

Sustainable Poultry, Pastures, Soils, and Vegetable Education in Minnesota

Final Report for ENC10-114

Project Type: Professional Development Program

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Region: North Central

State: Minnesota

Project Coordinator:

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Project Information

Abstract:

Four topics for education of small and beginning farmers were identified through farmer surveys and interactions with the Sustainable Farming Association of Minnesota (SFA). The four topic areas were Small Flock Poultry Management, Soils, Pasture Management, and Vegetable Production. A curriculum was developed in each of these areas in cooperation between Extension Educators and farmers from SFA. These curricula focus on the basics to assist farmers in getting started and understanding the topic to make better decision for managing their operations. Each curriculum was developed by a team of educators and farmers to try to assure that the content is relevant to the needs of farmers in Minnesota. Training of Extension and other educators will take place over the next year as staff turnover impacted the process of writing these curricula. All of the curricula will be available on the University of Minnesota Extension Small Farms Site <http://www.extension.umn.edu/food/small-farms/>.

Project Objectives:

The main objective was to develop curricula in each of the four topic areas. We used teams of educators and farmers that would develop the curricula and provide training on the curricula for other educators. This was done to insure the information was relevant to farmers and addressed the needs of farmers. A second objective was to strengthen the relationship of local educators and SFA. The third objective was to train educators across the state in these curricula.

Introduction:

The Extension Small Farms team conducted a needs assessment of Minnesota Small Farms in January of 2010 and determines that four topics were of interest to the greatest number of respondents. Those topics included Small Poultry Flock Management, Soils, Pasture Management and Market Vegetable Farming. In

addition, some members of SFA (Sustainable Farming Association of Minnesota) had indicated the same topics were coming up within their circles, particularly with beginning farmers. Since 2004, the county-based staff has had great turnover and in 2011 about 50% were new and it seemed a good opportunity to engage farmers and educators around curricula development. A secondary benefit would be to establish and build relationships with SFA members and beginning farmers.

The project was designed to develop curricula for educators. Demand for training in these areas has been constant for local educators across the state. These curricula would address the needs of local farmers and would offer a consistent product and learning objectives. It was hoped that 15-25 educators would be involved in the trainings around these curricula. While the training has not taken place, we intend to train our staffs around these curricula over the next year.

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Education & Outreach Initiatives

Objective:

Description:

Methods

Each of the curricula areas- Small Flock Poultry, Soils, Pasture management and Market Vegetable Production - were assigned a lead educator. This educator recruited one other educator to work with them. Extension asked SFA to help identify farmers from their membership to be a part of each of these teams. Two farmers were asked to be team members for each of the curriculum development teams.

A kickoff meeting was held to bring all of the team members together to discuss the objectives and the overall concepts of this project. Teams met initially at this time to discuss their curriculum, what approach they would take in development, and to divide up responsibilities for each of the members. Each team had a slightly different approach to the curriculum, how it might work, what methodology they would like to employ or how in-depth it should be. Teams developed a plan and a timeline for the work they wanted to accomplish. We met with SFA at their annual meeting and discussed the curricula and topics with members. Feed back from members was then taken into account for the development of the final curricula.

After the initial planning meeting, it was up to the team leaders to keep the teams moving. Several of the teams dug right in and started researching and literature searches. Two of the teams spent some time looking at how they might approach the task in a different way. The Pasture team spent some time investigating software which may have allowed them to develop a decision aid tool based on a question format. However, the software was not designed to do what they wanted and so the team went to a more traditional format of defining the topics and developing the curriculum around these topics.

During this time of team curriculum development, we had significant turnover of Extension staff associated with these teams. In 2012, we lost 5 of the 8 Extension Educators to job changes or exit from the Extension. This necessitated finding other staffs that were able and willing to take on the challenge of assisting with this project. Over the next two years we dealt with these changes which necessitated extensions from our two year plan. All of the curricula were completed in May 2014 and were to the graphic designer for final review and formatting to meet University of Minnesota branding.

In 2012 the team met several times on conference calls to discuss the progress and we determined that we would produce a similar product between each of the

teams. So the basic curricula are based on 2 or 3 PowerPoint presentations with speaker's notes, exercises that teachers can use in the classes, references, and session evaluations to be used with students. Instructors can modify the content, use parts of it or the whole curriculum. The evaluations are designed to give feedback on the course format, the instructor and future topics. All of the curricula have been peer reviewed within the Extension system.

