

**North Central Region SARE Professional Development Program**  
**2013 Michigan Sustainable Agriculture Plan of Work**  
**Dale R. Mutch & Dean G. Baas**

**Section 1: Background**

The Michigan SARE State Sustainable Agriculture PDP program is coordinated through Michigan State University (MSU) Extension (MSUE) under the co-management of Dr. Dale R. Mutch and Dr. Dean G. Baas. Dean is partially funded by SARE, while Dale is supported by other sources. Together, with the input of the advisory board, they jointly develop and set the direction for sustainable agriculture in Michigan. Dale provides overall leadership and coordination with MSU, MSUE, MSU BioAgResearch and the College of Agriculture and Natural Resources. Dean manages the implementation of the POW by coordinating initiatives (with leaders), travel scholarships, mini-grants and promotion. Dale and Dean are both located at the St. Joseph County MSUE office in Centreville, MI allowing them to meet regularly to discuss, monitor and implement the POW. Tom Rorabaugh, retired County Extension Director, is a part-time, temporary employee assisting in the management and promotion of the Michigan NCR SARE Professional Development Program (PDP).

This past year, 2012, was a very active and highly productive year for the Michigan NCR SARE PDP. In addition to our typical POW activities, support and coordination was provided for two major region-wide initiatives: the NCR SARE regional training – Carbon, Energy and Climate and NCR SARE diversity training. Some 2012 highlights are:

- On September 26 – 28, 2012, 127 participants and speakers attended the NCR SARE regional training – Carbon, Energy and Climate at the MSU W.K. Kellogg Biological Station in Hickory Corners, MI. During this event NCR state teams received training and professional development through keynote speakers, a farmer panel, leading researchers, tours, hands-on workshops and networking opportunities. This regional conference provides the basis for developing and implementing similar programs at the state level in 2013.
- In collaboration with the NCR SARE regional management a diversity workshop with Alan Johnson, author of *Privilege, Power and Difference* with agricultural educators at Western Michigan University. The workshop was video-taped and the materials developed were used for a diversity webinar led by Dr. Johnson for NCR SARE participants throughout the region. From the workshop and webinar an on-line NCR SARE diversity course is being developed.
- 2012 Sustainable Animal Production initiative: Kable Thurlow (MSUE), Jason Rowntree (MSU) and Jerry Lindquist (MSUE) have taken leadership of this initiative and held a two-day conference on holistic forage and cover crop production and utilization with national keynote speakers.
- A new initiative in 2012 for underserved audience supported two programs on sustainable foods. First, support was provided for the Indigenous Foodways Workshop targeting Michigan Native American tribes was attended by 149 participants. The workshops were "hands--on" with expert instruction and teaching and experiential learning. Second, allowed leaders of the Wisewoman program to receive professional development on entrepreneurial gardening, hoop houses and extending the growing season to educate other members and expand the use of these practices.
- Other sustainable agriculture support was given for an Entrepreneurial Farm Tour of Western Michigan and an on-line IPM academy for novices.
- The Michigan state team that attended the NCR SARE regional training – Carbon, Energy and Climate has received an MSUE Project GREEN AABI special grant to match with SARE funds for the state program. They plan to hold four meetings around the state targeting four unique segments of Michigan's agriculture: fruit, crops and

livestock, state and federal governmental agency staff, and the agri-business community.

We have not been able to get any traction for a 2011 initiative on practical farm sustainable economic analysis. All potential leaders that we have contacted for this initiative do not have the time to develop this tool. We have abandoned this initiative and redirected the fund into the other sustainable agriculture initiative.

## **Section 2: Stakeholder Involvement**

The advisory board management changed in 2012 with six members departing and the addition of six new members (Attachment 1). We welcome representatives from the Xerces Society, one from MSU and four from MSUE. MSUE representatives are now providing input for the horticultural and fruit industry and the Upper Peninsula of Michigan. The advisory group continues to take an active role in leading and promoting initiatives in 2012. We will continue to leverage advisory group members to lead initiatives in 2013. The purpose of this advisory group is to advise the coordinators, participate in identifying educational program and research needs, and assist in the selection of recipients for SARE mini-grants and travel scholarships. The advisory group meets biannually and participates in bimonthly teleconferences. This group has become the voice for SARE in Michigan, informing educators about SARE PDP.

## **Section 3: Face of SARE**

The Michigan SARE web site ([www.misare.msu.edu](http://www.misare.msu.edu)) contains information about the Michigan PDP program, application forms for mini-grants and travel scholarships, and links to other SARE grant programs on the NCR-SARE site.

