

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA - CAMPAIGN
ACES

NOTICE: Return or renew all Library Materials! The *Minimum Fee* for each Lost Book is \$50.00.

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.


Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.
To renew call Telephone Center, 333-8400

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

--	--	--

L161—O-1096

ACES LIBRARY
SEP 16 2005
UNIVERSITY OF ILLINOIS



Digitized by the Internet Archive
in 2011 with funding from
University of Illinois Urbana-Champaign

<http://www.archive.org/details/agroecology1213univ>

630.9773
AG86

News and Perspectives

AGRO-ECOLOGY

Science and Education for a Sustainable Agriculture



Volume 12 • Number 1

MEETING THE NEEDS OF SMALL FARMS

By Deborah Cavanaugh-Grant

SPRING 2003

INSIDE

2003 Tour Schedule.....	2
New Regional Council for Students	9
Sustainable Ag in Jo Daviess ..	10
Opportunities from NCR SARE	12
Resources	14

In the fall of 2001, members of the Illinois Small Farm Task Force met to begin planning a series of summer tours that would culminate in workshops for educators. We wanted to provide educators with an opportunity to visit a variety of farms across the state before meeting in the fall to address issues that small farms face. We had also offered tours in the past and felt it was worth repeating. (For background on the task force, see *Agroecology News and Perspectives* Vol. 8, No. 3. View the issue online at www.aces.uiuc.edu/~asap/news/v8n3/task-force.html.)

What does the task force mean by "small farm"? According to the 1998 National Commission on Small Farms, a small farm is defined as "*farms with less than \$250,000 gross receipts annually (and adjusted over time for inflation), on which day-to-day labor and management are provided by the farmer and/or the farm family that owns the production or owns, or leases, the productive assets.*" But this definition continues to be discussed and revised.

The logistics of planning tours of small farms around the state were complex. We wanted to offer unique and interesting tours that would



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen.

Please address all correspondence to: *Agro-Ecology* Editors, 211 Mumford Hall, 1301 West Gregory Drive, Urbana, Illinois 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the NCR SARE Professional Development Grant Program, the UIUC Office of Research, and University of Illinois Extension.



College of Agricultural,
Consumer and
Environmental Sciences

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of *Agro-Ecology News and Perspectives*, contact Deborah Cavanaugh-Grant, (217) 968-5512, e-mail: cvnghgrn@uiuc.edu

Meeting the Needs, continued

provide educators and agricultural professionals a look at the diversity of Illinois agriculture. After many phone calls and countless e-mails, we developed the following schedule:

- May 22 — The Permaculture Project
- June 17 — Intensive Grazing in Crop Rotation
- July 20 — Organics in Action
- August 6 — Illinois Vegetables, Pumpkins and Low-Nicotine Tobacco
- September 10 — Fee Hunting
- October 11 — Agritourism in Action

The tours were so successful that the task force is planning another set for 2003. The tours also laid a good foundation for discussion at the fall training workshops for educators. The training program included two almost identical, one-day workshops on November 13 and 14 entitled, *A Time to Act: Providing Educators with Resources to Address Small Farm Issues*. Speakers from state and federal agencies, universities, nonprofit organizations and farmers presented information on financing and credit, market access, farmer cooperatives, regulatory and government barriers, and available grants and resources.

At each of the two workshops, there was an area devoted to displays from several agencies and organizations. A small farm resource manual was developed containing information about the workshops, sustainable agriculture programs and activities in Illinois and other regional and national programs.

The goal of the workshops was to equip educators with the sensitivity and resources to address small farm issues. The workshops provided University of Illinois Extension, USDA Natural Resources Conservation Service, USDA Farm Service Agency, Soil and Water Conservation Districts and other agricultural professionals with resources to give educational, technical and production assistance to small farms. Our long-term goal is to promote a change in attitude among Extension and other agricultural professionals leading to a commitment to serving the needs of people with small farms.

MARK YOUR CALENDAR!

2003 Sustainable Agriculture Tours

June 17

Ethnic Markets, Chicago

July 14

Organic Farm, Woodford County

August 12

Community Supported
Agriculture, Caledonia

September 10

Agritourism, Rantoul

October 29

Fee Hunting, Marion

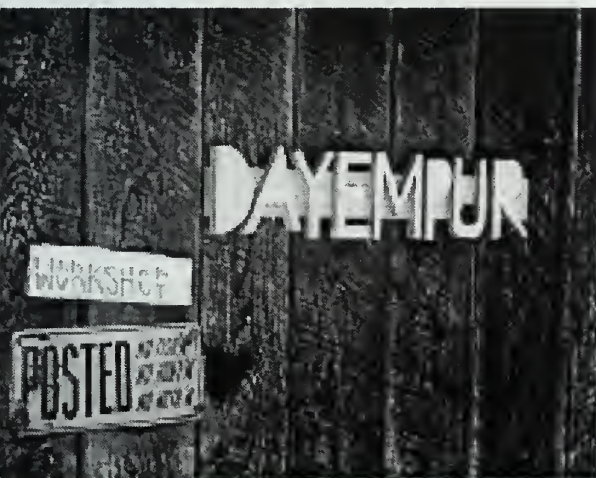
For details, visit

www.aces.uiuc.edu/asap/topics/index.html.

2002 Tour Journal

Tour #1 The Permaculture Project

I had the opportunity to meet Wayne Weiseman in February 2002 at one of our grant-writing workshops in Salem. Following the workshop, I went to lunch with Dan Anderson and Wayne. During lunch, we shared information about our respective programs and activities. I had some familiarity with permaculture, but had never been to a farm that was implementing these practices. When the task force began discussing ideas for tours, this was one of the first locations suggested.



Woodcut sign at Dayempur Farms.



A row of bee hives near an orchard of fruit trees.



The group gathers prior to taking a tour of Dayempur Farm in Anna, Illinois.

May 22
Daymepur Farm, Anna, Illinois

The day of the tour, the weather was perfect! Wayne and I met in Carbondale at the food co-op to purchase refreshments, then drove to the farm. Wayne gave me a brief tour of this bucolic setting and we prepared for folks to arrive. Most of the people attending had not heard of the word permaculture or had only a cursory knowledge of the subject. Wayne and other members of the Dayempur community spoke to the group, then spent an hour walking around the farm with us. Wayne told us about the energy system, the bee hives, the forest garden and other topics. The tour gave us with an opportunity to see first-hand how permaculture works.

For more details about the tour, see Agroecology News and Perspectives Vol. 11, No. 2. View the issue on line at www.aces.uiuc.edu/~asap/news/v11n2.pdf.

Tour #2
Intensive Grazing in
Crop Rotation

I had the opportunity to meet Ray Meismer when he was awarded a NCR SARE Producer Grant for his project "Incorporating Rotational Grazing in the Crop Rotation" and again when he spoke at our February 2002 grant-writing workshop in Bloomington. A critical component of the Producer Grants is outreach so when we discussed ideas for tours and managed intensive grazing came up, I immediately thought of Ray. When I contacted him, he said that he was working with Jay Solomon, Extension educator in engineering technology at the East Peoria Extension Center and other educators from Extension and USDA Natural Resources Conservation Service to develop a tour in June. I contacted Jay and he thought that it would be a good idea to work together on this tour.



Stanley (Jay) Solomon, U of I Extension educator discusses full flow floats for livestock watering systems. This was part of a watering system presentation that included a demonstration on solar powered pumping system.

June 17
Raymond Meismer Farm, Washburn, Illinois

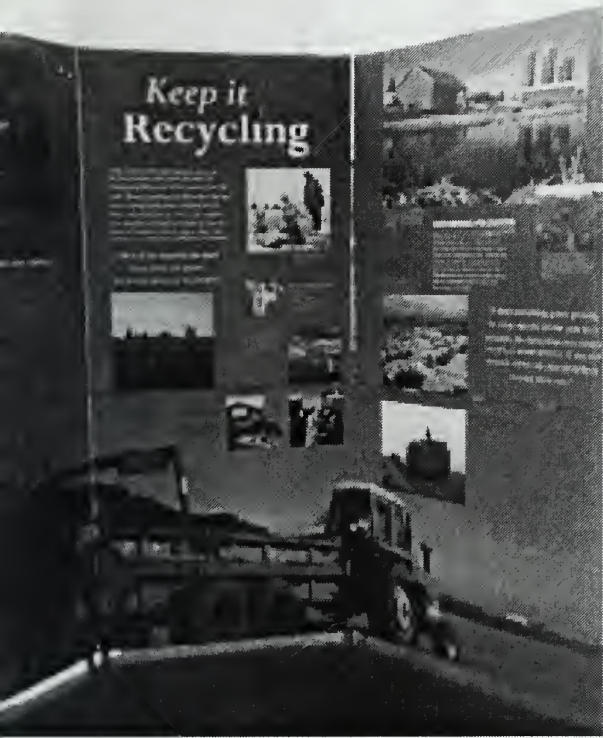
I arrived at the Meismer Farm about 5:00 p.m. Again, the weather for this tour was perfect. I was welcomed into Ray's home to meet his family. We chatted briefly as folks finished up the evening meal, then drove down the lane to the tour site. The tour focused on how the availability and location of water can have a major impact on livestock grazing efficiency and performance. During this pasture walk, we learned how proper livestock water availability can improve the forage production and utilization within a grazing system.

At the first stop, we saw a designed watering system that used a spring development, ram pump, upper elevation storage tank, and gravity watering system. Water is captured from a spring just above a creek bed and the ram pump moves the water to storage at a higher elevation. Cattle water troughs are gravity fed from these storage tanks. A solar system water pumping system was also demonstrated.

At the second stop, we learned more about management-intensive grazing with a discussion about forages, livestock and their interactions. As I left the Meismer farm, the sun was setting and Dan Anderson, John van Es and Mike Rahe were trying to get Dan's U of I vehicle to shift out of park. They eventually got it to work and John followed Dan back to Urbana.



U of I Extension educator, Stanley (Jay) Solomon, (right, with Mike Rahe) displays a quick disconnect assembly of livestock water systems. Solar photovoltaic panels can be seen in the back ground.



Traveling Smithsonian exhibit entitled "Listening to the Prairie," featured Joel and Adela Rissman's Illinois farm.

July 20
Sycamore Public Library, Sycamore, Illinois
and Joel & Adela Rissman's Farm,
Waterman, Illinois

The first stop of the day was the library. Joel and his family were one of four producers featured in this multi-panel exhibition about the North American prairie. The exhibit opened at the Smithsonian National Museum of Natural History in Washington, DC, in 2000. We viewed the exhibit, then heard a presentation from the library staff as well as comments from Joel about his farming operation.

We left the library and drove to the Immanuel Lutheran Church in Waterman for a great noon meal, coordinated and prepared by Adela Rissman featuring all organic products— from the Rissman's beef for hamburgers down to the mustard and ketchup. After the meal, we went down the road to the Rissman farm. The tour there featured speakers and information about pastured poultry, organic livestock rations, feeding flax to beef cattle to lower cholesterol, biodynamic manure treatment and rotations. On my way back home, I thought about how completely the Rissman's demonstrate what it means to be a small, successful family farm.

Tour #3

Organics in Action

When I think about organics, the first person that comes to mind is Joel Rissman. I have known Joel for more than 10 years, and am continually amazed at his intelligence and his innovative approaches to farming. Joel, like Ray Meisner, is a NCR SARE Producer Grant recipient. Joel has received three producer grants: "Low-Cost Waste Management in Beef Cattle Operation" and phases I and II for "Re-Introduction of Flax as a Viable Economic and Rotational Crop in an Organic System". He has also been a speaker for several years at the grant-writing workshops. When the task force discussed possible organic tours, we knew we wanted to start with Joel. It was a bonus that a traveling Smithsonian exhibition of "Listening to the Prairie" was making a month-long stop at the Sycamore Public Library coinciding with the date we chose for his tour.

Tour #4

Illinois Vegetables, Pumpkins and Low-Nicotine Tobacco

Our fourth tour was another collaborative venture. Walt Townsend, executive secretary for the Southeastern Illinois Sustainable Agriculture Society (SISAA) was planning the annual SISAA field day. When I contacted him, he agreed that it would be a great idea to work together. Walt is another person who has contributed much to the sustainable ag efforts in Illinois. He spent his career working as an Extension advisor in southeastern Illinois and provided (and still provides) leadership to SISAA.



Pumpkin field stop on the Frey Farm tour.



Martin Barbre (left) and Brad Greenwalt tell about growing low nicotine tobacco.

August 6

Keenes and Mt. Vernon, Illinois

We met at Frey Produce, just north of Keenes, for an informative presentation by Sarah Frey. Frey Produce is a family-owned commercial buyer and packager of fruit and produce. Sarah provided an overview of fruit and vegetable production, including a discussion of marketing. Later that morning we went to a nearby field to discuss pumpkin production.

After Sarah's pumpkin presentation, Kevin Koenigten of the Illinois Farm Development Authority (IFDA) discussed programs for beginning farmers, debt restructuring and ag business. Our last speaker before lunch was Dave Johnson, Illinois Department of Natural Resources farm forester. Dave discussed selling trees and nuts and provided useful information on small woodlot management.

Following the noon meal, Martin Barbee and Brad Greenwalt discussed their experiences growing low nicotine tobacco. Folks then left the Frey farm and traveled to the nearby farm of Mark Donoho who grows pumpkins as an alternative to corn and soybeans. Regrettably, I could not attend the rest of the tour as I had to attend an evening meeting in Petersburg. But, without me, the tour continued to the Genkota Winery in Mount Vernon where Brad Drake described grape and wine production.

Tour #5 Fee Hunting

Mike Rahe, yet another NCR SARE Producer Grant recipient ("Trout and Walleye Production in Freshwater Springs") would host this tour. I have worked with Mike for 15 years and believe he exemplifies a person whose vocation and avocation are one and the same. Mike is the coordinator of the Illinois Department of Agriculture's C-2000 Sustainable Agriculture Grant Program and has a successful fee hunting enterprise.



Mike Rahe and Secretary of State, Jesse White holding two, five pound trout caught by Mr. White.

September 10
Spring View Acres in Pike County, Illinois

I left home early that morning to drive to Pike County. The tour was being held at Spring View Acres, in western Illinois about 10 miles from Pittsfield. During the tour, we had an opportunity to hear from Mike and others, about management techniques used to establish and maintain a successful fee-hunting enterprise. We learned about harvest strategies, habitat development, economics and marketing. We had a great time hiking around the property, checking out the cabins for the hunters and the food plots for deer.

Tour #6 Agritourism in Action

Agritourism has become a great way for small farmers to supplement their income. Many farms in Illinois have added U-pick operations, petting zoos and other attractions to their business so it was difficult to choose one for a tour. We finally settled on visiting Apple Basket Farm, a successful example of agritourism in Barry.



Photos above show an aerial view of a corn maze and the interior of the Farm Market and Bakery at Apple Basket Farm.

Thinking back on these tours, I am struck by the people. In every case, the success of these workshops lies in the farmers and their families who are making it happen; to the educators who provide information, assistance and support; to the participants with their interest in learning more

October 11

Apple Basket Farm, Barry, Illinois

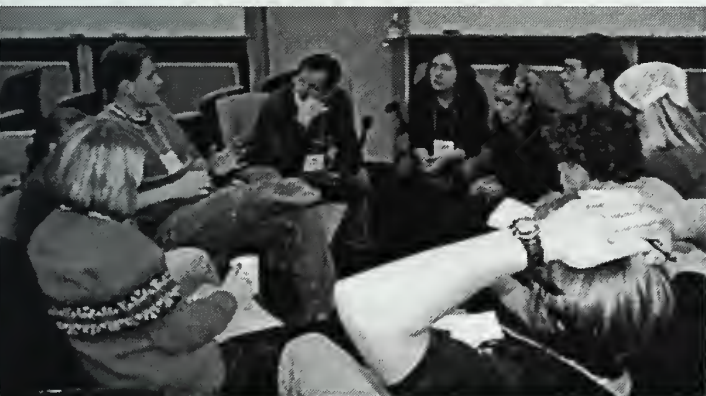
As on all the other days, the weather could not have been better. I arrived at the Apple Basket as they were preparing to open for the day. Their shop is located in a beautifully renovated barn. Along the outside of the building were carts full of squash, pumpkins, gourds, and Indian corn. Inside, the shop had the wonderful aroma of cider and baking pies. Karen and Jack Cruttenden came out of the kitchen and gave me a hearty hello. I had the sense that they had been up working for several hours. Karen is an amazing woman. I first met her at a workshop and was really impressed with her knowledge, energy and entrepreneurial spirit. Other folks started arriving and one of her staff brought us out a big tray of freshly baked cider donuts. Jack provided us with an overview of the operation, then we went on a tour. This very unique agritourism enterprise includes a cider-making operation, petting zoo, a corn maze they call the "amazing maze," a miniature village built for bunnies, educational school tours and a gift and food store. We rode on a wagon around the farm and learned more about their orchards and how the Cruttendens shifted from a commercial, wholesale apple production to a thriving agritourism enterprise. Several of us stayed for a lunch of delicious homemade soups, fresh bread and dessert

about our food system and ways to ensure that families and farms will be sustainable both now and in the future. The tours also reminded me that I have a great job! I get to travel across Illinois, learn new things, and meet great people. 68

New Regional Council for Students of Sustainable Agriculture

by Andrew Larson

Training Tomorrow's Trainers: A Conference for Students of Sustainable Agriculture" was hosted in October by University of Wisconsin Extension, with sponsorship from North Central Region of USDA's Sustainable Agriculture Research and Education (NCR SARE) program.



Students and educators discuss the weekend's events and reflect on issues that came up as a result of their experiences.

Participants from schools all over the 12-state region learned about courses and programs involving sustainable agriculture, student farm activities on campuses and field stations and the breadth of research being conducted on sustainability.

Workshop and keynote presentations spread messages about food security, permaculture, agroforestry, biodynamics, gender roles and agricultural ecology. Guided tours of research fields, urban agriculture plots and progressive farms and food-related businesses all over southern Wisconsin gave conference participants firsthand looks at benefits and obstacles in implementing sustainable production practices.

One association established at the conference was a student council consisting of one delegated representative from each interested school. We have come to be known as the


North Central Network of Sustainable Agriculture Students (NCNSAS). Though we are spread geographically, we keep in touch by e-mail.

The council wants to create a multi-functional online clearinghouse for professionals, practitioners, interested parties and students.

"There is an increasing number of ACES students interested in sustainable agricultures," said Dan Anderson, research specialist in the sustainable agriculture program at the University of Illinois. "To date we have had nothing

to offer them except a couple of classes and maybe a few research experiences. Now we have a seminar series and the beginnings of a graduate program. A student organization will provide a great opportunity for students to learn more from each other, other student sustainable ag organizations at other schools and to discuss the issues as part of their UI experience."

We are also identifying faculty advisors to help write grants and secure presenters as well as scouting potential locations and funding sources for conferences. A progression of opportunities for networking, expert teaching and experiential learning will help create highly prepared and effective leaders.

To learn more visit www.csare.org/programs/t3regcouncil.html. 

Andrew Larson is a graduate student in the Department of Natural Resources and Environmental Sciences at the University of Illinois
260 E. R. Madigan Labs
Urbana, IL 61801
allarso1@uiuc.edu



Students listen as veteran organic dairy farmer, Dean Swenson (not pictured), answers questions about his organic dairy herd, rotational grazing practices, and organic crop production.

Combining CED Efforts for Sustainable Ag in Jo Daviess County

By Terry Feinberg



Jo Daviess County covers almost 400,000 acres and has a population of over 22,000 people.

If University of Illinois Extension is a well-kept secret in Illinois, then its Community and Economic Development (CED) efforts are the best-kept secret of them all. CED educators and specialists spearhead projects in improving business and business practices and do so within all of Illinois' industries, from big corporations to the corner grocery. We also work closely with community organizations, governments and county Extension units, providing our specific expertise to enhance what Extension does best.

But, the reason community and economic development as a specific process or team is so often overlooked is that this is the aim of Extension's teams: enhance the community's social and economic status. It doesn't matter if an educator is standing shin-deep in mud on a farm, looking at a bug under a microscope, teaching someone how to wash their hands the right way, providing character education to youth, helping a community revitalize their business district or anything in between -- in the end, it's all community and economic development.

In the far northwest corner of the state, there is a region of diverse land with equally diverse producers, crops, businesses and industries. Trying to find common ground in a region with such dissimilar economic perspectives is never easy and less so since the population has grown significantly through migration that one Jo Daviess resident calls, "The Flight of the Urban Refugee" (she, being one such refugee herself). The beauty of Jo Daviess County is unsurpassed in Illinois, and the proximity to multiple major urban centers makes it even more attractive. These advantages have created a distinctive community with old issues and new concerns. The Jo Daviess-Carroll Extension Unit recognizes the immense capabilities and value of both a regional and a cooperative approach to development. Extension CED

and Agricultural educators and specialists, together with area organizations, have begun the process of developing sustainable agriculture and viable industry in Jo Daviess County. Unit Leader, Mark Maidak, steadily organizes programs and projects to educate residents and provide sustainable economic alternatives to them without neglecting the importance of their quality-of-life concerns. Recognizing that CED is an all-encompassing endeavor which is unsuccessful when relegated to one disparate project here, another unrelated one there, Maidak and Extension educators have joined efforts to develop programs that can ensure continued success in the region.

One of the first projects Maidak took on was the creation of the Northern Illinois Winegrowers Group, designed to enhance the economic viability of the region's wine industry. Maidak enlisted area winemaker, Chris Lawlor (who was honored as Winemaker of the Year in 2002 by the Illinois Grape Growers and Vintners Association), who opened her facility to Extension for meetings and showed strong support for the alliance. In one of Extension's start-up programs for the Group, State viticulturist, Imed Dami (Southern Illinois University) and enologist, Stephen Menke (University of Illinois and U of I Extension) provided expertise in both science and the economic value of developing regional cooperation.

With the growing success of this first regional economic alliance, Maidak next moved simultaneously in two directions. Joining with area conservancy groups, Extension worked side-by-side with the county's Farm Bureau and residents who were interested in preserving the area's green space and beauty of the area but also recognized the importance of sustaining agriculture to secure this end. From this new partnership developed the Jo Daviess County Land and Farm Preser-

vation Coalition, a group of individuals and organizations who together are exploring options for preserving and enhancing the vitality of area farms and the county's unique beauty.


Open meetings and events of the coalition have run the gamut from providing education on conservation easements and property development rights to making grants to farmers to enhance their business and multiple opportunities for alternative farm enterprises, which include branded and organic products, agri-tourism, the formation of alliances and viable marketing strategies. Extension educators, Dar Knipe (CED, Quad Cities), Rich Knipe (Animal Systems, Quad Cities), I (CED, Rockford) and Extension specialist Deborah Cavanaugh-Grant (Natural Resources and Environmental Sciences) have spoken at various events as well as to small groups of interested producers and business-persons. But even Extension can't do it alone. Through Extensions' partnerships, experts such as Mike Doherty (USDA-Rural Development: cooperative business specialist) and Ryan Buckles (Illinois Beef Association director of marketing) have been invited in to provide sought-after information.

Two new publications, *Jo Daviess County Ag-Related Products* and *Jo Daviess County Farm Work* directories, have been instrumental in providing a central location for information, and began the process of bringing together area agri-businesses in a variety of forums. First off the ground was an Extension-hosted group of income growers and producers. The collaboration of business owners, Extension, Farm Bureau and Blackhawk RC&D produced *Jo Daviess County Home Grown*, a guide to home-grown businesses in the county.

Most recently, Extension, along with the Northern Illinois Cattle Producers, was key in creating the Cattle Marketing Alliance, a group of regional cattle producers brought together to discuss cattle marketing programs. This group organized the Five State Beef Initiative January feeder cattle sale in northwest Illinois which was held on January 4.

Maidak also joined forces with the Jo Daviess League of Women Voters to augment the efforts of the Land and Farm Preservation Coalition by supporting the county's goal to manage area growth and development. Extension, the Jo Daviess county board and the League developed a speaker-educator program training volunteers to present the county's plan to community organizations. Support for this unique educational program was financed in great part by the county's

Extension office; Maidak, the plan's consultant/writer, Monica Notheis and I developed the training agenda. A second session of training conducted in July brought the number of volunteers to over 50, and more than 100 organizations have invited them to present the plan.

Effective community and economic development programming cannot be done in a vacuum. The examples in Jo Daviess County demonstrate the need for cooperation, collaboration and a readiness to listen and work with those directly involved in the process. 

Terry Feinberg is an Extension educator in Rockford, Illinois. This article was adapted from one that originally appeared in Agrinews on November 22, 2002.



The Jo Daviess County Land and Farm Preservation Coalition was developed to help preserve the area's green space and beauty of the area but also recognized the importance of sustaining agriculture.

Opportunities from NCR SARE's Professional Development Program

SARE (Sustainable Agriculture Research and Education) is a national program funded by the USDA. Its mission is to increase knowledge about, and help farmers and ranchers adopt, practices that are economically viable, environmentally sound and socially responsible. The North Central Region (NCR) encompasses Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. For more information, visit www.sare.org and www.sare.org/ncrsare/.

Regional Multi-State Workshop and Conference Support

Purpose and outcome: To support multi-state conferences and workshops that provide professional development in sustainable agriculture to educators in the North Central Region. The intended outcomes are to foster educators who are knowledgeable about sustainable agriculture, develop partnerships with farmers and ranchers, and provide educational programs and activities that enhance the sustainability of agriculture and rural communities in the North Central Region.

Eligibility: Any educational institution, for-profit, or non-profit organization sponsoring a workshop, meeting, conference or educational opportunity that involves agricultural educators from more than one state in the North Central Region. For the purposes of this program, the term "agricultural educators" includes personnel from the Cooperative Extension Service (CES), Natural Resources Conservation Services (NRCS), other governmental agencies and non-governmental organizations as well as educators from the non-profit and for-profit sectors serving the food and fiber system.

To qualify as a "multi-state" event, at least 20% of expected participants must be from a state other than the state of the applicant organization.

Applications must be submitted by an organization in the North Central Region but can include participants from states outside of the region.

Guidelines: Provide up to \$5,000 to support direct costs associated with planning and hosting an educational event. Direct costs may include travel costs for participants or speakers, materials and supplies, and other direct expenses related to a conference or workshop. Entertainment, food and indirect costs are not allowed.

Dollars requested from NCR SARE must be matched 1:1 with other support. Matches cannot include indirect costs. Matches do not need to be formally documented but can instead be described in the application. Matches can include in-kind contributions of personnel time and other forms of direct support for event.

Applications will be taken year-round. Decisions on applications will be made June 13 and October 13, 2003. Approximately \$10,000 will be available for distribution on each of these dates, pending program demand. No organization or institution can receive more than \$5,000 support per year.

Application: Total application packet cannot exceed 4 pages (1-inch margins and 12-point font), including text of application (2 pages), program logic model (1 page) and budget (1 page).

Text of application (2 pages) should include brief descriptions of 1) rationale and need for event; 2) topics to be covered; 3) event format and/or educational approaches to be used (workshops, lectures, on-farm tours, etc.); 4) invited speakers; 5) intended audience and expected attendance; 6) date(s) and location; 7) evaluation plans to monitor event impact; and 8) planning committee members and/or organizations involved in planning.

The logic model should specify event inputs, activities, outputs and expected outcomes. Outcomes can include short-term changes in knowledge, attitude, motivation and skills, but should also include intermediate-term changes in behavior and practice. Long-term outcomes can be included, but it is not expected that applicants will monitor long-term outcomes. For more information on logic modeling and outcome-based planning and evaluation, please see the Outcome Based Planning and Evaluation workshop materials online at sare.org/ncrsare/outcomefcsht.htm.

