

Growing Successful Transitions with Beginning Women Farmer/Rancher Programs in the Northeast and Texas

2014 Report

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Growing Successful Transitions with Beginning Women Farmer/Rancher Programs in the Northeast & Texas



Executive Summary

The *Growing Successful Transitions with Beginning Women Farmer Programs in the Northeast and Texas* began in September 2012 and will run through August 2015. This program was primarily funded by the USDA/NIFA Beginning Farmer and Rancher Development Program (Award # 2012-49400-19673), along with significant contributions from Farm Aid and Clif Bar Family Foundation. In 2014, 127 participants were accepted into the program and 98 graduated (77%) by participating in 70% or more of the trainings.

Our collaborating partners and state coordinators were: Devon Whitney-Deal and Kristen Wilmer of Massachusetts's Community Involved in Supporting Agriculture; Jessie Schmidt of University of Vermont Extension; Kate Kerman of Small and Beginner Farmers of New Hampshire; Sarah Williford of Central New York RC&D; Sherry Simpson and Deb Legge of Connecticut Northeast Organic Farming Association; Gail Chase of Women in Agriculture Network Maine; and Peggy Cole of HMI in Texas. There were 19 mentors and a pool of 15 instructors.

At the end of each of the 10 sessions (6-8 hours in length) participants filled out evaluations to measure knowledge and attitude change, intended behavior change, and actual change. There was a final program evaluation that also measured these changes with the whole program in mind and the changes - and results of those changes that took place over a five to nine month period. 94 women completed that survey for a 74% response rate. We will be following up with an additional survey later in the grant to see what additional outcomes have occurred after participants had a chance to put their training into practice.

In addition to the 70 day-long sessions (21 of which were on-farm), there was a program-wide listserve and the ability for participants to take online classes of the courses they missed. As part of the capacity building for the program, nine trainer-

trainees were accepted into the Beginning Women Whole Farm Planning Trainer Program that began in year two of the program and began assisting lead instructors at that time.

Outcomes

Materials published/developed

HMI developed online modules for each of our ten place-based sessions using our Online Platform (Canvas) so that participants who missed courses could make up work online. 21 participants were invited to complete courses. Ten courses were completed online by seven participants.

Program Outreach

All HMI blogs were also tweeted and posted on Facebook. Seven mass emails were sent out to over 11,000 email recipients during the year. Two program flyers were developed for state coordinators to distribute for recruiting. HMI's main Beginning Farmer program page had 8,320 hits since September 2013, the enrollment page had 1,845 hits and the BWF Conference Proceedings page had 334 hits. An additional 42 web pages were developed internally or posted by our collaborating organizations or through other media. Nine articles were published in print magazines and three of the collaborating organizations also created their own Facebook pages for the program.

Program Outcomes

As evidenced in the data below, the program achieved an overall graduation rate of 77%. The average level of participant satisfaction of the program was 91% (84-97% spread). There was a total of 43,403 acres under management by participants and they were providing products to over 3,085 customers in their respective states. All participants had been farming less than ten years with a state average ranging from 2-5 years. 91% of participants are either farm owners or farm workers.

Both program goals (getting 50% of participants to experience knowledge change and behavior change) were met. The weakest area for behavior change was the land planning with a 61% average. The biological monitoring is the last session so we do not expect a high percentage of implementation there yet we had a 68% response there. Ideally we would like to have 70% or more of participants completing at least a draft plan for each aspect of the whole farm plan. We achieved this in most states for each aspect of the whole farm/ranch plan. Lack of current business or land to plan definitely affected certain state's percentage of participants completing their own plan. However, our curriculum was such that all participants had the opportunity to fill out templates for each aspect of the whole farm/ranch plan so they have the experience of planning that will help them in the future when they do have their own farm or ranch or are working on a farm or ranch.

The last program goal was 25% of participants experiencing some outcome of improved management as a result of the training. Based on surveys, and depending on the state, an average of 68% of participants experienced improved satisfaction in their quality of life and 91% improved their ability to make complex decisions, 94% to determine needed profit, 87% to manage time, and 97% to communicate. Additional outcomes were also measured with top common outcomes noted below, all of which fell above the goal of 25% of participants experiencing outcome changes.