Michigan will promote SARE at a variety of events, field days, conferences and meetings in 2013 such as the Michigan Organic Conference, MSU Forage Technology Conference, etc. where sustainable agriculture audiences can be reached.

Increasingly, agriculture educators are obtaining a portion of their funding through grants. In addition to numerous workshops held throughout the state, we provided follow-up assistance to grant writers as they prepared their actual grants. These efforts are reflected in the increase in number of Michigan proposals submitted, and number funded in 2011. We will continue to provide support and advice to applicants for Farmer Rancher, Research and Education, Professional Development, Graduate Student, and Youth Educator Grants. The response to SARE grant programs and the exposure provided by the Michigan PDP program are evidence of expanding commitment to sustainable agriculture in Michigan. These efforts are producing a viable network of agricultural professionals, knowledgeable in sustainable agriculture, working to make Michigan more successful in adopting sustainable agriculture's practices and principles.

## **Section 4: Professional Development Initiatives**

The 2013 Michigan professional development initiatives include continuation of four 2012 initiatives: 1) Support Regional Training - Carbon, Energy and Climate, 2) Sustainable Livestock Production/Forage Management, 3) Sustainable Agriculture Programs for Underserved Audiences and 4) Other Sustainable Agriculture. Four additional initiatives have been identified through the advisory board for 2013: 1) Pollination/Sustainable Fruit, 2) Soil Health/Cover Crops, 3) Sustainable Hop Production, and 4) Sustainable Water Use. We will continue the successful use of advisory board members to lead and implement these initiatives in coordination with Dale, Dean and Tom.

The professional development initiatives will be implemented through the awarding of mini-grants and travel scholarships that contribute to the desired outcomes. The applications for mini-grants and travel scholarships are administered through the Michigan SARE website ([www.misare.msu.edu](http://www.misare.msu.edu)). Co-coordinators and initiative leaders consult on applications to ensure that awards meet the initiative objectives. Mini-grant recipients are required to complete the SARE on-line sustainable agriculture course prior to receiving funding.

**Initiative: Support Regional Training Program – Carbon, Energy and Climate**

Primary audience: Extension educators, university faculty, specialists and stakeholders engaged in carbon, energy and climate (CEC) work from across Michigan.

Background: The regional training titled “Carbon, Energy, and Climate” held in Michigan in 2012 and attended by a team of seven educators from across Michigan identified to lead CEC professional development for local sustainable agriculture educators and professionals. This team has received an MSUE Project GREEN AABI special grant for \$4,872 to support this initiative. They have planned four meetings around the state targeting four segments of Michigan’s agriculture for presentations of and listening sessions on CEC issues. The MI PDP is providing \$5,877 from 2012 funds to support these events.

Activities:

- Identify stakeholders to attend one-day listening sessions/meetings on CEC.
- Implement meetings and engage educators on CEC issues
- Provide educator support for follow-up development of programs to address issues.

PDP Budget: \$0 (\$5,877 has been awarded to the team from 2012 funds)

Outcomes/Evaluation: See Program Logic Model, Table 1

**Initiative: Sustainable animal production/forage management**

Audience: Extension educators and Specialists, NRCS, MDA, Conservation Districts

Background: Drought-related challenges impact all areas of agriculture in Michigan, including livestock production and related forage management. The 2012 growing season in Michigan included serious drought for many regions. Weather-related pressures add to the existing set of challenges faced by livestock producers in Michigan, including increasing energy and input costs, environmental concerns and community and regulatory issues at the rural-urban interface. Extension educators and other industry support personnel must be prepared to assist producers as they address these problems, and must stay abreast of increasing demand from consumers to know about food safety, source verification and environmental impacts of livestock. This initiative will continue the work initiated in 2011 and 2012 by MSU Extension educators to integrate sustainable practices into animal agriculture in Michigan. Kable Thurlow (MSUE) and Jim Islieb (MSUE) have taken the lead on integrating sustainable practices into animal agriculture in Michigan. Livestock and forage programs are making a difference promoting sustainable animal production in Michigan and this initiative will continue to support these efforts.

Activities: Support attendance at workshops and training for educators. Support projects to develop outreach materials and activities for educational outreach to farmers.

PDP Budget: \$4,500

Outcomes/Evaluation: See Program Logic Model, Table 1

**Initiative: Sustainable Agriculture Programs for Underserved Audiences**

Audience: Extension educators, university faculty, specialists NRCS, NGOs, MDA, Cons. Districts engaged in sustainable agriculture programs to underserved audiences.

