Feeding Cattle in the Region

Investigating the Opportunity

Regional Resources Available
Industry Trends

- $3.00+ Corn Era (narrowing price slides)
- Continued Concentration
- Price Cycle Down
- Product Branding and Differentiation
- Natural and Organic Growth
- Alliances (supply chain integration)
- Added documentation (PVP, ID, …)
- Greater Regulation
- International Competition
- Structural shift ??
Effect of Calf Weight on Price-January, 2007
(400-800 Lbs)

\[ y = 0.53x + 334.76 \]

\[ R^2 = 0.7268 \]
Cattle Feeding Requirements

- Source of cattle
- Competitive reliable feed
- Favorable climate – temps, rainfall
- Capitol/financing
- Land/facilities/equipment/infrastructure
- Interest and knowledge
- Services – vet, trucking, feed
- Markets
- Labor
Cattle Numbers
5 NW ND & 4 NE MT counties

- Beef cows: 200,700
- Cattle Fed: 69,500
  - Bulls: 8,000
  - Replacement heifers: 30,000
  - Feeders: 31,000
  - Finishers: 500
- Feedlots
  - ND: 180+
  - NW ND: 6
- Feedlot Expansion/Construction: 200
- Cost share applications 06: 53 (37.5M)
North Dakota districts’ feedlot capacity

* Counties within a district correspond with those used by the North Dakota Agricultural Statistics Service.
## Capital Cost Summary (NDSU 1997)

<table>
<thead>
<tr>
<th>Feedlot Size</th>
<th>Lot Land</th>
<th>Building</th>
<th>Equip Mach</th>
<th>Total</th>
<th>$ Per Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>156,111</td>
<td>54,720</td>
<td>251,970</td>
<td>462,801</td>
<td>$467.80</td>
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<tr>
<td>5000</td>
<td>636,409</td>
<td>174,797</td>
<td>583,270</td>
<td>1,394,476</td>
<td>$278.90</td>
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<tr>
<td>20000</td>
<td>2,222,945</td>
<td>517,594</td>
<td>2,119,014</td>
<td>4,859,553</td>
<td>$242.98</td>
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<tr>
<td></td>
<td>Feeder</td>
<td>Finish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder Cost</td>
<td>600</td>
<td>765</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Feed Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grain</td>
<td>60 (20bu)</td>
<td>165 (55bu)</td>
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</tr>
<tr>
<td>Forage</td>
<td>30 (.6T)</td>
<td>25 (.5T)</td>
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<tr>
<td>Supplement</td>
<td>15 (120lb)</td>
<td>25 (140lb)</td>
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<tr>
<td>Bedding</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vet &amp; Medicine</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel/Utilities</td>
<td>5</td>
<td>50</td>
<td></td>
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</tr>
<tr>
<td><strong>Feed Cost</strong></td>
<td><strong>$725/ head</strong></td>
<td><strong>$1050/ head</strong></td>
<td></td>
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</tr>
</tbody>
</table>
Local Feed Resources

- Large farming base – high potential
- Limited irrigation
- Forage crops should be captive to feedlot
- Low cost opportunity feeds
  - screenings, damaged crops, feed barley
  - Midds, DDGS, WDGS, oil seed meal, pressed pulp
  - Crp hay, stover, aftermath
- Finishing requires high quality grain and forage – grain costs are critical
- Backgrounding uses good forage supplemented with grain and byproducts
One Bushel of Corn Produces:

- 2.7 Gallons of ethanol
- 18 Pounds of DDG
- Or 54 Pounds of WDG
- 18 Pounds of carbon dioxide
How about our Winter Weather?
Cold Weather Feeding

Greater intake and maintenance
Performance can be high
Wind protection and bedding critical
Snow and storm work, preparations, and cost
Ideal feeding climate in much of the rest of the year
LAND - approximately 1 ac/ 100 hd
- manure disposal <.5 ac/hd

Site List:
- away from streams
- good water supply
- clay soil base
- 2-3% S or E slope
- setback from towns and neighbors
- roads and power
- natural protection
Federal, State, and Local Regulation
Permit to Operate
Containment of Runoff
Nutrient Management Plan
ND Department of Health is the Regulating Authority

Size requirement: CAFO 1000 AU
               Mid AFO 300-999AU
               Small AFO <300 AU

Lagoon capacity: 25 year – 24 hr storm
Manure Application: crop capacity
Cattle Feeding - has a positive and modest impact on the community

More Feeding - because

- better markets for pooled preconditioned sorted calves
- capture value in superior cattle
- utilization of byproduct feeds
- keep more people involved in agriculture
- Economic diversification