One page of the application should include a budget for the funds being requested. Funds can be used to support travel (air, car, lodging, per diem while on travel status) for participants or speakers, direct costs for meeting facilities, direct costs associated with educational materials used or distributed at event, and other direct costs associated with event. Funds cannot be used for entertainment, food or indirect costs. Other sources of support (in-kind) can be outlined in text. Although no match documentation is required, it is expected that other funds (1:1 in kind or match) will be leveraged in support of the event.

Application evaluation: Applications will be reviewed by June 13 and October 13, 2003. Applications must be received by 5:00 p.m. on the due date to be considered by the panel. Applications will be reviewed

North Central Region



SARE

Applications should be e-mailed to Paula Ford (pford@oznet.ksu.edu) and the North Central SARE office (sstoppel@unlnoted.unl.edu) in either Word or Wordperfect format. Questions? Call Paula Ford at (785)532-5328.

by a panel from the NCR SARE Administrative Council. The review panel will rank applications according to their potential impact on agricultural educators and overall program quality. Proposals originating from states traditionally under-represented in the SARE PDP program (IL, IN, KS, MO, ND, OH, SD) will receive priority in funding. Approximately \$10,000 will be distributed in each review cycle, given acceptable proposals. Applicants will be notified no more than two weeks after the application deadline.

Regional Travel Scholarships

Purpose and outcome: To support the participation of educators in professional development opportunities in the area of sustainable agriculture. The intended outcomes are to foster educators that are knowledgeable about sustainable agriculture, develop partnerships with farmers and ranchers, and provide educational programs and activities that enhance the sustainability of agriculture and rural communities in the North Central Region.

Eligibility: Any agricultural educator within the North Central Region. For the purposes of this program, the term "agricultural educator" includes personnel from the Cooperative Extension Service (CES), Natural Resources Conservation Services (NRCS), other governmental agencies and non-governmental organizations as well as educators from the non-profit and for-profit sectors serving the food and fiber system.

Professional development opportunities that would qualify for support include conferences, workshops, training events and any other educational events that would directly enhance the capacity of educators to conduct educational programs in the area of sustainable agriculture.

Applications must be submitted by an individual who resides in the North Central Region but can request funds to attend a professional development opportunity outside of the region.

Guidelines: Provide up to \$2,000 (minimum request \$500) to support participation in a professional development opportunity. A scholarship may include direct travel costs (air, car, rail, etc.), registration fees, per diem expenses and any other expenses incurred by participating in the professional development opportunity.


Applications are taken year-round. Decisions will be made on July 1 and October 6, 2003. Approximately \$10,000 will be available for distribution on each of these dates, pending program demand. Applications for travel in the next three months will be given

priority in the review process. No individual can receive more than \$2,000 support per year, and funds cannot be used to support international travel.

Application: The total application packet cannot exceed 3 pages, including text of application (2 pages), attachment describing professional development opportunity, and budget (1 page). Text of application (2 pages) should include brief descriptions of 1) rationale and need for participating in the professional development opportunity; 2) content and scope of the professional development opportunity (please attach pamphlet or announcement of professional development opportunity, if available); and 3) description of the short and intermediate term outcomes expected from participating in the professional development opportunity. Outcomes can include short-term changes in knowledge, attitude, motivation and skills, but should also include intermediate-term changes in behavior and practice. It is expected that attending a professional development opportunity in the area of sustainable agriculture will directly impact the educational programming of the participant. Long-term outcomes can be included, but it is not expected that applicants will monitor long-term outcomes. For more information on outcome-based planning and evaluation, please see the NCR SARE Outcome Based Planning and Evaluation workshop materials at <http://sare.org/ncrsare/outcomefcsht.htm>.

One page of the application should include a budget for the funds being requested. Funds can be used to support travel (air, car, lodging, per diem while on travel status), costs for educational materials associated with professional development opportunity, registration costs and any other costs directly attributable to participation in the professional development opportunity.

Application evaluation: Applications will be evaluated July 1 and October 6, 2003. Applications must be received by 5:00 p.m. on the due date to be considered by the panel.

Applications will be reviewed by a panel from the North Central SARE Administrative Council. The review panel will rank applications according to their potential impact on agricultural educators and overall program quality. Proposals originating from states that are traditionally under-represented in the SARE PDP program (IL, IN, KS, MO, ND, SD) will receive priority in funding. Educators who have not participated in SARE events in the past are particularly encouraged to submit applications. Approximately \$10,000 will be distributed in each review cycle, given acceptable proposals. Applicants will be notified no more than two weeks after the application deadline. 

New Book: *People Sustaining the Land*

In 1998 Jerry DeWitt of Iowa State University, a 30-year extension educator, entomologist and sustainable ag program leader began a one-year sabbatical to follow two passions: photography and family farmers. DeWitt joined Cynthia Vagnetti, a documentary photographer and video producer who began her journey in 1987 as a thesis project to depict change in rural areas through the stories and pictures of Illinois dairy farmers.

This collaboration resulted in a new book entitled, *People Sustaining the Land*. DeWitt and Vagnetti went to 38 states, visiting more than 35 farm and ranch families. They interviewed them, worked with them and took photographs of the people, places and landscapes.

The stories that emerge are authentic and heart-felt. The book also provides a good look at sustainable agricultural practices — unique to each operation and region — sprinkled with a healthy dose of farm-bred philosophy. Illinois is represented through the story of carbon sequestration by McLean County farmer, Jim Kensella.

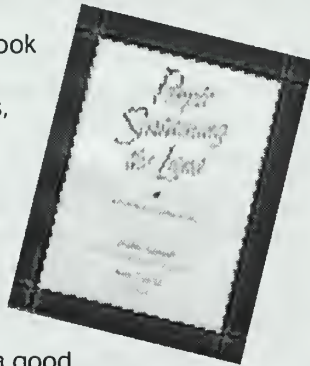
All farmers share the details of how they care for the land and why, as well as what they've learned from their experiences.

Portions of this review were distilled from a book review by Laura Miller for the Leopold Center.

Books can be ordered by contacting Deborah Cavanaugh-Grant at cvnghgrn@uiuc.edu or (217) 968-5512. The cost of the book is \$11.95 (plus \$0.90 sales tax and \$3.95 for shipping and handling) for a total cost of \$16.80.



*Photo from *People Sustaining the Land* showing Illinois farmer, Jim Kensella and his son walking the corn rows on their farm in McLean County.*



The Holistic Agriculture Library

<http://www.soilandhealth.org/01aglibrary/01aglibwelcome.html>

Radical agriculture addresses the close connection between the health of the soil and the health of those organisms that feed from the soil, including human beings. The Holistic Agriculture Library brings together writings from Organic, Biodynamic and other schools of thought.

USDA Publishes Agricultural Internet Marketing Guide

How To Direct-Market Farm Products on the Internet provides basic information to farm direct marketers interested in selling their products online or using a website to publicize their farm or products. The publication addresses issues to be considered before adopting the Web as a marketing tool, as well as tips on how to research the Internet market, set up a website, and market products on the Web. The publication is available in print and on the Internet at www.ams.usda.gov/tmd/MSB/msb.htm. For more information or to obtain a copy of the publication, contact Errol Bragg, phone: (202) 720 8317; E-mail: Errol.Bragg@usda.gov.

Fruit Crop Ecology & Management book

Michigan State University Extension has published a new book for fruit growers in response to the increasing regulatory and environmental restraints on fruit production systems. To help fruit growers and consultants transition to more sustainable practices, MSU specialists collaborated with them to produce this publication explaining how ecology works within fruit production systems. The book explores how those who want a biologically intensive fruit production system must look at their farm as an ecosystem where organisms form an integrated web allowing the farms to function. With knowledge of these interactions, growers can effectively modify their own production systems.

Sample pages and content description can be viewed at the MSU IPM Program website: www.msue.msu.edu/ipm/Pubs_eco.htm.

Fruit Crop Ecology and Management was produced with collaboration from 20 authors from ten disciplines, and over 25 reviewers from several states and the Netherlands. The book includes information for tree fruit and small fruit grown in the Great Lakes states with principles that can be extended beyond that region.

The soft-bound 104-page book sells for \$16 (\$19.20 for international orders) and can be ordered at www.msue.msu.edu/ipm/EcoForm.htm.

RESOURCES

New and Updated ATTRA Publications Available

The National Center for Appropriate Technology has a number of new and updated publications from ATTRA (Appropriate Technology Transfer for Rural Areas). Those listed below and many others are available free to American farmers and ranchers and those who serve them. Call 1-800-346-9140 or visit attra.ncat.org to download a copy.

- Scheduling Vegetable Plantings for Continuous Harvest (new)
- Anaerobic Digestion of Animal Wastes: Factors to Consider (new)
- Cucumber Beetles: Organic and Biorational IPM (new)
- Sustainable Agriculture: An Introduction (update)
- Protecting Water Quality on Organic Farms (new)
- Solar-Powered Livestock Watering Systems (new)
- Sustainable Farming Internships & Apprenticeships (Web only; updated)
- Farmers' Markets (updated)
- A Brief Overview of Nutrient Cycling in Pastures (new)
- Label Rouge: Pasture-Based Poultry Production in France (new)
- Grain Processing: Adding Value to Farm Products (updated)
- Drought Resistant Soil (updated)
- Wheatgrass Production (new)
- Organic Farm Certification and the National Organic Program (updated)

Federal Sustainable Agriculture Program Primer

As a service to its partners, the National Campaign for Sustainable Agriculture is offering the Federal Sustainable Agriculture Program Primer. This resource compiles basic information on a wide range of the programs and policies that the National Campaign and its partner organizations have helped to conceive, develop, promote and/or get funded over the years. The primer is available at www.sustainableagriculture.net.

Illinois Guide for Farmers

Illinois farmers and producers interested in selling farm products directly to consumers can learn what they need to do to comply with the legal and regulatory requirements of Illinois in *Legal Guide to Direct Marketing for Illinois Farmers*, by attorney, Rich Schell and funded by the Illinois Stewardship Alliance.

"Rural Illinois has three bright spots on the horizon: specialty crops (e.g. organics), agritourism and direct sales of farm products to consumers," says Schell. "This publication will help Illinois producers learn how they can play by the rules while selling their products directly to consumers."

The Guide covers common Illinois farm products, including eggs, meat, vegetables and cider, as well as regulatory requirements for organic certification, sales tax, inspection, processing and food safety.

To purchase a copy for \$10, contact Illinois Stewardship Alliance, PO Box 648, Rochester IL, 62563 or call (217) 498-9707.

For information on the Illinois Stewardship Alliance, visit <http://www.illinoisstewardshipalliance.org> or call (217) 498-9707.

Report on Effects of Climate Change

The Soil and Water Conservation Society (SWCS) recently released a report entitled, "Conservation Implications of Climate Change: Soil Erosion and Runoff from Cropland."

The report identifies three promising approaches to begin adapting conservation policy and programs to changing climate and precipitation patterns: 1) continue to correct climate projections; 2) get a handle on the actual damage due to climate change and why; and 3) transform the approach to conservation planning to risk-based management instead of planning for average climate occurrences.

A copy of the report can be requested by calling SWCS at (515) 289-2331 or via e-mail at pubs@swcs.org. The report also is posted at http://www.swcs.org/t_advocacy_action.htm.

CALENDAR

Organic Trade Association Conference Austin, Texas May 14-17

The conference entitled, "All Things Organic" will include: USDA/National Organic Program updates; organic regulations in international trade; the latest trends in organic food processing and handling; ethical labeling issues; organic marketing tactics; and trends in organic fiber and personal care products.


Keynote speakers: Robert F. Kennedy, Jr., President of Waterkeeper Alliance and Dr. Marion Nestle, chair of New York University's Department of Nutrition and author of *Food Politics: How the Food Industry Influences Nutrition*.

For more information, contact Lisa Murray at Diversified Business Communications, phone: (207) 842-5468 or e-mail: ato@divcom.com or visit: www.ota.com.

Soil and Water Conservation Society Annual Conference Spokane, Washington July 26-30

The Inland Empire Chapter of the Soil and Water Conservation Society will host this event consisting of workshops, plenary and concurrent sessions, and educational tours. Topics will include -- integrated watershed and basin management; water supplies for ecology and economy; grassland health for sustainable production and biological diversity; and air quality for public health and economic vitality.

Technical tours offered to participants include a day trip to the Palouse region where erosion is a concern with the 30 to 45 percent slopes; the Grand Coulee Dam; a modern lumber mill; and more. Certified Education Units will be offered to participants.

For registration information and a look at the preliminary program, visit: www.swcs.org/t_what2003conffrontpage.htm. Additional information can be found at the Society's website at www.swcs.org. 

AGRO-ECOLOGY



News and Perspectives

University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
211 Mumford Hall
1301 West Gregory Drive
Urbana, Illinois 61801

AGRO-ECOLOG Y

Science and Education for a Sustainable Agriculture



Volume 12 • Number 2

The Crop Destined to Die

by Debra Levey Larson

Cover crops can help reduce soil erosion, control weeds and improve nutrients in the soil. Although some cover crops can have cash value, most are planted not to harvest, but to kill. Add to that the fact that cover crops can be difficult to manage and it's not surprising that most farmers are reluctant to try them. So, why do some farmers plant a crop that they plan to kill?

SUMMER 2003

INSIDE

Miscanthus: New U.S. Crop?.....	6
Attitudes Toward Clover	9
Pumpkin Proposal	10
Calendar	11

PROTECTING THE SOIL

Standing in a field of dry sunflowers, Allen Williams points to the cover crop of wheat that he planted in the same field about four weeks earlier. To the untrained eye, something looks wrong. The lovely sunflower crop has become overgrown with stubby clumps of green grass, but Williams is pleased with what he sees. "This is doing really well," he says. "After we harvest the sunflowers, the wheat will stay here over the winter to protect the ground from wind and rain erosion."

Williams farms about 1,600 acres in central Illinois. He owns 280 acres of farmland surrounding the 130-year-old farmhouse where he and his wife live and he rents another 1,300 acres across the road. He has been farming since 1972 and, yes, he plants cover crops, most of which he kills in the spring.

Williams is Chair of the Piatt County Soil and Water Conservation District so soil erosion is a hot topic for him. On his farm, he has designed sod-lined waterways to filter and direct the water, uses drainage tiles and a terrace system in addition to cover crops in order to combat the erosion problem in his fields. The land looks relatively flat but Williams says, "I've seen water coming off a no-till corn field that's almost muddy, it's so dark because it's loaded with silt and residue."

According to Williams, planting grasses as a cover crop, has a tremendous advantage over corn or soybean residue in preventing soil erosion because the grasses have a root system that's growing and strong— so they hold the soil in place much better than the dead, dry crop residue.

continued on next page



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen.

Please address all correspondence to: *Agro-Ecology* Editors, 211 Mumford Hall, 1301 West Gregory Drive, Urbana, Illinois 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the Illinois Department of Agriculture, C-2000 Sustainable Agriculture Grant Program, the UIUC Office of Research, and University of Illinois Extension.



The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of *Agro-Ecology News and Perspectives*, contact Deborah Cavanaugh-Grant, (217) 968-5512, email: cvnghgrn@uiuc.edu

The Crop Destined to Die, continued

On the Thompson farm near Ames, Iowa, Dick and Sharon Thompson have seen similar benefits from cover crops, saying that the plant protects the soil from the pummeling of direct rain in the spring while the root systems hold the soil in place. They have conducted research projects on their farm since 1967, experimenting with several combinations of cover crops. In earlier years they planted grain or cereal rye and a combination of oats with hairy vetch. About 10 years ago, they began using rye alone.

WHY RYE?

Rye isn't for everyone. But it has become a favorite cover crop for German Bollero, a crop science researcher at the University of Illinois. Bollero likes rye for the cooler, upper Midwest states, where much of his research is conducted. He has found that the use of rye prior to corn has not been successful because it can hinder corn growth, but it works well when planted before a soybean crop. "It doesn't hurt soybean yield and even helps to reduce weed pressure," says Bollero. But, he adds that more rye management research, especially in the area of residue decomposition, is needed in order to exploit the benefits of this cover crop without hurting the following corn crop.

But rye brings its own special challenges, and learning the strategies for managing it can be a somewhat daunting task for farmers. Bollero admits that incorporating cover crops into a rotation or using them during the winter can be very complicated. "There's a lot for farmers to learn and the planting and killing time can be critical," says Bollero.

Williams can identify with that. He says that one year he had a problem with rye. "We had a lot of rain and it grew too fast. We couldn't kill it in time. It headed out and we mowed it, but it added too much residue for the no-till corn. You just have to really watch it in the spring that it doesn't grow too tall, otherwise it can become a weed."

Much of Bollero's current research using rye as a cover crop is focusing on helping farmers to identify the perfect time to kill off the rye, while leaving the soil stable, and optimize the decomposition so that the nutrients are available for the cash crop that follows. Bollero has already learned that in Illinois, farmers need to abide by a fairly early kill date in order to maximize its effectiveness—17 to 27 days prior to planting.



A field of sunflowers with a cover crop of wheat on Allen William's farm in Cero Gordo.

Even though rye can be tricky, Bollero believes that it is worthwhile for another reason. The rye pulls up residual nitrogen from the soil, preventing it from leaching into the groundwater.

Excess nitrogen in the soil that eventually leaches into the groundwater has become a persistent problem for some communities in heavy agriculture areas. Joe Mitchell at the Illinois Department of Health says that in a recent year, out of 5,791 water samples tested on private wells, 567 were higher than 10 parts per million (ppm) and 149 of the samples were over 20 ppm, which is a dangerous level for humans, particularly babies. (Levels of nitrogen over 10 ppm can produce algal blooms and deplete oxygen, contributing to methemoglobinemia, or blue baby syndrome.)

"We also have records of 2,862 samples taken from schools and businesses around the state," says Mitchell. "Of those, 88 were higher than 10 ppm and nine were higher than 20 ppm. Those systems over 20 ppm are restricted from providing water to users."

In the Chesapeake Bay area, nutrient run-off has contributed to high levels of phosphorus, producing toxins and lesions in fish. As a result, nutrient management is mandatory as of January 2002 for farms on the East coast. Bollero believes that it is just a matter of time before nutrient management becomes mandatory in the Midwest as well.

PROACTIVE FARMING

The impending threat of nutrient management is something that Bollero believes presents Midwest farmers with a rare opportunity. He reasons that if nutrient management is indeed on the horizon, farmers might feel better about the changes they will need to make if the changes are their own idea—farmers can choose to be proactive rather than reactive in their farming practices. "If we anticipate mandatory nutrient management—changes that are coming—then it's wise to encourage farmers to take the lead in these farm practices now rather than being forced to later," says Bollero.

Williams has already begun making changes and seems to thrive on the challenges farming brings, along with its successes and disappointments. There is an obvious excitement in his face and voice as he tells of a new cover called chickling vetch that he is trying out on a small patch of land. "I read about it and got the seed from Canada. It's supposed to set up to 200 pounds of nitrogen per acre, which is double the amount of hairy vetch. If it works, I'll work it into our rotation."



Allen Williams rotates white corn/soybeans/double crop of wheat and sunflower, followed by a cover crop of wheat or rye on his non-organic acres.

Cover Crop Resources on the Web

An online edition of the book, *Managing Cover Crops Profitably* explores how and why cover crops work and provides all the information needed to build them into any farming operation. This is the most comprehensive book ever published on the use of cover crops to sustain cropping systems and build soil.
<http://www.sare.org/handbook/mccp2/index.htm>

Reports from research on the Illinois Stewardship Farm which compared the economics of conventional, no-till, three-crop and organic cropping systems.
http://www.aces.uiuc.edu/asap/research/stew_farm/Report-2-02.htm

Practical Farmers of Iowa is a non-profit organization whose mission is to promote farming systems that are profitable, ecologically sound, and good for families and communities.
<http://www.pfi.iastate.edu/>

Appropriate Technology Transfer for Rural Areas (ATTRA)
<http://attra.ncat.org/attra-pub/covercrop.html>

University of Illinois Agroecology/Sustainable Agriculture Program
<http://www.aces.uiuc.edu/asap/covercrops/>

But Williams admits that his experiments and changes are also motivated by profit. He currently farms a small percentage of the acres he rents organically and is slowly transitioning more acreage. "The economics of farming today are driving me to going more organic," he says. "I can make more money, not a lot, but some more on organic crops."

On the organic acres, Williams uses a four-year rotation of corn/soybeans/wheat/mix of alfalfa, clover and grass. On the non-organic acres, he rotates white corn/soybeans/double crop of wheat and sunflower, followed by a cover crop of wheat or rye. On organic fields, he also uses clover every fifth year to rejuvenate the soil and adds chicken manure and compost.

Once he got the cover crops started, he has used his own seed from year to year so there isn't a new expense to purchase the seed. "And," he says, "there really isn't a lot of extra labor, just planting the cover crop. In the spring, you kill it and most farmers would use a burndown herbicide anyway so it's just a little more work in the fall."

Williams also likes the health benefits of a cover crop for the environment and for his family. He likes not having to use as many pesticides and says that the cover crops help a lot in reducing weeds. "The first year of corn rootworm infestation, we lost about 50 bushels per acre on the conventionally farmed field. On the organic field, we took a big hit because we couldn't use pesticides. But the return per acre was still higher on the organic crops."

From the researcher's perspective, Bollero is not suggesting that farmers make the switch to organic farming or other practices they perceive as radical. "We're not saying that farmers need to make major changes in their crop rotation or plant some unusual crop like eucalyptus or something," Bollero jokes. "If, for instance, there are 27 million acres of farmland in Illinois and even 10% of those acres adopted these different farming practices, it would make a tremendous beneficial impact on agriculture and the environment."

Williams realizes that farmers are reluctant to try new things. "Corn and beans grow well here, and there's an infrastructure set up to handle the grain," he says, "But especially if the farmer owns the land, they'd want to have a long-term commitment to prevent soil erosion, gain nitrogen, eventually increase yield, and improve the soil health."

FOR THE SAKE OF THE SOIL

Soil health is hard to define and hard to measure. But Bollero compares the long-range plan to improve soil health to putting money into a long-term savings account. You won't see dramatic benefits right away, but in time, you will. Like a savings account, soil health is a long-term pay-off. That's the philosophy of many of those in favor of using cover crops. Bollero says that one of the ways cover crops improve soil is by keeping it in constant use. "The soil is working year round," he says. Planting cover crops between cash crops keeps the soil working, adding nutrients for the future.

The Thompsons continue to use and experiment with cover crops regardless of changes in yield that they've experienced on their farm. Over the years, they have attributed both increases and decreases in yield to cover crops, realizing that many other variables also play a role. Still, they conclude that despite agronomic and economic setbacks, they will pursue various management techniques in order to "take advantage of long-term improvements in soil structure that cannot be given a price tag." 🌱

Debra Levey Larson is a writer at the University of Illinois in the College of Agricultural, Consumer and Environmental Sciences.



Williams points to an emerging rye plant being utilized as a cover crop after harvesting a field of organic soybean.

Miscanthus: New Crop for U.S. Farmers?

by LeAnn Ormsby

Miscanthus, a tall perennial grass that grows 12 to 14 feet high, is being studied by C-FAR-funded researchers as a possible new crop for U.S. farmers. Miscanthus is already proven as a successful biomass crop in Europe, and an AgriFIRST 02 project in Piatt County, Illinois, has shown it is technically possible to grow miscanthus on a field scale. Miscanthus has the potential to increase the stability of farm incomes by providing farmers with another agricultural product while also reducing U.S. dependence on foreign oil.

"Recent events in the United States and abroad have highlighted the crucial need for energy sources that are not only clean and renewable but also domestically abundant," said

Emily Heaton, a University of Illinois graduate student in crop sciences. "One acre of miscanthus can provide the same energy as nine tons of coal."

In Europe, grassy biomass crops such as miscanthus are used for energy production by being burned with coal. Power stations fueled solely by plant biomass have been built and are operational in Britain and Denmark. Using computer models, researchers at the University of Illinois predict what miscanthus yields would be when grown on farms in the Midwest.

"Our model predicts that no matter where the crop is grown in Illinois, it will yield as well as or better than it does in Europe," said Stephen Long, University of Illinois plant biologist. "With C-FAR support, we are testing these predictions with trials of the crop across the state."

Long estimates Illinois farmers could harvest from 11 to 17 dry tons of miscanthus per acre per year. While miscanthus is also being studied for use in producing agricultural fiber products, its most important use in Illinois is likely to be in generating electricity. Dry miscanthus contains virtually no sulfur. Illinois coal is high in sulfur; mixing the two would result in lower emissions of sulfur per unit of electricity generated. This will benefit Illinois coal in allowing its combustion and Illinois agriculture in finding another profitable use of the land. Miscanthus is also suitable for marginal and slope land, which could extend the productive acres.



Emily Heaton, who is 5'4" tall, stands next to the miscanthus grass in order to demonstrate its remarkable size.

Because miscanthus is a sterile hybrid that does not produce seeds, planting is time consuming. Farmers must dig holes and plant sprigs, or pieces of the root called rhizomes, one at a time. The crop can be harvested in its second growing season, with yields quickly increasing through its third year. "You do need labor to put the crop into the

- As a sterile hybrid, it cannot spread or become a noxious weed.
- The crop can be planted alongside water supplies to reduce fertilizer runoff, and it provides cover for wildlife.

The use of miscanthus as a biofuel in Illinois is still in the research and development phase. Dynege, the

the greenhouse effect and global change. The government is currently considering tax credits for electricity generated from renewable sources, which would further boost the value of miscanthus.

"The federal government has recognized the vital role agriculture can play in satisfying U.S. energy demand," said Heaton. "Biofuels, specifically energy crops, were included in the new 2002 farm bill, reflecting the increased importance of these crops in the U.S. energy and agricultural portfolio." 🌱

"One acre of miscanthus can provide the same energy as nine tons of coal."

ground, but after that it involves considerably less labor than corn or soybeans, and current figures indicate it will be more profitable based on current energy prices," said Long. Long, who led production research in the European Union on this crop before moving to Illinois, said that miscanthus offers a variety of attractive characteristics for farmers:

- As a perennial, it is a low-input crop needing no annual tillage or planting.
- Rapid growth in the spring allows it to outgrow weeds.
- The plant has no known pests or diseases.
- Nutrients are recycled back into the soil as the plant dies back, so there is little fertilizer requirement.
- The crop can be harvested any time between November and February.
- Individual plants can last up to 30 years.
- The plant sequesters carbon in the soil at a rate of two tons per acre per year, giving it added value in the carbon credit market.

parent company of Illinois Power, is the only power company in Illinois that has currently offered to buy miscanthus and has indicated that it won't be ready to harvest biomass crops on a large scale for another five years. The energy company estimates that it could eventually pay \$40 to \$50 per ton for dried, harvested miscanthus. Dynege is looking for farmers within a 50-mile radius of its power plant in Havana who are interested in growing the crop. While miscanthus doesn't burn as efficiently as coal, it produces far fewer pollutants. As energy companies are forced to meet stricter environmental requirements, the crop is becoming more appealing.

Burning miscanthus, unlike fossil fuels, does not add carbon to the atmosphere; the crop fixes the carbon from the atmosphere as it grows, and the carbon is returned when the miscanthus is burnt. There is thus no net effect on the atmosphere, and such renewable energy systems avoid

LeAnn Ormsby is communications director for the Illinois Council on Food and Agricultural Research (C-FAR).

Another Look at Miscanthus

by Debra Levey Larson

John Caveny, president of Environmentally Correct Concepts Inc. (ECCI), was first introduced to miscanthus by Emily Heaton and Steve Long, University of Illinois crop scientists. Caveny is interested in miscanthus for its potential as a bioenergy crop as well as its ability to sequester carbon.

