

# NORTH CENTRAL REGION SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION

## FIELD NOTES

THE NEWSLETTER OF THE  
NCR-SARE PROGRAM

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### NCR-SARE's Sustainable Energy Future

*"The North Central Region Sustainable Agricultural Research and Education (NCR-SARE) Administrative Council (AC) will vigorously support energy-use-efficiency (including all aspects of energy conservation), strive to help identify bioenergy ideas and technologies that are truly sustainable, and actively participate in balanced discussions regarding the sustainability of current bioenergy investments." - Excerpt from the "NCR-SARE Bioenergy Position Paper"*

In Spring 2007, NCR-SARE Administrative Council (AC) members voted on two decisions that will shape the future of funded projects in the North Central Region. Bioenergy proposals would be sought out for both the Professional Development Grant Program and the Research and Education Program. This decision resulted from more than a year's worth of dialog among state coordinators, Council members, and SARE staff, along with the influence of several successful projects previously funded in sustainable energy.

In 2006, NCR-SARE formed a Bioenergy Committee that identified some major points of concern with the rush to ethanol, and by spring 2007, NCR-SARE wrote and posted their position paper on the NCR-SARE web site.

Shortly after the position paper was posted, the AC approved concepts for a Professional Development Program (PDP) call for competitive grant preproposals that was released in late March 2007. The call featured an upper proposal limit of \$50,000 and the topic area was limited to bioenergy.

"As Program Coordinator for the PDP, I work with NCR-SARE State Coordinators as well as the PDP Review Committee on identifying priorities for training educators in the North Central Region," said Paula Ford, PDP Program



*Barry Adler's NCR-SARE project produced an off-the-grid renewable energy bio-integrated greenhouse and a passive solar greenhouse (FNC04-510).*

Coordinator. "The State Coordinators have identified this as a high priority issue." In November 2007, the AC approved the first batch of bioenergy projects in PDP Competitive Grant Program.

The newly funded PDP projects cover a wide range of sustainable energy topics, from biofuels and sustainability in the community to utilization of ethanol co-products.

University of Nebraska Extension Educator, F. John Hay addresses some concerns with the rush to ethanol with his project, "Storage and Utilization of Ethanol Co-products by Small Cattle Operations."

"The expansion of ethanol production in the Midwest has provided a new feed product to cattle producers," ex-

*continued on page 2*

# Sustainable Energy Future

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plained Hay. “The wet grain distillers grains products have been used predominately by large producers with substantial economic and animal performance benefits.”

“New research is developing ways to store and utilize corn ethanol co-products to allow access of these benefits to small feeders and cow calf operations. Availability of co-products to small operations will improve their ability to compete with large operations and improve the local economic impact of biofuel production.”

“Alternative fuels have become big business in the north central region, and many communities have been impacted by this build-up. For these ethanol facilities to be successful they need a connection with their local farming communities both as a source of their grain as well as an outlet for the distillers grains feed co-products. No matter how you feel about ethanol’s pros and cons it is here and agricultural producers do have an impact on ethanol’s environmental footprint. One thing ethanol has done is increase our awareness of the energy we consume in the production of crops and reminded us of ways to reduce and improve the sustainability of crop production. The energy discussion is important as we slowly move toward sources of energy not derived from fossil fuels.”

Hay intends for his project to create interaction between agricultural educators and beef experts, as well as small livestock producers who are experimenting with on-farm storage. It will also include demonstrations of mixing and storage techniques. “Hands on demonstrations leave a very strong lasting impression on people. This PDP project will use full scale demonstration to teach about ethanol co-products storage techniques for use on many small cattle operations,” explained Hay.

When asked about his personal interest in sustainable agriculture, Hay looked toward the future. “This earth has been left in our care. Each of us as individuals has a responsibility to ensure whatever small part we control is taken care of.”

That concern for the future of sustainable energy was echoed by PDP project coordinator, South Dakota State University Professor David Clay, “When we look into the future, the prospect of declining grain stock piles, declining oil supplies, global warming, drought, and war is down right depressing. This project provides an opportunity for a team of scientists to do something to help solve critical problems,” said Clay.

Clay’s project, “Tools and Professional Development Training for Increased Energy Efficiency, Environmental



*30-gallon insulated containers allow Eric Jellum to increase the number of treatments to evaluate various composting condition parameters more quickly than would be possible with larger bunkers. Projects such as this demonstrate composting for heat recovery (NCR-SARE project FNC05-562).*

Quality, and Profitability Across the Landscape,” seeks to increase producers’ awareness of the importance of determining costs of production as well as conducting energy efficiency and environmental sustainability assessments during long-term planning.

