

NORTH CENTRAL REGION SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION

Field Notes



White yarrow bordering a field of *astragalus membranaceus*. The plants were part of the 1989 project, "Elixer Farm: Chinese Medicinal Herbs as Field Crops in the Ozarks." The project coordinator was Lavinia McKinney, of Brixey, Missouri.

It is a maxim universally agreed upon in agriculture, that nothing must be done too late; and again, that everything must be done at its proper season; while there is a third precept which reminds us that opportunities lost can never be regained.

Pliny the Elder, Natural History

Field Notes, the quarterly newsletter of the North Central Region Sustainable Agriculture Research and Education program, has been absent for two years. It has not been lack of news that halted publication production, but the lack of a publication producer -- the NCR-SARE communications director position was empty from March until September, 2003. The position filled (by Jennifer Robison, a nationally published writer with a strong family farm background), *Field Notes* is going back into the field -- late, but not too late.

Ordinarily, *Field Notes* highlights a specific aspect or form of agriculture. Past issues have covered sustainable agroforestry, marketing, watering systems, and swine production,

among many others. This method is deliberate. It allows us to cover sustainable agriculture projects in great depth, and lets us show you the scope of complex farming techniques. More important, single-topic reporting is a good way to introduce you to the people putting sustainable practices to work. It's a method we're committed to, but one we're not using this issue. After such a long absence, we feel it is the proper season to do something we've never done before -- report every single grant we've awarded in a single year.

The North Central Region Sustainable Agriculture Research and Education Program is committed to helping producers, students, scientists, and educators lead American agriculture into an environmentally, socially, and economically sustainable future. So as you review the lists, consider the people behind the data. Each of them devoted long hours, hard work, and real passion to their projects. Each of them knew that their experience might be of more benefit to others than themselves. Each one of them took the opportunity to take a chance -- one that might have been lost, never to be regained.

People and Projects: NCR-SARE's Grants in 2003

PRODUCER GRANT PROGRAM

Iowa

Project Coordinator: James Blankman
Project Category: Animal Production
Project Title: Using Flathead Catfish to Renovate Ponds Overrun with Bullheads, Improving Water Quality Within and Exiting the Ponds

Project Coordinator: Michael Nash
Project Category: Economics/Marketing
Project Title: Local Foods Buying Club

Project Coordinator: Tom Wahl
Project Category: Crop Production
Project Title: Value Added Processing for Small

Sized Chestnuts

Project Coordinators: Jeff and Jill Burkhart
Project Category: Economics/Marketing
Project Title: Picket Fence Creamery . . . to Sustain a Family Farm and Preserve a Way of Life

Project Coordinator: Eric Jellum
Project Category: Natural Resources
Project Title: Deep Placement of Compost

Project Coordinators: Maury and Mary Wills
Project Category: Crop Production
Project Title: Evaluating Alternative Pest Management Strategies for Organic Apple Production

Project Coordinator: Bruce River
Project Category: Animal Production
Project Title: Over-Wintering Beef Cows by Grazing Standing Corn as a Cost Effective Alternative to Stockpile Grazing or Stored Feed

Illinois

Project Coordinator: Jon Klingenberg
Project Category: Crop Production
Project Title: Okra Test Trial of 16 Varieties in an Organic Farming Operation

Project Coordinator: Irene Seals
Project Category: Animal Production
Project Title: Raising Tilapia Fish in Tanks Along with Plants and Vegetables in Beds

Project Coordinator: Louis Reuschel
Project Category: Education
Project Title: Student Producers for the Future

Project Coordinator: Brenda Lyons
Project Category: Animal Production
Project Title: Reinventing the Family Farm

Indiana

Project Coordinator: Jim Tarnowski
Project Category: Natural Resources
Project Title: Investigating the Use of Compost Tea for Rapid Restoration of Soil Ecology on Four Indiana Farms

Kansas

Project Coordinator: Glenn Brands
Project Category: Crop Production
Project Title: The Use of Cover Crops in Western Kansas Rotation in Lieu of Summer Fallowing, and the Economic Return of Both

Project Coordinator: Karen Rains
Project Category: Crop Production
Project Title: Moveable High Tunnel

Project Coordinator: Kevin Morrill
Project Category: Crop Production
Project Title:

Clover 101: Can Clover Help Eastern Kansas?