"ECCI has U.S. patents and corresponding foreign patents relating to quantifying the amount of carbon dioxide that is removed from the air by deliberately managing plants to do that," said Caveny. "Once amounts are quantified and verified, these amounts can be traded, banked, or sold.

These credits will be an additional source of income for farmers and ranchers around the world."

Caveny believes that the production of grassy bioenergy crops presents a real opportunity for Illinois agriculture.

"Right now we are rather limited to switchgrass that yields 4 to 6 tons per acre per year of harvestable dry matter," he said. "Miscanthus has the potential to produce in excess of 15 tons of harvestable dry matter per acre per year." Ignoring establishment costs, the annual variable expenses, fertilizer and harvesting are about the same per acre. "If a higher-yielding crop is available like miscanthus, the economics and profit potential to the farmer look better," said Caveny.


ECCI submitted a proposal to AgriFIRST 02 that was funded to investigate the agronomic and economic potential of miscanthus as a biomass crop for energy. The grant provided technical assistance to help establish the largest commercial planting of miscanthus for renewable energy in the U.S. The commercial test bed is in rural Piatt County, on Caveny's farm. "The problems of establishment, best manage-

ment cultural practices and material handling haven't been worked out yet," said Caveny. "But we have demonstrated that it is technically possible to grow miscanthus in Illinois."

Participants in one of last year's field days visited Caveny's farm and had the opportunity to ask questions about this new crop, and they had plenty:

"Where do I get plants?" Caveny said that although the plants are not available right now, he hopes to create a seed stock nursery and plant fields on a custom basis. "What would I do with it?" Caveny replied that it is an energy crop and not good for grazing. "Farmers also wanted to know if it would spread like kudzu," said Caveny. "I explained that miscanthus is a sterile plant. It must be planted from pieces of the rhizomes like potatoes. It produces no underground runners. Each individual plant only expands to a diameter of about three feet and can be killed with glycosate.

"Energy from wind farms and solar collectors has potential, but Illinois' trump card in the field of clean, renewable energy springs from the prairie," said Caveny. "The soils and climate allow Illinois farmers to efficiently grow great quantities of biomass that can be converted into electric energy. Green energy from biomass crops, specifically *Miscanthus x giganteus*, provides an opportunity for the agricultural and energy industries to work together in finding profitable and sustainable new crops while simultaneously providing clean, renewable fuels and other ecosystem services."

Caveny believes that miscanthus will become a new profitable and sustainable crop for Illinois farmers. "This new crop will be purchased by the electric utility industry," said Caveny, "and all Illinois citizens will benefit from cleaner air and a secure, ample supply of safe domestic electric energy." 

Debra Levey Larson is a writer for the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois.

Attitudes Toward Clovers Surveyed

By Dean Oswald

At the April 2003 American Forage and Grassland Council annual meeting in Lafayette, Louisiana, a seminar was offered on clover establishment, benefits and utilization. Garry Lacefield, Kentucky Extension forage agronomist, and Don Ball, Auburn University Extension forage crop agronomist, presented papers on clover utilization. They listed six benefits to incorporating clovers into a grazing program:

- Improved forage quality
- Lower nitrogen fertilizer cost
- Better distribution of pasture growth
- Increased forage yield
- Crop rotation benefits
- Reduced animal toxicities

Recently the Oregon Clover Commission asked Lacefield and Ball to survey other Extension forage crop agronomists throughout the United States about using clovers in forage/livestock programs. Responses were received from 71 agronomists in 35 states. Participants were asked to rank a number of statements on a scale of 1 to 10 (1 = strongly disagree; 10 = strongly agree).

The five statements receiving the greatest agreement among agronomists were the following:

Clovers can significantly improve the forage quality of a pasture.

The average score was 8.6. Responses were very positive and indicate a high awareness of the forage quality attributes of clovers and a major benefit that results from the use of clovers.

Better grazing management could greatly increase clover populations in many pastures in my state.

The average score was 7.6. Agronomists seem to feel strongly that if producers knew more about grazing management, increased clover populations could result.

I believe the use of clovers in forage/livestock programs is becoming increasingly desirable and feasible.

The average score was 7.5.

Better distribution of pasture growth is an important reason for using clovers.

The average score was 7.0. Extension agronomists appear to view improved distribution of forage growth in pastures as a highly desirable trait, and clovers can accomplish this in some situations.

Producers in my state don't fully realize the benefits that clovers offer.

The average score was 7.0. There is a significant need to provide producers with additional information regarding the benefits of clover. This survey revealed that Extension forage crop agronomists overall view clovers as being highly useful in forage/livestock programs. Potential problems or disadvantages were ranked as being of little concern.

Clovers are agronomically sound, environmentally friendly and economically advantageous. Producers should consider improved grazing management and the use of clovers in increasing forage quality and yield. Extension crop and animal systems educators can assist producers in selecting clover species and management systems that will enhance their forage/livestock system. 🌱

Dean Oswald is a University of Illinois Extension, animal systems educator.

6 Benefits to incorporating clover into grazing

- Improved forage quality
- Lower nitrogen fertilizer cost
- Better distribution of pasture growth
- Increased forage yield
- Crop rotation benefits
- Reduced animal toxicities

Illinois Pumpkin Proposal Funded

By Gerry Walter



University of Illinois crop scientist Mohammad Babadoost and Sayed Zahirul Islam, a postdoctoral research associate working with him, use a technique that exposes pumpkin seedlings to red light to induce disease resistance.

A University of Illinois crop scientist's trial of innovative methods for controlling plant diseases is among 18 proposals selected for FY 03-04 funding at the March meeting of the North Central Region Sustainable Agriculture Research and Education (NCR SARE) administrative council in Kansas City.

Mohammad Babadoost's project, "New Strategies for Management of Vegetable Diseases in Organic and Traditional Farms," will evaluate the effect exposure to red light has on development of *Phytophthora*-related diseases in pumpkin seedlings. Babadoost's was the only Illinois proposal funded.

The council's funding choices reflect both the diversity of Midwest agriculture and the breadth of SARE's mission. Slightly more than half the nearly \$2 million in funding went to 10 research projects, with the balance allocated to eight sustainable agriculture educational efforts. Projects focus on issues in crop and livestock production, rangeland management, food safety and local food security, and sustainable agricultural education opportunities for high school and college students.

Projects promising to explore new marketing opportunities or strengthen local food systems did not fare well in this year's funding process.

continued on next page



*Fruit rot is one possible manifestation of *Phytophthora* infestation in processed pumpkin.*

CALENDAR

July 29 to 31

Upper Midwest Grazing Conference
(sponsored by 4-State Extension)
Lacrosse, Wisconsin

The conference features speakers from the Upper Midwest, with farm tours, a trade show, and networking opportunities. For more information, visit <http://www.wisc.edu/cias/uppermidwest/>.

July 29 to August 1

InfoAg 2003
Indianapolis, Indiana

The sixth Information Agriculture Conference will focus on site-specific crop and soil management, remote sensing, and computer applications in agriculture and will include hands-on workshops on data management, exhibits and demonstrations. For more information, visit <http://www.farmresearch.com/infoag/>.

September 16 & 17

64th Minnesota Animal Nutrition Conference
St. Paul, Minnesota

The Minnesota Nutrition Conference is an important forum for the nutrition industry. Local, national and international animal nutritionists gather to learn about the current innovative research being conducted at universities, in industry and at government centers. This year the conference focus is dairy, beef, swine and poultry nutrition.

For more information, visit <http://www.cce.umn.edu/ag/mn-nutrition.shtml>.


November 2 to 6

2003 ASA-CSSA-SSSA Annual Meetings
American Society of Agronomy (ASA)-Crop Science Society of America (CSSA)-Soil Science Society of America (SSSA)
Denver, Colorado

Over 2,800 symposia and paper/oral sessions will cover topics such as plant genomics, turfgrass science, soil mineralogy and integrated agricultural systems. The event also features exhibits, a career fair, guided tours, companion activities and childcare. For more information, visit <http://www.asa-cssa-sssa.org/anmeet/>.

Illinois remains historically under-represented in NCR SARE research and education grant funding.

The council also moved to enhance the proposal review process by moving up the research and education grant preproposal submission deadline. This will give the technical committee and outside reviewers more time to work with investigators to improve proposals prior to the final funding decision, but it will also significantly lengthen the interval between the first submission and release of funds.

The council also increased by \$10,000 the total amount to be awarded in the graduate-student grant program. 

Gerry Walter is an adjunct assistant professor of agricultural communications in the Department of Human and Community Development at the University of Illinois. His academic training is in mass communication and rural sociology, and he has been a principal investigator or collaborator on a range of projects examining the ways to communicate information about sustainable agriculture. Walter is also the Illinois Representative to the NCR SARE Administrative Council. He can be contacted at (217)333-9429; gwalter@uiuc.edu.

Mohammad Babadoost can be reached at (217)333-1523; babadoos@uiuc.edu

TOURS

2003 SUSTAINABLE AGRICULTURE TOURS

Monday, July 14
Organic Farm Tour
The Land Connection, Woodford County

Tuesday, August 12
Community-Supported Agriculture
CSA Learning Center@Angelic Organics, Caledonia

Tuesday, August 19
Prawn Farming
Tanglefoot Farm, Simpson

Wednesday, September 10
Agritourism
Hardy's Reindeer Ranch, Rantoul

Wednesday, October 29
Waterfowl Fee Hunting
Pike's Hunting Club, Marion

Visit <http://www.aces.uiuc.edu/~asap/smallfarm/tourbrochure.pdf> for a printable brochure that includes more about the tours. For additional information, contact Deborah Cavanaugh-Grant at (217) 968-5512 or cvnghgrn@uiuc.edu. A small fee will be charged for each tour.

Registration at least one week in advance is required. A registration form is available online at <https://webs.aces.uiuc.edu/asap/index.html> or by contacting Cavanaugh-Grant.

AGRO-ECOLOGY 
News and Perspectives

University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
211 Mumford Hall
1301 West Gregory Drive
Urbana, Illinois 61801

127 25
Maria Porta
ACES LIBRARY
1101 S. GOODWIN
CAMPUS MAIL MC-633

AGRO-ECOLOGY

Science and Education for a Sustainable Agriculture



Volume 12 • Number 3

ACES LIBRARY
123 OCT 07 2003
03
UNIVERSITY OF ILLINOIS

CAMPUS RESEARCH UNDER WAY ON ORGANIC AGRICULTURE

by Dan Anderson and John Masiunas

FALL 2003

INSIDE

Weed Tolerance	5
Buffalo Farming	6
Chicago Fresh	9
NCR SARE Updates	11

A group of researchers based in the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois and the Illinois Natural History Survey, as well as U of I Extension and organic farmers, have banded together to launch a new research initiative examining issues of organic agriculture. Six acres assigned to the survey and located on the university-owned Cruse Farm have been set aside for the multi-year project. Earlier this year the group was awarded a sizable research grant from the USDA Organic Transition Program. What is affectionately called the "WORT (Windsor Organic Research Team) Project" is the largest concerted effort to date by university and survey researchers to focus squarely on questions related to organic agriculture.

The use of organic farming practices, characterized by the prohibition of chemically based fertilization and pest control, is increasing. Though some substances are allowed for field application, organic farmers must depend on alternative strategies such as biodiversity, long-term crop rotations, natural predators and beneficial insects to manage their farms. The methods used vary field by field, and require intimate knowledge of soils, crops, pests and the multiple interactions present in all biological systems. Interest in organic agriculture is growing because of continued increase in the market demand for organically grown food — at 20 to 25%, the fastest growing segment of the food industry for the last several years.

continued on next page



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen.

Please address all correspondence to:
Agro-Ecology Editors, W-503 Turner Hall,
1102 S. Goodwin, Urbana, IL 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Grant Program, the Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign and the University of Illinois Extension.



The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of *Agro-Ecology News and Perspectives*, contact Deborah Cavanaugh-Grant, (217) 968-5512, email: cvnghgrn@uiuc.edu

Campus Research, continued



Insect traps were used to reveal species present in the organic research field.

The WORT research reflects the obstacles farmers face in adopting organic practices, including the risk of shifting to new farming methods and a lack of readily available science-based information. It compares the influence of transition schemes that differ in management intensity and organic amendments on pests, plant health, soil fertility, soil invertebrates, and their interrelations. Management intensity treatments during the three-year transition period include intensive vegetable production, less intensive cash grain production, and grass-legume sod. The project's goal is to establish an organic systems program — a partnership of organic producers, researchers, and extension educators — that improves performance of organic systems and enhances farmers' ability to meet the growing demand for organic products.



Tomatoes were transplanted into plastic row-covers, a common practice for organic vegetable growers.



Straw mulch was spread for weed control between tomato rows.



Cover crop biomass sampling site.

One of the project's main features is involvement by organic farmers from the beginning. The research team has made a special effort to connect with a select group of Illinois organic producers and seek input from them so that research will have maximum application for growers. In addition to hosting a meeting last winter to present research ideas and get feedback, the team hosts a website where information is posted monthly and farmers have the opportunity to stay involved.

Plots were established for the first time in 2003, and baseline data to characterize the research site are being collected. Other organic activities on campus include a C-FAR-funded project to determine the market potential for Illinois-produced organic products. An Organic Task Force is also bringing together researchers, Extension personnel and others with an interest in organic agriculture. 🌱

For more information about the project, contact Catherine Eastman (ceastman@uiuc.edu; 217-333-6659) or John Masiunas (masiunas@uiuc.edu; 217-244-4469).



Plastic row-covers were used to control weeds within tomato rows.

Foam Mulch Promising for Weed Control on Vegetables


by Debra Levey Larson

Al Morgan of Clinton, Illinois, has patented a foam mulch that he hopes will become an alternative to herbicides for vegetable farmers and to black plastic for organic farmers. He received a grant from the USDA Small Business program and approached researchers at the University of Illinois to test the product and provide an unbiased evaluation.

"The foam kind of looks like shaving cream," said John Masiunas, a professor in the U of I College of Agricultural, Consumer and Environmental Sciences who tested the product. The mulch is made of degradable natural polymers, and the fibers are common cellulose materials like crushed seed hulls, corn cobs and cotton.

Masiunas explained that the foam is sprayed onto row crops like tomatoes, basil or pumpkins and in a couple of hours, it dries down to a mat. "Usually it's gray," said Masiunas, "but the color depends on what it's made from. In one of our treatments, the foam Morgan used was made from old blue jeans, so it was blue in color." U of I researchers experimented with a variety of colors of the foam, including black and red, because the color of the plant's environment can impact its growth. For example, reflective silver mulch has been shown to reduce aphid populations, Masiunas said.

"The mulch is easy to apply and weeds can't grow through it," he said. "And since it's made of plant residue and other natural materials, when it biodegrades, it doesn't harm the soil." Since it biodegrades, foam mulch doesn't have to be removed like the black plastic used in vegetable farming, so it's better for the environment. Masiunas said that using paper products as mulch isn't new but previously used materials have biodegraded too fast. The foam mulch works better because it persists for the whole growing season.

The down side is that farmers would need special equipment to spread the mulch. It can't be applied with standard farm equipment — farmers would need a big hose and a tank. Right now, Masiunas believes that due to the cost and special equipment needed to spread the mulch, it could most likely be used on a small scale in home gardens, landscaping and organic vegetable farms. 



A close-up of tomatoes growing in black foam mulch, two weeks after the mulch was applied.



An overview of the weed control within tomato and basil rows, four weeks after red foam mulch was applied.



Basil growing in red foam mulch.

SETTING A THRESHOLD

for Weed Tolerance in Vegetable Crops

by Debra Levey Larson

According to a University of Illinois researcher, setting a threshold for weed tolerance in vegetable crops is the key to helping farmers decide when or even if they should apply herbicides.



Snap beans starting to flower and produce pods.

"The threshold for controlling insects is determined from performing sweep nets or other means to collect and count insects," said John Masiunas, "but there isn't the same widely accepted threshold for weeds." Masiunas is a U of I professor in the College of Agricultural, Consumer and Environmental Sciences. Over the years he has studied a number of non-chemical techniques for managing weeds in vegetables, including living mulches and cover crops. This latest study was based on farmers' observation in the field.

"We wanted to develop decision tools that rely on the number of weeds that are present in the field," he said. "If there aren't enough to worry about, the farmer will save money on herbicides as well as the labor cost to hand


remove the weeds. And, if we can help reduce the labor costs in particular, that will help the vegetable industry become more competitive."

The study looked specifically at redroot pigweed and large crabgrass in fields of snap beans. The goal was to find the point at which managing weeds was necessary in order to avoid economic losses. Masiunas found that if there were more than four weeds per meter of row, they needed to be controlled.

Surprisingly, the study also found that snap bean fields with large crabgrass actually had fewer potato leafhoppers. Researchers believe that the leafhopper doesn't like the feel of that particular weed. So the presence of large crabgrass may actually be a deterrent to at least one pest. Conversely, redroot pigweed appeared to encourage the population of bean leaf beetles, by providing a better, shaded habitat for them to thrive in.

Masiunas pointed out that vegetable farmers do not have the advantage of corn and soybean farmers, who may use genetically modified seed. "There are no Roundup Ready vegetables," he said. Instead, vegetable growers rely on selective postemergence herbicides and hand-weeding.

If the threshold guidelines were followed, consumers and the environment would both benefit by having fewer herbicides entering the soil and water.

The study was funded in part by the North Central Integrated Pest Management Program. 



An overview of the snap bean treatment with low density of late emerging redroot pigweed. The weed has failed to overtop the crop.

Buffalo Farmer Featured in New Book on Innovative Farmers

by Jacob Dittmer

For most Illinois farmers, agriculture is corn and soybeans with the occasional livestock herd or wheat field. But Dan Anderson, co-coordinator of the Agroecology/Sustainable Agriculture Program at the University of Illinois, knows there is more to Illinois agriculture — Anderson is writing a book profiling Illinois farmers who practice alternative farming, including organic and nontraditional methods.

"I got the idea from a similar publication by SARE, the USDA's sustainable agriculture program," Anderson said. "It features farmers from all over the country. Unfortunately, there wasn't one Illinois farmer included. We have many, many innovative farmers in this state."

Each of the farmers Anderson has interviewed is attempting something unusual for Illinois farms. Some are trying new methods of preserving soils and improving low-quality soils. Others are dedicating all or a portion of their farms to the public for agritourism purposes.

"There doesn't seem to be much optimism in agriculture these days," Anderson said. "I think there are farmers out there who know they have to do something different to survive. This will be a book of real-life success stories showing farmers what is possible."

Overall, Anderson hopes to create awareness about new farming techniques and methods that aid in sustaining Illinois farmers, agriculture and the environment.

One farmer featured in the book is Terry Lieb, who farms in Piatt County near Monticello. Lieb has a small herd of four buffalo that graze in a small pasture next to his farmhouse. He plans to expand his operation by increasing the pasture the buffalo graze on and adding to the herd. Lieb will eventually sell buffalo meat as an alternative source of income.

"I'm a big fan of history," Lieb said. "I like the idea of looking out the window, seeing that herd and feeling like you're on the natural prairie."

Lieb is pleased with how well the buffalo get along since he purchased them. "They don't require much attention at all really," Lieb said. "All they need is grass and water and they have few health issues when they are kept like this."

Lieb is just one example of the farming diversity represented in the book, featuring Illinois farmers who are motivated to try alternative farming methods.

"The purpose of the book is more inspirational than educational," Anderson said. "It shows the diversity in Illinois agriculture and gives farmers examples of the alternatives that are out there for them to think about." Anderson hopes the book will reach many

"I think there are farmers out there who know they have to do something different to survive. This will be a book of real-life success stories showing farmers what is possible."

NEW BUSINESS BOOK FOR FARMERS

Building a Sustainable Business is a guide to developing a business plan for farms and rural businesses. Step-by-step strategies are detailed in the 280-page book, including how to take advantage of new opportunities, such as organic farming, agritourism, on-farm processing, direct marketing, alternative crops, and adding value.

For an order form and more information about the book, visit <http://www.misa.umn.edu/publications/finalbizflyer.pdf> or call 1-800-909-6472.

farmers as well as other Illinois residents making an impression by showing examples of successful innovators and alternatives in agriculture.

"Diversity spawns balance, vigor and strength in farming," Anderson said. "Sustainable agriculture is keeping people on the land— not just surviving, but thriving. That starts with healthy soil and ends up with healthy rural communities. Sustainable agriculture encompasses it all."

The book is being funded by the Illinois Department of Agriculture's C-FAR 2000 Sustainable Agriculture Grant Program, and is a special project of the Sustainable Agriculture Committee. Nominations for innovative

farmers were submitted through U of I Extension and other ag-based organizations, as well as agriculture publications. Anderson hopes to have the book ready for distribution this fall and also plans to create a website so that he can continue to add stories about innovative Illinois farmers. ☞

Jacob Dittmer is a student in the College of Communications at the University of Illinois.



Terry Lieb has a small herd of buffalo on his farm in Piatt County near Monticello. He plans to sell buffalo meat as an alternative source of income.

NEW WEBSITE HELPS PRODUCERS GO TO MARKET



Producers, buyers, sellers, and distributors in Illinois will now have a new online marketing tool in MarketMaker. This interactive website has been designed to find supply chain partners and to improve knowledge of where food consumers are located, and how they make food-related purchasing decisions. MarketMaker, a collaboration between the University of Illinois Initiative for the Development of Entrepreneurship in Agriculture (IDEA), the Illinois Department of Agriculture and C-FAR, is intended to aid marketers of value added food products in Illinois.

"The idea is to provide a one-stop shop for strategic marketing information for producers and food retailers alike," said Darlene Knipe, principal investigator for the project. "There is an abundance of marketing data available via the Internet and through various trade magazines, but to a novice user it can be a bit overwhelming. We've attempted to distill and organize that information into an easy-to-use interactive site." State-of-the-art mapping tools let users visualize strategic marketing information.

The idea for MarketMaker was an outgrowth of previous C-FAR projects exploring market opportunities for value-added meat products. The project required extensive market reconnaissance to gain a working knowledge not only of the end consumer but also of all the steps from the farm to the plate. Good marketing decisions were predicated upon having good practical marketing data.

Peter Goldsmith of the University of Illinois Department of Agricultural and Consumer Economics, a member of the MarketMaker team, explained that, "We had to be able to answer questions like who are the consumers that were most likely to buy the kinds of products we were evaluating. For every marketing question we're able to answer, new ones emerged. What businesses were currently serving

those consumers? Would they be potential partners in a venture with producers that offered a better product?

"Through that process we amassed an extensive archive of marketing data. Farmers engaged in value-added ventures began requesting marketing information for their own business plans and the need for a better way to disseminate marketing information became apparent."

The MarketMaker website is rich with demographic and business data that the user can query. Details can be summarized on a map to show concentrations of consumer markets and strategic business partners. "Providing this kind of information in a map-based format makes much more sense than business lists and statistical tables," states Pat Curry, a project co-investigator.

For example, a user can request lists of federally inspected packing plants along with a map that identifies their locations. If you are a grocery store manager looking for the closest producer of organic vegetables, you can query the website to find the names and contact information.

Census data is also a feature of the site. For example, a producer wanting to sell meat to Hispanic consumers can request a map showing the greatest concentration of upper-income Hispanic households, then request a complete demographic profile of those locations. This is the kind of information required in most business plans, but is also useful in determining feasible target markets. Fact sheets, customized demographic profiles and supporting research, can all be found on MarketMaker.


"We will always be adding and updating the site with new information" said Gina Backes, program coordinator. "Right now we are developing a series of materials on

marketing to ethnic populations. MarketMaker will always be a work in progress."

The next phase of the project is to build the list of Illinois food producers on the site. Since there is no complete list of Illinois farmers producing and marketing of food related products, University of Illinois Extension educators will be reaching out to the producers statewide to include their ventures in MarketMaker. There is no charge associated with having a business listed on the site.

"Our goal," said Knipe, "is to make the site a resource for all businesses in the food supply chain. We are as interested in helping a grocery store find farm-fresh eggs as we are helping the farmer find a place to sell them, so it's important to include as many producers in our database as possible."

Visit MarketMaker at <http://www.marketmaker.uiuc.edu>. Businesses can be added to the database by completing the online form provided on the site or by contacting Gina Backes (backes@uiuc.edu; 309-796-0512).

If you have questions about MarketMaker, contact any member of the development team: Darlene Knipe (dknipe@uiuc.edu; 309-792-2500), Gina Backes (backes@uiuc.edu; 309-796-0512) Pat Curry (curry@uiuc.edu; 217-782-6515) or Peter Goldsmith (pgoldsmi@uiuc.edu; 217-333-5131). 

CHICAGO FRESH

Partners with Growing Power

June 2002 saw the beginning of Chicago Fresh, an urban farming program that addresses the need to increase economic opportunities for targeted Chicago communities through the development of farming enterprises. The Chicago Fresh program, spearheaded by University of Illinois Extension Chicago Unit, provides education in farm business management, agriculture production, marketing and small business development.

Educators Rhonda Hardy – Community and Economic Development, Lynnette Mensah – Nutrition and Wellness, Maurice Ogutu – Urban Horticulture, Larry Wilson – Community and Economic Development, and Program Coordinator Todd Byrd work as a team to develop, implement and evaluate this initiative. Partnerships with several community groups, local organizations and businesses that work together to support this effort are a strong component of this project.

Chicago Fresh participants and other urban farmers repeatedly voiced the need for more training on how to market their produce to potential buyers. To fulfill this request, Extension partnered with Growing Power, a well-known urban agriculture site in Milwaukee, Wisconsin. Eight Chicago urban farmers and Extension staff attended a weekend training at the Growing Power site. A follow-up meeting revealed that attendance at this training was useful on several different levels, depending upon the expertise of the attendee. Those who were experienced in urban agriculture felt that the opportunity to network, learn from other urban farmers and bring back ideas was most beneficial. For those who were inexperienced in agriculture, it was a very useful exposure into the vast array of opportunities in urban agriculture. ☺

For more information, contact Rhonda Hardy (rihardy@uiuc.edu; 773-768-7779, ext. 203).

Maurice Ogutu, horticulture educator for University of Illinois Extension Northeast Region, explains plans to assist in helping urban agriculture enterprises to a Chicago Fresh community partner.



Ask ATTRA

Appropriate Technology Transfer for Rural Areas (ATTRA), the national sustainable agriculture information service of the non-profit National Center for Appropriate Technology (NCAT), has a new feature on its website — <http://www.attra.ncat.org> — that allows farmers and ranchers to submit questions about sustainable agriculture on-line.

“Ask a Sustainable Agriculture Expert” lets qualified users send their queries directly to NCAT’s agriculture specialists, who provide either tailored research reports or appropriate ATTRA publications to address the questions. Both the publications, which are also available for downloading from the site, and the research services are free to American farmers, ranchers, and those who serve them.

Questions and requests for literature can also be submitted by calling ATTRA’s toll-free number, (800- 346-9140). NCAT receives funding for the ATTRA project from the USDA Rural Business Cooperative Service.

DeKalb County Farmer Receives Sustainable Agriculture Award

by Michael J. Rahe, Illinois Department of Agriculture

The winner of the 2003 R. J. Vollmer Sustainable Agriculture Farmer Award is Joel Rissman. He was nominated for this statewide award by the DeKalb County Soil and Water Conservation District. The award was named for the first recipient of the award, R. J. (Bob) Vollmer who overcame physical injury from an accident when he was young and went on to become a leader in the early sustainable agriculture movement in Illinois. Agriculture director Chuck Hartke presented the award to Rissman during Ag Day at the Illinois State Fair.

Since Rissman started farming in 1991, the DeKalb County farmer has "been obsessed with stopping soil erosion at all costs." According to Rissman, "The soil is agriculture, and who wants to see their future go down the creek?" Sustainability to him means ensuring that the soil remains in place and healthy for generations to come. His farm models how soil-saving techniques can be applied profitably to any farm in the Midwest.

