Challenges and Opportunities for the U.S. Dairy Industry
Greg Wickham
CEO, Dairylea Cooperative Inc.

2,200 Members
5.5 Billion Pounds Marketed Annually

Dairylea Cooperative Inc.

Map showing the location of Dairylea Cooperative Inc. in the Northeastern United States.
**U.S. Cooperative Rankings**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Dairy Cooperative</th>
<th>Member Milk Volume (Bll. lbs.)</th>
<th>Member Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dairy Farmers of America</td>
<td>37.590</td>
<td>11,306</td>
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<td>2</td>
<td>California Dairies, Inc.</td>
<td>16.932</td>
<td>634</td>
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<td>3</td>
<td>Laxton Olades, Inc.</td>
<td>12.068</td>
<td>3,178</td>
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<td>4</td>
<td>Northwest Dairy Association</td>
<td>7.688</td>
<td>634</td>
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<td>5</td>
<td>Dairyland Cooperative, Inc.</td>
<td>5.400</td>
<td>2,928</td>
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<td>6</td>
<td>Foremost Farms USA</td>
<td>5.255</td>
<td>2,812</td>
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<td>7</td>
<td>Associated Milk Producers, Inc.</td>
<td>5.100</td>
<td>3,490</td>
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<td>8</td>
<td>Family Dairies USA</td>
<td>4.659</td>
<td>3,697</td>
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<td>9</td>
<td>Manitowoc Milk Producers Cooperative</td>
<td>4.400</td>
<td>2,914</td>
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<td>10</td>
<td>Select Milk Producers, Inc.</td>
<td>4.220</td>
<td>79</td>
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*Source: Hoard's Dairyman; October 2007*
Operating Structure

DMS Focus / Priorities
• Milk Marketing Functions
• Transportation & Milk Assembly
• Field Services

Member Coops
Mount Joy
Conesus
Cortland
Oneida-Madison

Participating Coops
Lowville
United Ag Services
NFO
Schoharie
Mass Fed
Jeff Bulk
Konhokton
South New Berlin
Finger Lakes
Producers Coop
Farmer Friendly
Others

DMS
Dairy Marketing Services

• 8,000 farms
• 16 billion lbs of milk/year
• 900+ loads/day
• 120 plants to which we deliver
• 186 contract haulers in 13 states
• 1,000 drivers
• 860 rejected loads/year or .28% of total
December 2007
Northeast Market Share

- Independents: 13.6%
- Unknown: 4.8%
- DMS MEC: 1.2%
- DMS: 56.1%
- Other Cooperatives: 4.4%
- MD-VA: 4.2%
- AgriMark: 8.9%
- Division 95: 1.0%
- Upstate Niagara: 5.6%
- Independents: 13.6%
- Unknown: 4.8%
- DMS MEC: 1.2%
- DMS: 56.1%
- Other Cooperatives: 4.4%
- MD-VA: 4.2%
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- Division 95: 1.0%
- Upstate Niagara: 5.6%

7 Unique Farm Services

- ASA
- Agri-Max Financial Services
- RMS
- Empire Livestock Marketing
- Eagle Dairy Direct
- Dairy One
- Agri-Edge Development
Dairylea is a Member Cooperative of DFA

DFA Business Units

Area Councils
- American Cheese
- Italian Cheese
- Ingredients
- Fluid

American Dairy Brands
- Formulated Dairy Foods

Affiliates
Dairy Plants

DFA Marketing Network

- Dean Foods (105)
- DFA Branded (4)
- DFA Cheese (5)
- DFA Formulated (8)
- DFA Manufacturing (27)
- Fluid JV (64)
- Leprino Foods Co (9)
- Manufacturing JV (15)

Member Demographics

- 12,183 Members
- 500 Largest Farms Make 50% of total milk marketed
What Affects Milk Prices?

- International markets
- National milk production
- Economy
- Dairy product consumption
- CWT
- Weather
- rbST use
$7 Corn and $120 Oil
Do not work with
$18 Milk

Prices Will Continue to Cycle
but at a Higher Level

Central NY Annual Average Gross Milk Price 1996-2008

$ per hundredweight

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U.S. Milk Production Growth
Year-over-year, 2005-2008

- 3.9% (2005)
- 2.7% (2006)
- 2.1% (2007)
- 2.7% (2008E)


- 5.5% (2001)
- 5.1% (2002)
- 5.7% (2003)
- 7.5% (2004)
- 8.3% (2005)
- 9.3% (2006)
- 9.5% (2007)

Data Source: US Dairy Export Council
Costs Up Substantially

U.S. Average Purchased Feed Cost, 2002-2008

$ per CWT of Milk

2002 2003 2004 2005 2006 2007 2008E

$3.59 $3.68 $3.97 $3.50 $3.88 $5.22 $7.23
U.S. Dairy Industry Trends & Background

Size of Average U.S. Dairy Farm
1992 - 2007

Dairy Cows per Farm

<table>
<thead>
<tr>
<th>Year</th>
<th>Cows</th>
</tr>
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<tbody>
<tr>
<td>1992</td>
<td>74</td>
</tr>
<tr>
<td>1993</td>
<td>76</td>
</tr>
<tr>
<td>1994</td>
<td>80</td>
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<tr>
<td>1995</td>
<td>84</td>
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<td>1996</td>
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<td>2003</td>
<td>129</td>
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<td>2004</td>
<td>135</td>
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<td>2005</td>
<td>140</td>
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<tr>
<td>2006</td>
<td>147</td>
</tr>
<tr>
<td>2007</td>
<td>155</td>
</tr>
</tbody>
</table>
**Farm Size Trends...**

