



DGA: First In The Nation
NATIONAL STANDARDS FOR TRAINING IN MANAGED
GRAZING DAIRY PRODUCTION

- Guided work experience
- Related instruction
- Facilitated peer group
- Industry networking
- Pathway to farm ownership



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Training Guidelines



TRAINING GUIDELINES

prepared by
Dairy Grazing Apprenticeship
and approved by the
Office of Apprenticeship,
United States Department of Labor

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MAJOR WORK CATEGORIES

All work items are mandatory unless specifically identified as "Not Mandatory."

1 MANAGE CATTLE APPROPRIATELY
(INCLUDES HEIFERS/DRY COWS, CALVES AND MILK COWS)

A HANDLE ANIMAL SAFELY

CRITERIA FOR EVALUATION

MASTER SIGNATURE

APPR. INITIALS

DATE COMPLETED

1) Maintains appropriate flight zone distances.

2) The animals move calmly in the desired direction.

3) Remains calm.

4) Correctly uses head lock and halter.

5) Properly uses safeguards while rotating an animal, including gates and proper deterrent tools.

MAJOR WORK CATEGORIES

B VERIFY HERD HEALTH AND WELLNESS

CRITERIA FOR EVALUATION

MASTER SIGNATURE

APPR. INITIALS

DATE COMPLETED

1) While conducting farm operations, such as milking, recognizes variations and abnormal behavior that would indicate illness.

2) Follows proper protocols to determine whether a contacting a veterinarian is necessary.

3) If contacting a veterinarian is not necessary, determines and administers the necessary on-farm treatment (ex. common metabolic disorders).

C EVALUATE ANIMAL PRODUCTIVITY

CRITERIA FOR EVALUATION

MASTER SIGNATURE

APPR. INITIALS

DATE COMPLETED

1) Comprehends and monitors cattle body condition scoring.


2) Monitors daily milk production.

3) Comprehends and monitors breeding records, and records breeding dates.

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MAJOR WORK CATEGORIES

B. EVALUATE CALF NEEDS AND USE APPROPRIATE RESOURCES TO MEET THE REQUIREMENTS

CRITERIA FOR EVALUATION	MASTER SIGNATURE	APPR. INITIALS	DATE COMPLETED
1) Feeds calves appropriate type and amount of feed.			
2) Follows appropriate protocol for weaning calves.			
3) Follows proper protocol for care and milking of calves.			
4) Compensates potential health risks of calves, and monitors for related symptoms.			
5) Compensates health needs of a calf, and monitors for proper growth.			
6) Demonstrates proper dehorning techniques.			

C. ESTABLISH COW BREEDING CYCLES

CRITERIA FOR EVALUATION	MASTER SIGNATURE	APPR. INITIALS	DATE COMPLETED
1) Identifies animals that are in heat.			
2) Compensates and monitors breeding records.			

F. COMPREHEND MILK COW VACCINATION PROGRAM

CRITERIA FOR EVALUATION	MASTER SIGNATURE	APPR. INITIALS	DATE COMPLETED
1) Explains resources available and procedures used on the farm.			
2) Summarizes the vaccination protocol.			

MAJOR WORK CATEGORIES

G. MAINTAIN HOOF HEALTH

CRITERIA FOR EVALUATION	MASTER SIGNATURE	APPR. INITIALS	DATE COMPLETED
1) Identifies the hoof condition.			
2) If the hoof condition is acute, able to treat it accordingly by use of antibiotics or other means.			
3) If the hoof condition is chronic, able to trim the hooves or administer another appropriate treatment.			

NOTES

Include information regarding Apprentice Progress, special certifications, etc.