The Rissman farm consists of 300 acres farmed organically. Rissman uses conservation practices including waterways, contouring, strip cropping and filter strips in combination with crop rotations, cover crops such as hairy vetch, rye, alfalfa, oats, and clover, and innovative weed and insect control systems including flaming and biological controls. His diverse farming operation includes beef, chicken and turkey production, from which he uses compost and legumes as his primary fertility program.



Pictured, left to right, are Illinois Agriculture Director Chuck Hartke; Noelina, Adela, Kendyl, and Joel Rissman; and Jamie Bolander, Miss Illinois County Fair Queen from Olney in Richland County.

Rissman conducts a variety of on-farm research trials in an attempt to improve his farming system. He has also hosted several field days on his farm and has spoken at numerous others to share his expertise with the public.

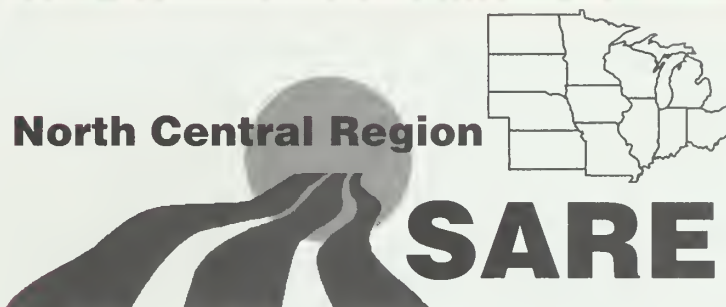
Rissman is a leader in the Sustainable Agriculture movement, having served on the North Central Region Sustainable Agriculture Research and education (SARE) steering committee, as past president of the Illinois Organic Crop Improvement Association (OCIA), and current member of the Illinois Sustainable Committee.

When Rissman leaves farming, he wants his successor to walk the ground and feel the soil is alive and has vibrant microbial life, high organic matter and water-holding capacity. Until then he says, "I plan to keep on improving what I am doing to make the land a showcase for Sustainable Agriculture!" 🌱

Michael Rahe is a sustainable agriculture representative in the Illinois Department of Agriculture.

NCR SARE Update

By Gerry Walter




Future program participants with North Central Region Sustainable Agriculture Research and Education (NCR SARE) will find new funding opportunities for youth and rural development projects thanks to actions taken at the NCR SARE Administrative Council's June meeting in Columbus, Ohio.

The council approved an outline for a four-state pilot program to award mini-grants to grade school and high school student projects that explore some aspect of sustainable agriculture. The programs' authors hope the mini-grants will help extend NCR SARE's educational efforts to an important new audience.

And while the council decided not to initiate a Community Innovation Grant program similar to one now in place in the Southern SARE region, it did vote to make social science and rural development a separate target category for next year's Research and Education (R&E) grants.

The council also took several steps to streamline administrative procedures. The new R & E grant calendar, which moved the preproposal submission deadline to early June, will allow the council to reduce the number of meetings to two per year from the current three. Council members also approved a new R & E preproposal review process that will use teleconferences and e-mail voting in place of activities currently on its face-to-face meeting agendas. The office in Lincoln, Nebraska received 190 R & E preproposals this summer, from which the council and the NCR-SARE Technical Committee ultimately will select about 40 for full funding.

In other business, the council approved 55 producer grants totaling \$404,632, as well as five Professional Development Program competitive grants totaling \$379,179. The council declined to expand a Michigan mini-grant program for extension on-farm projects regionwide, saying existing programs provide adequate support for such efforts.

Council members also reaffirmed a motion passed at the March 2003 meeting requiring all NCR-SARE proposal and preproposal authors to declare whether their project will be using genetically modified organisms and, if so, how GMOs will be used to advance sustainability. Also, reviewers will be asked to assess the author's justification for using GMOs as they score and comment on proposals. 

Gerry Walter (gwalter@uiuc.edu; 217-333-9429) is an adjunct assistant professor of agricultural communications in the Department of Human and Community Development at the University of Illinois. He is also the Illinois representative to the NCR SARE Administrative Council.

Five Professional Producer Grants Awarded in Illinois

The Producer Grant Program emphasizes the importance of farmer-driven research and indigenous knowledge, supporting innovative farmers and ranchers who are looking for ways to overcome obstacles using sustainable options. Individuals are awarded up to \$6,000. Group projects with three or more producers can be funded up to \$18,000. This year's recipients from Illinois are:

Raising Tilapia Fish in Tanks Along with Plants and Vegetables in Beds

Irene Seals — St. Anne, IL

Reinventing the Family Farm

Brenda Lyons — Sandoval, IL

Student Producers for the Future

Louis Reuschel — Golden, IL

"Harmony Farm:" Education Play Yard — Adding Value to Educational Farm Tours

Karen Cruttenden — Barry, IL

Okra Test Trial of 16 Varieties in an Organic Farming Operation

Jon Klingenberg — Butler, IL

Grant writing workshops will be held in January 2004. Information will be available in the next issue of this newsletter. In late October, details can be found at <http://www.aces.uiuc.edu/asap/topics/>

NCR SARE


Professional

Development Grants

Stu Jacobson, research specialist at the University of Illinois at Springfield was recently awarded a North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Program competitive grant for his proposal, "Professional Development Program in Apiculture and Pollination."

The project will provide information on sustainable beekeeping and pollination of food crops to professional and volunteer agriculture educators in Extension, the Natural Resources Conservation Service and various state agencies, as well as other organizations which provide information or services to the agricultural sector. For more information, contact Jacobson (Jacobson.Stu@uis.edu; 217-206-7991).

Dennis Eppin, University of Illinois Extension educator in crop systems at the Mt. Vernon Center, was awarded a grant to attend the National Pesticide Applicator Certification and Training Workshop. The Regional Travel Scholarship Program supports the participation of educators in professional development opportunities in sustainable agriculture. The intended outcome is educators who are knowledgeable about sustainable agriculture, develop partnerships with farmers and ranchers, and provide educational programs and activities that enhance the sustainability of agriculture and rural communities in the North Central Region. For more information, contact Paula Ford, Regional Professional Development Program Coordinator (pford@oznet.ksu.edu; 785-532-5328) or the NCR SARE Program (<http://sare.org/ncrsare/>; 402-472-7081).

The NCR SARE Professional Development Program also has funds available through the Regional Multi-State Workshop and Conference Support. This program provides funding for multi-state conferences and workshops that provide professional development in sustainable agriculture to educators in the North Central Region. For additional information, contact Paula Ford. 

University of Illinois USDA NCR SARE Mini-Grants

A mini-grant program has been developed to provide educators (including personnel from Extension, Natural Resources Conservation Service (NRCS), other governmental agencies, and non-governmental organizations and educators from the non-profit and for-profit sectors serving the food and fiber system) with resources to develop and deliver programs and activities that enhance the sustainability of rural and urban communities and the food and agricultural system. University of Illinois has approximately \$10,000 for mini-grants made available through USDA NCR SARE Professional Development Program funds.

The mini-grant program supports educational programs and activities that enhance the sustainability of agriculture and communities in Illinois. Appropriate outputs include projects that seek to implement community activities, production practices, financial planning or stewardship activities that improve the viability of Illinois agriculture and communities.

To achieve these products, educators from units including U of I Extension and NRCS, as well as other agricultural educators in the governmental, for-profit and non-profit sectors, are invited to submit proposals in support of educational programs, events, activities, demonstrations, and other innovative educational projects.

Competitive grants of up to \$1,000 are available. Funds can be spent between January 1, 2004 and December 31, 2004.

Priority will be given to project proposals with evidence of partnering and coordination among groups, organizations, and/or agencies. This may include offering educational programs at multiple locations.

APPLICATION REQUIREMENTS

There are two main components to an application:

A. Project Proposal. The project proposal consists of general information and questions to be answered. Proposals should be typed or printed in dark ink. The proposal must include the following elements:

■ Cover Page

- Project Title
- Contact information: Project Leader; Address; Phone; fax; e-mail
- Partners and/or collaborators
- Mini-grant funds requested, including the dollar amount
- Matching funds and source, including the dollar amount

continued on next page

■ Project Description.

The applicant should write a brief statement or paragraph to answer each of the following questions:

- What are the intended educational outcomes of the project?
(Describe who is intended to benefit from the educational event and what you would anticipate the person or persons to do as a result of participating.)
- What is the output or action plan to accomplish the intended outcomes?
(Describe briefly the actions and/or events that will occur to support the educational outcomes.)
- What is the evaluation plan to determine if your educational outcomes have been achieved?
(Describe indicators that will help determine if your outcomes have been successfully accomplished.)

B. Budget request. Submit a complete budget with narrative to explain planned expenditures.

	Mini Grant Contributions	Other Contributions
Travel	_____	_____
Operating and supplies	_____	_____
Other expenses	_____	_____
TOTAL	_____	_____

Budget narrative (explain expenses):


■ APPLICATION PROCEDURE

Proposals must be postmarked no later than November 15, 2003. Decisions will be given by December 15. Submit proposals to Deborah Cavanaugh-Grant, University of Illinois, P.O. Box 410, Greenview, IL 62642 (cvnghgrn@uiuc.edu; 217-968-5512).

■ APPLICATION EVALUATION

Proposals will be reviewed by a subcommittee of the University of Illinois SARE PDP Planning Committee. Funding recommendations will be based upon well defined educational outcomes; effective plan of action; potential benefit or outcome of the project; appropriateness of the budget; cooperation among producer groups, organizations, or agencies in planning and delivering the project; and potential contribution to the profitability and/or stewardship of Illinois producers. Projects involving community food systems, etc. will also be considered.

■ REPORTING

A brief report outlining the accomplishments toward the intended outcomes is required within 30 days of completion of the educational project. This narrative can be written similar to annual accomplishment reports. 

Sustainable Agriculture Travel Scholarship Program

A travel scholarship program has been developed to provide educators (Extension, Natural Resources Conservation Service, and other agricultural educators in the governmental, for-profit and non-profit sectors) with resources to increase their awareness, knowledge, attitudes and skills in order to develop and deliver programs and activities that enhance the sustainability of rural communities and the food and agricultural system. A total of \$5,000 in travel scholarships will be awarded each year on a first come, first served basis, at up to \$500 per scholarship. Matching funds (50/50) must be provided from other sources (county funds, specialization funds, etc.). Travel scholarships may be used to support participation in conferences, tours, and other programs as well as visits to study issues or programs with researchers, Extension personnel, educational institutions, foundations, or farm families.

Proposals may be submitted at any time during the year and should be submitted at least 30 days before to the proposed travel activity. Proposals (one page or less) should include a description and date of proposed travel activity, a proposed budget and a brief discussion of how participation will help the applicant develop or conduct programs which will help clientele improve the sustainability of their farming operations. Participants will be asked to write a short synopsis of the project to be published in a future issue of the *Agroecology News and Perspectives*. 🌱

For more information contact Deborah Cavanaugh-Grant, SARE Coordinator (cvnghgrn@uiuc.edu; 217-968-5512).

Farming on the Edge – Finding the Balance

by Gary Letterly

In mid-March I was able to attend the American Farmland Trust's National Conference in Pacific Grove, California. The conference theme "Farming on the Edge – Finding the Balance" served as a virtual umbrella to presentations that focused on how communities can balance growth, agriculture, and environmental preservation. The west coast location offered me a chance to experience how many private organizations, individuals, and agencies across the country are preserving farmland, finding ways to keep families on the farm, developing local and regional land use policy, and creating networks that connect directly to issues of sustainable agriculture. At the conference I was able to learn about some specific problems associated with land, water, ecosystem, wildlife preservation and farms in transition:

- Preserving Grassland Ecosystems -Allan Savory –Center for Holistic Resource Management – Albuquerque, New Mexico
- Water Use and Availability – Charles Bell – USDA/NRCS
- Farmland Protection: the Role of Public Preferences for Rural Amenities – Charles Barnard – USDA Economic Research Service
- John Hall – Community Based Needs Assessment – Maryland Extension and Chesapeake Fields
- Patty Cantrell – Michigan Land Use Institute's New Entrepreneurial Agriculture Project

The various workshop presentations and discussions helped provide a land use framework to what I observed during a day tour of the Salinas and Pajaro Valley farming area. Land use policy is rapidly evolving in this economically wealthy and ecologically diverse coastal-valley region. The regional land use policies are dramatically influenced by a public and private push for housing development, scarce water resources, management of highly fertile soil, intensive agriculture practices, and the imminent threat to unique and fragile ecosystems of the area. The area tour also provided me with an enlightened perspective of agricultural land use policies that are being developed to protect coastal natural resources but may be causing economic problems for minority farm families in the region.

EXAMPLES:

- 1)** Valley farmers, local government, and land use planners are co-developing guidelines to "managed and directed" growth as a compromise to housing development-consumption of highly fertile and productive soils (community of Salinas).
- 2)** The same approach is being taken toward preserving unique threatened ecosystems in the region (Elkhorn Slough–Monterey Bay). Elkhorn Slough is managed by a foundation that is acquiring steep-sloped erodible lands within the watershed and planting it back to native grasses and forbs.
- 3)** Minority family farms have been established on affordable but ecologically unstable lands over the past generation. Limited water resources coupled with highly erodible hillsides that have been purchased by minorities wanting to improve their economic base are being hit hardest by water use and land conservation policies and laws.

Gary Letterly is a natural resources educator with University of Illinois Extension Christian County Unit.

CALENDAR

October 29

Waterfowl Fee Hunting Tour
Pike's Hunting Club,
Marion, Illinois
9:00 a.m. to noon

Tour 530 acres of prime waterfowl habitat at Pike's Hunting Club. See mallards, pintail, teal, gadwall and more. Learn about the water circulation and cropping system at the club and available programs to enhance waterfowl habitat on private land. For more information, visit www.pikeshuntingclub.com. To register, contact Deborah Cavanaugh-Grant (cvnghgrn@uiuc.edu; 217-968-5512). You can also register online at least one week in advance at <https://webs.aces.uiuc.edu/asap/index.html>. Cost: \$10 per person

November 1 to 5

The 7th Annual Community Food Security Coalition (CFSC) Conference
Growing the Movement: New Opportunities and Challenges for Community Food Security
Boston, Massachusetts

This conference is an opportunity to connect with food activists and analysts to share experiences and learn from each other about building food systems that work for our communities. For more information, visit <http://www.foodsecurity.org/events.html>.

November 6 to 8

11th National Small Farm Trade Show & Conference
Columbia, MO

The trade show includes over 300 exhibitors, including demonstrations. Conference programs include short courses, seminars, farmers' forum, alternative energy talks, the stock dog clinic (Wednesday), and meetings and shows. Audio tapes from the seminars and short courses are available. For more information, visit <http://www.smallfarmtoday.com/tradeshow/default.asp>. For future reference, the 12th and 13th annual trade shows and conferences will be held November 4 to 6, 2004 and November 3 to 5, 2005.

December 7 to 10

The Second National Conference on Grazing Lands
Nashville, Tennessee

The conference objectives are "to heighten awareness of the economic and environmental benefits of grazing lands." Target audiences include consumers, conservationists, environmentalists, urban based resource interests, grazing land managers, landowners and others interested in effective natural resources management. Cooperators and other attendees are expected to come from the public sector (natural resource agencies and entities), and from the private sector (agricultural and natural resource entities, the farming and livestock industry, and environmental conservation organizations). For more information, visit <http://www.glci.org/2NCGLindex.htm>.

AGRO-ECOLOGY



News and Perspectives

University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
211 Mumford Hall
1301 West Gregory Drive
Urbana, Illinois 61801

NON PROFIT ORG
US POSTAGE PAID
PERMIT #75
CHAMPAIGN IL

107 26
Maria Porta
ACES Library
1101 S. Goodwin
Campus Mail MC-533

AGRO-ECOLOGY



DISCUSSING THE MANY FACES OF SUSTAINABILITY

By John E. Marlin

A new program in the College of Agricultural, Consumer and Environmental Sciences (ACES) at the University of Illinois offers students an opportunity to study sustainability from many angles. The program, known as ESAS (Ecology and Sustainability of Agricultural Systems), is an interdisciplinary, nondegree approach to education that combines classroom teaching, student advising, research and practical problem-solving.

During the fall of 2003, students could attend a weekly seminar series that highlights current issues in sustainability. Each lecture is given by different faculty experts in a related field, leading to a diverse list of topics and perspectives. Students in the program can expect to discuss everything from organic markets to atmospheric changes that will affect soybean crops in the future.

The seminars, coordinated by ACES faculty Michelle Wander and Germán Bollero, might be better described as faculty-moderated discussions. While the first half hour is a standard lecture, the last hour of each session is devoted to a discussion of the readings provided to the students before the class.

Graduate student Andy Larson describes the seminars as heated affairs, where difficult questions force students to "round out their knowledge and approach the problems from a different perspective." This different perspective is perhaps the program's greatest strength. By taking a multidisciplinary approach to the issue, ESAS provides a broader view of the topic of sustainability. The diverse lecture topics and subsequent discussions in a small-class environment give students the opportunity to express their viewpoints and preconceptions—to contribute and be challenged. Sometimes the discussion takes the class on an intellectual ride. Anne Silvis, a member of the ESAS faculty, described how a single question from a student

continued on next page

WINTER 2003

INSIDE

Working to Keep Small Farms Strong..... 4

How Would You Like Your Steak Raised? 8

Contrasting Viewpoint About *Miscanthus* 10

Fast Food Nation 11



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen.

*Please address all correspondence to:
Agro-Ecology Editors, W-503 Turner Hall,
1102 S. Goodwin, Urbana, IL 61801.*



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Grant Program, the Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign and the University of Illinois Extension.



College of Agricultural,
Consumer and
Environmental Sciences

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of Agro-Ecology News and Perspectives, contact Deborah Cavanaugh-Grant, (217) 968-5512, email: cvnghgrn@uiuc.edu

Many Faces continued

majoring in philosophy turned into a 20-minute discussion. This is a good example of the critical thought engendered by the program. It removes students from their regular circle of like-minded scholars.

In addition to attending the seminar, students are encouraged to pursue opportunities for interdisciplinary research within the field. But this does not limit them to issues of crop production. Students studying agriculture today must address the broad spectrum of social and environmental issues surrounding sustainability. One student interested in agricultural sustainability may choose to study organic regulation, while another studies polyculture, or even the ethics of various practices. This allows students to work in the diverse fields of their specializations and use the ESAS seminar as a medium of communication

For many, this program is a labor of love. Its professors have taken on this responsibility on top of their already tight schedules, showing a level of commitment that may not be found in a more established program.

between the parties. They become aware of the cross-disciplinary research that will prove crucial when dealing with sustainability issues in the outside world.

The ESAS program is currently being run by a voluntary association of faculty drawn from a variety of departments in the College of ACES, including Natural Resources and Environmental Sciences, Crop Sciences, Human and Community Development, Agriculture and Consumer Economics, and Agricultural and Biological Engineering, but also from more diverse areas such as law and sociology.

For many, this program is a labor of love. Its professors have taken on this responsibility on top of their already tight schedules, showing a level of commitment that may not be found in a more established program.

Despite the interest of faculty and students, the program is being held back by lack of resources and outreach. Most students who enter the program have to be informed by their advisors, or they stumble upon one of its promotional posters. As of yet, the program lacks a website or a listing in the official university texts. This promises to be remedied soon, but for now incoming students have to search a little harder to satisfy their curiosity about sustainable agriculture.

Overall, the program is going well and shows promise for expansion. Though it is unclear what direction it will take, the grassroots dedication of students and faculty is sure to keep the program both academically satisfying and productive in the growing debate about sustainability. 🌱

John E. Marlin is a student in the College of ACES at the University of Illinois (217-332-3084; jmarlin@express.cites.uiuc.edu).



ONE ANGLE ON SUSTAINABILITY PRESENTED IN THE ESAS PROGRAM

One of the guest lecturers in the ESAS program in the 2003 fall semester was Ken Salo, an environmental lawyer and assistant professor of environmental policy in the Department of Natural Resources and Environmental Sciences in the College of ACES. He spoke about the need to reflect on how natural and social scientists differently represent or frame the idea of sustainability and what these different views simultaneously show and hide or leave out.

To illustrate how framing concepts matter, Salo displayed different map projections of the world and asked students to discuss what these different worldviews or representations both revealed and hid as an exercise to discover the central purpose, or "centricity," of the mapmaker. For example, an Australian mapmaker, tired of being always "down under," represented Australia in the center of his map by "displacing" the other continents to the edges of his world view. After students acknowledged the importance of perspective, Salo described the current problems social and natural scientists have in framing a common "map," image, or representation of sustainability.

The energetic discussion that followed Salo's lecture included debates on the need to reflect on how things got to be this way as a part of deciding "what we need," as if we were again at some intellectual frontier where social and natural scientists as lawyers and philosophers with pragmatic farmers needed to work together for mutual survival. By the end of the hour and a half, students reluctantly packed up, and it was obvious that they had much to ponder for the next week's interchange. 🌍

WORKING TO KEEP SMALL FARMS STRONG

By Deborah Cavanaugh-Grant

Throughout the North Central region, the number of farms continues to decline while average farm size increases. At the same time, funding for Extension is declining in several states. These trends increase the pressure on educators to focus their attention on large farms—and on agricultural systems that work for large-scale farms. At the same time, small and moderate-size farms continue to play an important role in sustaining rural communities as sites of innovation in production and marketing techniques and as entry points to agriculture for beginning farmers, minorities and women.



Homegrown popcorn provided by the Joehl Queen Farm in Illinois was one of the many specialty crops offered to the participants at the Small Farm Task Force Workshop.

Identifying the Needs

Within the North Central region, most states have at least some programs relating to small-farm needs, but these programs are often isolated and disconnected. The North Central Region Small Farm Task Force provides communication, information exchange, and a critical mass for planning small-farm educational activities for educators. In March 2001, a regional workshop was held at the University of Illinois at Springfield. Extension educators, farmers, agency personnel and nonprofit organizations from thirteen states (Arkansas, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, West Virginia and Wisconsin), Washington, DC, and Australia participated in the workshop. However, follow-up was lacking, and the workshop organizers felt that continued regional support was needed to build both in-state and interstate networks for small-farm issues.

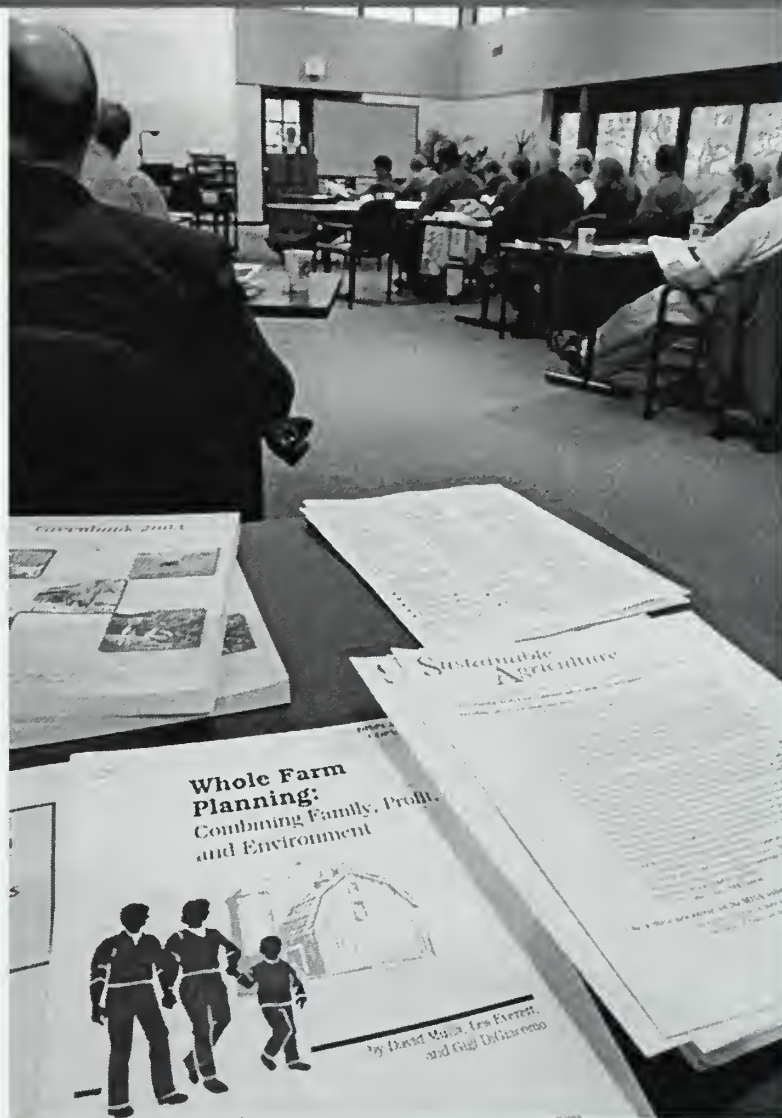
Building on a Beginning

To sustain the efforts of the March 2001 workshop, a planning group consisting of Deborah Cavanaugh-Grant (University of Illinois), Gwen Garvey (Farm Center-Wisconsin Department of Agriculture, Trade and Consumer Protections [DATCP]), Debi Kelly (University of Missouri) and Diane Mayerfeld (University of Wisconsin) was formed to develop another workshop. The goals of the second workshop were twofold: first, to create a better understanding and consensus among the region's educators of what is meant by "small farms" and why small farms deserve and need special programming, and second, to strengthen small-farm programming by building communication and partnerships both within states and across the region.

A proposal was submitted to the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Program, and a grant was awarded to the University of Illinois to coordinate the next workshop and develop the related materials. To meet the goal of creating understanding and consensus, the planning committee decided to develop a small-farm publication. As with sustainable agriculture several years ago, there is a strong sense among some educators (and others) that small farms are important both to our culture and to our food security, but there is a lot of uncertainty about exactly what a small farm is and how best to express its importance. As with sustainable agriculture, the search for a definition with precise boundaries is not the answer, but the issues are real and need to be addressed. The publication resulting from that committee is entitled *Small Farms in the North Central Region* and will be available in February 2004.

Not Just Another Workshop

To meet the goal of strengthening small-farm programming by building communication and partnerships both within states and across the region, a three-day regional workshop was planned and held November 5 to 7 in Columbia, Missouri. At present, many small-farm programming efforts are conducted by one or two people, often in isolation. This workshop was attended by 70 Extension educators, farmers, agency personnel, and representatives from non-profit organizations. Most of the activities were designed to foster cooperation among educators working on small-farm issues, so communication and partnerships could increase both the quality and effectiveness of programs. Participating states (Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio, and Wisconsin) were asked to organize state "teams" and to provide a list of the small-farm resources in their states. The resources were compiled into a publication entitled *North Central Small Farm Resource Guide*, which can be found on the North Central Small Farms website at <http://www.sfin.missouri.edu/>. The guide lists key publications about small farms, as well as contacts and information sources for small-farm information. It will draw on materials developed within the region, such as the *Kansas Family Farmer and Rancher Resources and Services Guide* and materials identified in the state team meetings before the workshop. It will also include resources developed outside the region, such as *Ways to Grow: Small Farm Decision-Making and Enterprise Planning Workbook*.



A table at the back of the room at the Small Farm Workshop displays booklets and other information to the more than 50 people who attended the workshop.

Sharing Ideas from State to State

During the workshop, participants had several opportunities to learn about programs in other states. Cathy Twohig (program director, Land Stewardship Project, Montevideo, Minnesota) and Eric Klein (Hidden Stream Farm, Elgin, Minnesota) discussed the Farm Beginnings program. Farm Beginnings, which started in 1997 in western and southwestern Minnesota, provides education, support, and equity to build opportunities for beginning farmers. According to Cathy Twohig, the goal of the program is to "help people to get a plan in place." Farm Beginnings was established by farmers and community members and includes Land Stewardship Project staff and members and various organizational partners. The program focuses on farmer-to-farmer networking and coaching and planning for the whole farm. It provides opportunities for no-interest livestock loans and for successful farming alternatives. Eric Klein, a Farm Beginnings participant, believes that the program "offers people the opportunity to think out of the box."

