Introduction

- Limited research focuses on US organic dairy farming general herd management and feeding practices.
- Implementation of the USDA National Organic Program pasture rule (30% DMI from pasture for at least 120 days in a year) requires and natural phenomena create challenges for organic dairy farmers when making feeding management decisions.

Objectives

- Group and describe WI organic dairy farms based on their general farm characteristics and feeding strategies.
- Assess productivity and profitability of farm systems studied.

Materials & Methods

Sampling
- Two Wisconsin’s Department of Agriculture Trade and Consumer Protection directories were compared for a list of potential farm participants.
- 2009 WI Active Dairy Producers list
- 2009 WI Certified Organic Producers list
- All farms (N = 554) on the resulting list of Wisconsin certified organic dairy farmers received an invitation to participate in the project.

Surveying
- Willing farmers were surveyed on-farm, face-to-face, with a traditional paper questionnaire, by one of the project’s two graduate students between January 2011 and January 2012.
- The 44-page survey contained sections on general farm characteristics, feeding, pasture management, and economics.

Clustering
- A non-hierarchical clustering method using nine variables related to general farm characteristics, feed supplementation, and grazing was applied to partition the farms into four clusters (Table 1).

Assessment
- Assess productivity and profitability of farm systems studied.
- Clustering
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Table 3.1a. Cluster and total sample medians (interquartile ranges) for the clustering and evaluated variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cluster 1 (n=8)</th>
<th>Cluster 2 (n=5)</th>
<th>Cluster 3 (n=32)</th>
<th>Cluster 4 (n=24)</th>
<th>Total (n=69)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cows per herd</td>
<td>129 (56)</td>
<td>50 (35)</td>
<td>41 (14)</td>
<td>43 (51)</td>
<td>45 (41)</td>
</tr>
<tr>
<td>Percent Holstein</td>
<td>90 (14)</td>
<td>0.0 (0.0)</td>
<td>89 (25)</td>
<td>6.0 (22)</td>
<td>71 (69)</td>
</tr>
<tr>
<td>Milking frequency</td>
<td>2.0 (0.0)</td>
<td>1.5 (0.48)</td>
<td>2.0 (0.0)</td>
<td>2.0 (0.0)</td>
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</tr>
<tr>
<td>Cow feeding groups</td>
<td>2.0 (0.25)</td>
<td>1.0 (0.0)</td>
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</tr>
<tr>
<td>Supplemented feeds</td>
<td>8.0 (2.3)</td>
<td>2.0 (2.0)</td>
<td>6.0 (2.0)</td>
<td>6.0 (2.0)</td>
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</tr>
<tr>
<td>Concentrates fed</td>
<td>5.7 (2.8)</td>
<td>2.7 (2.7)</td>
<td>4.2 (1.4)</td>
<td>1.9 (2.6)</td>
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<td>Land as pasture (%)</td>
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<td>Occupancy period</td>
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<td>Grazing season length (d)</td>
<td>203 (21)</td>
<td>216 (24)</td>
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Results

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- The average diet for each cluster met the requirements set forth by the pasture rule.
- Farms that supplemented more feed had greater RHA and higher IOFC.
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Support

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Figure 2: (Left) Proportion of each ingredient type in the surveyed farms lactating cows’ diets by cluster. Proportion pasture was estimated using the subtraction method. The white space for February in cluster 2 signifies that there were no lactating cows on its farms during that month.

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