Background: Beginning in 2010 with the Indigenous Gardening Conference and continuing in 2011 with the Native American Sustainable Agriculture Speaker Series and 2012 with the Indigenous Foodways Workshop, the Michigan PDP has increased support to Native American populations. Support for the MSUE program Exploring Cultural Connections for Restorative Change a project study exchange to northern New Mexico is expected in 2013. Rob Serrine and Ginger Hentz will lead this initiative and help us to continue to support these types of programs and identify organizations to provide sustainable agriculture education to other underserved audiences.

Activities: Support development of and attendance at workshops and training for educators engaged

in programs on sustainable agriculture for underserved audiences.

PDP Budget: \$4,500

Outcomes/Evaluation: See Program Logic Model, Table 1

**Initiative: Other sustainable agriculture support**

Audience: Extension educators and specialists, NRCS, NGOs, MDA, Cons. Districts

Background: Mini-grants and travel scholarships can help educators, NRCS, governmental and non-governmental organizations develop and deliver professional development programs or demonstrations that promote sustainability of rural and urban communities. To receive these funds, applicants must submit a professional development proposal that addresses the sustainability of agriculture or sustainability in their communities. These funds need to be used for their professional development and incorporated into their programs and educational activities. The advisory group has recommended focusing a majority of Michigan NCR-SARE PDP resources toward the four major initiatives. However, educator support for other sustainable agriculture programs outside of those initiatives must be available and considered. This initiative addresses support for those deserving proposals.

Activities: Promote mini-grants and travel scholarships for educator programs in sustainable agriculture.

PDP Budget: \$5,000

Outcomes/Evaluation: See Program Logic Models, Table 1

**Initiative: Pollination/sustainable fruit**

Audience: Extension educators and specialists, NRCS, NGOs, MDA, Cons. Districts

Background: Fruit production is an important part of Michigan agriculture ranking first in tart cherries, first in blueberries, third in apples and fourth in sweet cherries in the U.S. Pollination and the understanding of pollinators is a crucial component in fruit systems. Identifying pollinators and enhancing existing and alternative pollination is important to the sustainability of these systems. The Michigan State University Entomology Department is researching pollination including alternative forage materials such as cover crops and permanent covers to attract and retain pollinators. This initiative will be lead by Rufus Isaac, Nikki Rothwell and Jennifer Hopwood and will provide professional development to educators on pollination.

Activities: Support development of and attendance at workshops and training for educators. Support attendance at cover crop meetings and conferences. Support projects to develop outreach materials, tours and demonstration/research projects.

PDP Budget: \$3,500

Outcomes/Evaluation: See Program Logic Model, Table 1

**Initiative: Soil health/cover crops**

Audience: Extension educators and specialists, NRCS, NGOs, MDA, Cons. Districts

Background: With the establishment of the NCRS Soil Health Campaign, Michigan has been actively supporting this program with NRCS including the use of cover crops in improving soil health. Farmer interest in cover crops and their use has dramatically increased in Michigan and the NCR. As a result educators are seeking information and professional development to increase their knowledge of soil health and cover crops. The goal of this initiative is to create a greater understanding of the role soil health and cover crops play in environmentally friendly farming systems and a greater appreciation of ecosystem functionality they provide. This will prepare educators to deliver programs to and consult with farmers on the benefits and method to incorporate these sustainable practices into their farming systems.

Activities: Support development of and attendance at workshops and training for educators. Support

attendance at soil health/cover crop meetings and conferences. Support projects to develop outreach materials, tours and demonstration/research projects.

PDP Budget: \$5,500

Outcomes/Evaluation: See Program Logic Model, Table 1

**Initiative: Sustainable Hops Production**

Audience: Extension educators and specialists, NRCS, NGOs, MDA, Cons. Districts

Background: Because of hop shortages in 2008, many Michigan brewers and farmers expressed interest in locally sourced hops. Michigan State University Extension has taken the lead on hops production, research, and outreach through annual programs, field days, and presentations. Though market security has subsided, the interest in Michigan hops production has continued unabated. As of 2012 there are over 150 acres of hops planted in Michigan and five processing operations. MSU Extension has received previous funding to determine best management practices and cultivar selection to optimize quantity and quality in both southwest and northwest Michigan. We are also completing a multi-state on-farm variety trial funded by the USDA OREI. While this research has provided useful preliminary data, more specific industry information and further professional development is needed to help support this expanding industry. The goal of this initiative is to convene a statewide meeting of educators, government officials, and growers to discuss professional development needs of educators, determine interest in formation of a statewide cooperative, and determine quality and quantity requirements of buyers.

Activities: Support development of and attendance at workshops and training for educators. Support attendance at cover crop meetings and conferences. Support projects to develop outreach materials, tours and demonstration/research projects.