Inspiring Examples

Next, a panel of four speakers provided participants with examples of innovative small-farm programming. The panelists were John Baker, director, Beginning Farmer Center, Iowa State University Extension, discussing the Farm On Program (<http://www.extension.iastate.edu/bfc/programs.html#Farm%20n>); Tony Rickard, dairy specialist and Barry County program director, University of Missouri, discussing the Management Intensive Dairy Grazing Program (<http://www.psu.Missouri.edu/Dairy/index.htm>) and Karen and John Pendleton of Pendleton Country Market, Lawrence, Kansas (<http://www.pendletons.com>), discussing the Value-Added Processing Project. The presentations highlighted issues of particular importance to small-scale producers and demonstrated successful programs that involve producers while meeting real needs.

Collaborating, Communicating, and Planning

Mary Simon Leuci, program leader for Community Development, University Outreach and Extension, University of Missouri, provided a session on "How to Build Successful Partnerships." She discussed the importance of working collaboratively; the nature of networks, partnerships and coalitions; what contributes to successful collaboration and partnering; and tools for building successful partnerships. Leuci emphasized that "successful outcomes occur when people learn how to work together to use their resources as effectively as possible."



Paula Ford, regional Professional Development Program coordinator, NCR SARE presented a session on "Statewide Small Farm Planning and Outcomes." The workshop organizers felt that an important first step in strengthening small-farm programming efforts within states and across the region was to provide workshop participants a way to measure the impacts of the programming efforts that were developed. Since then, the NCR SARE program has moved toward using an outcome approach to their grant programs, requiring that projects specify their end results or effects and answer the "so what" question. Ford's overview of the program logic model provided participants the information they needed to identify one or two outcomes and the related activities in the subsequent 12 to 18 months. Each of the teams met, and an individual from each state provided a report to the entire group.

In the final panel, four speakers discussed "Regional and National Resources for Small Farm Programming." Gwen Garvey, Farm Link program coordinator, Wisconsin Farm Center-DATCP, discussed Farm Link (http://www.datcp.state.wi.us/mktg/agriculture/farm-center/transfers/farm_link.html), a program that helps farmers identify available farm transfer options, finds the farmer who best matches one's specific operation and develops a linkage plan to ensure a smooth transfer. Sean McGovern, outreach specialist for USDA CSREES's Sustainable Agriculture Research and Education (SARE) program, gave an overview of the SARE program (<http://www.sare.org>) and related grant and educational resources. Debi Kelly, coordinator, Missouri Alternatives Center, (<http://agebb.Missouri.edu/mac>), provided information about the Sustainable Small Farm Information Network (SSFIN) and the new North Central Small Farms website (<http://www.ssfin.Missouri.edu>). Jean Stramel, soil conservationist, USDA Natural Resources Conservation Service (NRCS); (<http://www.nrcs.usda.gov>) gave an overview of NRCS programs.

A groaning board of food displayed the wide variety of locally produced food items brought from across the North Central Region.



Maple syrup is a growing specialty crop for Midwest farmers who are looking to diversify their farm on non-crop acres.

The presentations from the workshop are available at <http://www.aces.uiuc.edu/asap/smallfarm>. Deborah Cavanaugh-Grant will work with the state contacts over the next year to ensure that states continue networking on small-farm issues and will assist with interstate collaboration on small-farm issues. ♻️

Deborah Cavanaugh-Grant is the co-coordinator of the Agroecology/Sustainable Agriculture Program at the University of Illinois.

SMALL FARM NETWORK

The North Central Region Small Farm Task Force, along with an NCR SARE grant, developed the Sustainable Small Farm Information Network (SSFIN). The SSFIN was created to meet the needs of present and future small-scale agriculture in the North Central Region by providing quick and easy access on a wide range of sustainable agriculture information related to small farms.

Small farm families clearly need this information so they can explore alternatives to traditional enterprises and ways to fit new alternatives into sustainable whole-farm systems.

With the wealth of information and the multitude of its various forms, the task force categorized the information by a search through categories and then subcategories.

Categories include:

- animal production
- community development (home-based business)
- crop production
- economics and marketing
- education and training (research methods)
- integrated farm systems
- natural resources and the environment
- pest management
- quality of life (including food systems)
- soil management

Information can also be searched by information origin (university, USDA, or other source) and by the different media types (articles, audio tapes, bibliographies, books, CDs, educational programs, guide sheets and fact sheets, websites, magazines and journals, newsletters, people contacts, conference proceedings, slides, and videos).

This is an ongoing resource as new information will be updated on a regular basis. For more information, visit <http://ssfin.missouri.edu>. ♻️

HOW WOULD YOU LIKE YOUR STEAK RAISED?

A New Premium Beef Product Developed by Asking the Customer First

By Debra Levey Larson

A new premium beef product that is being sold exclusively in several independent grocery stores in Chicago began with a survey asking customers what they are looking for when they want to buy a high-quality cut of meat. University of Illinois research specialist Richard Knipe and his wife and colleague, Dar Knipe, a U of I small-business marketing specialist, were able to bring beef producers together with these independent grocers to provide the kind of product their customers want.

After surveying customers in Chicago to determine the taste, texture, and other characteristics in high-quality beef that they wanted, Richard Knipe worked with several livestock producers located all over the state of Illinois to develop a specially branded beef product that would meet those specifications.

Wendel Underwood, meat manager at Sunset Foods in Northbrook, said that this was his first experience working with an actual producer rather than a meat salesman. "Working with Illinois Crown Beef, I know the origin of the meat, that it's an Illinois-grown product, corn-fed, and I've gotten to know some of the people who were actually in the beginning stages of the feeding of the animal and production of the meat. The average salesman out there doesn't know who is producing the meat. All he knows is that the box is brown and it says strips on it. He knows nothing about where the meat came from, how it was fed, and how it was handled all the way through the HACCP program to the market." (HACCP, or Hazard Analysis and Critical Control Point, is a systematic approach to the identification, evaluation, and control of food safety hazards adopted by the Food and Drug Administration.)

"Chicago is one of the three largest markets for specialty foods in the country," says Knipe. "And the Chicago area has a critical mass of consumers with higher-than-average income and above-average meat consumption, so that makes it an especially attractive market for producers of specialty meat products."




Sunset Foods in Northbrook is one of the grocery stores in the Chicago area selling Illinois Crown Beef.

Illinois Crown Beef is currently being sold at two Hyde Park Co-Op Markets in Chicago and at Sunset Foods in Highland Park, Northbrook, Lake Forest, and Libertyville. These stores were selected because surveys of store customers conducted in 2001 by U of I researcher Burt Swanson demonstrated that those customers had a much greater concern for quality when selecting fresh meat products.

Independent grocery stores have been able to stay in business by catering to the high-end customer who is willing to pay a higher price for a specialty product.

But customers who are willing to pay for high-quality beef aren't fooled by the mere presence of a higher price tag. "It's not good enough to take a commodity product, slap a label on it, and ask a higher price for it," says Knipe. "You have to demonstrate to the customer that your product contains unique characteristics that differentiate it from other similar products. In the case of beef, these characteristics may include being able to identify where the product came from, higher consistency, higher quality, grass-fed or raised without growth hormones or antibiotics—with reasons to back up why it is better or safer."

The number of independent grocery stores in the U.S. has decreased by 17.2% over the last decade, while chain supermarkets and mega-supermarkets have increased their numbers over 20%. "The extremely competitive nature of the industry has compelled food retailers to offer the broadest selection of products at the lowest possible price," says Knipe. "The result is grocery store shelves filled with products with declining profit margins. That tips the scales in favor of the larger supermarket chains that can sell in higher volumes."

The Illinois Crown Beef project is funded by the State of Illinois through the Illinois Council on Food and Agriculture Research (C-FAR). 

Debra Levey Larson is a writer for the University of Illinois College of Agricultural, Consumer and Environmental Sciences.



Illinois Crown Beef producers, from left to right, Jim Berry, Scales Mound; A. J. Harland, La Fayette; Larry O'Hern, Vermont; Jamie Willret, Malta; Ken Bryant, Dixon; Otto Wagenknecht, Milledgeville; David Albritten, Belknap; Joyce and Phill Ellis, Chrisman.



In conjunction with the 50th anniversary of the Farm Progress Show, Illinois Crown Beef received one of five Innovative Farmer of the Year Awards. The awards were presented by Illinois State Treasurer Judy Baar Topinka to five individuals or organizations that have shown a commitment to inspiring Illinois' agriculture industry with innovative and creative work toward the farm and food systems. The awards program is co-sponsored by the Treasurer's Office, U.S. Bank, ADM, and the Danville Area Convention and Tourism Bureau.

A Contrasting VIEWPOINT

About Miscanthus

By Robert N. Wiedenmann and Mary Kay Solecki

The article entitled "Miscanthus: New crop for U.S. farmers?" in the Summer 2003 issue of *Agro-ecology News and Perspectives* presented an interesting view on the potential use of that plant

as a sustainable biomass crop. Although we agree with the potential benefit from *Miscanthus* as a sustainable crop and new energy source, we also believe there are alternate viewpoints, considering this non-native grass from a different perspective. We believe the earlier article failed to address adequately some potential problems that *Miscanthus* may cause, and

we suggest those possible problems ought to be considered before recommending planting of that exotic grass.

Many of the same characteristics that were touted as benefits of the plant—non-native, perennial, quick-growing in the spring, no known diseases or pests, little need for fertilizer, and the possibility of being planting near waterways—are also all key characteristics of invasive plants. One other characteristic often listed of potential invasive species is the presence of congeneric species that are already known to be invasive. *Miscanthus sinensis*, also known as Chinese silver grass, was introduced to the United States as an ornamental about 100 years ago, but it is now considered an invasive species. Chinese silver grass spreads readily in disturbed areas and grows rapidly enough to prevent growth of other plants. It spreads by both seed and rhizome.

The article stated that because the cultivated *Miscanthus* is a sterile hybrid, it cannot spread or become a noxious weed. However, the plant can be established from pieces of rhizome, which does offer a means of spreading, especially if it were planted near waterways with flowing water. In fact, the article stated that planting pieces of rhizome is the means of intentional propagation—certainly rhizomes can be spread unintentionally, as well, whether through soil disturbance, cultivation or flooding. Some grasses, such as reed canary grass (*Phalaris arundinacea*) sprout from nodes of cut stems; although this phenomenon isn't common among grasses, it isn't known if *Miscanthus* could spread via this means.

Sterility of *Miscanthus* in itself doesn't preclude invasiveness. There are sterile hybrids of purple loosestrife, and orange daylily typically does not produce seed; neither of these plants spread via seed, yet both are problem invasives that spread via other means. Likewise, cross-pollination with other grass species can occur, which can yield hybrids that do produce seeds. The original Bradford pear tree (*Pyrus calleryana* 'Bradford'), planted extensively as an ornamental tree, produced sterile fruits. However, newer hybrids, developed and propagated for different characteristics (primarily durability under winter weather) are not sterile, and they cross-pollinate readily with the previously sterile varieties. The hybrids are very aggressive invaders of both natural and disturbed areas, displacing native plants and disrupting ecosystems.



Rob Wiedenmann and Charles Helm, scientists with the U of I Department of Natural Resources and Environmental Sciences, and Rami Kfir, a visiting scientist from South Africa, examine a slope covered with kudzu near the entrance to Little Grand Canyon in Jackson County.

FAST FOOD NATION:

The Dark Side of the All-American Meal

Reviewed by John E. Marlin



Throughout America today, a hamburger consisting of a single beef patty, two pickles, ketchup, mustard and a precise smattering of onions will be served. It will be passed through the window of a minivan in San Francisco; it will be washed down with a Coke in Boise, Idaho; and, in New York, a young child will nibble one for the first time. This burger has been sold over one billion times in 119 different countries. It is the meal that conquered the world, a meal that is a way of life, an ideology of business and a cultural phenomenon all in one. By sheer volume, it has shaped the face of agriculture as we know it, yet few people understand the effects of fast food beyond the restaurant.

Fortunately, with the help of *Fast Food Nation: The Dark Side of the All-American Meal* by Eric Schlosser, this period of ignorance has come to an end. Schlosser uses meticulous reporting and verbal dexterity to reveal the iceberg under the sanitary tip of the fast food restaurant. By covering every facet of the industry from the farm to the finger, he has created an indictment that is hard to put down and impossible to ignore.

While a book of staggering detail, *Fast Food Nation* does not get bogged down in facts. Schlosser presents the information in an eclectic mix of anecdotes, personal histories and pertinent statistics. Often entire subjects are framed in the context of a location's or individual's history. As the human element draws one in, Schlosser ties in facts and trends from the industry, lending a digestibility and immediacy to the crisis that may have been lost to less eloquent reporting. After one reads of the struggle of the idealistic family rancher or the trials of the cashier, learning the facts and trends behind their lives is not a chore, but merely a fleshing out of the story.

However, Schlosser's engaging prose does not come at the expense of good reporting. Not only does he bring years of firsthand experience to his work, it is impeccably researched as well. Evidence of this can be found in his bibliographic section. With its 70 pages, it is an achievement in its own right. This knowledge base is the greatest strength of the book. It leaves nothing to subjectivity and allows histories and practices of these companies to speak for themselves. Schlosser merely allows us to listen.

And there is much to hear. Schlosser covers the practical and social aspects of a number of topics important to those interested in American food production. On the occupational level, *Fast Food Nation* provides a thorough examination of the nation's meat-packing firms, their sanitation standards, and their dealings with their producers. Highlighted are the predatory dealings of cattle slaughter yards, the despicable conditions of the meat processing plants, and the truth behind the independent chicken farms of Tyson Foods. On the social side, Schlosser explores, among many other topics, the consolidation of the agri-giants and the treatment of unions and workers within the system.

Of course it would not be right to use the title *Fast Food Nation* without an examination of the restaurants that helped fuel this agricultural shift. These sections are quite potent, as they hit closer to home than the relatively hidden world of agriculture. There is a good chance of readers' having worked in one of

continued on page 12

The statement that *Miscanthus* has no known pests or diseases should raise serious alarm about the possible invasiveness. The primary characteristic of invasive species is the lack of natural enemies that keep populations in check. In its native habitat, *Miscanthus* is likely not invasive, except in disturbed habitats, because of the presence of native arthropods or diseases that act as natural enemies, keeping the plant in check. Clearly, when a plant is moved to a new part of the world we can capitalize on the lack of enemies to raise the plant without pests, but this also means that any escape from cultivation would go unchecked.

Many of our worst invasive species were brought for one purpose without consideration of other potential outcomes. Kudzu, for example, was intentionally introduced to North America to reduce erosion and for use as animal fodder. Kudzu in Illinois is known from as far north as the Quad Cities and has had greater than a hundred known populations; most recently it was discovered in the Chicago area. Bighead carp was introduced for aquaculture; this fish is threatening to enter the Great Lakes, which will yield unknown—but feared—consequences.

We suggest that the possible use of *Miscanthus* for biofuel should be examined from all angles, with input from specialists working with natural areas and invasive species, as well as from agriculturists and energy specialists. A thorough risk analysis may show that the risks or costs of *Miscanthus* are far outweighed by the benefits of a sustainable fuel that does not contain sulfur and that could diversify farm income. Without such a risk analysis, an informed decision will be difficult to make. At the same time, we cannot responsibly dismiss the possibility that *Miscanthus* could become an invasive plant merely because it is a sterile hybrid. Other factors are even more relevant and should not be overlooked.

Invasive species cost all of us large amounts of money—over \$500 per person per year, by one estimate—which no one seems to be willing to pay until economic losses accrue. One does not have to go far back in history to find examples of "good ideas" gone bad. The litany of woes is long and well documented—multiflora rose, buckthorn, autumn olive, kudzu, and various honeysuckles, for example. It behooves us to avoid repeating those errors of introduction by carefully studying the invasive potential of every plant species before promoting its widespread planting and use. 🌱

Rob Wiedenmann is an entomologist and director of the Center for Economic Entomology at the Illinois Natural History Survey, where he works on biological control of invasive weeds (217-333-6656; rwieden@mail.inhs.uiuc.edu).

Mary Kay Solecki is a field representative of the Illinois Nature Preserves Commission and works on the control of exotic, invasive plants (217-688-2622; msolecki@dnrmail.state.il.us).

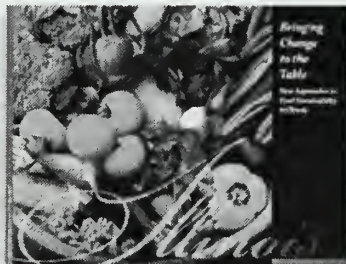
these restaurants themselves. This book is no doubt a vindication of all the conspiracy theories they may have considered while grumbling on break. Schlosser provides many examples of worker abuse, ranging from systematic managerial policies to having teens work overtime for no pay to millions of lobbying dollars poured into the government to lower the minimum wage. One of the more fascinating tidbits of this section is Schlosser's description of a visit to the flavor chemist's factory, in which one can open a test tube and experience the smells of smoke, prime rib, and even freshly cut grass. He finds these scientists to be artists, painting flavors onto the tasteless canvas that is post-processed fast food.

Along with the beefy (pun intended) subjects of fast food politics and agriculture, Schlosser brings a slew of peripheral knowledge that makes for a more satisfying whole. This includes the varied and exciting histories of fast food founders. One look at the felonious resume of Colonel Sanders and you realize that the pioneers weren't generic business men. Also included are snippets of history such as the founder of McDonalds and Walt Disney serving in the same unit in World War II, and how the early automobile industry bought up and destroyed its trolley competition only to replace the trolleys with GM-produced buses.

With so broad a dissertation, it is hard to quantify the achievement of Schlosser in this work. That a journalist like Schlosser could so thoroughly and eloquently tackle the scope of the fast food phenomenon is a tremendous boon for the public and the craft in general. In the end, *Fast Food Nation* leaves the reader with something that has become a rarity in the "muckraking" novels of late—a sense of optimism. Fast food is not inevitable, and it will continue only as long as we patronize it. As Schlosser says, "Fast food men are not bad men, they are business men," and it is up to us to tell them which products and practices should make a profit. 🌱

John E. Marlin is a student in the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois (217-332-3084; jmarlin@express.cites.uiuc.edu).

Publications



Bringing Change to the Table: New approaches to Food Sustainability in Illinois

Bringing Change to the Table is a collection of essays on food sustainability in Illinois. The forward was written by Michael Marcus, Chicago Community Trust senior program officer. Writers include Tom Spaulding, CSA Learning Center; La Donna Redmond, Institute for Community Resource Development; Rochelle Davis, Healthy School Coalition; Diane Doherty, Illinois Hunger Coalition; Robin Orr, University of Illinois Extension; and Juli Brussell, Illinois Stewardship Alliance.

"Illinoisans benefit from all those who are involved and dedicated to the issue of food security throughout our state. This book marks their progress; we can all learn from this initiative."—Rod Blagojevich, Governor of Illinois.

New Publication from ATTRA

Appropriate Technology Transfer for Rural Areas (ATTRA), the sustainable agriculture information service of the National Center for Appropriate Technology (NCAT), has a new publication entitled *Bringing Local Food to Local People*. It highlights and discusses the advantages and obstacles of marketing directly from farms to institutions, such as colleges and schools. It contains a spreadsheet that provides contact information for about 40 farm-to-institution projects, including the state, name and position of contact person, address, email, and phone number, as well as a brief description of the project.

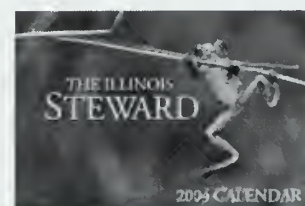
These and more than 230 other ATTRA publications are available free to farmers, ranchers, Extension agents, market gardeners, and others engaged in commercial agriculture, by calling 1-800-346-9140. The publications may also be downloaded from the ATTRA website <http://www.attra.ncat.org>.

2004 Illinois Steward Calendar and Subscriptions

The Illinois Steward 2004 Calendar is now available. This large-format wall calendar offers a way to celebrate the natural beauty of Illinois year-round through the stunning 15-1/2" by 9" photos. For a preview, visit <http://ilsteward.nres.uiuc.edu>.

To order, send a check made payable to the University of Illinois. Include your name, mailing address, city, state and zip code and the number of calendars at \$12 each that you would like to order.

Mail to: Karyn McDermaid
The Illinois Steward Magazine
W-503 Turner Hall
1102 S. Goodwin Ave.
Urbana, IL 61801
(217-244-3896; karynk@uiuc.edu)



For a subscription to *The Illinois Steward* magazine, contact McDermaid or print out an order form at <http://ilsteward.nres.uiuc.edu/form.pdf>.

WORKSHOPS

Grant-writing Workshops to be Held in January and February

Illinois producers and agriculture professionals can learn how to write grant proposals for two sustainable agriculture programs—the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Producer Grant Program and the Illinois Department of Agriculture's C-2000 Sustainable Agriculture Program.

January 21 in Decatur

Hosted by University of Illinois Extension,
Macon County
2535 Millikin Parkway

January 23 in Galesburg

Hosted by University of Illinois Extension,
Knox County and Henderson/Mercer and Warren Units
Knox Agri Center, 180 S. Soangetaha Road

January 26 in Sparta

Hosted by University of Illinois Extension,
Randolph County
313 W. Belmont

January 28 in Paris

Hosted by University of Illinois Extension, Edgar County
and Purdue University Extension, Vermilion County
4-H Grounds, IL Hwy 1 North

January 29 in Effingham

Hosted by University of Illinois Extension,
Effingham County and Jasper/Cumberland Unit
1209 Wenthe Drive

January 30 in Bourbonnais

Hosted by University of Illinois Extension,
Kankakee County
1650 Commerce Drive

February 3 in Pittsfield

Hosted by University of Illinois Extension,
Pike County and Adams/Brown Unit
1301 E. Washington

The workshops will be held from 10:00 a.m. until 3:00 p.m. Each workshop will offer individual grant-writing assistance.

"The workshops will include information to help farmers compete for grants from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Producer Grant Program," said Deborah Cavanaugh-Grant who is coordinating the workshops through the University of Illinois Agroecology/Sustainable Agriculture Program in the College of Agricultural, Consumer and Environmental Sciences.

Producers interested in research, demonstrations, or educating others about profitable, environmentally sound, socially responsible agriculture are encouraged to apply. "Those persons interested in writing an NCR SARE Producer Grant, are asked to bring a brief written summary of their proposed research idea. The goal is to have participants leave the workshop with a rough draft of a proposal," said Cavanaugh-Grant.

"The Producer Grant Program emphasizes the importance of farmer-driven research and indigenous knowledge," said Ken Schneider, former farmer/rancher and NCR SARE's producer grant liaison. "We support innovative farmers and ranchers looking for ways to overcome obstacles to a sustainable option."


In 2004, producer grants will be awarded in amounts up to \$6,000. Group projects that involve three or more producers can be funded up to the \$18,000 maximum. Funds will become available to successful applicants in fall 2004.

This year's workshops will also include information about the Illinois Department of Agriculture's C-2000 Sustainable Agriculture Grant Program. The program provides funds for agencies, organizations and individuals for (1) on-farm research or demonstration; (2) outreach and education; and (3) university research.

The workshops, conducted by the University of Illinois Agroecology/Sustainable Agriculture Program and the Illinois Department of Agriculture, will explain both programs and requirements to receive funding. Cavanaugh-Grant and Dan Anderson from the U of I, along with Mike Rahe from the Illinois Department of Agriculture, will be leading the workshops.

A producer grant recipient will be at each workshop program to relate the farmer experience in the NCR SARE Producer Grant Program. The workshops are co-sponsored by University of Illinois Extension, Illinois Department of Agriculture, and the Illinois Sustainable Agriculture Society.

Although there is no charge for the workshops, registration is required. Registration is available online at <http://www.aces.uiuc.edu/asap/topics/grantwriting.html> or by contacting Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

Information about the NCR SARE Producer Grant Program is available at <http://www.sare.org/ncrsare/02producercfp.PDF>. Information about the IDOA program, is available at <http://www.agr.state.il.us/C2000/index.html>. 

CALENDAR

January 14 to 30

Illinois Regional Tillage Seminars

8:30 a.m. to 3:30 p.m.

The yield results and other comparative data collected from plots on 18 farms throughout Illinois will be highlighted at a series of five seminars. The theme will be "Soil and Nutrient Management: Decision-Making for 2004."

Wednesday, January 14,

Richard's Farm Restaurant, Casey

Thursday, January 15,

Madison County Extension Office, Edwardsville

Wednesday, January 28,

Holiday Inn, Bloomington

Thursday, January 29, Kishwaukee College, Malta

Friday, January 30, Holiday Inn, Annawan

The seminars are co-sponsored by University of Illinois Extension, Natural Resources Conservation Service, Illinois Department of Agriculture, and Soil and Water Conservation Districts. Each seminar will feature seed, chemical, and machinery dealers; soil testing firms; and other agribusinesses as exhibitors. The Illinois Regional Tillage Seminars will provide continuing education credit hours for Certified Crop Advisers.

For more information, contact Bob Frazee, U of I Natural Resources Educator (309-694-7501) or Alan Gulso, Water Quality Coordinator, Illinois Department of Agriculture (217-782-6297).

February 5 & 6

Connecting Illinois' Watersheds

Peoria

This conference is the first designed to bring together the more than 160 watershed groups that are active in Illinois. It is recommended for anyone with an interest in water quality, conservation, economic growth of a community, and/or natural area preservation.

Participants will learn how to access watershed management tools online, locate funding sources, conduct a social profile on their watershed and motivate volunteers, and will have the opportunity to network with others interested in protecting Illinois' natural resources.

Advance registration is necessary. Registration is \$25 and will be available online at www.watershed.uiuc.edu or through your local Extension office. For more information call Susan Meeker at 309-694-7501 or visit the website.

February

Drainage Workshops

February 11, Rend Lake College, Ina

February 13, Hancock County Extension office, Carthage

February 16, Countryside Banquet Facilities, East Peoria

February 17, Holcomb State Bank, Rochelle

February 19, Kankakee Extension office, Kankakee

February 20, Christian Extension office, Taylorville

Narrower tile spacing, new tile products, shallow tile installation, nitrogen loss reduction techniques, and drainage law will be among the topics presented.

Reservations are due one week before a meeting.

For more information, contact Stanley Solomon, Engineering Technology educator, East Peoria Extension Center (309-694-7501) or your local U of I Extension office.

February 18

Farm Conservation Programs Teleconference

9:00 a.m. to noon at participating local University of Illinois Extension Unit offices

For more information, contact Jodie Tate (217-782-6515; jotate@uiuc.edu) or Susan Meeker (309-694-7501; smeeker@uiuc.edu) or visit

<http://www.extension.uiuc.edu> and click on "Calendar" and then "February 18." Pre-registration by Wednesday, February 11, is requested.

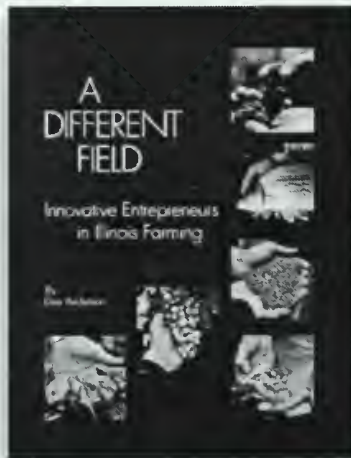
February 26

Soil and Water Conservation Society Annual Meeting
Levis Center on the U of I Campus, Urbana

The theme for this year's meeting is "Professional Development and Certifications." It will provide the opportunity for Illinois Chapter members of SWCS to become more familiar with professional development opportunities and certification programs available in natural resources.