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Website/Database

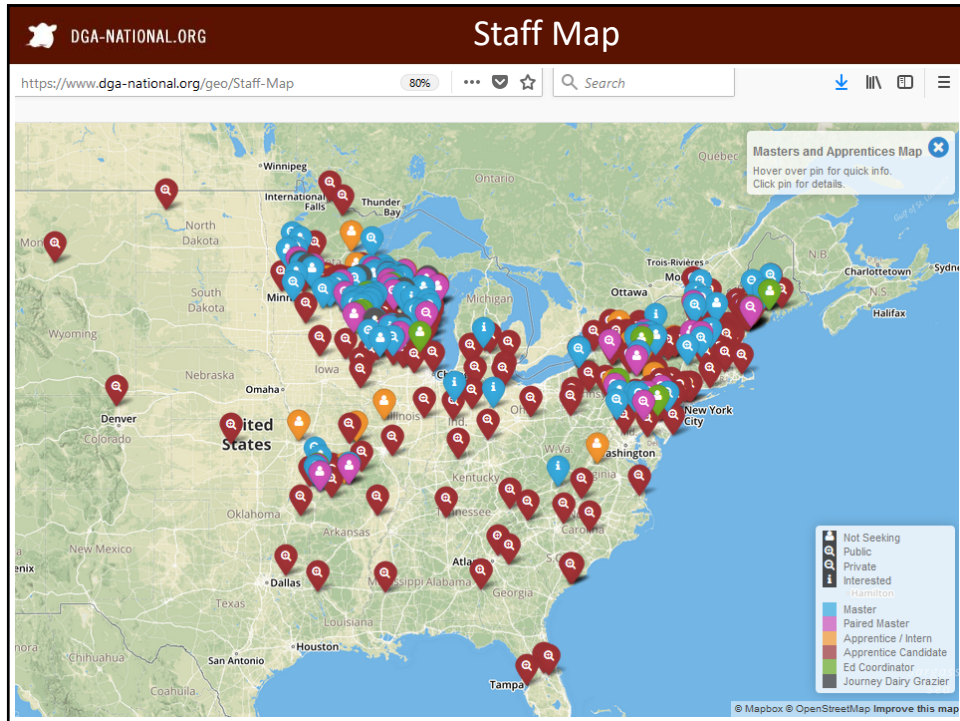


YOUR FUTURE IS THE FUTURE OF DAIRY

APPRENTICESHIP

Apprenticeship is a structured system of training designed to prepare individuals for skilled occupations by combining on-the-job training with related instruction. Apprentices earn while they learn and their skills are nationally recognized.

For 100 years, skilled trades have used Apprenticeship to train certified skilled workers and ensure their standard of training.



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https://www.dga-national.org/Portal 80% Search