Program Need

The information below will demonstrate the need for this program and illustrate why beginning women farmers, who are often limited resource farmers, were chosen as our target audience.

The number of women in the U.S. who have listed farming as their primary continues to decrease. In 2002, 52.5% of women farmers listed farming as their primary occupation. This dropped to 40% in 2007, and new census numbers in 2012 put that number at 36%.



Research has also shown that sustaining a small business in today's economy is extremely challenging which is why 85% of small businesses fail within their first five years (Gerber 2001). The odds are even greater for farming, where most farms are supported by off-farm income and gross sales are under \$50,000.

Another challenge for beginning farmers is access to capital. A 2003 survey of farmers, lenders and agricultural educators in Minnesota and Wisconsin found that not having a good business plan was a major impediment to getting financing (Land Stewardship Project 2003). Thus it is of great importance to offer whole farm planning, which includes a focused financial planning and monitoring module, to new and beginner farmers.

In terms of adopting practices that will regenerate or sustain healthy environmental conditions on the land, studies have found that a major barrier to adopting sustainable farming methods is lack of information and firsthand knowledge related to such systems. (Drost et al 1996). A Northwest Area Foundation study found that farmers adopting alternative production methods were more likely to be successful if they were part of some sort of formal or informal network of like-minded farmers (Northwest Area Foundation 1994).

Today, there are numerous beginning farmer programs in the country, but only a few are built on the principles of whole farm planning and fewer still are focused specifically on women farmers



Our program also addresses new research on how farmers, and beginning farmers in particular, learn. Agricultural educators frequently rely on traditional lecture, PowerPoint presentations, fact sheets and other common methods to educate farmers. Yet research studies, such as the one by Eckert and Bell (2005) show that farmers and beginning farmers in particular learn best by utilizing hands-on techniques, peer-to-peer learning with other farmers and ranchers, and through internships. Eckert and Bell found a farmer's prior values, beliefs, and knowledge directly influenced a farmer's mental model and that each farmer's mental model guides her or his actions, decisions, and use of information. For farmers to adopt new practices, their mental model has to be taken into account.

Our experience with the participants in the Beginning Women Farmers project over the last five years (2009 – 2014) has proven this research to be true. Consistently, evaluations of the program have shown that what is of great importance to participants is the opportunity to actually engage with the material and create their own plans and learn from each other in small group work. Likewise, the opportunity to learn from mentor farmers and see each other's farms is equally important. We have continued to adapt the curriculum based on participant and local coordinator feedback.

HMI's *Growing Successful Transitions with Beginning Women Farmers and Ranchers in the Northeast and Texas* provides creative instruction/facilitation and experiential learning that takes into account these effective educational methods for farmers. While we do offer traditional print materials for farmers, we also have interactive software, webinars, teleconferences, and videos to promote distance learning and support. Likewise, very little of the courses are lecture. Mostly the course is a facilitation of learning the different components of whole farm planning by working on their individual enterprises and operations, while learning from each other, and learning from their mentors. In this way the program is individualized with a

heavy emphasis on peer-to-peer learning. In addition, at least 30% of sessions actually take place on farms for even greater peer-to-peer learning, while reinforcing key environmental principles.

Audience

The primary audience for this program are women farmers who fit into the definition of beginning farmers (less than 10 years of farming experience – per USDA guidelines) and often as limited resource farmers. The northeastern U.S. has one of the largest per capita ratio of women farmers in the nation. In Texas, the number of female farmers grew 22.3% between 2002 and 2007, with a more modest increase in women farmers (3.5%) seen in 2012.

Preliminary Data & Information on Holistic Management Whole Farm Planning

In particular, one peer-reviewed, qualitative research journal article reported the results of farmers who had learned Holistic Management as a whole farm planning tool included: A 1,100% increase in management for biodiversity after training; 80% reported increased profit, and 91% reported improved quality of life because of time budgets (improved time management) (Stinner 1997).