The cost is \$15 for SWCS members, free for SWCS student members, and \$20 for non-members, which includes a buffet lunch. Advance reservations are required by February 18. Make checks payable to "SWCS" and send to Steve Hollister, SWCS Meeting Coordinator, NRCS, 16255 Liberty St., Morrison, IL 61270, or call 815-772-2124, Ext. 3.

BOOK FEATURES INNOVATIVE ILLINOIS FARMERS



Grapes, earthworms, buffalo, pecans, honey, and catfish—not typically what comes to mind when thinking about farms in the state of Illinois. But these and other unusual "crops" are featured in a new book about innovative farmers. The book is entitled *A Different Field: Innovative Entrepreneurs in Illinois Farming*, and was written by Dan Anderson of the University of Illinois Agroecology/Sustainable Agriculture Program. In its 40 pages, the book tells the stories of 18 farmers who are exploring alternatives to corn and soybeans.

To obtain a copy of the book, call 1-800-345-6087 Monday through Friday, between 8 a.m. and 4:30 p.m. or order online at <https://webstore.aces.uiuc.edu/shopsite/>.

A downloadable PDF version of the book is available online at <http://www.aces.uiuc.edu/~asap/resources/diffield.html>. Anderson plans to continue to interview farmers around the state who are doing innovative farming and add their stories to the website.

Funding for the book was provided by the Conservation-2000 Sustainable Agriculture Grant Program at the Illinois Department of Agriculture.



AGRO - ECOLOGY

News and Perspectives



University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
W-503 Turner Hall, MC-047
1102 S. Goodwin Ave.
Urbana, Illinois 61801

04115
86
APR 01 2004
ACES LIBRARY
UNIVERSITY OF ILLINOIS

pectives

AGRO-ECOLOGY

Science and Education for a Sustainable Agriculture 

Volume 13 • Number 1

2003 Tour Review

by Deborah Cavanaugh-Grant

SPRING 2004

INSIDE

Organic Certification	7
Local Food Forum	9
Bamboo Farms	11
Permaculture	14

Given the success of the 2002 tours, the Illinois Small Farm Task Force scheduled six tours in 2003. We wanted to again offer unique and interesting tours that would provide educators and agricultural professionals a look at the diversity of Illinois agriculture.

June 17 Chicago's Ethnic Grocery Stores

On this first tour, a group of 17 educators and farmers visited African, Caribbean, Vietnamese, Thai, Mexican, Latin American, Indian, Middle Eastern, Korean and Russian grocery stores. According to Evelyn Thompson, tour guide and owner of Ethnic Grocery Food Tours, "Chicago is a city of ethnic neighborhoods, and the people place great emphasis on maintaining the food patterns of their cultures of origin."



"Chicago is often referred to as the city of neighborhoods, and along with our neighborhoods come the grocery stores, bakeries, delis and markets that nurture and nourish the many ethnic food cultures we have. How fortunate for us that food preferences are one of the ways families keep their home ties alive."
Evelyn Thompson, owner of Ethnic Grocery Food Tours

The tour included stops in several grocery stores that featured a wide range of produce, meats and fish. We visited Vietnamese and Indian neighborhoods, Muslim meat markets, and a Swedish bakery and had a great lunch at Reza's, a Persian restaurant. Evelyn provided information at each stop about the produce, ingredients, cooking procedures and history of the food cultures. For more information, visit <http://www.ethnic-grocery-tours.com/>.

July 14 Organic Farm Tour

Our organic farm tour was done in collaboration with Terra Brockman, director of the Land Connection Foundation. The tour featured visits to three farms: a grain and livestock operation that has been certified organic since 1997, a farm that is in the second year of transitioning to organic and a

continued on next page



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen.

Please address all correspondence to:
Agro-Ecology Editors, W-503 Turner Hall,
1102 S. Goodwin, Urbana, IL 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Grant Program, the Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign and the University of Illinois Extension.



College of Agricultural,
Consumer and
Environmental Sciences

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of *Agro-Ecology News and Perspectives*, contact Deborah Cavanaugh-Grant, (217) 968-5512, email: cvnghgrn@uiuc.edu

Editor's note: In the Winter 2003 issue of Agro-Ecology News and Perspectives the article entitled, How Would You Like Your Steak Raised? it was stated that the project was funded by the State of Illinois through the Illinois Council on Food and Agriculture Research (C-FAR). The C-FAR funds were used for research and development. The project also received funding from AgriFirst and USDA Rural Development for non-research aspects of the project. The University of Illinois does not own or benefit financially from the sales of Illinois Crown Beef.

2003 Tours continued

diversified vegetable farm. We began at the farm of Larry and Marilyn Wettstein. On this 500-acre, certified organic farm, the Wettsteins raise corn, soybeans, oats, wheat, vetch, rye, flax, alfalfa and clovers. They also produce an assortment of meat, including beef, pork, lamb, chicken and turkey.

The second stop was at the farm of Rick and Sue Weigand, who transitioned to organic in 2002 with 26 acres of soybeans. Last year's bean field now has transitional wheat and will have corn next year. The plan is to have the first year of certified organic soybeans in 2005.

The final stop was at the Congerville farm of Henry and Hiroko Brockman. Henry's Farm (<http://www.henrysfarm.com>) is a labor-intensive, multigenerational, family-farming operation growing organic vegetables. Henry's parents, siblings, wife, children, nieces and nephews, interns, even the dogs, all contribute to the endeavor. They grow 450 varieties of vegetables on eight acres for sale to community-supported agriculture (CSA) shareholders in Bloomington and at the Evanston farmers' market.

After the farm visits, we drove to The Land Connection for an organic meal. Marilyn, Terra and members of Terra's family (her mother, Marlene Brockman, and sister, Teresa Santiago) spent considerable time and effort preparing the organic food that we ate both in the morning and at the noon meal. The meal included biscuits and gravy made from organic wheat flour from Henry's soft red winter wheat and organic milk and sausage from the Wettsteins; organic honey flaxseed bread made from Wettsteins' organic golden flax and honey produced by bees foraging in their organic fields; and soy flour cookies (oatmeal raisin and double chocolate chip) made by Marlene Brockman using soy flour from the University of Illinois soy research lab. For more information, visit <http://www.thelandconnection.org>.

August 12 Community-Supported Agriculture (CSA)

The first of two August tours was to Angelic Organics in Caledonia. Angelic Organics is the largest CSA organization in Illinois, growing vegetables and herbs biodynamically for more than 1,000 Chicago- and Rockford-area households. Members, called shareholders, buy a subscription to receive a weekly 3/4-bushel box of freshly harvested produce for 12 weeks from mid-August to late October. Shareholders can extend their subscriptions by purchasing a winter share that provides an additional four boxes of storage vegetables delivered in November and early December.



"While many people see no future in farming, we see a bright future. We see it in our oldest organic farmers, Willis Weigand (80) who transitioned in 1974, and in our youngest, Pete Wettstein (21), who is in his first year of transitioning his uncle's farm, seen in this photo. With a depth and breadth of experienced organic farmers, a rich heritage of independent family farms and a growing demand for locally grown organic products, we believe there is no better time or place to farm. It is not an easy life, but it is an independent, creative and largely self-controlled life—a life measured in both daily accomplishments and the long-term health of the farm and of future generations." Terra Brockman, director of The Land Connection Foundation



Youth leaders from Roots and Wings, a program for youth ages 8 to 14 that combines youth leaders with agro-ecology education and community service, share in hosting the field day at Angelic Organics.

When we arrived at the farm, Tom Spaulding, director of the CSA Learning Center (CSALC), welcomed the group and made a few comments. He introduced John Peterson, farmer/owner/and founder of Angelic Organics, who discussed his operation and took us on a tour of the 94-acre farm that has approximately 25 acres in vegetable production each year. We were fortunate to be visiting on the day that they were packing produce boxes, which that week included greens, peppers, eggplants and tomatoes. Next, Tom provided an overview of the CSALC and gave us a tour of the facilities. The center provides agro-ecology education for youth, adults, and families and education and training opportunities for urban farmers. The center also holds workshops and outdoor experiences on cooking, soap-making, animals, arts and crafts, health and more. We ended the day with a noon meal of wonderful fresh greens and vegetables. For more information about Angelic Organics, see <http://www.angelicorganics.com> or the CSA Learning Center (<http://www.CSALearningcenter.org>).

August 19 Prawn Farming

The second tour in August allowed 85 participants to visit a unique operation in southern Illinois—a prawn farm. Grover Webb, owner of Tanglefoot Farm, hosted this unique tour, which provided an overview of prawn production and the related opportunities for diversification of grain and livestock operations. Grover conducted a tour of the ponds and discussed how freshwater prawns are produced. Ed Wetzel, graduate student at Southern Illinois University Fisheries and Illinois Aquaculture Center, shared information about prawn biology and reproduction. Wynne Forrest, aquaculture specialist from Kentucky State University, discussed issues relating to pond



Close-up of a freshwater prawn.

management. Following the tour, we drove to Dixon Springs Agricultural Center in Simpson for a delicious lunch that featured freshwater prawns!

September 10 Agritourism

In September, we visited Hardy's Reindeer Ranch in Rantoul. The tour began in a western-style banquet hall, where we learned more about this unique operation. Mark and Julie Hardy provided an overview of their business, from their start as a Christmas tree farm to the addition of reindeer (and all of the education that was necessary to raise reindeer in central Illinois), a corn maze and a pumpkin patch to their newest activity—a dinner theater. Bruce Wicks, associate professor in the Department of Leisure Studies and director of the Office of Recreation and Tourism Development at the University of Illinois, spoke on ways to explore agritourism possibilities. Then Mark and Julie took us on a tour of the operation. We met Klondike, Mistletoe, Jingle and the other reindeer, visited the gift shop created in their 100-year-old barn and toured the Christmas tree farm and corn maze. We ended the tour with a delicious chuck wagon BBQ lunch. For more information about Hardy's Reindeer Ranch, visit <http://www.reindeerranch.com>.

October 29 Fee Hunting

The final 2003 tour was to Pike's Hunting Club in Marion to learn about waterfowl fee hunting. John Pike is involved with his family's operation and is also employed as a University of Illinois Extension educator in economic development at the Carbondale Extension Center. John gave an overview of the operation, discussed the opportunities available in the area of fee hunting, then took us on a tour of the club.



Attendees of waterfowl hunting tour view a steel in-ground pit used to conceal hunters.

Over two miles of levees have been built to allow water levels to be controlled in seven impoundments totaling more than 100 acres. The fields are all planted to corn, and plenty of grain is left standing to feed the waterfowl. We looked at the heated, strategically placed, in-ground pits that are located on this 530-acre farm. Mel Gajewski of Base Camp Leasing discussed outfitting. Base Camp works with landowners to evaluate land for recreational hunting. This evaluation is used to put a value on the property for

hunting leases, and Base Camp lists available hunting land on their website to put hunters in contact with landowners. Lastly, Tony Korando, USDA Natural Resources Conservation Service (NRCS) district conservationist from Williamson County, discussed some of the conservation programs available through NRCS and the Soil and Water Conservation Districts to enhance wildlife habitat. For more information, see <http://www.pikeshuntingclub.biz>.



Boards placed in stop log flood control structures are used to control water depth in flooded fields to enhance waterfowl habitat.

The 2003 tours truly showcased the creativity and entrepreneurship alive in Illinois. The farmers and their families, the educators, and those who attended the workshops all seemed to share an enthusiasm for sustaining our food system and seeking innovative ways to improve it. I hope you'll make a note of the tours scheduled for 2004 and plan to join us for one or all of them. ♻️

Mark Your Calendar 2004 Schedule of Tours

June 10 — Ethnic Grocery Stores, Chicago.

The tour will include an opportunity to meet with buyers and farmers and tour several local ethnic grocery stores. Tour guide Evelyn Thompson will provide information about the produce, ingredients, cooking procedures and history of the food cultures.

July 20 — Farm Composting, Hampshire

Learn about on-farm composting methods, state regulations, how to include compost in a nutrient management plan, and marketing. Participants will see a farm composting operation, along with a demonstration of equipment used.

August 4 — Utilizing Green Waste, Grayslake

On a visit to Prairie Crossing in Grayslake you'll learn how the farm is collaborating with municipalities and horse manure haulers to have their green waste delivered to the farm for composting and field application as a soil enhancer and fertilizer supplement. The event includes a Liberty Prairie Reserve Hayride tour and lunch featuring fresh produce.

August 12 — Pastured Poultry, Herscher

Tour a unique pastured poultry operation owned by Dennis and JoAnn Dickman. The trip will include a delicious chicken meal.

September 15 — Fee Hunting, Wine and Buffalo, Western Illinois

This tour will travel to several locations in western Illinois: John Brook's fee hunting operation; Baxter's Vineyard and Winery; and Warren Bond's buffalo ranch.

October 15 — Agritourism, Millstadt

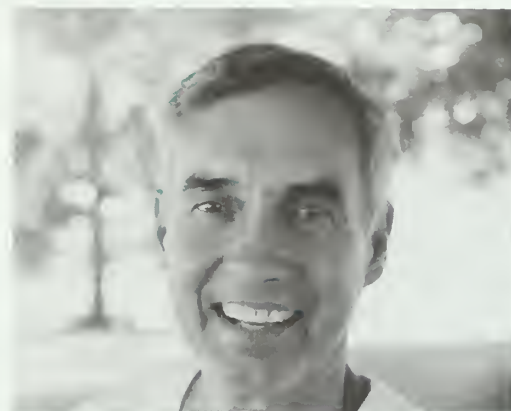
During the height of autumn, this tour will visit Eckert's Orchard as an example of a successful agritourism operation. (<http://www.eckerts.com/millstadt.htm>).

Jack Erisman:

ORGANIC FARMER

by Dan Anderson

"By the end of 1969, I had come to realize more fertilizer and chemicals didn't necessarily mean more profit."



Jack Erisman's farm is known throughout Christian and Shelby Counties as something of a novelty. Most organic producers farm small-scale operations. Not Jack. Jack farms 1,800 acres, all organic, and he converted it all at once . . . cold turkey. Not an easy task. "I would not recommend that strategy to others," Jack confesses. The story of how he came to that point and made it work begins with his childhood, growing up on the family farm.

Jack always loved the land, and fondly remembers his father—"the hardest working man I've ever seen"—starting up the Caterpillar tractor. Jack's mother was an educator and wanted the best education possible for Jack and his sisters. That meant parochial school in Springfield when Jack was about 12, and later Jesuit boarding school in Wisconsin for a classical education including studies in Latin, Greek, mathematics and science. He also learned to play the piano and oboe, and even considered the priesthood.

For college, Jack was sent to St. Louis University to study liberal arts. He did not care for it and wanted to come back to the farm. Because of tenant problems, his father relented for a short time, but then insisted Jack joins the army. In the army, Jack was assigned to play oboe for the 7th Army Symphony Orchestra, in Munich, Germany. Though he enjoyed

music, it was not what he wanted to do all day, every day.

He talked the army into changing his orders, landing him in a construction unit working with large equipment, building roads and firing ranges in the southwestern U.S. In the fall of 1961 he finished his stint in the army and enrolled at Colorado State University to study ag engineering. Before he could finish school his father became ill, and Jack finally got his chance to come back to the farm.

His first crop was in 1963, while working with his father. By January 1964 Jack's father sold out completely. "By the end of 1969, I had come to realize more fertilizer and chemicals didn't necessarily mean more profit," Jack says.

Ultimately, Jack's education and experiences had an impact on the way he approached farming. He began to consider the history of man and agriculture, and came to the realization that humans grew their food for thousands of years without the benefit of synthesized plant fertility and pest control. Yet the latest thinking in agriculture was that chemical fertilizers and pesticide were now the only way humans could hope to feed themselves.

"The period of time that agriculture has been based on chemicals seems extremely small compared to the rest

of history," Jack says. "The whole approach seems to be born of arrogance. This is a giant experiment. We don't know if we can sustain it indefinitely." At the same time, Jack was seriously questioning his profession from a spiritual perspective. As a farmer he saw himself as a steward of God's creation. Were his practices fulfilling that calling? Was he properly taking care of the resources upon which future generations will also depend?

By 1968, Jack had initiated conservation tillage, all but eliminating the moldboard plow. By 1970, he had ceased using anhydrous ammonia and insecticides, using lower rates of nitrogen, in liquid form and cutting chemical rates in half. He spent the 1980s cutting back more and more on chemicals.

In 1988 and 1989, Jack grew a field of wheat organically. Then in 1990, he treated the whole farm of 2,000 acres as if he were farming organically. It was a frightening time, especially for Jack's wife, Jeannie, who was not at all convinced that it was the right thing to do. She asked him how long it would take to change over and make it really work. He told her 10 years. "And that's how long it took," he says. He was told by professors at the University of Illinois that no one had tried to convert large-scale acreage to organic, and they honestly thought it could not be done.



Acres currently farmed: 1,800

Crops and livestock currently raised: Cattle (cow/calf and finishing), hogs and chickens (partnership experiment), corn (white, yellow waxy, yellow feed grade, popcorn, blue), soybeans (food grade), soft red winter wheat, winter barley, spring oats, spelt, triticale, grain rye, orchard grass and red clover (for seed), hay

Formative events: Education and a noticeable drop in soil fertility

Approach to farming: Organic, using long-term rotations that integrate animals and leave ground fallow periodically

In addition to the work of transition, Jack likes to point out that he did it without the help of the government. Jack did not accept any government payments and doesn't to this day. He also points out that the transition to organic occurred while he was servicing a half-million-dollar debt. In addition to his good planning and management, one of the things that helped Jack succeed was the gift of 180 acres he gradually received through a family trust over 30 years.

Now almost 20 years later, Jack runs a very diverse operation using a seven-year rotation. The rotation typically starts with corn, into which a rye cover crop is sown. The next year soybeans are planted, which are always followed by a small grain—wheat, oats, barley or rye. The next spring, a grass/legume mix is over-seeded into the small grain. After harvest of the small grain, the grass/legume mix is allowed to grow and is used for pasture and hay for one to three years, depending on the field and access to water. In some fields year five is planted back to corn, year six is planted to soybeans and year seven is fallow. One seventh of Jack's land is fallow every year.

In addition to crops, Jack currently has a 200-head cow/calf herd that he keeps mostly on pasture except for a few steers that are on feed. The animals are there to complement the

system. "If we can successfully keep the animals on grass, it enables us to use longer rotations," Jack says. This makes the farm less dependent on cash from grain yields. Jack sees the good-quality perennial pasture as a key component of the system, and he gives it the potential for long-term sustainability. "That's the ideal, but I'm still learning how to do this."

Jack also uses the cattle to allow his hired hands to build their own equity in the farm. Jack usually has two hired hands working with him, and they typically stay with the farm a long time. A couple have even retired from the farm. One of the reasons is the opportunity Jack allows for them to acquire ownership in the cattle herd.

Jack admits he is still developing the system, but he now sees the biggest challenge as sustaining it. It is not that Jack worries that there won't be any farmers to farm it in the future, but he does wonder who will manage it according to the same values guiding his practices. Neither of Jack's sons is interested in farming, and the culture itself does not seem to value agriculture, let alone an agriculture that is diverse and organic.

"I have grave concerns about capital becoming more and more concentrated in the hands of fewer corporate entities," says Jack. Of course, the concern is for the conservation of the

natural resources upon which future generations will depend for food. But he also worries that modern industrial agriculture is destroying opportunities for individual ownership. "Greater individual ownership results in better stewardship," Jack says, "It provides the greatest benefit and economic balance for society." 🌱

This feature on Jack Erisman is a chapter from the book A Different Field, by Dan Anderson. The book was offered free at the 2003 Farm Progress Show. Now that the show is over, copies are being sold for a very reasonable price, and proceeds will cover future printings of the book. Single copies can be purchased for \$6.50 plus shipping, or five copies for \$20 plus shipping. Visit Publications Plus to order online at www.PublicationsPlus.uiuc.edu, or call 1-800-345-6087.

Organic Certification in Illinois

by John Masiunas, Deborah Cavanaugh-Grant, and Andy Larson
University of Illinois, Department of Natural Resources and Environmental Sciences

Organic production and markets are rapidly expanding. For example, the market research firm Datamonitor projects organic sales in the United States will reach \$30.7 billion by 2007. Farmers interested in producing products organically need to be certified. This article provides information on certification in Illinois.

Organic Farming

The National Organic Program (NOP) Final Rule defines "organic farming" as an agricultural production system that responds to site-specific conditions by integrating cultural, biological and mechanical practices that foster cycling of resources, promote ecological balance and conserve biodiversity.

Frequently Asked Questions

Should I certify?

Certification depends first on your commitment to meeting the requirements of the NOP and to organic farming. Secondly, what are the requirements of your markets and the expectations of your buyers? Most wholesale markets and processors require certification. Certification is required if you want to use the terms "organic," "100 percent organic" or "made with organic ingredients" and the USDA organic seal. Producers who market less than \$5,000 worth of organic products are not required to become certified but must still adhere to the federal standards for organic production, product labeling and handling, including keeping appropriate records, and cannot use the USDA seal.

What is the certification process?

Organic certification is the process in which a third-party organic certifying agent determines if you conform to an established set of operating guidelines known as organic standards. One part of these standards is that you have not used prohibited products for 36 months prior to harvest of an organic crop. If you conform to the standards, you are certified by the agent and can use the USDA logo and the term "organic" to document your products as certified organic.

The first step in certification is to choose and contact a certifying agent and request a copy of the certifiers' organic standards and an application packet. The packet



John Peterson founder of Angelic Organics gestures toward rows of vegetables on the farm during a 2003 Sustainable Agriculture Tour (see page 2).

will contain an organic farm plan questionnaire that needs to be completed. It will include farm maps along with crop and input histories. The certifier reviews your organic farm plan to be certain that it is complete and meets NOP organic standards. Once the farm plan is complete, an organic inspector inspects all relevant areas of your farm. The inspector determines if you are operating according to your organic plan and that it is in compliance with organic standards. The inspector then submits a detailed report to the certifying agency. The organic farm plan and inspection report are reviewed by a certifier and a decision is made on whether or not to grant certification. If certification is granted, you can market products as organic and use the seal of the certifier and the USDA's organic seal.

How do I choose a "certification agent"?

Illinois does not have a state organic certification program; instead, certification is done through private organizations. The NOP must accredit these organizations because the certifier's work is an extension of the federal government, licensing producers to use the term "organic." As of October 15, 2003, the NOP had accredited 88 certification agencies, with 53 of those agencies based in the U.S. However, not all certifying agents operate in all regions.


When choosing a specific organization, you should consider several factors:

- Consider the organization's willingness and ability to answer questions about their certification program. The NOP rules require that the organization provide this information, but be aware that certifying organizations cannot give advice or consultation on specific practices or products.

- Ask the agency about its history in certifying your kind of enterprise. You want an agency that understands the problems that your type of farming enterprise may encounter.
- Consult area organic farmers on the certifying agents that they are using and their experiences in certifying.
- Consider the certifier's stability as a business. You want to use a certifying agency that has experience and will likely continue to exist next year. Find out if the agency has memberships in organizations such as the Organic Trade Association and the Organic Materials Review Institute.
- Ask questions, such as whether the agency provides any additional certification services (e.g., kosher). How well does your market recognize the certifier's logo? What are the needs of your buyers? Some buyers may prefer a specific certifying agent. Does the agency have additional accreditation (besides that required by NOP) by international certification organizations, such as the International Federation of Organic Agriculture Movements (<http://www.ifoam.org>)? This additional accreditation of your certification agency can be important if you are planning to market internationally.
- Consider the costs of certification.

How much does it cost to certify?

Fees charged for certification depend on the certifying agent, the size and complexity of the farm and the cost of inspection. The costs generally include a fee for the application packet, general certification fees and inspection fees. Fees can be based on either annual organic sales or acres to be certified. Larger size operations may have to pay a percentage (0.1 to 0.5) of sales. The cost of inspection partially depends on how far the inspection agent has to travel. Inspection fees can vary considerably, beginning at a low of approximately \$175. Get a clear explanation of the fee structure when choosing a certifier. The Midwest Organic and Sustainable Education Service estimates fees for certification to be \$300 to \$800 per year.

The 2002 federal farm bill set aside funds for a certification cost-share program. It allows federal cost-share of 75% of the cost of certification, with a maximum payment of \$500. Contact Kent McFarland, Illinois Department of Agriculture, Bureau of Marketing and Promotion (217-524-9131; kmcfarland@agr.state.il.us) for information. 

CERTIFIERS OPERATING IN ILLINOIS

The organic certifying organizations or agents operating in Illinois include the following:

Nanette Rambo
Certified Organic, Inc.
P.O. Box 1664
Fairfield, IA 52556
Tel: 866-581-6428
Email: certifiedorg@netins.net
Web: <http://www.certifiedorganic.org>

Cissy Bowman
Indiana Certified Organic
8364 S. SR39
Clayton, IN 46118
Tel: 317-539-4317
Fax: 317-539-4319
Email: cvof@iquest.net
Web: <http://members.iquest.net/~cvof/ico>

David Engel, Executive Director
Midwest Organic Services Association, Inc.
P.O. Box 344
Viroqua, WI 54665
Tel: 608-637-2526
Fax: 608-637-7032
Email: mosa@mosaorganic.org
Web: <http://mosaorganic.org>

Betty J. Kananen
Global Organic Alliance
P.O. Box 530
Bellefontaine, OH
Tel: 937-593-1232
Email: kananen@logan.net
Web: <http://www.goa-online.org>

Rochelle Bosche
International Certification Services
301 5th Ave. SE
Medina, ND 58467
Tel: 701-486-3578
Fax: 701-486-3580
Email: rochelle@ics-intl.com
Web: <http://ics-intl.com>

Jon Klingenberg
Organic Crop Improvement Association
Illinois Chapter
13138 Witt Ave.
Butler, IL 62015
Tel: 217-594-7356
Email: klingenberg@consolidated.net
Web: <http://www.ocia.org>

RESOURCES FOR CERTIFICATION

There are numerous websites with information on certification. Each certifying agent has a website that you should visit. Other useful sites include these:

USDA National Organic Program
<http://www.ams.usda.gov/nop>

Midwest Organic and Sustainable
Education Service (MOSES)
<http://www.mosesorganic.org>

Appropriate Technology Transfer for Rural Areas (ATTRA)
<http://www.attra.ncat.org>

Organic Agriculture Answers on the Web

The University of Illinois is joining with Purdue University and Michigan State University to bring seasonal advice to field crop and vegetable growers interested in organic agriculture. The project is entitled, *New Agriculture Network: Farmers, researchers and educators teaming up for sustainable and organic ag solutions in the Great Lakes region.* Information is available at <http://www.ipm.msu.edu/new-ag.htm>. Nine organic growers will share crop updates and advice with Extension personnel to generate information on the website. University specialists will also write articles about a variety of practices and new findings useful for organic growers. The website will serve those interested in transitioning to organic as well as those currently practicing low-input or organic agriculture. It has been funded through the American Farmland Trust. For more information, contact Deborah Cavanaugh-Grant, (217-968-5512; cvnghgrn@uiuc.edu).

Illinois Local Food Systems Forum

by Dan Anderson

On January 22, a statewide forum was held at Wildlife Prairie Park near Peoria to focus on strengthening locally based food systems in Illinois. The event was sponsored by the Illinois Sustainable Agriculture Committee and the Illinois Department of Agriculture's Bureau of Land and Water Resources and Bureau of Marketing and Promotion. Funding for the event was provided by IDOA's Sustainable Agriculture Grant Program.

