The New York Dairy Industry and Cornell

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Dairy Farming in New York State

- ~625,000 dairy cows (~9 million cows in U.S.)
- 12.4 billion lbs of milk produced (3rd largest state)
- $2.3 billion in farmgate revenue (2008)
- ~5,600 dairy farms
- Largest dairy farms ~4,000 cows
- Tremendous diversity in herd size and management style, partly due to geographical differences across New York state
## Dairy farms and distribution of cows (2007 data)

<table>
<thead>
<tr>
<th>Item</th>
<th>1 – 29</th>
<th>30 – 49</th>
<th>50 – 99</th>
<th>100 – 199</th>
<th>200 – 499</th>
<th>500+</th>
</tr>
</thead>
<tbody>
<tr>
<td># farms</td>
<td>1,250</td>
<td>1,100</td>
<td>1,900</td>
<td>870</td>
<td>370</td>
<td>210</td>
</tr>
<tr>
<td>% of cows</td>
<td>2.0</td>
<td>7.0</td>
<td>20.0</td>
<td>19.0</td>
<td>18.0</td>
<td>34.0</td>
</tr>
</tbody>
</table>

- 113 dairy plants
- 716 million lbs of cheese (fourth-ranking state)
- First in cottage cheese production
- About 50% fluid utilization
Dairy industry strengths

• High fluid utilization (higher relative milk price)
  – Need for LOCAL food production

• Capacity to produce high quality forages

• Progressive mindset of many producers

• Excellent allied support professionals

• Solid support at CALS and state levels
Dairy industry challenges

• High volatility in milk price to farmer

• Less able to take advantage of economies of scale compared to some other regions

• Aggressive approach to environmental regulation in NYS compared to other regions

• Ongoing high need for next generation of dairy producers
Dairy Industry Has Significantly Decreased Resource Demand per Billion Pounds of Milk Produced Since 1944

<table>
<thead>
<tr>
<th>Resource</th>
<th>1944</th>
<th>2007</th>
<th>2007 as % of 1944</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milking cows</td>
<td>188,250</td>
<td>42,500</td>
<td>23.6%</td>
</tr>
<tr>
<td>All cows, heifers, &amp; bulls</td>
<td>423,000</td>
<td>91,500</td>
<td>21.6%</td>
</tr>
<tr>
<td>Feed (t)</td>
<td>8.39 mil</td>
<td>1.86 mil</td>
<td>22.3%</td>
</tr>
<tr>
<td>Land (ac)</td>
<td>1.87 mil</td>
<td>0.18 mil</td>
<td>9.7%</td>
</tr>
<tr>
<td>Manure (t)</td>
<td>9.32 mil</td>
<td>2.48 mil</td>
<td>26.6%</td>
</tr>
<tr>
<td>Water* (gal)</td>
<td>1.28 bil</td>
<td>0.45 bil</td>
<td>35.2%</td>
</tr>
<tr>
<td>Methane (t)</td>
<td>60,000</td>
<td>26,750</td>
<td>44.5%</td>
</tr>
</tbody>
</table>

* Note: Water estimate does not include sanitation use
Source: Adapted from Capper et al. (2008) ADSA-ASAS Annual Meeting
Carbon Footprint of a Gallon of Milk Has Been Reduced by \( \frac{2}{3} \) Since 1944

Source: Capper et al. (2008) ADSA-ASAS Annual Meeting
CALS/Cornell programs relating to dairy

- PRO-DAIRY
- FarmNet/FarmLink
- Northeast Dairy Foods Research Center
- Nutrient Management SPEAR program
- Dairy Farm Business Summary and Analysis
- Quality Milk Production Services (CVM)
- Milk Quality Improvement Program
- Cornell Program on Dairy Markets and Policy
- Other individual faculty programs
PRO-DAIRY programs

- Dairy manure management
- Livestock environmental programs
- Field crops/nutrient management
- Housing/facilities engineering
- Farm business management
- Dairy discussion groups
- Junior Dairy Leader program
- “The Manager” section of Eastern DairyBusiness
Dairy Profit Discussion Groups

Leader:
Kathy Barrett
Senior Extension Associate,
PRO-DAIRY
PRO-DAIRY impact

- Link research to extension in multiple Cornell departments and colleges
  - Animal Science
  - Applied Economics and Management
  - Biological and Environmental Engineering
  - Crops and soil science
  - Quality Milk Promotion Service (Veterinary Medicine)

- Provide leadership for many programs at state, regional, and national levels