A graduate thesis from Montana State University on the results of Holistic Management noted that 85% of producers receiving whole farm planning training achieved the following outcomes: 85% had an annual grazing plan, 65% had implemented wildlife management practices, 83% had increased care for riparian areas, 60% had implemented formal documented land monitoring, and 78% had an annual financial plan and budget. Furthermore, increased satisfaction levels for the following areas were reported: economic satisfaction 90%; personal happiness 86%; family happiness 76%; job pleasure 86%; vacation time 60%; community involvement 60%; children returning to ranch 20% (Montagne & Orchard 2001).

Preliminary Data & Information on Need for Whole Farm Planning with Livestock Operators



Many livestock producers have found whole farm planning to be particularly helpful in improved livestock management. Likewise, many farmers who attend whole farm planning may decide to include livestock as part of their operation due to increased consideration of a sustainable approach to soil fertility. Pasture based farming has significant environmental benefits. Specifically, practices such as pasture cropping or developing a rotation of cropland and pasture keep soil in place through permanent cover, thus reducing input demands and the amount of sediment and fertilizer that leaves the farm and pollutes water in several ways: 1) Reduces sediment loss and provides greater capability of absorbing water which reduces runoff (Digiacomio, et al) and soil erosion by up to 50-80%; 2) Reduces reliance on highly fertilized feed crops; 3) Reduces flooding by over 30%; 4) Increases bird and wildlife habitats by five times; 5) Reduces greenhouse gasses by up to 40% (Boody, et al) due to increased soil organic matter and sequestration of atmospheric carbon in agricultural soils.

Evaluation

Evaluation of this program is three-fold:

- 1) *Formative Evaluation*: This will focus on assessing the effectiveness of the educational methods, the program format, and whether the learning objectives were met. The primary purpose of these evaluation efforts will be for program improvement and to measure learning outcomes. At the end of each session, time will be spent doing a focus group exercise to assess how to marry educational methods with the specific needs of the participants in each group. Adjustments to the educational methodology will be made for the individual groups, and thus we will not use a one size fits all approach. End-of-session questionnaires and retrospective survey tools will allow us to measure specific gains in knowledge and skills for each group. We will use the results of both of these evaluation methods to make adjustments to the curriculum, educational methodology, and factors as necessary, offering a very flexible approach to our program delivery. This approach has been found to be extremely effective in past trainings.
- 2) *Summative Evaluation*: This will focus on assessing the action outcomes in terms of new behavior changes and the impacts that result from these behavior changes, such as increased profitability, improved quality of life, and improved

environmental conditions. We will use a combination of web-based surveys and phone surveys to measure indicators including the following: communication changes, number of new conservation practices implemented, changes in pricing, expenses, income streams, and new enterprises. Additional indicators will be determined and measured through the assistance of an evaluation consultant.

- 3) *Evaluation of Network Success*: This will include an evaluation of networks created for these programs and the networks' abilities to self-sustain. This portion of the evaluation will focus on the program's sustainability. Our program model seeks to build in a sustainability phase by empowering existing networks to grow stronger through implementation of whole farmer planning and sustainable practices programming. For the states that do not have any network for beginning women farmers, we will work with coordinators to develop such networks. Our evaluation process will seek to measure how many participants attend meetings, how frequently these meetings are held, and the satisfaction level of those who participate in the meetings, including how productive and informative participants feel these meetings are. The evaluation results will be shared with the network coordinators so that they can improve their activities and network efforts.

The end-of-session evaluations and web-based surveys will be done using HMI staff skills and evaluation knowledge. Tool development and follow-up retrospective surveys will be provided through a contracted evaluation consultant.

Target Audience

This program is targeting beginning women farmers, of which 100% will be limited resource farmers. The existing networks that will assist in recruiting program participants include Maine, Vermont, and Massachusetts WAgN, Central New York Resource Conservation & Development, Connecticut NOFA, New Hampshire Beginner Farmers, Holistic Management International Beginning Women Farmer Seminar participants and collaborator network, Texas Sustainable Food Center, and Texas Organic Farmers & Gardeners Association. Further recruiting assistance will come from Cooperative Extension and RC&D, NRCS, and sustainable food system websites.

Personnel & Resources

Holistic Management International (HMI) has been teaching whole farm planning to beginning and experienced farmers and ranchers for 30 years on four continents, 26 countries, and all 50 states. Currently over 40 million acres around the world are being managed through our whole farm planning process.