"A local food system is a food system where a substantial portion of the food consumed by people living within a region is raised within that region," said Mike Rahe, coordinator of the grant program. "It is characterized by diverse farming systems and a shortened marketing distance between producers and consumers. These systems provide many benefits to farmers and rural communities."

The idea for the program originated within the Illinois Sustainable Agriculture Committee. "Sustainable agriculture has gone through many phases in Illinois, all building on each other," said Tony Joehl, vice chairman of the committee. "Local food systems can provide a strong foundation for a sustainable agriculture, and we wanted to set the stage for future growth in this area."

To begin the process the committee hired Carol Elder to coordinate planning of the forum. "The objective was to identify what was already happening and design a forum that provided the conditions for future collaboration," said Joehl. Much of the work in progress was focused in the Chicago metro area. It became apparent that the forum could be a means to broaden the effort statewide and involve sustainable agriculture groups and organizations that have an interest in local foods. Elder brought the idea to groups and organizations around the state and found enthusiasm for the opportunity to broaden the effort.

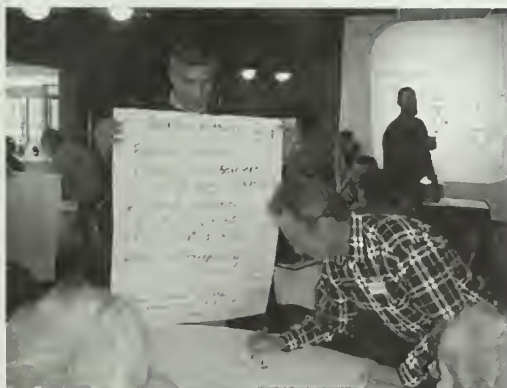
The highly interactive forum was not open to the public, but rather limited to a list of invited persons and groups with strong interest and ongoing activity in local foods. The objective was to facilitate a high level of networking among the important parties in Illinois already working on sustainable agriculture and local food systems issues. In this regard, the forum was a success.

Participants were divided and grouped in several different ways to identify features of a successful local food system and barriers to getting there.

Several IDOA officials were present at the forum, and one of the other objectives of the event was to raise their awareness of existing efforts and future priorities for developing local food systems in the state. The bureau chief of the Marketing Division, Gib Frier, spoke directly with local farmers about the difficulties and benefits of marketing food products directly to consumers. Lisa Groesch, assistant to the IDOA director, addressed the group, expressing support for local food systems, and participated in discussions during the day.

Almost 60 individuals attended the forum from nearly 40 organizations, ranging from the Northeastern Illinois Planning Commission to University of Illinois Extension to the Illinois Stewardship Alliance and the Interagency Nutrition Council.

One of the day's highlights was a keynote presentation by Kamyar Enshayan, program manager for the Local Food Project at the University of Northern Iowa's Center for Energy and Environmental Education. Enshayan inspired forum



Organic farmer Jack Erisman holds up a list from one of the interactive small group activities identifying barriers to local food systems.



Carol Elder, Local Food Systems Forum coordinator, reads the participant comments for future work in local food systems.

participants with several practical ideas his program is using to grow and strengthen local food systems in Iowa.

What next? Several things will come out of the forum and hopefully be of use for future efforts. A comprehensive list of

organizations and people involved in promotion of local foods will be sent, along with everyone's current projects and services and contact information, to all the forum participants. The many ideas generated from the brainstorming and discussions of the day were collected and are being organized by Carol Elder. "A summary of all the discussions will be created and sent to everyone who was there, along with a topical list of program priorities proposed by the groups to make progress in local foods in Illinois," said Elder. It is hoped that this information will provide the basis and focus for future collaborations of groups working to strengthen local food systems.

In introductory statements, Steve Frank, IDOA Bureau Chief of Land and Water Resources, pointed out that large-scale farming will likely continue to be the norm in Illinois, but he also identified a growing trend among consumers to pay closer attention to where their food is coming from.

"I am not suggesting that a local food system can replace conventional agriculture in our state," Franks said. "Still, there are trends that should provide hope for the producer who wants to neither get big nor get out. A strong local food system operating parallel to the conventional grain system can be developed to effectively serve the growing segment of consumers generating the expanding demand for organic and local food."

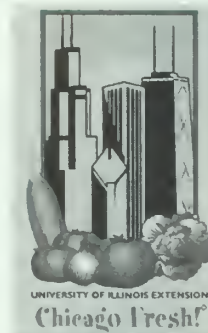
The Illinois Local Food Systems Forum was a good start to broadening the effort already underway, and a good indication that the Illinois Department of Agriculture is aware, and supportive, of these alternative trends. ♻️

Dan Anderson helps coordinate the Agroecology/Sustainable Agriculture Program at the University of Illinois, College of ACES. He is also chairman of the Illinois Sustainable Agriculture Committee.

Chicago Fresh:

Bringing Farming to the City

With a \$1,500 startup budget, 15 volunteers and more than 1,000 hours of gardening, Chicago Fresh realized its beginning. Eight types of vegetables were planted — five types were sold. Chicago Fresh is an urban farming program, through the University of Illinois Extension, that addresses the need to increase employment and income, stimulate community enterprise, acknowledge a growing demand for fresh and locally grown produce, improve environmental aesthetics, and encourage community pride and cooperation. The program provides educational resources including soil management, crop production, community and economic development, small business management, consumer health, and nutrition. Chicago Fresh also encourages partnerships between agencies and organizations that are interested in developing urban farming programs and links businesses and retailers that are interested in locally grown produce.



The pilot site for the Chicago Fresh program was started at the Fulton lot in the Austin community in partnership with the Institute for Community Resource Development (ICRD.) Through this partnership, the Chicago Community Trust provided some of the funding to the program.

In 2002, Chicago Fresh began with one partner, ICRD; and in 2003 increased to five partners and established relationships with potential buyers so that these partners will be able to operate economically viable businesses.

Last year, individuals and organizations from the community attended Chicago Fresh workshops that focused on produce selection, planting, integrated pest management, and harvesting.



Raised beds are being prepared in plots owned by LaDonna and Tracey Redmond on Fulton Avenue in Chicago. Standing in the foreground are Lynnette Mensah, Larry Wilson, and Rhonda Hardy, U of I Extension educators.

Chicago Fresh plans to strengthen its focus in providing skills in agricultural production and marketing to new partners during the "down-time" of winter with a kick-off Urban Agriculture Symposium to take place in January 2004.

For more information, contact Rhonda Hardy (rhardy@uiuc.edu; 773-768-7779, ext. 203).

Bamboo Farms Could Help Soak Up Urban Pollution

by Gary Wisby

Chicago Sun-Times Environment Reporter

A novel plan to grow bamboo on polluted lots in Chicago known as brownfields is a winner in a new sustainable design competition. This beats the usual “dig and haul” method that deposits the contaminated soil in a landfill. Instead, the bamboo absorbs pollutants and converts them into nutrients.

“Urban Bamboo Farms” is the idea of three master’s degree candidates in urban planning at the University of Illinois at Chicago—Daniel Butt, Kevin Anderson and Abraham Madrigal.

Their brainchild was one of three prizewinners at the Chicago Sustainable Design Initiative. It also was the “audience choice” of 250 local designers, architects, policy makers and nonprofit leaders. Butt and Madrigal visited city-sponsored affordable “green” homes and discovered they featured bamboo flooring. It’s the equivalent of expensive oak.

The trio’s research found that at least two locally obtainable varieties of bamboo, *Fargesia* and *Phyllostachys*, could survive winters in Chicago. Seeds and small plants are available from growers in Ohio and on the West Coast. “We can use the seed from our initial crop to increase the supply and achieve economies of scale,” Butt said. “Once economies of scale were achieved, the city could encourage manufacturers of bamboo to locate in the city, providing further employment opportunities.”

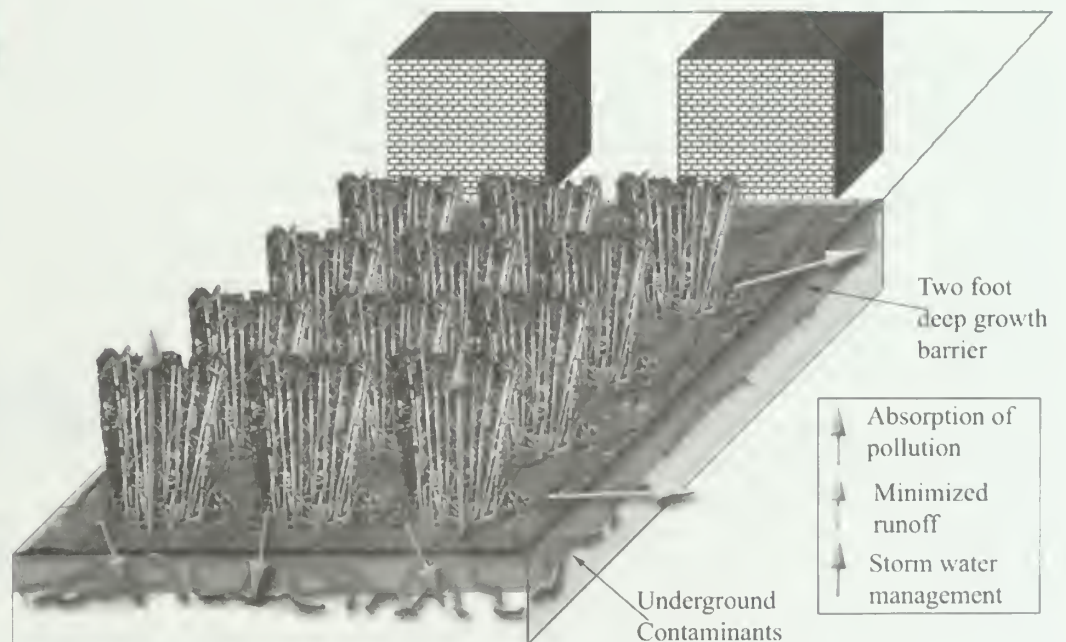
Bamboo comes in a variety of heights, some 8 feet tall, and would change the appearance of blighted neighborhoods and Chicago’s vacant lots. “Planted in between houses, it would serve as a windbreak, reducing energy costs,” Butt said. “It’s like planting trees around a home.”

Part of the overall plan is to initially plant bamboo in brownfield sites, which are generally located near low-income areas. Low-income workers would be trained and employed to maintain the bamboo crops. More jobs would be created by factories that would produce flooring, furniture, musical instruments—anything ordinarily made of wood. Used as a renewable building material for

centuries in Asia, some types of bamboo have a greater tensile strength than steel. Bamboo reaches maturity in three to five years, compared with the 30 to 50 years needed by hardwoods.

The plant reduces runoff rates and pollutants in the water table and is a better carbon sink than most trees. So it helps improve air and water quality. “It also saves deforestation in other parts of the world and emissions from transporting wood to Chicago,” Butt said. 🌱

This article was originally published in the Chicago Sun-Times. Permission was granted to reprint it in this issue of Agroecology News and Perspectives.



This diagram illustrates the root system of bamboo and how the plant helps to reduce runoff rates and pollutants in the water table.

New Clean Energy Dollars for Farmers, Ranchers and Rural Small Businesses

As part of the Clean Energy Title of the federal Farm Bill, USDA Rural Development has made \$23 million in matching grants and loans to support renewable energy and energy efficiency investments at farms, ranches, livestock operations and rural small businesses. The funds can be used to support a wide variety of energy improvements from basic efficiency upgrades (for example, upgrading refrigeration equipment and lighting in a dairy or super-market) to innovative renewable energy projects.

Who Is Eligible for the Grants and Loans?

Any agricultural operation or rural small business (less than 500 employees, less than \$50 million in annual revenue in a non-metropolitan community of less than 50,000 people) can apply for this funding. The grants and loans are competitive and are based on the cost-effectiveness of the proposed project and a demonstration of financial need.

How Much Is Available Per Project?

In 2003, only grants were available. The maximum grant amount is 25% of the project cost, up to \$250,000 for energy efficiency projects and up to \$500,000 for renewable energy projects. The program rules for 2004 are still being revised. Loans may be included in this year's program and the minimum and maximum awards may also change.

Where Do the Opportunities Lie?

Energy Efficiency: If you're a dairy farmer, Section 9006 grants and loans give you an opportunity to replace your milk pumping and refrigeration equipment. If you raise poultry or hogs, you might want to install new ventilation equipment. If you own a motel, you could replace your air conditioning or hot water system. If you have a manufacturing facility, you could improve lighting or replace outdated machinery.

Renewable Energy: Whether you want to generate electricity, produce heat or hot water or manufacture renewable bio-fuels, Section 9006 grants and loans can make an attractive project even more attractive. If you live in a windy area and your electric rates are high or you value energy independence you may want to install a small wind system. Larger "utility-scale" wind turbines are a significant and complex investment but one that can bring an entirely new income stream to farmers and landowners. Solar hot water systems can be cost-effective, even in the Upper Midwest. Many dairy and hog operators have invested in anaerobic digesters for treating animal waste and generators to utilize this biogas in electricity production.

How Much Energy Can These Projects Save or Produce?

If you are interested in an energy efficiency project, you will need an energy audit to tell you what your potential energy savings are. To apply for a USDA grant, your projected energy savings must be equal to at least 15% of your annual energy use. Some projects will save much more.


While there are no specific performance requirements for renewable energy systems, grant applicants will receive higher consideration for projects that produce more power and have a shorter payback period.

Applying for USDA Funding

For more information on applying for S9006 grants and loans, contact your local USDA Rural Development office or visit their website at www.usda.gov/rural.html. USDA can provide you with program guidelines and application materials. Give yourself plenty of time to put together the application as federal funding requirements can be complex.

Other Funding Sources

You may also be eligible for state grants, loans and loan guarantees for your project. Be sure to check with your state energy office or look for applicable financial incentives on the "DSIRE" website (www.dsireusa.org). Now is also the time to begin discussing your project with local lenders. Many of these investments are less familiar to bankers and a loan commitment for the matching share must be secured prior to applying for the USDA grant.

For more information on the S9006 Renewable Energy and Energy Efficiency program, log on to www.elpc.org/farbill.htm or contact your state office of USDA Rural Development. 

Projects Receiving Funding in Illinois

Project Applicant	Location	Project type	Grant Amount
Midwest Bio Energy	Whiteside County	Wood waste to energy	\$500,000
Central Illinois Energy Cooperative	Fulton County	Ethanol production facility	\$250,000
Lincolnland Agri-Energy	Crawford County	Ethanol production facility	\$300,000
Illinois Rural Electric Cooperative	Pike County 1	MW wind turbine	\$438,544
Hunter Haven Farm, Inc.	Stephenson County	Anaerobic digester	\$242,518
FPC Services	Lee County	20 MW wind farm	\$300,000
Willow Creek Organic Forest Farm	Less County	Solar photovoltaics	\$125,000
Momence Finer Foods	Kankakee County	Refrigeration upgrade	\$30,534

Publications

CSA Across the Nation provides the first comprehensive portrait of the community-supported agriculture movement in the U.S. Findings from a 1999 national survey show both commonalities and diversity among CSA farms. The study includes data, analysis, reflections and suggestions for future research. The study was co-produced by the Center for Integrated Agricultural Systems (University of Wisconsin), the Department of Resource Economics (University of Massachusetts), the Northeast Sustainable Agriculture Working Group and the Robyn Van En Center for CSA Resources (Wilson College, Pennsylvania), with partial support from the Northeast SARE Program. The report is available at <http://www.wisc.edu/cias/pubs/csaacross.pdf>.


Wind Energy Basics and New Educational Curriculums

Wind energy, produced with the large new wind turbines, is becoming a controversial natural resource issue for many communities and counties. The U.S. Department of Energy has an excellent website with a tremendous amount of information about wind: *Quick Facts about Wind Energy, Resources and Curriculums for Teachers and Students, Wind Energy Basics, Frequently Asked Questions and Wind Energy and the Homeowner*. The site is located at www.eere.energy.gov/wind.

The U.S. Department of Energy has produced wind resource maps and collected wind resource data for each state. The map for Illinois and accompanying wind data can be found at www.awea.org/smallwind/illinois.html.

Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses (280 pages, wirebound) brings the business planning process alive to help today's alternative and sustainable agriculture entrepreneurs transform farm-grown inspiration into profitable enterprises. Sample worksheets illustrate how real farm families set goals, determined potential markets and evaluated financing options—and help the reader develop a detailed business plan. To order, send \$14 plus \$3.95 s/h to Sustainable Agriculture Publications, 210 Hills Building, University of Vermont, Burlington, VT 05405-0082. Preview the entire publication online at <http://www.sare.org/publications>.

A Guide to Illinois Laws Governing Direct Farm Marketing for Farmers and Other Food Entrepreneurs (16 pages, \$7.50) by Rich Schell, J.D., is a tool for farmers and other food entrepreneurs interested in increasing profits through developing niche markets. The guide is a short, simple, easy-to-use pamphlet that covers key regulatory points, including liability, processing foods, taxes, organics and zoning. Certain other moneymaking areas, such as apples, dairy, eggs, poultry and meat are also explored. Readers will receive a working knowledge of basic principles of direct food sales to help them, comply with federal and state regulations governing food sales and farmers market sales.

Copies may be purchased from the Illinois Stewardship Alliance (217-498-9707; isa@illinoisstewardshipalliance.org; www.illinoisstewardshipalliance.org), a citizens organization that promotes a safe and nutritious food system, family farming and healthy communities. 

Nominations Being Accepted for Sustainable Agriculture Award

USDA's Sustainable Agriculture Research and Education (SARE) program is accepting nominations for its Patrick Madden Award for Sustainable Agriculture. The award honors farmers and ranchers who raise food or fiber in ways that are profitable, good for families and communities, and beneficial to the environment.

Four regional winners will receive \$1,000 each and a travel scholarship to "Toward a Sustainable Food System," the SARE conference in Burlington, Vermont, October 19 to 21. All producers farming in the United States and its protectorates are eligible, except for previous winners and finalists.

To nominate someone, go to <http://www.sare.org/madden/> (No self-nominations, please. Nomination deadline: May 10, 2004.)

PERMACULTURE EVENTS

Earth Day talks about permaculture and a 15-day certification course are being offered with support from Sustainable Agriculture, Research and Education (SARE), the University of Illinois Agroecology/Sustainable Agriculture Program (ASAP) and the Center for Sustainable Community (CSC).

Permaculture (*permanent 'agri' culture*) is a method of ecosystem design and management. Using permaculture principles, the designer first observes, then utilizes the inherent patterns of land, weather and water flow to optimize their relationship. Permaculture maximizes production through "stacking functions" that maximize usage of all resources in an ecosystem and by treating all "waste" in the system as a resource.

April 21 to 25 Earth Day Week

Precise dates and locations to be announced. David Blume of the International Institute for Ecological Agriculture (IIEA) will give two-hour talks on permaculture. For more information, visit www.CenterForSustainableCommunity.org or contact CSC (815-256-2204; csc@stelle.net).



David Blume

July 17 to August 1 Permaculture Design Certification Course: IIEA Stelle, Illinois

This 15-day course will include instruction from David Blume and Joel Salatin. Small farmers and landowners, landscapers, and builder/designers desiring to make a good living while healing and nurturing the land will greatly benefit. Teachers and students will do an on-site permaculture design for the community of Stelle, which in exchange will provide lodging/camping facilities and three organically prepared meals per day. Graduates will be "certified" and able to use the term permaculture in their business promo-



Joel Salatin

tional activities. For more information, call 832-688-0338 or visit www.permaculture.com/permaculture/courses/who.htm.

More about the Speakers and Sponsors

The International Institute for Ecological Agriculture (IIEA) was founded by David Blume. He is the author of *Alcohol Can Be A Gas* and was the host of National Public Radio's mini-series on alternative fuels. To learn more, visit www.permaculture.com.

Joel Salatin operates a farm in Shenandoah Valley, Virginia, and is an expert in the field of sustainable agriculture in the United States. He is the author of *Family Friendly Farming* and writes regularly for *Acres USA* and *Stockman Grass Farmer*. 🌱

CSC is a non-profit educational organization located in Stelle, Illinois. For more information, visit www.CenterForSustainableCommunity.org.

Stelle, a small town of only 100 residents, has its own solar-powered telephone company and Internet server, numerous solar-paneled homes, cooperative community gardens and shared cooperative resources, including tool, learning, and dinner cooperatives. To learn more, visit www.StelleCommunity.com.

SARE is a program of USDA's Cooperative State Research, Education, and Extension Service. Visit www.sare.org/htdocs/sare.

ASAP, a University of Illinois program, facilitates and promotes research and education which protect Illinois' natural and human resources while sustaining agricultural production forever. Visit www.aces.uiuc.edu/~asap/.



Bill Wilson, director and president of the Center for Sustainable Community in Stelle, Illinois holds a head of cabbage harvested on December 18.

CALENDAR

April 22

35th Anniversary of the First Earth Day

For more ideas on what you can do to promote National Earth Day, visit www.earthday.net/.

April 23

**Permaculture
Urbana, Illinois**

Permaculture expert David Blume will speak at several locations throughout the day on the University of Illinois campus. For more information, contact Dan Anderson (217-333-1588; aslan@uiuc.edu).

April 30

National Arbor Day

For complete information, visit www.arborday.org.

May 2 to 4

**All Things Organic Conference and Trade Show
Chicago, Illinois**

The McCormick Place is this year's site for All Things Organic, co-located with the Food Marketing Institute's FMI Show, the National Association for the Specialty Food Trade's (NASFT) Fancy Food Show, and the United Fresh Fruit and Vegetable Association's (UFFVA) United 2004 Produce Expo and Conference.

For more information, visit <http://www.ota.com> and <http://www.atoexpo.com/>.

November 15 to 17

**American Farmland Trust National Conference
Lexington, Kentucky**

The conference theme is "Farming on the Edge: Meeting the Challenge" and will feature a bus tour of Fayette County's exceptional agricultural landscape, protected farms and creative urban growth boundary.

For more information, visit www.farmland.org.


PROFESSIONAL DEVELOPMENT PROGRAM CALL FOR PROPOSALS

The North Central Region Sustainable Agriculture Research and Education (NCR SARE) program is pleased to announce its 2004 Professional Development Program call for proposals.

Funded projects will further the NCR SARE goals of fostering environmentally, economically and socially sustainable agriculture. The Professional Development Program provides funding to increase the knowledge and skills of educators in the Cooperative Extension Service, Natural Resources Conservation Service, and other governmental agencies and of educators and service personnel in the non-profit and for-profit sectors serving the food and fiber system.

Although all proposals will be considered, this year the program is calling for proposals in specific areas: education program evaluation; serving socially disadvantaged audiences; sustainable agriculture and community

development; community food systems and community food security; and agroforestry and alternative land-use issues.

Information regarding proposal requirements is available from Paula Ford, Regional Professional Development Program Coordinator, at pford@oznet.ksu.edu, on the NCR SARE website (www.sare.org/ncrsare/cfp.htm) and from Deborah Cavanaugh-Grant, SARE Coordinator (217-968-5512; cvnghgrn@uiuc.edu). 

WORKSHOP ON ORGANIC AGRICULTURE

June 28

Springfield Extension Center

9:00 a.m. to 4:00 p.m.


University of Illinois Extension

This workshop is designed for the members of the University of Illinois Organic Task Force, Unit Leaders, Extension educators, faculty and other agency personnel interested in organic agriculture.

The goal of the workshop is to provide participants with an overview of the issues surrounding organic food production, marketing and consumer acceptance and with information about state and regional resources.

The agenda will include a keynote presentation by Dr. Kathleen Delate of Iowa State University; an overview of Illinois and regional resources; farmer, research and agency panel; and a lunch of local organic food.

A fact sheet of commonly asked questions and a resource book will be developed and distributed to workshop participants.

The deadline to register is June 14. For more information, contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu) 

AGRO-ECOLOGY



News and Perspectives

University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
W-503 Turner Hall, MC-047
1102 S. Goodwin Ave.
Urbana, Illinois 61801

Robert Allen
ACES Library
1101 S. Goodwin
MC-633



Playing the Waiting Game with a Soil Pathogen

by Debra Levey Larson

Chemicals have limited effects on controlling it, and there are no known resistant varieties of processing pumpkin to withstand an attack of the deadly blight caused by *Phytophthora capsici* (*P. capsici*). Now, researchers at the University of Illinois suspect that rotating crops that are not susceptible to the disease may reduce survival of the pathogen.



A healthy pumpkin (left) and a pumpkin that has been attacked by the disease *Phytophthora capsici* (right).

In a recent study, 45 species of crop and weed plants were screened for their susceptibility to *P. capsici*. Although 22 crop species succumbed to the disease, 14 did not. Mohammad Babadoost, plant pathologist at the U of I in the College of Agricultural, Consumer and Environmental Sciences, believes that rotating the 14 resistant crops may serve to wait out the pathogen until it is safe to once again plant pumpkins or other crops susceptible to *P. capsici*.

"Crop rotation is already being used by pumpkin growers as an important component of disease management," said Babadoost. "Most pumpkin growers in Illinois follow at least a short-term crop rotation. However, most growers have experienced heavy losses when carrot, lima beans, pea, pepper, snap bean, and tomato were grown prior to pumpkin."

In order to make crop rotation a successful solution to waiting out *P. capsici*, a critical question remains to be answered: How long does the pathogen stay alive in the soil?

"Unfortunately, we don't know how long," Babadoost said. "Currently, I have a graduate student investigating that. We are trying to work out the problem piece by piece, then develop effective strategies to manage this disease. Definitely, the study that Tian completed provided us with very valuable information in dealing with this destructive pathogen."

Continued on next page

SUMMER 2004

INSIDE

Specialty Soybean Marketing	3
Research on Transitioning to Organic Farming	6
State-Wide Directory	8
Central Illinois Farm Fresh Network Formed	9



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen. Photos not credited in this issue were taken by Debra Levey Larson.

Please address all correspondence to:
Agro-Ecology Editors, W-503 Turner Hall,
1102 S. Goodwin, Urbana, IL 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Grant Program, the Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign and the University of Illinois Extension.



College of Agricultural,
Consumer and
Environmental Sciences

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of Agro-Ecology News and Perspectives, contact Deborah Cavanaugh-Grant, (217) 968-5512, email: cvnghgrn@uiuc.edu

Surveying the growing *P. capsici* threat

Soybean, corn, and wheat, the major crops grown in Illinois, did not become infected, and there is no report indicating that these crops are hosts of *P. capsici*. The other 11 vegetable crops that, when inoculated with *P. capsici*, did not develop symptoms of the disease are basil, broccoli, cabbage, cauliflower, celery, chive, dill, kale, kohlrabi, mustard and parsley.

The 22 vegetable crop seedlings that became infected and developed symptoms of the disease in the study are beet, carrot, eggplant, green bean, lima bean, radish, snow pea, spinach, Swiss-chard, tomato, turnip, onion, pepper and a long list of vine vegetables, including pumpkin, cantaloupe, cucumber, gourd, honeydew melon, muskmelon, squash, watermelon and zucchini.

Babadoost said that the incidence of fruit rot on pumpkins caused by *P. capsici* has dramatically increased in Illinois, causing yield losses of up to 100 percent. "Jack-o-lantern pumpkin is an important crop in Illinois, and approximately 90 percent of the commercial processing pumpkins produced in the United States are grown in Illinois, so this is an economic problem for the state."

Babadoost and crop sciences graduate student Donglan Tian completed the study, which is published in the May 2004 issue of Plant Disease by the American Phytopathological Society. The research was supported in part by funds from North Central Region Sustainable Agriculture, Research and Education, the Illinois Department of Agriculture and Nestle Food, Inc.

For more information about this research, contact Mohammad Babadoost (217-333-1523; babadoos@uiuc.edu).



