

Dairy Grazing Apprenticeship Program

The next session beginning at 2:45 PM was the **Dairy Grazing Apprenticeship Program**. When we found out that Laura Paine, Program Director of the Dairy Grazing Apprenticeship Program was going to be in Freeport, Maine to work with Wolfe's Neck Farm to develop a dairy grazing apprentice program there, we made an opening for her to address our Consortium. Jim Cropper introduced Ms. Paine to the conference attendees. Laura opened her presentation explaining that an apprentice program for dairy farmers is becoming important since many farm families do not have a child interested in taking over the family farm to continue the tradition of milking cows. In other industries apprenticeships have long been used to ensure that there were younger people able to come into the trade with the skills necessary to be successful and professional. The Dairy Grazing Apprenticeship (DGA) Program provides a structured system of training using mostly on-the-job training with some classroom type education. They also earn as they learn and their skills are nationally recognized. DGA is the first in the nation to have accredited national standards for training in managed grazing dairy production. It gives each apprentice:

- Guided work experience
- Related instruction
- Facilitated peer group
- Industry networking, and a
- Pathway to farm ownership.

Laura showed why the program got started in Wisconsin by giving us some statistics on the number of dairy and beef grazing farms in WI and where they are located around the State. The PowerPoint slide is shown on the next page. Management Intensive Grazing (rotationally grazed pastures) compose a large number of dairy farms and beef farms in WI. Twenty-two percent of the dairy farms employ management intensive grazing (MiG) while 42% of the beef farms do. WI has over 3000 management intensive grazing dairy farms so in order to retain dairy farms in the State, it was ready to take-on the Case of mentoring and training young people interested in being grazing dairy farmers. Interest is now spreading to other parts of the Nation, such as in Maine, New York, and Pennsylvania, in the Northeast. The concentration of MiG dairy and beef farms are in western WI that has terrain similar to the Northeast being hilly and highly dissected by stream valleys making row cropping challenging.

Laura explained that there are three ways to increase profits:

- Increase production
- Reduce cost of production
- Premium pay price

As shown by the statistics in the table above, getting bigger in the dairy industry is not the way to riches. Producing more milk by having more cows is a losing proposition. Confinement of dairy cows causes a big increase in expenses with housing, feeding equipment, and forage harvesting equipment

Dairy and Beef Grazing in WI

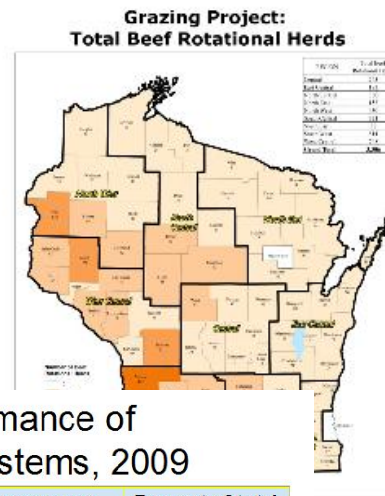
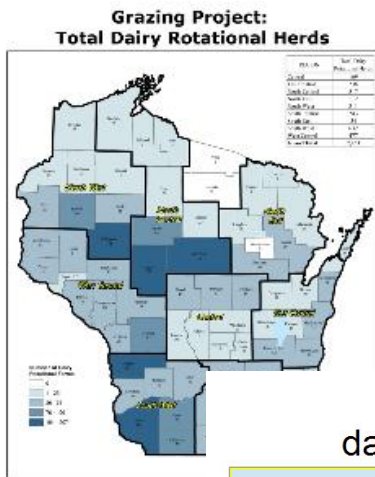
from 2007 Census of Agriculture & 2010 grazing surveys

Dairy Grazing Survey

- # of MIG farms: 3070
- 22% of dairy farms in WI
- Average herd size: 61 cows
- Land owned: 246 acres

Beef Grazing Survey

- # of MIG farms: 4763
- 42% of beef farms in WI
- Average herd size: 27
- Land owned: 203 acres



Financial performance of dairy production systems, 2009

	Average herd size	Income per cow	Percent of total WI Dairies
Wisconsin Organic	66	\$996	4%
Wisconsin Grazing	75	\$430	21%
Wisconsin Confinement	309	-\$145	75%
Arizona	1009	-\$486	
California	850	-\$647	
Idaho	661	-\$677	
New Mexico	1200	-\$429	
Texas	313	-\$463	

Source: Dairy Grazing Farms Financial Summary, Tom Kriegl et al.

among other things driving up the overhead. Pasture is a much lower cost feedstuff as there is no middle man, the farmer, needed to harvest, store, and feed the forage during the pasture season except for TMR or concentrate supplement feeding back at the barn or feedlot at milking. The cows go and get it themselves. Smaller dairies can be more on top of dairy cow health as they have fewer cows to observe and treat. Then, if it is an organic dairy, there is a premium price for milk over that of

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conventionally produced milk. As we see from the 2009 data, organic dairy farms in WI got the best income per cow, followed by the grazing dairy, and then all the confinement dairies all over the US.