As an international non-governmental organization (NGO) based in Albuquerque, New Mexico, we have collaborated not only with other NGO's and Community Based Organizations (CBO) in a variety of areas, but have collaborated extensively with agricultural educators to develop whole farm planning programs for farmers to improve land health, profitability, and quality of life on farms. Our network includes some of the most experienced farmers to integrate livestock and cropping as a key practice for sustainable farming (improving land health and increasing profitability) and healthy, local food systems.





SUMMARY OF RESULTS

BWF 2014 Graduation Report			
State	# of Participants Trained	Participants Graduated (70% or more)	% of Participants
Texas	31	28	90%
Vermont	15	13	87%
Maine	12	6	50%
Massachusetts	19	15	79%
New Hampshire	13	12	92%
Connecticut	18	10	56%
New York	19	14	74%
Total	127	98	77%

BWF 2014 Satisfaction Report			
State	Participant Satisfaction w/ Program	Participant Satisfaction w/ State Coordinator	Participant Satisfaction w/ Mentor
Texas	100%	96%	96%
Vermont	100%	100%	100%
New York	100%	100%	100%
Maine	100%	100%	100%
Connecticut	100%	100%	100%
Massachusetts	100%	100%	100%
New Hampshire	88%	100%	88%
Average	98%	99%	98%

BWF 2014 Demographic Report			
State	Acres Influenced	# of Customers	# of Years Farming Average
Texas	6336	642	4
Vermont	448	935	5
Maine	45	72	3
Massachusetts	302	2174	4
New Hampshire	20	308	5
New York	499	100	3
Connecticut	10	76	2
Total	7660	4307	3.7

BWF 2014 Behavior Change								
<i>(% of participants completing draft or plan or taking action)</i>								
State	Whole Farm Goal	Financial Plan	Business Plan	Market Plan	Land Plan	Grazing Plan	Bio Monitoring	Forged New Relationships
Texas	93	89	89	86	96	96	96	100
Maine	100	100	17	86	0	50	86	100
New York	100	89	67	67	100	100	75	100
Massachusetts	100	83	72	89	67	89	78	72
New Hampshire	100	88	88	88	75	75	25	88
Vermont	100	92	92	92	54	56	67	100
Connecticut	88	63	86	63	38	100	50	100
Average %	97	86	73	82	61	81	68	94

2014 Knowledge Change							
<i>Average % of participants experiencing knowledge change for each session</i>							
Session	TX	NY	VT	ME	CT	NH	MA
Goalsetting	100	94	93	100	95	100	90
Time Management & Decision Testing	100	93	93	80	75	89	85
Financial Planning Overview	100	100	100	100	100	89	93
Enterprise Analysis	100	100	100	88	100	100	95
Market Planning	100	100	100	100	89	90	95
Business Planning	100	92	100	100	91	100	100
Leadership & Communication	100	78	100	100	100	63	100
Land Planning	100	100	100	100	100	71	100
Grazing Planning	100	100	91	100	100	100	100
Soil Fertility	100	100	100	83	80	75	83

2014 Session Satisfaction Report <i>Average % of satisfaction (rated good or better)</i>							
Session	TX	NY	VT	ME	CT	NH	MA
Goalsetting	100	100	100	90	100	100	90
Time Management & Decision Testing	97	86	100	100	94	100	100
Financial Planning Overview	90	100	100	100	100	89	93
Enterprise Analysis	97	100	100	100	83	89	100
Market Planning	93	86	100	100	89	100	100
Business Planning	96	100	100	100	82	100	93
Leadership & Communication	100	78	100	100	100	63	93
Land Planning	92	89	100	100	100	100	100
Grazing Planning	93	75	100	100	100	100	100
Soil Fertility	100	89	100	80	100	88	94