“The benefit from converting biomass to ethanol can be substantial. For example, if each ton of corn stover produces 70 gallons of ethanol, and if half of the non-grain biomass is harvested (2-2.5 tons/acre) the net result could be 175 gallons of ethanol per acre or 28,000 gallons per field (quarter section),” explained Clay. “Farmers attending a focus meeting that we held in January of 2007 clearly stated that they wanted to participate in this opportunity. The research question is how much biomass, from either a corn field or a field planted with native grasses can sustainably be removed.”

“Central to the issue biomass conversion to ethanol is the need to increase the energy efficiency of our farmers. Many times we think about energy efficiency as turning off the lights when we leave a room or installing high energy efficiency light bulbs. On the farm, each pound of N requires approximately 25,000 BTU. Five pounds of N fertilizer are almost equivalent to the amount of energy contained in a gallon of gasoline. Reducing the amount of N applied to land by 5 lbs/acre in a quarter section will roughly save the amount of energy contained in 160 gallons of gasoline. Profitability, energy efficiency, long-term productivity, and sustainable energy production are linked.”

*continued on page 6*



## Diversity Initiatives Underway

*“Communities in the North Central Region continue to change, with representatives of different cultures regularly being added to an already diverse population. We know that cultural and economic barriers exist that prevent some in the region, new and established alike, from working with the Sustainable Agriculture Research and Education program to achieve our common sustainability goals.” - excerpt from “NCR-SARE’s Diversity Goals Narrative”*

NCR-SARE’s Diversity Initiative is not new to NCR-SARE, but NCR-SARE’s Diversity Committee has breathed new life into the effort in the past year.

More than 10 years ago, in 1997, NCR-SARE’s Administrative Council awarded four special Diversity Enhancement grants for Native American communities to implement sustainable practices and concepts on reservation lands. This initiative was intended to open doors and forge partnerships with Native American land grant universities.

At that point, NCR-SARE made a pledge: “Future NCR-SARE initiatives will encourage more participation of minority groups and under-served communities.”

Thus far NCR-SARE has had some legitimate success reaching out to minority groups and under-served communities in order to broaden the scope and understanding of sustainable agriculture in the North Central Region.

Funded in 2005 through the Farmer Rancher Grant Program, Pov Huns’ high tunnel project, “Can Screened High Tunnels Extend the Growing Season of Bitter Melon in the Midwest?” (FNC05-551) aimed to determine whether pest control and season extension could make a tropical vegetable such as bitter melon profitable by using a high tunnel on his Kansas City farm.

*Pov Huns poses with Huns Garden’s high tunnel, funded in part through a grant from NCR-SARE.*



*Pov Huns gives a tour of Huns Garden with field day participants in Kansas City, KS.*

On the Kansas City Farm, Huns and his wife strive to produce specialty vegetables that have medicinal value, as well as other rare Asian greens. Huns Garden serves a diverse customer base including immigrants from Africa, the Middle East, South America, the Caribbean, Asia and the Pacific Islands, as well as locals interested in healthy eating.

With funding from NCR-SARE, Huns was able to host a field day on the farm. 25 people attended and enjoyed a cooking demonstration. Huns and his wife Chaxamone Lor gave on-farm tours and provided cooking demonstrations during the Kansas City Urban Farms Tour on June 2007, and Huns presented “Update on Tropical Plants in Non-Tropical Environments” at the 15th National Small Farm Trade Show & Conference™ this past November.

Huns is optimistic about the future of this project. He is planning to share more information at the Great Plains Vegetable Conference, the Wisconsin Farmers’ Conference, and host another farm field day.

“While this proposed project addressed one crop, we expect that the season-extension approach being explored in this project may also be applied to many of the specialty leafy green crops mentioned above,” said Huns.

With a crop of several successful projects as encouragement, NCR-SARE took the initiative and released its first Diversity Call for Proposals in September 2007.

“We have long had the sense that NCR-SARE isn’t as effective as it could be at involving all the people that are interested in making agriculture more sustainable in our region,” said NCR-SARE Regional Coordinator, Bill Wilcke.

“A majority of NCR-SARE stakeholders believe that agriculture will be more sustainable if we involve a greater variety

*continued on page 7*

# NCR-SARE Opens New Doors for the Circle of Sustainability

When NCR-SARE determined that their Summer 2007 AC meeting was to be held in Bismarck, ND, the decision was met with great anticipation. Council members and State Coordinators recognized the potential of a meeting with communities of people who represented a unique tradition of sustainable agriculture.

