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This is a final project report submitted  
to the Organic Farming Research Foundation.

**Project Title:**

Organic training for Montana's agricultural technical  
service providers

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**OFRF funding awarded:** \$5,400, awarded spring 2003

**Project budget:** \$42,900

**Funding category:** Education

**Project period:** 2004-2006

**Report submitted:** August 2009, 9 pp

**Matching support provided by:** Western SARE, Montana NRCS, Washington State University Western Center for Risk Management.



## **1. Project Summary**

The Alternative Energy Resources Organization (AERO) and a collaboration of partners hosted fourteen sustainable and organic field tours in 2003, ten field tours in 2004, organized a statewide training for agriculture service providers 2003, and hosted two “transitioning to Organic” risk management workshops in 2005. AERO was also a principle sponsor and collaborator for two statewide organic conferences, one in 2003 and the other in 2005. Sustainable agriculture and organic principles relating to dryland and livestock production were the main focus of the tours, trainings and conferences. Over 750 total participants attended the tours, trainings and conferences over the three-year period of this grant. Participants included Montana Natural Resources Conservation Service (NRCS), Extension, land grant researchers, Resource Conservation Districts (RCDs), farmers, ranchers, economic development corporations, Montana Department of Agriculture (MDA) staff and related for-profit and non-profit businesses and organizations.

A summary of accomplishments for this project include: highly effective evaluation & assessment that continually fed into improving the outcomes, innovative and participatory educational venues, collaborative leadership between farmers and ranchers, multiple agencies and non profits, broad participation with over 750 individual attendees and a cash match totaling over \$42,000.

Dissemination of sustainable and organic resource materials at the trainings, tours and conferences included: packets of educational materials assembled from national and regional publications, power point presentations, state and regionally germane research results, and on-farm observations from experienced farmers and industry leaders. Together these all provided a broad array of educational opportunities for participants at every level of this three-year effort.

Ag service providers, researchers, and farmers and ranchers have a deeper and broader understanding of sustainable and organic systems as a result of the educational opportunities this project provided in Montana. In 2008 a core set of these same partners co-sponsored sustainable and organic farm tours, another organic conference and held nine “Transitioning to Organic” workshops. This group has also continued to collaborate to provide easier access to sustainable and organic materials and resources. MDA and NRCS both have Organic sections on their websites, created from these workshops and conference materials. As importantly, project leaders have much stronger working relationships, which will lead to further collaborations. We also better understand and appreciate the capacities of our institutions, agencies, field staff and non-profit organizations who participated in the project and what we collectively have to offer Montana farmers and ranchers.

Evaluations from each venue were collected, tabulated and provided valuable insight for continually improving the program delivery. A steering committee of partners provided oversight, suggestions and helped make crucial decisions about the educational programs for each event.

## **2. Introduction to Topic**

For the past 15 years, AERO members throughout Montana have been experimenting and developing sustainable and organic production and marketing systems. This network of farmers and ranchers have been openly sharing their work with other interested producers and agriculture service providers. Although we have seen a tremendous increase in Montana acreage transitioning to sustainable and organic practices, most agriculture service providers (by their own admission) lack the background and understanding to assist farmers and ranchers wishing to incorporate sustainable and organic practices on their farms and ranches.

The few of us with the knowledge to serve the burgeoning number of organic and sustainable queries from producers knew we needed more help from agriculture service providers and researchers to better serve those interested in transitioning to organic and sustainable systems. We also knew working from a research perspective would further all our efforts and deeper understanding of organic principles. This project has provided a tremendous boost to broadening the base of knowledge agriculture service providers are now capable of sharing. More importantly, they are more confident of the “principles” and can apply their scientific training within those principles. One of our goals for this project was to increase Montana’s county and state agriculture technical providers’ knowledge of sustainable and organic principles and practices through informative, hands-on collegial training settings. Project leaders felt that a statewide network of informed agriculture service providers would be critical for continued adoption of organic and sustainable principles, and we have gained considerable measure of success in this arena through the efforts of this project.

## **3. Objectives Statement**

1. To increase technical service providers’ knowledge of organic production systems, certification process and marketing opportunities through workshops, field days, resource material development and networking.
2. To increase the opportunity for farmers and ranchers to work with their local technical service providers so they can more easily transition to organic production systems.
3. Evaluate the educational venues and materials developed and shared through this participatory educational project.

## **4. Materials and Methods**

Over the past three years AERO worked with a great team of folks representing state and county NRCS, researchers and extension agents from Montana State University (MSU), Montana Department of Agriculture (MDA), the National Center for Appropriate Technology (ATTRA project), the Western Sustainable Agriculture Working Group, the Independent Organic Inspectors Association and sustainable and organic farmers and ranchers. This team assisted AERO in developing an assessment tool and process to find out what the organic and sustainable educational needs of farmers, ranchers, ag professionals and field staff were. From the assessment findings this team then helped design, participate in and complete organic farming and research workshops, tours and conferences.