Top Post-Program Satisfaction with Outcome Changes Experienced								
Topic	CT	MA	TX	NH	VT	ME	NY	Av.
Increased Satisfaction with Time Management	71%	83%	96%	75%	92%	100%	89%	87%
Increased Satisfaction with Ability to Determine Needed Profit	88%	89%	96%	88%	100%	100%	100%	94%
Increased Satisfaction with Ability to Make Complex Decisions	88%	88%	96%	88%	100%	100%	78%	91%
Increased Satisfaction with Quality of Life	57%	22%	93%	63%	69%	83%	89%	68%
Increased Satisfaction with Communication	71%	56%	93%	75%	85%	100%	100%	97%

Key Post-Session Impacts Experienced by Participants	MA	TX	CT	NH	NY	VT	ME	Av.
Intention to Continue Farming	89%	100%	88%	100%	100%	100%	100%	97%
Enhanced Understanding of Your Farm Finances	72%	96%	75%	100%	67%	92%	100%	86%
New or Improved Record Keeping Systems	78%	96%	75%	88%	78%	100%	57%	82%
Improved Understanding of Your Farm's Eco-System	89%	96%	88%	75%	67%	85%	71%	82%
Improved Ability to Articulate Goals and Objectives of Business to Others	100%	86%	88%	88%	44%	92%	71%	81%
More Effective Use of Resources	72%	96%	88%	75%	78%	77%	57%	78%
Improved Ability to Determine Appropriate Management to Address an Environmental Issue	83%	86%	63%	38%	56%	69%	57%	65%
Improved Understanding of Market	89%	79%	38%	63%	44%	69%	43%	61%
Reduced Farm Finances	44%	57%	25%	13%	11%	54%	29%	33%
Increased Net Income	28	71%	40%	0%	33%	40%	0%	30%
Increased Farm Profit	39%	43%	13%	0%	11%	8%	29%	20%



RESULTS

by

STATE



CONNECTICUT



Participant Information

Number of Participants: 18
Number Graduating from Program: 10
Graduation Percentage: 56%
Number of Acres Influenced: 10
Number of Customers: 76
Participant Satisfaction with Program: 100%

Results

% of BWF Participants in Connecticut who have created the following:	2014 Percentage
Grazing Plan	100%
Relationships with Positive Impact	100%
Holistic Goal/Whole Farm Plan	88%
Business Plan	86%
Financial Plan	63%
Marketing Plan	63%
Biological Monitoring Plan	50%
Land Plan	38%

Program Collaborators

Connecticut Northeast Organic Farming Association (NOFA)
Connecticut Natural Resource Conservation Service (NRCS)
Women's Agricultural Network—Connecticut
Connecticut Dept of Agriculture
University of Connecticut Extension
New Connecticut Farmer Alliance
Eastern Connecticut RC&D
King's Mark RC&D (CT)

MASSACHUSETTS



Participant Information

Number of Participants:	19
Number Graduating from Program:	15
Graduation Percentage:	79%
Number of Acres Influenced:	302
Number of Customers:	2,174
Participant Satisfaction with Program:	100%

Results

% of BWF Participants in Massachusetts who have created the following:	2014 Percentage
Holistic Goal/Whole Farm Plan	100%
Grazing Plan	89%
Marketing Plan	89%
Financial Plan	83%
Biological Monitoring Plan	78%
Business Plan	72%
Relationships with Positive Impact	72%
Land Plan	67%

Program Collaborators

Community Involved in Sustaining Agriculture (MA)
Massachusetts Northeast Organic Farming Association (NOFA)
University of Massachusetts
Southeast Massachusetts Agricultural Partnership
Berkshire Grown
Massachusetts Department of Agriculture
New England Small Farm Institute

MAINE



Participant Information

Number of Participants: 12
Number Graduating from Program: 6
Graduation Percentage: 50%
Number of Acres Influenced: 45
Number of Customers: 72
Participant Satisfaction with Program: 100%

Results

% of BWF Participants in Maine who have created the following:	2014 Percentage
Financial Plan	100%
Holistic Goal/Whole Farm Plan	100%
Relationships with Positive Impact	100%
Biological Monitoring Plan	86%
Marketing Plan	86%
Grazing Plan	50%
Business Plan	17%
Land Plan	0%

