IOWA DAIRY INDUSTRY: Past, Present, and Future!

Virtual Dairy Day – February 9, 2021
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Today’s Objectives

Iowa’s Dairy Industry: Past & Present and Future

Let’s Look at Real Iowa Sustainable Farms and their Economic Impact!

2020 Iowa Dairy Producer Survey Sneak Peek

Summary
Milk Cows in Iowa in 1925

Figures indicate numbers of dairy cows in each Iowa county in 1925. Iowa total = 385,000 cows, each cow on average produces about 900 dairy cows.

1925 Average Production: 4,000 pounds/cow/year

Approximate total 1925 dairy cows in Iowa produce about 27,500,000 pounds.
Dairy Cows in Iowa 1924 - 2018

1934
1.5 million

2020
220,000
Up 20,000 since 1997

Poll question
Dairy Farms in Iowa

1984: 6000 herds

Years: 2003, 2008, 2013, 2018
Number of Grade A, B, G & S Milk Producers by County

A = Grade A Farms (Total #897)
B = Grade B Farms (Total #10)
G = Goat Farms (Total #195)
S = Sheep Farms (Total #1)
Overall Total: 1104 (-124) – Map Stats

January 20, 2021

Image Credit: Iowa Dept. of Agriculture & Land Stewardship, Dairy Bureau
% Iowa dairy herds by herd size  2017 Iowa Ag Census

1592 herds

- 500 - 999: 2%
- 1000 - 2499: 10%
- 200 - 499: 10%
- 50 - 99: 24%
- 100 - 199: 18%
- 20 - 49: 15%
- 2000 - 4999: 10%
- > 5000: 0%
- 1000: 29%
- 500 - 999: 2%
- 0 - 19: 29%
- 100 - 199: 18%
- 50 - 99: 24%
- 20 - 49: 15%
1131 herds

- 33.9% > 5000
- 25.9% 500 - 999
- 21% 200 - 499
- 13.5% 100 - 199
- 2.9% 50 - 99
- 1.3% 20 - 49
- 1.2% < 20

% Iowa dairy herds by herd size  2017 Iowa Ag Census
221,878 cows; avg. herd size 196; median 94
### Butter Production in Iowa 1977-1985

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>16,827,457</td>
</tr>
<tr>
<td>1924</td>
<td>27,213,957</td>
</tr>
<tr>
<td>1940</td>
<td>255,870,000 (2nd)</td>
</tr>
<tr>
<td>1955</td>
<td>181,928,000</td>
</tr>
</tbody>
</table>

21.2# milk = 1# butter
Cheese Production in Iowa: 1979-2018

10# milk = 1# cheese

1955: 26,786,000 pounds of cheese produced
Iowa Ice Cream (gal.): 1970-1991

12# milk = 1 gallon ice cream

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>12,515</td>
</tr>
<tr>
<td>2005</td>
<td>75,000,000 (Wells)</td>
</tr>
</tbody>
</table>
Iowa Yogurt (lbs.): 1990 - 2007

1# milk = 1# yogurt
Iowa Economic Impact of Single Dairy Cow $25,495

Read the full Comprehensive Review of Iowa’s Dairy Industry: https://www.extension.iastate.edu/dairyteam/iowa-dairy-industry
IOWA DAIRY INDUSTRY: Past, Present, and Future!
Iowa Dairy Industry Survey - Previous

- **Northeast Iowa 2000**
  - 60 questions
  - Sent to 1000 producers
  - Topics: farm characteristics, labor management, information sources, and dairy issues
  - 48% response rate

- **State-wide survey 2005**
  - 75 questions
  - Sent to 1000 producers
  - 42% response rate

- **State-wide survey 2012**
  - 60 questions
  - Sent to 1000 producers
  - 38% response rate
Iowa Dairy Industry Survey - 2020

- Mail/emailed to 897 producers
- 25% response rate
- 78 questions
- Anonymous data collection by Center for Survey Statistics and Methodology Survey Research Services – Iowa State University
- Farm characteristics, dairy farm management, employee and farm labor, farm/personal demographics, issues in the dairy industry, information sources
### Impact on your Farm Business