NCR-SARE would not only have the opportunity to meet with people representing various Native American Nations at the meeting, but they would also have the opportunity to personally visit Standing Rock Sioux Reservation and Fort Abraham Lincoln State Park to observe traditional practices.

Frank Kutka, State Coordinator for the Dakotas, was eager to help facilitate the bringing together of people from many communities for one purpose. "It was so nice to see that my visits to the reservations had generated so much interest in SARE and this meeting," said Kutka. "Having met some of these folks before, I knew they represented a vibrant group of educators and policy makers that we should meet."

"The Native communities have been in this region for a very long time and this experience has informed them about how to live in this place," explained Kutka. "Their long term experiences here will help us all to better formulate our long term goals and vision of sustainability on the northern plains. The discussions have just begun, but they should prove fruitful."

The work conducted with Native communities was a collaborative effort for NCR-SARE. Along with Frank Kutka, Jeri Vines, a Land Operations Range Specialist for the Bureau of Indian Affairs, was involved in the planning process. Vines was asked to help make contacts and give insight from Indian Country.

Vines lives on a ranch in Eagle Butte, SD, and serves on the NCR-SARE Technical Committee. She was pleased with the progress made at the meeting in order to expand the circle of sustainability. "I felt that this gave a broader defini-



*Jeri Vines, Land Operations Range Specialist for the Bureau of Indian Affairs, and NCR-SARE Technical Committee member.*



*Joe Dunn, project manager for the Standing Rock Tribal Conservation District and Joan Benjamin, Farmer Rancher Grant Program Coordinator and Asso. Regional Coordinator with NCR-SARE, at the "Oyate Tawoju" (The Planting People Project) project location on Standing Rock Sioux Reservation (FNC06-596).*

tion to the word 'sustainable'. We now not only look at sustainability as a profit margin for the producer and community and protecting our environment, but it also is defined as the health and mental wellness of a community."

After having met and formed connections, members of these communities and NCR-SARE committed to keeping the dialog alive through additional visits and conversations about expanding SARE's scope in the North Central Region. The result is an NCR-SARE initiative now termed "The Circle of Sustainability."

In November 2007, NCR-SARE's AC approved funds to sponsor a series of small-group listening sessions on North and South Dakota reservations to follow up on the June 2007 meeting. The listening sessions are being planned by the group that planned the Bismarck meeting.

Kutka is pleased with NCR-SARE's progress. "I am very happy that such a meeting could be held and that it has resulted in new doors opening."



*Frank Kutka, NCR-SARE State Coordinator for the Dakotas,*



# NCR-SARE Introduces New Administrative Council Members

Liz Stahl, of Sherburn, MN, and Dave Campbell of Maple Park, IL, have been elected to serve as Administrative Council members for the North Central Regional Sustainable Agriculture Research and Education program (NCR-SARE). Stahl will fill the Minnesota extension position on the Administrative Council, and Campbell will fill the Illinois farmer/rancher position.

Liz Stahl has been a University of Minnesota Regional Extension educator and crops specialist since 2004, but has been involved in agricultural education since 1988. She received both her bachelor's degree in Agricultural Education and her master's degree in Agronomy/Weed Science from the University of Minnesota. Stahl is a Certified Professional Agronomist with the American Society of Agronomy

"Ever since I can remember, I have been interested in efforts to enhance stewardship of our natural resources," said Stahl.

"My interests became more developed as an intern with the Soil Conservation Service and as a participant in the Sustainable Ag Discussion Groups during my undergraduate days at the University of Minnesota."

Stahl's passion was rooted in her upbringing. "I also grew up on a farm and currently reside in a rural area, so have first-hand experience with the challenges facing rural communities today."

Dave Campbell is no stranger to Midwestern farms. He has spent most of his life living on farms in Illinois and Wisconsin. In 1967, his father's farm switched over to organic production, and Campbell was charged with raising rabbits for meat production.

He continued to work on his father's farm while he attended Western Illinois University where he received his bachelor's degree in education. He worked with his father until he began his own operation, Lily Lake Organic Farm in northern Illinois. Currently, Campbell serves on the Advisory Board of the University of Illinois Sustainable Ag Board and is active with the New Ag Network.

Campbell is eager to begin his work with NCR-SARE. "I look forward to combining my years of organic/sustainable farming experiences with my interest and background in education," said Campbell.



*Liz Stahl represents Minnesota Extension on the NCR-SARE Administrative Council.*



*Dave Campbell represents Illinois farmer/ranchers on the NCR-SARE Administrative Council.*

NCR-SARE's Administrative Council represents various agricultural sectors, states and organizations. It sets program priorities and makes granting decisions for the region.