Getting Started

BRIDGET D'WEARA
staff

DASHBOARD

APPRENTICE APPLICATION

MASTER APPLICATION

SEARCH USERS

ADD USER

STAFF MAP

MASTERS REPORTS

APPRENTICE REPORTS

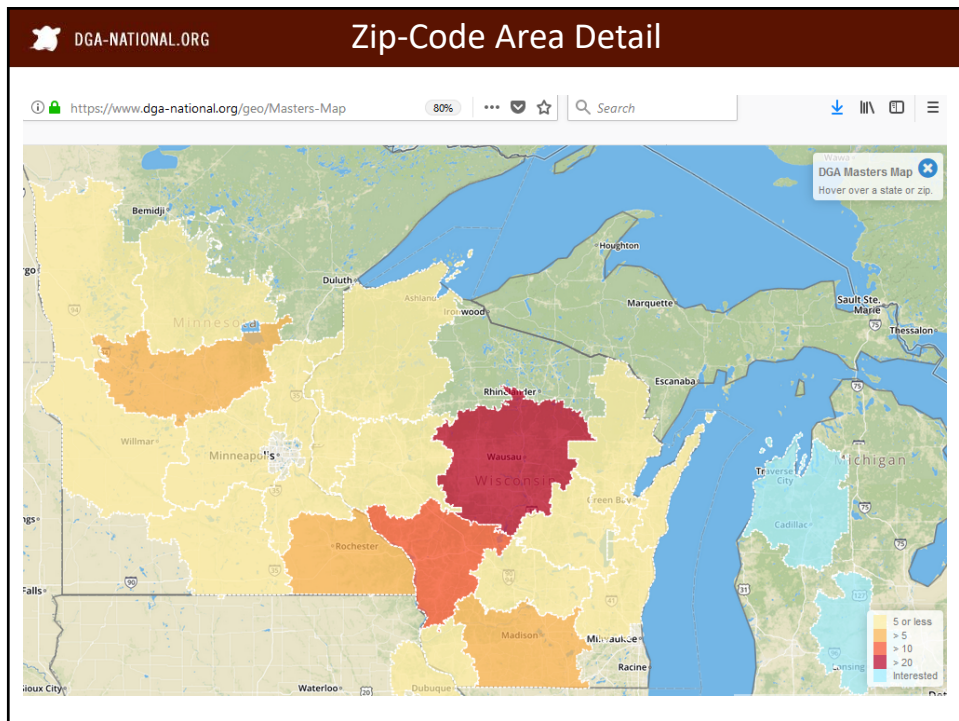
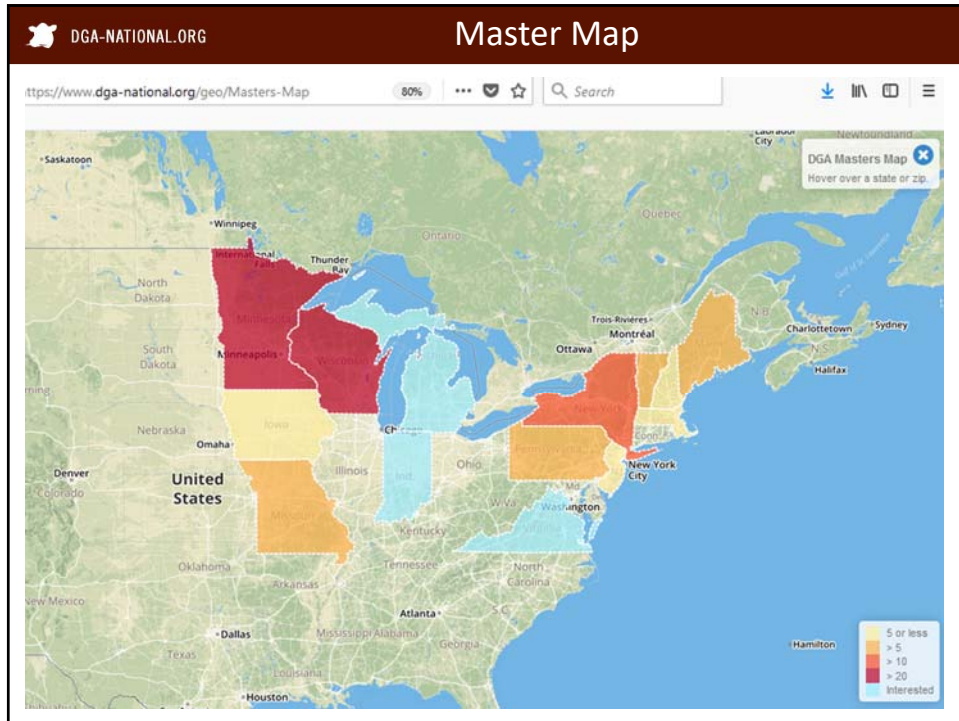
EMAIL LISTS