Project Coordinator: Larry Sorell
Project Category: Crop Production
Project Title: Lazy S Farm Cold Frame Production

Michigan

Project Coordinator: Mike Iho
Project Category: Animal Production
Project Title: Pasture Improvement Trial: Enhancing Results by Analyzing Samples and Observing Cattle Grazing Preferences

Project Coordinator: James Crosby
Project Category: Agroforestry
Project Title: The Value of Mint: Preserving Historical Mint Fields with Windbreaks

Project Coordinator: Roy Monzo

Project Category: Crop Production
Project Title: Designing My Path into Sustainable Organic Farming

Project Coordinator: James Koan
Project Category: Disease/Pest Management
Project Title: Sweeping the Orchard Floor as a Housekeeping Practice to Effectively Control the Plum Curculio Insect in Organic Orchards

Project Coordinator: Peter Ways
Project Category: Crop Production
Project Title: Establishing Successful Organic Orchards

Minnesota

Project Coordinator: Winona LaDuke
Project Category: Crop Production
Project Title: Restoration of Traditional Anishinaabeg Agricultural Practices, Utilizing the Three Sisters Gardening Method

Project Coordinator: Tim Gieseke

Project Category: Crop Production
Project Title: Using a Vertical Shoot Position Trellis and Micro-Nutrients to Reduce Labor and Increase Fruit Set



Brown Swiss and Holsteins grazing on the farm of Myron Herek near Stevens Point, Wisconsin. Herek was a 1993 Producer Program grant recipient for his project, "Evaluating Various Forage Combinations in a Rotational Grazing System."

Project Coordinator: David Sjostrom
Project Category: Animal Production
Project Title: Yield and Feeding Value of Annual Crops Planted for Emergency Forage in Minnesota

Project Coordinator: Patricia Altrichter
Project Category: Agroforestry
Project Title: Developing a Saskatoon Berry Market in the Upper Midwest

Project Coordinator: Sally Auger
Project Category: Crop Production
Project Title: Dream of Wild Health, a Project of Peta Wakan Tipi

Project Coordinator: Brian Fredericksen
Project Category: Animal Production
Project Title: Adding Value to Honey Products through the Use of Melissopalynology

Purple coneflowers on Emily Hunter's farm. Hunter, of Matfield Green, Kansas, received a 1999 Producer Program grant for "Organic Medicinal Herb Cultivation."



Missouri

Project Coordinator: Ben Hunter
Project Category: Animal Production
Project Title: Crawfish Production in Reestablished Wetlands

Project Coordinator: Rick Hopkins
Project Category: Economics/Marketing
Project Title: Diversity Increases Profits for Small Livestock Producers

Project Coordinator: Daniel West
Project Category: Energy
Project Title: Ethanol from Waste Fruit

Project Coordinator: Penny Frazier
Project Category: Agroforestry
Project Title: Agroforestry Application, Non-Timber Forest Species Nursery Growers Cooperative

Project Coordinator: Nicola Macpherson
Project Category: Crop Production
Project Title: Developing Optimal Shiitake Mushroom Production in a Solar Greenhouse Utilizing Spent Shiitake Logs as a Sustainable Heat Source

Project Coordinator: Drew Kimmell
Project Category: Economics/Marketing
Project Title: Fulfilling a Market Niche, Organically

Project Coordinator: Thomas Craft
Project Category: Economics/Marketing
Project Title: Reaching Greater Sustainability Through Value Added Direct Marketing

Project Coordinator: Jimmy Story
Project Category: Crop Production
Project Title: Market Development and Business Analysis for Chili Peppers

North Dakota

Project Coordinator: Dennis Schill
Project Category: Animal Production
Project Title: Portable Poultry Eviscerating Unit

Project Coordinator: Clark Lemley
Project Category: Crop Production
Project Title: Evaluation of an Annual Cover Crops for No-till Management

Project Coordinators: Kristen and Andrew Vetter
Project Category: Agroforestry
Project Title: Beaver Creek Pumpkin Patch/Corn Maze

Nebraska

Project Coordinator: Joseph Rosberg
Project Category: Economics/Marketing
Project Title: Marketing and Canning Beef

Project Coordinator: Tim Nissen
Project Category: Crop Production
Project Title: Organic Grape Production

Project Coordinator: Jane Amerine
Project Category: Animal Production
Project Title: Evaluation of Establishing a Cornell Cross Breeding Flock to Produce and Hatch Broiler Chicks for the Pastured Poultry Producer in the Upper Midwest

Ohio

Project Coordinator: Perry Clutts
Project Category: Natural Resources
Project Title: Matching Nutrient Applications with Crop Performance During Transition

Project Coordinator: John Lehman
Project Category: Animal Production
Project Title: Developing a Large-Scale Rotational Grazing System to Improve the Sustainability and Profitability of a Cow-Calf Operation in Appalachia

Project Coordinator: Mike Neeley

Project Category: Crop Production
Project Title: Sustainable Adapted Year-Round Production of Chemical-Free Strawberries