Read more about NCR-SARE's Administrative Council at <http://sare.org/ncrsare/leaders.htm>.

## Staff Updates at NCR-SARE



*Marie Martin,  
Communications Specialist*

Marie Martin was hired as the Communications Specialist for NCR-SARE in July 2007. In her previous position with NCR-SARE, Martin was the Executive Office and Administrative Specialist. Martin came to NCR-SARE from the University of Wisconsin - Oshkosh, where she was a Communications Specialist for University Relations.

## NCR-SARE Award Recipients

Adam Handy has been named as the 2007 USDA SARE/ National Association of County Agricultural Agents (NACAA) Fellow for the North Central Region. This program is designed to provide hands-on experience and materials for selected NACAA members to study and become familiar with the basics of sustainable agriculture and alternative farm systems as currently practiced within the four regions of the USDA.

Otto Wiegand has been named the SARE Search For Excellence Awardee in Sustainable Agriculture for the North Central Region. The program recognizes NACAA members who develop and implement outstanding educational programs in sustainable agriculture.

# Sustainable Energy Future

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Using the funding from NCR-SARE, Clay will develop science-based decision tools that can be extended to Extension Educators and producers.

Iowa State University Extension Agricultural Engineer Mark Hanna helped to draft the NCR-SARE position on bioenergy and was also a member of the proposal review team to evaluate PDP competitive grants. "NCR-SARE is highlighting that there are important issues of developing energy sources and conservation methods in a manner that is sustainable for longer term environmental needs," said Hanna. "NCR-SARE is taking a pro-active approach to both agricultural energy conservation and sustainable local development of future bioenergy sources."

In addition to funding these Professional Development Program competitive grants, NCR-SARE's Administrative Council also voted to accept sustainable energy proposals in the Research and Education Grant Program call for pre-proposals which was released in late April 2007.

Bill Wilcke, Regional Coordinator of NCR-SARE and coordinator of the R&E Grant Program, recognized, along with a number of AC members, that the time had come for NCR-SARE to take a position on bioenergy and sustain-

able energy in sustainable agriculture, and knew that the north central region could provide a unique perspective. "NCR-SARE's unique focus is on the sustainability of bioenergy choices. Our goal is to get people who are developing various ideas for bioenergy to consider the sustainability of their ideas. So our goal is to only fund bioenergy projects that consider the sustainability of various bioenergy options or projects where the proposal author has made a good case that the option being proposed will make agriculture more sustainable."

The increasing interest in sustainable energy is apparent even in NCR-SARE's Farmer Rancher Grant Program. Program Coordinator and Associate Regional Coordinator, Joan Benjamin, has noted the increasing interest in bioenergy topics in the Farmer Rancher Grant Program, as well.

"We recognize that energy is essential for agriculture and that bioenergy could help meet agriculture's energy needs and that maybe, through bioenergy, agriculture can help meet the energy needs of the rest of society," said Wilcke. "But if agriculture is going to be sustainable, any bioenergy effort must increase rather than decrease sustainability."

*Interested in reading more about NCR-SARE's bioenergy initiative? Visit <http://sare.org/ncrsare/bioenergy.htm> to read NCR-SARE's Bioenergy Position Paper.*

## Kansas City Conference in March Celebrates 20 Years of SARE

SARE's 20th Anniversary Conference "The New American Farm" will celebrate and investigate advancing the frontier of sustainable agriculture.

From March 25-27, 2008, researchers, educators, producers and other ag professionals will gather at the Westin Crown Center in Kansas City, MO. There, they will examine and discuss innovative farming and grazing methods, lucrative organic markets, specialty crops, community farmers markets to try to better understand how sustainable farming is rapidly changing the face of American agriculture and rural life.

Participants at the New American Farm Conference will have the opportunity to learn from State-of-the-art practitioners – farmers, ranchers, teachers, researchers and students sharing work and experiences.

Expert practitioners from around the country will discuss current practices, such as: cutting costs with energy efficiency and renewables, tapping new markets, innovative cropping and grazing methods, and cutting edge pest management.

There will also be opportunities to tour local farms to see sustainable agriculture at work, learn the ins and outs of quality marketing and production, network, and help chart a course for 20 more years of SARE success.

Registration: Send your name and complete postal address to [outreach@sare.org](mailto:outreach@sare.org) to receive registration materials in January 2008 or register online at <http://www.sare.org/2008Conference/registration.htm>. Registration closes March 19, 2007. For exhibit and sponsorship opportunities, contact Sean McGovern at [outreach@sare.org](mailto:outreach@sare.org) for more information.