Using the assessment data collected and through their own experiences, the project team helped make the field and ranch tours, trainings and conferences successful by:

1. Designing the events and developing the process for the training and tour agendas, based on what potential participants asked for specifically,
2. Inviting farmers and ranchers, researchers, Extension, MDA and NRCS staff to participate,
3. Attending the events as presenters, technical resource providers and supporters,
4. Editing, writing and disseminating press releases for each of the events,
5. Encouraging their fellow staff members, colleagues and farmers and ranchers they knew to attend,
6. Identifying and interviewing prospective field tour hosts and presenters, and
7. Providing, developing and sharing publications, research, presentations and other resources for each educational event.

Researcher participation from Montana State University, other regional Land Grants and Canada was built in to the format of every educational venue and is a critical component that lent added credibility to the overall outcomes of the events.

Evaluation of the organic educational events was completed by using two methods of information gathering. At the trainings and conferences, participants were encouraged to evaluate the presentations right after they occurred. In addition NRCS staff were assigned additional questions by the State Conservation Director. Having the NRCS director participate in gathering data was critical for getting honest and timely feedback.

## **5. Project Results**

AERO and a collaboration of partners hosted fourteen sustainable and organic field tours in 2003, ten field tours in 2004, organized a broad based two-day organic training for NRCS and Extension staff in 2003, and two Risk Management trainings in 2005. We also were a principle sponsor and collaborator for two statewide organic conferences, one in 2003 and one in 2005. Sustainable agriculture and organic principles relating to dryland and livestock production were the main focus of the tours, trainings and conferences. Over 750 total participants attended the tours, trainings and conferences over the three year period of this grant. Participants included NRCS, Extension, land grant researchers, RCDs, farmers, ranchers, Montana Department of Agriculture staff and related for-profit and non-profit businesses and organizations.

## **6. Conclusions and Discussion**

Bringing together farmers, ranchers, researchers and agriculture service providers to learn from and with one another is a win-win opportunity. Researchers and agriculture service providers learn more about how they can better serve sustainable and organic farmers and ranchers. And farmers and ranchers have the opportunity to talk directly with experienced agriculture professionals about the technical and scientific aspects of their operation.

A lasting second accomplishment is that organic farmers and ranchers, researchers and agriculture service providers now have a more knowledgeable understanding of the

constraints (education and research) and opportunities (environmental and economic) sustainable and organic farming and ranching has to offer. This cross fertilization has spurred research at MSU in areas of fall planting of peas, economic comparisons of conventional, no-till and organic systems; and cropping systems that include legumes to reduce nitrogen costs. The broader benefits are that the new research is of benefit to the entire agriculture community not just for organic and sustainable producers.

Over the three year period of this project, agriculture service providers, researchers, farmers and ranchers had multiple opportunities in a host of venues to learn about sustainable and organic farming systems in Montana. Having well spaced programs over the course of three years has allowed more participants to attend conferences, trainings and field tours. Also having a multitude of educational venues has allowed participants to learn through methods and settings they are most comfortable in.

The educational process we used was very participatory and has served as a model for other states to use, specifically Washington State University (David Granatstein) and California (NCAT/ATTRA). The "Walk About" sessions in particular were a success in the two trainings we did and a process we have used in other venues outside of this project. These sessions were designed to allow attendees at the organic conference the opportunity to explore their organic farming questions, observations and insights in a setting that maximized learning. Walk About stations are designed to allow organic conference participants to move around to self-selected sessions and ask those burning questions about organic that in bigger groups they might not feel comfortable asking or may not have had a chance to ask in the earlier sessions.

For each Walk About station there is at least one farmer or rancher paired with an organic inspector or an individual with a solid background in the organic certification rules and a researcher/educator who can answer technical questions about soils, crops, livestock health etc.

### **Potential Contributions**

The Montana sustainable and organic education process is a model with multiple components other states can and are (CA and WA) using to develop their own organic outreach and educational venues for farmers, ranchers, ag service providers and researchers. For more information on the specifics of this process please contact AERO.

As a result of the field tours, organic trainings and conferences several research needs were identified by farmers and ranchers and the researchers attending. Having our land grant, NRCS and other institutions recognize and identify particular research needed to support the further development of sustainable and organic systems in Montana is a critical step and one that will need continued dialogue and support. Non profits such as AERO can play a key role in bringing together farmers, ranchers, ag service providers and researchers to begin the dialogue and help to develop research agendas and priorities.