<table>
<thead>
<tr>
<th>Impact on your Farm Business</th>
<th>No Impact</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Very Great Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>= 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>= 5</td>
</tr>
<tr>
<td>Land Prices</td>
<td>27%</td>
<td>9.9%</td>
<td>23%</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>Commodity Prices</td>
<td>8</td>
<td>4</td>
<td>24</td>
<td>27</td>
<td>37</td>
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<tr>
<td>Immigration Policies</td>
<td>75</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Environmental Regulation</td>
<td>28</td>
<td>16</td>
<td>29</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Animal Welfare Policies</td>
<td>20</td>
<td>20</td>
<td>25</td>
<td>21</td>
<td>15</td>
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<tr>
<td>Milk Price Volatility</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>24</td>
<td>61</td>
</tr>
<tr>
<td>SCC Limit</td>
<td>42</td>
<td>21</td>
<td>20</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Dairy Check-off</td>
<td>30</td>
<td>23</td>
<td>27</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td><strong>57% agree that COVID-19 negatively impacted their operation</strong></td>
<td>18</td>
<td>17</td>
<td>21</td>
<td>17</td>
<td>28</td>
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<tr>
<td>Producer Price Differentials</td>
<td>14</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>53</td>
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<tr>
<td>Dairy Imports</td>
<td>14</td>
<td>15</td>
<td>29</td>
<td>18</td>
<td>26</td>
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<tr>
<td>Dairy Exports</td>
<td>13</td>
<td>9</td>
<td>25</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Milk base limits/quotas</td>
<td>44</td>
<td>10</td>
<td>18</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Milk hauling costs</td>
<td>10</td>
<td>15</td>
<td>32</td>
<td>18</td>
<td>25</td>
</tr>
</tbody>
</table>

**Preliminary Data Summary, unpublished**
Use of Risk Management Tools

• 52% are using a risk management tool
  • Dairy Revenue Protection – 34.75%
  • LGM – 9.3%
  • Milk Contracts – 18.6%
  • Dairy Margin Coverage – 86.4%

Preliminary Data
Summary, unpublished
Updates to the Dairy in the next 15 years?

- 17% responded they will update milking system
  - (note: 35% of respondents milk in tie stalls and 16.5% herringbone)
  - 50% robotic
  - 37.5% conventional parlor

- 76% do not plan to expand the herd in the next 15 years

- Updates in less than 5 years:
  - 25% update calf/heifer facilities
  - 15% manure management
  - 17% transition/dry cows
  - 15% update feed storage

Preliminary Data
Summary, unpublished
Future of Dairy Farming?

• Do not plan to discontinue within the next 15 years – 54%
• Discontinue milking but continue farming:
  • <5 years – 23%
  • 5-10 years – 10%
  • 10-15 years – 12%

• 87% agree Family Farms are essential to rural Iowa
• 54% agree a mixture of small, medium, and large farms are important to local communities

Preliminary Data
Summary, unpublished
IOWA’S DAIRY INDUSTRY 2020

1186 herds
• 966-dairy cows;
• 219- dairy goat;
• 1 dairy sheep

220,000 cows; 34,000 does
• 12th nationally (cows, milk prod.)
• 9th nationally – milk prod./cow

50 % herds < 100 cows; 15% > 200

24,800# milk/cow
5.6 billion total lbs.

On farm milk $ value:
$1 billion

Value added processing:
$2+ billion

Supports 16,000+ jobs
• (100 cows = 8 jobs)

Total impact:
$5.6 billion

Source: Iowa State University Extension and Outreach - Dairy Team

1 cow = $25,495
Iowa Economic Impact
• Stay tuned for more detailed updates on the Iowa Dairy Survey!
• Any Questions?
Enhancing Dairy Profits and Quality of Life

$25,495 /cow
LOCAL
Economic Activity!
100 cows = 8 jobs!

Fred Hall
Jennifer Bentley
Larry Tranel
Jan Shearer
Leo Timms Emeritus
Gail Carpenter