# Diversity Initiatives Underway

*continued from page 3*

of people and perspectives in our decision making and if we fund a greater variety of projects. The Diversity Initiative is a reflection of our acknowledgment that we could use some help in setting up systems and practices in becoming more diverse and serving more diverse audiences.”

It was important for NCR-SARE to consider the value and definition of diversity in the North Central Region. The NCR-SARE Diversity Goals Narrative was written in 2007 to clarify NCR-SARE’s goals for the diversity initiative. Along with the narrative, definitions of goals and a Diversity Committee Logic Model were written.

“I think that everyone has a little different sense of what ‘diversity’ means,” explained Wilcke. “In terms of our call for proposals, we’re interested in looking at all kinds of diversity: ethnic, racial, biological, types of farming - something different from the audience or topic that we usually deal with. The term ‘diversity’ causes me to think about under-served audiences; people who can contribute to the sustainability of agriculture, but whom NCR-SARE hasn’t reached as effectively as we could have. Our ‘diversity’ section on the NCR-SARE website and our call for diversity proposals, provide some definitions of diversity and under-served.”

Ultimately, along with a call for proposals, NCR-SARE committed to building strong relationships with existing programs and organizations that currently serve those that may be under-served by NCR-SARE. That goal will not only influence future funding, but also how NCR-SARE communicates and engages in outreach in the region.

“At the summer meeting in Bismarck, we met with representatives of Native American tribes,” said Wilcke. “Native



*Bill Wilcke, Regional Director of NCR-SARE.*

*Photo credits for this issue of Field Notes - Marie Martin, Joan Benjamin, Eric Jellum, Barry Adler, Frank Reese, Troy Bishopp, Robert Friedman, and Heidi Rader*

Americans are important in the North Central Region and we have a number of tribal colleges in the NCR. But we don’t have very many Native Americans on our committees and we haven’t funded to completion very many projects that work with Native Americans.”

“The meeting in Bismarck was an attempt to learn more about Native American culture and to begin building the relationships needed to increase our interaction with Native Americans.”

*Interested in reading more about NCR-SARE’s diversity initiative? Visit <http://sare.org/ncrsare/diversity.htm> to read more.*



*Standing Rock Sioux Tribe Game, Fish, and Parks representatives speak to NCR-SARE AC members about buffalo grazing on the Standing Rock Sioux Reservation.*

## SARE Photo Contest Results



*This photo depicts Kansas farmer Frank Reese and his life long work with Heritage Turkeys. Reese breeds, hatches and raises turkeys for market and growers. Reese won the SARE Photo Contest Regional Grand Prize for this photo in the North Central Region. Four photos, one from each of SARE’s regions in the U.S., received grand prizes of free attendance and accommodations at SARE’s 20th Anniversary conference, to be held March 25-27, 2008 in Kansas City, Missouri.*

*NCR-SARE Honorable Mention Winners of the SARE Photo Contest include: Brooke Salvaggio, Andrea Godshalk, Teresa Webb, and Linda Hezel.*

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## NCR-SARE Grant Timelines

### Farmer Rancher Grant Timeline

August - Call for Proposals  
December - Proposals Due  
March - Authors Notified on Status of Proposal  
Spring - Funds Available to Recipients  
August - Call for Proposals  
December - Proposals Due

### Research and Education Grant Timeline

April - Call for Pre-Proposals  
June - Pre-Proposals Due  
Early Fall - Authors Notified on Status of Pre-Proposal  
Late Fall - Full Proposals Due  
March - Funding Decisions Made by NCR-SARE  
Spring - Authors Notified on Status of Proposal  
Fall - Funds Available to Recipient

### Professional Development Grant Timeline

Mid-January - Call for Pre-Proposals  
Mid-March - Pre-Proposals Due  
April - Authors Notified on Status of Pre-Proposal  
July - Full Proposals Due  
November - Funding Decisions Made

### Graduate Student Grant Timeline

Fall - Call for Proposals  
January - Proposals Due  
March - Funding Decisions Made by NCR-SARE  
Spring - Authors Notified on Status of Proposal  
Fall - Funds Available to Recipients

*Interested in reading more about funded NCR-SARE projects? Visit <http://www.sare.org/projects/> to read reports from funded project coordinators in the North Central Region.*



*Field Notes Survey: In the future months we will be conducting a targeted survey to evaluate *Field Notes* and communications for NCR-SARE. If you'd like to have the opportunity to provide feedback regarding the future of *Field Notes* and other communications, please contact Marie Martin at the NCR-SARE Office to be included in the evaluation process.*

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**SARE**  
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