% of Milk in U.S. by Farm Size

<table>
<thead>
<tr>
<th>Year</th>
<th>200-499</th>
<th>500-999</th>
<th>1,000-1,999</th>
<th>2,000+</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>1980</td>
<td>2.10%</td>
<td>0.50%</td>
<td>0%</td>
<td>0%</td>
<td>2.60%</td>
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<tr>
<td>2002</td>
<td>17.5%</td>
<td>13.9%</td>
<td>13.0%</td>
<td>15.0%</td>
<td>59.4%</td>
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<tr>
<td>2009</td>
<td>11.6%</td>
<td>12.3%</td>
<td>17.3%</td>
<td>33.8%</td>
<td>75.0%</td>
</tr>
</tbody>
</table>

**U.S. Annual Milk Production**

1997-2007

Annual Growth Rate
Approximately 2% Over Time
Production Per Cow
1997-2007

The 3,000 biggest farms in the U.S. produce more milk than any single country in the EU!
Regional Changes
10-Year Milk Shed Shift

Why the Shift West?

- Land availability & price
- California Real Estate $$
- State incentives
- Environmental
Opportunities and Challenges

World Milk Production Growth
Selected Countries, 2000 vs 2006

Data Source: FAPRI
Reduced World Inventories

Low World Stocks = Upward Price Pressure & More Volatility
China's GDP Per Person, RNB, 1953-2005

- China GDP has almost doubled since 2000
- RNB 14,000 = $ 1,866
- U.S. GDP per person = $ 44,000

U.S. History of Exports

- **1950 – 1995**
  “Anyhow Exporter”
- **1995 – 2000**
  Farm Leadership
  Interest in Exports
- **2000 – Present**
  Industry Very
  Focused on Exports
US Attitude on Dairy Exports

• Previous
  – Sell what we make
  – Price takers
  – Other countries lead world sales
• Current
  – Listen to customer needs
  – Want to be price makers
  – Desire to represent ourselves on sales

Slumping Value of the U.S. Dollar

On Purpose?
How Much Did it Help Exports?
Ethanol Boom or Bust...

Ethanol’s story: fuel, feed and folly

Which biofuel will emerge as king of the market?

**Corn** is the king of the biofuel food chain, at least for the moment. Although corn-based ethanol plants in the US are nearing 6 billion-gallon capacity, many more are under construction and are scheduled for major expansions, pushing out another 2 to 3 billion gallons over the next few years. For now, corn is the king in the market. But the future is uncertain. The US consumes about 15 billion gallons of corn annually. With the cost of unleaded gasoline expected to rise, the economics of ethanol production is boosted by some of the "sustainable" processes of the future. In this process, lignocellulosic residues are broken down into sugars, which are fermented into ethanol. The goal is to couple these processes with the production of corn. Several large companies are already working on major "green" technologies. ethanol International, already producing ethanol from corn, recently announced plans to create a "sustainable" process of the future. The goal is to couple these processes with the production of corn. Several large companies are already working on major "green" technologies.

Biofuel …

**Is It Good U.S. Policy?**
Is Sustainability a Passing Fad?

If Carbon Footprint is Important … How Do We Rank?
Carbon Footprint

- **Low**
  - Maximum Technology

- **High**
  - Organic / Less Technology

Industry Consolidation

- Processors
- Cooperatives
- Dairy Farms
- Federal Orders
Will rbST RIP?
Starbucks: Hold the Hormones

Starbucks is going rbST-free. The world's largest specialty coffee retailer says it will no longer use dairy products made with the artificial growth hormone rbST in a number of regions around the country. It is investigating a similar change at stores nationwide.

The announcement comes two years after Starbucks said it was halfway through a plan to phase out artery-clogging trans fats at company-owned U.S. stores.

As of this January, 37% of milk, half-and-half, whipped cream and other liquid dairy products that Starbucks purchases are produced with rbST. That's an increase of about 27% from the 2006 fiscal year, a company spokesperson said.

The change affects stand-alone Starbucks stores in Washington, Oregon, Idaho, Alaska, Montana and New Mexico, and Texas, along with Northern California and New England. The company also is examining plans to phase out products out of all stores nationwide, but hasn't yet committed to making the larger change, a spokesperson said.

rbST-free Plants 2006

- Houlton Dairy Houlton
- Grants Bangor
- Hood Portland
- Oakhurst Portland
- Calabro East Haven
- Crowley Concord
- Farmland Wallington
- Oaktree East Northport
- St Albans St Albans
- St Albans St Albans
- Hood Portland
- Oakhurst Portland
- Calabro East Haven
- Crowley Concord
- Farmland Wallington
- Oaktree East Northport
- St Albans St Albans
Immigration Reform

Can the U.S. Dairy Industry Continue To Grow?
New Technology

- Remove Water
- Genetics
- Robotics
- Fractionalization

Will U.S. Farms Invest Outside the U.S.?
Thank You