COURSES TEMPLATE

MESSAGES / TASKS		DELETE
Master Assigned - Benjamin	12-01-2017 8:18:41 am	
Profile Changed - Michael Needs a Spotcheck	12-01-2017 3:00:00 am	
Apprentice Application Submitted Notice - Jason	11-30-2017 3:01:41 am	
Apprentice Application Submitted Notice - Cody	11-30-2017 3:01:41 am	
Apprentice Hired - Willow Needs EC	11-27-2017 9:46:56 am	
Apprentice Hired - Teresa Carter Needs EC	11-27-2017 9:46:07 am	
Master Application Submitted Notice - Lyle	11-27-2017 3:00:00 am	
Master Application Submitted Notice - Matt	11-21-2017 3:00:01 am	
Master Application Submitted Notice - Scott	11-15-2017 3:00:03 am	
Easy Pointers to Improve Potential for Apprenticeship	08-09-2017 11:21:38 pm	

STATUS				
EC	Pending	Approved	Paired	Total
Aaron de Long	1	5	5	11
Alfrid Krusenbaum	1	11	7	19

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Apprentice Training Hours

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staff

PROFILE

Kelly

OJT HOURS

Month	OJT Hours	Hourly Rate	Pay Schedule Compensation	Paid Wages	In-Kind Value	Master Teaching Hours
2016-04	143.03	\$10.00	\$1430.30	\$1430.33	\$250.00	4
2016-05	155.52	\$10.00	\$1555.20	\$155.31	\$250.00	4
2016-06	168.28	\$10.00	\$1682.80	\$1682.84	\$250.00	4
2016-07	151.18	\$10.00	\$1511.80	\$1511.83	\$25.00	4
2016-08	215.15	\$10.00	\$2151.50	\$2158.17	\$250.00	6
2016-09	171.01	\$10.00	\$1710.10	\$1710.17	\$250.00	4

Apprentice Related Instruction

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RELATED INSTRUCTION

Semester	Course Title	Credits	Hours	Category	Graded	Required	Completed	Outcome
1	Dairy Nutrition Seminar	1	36	Formal	true	true	0	
1 and 2	Pasture-Based Dairy and Livestock Seminar	3	45	Formal	true	true	0	
2	Dairy Health Seminar	1	36	Formal	true	true	0	
3	Farm Business Management	1	36	Formal	true	true	0	
3	Milk Quality Seminar	1	36	Formal	true	true	0	
4	Organic Soils, Nutrients, and Composting	1	17	Formal	true	true	0	
Varies	Holistic Farming and Systems Approach	0	16	Formal	false	true	16	P
Monthly	Education Coordinator Farm Visits	0	24	Informal	false	true	4	
Varies	Discussion Groups/ Pasture Walks/Farming Conferences	0	42	Informal	false	true	4	

[ADD COURSE](#)

FARM VISITS

2017-09-08 10:00 - 2 hours
 Program basics, summer grazing, plans for fall reseeding, upcoming pasture walk with DGA training conference, u...

2017-10-23 13:00 - 2 hours

Options for Farm Transfer/ Investment

- *Average age of dairy farmers in U.S. is 59 years old. What are their options for farm transfer?*
 - *What are options for mid-career farmers seeking opportunities to expand and/or invest?*
- Milk-share Partnership
 - Spin-off Farm
 - Transition of Ownership



Apprentice Outcomes

- 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
 - Manage a grazing-based dairy
- * DGA is an FSA educational provider



Master Outcomes

- Employees who are highly skilled, competent, and trustworthy
- Managers for current dairy grazing operation and/or investment farm



- Financial models and support to help meet career goals, including retirement or exiting industry

Current Status of DGA

- 140 approved Master Dairy Graziers in 11 states: Iowa, Maine, Massachusetts, Missouri, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Vermont, and Wisconsin.
- 43 active Master-Apprentice pairs, 16 Journey Dairy Graziers, and more than 200 Apprentice Candidates seeking to be hired.
- Training manual, guidebooks, outreach materials.
- Website with online applications and searchable database to facilitate Master-Apprentice matches.
- Relationships with private investors.
- 501(c)3 Non-Profit Status.

