➔ Include harvest, drying, storing, and transportation costs.
- Silage pricing often based on corn price
  - ➔ 7.5 bu/wet ton X grain price adjusted for harvesting cost.
  - ➔ Forage "market" factors (short term contracts)
  - ➔ Set floor and ceiling price range prior to negotiation.

Corn Silage Contract & Pricing

- Moisture
  - ➔ Set price @ specific moisture, then adjust.

Silage Moisture	Base Price per Wet Ton @ 65% Moisture					
	$15.00	**$16.00**	**$17.00**	**$18.00**	**$19.00**	**$20.00**
70	$12.86	$13.71	$14.57	$15.43	$16.29	$17.14
69	$13.29	$14.17	$15.06	$15.94	$16.83	$17.71
68	$13.71	$14.63	$15.54	$16.46	$17.37	$18.29
67	$14.14	$15.09	$16.03	$16.97	$17.91	$18.86
66	$14.57	$15.54	$16.51	$17.49	$18.46	$19.43
65	$15.00	$16.00	$17.00	$18.00	$19.00	$20.00
64	$15.43	$16.46	$17.49	$18.51	$19.54	$20.57
63	$15.86	$16.91	$17.97	$19.03	$20.09	$21.14
62	$16.29	$17.37	$18.46	$19.54	$20.63	$21.71
61	$16.71	$17.83	$18.94	$20.06	$21.17	$22.29
60	$17.14	$18.29	$19.43	$20.57	$21.71	$22.86

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Corn Silage Contract & Pricing

- Who will select the hybrid?
- Corn silage quality
  - ➔ Largely dictated by hybrid and whole plant harvest moisture.
  - ➔ Rarely considered as a pricing consideration (many have tried and failed)
  - ➔ Easier to set parameters on acceptable whole plant moisture (if grower harvests) and make appropriate hybrid selections.

Corn Silage Contract & Pricing

- Who will harvest?
  - ➔ Often (and best) left to the dairy
  - ➔ "Full service" feed providers
    - Usually an existing dairy spreading fixed costs over more acres.
    - Some provide complete TMR
    - Premium paid for feed after shrink losses (10-15%)

Alfalfa Contract & Pricing

- Alfalfa is a more unique animal
  - ➔ Establishment costs / pest concerns / nutrients
  - ➔ Forage yields don't always follow grain yields
  - ➔ Winterkill and injury risk
  - ➔ Year to year yield variation
- Common to set a base price/ton DM at a given forage quality

Alfalfa Contract & Pricing

Hay Pricing Structure Based on D.M. Crude Protein and Relative Feed Value

	fill-in values for blue cells	
Per ton market value of 18% CP, 150 RFV hay:	$87.00	(assumes 87% dry matter)
Adjusted market value @ 100% dry matter:	$100.00	(set based on 100% dry matter)
Value for each 1 percentage unit change in CP:	$3.00	(amount to +/- from base quality)
Value for each 1 point change in RFV:	$0.80	(amount to +/- from base quality)
Percent dry matter:	47.1	(from forage analysis)
Actual percent CP (dry matter):	22.0	(from forage analysis)
Actual RFV:	160	(from forage analysis)
Shrink factor (%):	0.0	
Harvesting cost ($/ton):	$41.00	
Adjusted value for forage quality:	**$120.00**	Adjustment made for forage quality
Adjusted value for storage and shrink:	**$120.00**	Adjustment made for shrink
Final adjusted cost per ton of dry matter:	**$79.00**	Adjustment made for quality, shrink, and harvest costs
Adjusted value per ton as fed:	**$37.21**	This is the value per wet ton

When pricing hay, it is suggested to set minimum and maximum acceptible values for CP and RFV. This prevents hay from being delivered that is too low in quality and insures that premiums are not paid on excessive forage quality.

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Measuring Yield and Quality

- Be accurate
- Small errors with large volumes are the same as large errors.
- Scale and sample
  - ➔ Using estimates based on silo or wagon size simply isn't good enough.

Conclusions

- Contract feed production is often a “win-win” situation.
- Good business and personal relationships founded on trust are critical.
- Think long term
- Fit contract and pricing to the situation
  - ➔ There is no “one size fits all”

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