PDP Budget: \$1,000

Outcomes/Evaluation: See Program Logic Models, Table 1

**Initiative: Sustainable Water Use**

Audience: Extension educators and specialists, NRCS, NGOs, MDA, Cons. Districts

Background: Changes in land use and climate are increasingly putting pressure on Michigan's natural resources, including water. Increasingly irrigation is held up as an answer to adapting to changes causing frequent and severe droughts as well as early season frosts. A thorough study of sustainable water use in agriculture would benefit Extension Educators and other professionals as the demand for water grows. The goal of this initiative is to hold a series of planning meetings in 2013 that will result in a sustainable water and agriculture training program in 2014. This initiative will be led by Julie Doll and Joy Landis who will pull together Michigan State University's water researchers and outreach personnel to identify themes, topics, formats, and potential speakers for a 2014 PDP sustainable water training.

Activities: Support development of and attendance at workshops and training for educators. Support attendance at cover crop meetings and conferences. Support projects to develop outreach materials, tours and demonstration/research projects.

PDP Budget: \$1,000

Outcomes/Evaluation: See Program Logic Models, Table 1

**Table 1: POW Logic Model**

Intermediate Outcomes**	Short Term Outcomes *	Outcome Measures	Outputs (including # participating)	Activities	Inputs
<p>-Changes in attitude towards sustainable practices for each of the following initiatives:                      -Carbon, Energy and Climate                      -Pollination/Sustainable Fruit                      -Sustainable Livestock/ Forage Management                      -Soil Health/Cover Crops                      -Sustainable Water Use                      -Sustainable Hops Production                      -Underserved Audiences                      -Other</p> <p>-5-10 educators will deliver educational programs addressing sustainable practices for each of the following initiatives listed above.</p>	<p>-20 educators will increase their knowledge about sustainable agriculture for each of the following initiatives:                      -Carbon, Energy and Climate                      -Pollination/ Sustainable Fruit                      -Sustainable Livestock/ Forage Management                      -Soil Health/Cover Crops                      -Sustainable Water Use                      -Sustainable Hops Production                      -Underserved Audiences                      -Other</p> <p>-Mini-grants funded for workshops will reach 200 farmers and stakeholders across all initiatives.                      -Travel scholarships funded for attendance of sustainable agriculture workshops and professional development.</p>	<p>-Educator workshop attendance.                      -Mini-grants awarded.                      -Travel scholarships awarded.                      -Pre- and post-project surveys will be used to assess professional development and changes in knowledge and attitudes.                      -Follow-up surveys to evaluate increase in sustainable practices and effectiveness of direct delivery to farmers and stakeholders.</p>	<p>-5 to 10 mini-grants will be funded supporting education and demonstration projects across all initiatives.                      -20 to 30 travel scholarships will be funded for educator training in sustainable agriculture across all initiatives.                      -New partnerships across disciplines will be established.</p>	<p>-Promote mini-grants and travel scholarships.                      - Support development of and attendance at workshops and training for educators.                      -Survey participants post event.                      -Evaluate mini-grant projects.</p>	<p>-NCR-SARE funds.                      -Partner funds.                      -State coordinator time.                      -MSU specialists' time.                      -MSU educators' time.                      -Advisory group time.                      -Participant time and expertise.                      -Workshops/ Conferences                      -Demonstrations                      -Field days/ tours.</p>

**Attachment 1.** Advisory Group/Stakeholder Group Membership and Tentative Schedule of Meetings

<b>Member</b>	<b>Affiliation</b>	<b>Type</b>
Betsy Dierberger	NRCS	Existing
Julie Doll	MSU/KBS	Existing
Christina Curell	MSUE – Lake County	New
Paul Gross	MSUE – Isabella County	New
Jennifer Hopwood	The Xerces Society	New
Rufus Isaacs	MSU Entomology	Existing
Jim Isleib	MSUE – Alger County	New
Joy Landis	MSU IPM	New
Nikki Rothwell	MSUE – NW MI Horticulture Res Station	New
Robin Rosenbaum	MDA	Existing
John Simmons	Organic Farmer	Existing
Rob Serrine	MSUE – Leelanau County	Existing
Erin Taylor	MSU Plant, Soil and Microbial Sciences	Existing
Steve Tennes	Farmer	Existing
Kable Thurlow	MSUE – Gladwin County	Existing

<b>Purpose of Meeting</b>	<b>Tentative Date</b>
Advisory Group Meeting – Face to Face	Late April 2013
Quarterly Advisory Group teleconference calls,	March 2013 June 2013 September 2013 December 2013
Advisory Group Meeting – Face to Face	November 2013