Project Coordinator: Richard Poruban
Project Category: Crop Production
Project Title: Development and Testing of a Mycorrhizal Inoculum for Ericaceous Ornamental and Small Fruit Crops

Project Coordinators: Jamey and Jody Rauch
Project Category: Crop Production
Project Title: Culinary and Ornamental Herbs: Adding to a Grain and Livestock Family Farming Operation

Project Coordinator: Patricia Iubelt
Project Category: Crop Production
Project Title: Microbial Inoculants Treatments as an Alternative Spray for Disease Control that Reduces the Toxicity and Use of Copper in Organic and Sustainable Viticulture

South Dakota

Project Coordinator: Dan Rasmussen
Project Category: Animal Production
Project Title: South Dakota Grasslands Coalition Bus Tour to Grassland Grazing Demonstration Sites

Project Coordinator: Kim Graber
Project Category: Agroforestry
Project Title: Growing Native Fruits of the North Central Region

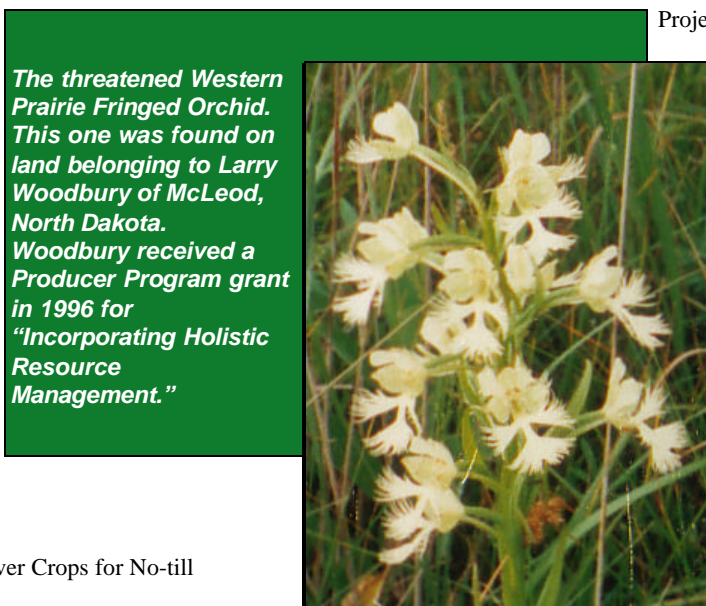
Project Coordinator: Joan Williams

Project Category: Economics/Marketing
Project Title: Cider Hill Farm Cheese Plant

Wisconsin

Project Coordinator: Valerie Adamski
Project Category: Economics/Marketing
Project Title: Northern Meadows Cheese Quality Improvement

Project Coordinator: Larry Jacoby
Project Category: Economics/Marketing
Project Title: Marketing to Culturally Diverse Families and Communities



"Kentucky Bluegrass Management and Variety Evaluation for Sustainable Seed Production in Western Nebraska," was a field day, featuring this sign. Laursen's land is near Alliance, Nebraska.

Part of Dan Laursen's 1997 project,

Project Coordinator: Julia Maro
Project Category: Animal Production
Project Title: Establishing a Wisconsin Hatchery to Produce and Sell Organically Raised Pastured Poultry Chicks

Project Coordinator: Bert Paris
Project Category: Animal Production
Project Title: Renovating Pastures with Outwintering and Fallowing

Project Coordinator: Charly Ray
Project Category: Agroforestry
Project Title: Promote Sustainable Forestry

PROFESSIONAL DEVELOPMENT GRANT PROGRAM

Illinois

Project Coordinator: Stewart Jacobson
Project Title: Professional Development Program in Apiculture and Pollination

Kansas

Project Coordinator: Jerry Jost
Project Title: Grow Your Farmer's Market

Minnesota

Project Coordinator: Caroline Van Schaik
Project Title: Smarter Farmers, Smarter Lenders: Educating Toward a Sustainable Community

South Dakota

Project Coordinator: H. Trey Patterson
Project Title: Training in Sustainable Production Systems in the Northern Great Plains

Wisconsin

Project Coordinator: Will Allen
Project Title: Building with Community: Professional Development Training in Sustainable Food Systems

Minnesota

Project Coordinator: Paul Peterson
Project Category: Animal Production
Project Title: Enhancing Pasture Productivity by Improving Winter Survival of Perennial Ryegrass

Project Coordinator: Meg Moynihan
Project Category: Economics/Marketing

Project Title: "Livestock Your Way" Series
Publications: Producer Guides to Goal Setting and Management Options for Dairy and Poultry Enterprises in the Upper Midwest

Project Coordinator: Francisco Diez-Gonzalez
Project Category: Crop Production
Project Title: Microbial Safety of Organic Fruits and Vegetables

Project Coordinator: Helene Murray
Project Category: Education
Project Title: Experiential Learning Opportunities for Graduate and Undergraduate Students



Dairy heifers grazing in the snow as part of Henry Miller's 1997 project, "Developing Partnerships Between Southern Michigan Cash Crop Farmers and Northern Michigan Livestock Farmers." Miller farms near Constantine, Michigan.