DGA has a proven educational model. The formal apprenticeship is 4000 hours over 2 years with:

- 3718 hours of on-farm employment and training, guided by “Job Book”
- 288 hours of related classroom instruction in
 - Herd Health
 - Milk Quality
 - Dairy Nutrition
 - Pasture Management

There are several DGA approved apprentice farm sites now around the US with 40 in WI, 14 in MN, 4 in MO, 1 in Maine (Wolfe's Neck Farm), and 1 in IA. NY and PA are working with DGA to develop partnerships to get approved apprentice farm sites in those two states as well.

DGA pairs a Master Dairy Grazer with a Dairy Grazing Apprentice. DGA provides guidance and training documents to both the apprentice and the master dairy grazer, such as reference guides written for both the apprentice and master dairy grazer and a Training Guidelines Handbook. They also have several other brochures and forms to inform and guide potential and actively involved apprentices and master dairy grazers so they know what to do and expect and complete to ensure an adequately trained apprentice is produced.

Outcomes for the apprentice are:

- Acquired skills, knowledge, and experience to own and operate a managed-grazing dairy
- Networked with dairy industry and local professionals
- Access to opportunities to:
 - Earn equity in cattle
 - Enter into a business partnership
 - Purchase a start-up farm
 - Transition into ownership.

Options for Farm Transfer/ Investment to new dairy farmers is critical as entry costs are high even for grazing-based dairies and there are fewer next generation family members interested in taking over the family dairy farm. Average age of dairy farmers in U.S. is 59 years old. What are their options for farm transfer? The apprenticeship program is one option if they would like to see the dairy farm remain one. What are options for mid-career farmers seeking opportunities to expand and/or invest?

- Milk-share Partnership
- Spin-off Farm
- Transition of Ownership

Currently, there are 17 paired masters. Two masters seeking to retire and transition the farm to non-family members. Five masters bringing their own family members through the program (six apprentices). Nine mid-career masters training unrelated individuals. One Education farm involved (Wolfe's Neck - currently two apprentices, planning for 6).

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There is a diversity of grazing operations and styles among the master dairy grazers. From a number of smaller farms with a single owner and operator to a large one in MO. Horizonz LLC in Avilla, MO is a dairy operation that:

- Farms in Southwest Missouri
- The farm is 600 acres (240 ha)
- The farm is 100% perennial ryegrass
- Milks 800 cows twice a day
- Cows are mainly NZ genetic Jersey/Kiwi Cross
- Employ 4 full-time staff plus owners Daryn (full time) and Stacie (seasonally)
- Calve seasonally (end of January through April)
- Has two large irrigation pivots that will be newly running this season
- Focus is on profit instead of production per cow

There are 19 current apprentices. Education level is:

- 8 with High School education
- 2 with ag-related Technical College degree
- 3 with ag/dairy related Bachelor's degree
- 6 with non-ag related Bachelor's degree

Demographics:

- Gender: 3 women, 16 men
- Age:
Range: 21 to 36
Average age: 29.6

Current status of DGA is:

- Operating in Wisconsin, Minnesota, Missouri, and Maine.
- 62 approved farm sites; 23 current Master-Apprentice pairs; 7 graduates who now own start-ups, are earning equity, or manage a farm; 80+ are awaiting placement.
- Training manual, guidebooks, outreach materials.
- Website with on-line applications and searchable database to facilitate Master-Apprentice matches.
- Relationships with private investors.
- Approved vendor for Farm Service Agency's Financial Management Training Program.
- 501(c)3 Non-Profit Status.

DGA has several funding partners: The Brookby Foundation, The Cedar Tree Foundation, The McKnight Foundation, The Otto Bremer Foundation, USDA-NIFA Beginning Farmer and Rancher Development Program, USDA-NRCS Conservation Innovation Grant, Whole Foods Market, WI Department of Agriculture, Trade, and Consumer Protection, and the Wisconsin Farmers Union. They also have several industry sponsors.

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Jim Cropper thanked Laura for her presentation and having the chance to renew her acquaintance since retiring from USDA-NRCS. They had participated in several grazing conferences over the years and Laura had also worked alongside researchers on stream-side grazing impacts on water quality.