Characterization of certified organic Wisconsin dairy farms:
Management practices, feeding regimes, and milk production

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Organic Pasture Rule

• Animals must graze pasture during the grazing season, which must be at least 120 days per year.
• Animals must obtain at least 30% of their dry matter from pasture during the grazing season.

Rule became effective on June 17, 2010. Operations which are already certified organic will have 1 year to implement the provisions. Operations which obtain organic certification after the effective date will be expected to demonstrate full compliance at the time of initial certification.

United States Department of Agriculture (USDA) National Organic Program (NOP)
Establishing the Sampling Frame

All farms on this resulting list received a mailing inviting them to participate in the project.
The Farms

70 organic farms were surveyed between October 2010 and January 2012.

Results from 66 of the farms are displayed in the following slides.
The Survey

• The survey was 44 pages long and contained nine sections:
  A. Farm Business Structure
  B. People on the Farm
  C. Dairy Herd
  D. Feeding
  E. Pasture
  F. Crops
  G. Manure and Nutrient Management
  H. (removed from survey)
  I. Economic
  J. Farm Satisfaction

• Surveys were conducted on-farm, face-to-face by 1 of the project’s 2 graduate students
Farm Characteristics - General

LAND OPERATED

- Maximum: 
- Outliers:

ACRES
1500
1000
500

3rd Quartile
Average: 303
Median
1st Quartile
Minimum

TOTAL
PASTURE

NUMBER OF YEARS...

- ORGANIC
- GRAZED

YEARS
60
40
20
0

0.0
6.65
14.7
Table 1: Characteristics of the people on the surveyed organic Wisconsin dairy farms.

<table>
<thead>
<tr>
<th>Trait</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raised on farm (% of respondents)</td>
<td>84.8</td>
</tr>
<tr>
<td>Relied entirely on family labor (% of farms)</td>
<td>43.9</td>
</tr>
</tbody>
</table>
Farm Characteristics - Livestock

NUMBER OF LIVESTOCK

0 100 200 300 400 500 600

COWS  HEIFERS

69.5  59.3
Farm Characteristics - Milk

**MILK COMPONENTS**

- **FAT**: 3.98%
- **PROTEIN**: 3.15%

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**Graphic**

- The graphic shows a box plot for milk components with FAT and PROTEIN on the x-axis and PERCENT on the y-axis.
- The box plot indicates a central tendency with FAT at 3.98% and PROTEIN at 3.15%.
### Farm Characteristics – Breeding

**Table 2:** Breeding characteristics of the surveyed organic Wisconsin dairy farms.

<table>
<thead>
<tr>
<th>Trait</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased dairy replacements (% of farms)</td>
<td>10.6</td>
</tr>
<tr>
<td>Used bulls (% of farms)</td>
<td>60.6</td>
</tr>
<tr>
<td>Used AI (% of farms)</td>
<td>72.3</td>
</tr>
<tr>
<td>Predominant breed was Holstein or Holstein + Holstein</td>
<td>57.6</td>
</tr>
<tr>
<td>crossbreds (% of farms)</td>
<td></td>
</tr>
</tbody>
</table>
Farm Characteristics – Reproduction

AGE AT FIRST CALVING

CALVING INTERVAL

AGE (MONTHS)

TIME (DAYS)

26.2

390
Farm Characteristics – Productive Life

NUMBER OF LACTATIONS BEFORE CULLING

4.5
Farm Characteristics – Intakes

**Dry Matter Intake**

- Median: 43.5 lbs/cow/day

**Peak Pasture Intake**

- Median: 69.3 percent
# Farm Characteristics – Supplementation

Table 3: Grazing supplementation on the surveyed organic Wisconsin dairy farms.

<table>
<thead>
<tr>
<th>Trait</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplemented grain (% of farms)</td>
<td>81.8</td>
</tr>
<tr>
<td>Supplemented protein (% of farms)</td>
<td>12.3</td>
</tr>
<tr>
<td>Supplemented corn silage (% of farms)</td>
<td>35.4</td>
</tr>
</tbody>
</table>
Farm Characteristics – Grazing

LENGTH OF GRAZING SEASON

GRAZING ROTATION FREQUENCY

DAYS

0 2 4 6 8 10 12 14

184

1.81
Grazing

- Wide variety of plants
  - Orchard grass
  - Kentucky bluegrass
  - Brome grass
  - Rye grass
  - Alfalfa
  - Clover (red, white)
  - New fescue
  - Plantain
  - Quack grass
The "average" organic farm

13,798 lb RHA
3.98% fat
3.19% protein
244,000 SCC

Supplements
grain

69 cows

59 heifers

69 cows

1 st calving at
26.1 months

390 day calving interval
4.5 lactations

Est. DMI of 43.5 lbs/cow/day
69.3% DMI from pasture

6.65 yrs organic
14.7 yrs grazing

303 ac. total
98.6 ac. pasture
The “average” organic farm

- 13,798 lb RHA
- 3.98% fat
- 3.19% protein
- 244,000 SCC

- 69 cows
- 390 day calving interval
- 4.5 lactations
- Est. DMI of 43.5 lbs/cow/day
- 69.3% DMI from pasture
- 303 ac. total
- 98.6 ac. pasture
- 59 heifers
- 1st calving at 26.1 months
- 6.65 yrs organic
- 14.7 yrs grazing
Any Questions?