Nebraska

Project Coordinator: David Baltensperger
Project Category: Education
Project Title: Producer Driven Education to Improve Bio-Diversity in Semi-Arid and High-Plains Cropping Systems

RESEARCH AND EDUCATION GRANT PROGRAM

Iowa

Project Coordinator: Derrick Exner
Project Category: Animal Production
Project Title: Research Alliance for Farrowing, the Weak Link in Alternative Swine Systems

Illinois

Project Coordinator: M Babadoost
Project Category: Disease/Pest Management
Project Title: New Strategies for Management of Vegetable Diseases in Organic and Traditional Farms

Indiana

Project Coordinator: Steven Hallet
Project Category: Weed Management
Project Title: Microbial Processes Underlying the Natural Weed Suppressiveness of Soils

Kansas

Project Coordinator: Ted Carey
Project Category: Economics/Marketing
Project Title: Growing Growers for Greater Kansas City: Improving Skills for Sustainable Local Food Production and Marketing

Michigan

Project Coordinator: Bernard Knezek
Project Category: Natural Resources
Project Title: Calcium Inputs for Soil Quality Improvement

Project Coordinator: Lenis Nelson
Project Category: Crop Production
Project Title: Winter Wheat Blends as a Potential Method of Enhancing Genetic Diversity, Pest Tolerance, and Yield Stability, thus Reducing Farmer Risk

Project Coordinator: W. Ken Russell
Project Category: Crop Production
Project Title: Providing Farmers the Technology Required to Efficiently Breed Corn Varieties Specifically Adapted to Alternative Cropping Systems



Larry Woodbury of McLeod, North Dakota, and his two boys. The field was used in Woodbury's 1995 project, "Incorporating Holistic Resource Management."

Ohio

Project Coordinator: David Barker
Project Category: Animal Production
Project Title: Financial Implications of Non-Toxic Endophyte-Infected Fescue Pasture: Establishment Costs and Livestock Returns

Project Coordinator: Matthew Kleinhenz
Project Category: Crop Production
Project Title: Variety Evaluation, Selection and Management for Organic Vegetable Systems

South Dakota

Project Coordinator: Ann Krush
Project Category: Education
Project Title: From Food Stamps to Home Production

Wisconsin

Project Coordinator: Douglas Maxwell
Project Category: Education
Project Title: Towards a Sustainable Agriculture: An Updated Curriculum for High School Classes

Project Coordinator: Dennis Cosgrove
Project Category:
Crop Production
Project Title:
Nutrient
Management
Planning for Dairy
Farms Practicing
Management
Intensive Rotational
Grazing

GRADUATE
STUDENT GRANT
PROGRAM

Graduate Student: George Zaimes
University: Iowa State University at Ames
Project Title: Are Livestock Grazing and Healthy Streams Compatible?
Livestock Grazing Systems that Reduce Erosion and Improve Stream Bank Stability

Graduate Student: Andrew Heggenstaller
University: Iowa State University at Ames
Project Title: Developing Educational Tools to Facilitate Systems Thinking in Sustainable Agriculture in the North Central Region

Graduate Student: Parker Forsell
University: Iowa State University at Ames
Project Title:
Restoring Organic
Agri-Culture:
Resource
Conservation, On-
Farm Recycling,
and Alternative
Marketing Taught
Through Farmers
and Farm
Organizations

Graduate Student:
Terry Griffin
University: Purdue
University at West
Lafayette
Project Title:
Development of
Appropriate
Participatory On-
Farm Trial
Designs for Sustainable Precision Agriculture Systems

Graduate Student: Chandrappa Gangaiah
University: Kansas State University at Manhattan
Project Title: Laboratory, Field and Farm Based Assessment of Compost and Compost Teas for Vegetable Crop Health

Graduate Student: Dario Stefanelli
University: Michigan State University at East Lansing
Project Title: Effect of Sustainable Ground Floor Management Systems on Root System Dynamics of Apple and their Contribution to Carbon Sequestration and Nutrient Cycling in the Soil



Bluebirds provide natural, pesticide-free -- and cheap -- insect control, which is why Myron Herek of Stevens Point, Wisconsin, installs bluebird houses, like this one, on his property. Herek was a 1993 Producer Program grant recipient for his project, "Evaluating Various Forage Combinations in a Rotational Grazing System."