The trainings, conferences and tours brought together key leaders, institutions and others interested in exploring and improving opportunities and understanding about organic

agriculture in Montana. This will facilitate continued collaborations, partnerships, networking and relationship building between and among all.

• **Future Recommendations**

- Montana needs the team that worked so well together to continue working together on new efforts—especially research that can explore and further develop the systems/opportunities sustainable and organic farmers and ranchers are using on their farms and ranches.

- Montana needs more economic data related to enterprises that are sustainable and organic so Extension and NRCS can see quantitatively that these practices will work on a host of farms and ranches--not just on “special” operations.

- The call-in organic hotline was an excellent idea that was instituted after the project got underway. ATTRA hosted the monthly “Organic Hotline” to answer questions through the growing season. The Organic Hotline was used primarily by NRCS. More farmers participating would have made the calls more effective by sharing their real life experiences which we think would have led to deeper understanding of more issues organic farmers face as they make individual decisions throughout the seasons.

- There needs to be an “organic team” to help farmers, ranchers, agency staff and Extension so folks can get timely, accurate and up-to-date information.

- We need to develop a “mentoring system” like AERO’s Farm and Ranch Improvement club program to help farmers on the ground in everyday life react to issues on their farm as the season progresses.

**A Sample of Evaluation Feedback Quotes**

*I have been to several organic training sessions since 1993 and this was by far the best. NRCS in Montana became concerned with soil tilth and organic matter in the early 1990’s but not to this depth. It seemed like these were just “buzz words” without a lot of application. We were simply told that reducing summer fallow operations would build soil organic matter and therefore help the soil tilth. But we were never told the rest of the story. Dr. Jill Clapperton did a wonderful job getting me excited about soil tilth and organic matter.” (NRCS staff)*

*“Excellent speakers - obviously the planning committee spared little expense.”  
(Extension staff)*

*“My thoughts and honest opinions are that, I thought it was well put together. The first day was a little long. But, it opened my eyes up to a new meaning about Organic Farming. Because, before when I would hear Organic, I would always think “GRANOLA”. But after I attended this training, I realized how effective Organic Farming can be. And how it could help with many different resource concerns, also a better understanding for some of the resource concerns that we have.” (NRCS staff)*

*“It would have been better if the session would have lasted one more day, as several of the presenters were rushed and did not have adequate time for questions.” (Farmer)*

*“My evaluation of the course changed dramatically from day one to day two. The passionate academics turned me off and the presentation turned me off, nothing worse than people trying to cram their passion down your throat without a moment to breathe. By day two, something in me clicked; it started with the veterinarian's presentation. Perhaps because my wife is a vet too and I listened for her as well as me. By the time Jill Clapperton spoke, I was all ears. You and I briefly spoke and I repeat, she is your best bet to get our folks to listen. We do soil, that's the basis of our outfit and she speaks soil and farm fluently. Even our most hardened employee will become butter in her talk. The organic farmer dude, Thad Willis, can relate to our guys also.” (NRCS staff)*

#### **What went well:**

- Using speakers from within and outside of Montana who had specific expertise was well received by participants.
- Using the “researchers as presenters” approach created the desired “credibility” we were all looking for.
- The planning committee intentionally chose organic farmers that had a more conventional background to be key presenters and this worked very well as the participants felt comfortable asking them questions and hearing about their transition process both on the farm and philosophically.
- The planning committee invited organic inspectors to participate in the trainings as both participants and to lead sessions. In addition, planning committee members who have extensive organic and education backgrounds had lead roles in the training.
- Having the inspectors and planning committee members available all through the conference provided additional opportunities for participants to ask questions they either did not think of during the presentations or were too afraid to ask in front of the whole group.
- The “Walk About” where folks really got to talk to one another fueled the participants’ imaginations and allowed them to get their questions answered more fully.
- Pairing researchers with farmers and ranchers would have been a better approach for learning in all the venues.
- The follow-up farm and ranch tours put the pieces together for participants when they could “see it in the field”.
- The Risk Management Trainings provided much needed support for transitioning farmers whose questions are quite different than farmers who have already begun the process.

#### **What could have been better:**

- The range of expertise the speakers possessed was underutilized to some extent as we pushed them through their presentations a bit too fast in all venues.

- Breakout sessions with the presenters and participants in smaller groups would have helped the participants gain much needed specific detail about the principles speakers mentioned in their talks.

- A much more participatory approach to the trainings overall would have gotten more relevant information transferred in more meaningful ways.

- Splitting the group into smaller breakouts would have helped folks feel more comfortable to ask questions and to delve more specifically into some of the transition issues and organic rules.

- There were too many people at some venues to really get deep learning accomplished. However it allowed a very large group to learn the basic concepts and principles and it allowed for cross fertilization between the participants.