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Administrative Partners

- Cornell University Small Farms Program and SUNY Extension
- University of Missouri Extension
- Pennsylvania Association for Sustainable Agriculture (PASA)
- Wolfe's Neck Farm and University of Maine Extension

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Projected Cumulative Outcomes

DGA Accomplishments	Prior to 2018	2018 ¹	2019 ¹	2020 ¹	5 Years ¹	10 Years ²	20 Years ³
Annual Graduates with Business Plans	16	10	16	26	66	316	903
Cumulative # of Journey Dairy Graziers	16	26	42	67	133	449	1349
Employed in management roles	7	11	18	29	58	196	590
Employed/Earning equity	1	2	3	4	8	28	84
Engaged in Farm Transfer	5	8	13	21	42	140	422
Engaged in Farm Start Up	2	3	5	8	17	56	169
Approved as DGA Master	1	2	3	4	8	28	84
Takes on own Apprentice		1	1	2	4	14	42
Training Farm for multiple Apprentices						1	2

¹estimates are based on 60% growth in Apprentice numbers per year. ²estimates are based on 30% growth in Apprentice numbers per year, ³estimates are based on 10% growth in Apprentice numbers per year.

Environmental and Economic Impacts

Managed grazing dairy systems are the economic engines of communities even as they restore natural resources needed for long term productivity. ***Each cow has annual impact of \$34,000 in economic activity in local community and, on 1.5 grazing acres, results in 2 ton reduction in soil loss with 8 lbs. reduction in phosphorus run-off per acre each year and a 2.3 to 7.6% increase in total soil carbon.***

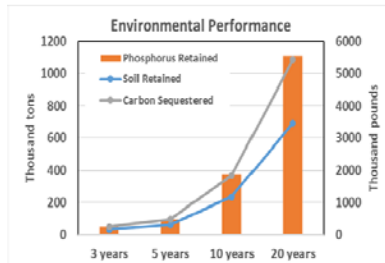
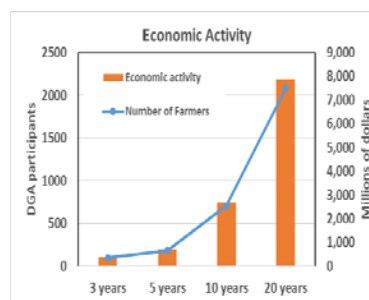
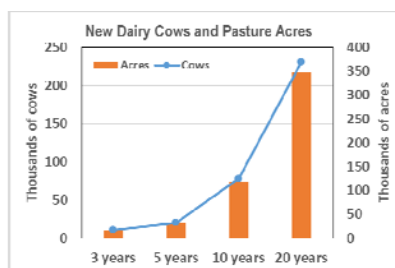
Farm Type	
Apprentice	100 cows: 150 grazing acres
Farm Transfer	100 cows: 150 grazing acres
Start up Farm	60 cows: 90 acres
Management	150 cows: 225 grazing acres
Training Farm	250 cows: 375 grazing acres



Near Term Impact

Three Year Total	Number of farmers	Cows	Acres	Economic impact	Soil Retained	Phosphorus retained	Carbon sequestered
Apprentice	40	4,000	6,000	\$136 mil.	12 K tons	96 K lb	6,840 tons
Management	29	4,350	6,525	\$148 mil.	13 K tons	104 K lb	7,439 tons
Farm Transfer	21	2,100	3,150	\$71 mil.	6.3 K tons	50 K lb	3,591 tons
Farm Startup	8	480	720	\$16 mil.	1.4 K tons	11.5 K lb	821 tons
Total	98	10,930	16,395	\$371 mil.	33 K tons	262 K lb	18.7 K tons

Potential Long Term Impacts



Diversity makes the US dairy industry more competitive in global markets and more resilient to economic and climatic changes.





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Contact

Joseph Tomandl, III

Executive Director

715-560-0389

joe@dga-national.org

Laura Paine

Program Director

608-338-9039

laura@dga-national.org