Program Collaborators

Maine Organic Farming and Gardening Association
Maine Northeast Organic Farming Association (NOFA)
Maine Natural Resource Conservation Service (NRCS)
Women's Agricultural Network--Maine
University of Maine Cooperative Extension
Maine Farm Service Agency (FSA)
Maine Agricultural Mediation Service

NEW HAMPSHIRE



Participant Information

Number of Participants: 13
Number Graduating from Program: 12
Graduation Percentage: 92%
Number of Acres Influenced: 20
Number of Customers: 308
Participant Satisfaction with Program: 88%

Results

% of BWF Participants in New Hampshire who have created the following:	Year One Percentage
Holistic Goal/Whole Farm Plan	100%
Business Plan	88%
Financial Plan	88%
Marketing Plan	88%
Relationships with Positive Impact	88%
Grazing Plan	75%
Land Plan	75%
Biological Monitoring Plan	25%

Program Collaborators

New Hampshire Northeast Organic Farming Association (NOFA)
Small and Beginner Farmers of New Hampshire
University of New Hampshire Extension
New Hampshire Natural Resource Conservation Service (NRCS)
Land for Good
New Hampshire Soil and Water Conservation Districts (SWCD)
New Hampshire Farm Bureau
New Hampshire Department of Agriculture
Southern NH RC&D
North Country RC&D (NH)

NEW YORK



Participant Information

Number of Participants:	19
Number Graduating from Program:	14
Graduation Percentage:	74%
Number of Acres Influenced:	499
Number of Customers:	100
Participant Satisfaction with Program:	100%

Results

% of BWF Participants in New York who have created the following:	2014 Percentage
Grazing Plan	100%
Holistic Goal/Whole Farm Plan	100%
Land Plan	100%
Relationships with Positive Impact	100%
Financial Plan	89%
Biological Monitoring Plan	75%
Business Plan	67%
Marketing Plan	67%

Program Collaborators

Central New York RC&D
Cornell University
New York Natural Resource Conservation Service (NRCS)

VERMONT



Participant Information

Number of Participants:	15
Number Graduating from Program:	13
Graduation Percentage:	87%
Number of Acres Influenced:	448
Number of Customers:	935
Participant Satisfaction with Program:	100%

Results

% of BWF Participants in Vermont who have created the following:	2014 Percentage
Relationships with Positive Impact	100%
Business Plan	92%
Financial Plan	92%
Marketing Plan	92%
Holistic Goal/Whole Farm Plan	80%
Biological Monitoring Plan	67%
Grazing Plan	56%
Land Plan	54%

Program Collaborators

University of Vermont
Vermont Northeast Organic Farming Association (NOFA)
Women's Agricultural Network—Vermont
Area Farm & Food Link (VT)
The Intervale Center (VT)

TEXAS



Participant Information

Number of Participants: 31
Number Graduating from Program: 28
Graduation Percentage: 90%
Number of Acres Influenced: 6,336
Number of Customers: 642
Participant Satisfaction with Program: 100%

Results

% of BWF Participants in Texas who have created the following:	2014 Percentage
Relationships with Positive Impact	100%
Biological Monitoring Plan	96%
Grazing Plan	96%
Land Plan	96%
Holistic Goal/Whole Farm Plan	93%
Business Plan	89%
Financial Plan	89%
Marketing Plan	86%

Program Collaborators

Sustainable Food Center (TX)
National Center for Appropriate Technology
NRCS Texas
(TX)Texas A&M Agrilife Extension
Farm & Ranch Freedom Alliance
Texas Parks and Wildlife Department
TRM International (TX)
Texas Mexico Border Coalition
University of Texas Pan American
Sustainable Growth Texas
Texas Agricultural Land Trust

Texas Agricultural Land Trust
Rural Texas Innovators
Texas Wildlife Association
Wimberley Valley Watershed Assoc.
Texas Organic Farmers & Gardeners Assoc.
Native Prairies Association of Texas
The Center for Environmental Research
Hill Country Alliance – Dixon Water Foundation
Texas & Southwestern Cattle Raisers Assoc.
Texas Sheep & Goat Raisers
North American Hair Sheep Assoc.

Texas Dept. of Agriculture
Texas Riparian Assoc.
River Systems Institute
Edible Austin (TX)
Dallas Farmers Market