One of the goals was to train educators on these curricula. This was not accomplished because of staff turnover, however, we will be doing this training in the future. Modifications and updates to the curricula based on these trainings and on use of the curricula will be made and updated curricula will be available on the Extension Small Farms Website <http://www.extension.umn.edu/food/small-farms/>.

- [Chickens Learner Evaluation](#)
- [Dirt on Dirt One Presenters Guide](#)
- [Dirt on Dirt Soil Management Plan](#)
- [Vegetable Production 2 Learner Eval](#)
- [Vegetable Production Grower Profile](#)
- [Vegetable Production IPM Learner Eval](#)
- [Vegetable Production Planting Worksheet](#)
- [Sustainable Vegetable Production PowerPoint](#)
- [Dirt on Dirt Three Learner Evaluation](#)
- [TheDirtOnDirt3 PowerPoint](#)
- [IPM for Vegetable Production PowerPoint](#)
- [Dirt on Dirt Two Presenter Guide](#)
- [Greener Pastures Case Study](#)
- [Greener Pastures Learner Evaluation](#)
- [Greener Pastures Part Two Learner Activites](#)
- [Greener Pastures Presenter Guide](#)
- [Greener Pastures Part Two PPT](#)
- [Chicken Presenters Guide](#)
- [Getting Started with Chickens PPT](#)
- [Dirt on Dirt One Learner Evaluation](#)
- [Dirt on Dirt Three Presenters Guide](#)
- [Vegetable Learner Evaluation](#)
- [Farm Data](#)
- [Vegetable Production Presenters Guide](#)
- [Vegetable Production Resource Guide](#)
- [Sustainable Vegetable Production Part II PowerPoint](#)
- [Dirt on Dirt Two Learner Evaluation](#)
- [TheDirtOnDirt1 PowerPoint](#)
- [Greener Pastures Part One PPT](#)
- [TheDirtOnDirt2 PowerPoint](#)

Outreach and Publications

These Four Curricula are being posted to the University of Minnesota Extension Small Farms website -<http://www.extension.umn.edu/food/small-farms/> . A new page for teaching resources is being developed currently and all of these curricula as well as, other materials will be posted on this page.

Outcomes and impacts:

Four curricula were developed on the topics of Small Flock Poultry, Soils, Beginning Pasture Management, and Market Garden Production. Each of these curricula is developed around the principle of teaching beginners enough about the topic to feel comfortable about making decisions or starting an enterprise. All of the curricula are different in that the focus of the curricula is derived from the availability of other resources relevant to the Upper Midwest. For example, the Vegetable Curriculum focuses more on the business aspects as there is a wealth of resources from other Universities and state Extension services around production topics. The soils curriculum was developed to provide some basic understanding of the soils and then goes into a discussion of soil quality.

While we had hoped to train our locally-based Extension staff and other educators about these curricula and their use, the loss of staffs during this process delayed completion of three of the curricula and we were unable to complete these trainings. We are planning to complete this training over the next year and are looking at possibly using some type of online training to help accomplish this.

Project Outcomes

Project outcomes:

The University of Minnesota now has four sustainable agriculture curricula available to our staffs and other educators to complement our work around small and beginning farmers. Since Minnesota has no formal state led Small/Beginning Farmer educational program, these curricula enable our locally-based educators to have some basic materials in these four content area from which to begin educational programming. Our hope is to build from these curricula and to be able to work with the College of Food, Agriculture and Natural Resource Sciences departments and Extension Faculty on curricula development for Small and Beginning Farmers.

Recommendations:

Potential Contributions

Our goal is to train our locally-based Extension Educators, high-school vo-ag instructors around the state and other interested educators in the use and teaching of these curricula. We know that our Extension Educators will use these sustainable agriculture curricula in their programming and our goal is to have these curricula shared with students across the state. As consumer economics and demand for sustainably and locally grown foods changes, interest in these topics will continue to push educators to do more education to producers. These curricula are a starting point for enhancing our efforts in sustainable farming

Future Recommendations

Farmer's interest in sustainable food production practices is growing and there are significant opportunities for enhanced learning about production practices and systems. However, many beginning farmers fail to establish good, reliable markets for their products. Increased emphasis on marketing and financial management as farmers are beginning, changing or growing, will increase their chances of being successful and sustainable. We hope to be able to build upon these curricula with enhanced programming on business management for sustainable farms.

Information Products

- [Sustainable Poultry Pastures Soils and Vegetable Education in Minnesota \(Course or Curriculum\)](#)

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture or SARE.



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