- NRCS should have had more “air time” to explain how their programs relate and can augment organic practices and principles the farmer and ranches are also trying to achieve.

### **Recommendations for future events:**

- Be sure scientists invited as speakers are doing “applied” and related work--Helen Atthowe and Jill Clapperton really did a great job with this. The “how to” was critical to learning the most in a short period of time.

- Be sure to include presenters, especially farmers and ranchers who are willing to present information that points out the risks and mistakes they or others have made.

- Many participants would like future trainings to include “in the field” portions so they could see the principles of organics in practice. For instance if we are holding a conference, build in time to visit a nearby farm.

- Participants would like to see tours and trainings geared specifically to their needs--NRCS only, or farmers only trainings as every group has different levels of knowledge and different applications for the information.

- Participants would like follow-up organic training opportunities that are smaller (20-30 people) and in regional settings.

- Extension agents would like more research examples from Montana or dryland operations particularly for soils, weeds, economics.

- Extension staff would like more specific information on risk management for organic operations and to have the trainings set up just for them, not have it mixed with NRCS or farmers at the same time.

- NRCS staff, and farmers and ranchers would like more information on how the organic practices improve conservation—specifically.

- Trainings need to be in smaller groups to allow for more interactive learning, getting to know one another better, more questions can be asked by participants and it's easier to move folks around.

## **7. Outreach**

AERO compiled and distributed over 350 resource packets over the course of the three years.

Presenters from all venues developed power point presentations or hard copy summaries for the training packet. These materials are available at AERO.



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Jonda Crosby, Alternative Energy Resources Organization. August 2009.

Press releases, radio PSAs, radio interviews and news stories were a major focus of and for each event. AERO has a file of these for others to use as templates or to learn more about the events.

AERO has developed a resource packet that contains over 25 resources and publications. These resources specifically relate to sustainable and organic dryland and livestock production. These packets included organic research summaries, extension bulletins, a wealth of publications from NCAT/ATTRA, Montana Department of Agriculture organic certification information and resources, the Independent Organic Inspectors Association resources and publications, AERO publications, farmer profiles for each farm tour and USDA SAN publications. Training packets are available from AERO for \$15.00.

Presenters from all venues developed power point presentations or hard copy summaries for the training packet. These materials are available at AERO and include:

**Montana Organic Overview: Jonda Crosby**, AERO Executive Director

**Organic Farming: A 21st Century Agriculture—David Granatstein**, Sustainable Agriculture Specialist, Washington State University's Center for Sustaining Agriculture

**Supporting Farmers' Transition to Organic Systems—Paul Flynn**, Minnesota State Resource Conservationist, USDA-NRCS

**One Farmer's Transition Story—Thad Willis**, Organic Farmer, Big Sandy, MT

**Weed Management in Organic Systems—Bruce Maxwell**, Weed Ecologist, MSU

**Economic Comparisons of Organic, No Till and Conventional Productions Systems in MT—Dave Buschena**, Ag Economist, MSU

**Organic by the Rule: Federal standards, certification, roles, procedures, documentation, inspection—Margaret Scoles**, Executive Director, Independent Organic Inspectors Association (IOIA), and **Doug Crabtree**, Montana Department of Agriculture Organic Certification Program Manager

**Organic Livestock Health—Joe Snyder**, D.V.M., Oregon and **Margaret Scoles**, Executive Director, Independent Organic Inspectors Association

**Disease and Pest Management in Organic Systems—Alexandra Stone**, Extension Specialist, Oregon State University; and **Helen Atthowe**, Missoula County Horticulturist, MSU

**Managing Soil as Habitat—Jill Clapperton**, Rhizosphere Ecologist, Agriculture and Agri-Food Canada, Lethbridge Research Station, Alberta

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*Organic training for Montana's agricultural technical service providers*  
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**Where Organic and Conservation Practices Overlap—Nancy Matheson**, Program Specialist, National Center for Appropriate Technology/ATTRA

**Managing the Risk: Transitioning to Dryland Organic Systems in Montana, Ecological and Economic Considerations—Dr. Bruce Maxwell and Dave Buschena**, MSU

## **8. References**

### **Major Participants:**

Dave White: State NRCS Director, Bozeman, MT  
Helen Atthowe: MSU Extension, Missoula, MT  
Jeff Schahczenski: Executive Director, WSAWG, Whitehall, MT  
Nancy Matheson: NCAT/ATTRA Ag Program Staff, Helena, MT  
Margaret Scoles: International Organic Inspectors Association, Broadus, MT  
Doug Crabtree: Montana Department of Agriculture Organic Certification Program, Helena, MT  
David Oien: Timeless Seeds organic marketing, Conrad MT

### **Cooperators:**

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