

Utilizing back yard poultry production to reduce weeds and insects while providing soil nutrients and home grown food.

IPM/SA Mini-Grant Proposal

Project Leader: Matt Palmer, USU Extension Agent in Sanpete County

Project co-Leader: David Frame, USU Extension Poultry Specialist

Collaborators: Centracom Interactive

1. Situation

Back yard gardening is very popular in central Utah. Most home lots have enough room to accommodate a vegetable garden. A great number of home owners grow vegetables in the garden to supplement family meals. Over the past few years, the cost of commercial fertilizer, herbicides, and insecticides has greatly increased. Also, many home owners desire to reduce or eliminate the use of commercial fertilizers and pesticides. The design of this project is to incorporate poultry into a sustainable back yard garden setting that will reduce commercial fertilizer, herbicides and pesticides normally utilized in gardening. In central Utah, a small amount of chickens are allowed by most city regulations. For example, Ephraim City allows home owners to have 30 chickens per home lot (www.ephraimcity.org). Chickens do not require expensive management equipment and are very versatile because they produce needed soil nutrients and eating weeds and insects.

2. Objectives:

Develop two sustainable demonstration gardens in Sanpete County to document and teach back yard gardeners about the use of poultry in organic gardening.

3. Procedures

Task	Completion Date	Responsible staff	Description
Purchase Equipment	April 2009	Matt Palmer and David Frame	Purchase electric fencing, feeders, water troughs, and shelters
Purchase Chicks	May 2009	Matt Palmer and David Frame	Purchase 50 chicks to place 25 at each demonstration garden
Pre-sampling	May 2009	Matt Palmer and David Frame	Take soil nutrient samples, weed survey, and pest survey
Plot set up	June 2009	Matt Palmer and David Frame	Set up electric fence shelter, feed and water troughs and place chicks.
Produce Garden show and DVD	June-August 2009	Matt Palmer and David Frame and Centracom Interactive Ch. 10	Shoot video footage of the demonstration gardens and begin running the program on The Garden Show.
Garden Field Day	August 2009	Matt Palmer and David Frame	Invite local gardeners to garden sites to teach about IPM and Sustainable gardening
Post-sampling	September 2009	Matt Palmer and David Frame	Repeat soil nutrient samples, weed and pest surveys
Produce a fact sheet and PowerPoint presentation	October 2009	Matt Palmer and David Frame	The fact sheet will be put on the USU website and the USU Small Farm web site and the presentation will be presented at small farm workshops and extension meetings

4. Data Analysis and Presentation of Results:

Pre and post samples and surveys will be compared in graphical form. Financial data will be collected to determine the reduction in commercial fertilizer and pesticides needed on the demonstration gardens. The data collected will be incorporated into the Garden Show production, PowerPoint presentation and the fact sheet. Centracom Interactive will air the video production on the Channel 10 garden show throughout the coming years. The PowerPoint presentation will be presented at USU Extension Meetings and at small farm workshops. The fact sheet will be placed on the USU Extension website in the poultry publications section and on the Small Farms web site.

5. Evaluation:

Gardeners that attend the garden field day will be expected to complete an evaluation form that will measure the knowledge and skills gained on a 1 to 5 scale. This will also be utilized at the small farm programs. We will utilize the evaluation information in conducting other garden IPM and sustainability programs. We will also utilize the projects equipment to continue to evaluate the usefulness of poultry in sustainable back yard garden production.

6. Educational Products:

We will produce a 30 minute garden show on the project with Centracom Interactive. We will also produce a factsheet and a PowerPoint presentation.

7. Educational Outreach

The Garden show production of this project will be aired throughout the coming years on the Centracom Interactive local Channel 10 which is broadcasted into about 5000 homes in central Utah. The fact sheet will be sent to the county extension agents in Utah and placed on the USU Extension website. The PowerPoint presentation will be presented at the UACAA summer meetings and at USU Extension Annual meetings and available for small farm workshops throughout the state.

8. Budget:

Item	Description	Budget	
		Grant	In-kind/Match
Electric Net Fence	2 roles @ \$200 each	\$400	
Electric Charger	2 units @ \$130 each	\$260	
Broiler Chicks	50 Chicks @ \$3 each	\$150	
Shelter	2 shelters @ \$150 each		\$300
Feed/Water Troughs	4 @ \$25 each		\$50
Feed	500lb @ \$0.35/lb	\$175	
Soil Samples	8 @ \$25	\$200	
Garden Show Production	30 min @ \$200/min		\$6000
Chicken Management	5hr/wk @ \$10/hour		\$500
		\$1185	\$6850