Graduate Student: Ebener Ballinger
University: University of Minnesota at St Paul
Project Title: Systems Evaluation of the Components of Reduced Input Dairy Farms

Graduate Student: Marjorie Ross
University: University of Minnesota at St Paul
Project Title: Comparing Vesicular-Arbuscular Mycorrhizal Colonization in Conventional vs. Organic Strawberry Production Systems

Graduate Student: Elaine Krumpelman
University: University of Missouri - Columbia
Project Title: Enhancing the Sustainability of Producer-Owned Organizations

Graduate Student: Mindi Schneider
University: University of Nebraska at Lincoln
Project Title: Land Ethics: Connecting Producers, Consumers, Land and Food



Nancy Aspelund of St. James, Minnesota, with several sows and their piglets. Aspelund received a 1997 grant for "Diversifying a Small Crop Farm With Hogs and Poultry on Pasture, Apple Trees, and Plums."

Graduate Student: Taradon Luangtongkum
University: Ohio State University at Columbus
Project Title: Comparing Antimicrobial Usage in Commercially Raised and Organically Raised Chickens and Turkeys and the Development of Antimicrobial Resistance in Campylobacter jejuni

Graduate Student: Joshua Smith
University: Ohio State University at Columbus
Project Title: Comparative Strategies for Accelerated Wetland Restoration on Agricultural Land

Graduate Student: Matthew Stoltenberg
University: South Dakota State University at Brookings
Project Title: Effects of Prairie Dogs on Sustainability of Cattle Grazing in Mixed-Grass Prairie

Now and Then -- A Look Back at NCR-SARE's Grant History

RESEARCH AND EDUCATION GRANT PROGRAM

\$1,989,000 was awarded in 2003.*

\$21,000,000 has been awarded since the program began.

In 2003, NCR-SARE awarded 17 R&E projects, one each in Iowa, Illinois, Indiana, Kansas, Michigan, and South Dakota. NCR-SARE funded two projects each in Wisconsin and Ohio, three in Nebraska, and four in Minnesota. Most of the research was in the category Natural Resources, followed by Animal Production and Disease/Pest Management. Historically, this is slightly unusual. Over the past 11 years, the majority of funded R&E projects have been in Education, followed by Crop Production. Animal Production and Economics/Marketing have rounded out the top four slots.

PRODUCER GRANT PROGRAM

\$403,000 was awarded in 2003.

\$2,800,000 has been awarded since the program began.

Since the program began, NCR-SARE has awarded 485 Producer grants. This year, NCR-SARE awarded 57 projects. Missouri claimed the highest number of funded projects, eight, followed by Iowa with seven, Minnesota and Ohio with six each, Illinois, Michigan, and Wisconsin with five each, Kansas received four grants, North Dakota, Nebraska, and South Dakota each received three, and Indiana got one. Over the years, the project subjects have been evenly split between Animal Production and Crop Production -- each comprise 25% of all projects -- followed closely by



Lambs in a line on David Coplen's farm. Coplen, of Fulton, Missouri, received a 1999 grant for "Low Input Pasture Finishing of Lambs."

Economics/Marketing. This year's projects follow the historical trend, but not the percentages. Twenty projects focused on Crop Production, 15 were on Animal Production, and only nine concentrated on Economics/Marketing.

GRADUATE STUDENT GRANT PROGRAM

\$129,000 was awarded in 2003.

\$237,000 has been awarded since the program began.

Of the 13 grants awarded in 2003, the highest percentage of funding, almost \$30,000, went to students in Iowa. Two projects, totaling \$20,000 together, were funded in Minnesota and Ohio. Graduate student grants in Indiana, Kansas, Michigan, Missouri, Nebraska, and South Dakota totaled \$10,000 each. The Graduate Student Grant program has awarded 24 projects since its inception two years ago and doesn't recognize specific subject categories.

PROFESSIONAL DEVELOPMENT GRANT PROGRAM

\$379,000 was awarded in 2003.

\$6,400,000 has been awarded since the program began.

In 2003, five grants were awarded, one each in Illinois, Kansas, Minnesota, South Dakota, and Wisconsin. The PDP program was instituted in 1994; 178 projects have been awarded since then. Prior to 2003, the PDP program has had only one subject category, education.

**All dollar amounts have been rounded to the nearest whole number*

North Central Region Sustainable Agriculture Research and Education

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