Agro-Ecology Editor Deborah Cavanaugh-Grant (left) and Mohammad Babadoost (right) surveying the growing *P. capsici* threat at the year's Pumpkin Day event at the Illinois Horticulture Station.



Agro-Ecology Editor Deborah Cavanaugh-Grant (left) and Mohammad Babadoost (right) surveying the growing *P. capsici* threat at the year's Pumpkin Day event at the Illinois Horticulture Station.

2004 Pumpkin Day
Thursday, September 9
St. Charles Horticulture Station

St. Charles, Illinois
For details, contact Mohammad Babadoost
217-333-1523; babadoos@uiuc.edu

Specialty

Soybean Marketing Requires New Strategies

by Rob Wynstra

One key reality of current soybean marketing is that most soybeans are destined for livestock feed, while most marketing and new-product introductions have occurred in the soy food and industrial use areas, according to Peter Goldsmith, National Soybean Research Laboratory Fellow in Agricultural Strategy and assistant professor in the Department of Agricultural and Consumer Economics at the University of Illinois.

"This becomes a challenge to researchers, producers, and soybean organizations to develop dual strategies that simultaneously address new opportunities in the food and industrial uses, while trying to stay focused and create more value from their dominant business of supplying feed," Goldsmith said.

He notes that that only about 5 percent of the soybeans produced in Illinois are specialty beans grown under contract. Of the estimated \$2.4 billion Illinois crop, only about \$132 million worth is channeled into specialty markets.

"Producers find that premiums are consistently below 10 percent and generally erode over time," Goldsmith said. "Many life science firms likewise are struggling to create value from their innovations in this area of the market."

Goldsmith points out, however, that the needs of end-users continue to fragment as consumers and retailers increasingly dominate the direction of the agri-food supply chain.

"This would imply significant opportunities for identity-preserved food products," Goldsmith said. "Customers around the globe want new features, such as low trans fatty acids and low carbohydrates, combined with taste, convenience, low prices, non-genetic modification, and longer shelf life. The organic and food-grade soybean markets are some of the fastest growing segments of the market."

Soy meat analogs are estimated to be a \$95 million category, growing at 6 percent per year. Soy milk and other dairy analogs had sales of about \$700 million in 2002, about one percent of dairy sold.

"Globally soybean demand has been increasing more than 8 percent annually since 1996," Goldsmith said. "The soybean's tremendous functionality is clear as buyers from around the globe are demanding soybean meal as their livestock feed of choice. That leads to the question of why specialty soybeans and their associated value-added markets have continued to lag."

Goldsmith says that one answer is that Illinois producers and handlers have many opportunities to market commodity soybeans.

"They have ready access to rivers, lakes, rails and roads, putting them in a very enviable position for moving large volumes of high-quality commodity soybeans," he said. "Technological advances such as Roundup Ready soybeans have also made Illinois growers some of the lowest variable-cost producers in the world."

He notes that a second explanation is that specialty soybeans are produced and marketed under a different business model than commodity beans.

"When producing commodity soybeans, the rules for success are to respond to markets, attain lower costs, build scale, and innovate for greater efficiency," Goldsmith said. "Producers in Illinois have become very skilled at executing this business model over the years."



Photo by David Rieckls

Peter Goldsmith is a National Soybean Research Laboratory Fellow in Agricultural Strategy and assistant professor in the Department of Agricultural and Consumer Economics at the University of Illinois. He is also a member of the American Soybean Association and the National Soybean Producers Association.



According to Goldsmith, the growing and marketing of specialty soybeans requires some very different business skills.

"Specialty-markets suppliers must respond to the needs of customers," he said. "They must also work with those making changes in the market, operate within a system, and continually strive to improve. So applying commodity rules to specialty businesses may be part of why specialty opportunities are hard to capture. Switching and adopting the new rules to operate the farm business is another major difficulty."

"For a specialty business to be successful, it is important to focus on customers and service, in addition to producing a high-quality soybean."

Goldsmith adds that, because of its customer and system orientation, the specialty soybean business requires less relative investment in production and much more in relationships and marketing.

"Historically agriculture's expertise has been in production," he said. "Relationship marketing, communication, and service were not necessary. Specialty soybeans and niche marketing are different."

He emphasizes that farmers, policy makers, and agribusiness managers who want to partake in these markets must act differently.

"Most significant are the types of investment and underlying research and development necessary to compete," Goldsmith said. "Investment may not necessarily be greater in terms of dollar value but certainly must be different."

He adds that the focus for investing should be on information technologies and traceability, processing and food manufacturing, and customer needs.

"For a specialty business to be successful, it is important to focus on customers and service, in addition to producing a high-quality soybean," Goldsmith said. "So whether the entity is a university, an agribusiness, a farm organization, or a farmer, it means that change is required. The bottom line is that the business of specialty soybeans is different, so investment has to be different." 🍱

For more information, contact Peter Goldsmith (217-333-5131; pgoldsmi@express.cites.uiuc.edu).

Rob Wynstra is a writer in the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois.

Gardensoy Soybeans:

A variety for the dinner table

by Debra Levey Larson

Although soybeans may typically be associated with processed soy products, such as tofu, soy flour, soy milk, margarine and cooking oil, they are also an edible vegetable in whole bean form. University of Illinois researcher Richard Bernard developed 13 varieties of soybeans called Gardensoy, specifically bred to be eaten as a vegetable on your dinner plate alongside peas, carrots and corn, but with the nutritional punch of the protein found in soybeans.

Cary Howrey, who has been farming for about 15 years, was a guinea pig for Bernard's Gardensoy soybeans when he was first developing the varieties. Howrey grew many of the varieties on her farm in Illinois and sells them at a Saturday morning farmers' market at Lincoln Square in Urbana at her stand, "Garden of Eatn'."

"When I first started selling edible soybeans," said Howrey, "they were a hard sell to American women. They thought soybeans were just for animals. Then when soybeans were in the news, saying that soy products were good for women's health, they started trying my fresh soybeans more. My Asian customers have always loved them."

Farmers in Japan have been growing soybeans to be eaten as a table vegetable for centuries, but their varieties don't thrive in the climate and diseases in the United States, said Bernard. "I started the hybrid process using Japanese soybean varieties and crossed them with our own high-yielding varieties."

Last year, Howrey said, she planted three varieties with staggered harvest times, beginning in late August through

the end of October. "The Gardensoy soybeans are bigger and tastier. There are some black ones that are really tasty—not oily or bland."

Soybeans can be cooked different ways depending on when they are harvested, said Bernard. If they are harvested dry, like pinto beans, Bernard says, they need to be taken out of the pod and boiled for about 40 minutes. "One big mistake people make is to soak them overnight like they are used to doing with other dried beans and peas. You can't do that with soybeans because they turn rancid if they are presoaked. Just throw them into boiling water and cook them for 45 minutes."

If the soybeans are picked while they are still green, they can be boiled or steamed for four or five minutes, removed from the pod and eaten alone or used just like any other vegetable in soups or casseroles. "They are bright green, so they add a lot of color to a dish, but not a lot of flavor, like peas," said Bernard. He stressed that unlike green beans, soybean pods are inedible—stringy, with an unappealing texture. After cooking the beans are easily squeezed out of the pod—and into your mouth, Bernard said.

Bernard released the first six varieties of the Gardensoy type in 2000 and seven more in 2002. He is still working on over 100 more varieties. The 13 varieties already released were selected because of their good taste, bean size and color. They take different amounts of time to flower and ripen, so harvesting can be staggered and spread out over a longer period.



University of Illinois researcher Richard Bernard developed 13 varieties of soybeans called Gardensoy, specifically bred to be eaten as a vegetable on your dinner plate alongside peas, carrots and corn, but with the nutritional punch of the protein found in soybeans.

Since large-scale soybean farmers would need to adapt their equipment to harvest Gardensoy soybeans, Bernard has focused on getting the seeds to small vegetable farmers and homeowners with vegetable gardens. "We'll provide packets containing 30 to 50 seeds free of charge of any or all of the 13 Gardensoy varieties to anyone who wants to try them," he said. Larger quantities are available through Rupp Seeds in Ohio (800-700-1199).

For more information about Gardensoy soybeans, contact Richard Bernard (217-398-0926; rbernard@uiuc.edu) or visit <http://www.nsrll.uiuc.edu/aboutsoy/edamame.html>.



Urbana, Illinois, is home to the Gardensoy soybean variety. The sign is located at the market stand at Lincoln Square.

Research on Transitioning to Organic Farming

By Amy Blankestyn

Even before receiving funding, a group of scientists and Extension specialists from the University of Illinois, the University of Wisconsin, and the Illinois Natural History Survey (INHS) began working together on a project for which they have a common interest—organic farming. According to Cathy Eastman, an INHS entomologist, the group jumped at the chance to initiate a field research project when the Survey offered the group six acres of its land allotment on the University of Illinois Cruse Tract as a field site for organic systems research.

With help from an INHS seed grant, the group held a planning workshop with experienced organic growers and submitted a proposal to the United States Department of Agriculture's Organic Transitions Program. Fingers crossed, the group established their field plots and collected baseline crop data at the site off Windsor Road in summer 2003 in hopes that research funding would soon follow. The gamble paid off, and the organic research team received a four-year grant last September. Field activities at the site for the second growing season are now under way.

With nearly 1.5 million hectares of land currently under organic management in North America alone, organic farming demands attention. "Interest in organic food has been growing at a rapid pace," Eastman said, "but there is also a lack of scientific research supporting organic systems. Organic

farmers are a consumer base that has been inadequately served. We need to be doing a better job at working with organic farmers to develop science-based information about organic systems," she said.

The organic research team used the information received from organic farmers to determine what kind of experiments the team should begin. The team is focusing the first three years of its experiments on researching the transition period, or the time it takes for chemicals to leave the system. Land must be free of synthetic chemicals for three years before crops grown there can be certified as organic. The researchers are investigating the effects of management intensity and organic amendments on pests, plant health, soil fertility, soil invertebrates and the complex web connecting everything. They are also researching individual components of the systems in separate experiments on small strips of adjacent land.

Ed Zaborski, soil invertebrate ecologist for INHS, said the land is divided into 36 plots. Actually, there are three management intensity systems: high intensity (vegetable production with cover crops); intermediate intensity (row crop production with cover crops); and low intensity (perennial pasture with no harvest, only occasional mowing). These systems are further divided into three subsystems, each with a different soil-fertility management strategy: no additional organic matter amendments, added



Cathy Eastman, INHS entomologist, says the project will help determine what kind of experiments the team should begin. The team is focusing the first three years of its experiments on researching the transition period, or the time it takes for chemicals to leave the system. Land must be free of synthetic chemicals for three years before crops grown there can be certified as organic. The researchers are investigating the effects of management intensity and organic amendments on pests, plant health, soil fertility, soil invertebrates and the complex web connecting everything. They are also researching individual components of the systems in separate experiments on small strips of adjacent land.

biologically active organic matter (e.g., manure), or added stabilized organic matter (compost). Each of the nine "systems" is repeated four times, giving 36 plots. With help from their farmer advisory council, the team chose these systems to represent three different approaches to transitioning from conventional to organic production. Eastman said the organic research team not only wanted to research organic farming, but also wanted to learn from established farmers. The team wants to focus on the experiences of organic farmers and translate that information into

within the group and with their farmer advisors, especially since the project is still in its beginning stages.

"I think it's great we've managed to get this off the ground. Now we're reworking our organizational structure to improve our effectiveness in group communications and decision-making," he said.

Zaborski thinks that more people are interested and would get involved in organic research if the right situation were presented. He feels the group will address questions that existing organic

For more information about the project, contact Cathy Eastman (217- 333-6659; ceastman@staff.uiuc.edu) or Ed Zaborski (217-265-0330; zaborski@mail.inhs.uiuc.edu).

Amy Blankestyn is a student in the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois. She is majoring in agricultural communications — news editorial option. She is also chief layout editor for Environmental Resources, and a layout editor for Illini Horizon.



Eastman is working in a field plot...

The Austrian pea cover crop in this plot will be turned under in mid-June and planted in cabbage and broccoli in mid-July.

A sign marks the organic research and demonstration plot.

scientific research opportunities, which in turn can increase the usefulness of Extension information developed about organic systems.

"This is an outlet for the experience they [organic farmers] have and an opportunity for them to have an impact on what the university is researching," she said.

Eastman stressed that the organic research team is a multi-disciplinary, multi-department, and multi-institutional research group that allows participation from a wide variety of interests. One of the most difficult tasks, Zaborski said, is coordinating and communicating effectively, both

producers are facing after the transition period research is done. Researchers will be able to reach farmers interested in switching to organic farming, while also supplying established farmers with important findings.

Eastman said a large focus of the group will be the outreach products the team can help supply from and beyond the research done at the Windsor Road site. "The organic research team hopes to establish a network that future scientists can use to continue organic research and outreach," she said.

State-Wide Directory on the Web @ Illinoisfarmdirect.org



A website that began about a year ago as a way to connect consumers with fresh foods grown by local farmers in central Illinois has recently made the leap to serve the entire state of Illinois.

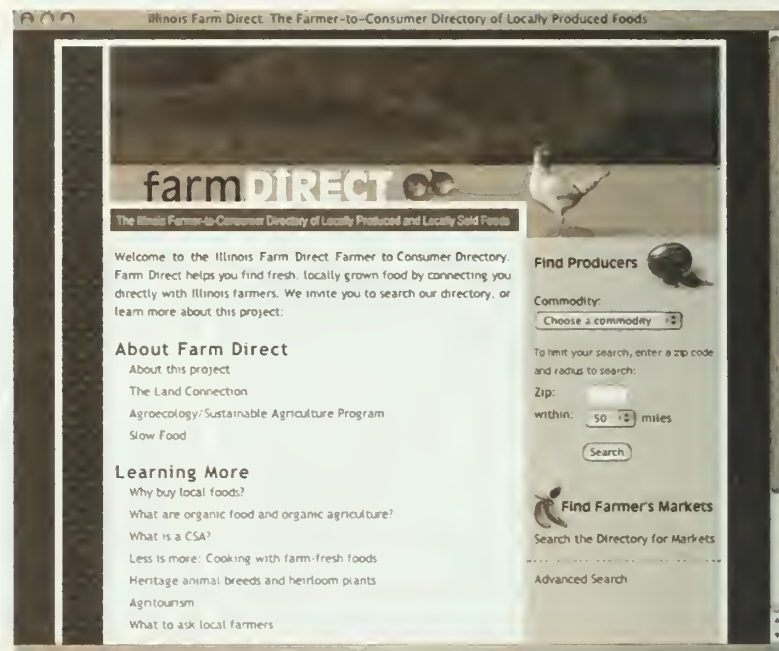
Farm Direct can now be found at Illinoisfarmdirect.org. The site has listings for over 700 farms, processors, farmers' markets and Community-Supported Agriculture operations, or CSAs. CSA's are also known as "subscription farming": Customers buy a subscription from a local farmer much like a subscription to a magazine, but instead of the magazine, they receive a pre-determined amount of fresh, locally grown or locally raised fruit, vegetables, eggs, and/or meats.

The project is a joint effort between the University of Illinois Agroecology/Sustainable Agriculture Program; the Department of Natural Resources and Environmental Sciences, University of Illinois Extension; The Land Connection, a non-profit organization connecting sustainable farmers to consumers; and Prairieland Slow Food, a group dedicated to the preservation of artisan food production, heritage seeds and animal breeds, and good eating. It is funded by the Illinois Department of Agriculture's Sustainable Agriculture Committee.

At the website, visitors can search by county or by product. Each entry also includes the name, address and phone number of each farm business, as well as a link if the business has a website of its own. When a visitor to the site searches by product, a listing of locations all around the state of Illinois is displayed.

"Only growers who sell directly to consumers are included in the directory," said Terra Brockman, executive director of The Land Connection Foundation. "And processors dealing with livestock raised in Illinois and selling those meat and dairy products directly to consumers are included."

"We wanted to make it easy for people to find farmers in their own community," said Laurence Mate, director of Prairieland Slow Food. Mate said that farm-fresh food has more flavor and there are a lot more varieties to choose from. "Once you discover how sweet fresh-picked asparagus actually is or how much flavor a really ripe Brandywine tomato can pack, there's no going back."



Illinois Farm Direct is the largest online directory of locally produced foods in Illinois.

"Farm Direct is an important source of information for producers and consumers who are re-creating vibrant local food systems across Illinois," said Brockman. "Community-based food systems are one of the best ways to keep family farmers in business, revitalize rural economies, ensure a safe and delicious food supply, and protect soil, air, and water."

David Onstad, Stuart Tarr, Deborah Cavanaugh-Grant, and Dan Anderson at the University of Illinois believe that this website directory will help small farmers build a clientele of local customers. "In order for small farmers to thrive, they need sustainable income," said Onstad. "Connecting farmers with customers helps everyone."

To obtain a printed copy, send a \$3.00 check made payable to The Land Connection and your mailing address to The Land Connection, P.O. Box 197, Goodfield, IL 61742-0197.

For more information about the site, contact David Onstad (217-333-6820; onstad@uiuc.edu).



Central Illinois Farm Fresh Network Formed

by Shannon T. Allen

On February 19, the Illinois Macon County Soil and Water Conservation District (SWCD) met with representatives from farmers' markets, growers, and other business people to discuss the possibility of forming a local foods network. As a result of the meeting, the Central Illinois Farm Fresh Network (CIFFN) was created.

The purpose of the network is to promote the exchange of information and ideas, to advance the marketing of locally grown farm products, and to provide education and resources to consumers and producers.

CIFFN is working to develop a creative plan to promote local farmers' markets to consumers. One idea is to provide demonstrations at farmers' markets in which area chefs prepare dishes that use locally grown foods sold at the markets. CIFFN is currently working with area chefs who want to purchase locally grown products because of the products' freshness. CIFFN is looking at ways to solve the supply-and-demand problems that arise with locally grown foods. The group also plans to create a year-round farmers' market and teach farmers how to make cheap greenhouses for growing and supplying products year-round.

The counties included in CIFFN are Macon, McLean, Morgan, Moultrie, Sangamon, Christian, Shelby, Coles, Douglas, Champaign, Piatt and DeWitt. The annual membership fee is \$25 per year (\$30 per year for those living outside of the CIFFN counties). This year's membership is valid through January 2005. A check made payable to Macon County SWCD can be sent to 4004 College Park Road, Decatur, IL 62521. 🍅

Shannon T. Allen is Watershed Specialist for the Macon County Soil and Water Conservation District and a member of the Central Illinois Farm Fresh Network. For more information, contact Allen (217-877-5670, ext. 3; shannon.allen@il.nacd.net).

Agritourism in Illinois

Agritourism in Illinois is picking up momentum with the formation of a state-wide association, the Agriculture & Tourism Partners of Illinois (ATPI). ATPI is incorporated as a nonprofit organization with a mission of supporting and marketing agritourism in the state.

According to Sheldon Keyser, ATPI's interim president, trends in tourism support the growth of agritourism throughout Illinois. "Those of us who have lived on farms share unique experiences that are now marketable, like plucking a ripe apple or a vine-ripened tomato and eating it on the spot. Seasonal activities like autumn bonfires with wiener roasts and hay rides and so many other things we've enjoyed and taken for granted are now sought-out experiences. People will pay farmers just to show them how to milk a cow." Although this is not a get-rich-quick business, Keyser went on to say, it does afford farmers the opportunity to generate additional revenues. "I think there are two important goals for any farmer thinking of doing this: one, to make a profit, and, two, to have fun doing it."

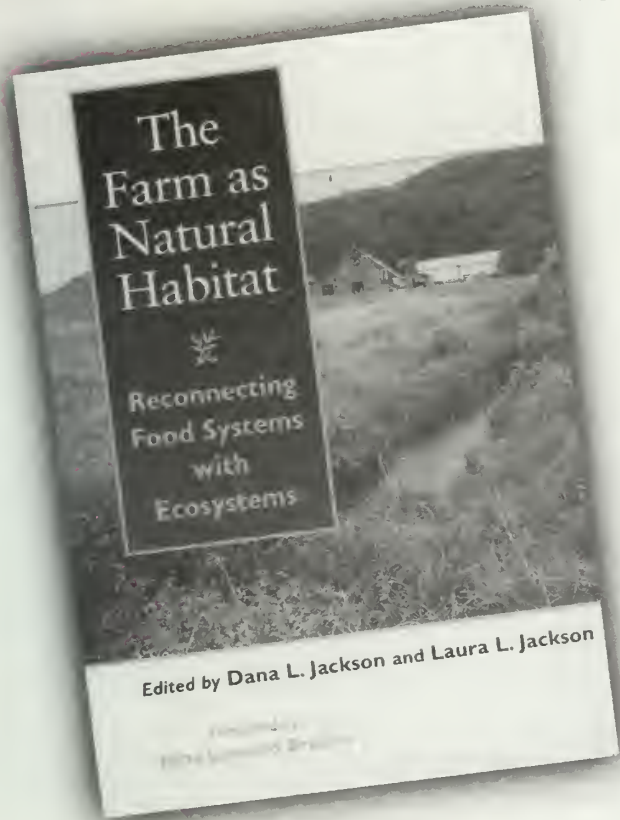
While there are many considerations in any business venture, the key one in agritourism is marketing, and that is an area where ATPI can help. Membership in ATPI provides a member a voice in a statewide organization, access to marketing resources, and marketing support.

The organization's first annual meeting of members and statewide conference is July 21 in Springfield. For more information, contact the Central Illinois Tourism Development Office, 700 East Adams Street, Springfield, IL 62701; 217-525-7980; citdo@visitcentralillinois.com. 🍷

The Farm as Natural Habitat: Reconnecting Food Systems with Ecosystems

Dana L. Jackson and Laura L. Jackson, editors

Reviewed by Kay Carnes



ing populations of native species that once thrived in the Midwest. The movement towards sustainable agriculture that began in the 1980's, while not changing industrialized agriculture, has been a positive step to restoring the relationship between farming and nature.

The book is divided into four parts. Part I presents the editors' conception of the problem and what is wrong with industrial agriculture. As the authors see it, the primary problem is that farmland has been dedicated to a corn/soybean monoculture lacking in biodiversity and that agriculture as an ecological sacrifice is acceptable not only to farmers but to conservationists, the U.S. Department of Agriculture and to the general public. The consequences of modern industrial agriculture include but are not limited to manure spills, nutrient runoff and pesticide contamination, which have far-reaching effects that reach far beyond the Midwest, as evidenced by a large hypoxic dead zone in the Gulf of Mexico. The blame for these problems does not lie not only with the farmers, but also with the government farm policies, universities, agrochemical companies and the public.

In Part II, the authors take a look at several farmers who are managing their land in ways that place farming and conservation in harmony and who are making a profit and feeding the world at the same time. Their motives and methods as well as the accomplishments, rewards and pitfalls of their conservation efforts are closely examined. What is special about these farmers is that they enjoy the natural habitats on their farms and see them as integral to their farms. Sadly, their efforts go unrewarded by government programs, which instead pay large subsidies to factory farms to repair damage that has resulted from poor stewardship practices.

A number of conservation programs are also discussed, showing that farmers and conservationists can work together to preserve the health of the land and waterways.

Changes in farming practices over the last century, and particularly since the advent of synthetic fertilizers and pesticides after World War II, have resulted in decreased diversity of crops and loss of natural habitat at an alarming rate. Industrialized agriculture and meat factories are now the norm, and they have caused alterations of the ecosystem literally from the ground up. Soil ecology has been devastated, erosion is on the increase, streams and rivers are polluted with nitrogen run-off and habitat destruction is at an all-time high.

The Farm as Natural Habitat is a series of essays by several authors, including the editors, which address these problems and demonstrate that conservation and farming can co-exist to restore a portion of biodiversity to the depleted land. The book is a reaction by the editors to the notion held by many conservationists and ecologists that the current agricultural landscape as outlined above is inevitable and a necessary sacrifice. It is also an attempt by the editors to carry forth the insights of Aldo Leopold and encourage national policy changes to support farming practices that would produce healthful food while sustain-

The Coon Valley, Wisconsin, watershed project was begun in the mid 1930's by Aldo Leopold and his sons and was the nation's first watershed project. Although landowners initially signed up for 5-year agreements, several of the farms continue to be farmed by the children and grandchildren of the original farm owners, using the conservation methods outlined in the original agreement.

Part III of *The Farm as Natural Habitat* closely examines ecosystem management in relation to privately owned lands. It looks at policies of the British government that provide incentives for landowners to maintain or restore native habitats and the impact these incentives have had on restoration. This part also outlines the importance of crop rotation in restoration as well as other necessary actions, such as restoration of marginal lands, protection of remaining habitat remnants, slowing the spread of exotic species and enhancing remaining pasture and hay lands with native plants.

The delicate relationship between conservation and agriculture is discussed by looking at several projects of The Nature Conservancy. Communication by both sides is essential for successful co-existence of biodiversity conservation and agriculture. Another seemingly unlikely project is the Tule Lake [California] National Wildlife Refuge, Tule Lake, California, which promotes both wetland habitat and farming. These relationships are delicate, sometimes tenuous and not always successful, but they show that ecosystem management is possible with cooperation, communication and dedication on the part of all parties involved.

Part IV addresses what can be done to bring about agroecological restoration and to turn around the industrial agriculture that is destroying the ecosystem. Although it would be easy to put the responsibility for restoration solely on the shoulders of the farmers, the problems belong to all of us who eat and vote. Changes in federal farm policy need to be made to encourage and reward those who are good land stewards and work toward restoration. We, the public, need to know where our food comes from and the environmental costs of the food we choose to eat. We need to examine our role in the market's demand for food, by supporting local growers and agricultural products pro-

duced by sustainable methods. We need to be outraged at damaging agricultural practices and work to make changes at all government levels that will restore habitats. Farmers need to consider whole-farm planning when making production decisions, but they need to be supported and assisted in this planning by extension agents, the USDA and nonprofit organizations. The government and land-grant universities need to re-examine policies and associations with agribusinesses.

The Farm as Natural Habitat is a realistic look at the problems of and solutions to loss of habitat and biodiversity that have resulted from poor farming practices; and it should be required reading for all conservationists and extension agents as well as farmers. The editors Dana and Laura Jackson point that out that there are no quick fixes or easy solutions to these problems, and there is no pie-in-the-sky attitude. What they do present are starting points towards ecological restoration of farmlands, successful programs that are working currently. These ideas give us much to think about. As I look out my window at the rapidly disappearing fencerows that were home to a myriad of species and the once-black soil that gets lighter in color every year, I can only hope that restoration is not too far off. 🌱

This review was originally printed in *Restoration Ecology*, 2003, Vol. 11, No. 4, pp. 531-532. Kay Carnes is a Research Specialist in the University of Illinois College of Veterinary Medicine, Veterinary Biosciences Department.

BOOKLET EXPLORES THE PRESENT AND FUTURE OF SMALL FARMS

A Matter of Scale: Small Farms in the North Central Region



What good are small farms? Can they really compete with large farms? And what's the real definition of a small farm size? Is it defined by output or earnings, and does it matter? The definition may differ or be more or less important to a food consumer, an agriculture educator, a farmer, a lawmaker, or a banker. There are a lot of questions, with very personal consequences, and few definite answers.

The North Central Region Small Farm Task Force set out to resolve some of the questions. With grant money from the North Central Region Sustainable Agriculture Research and Education program, the task force researched the issue, analyzed the complexities and inconsistencies of the situation, and talked to real farmers. The results of their hard work can be found in a new publication—*A Matter of Scale: Small Farms in the North Central Region*. In just 20 pages, the booklet offers fresh insight into an issue with a huge effect on the economy, health, environment, and people of the North Central region.

Take, for example, the definition of a small farm. *A Matter of Scale* examines the variety of ways to define "small," and shows where and why the definitions are right or not and how the definitions affect American agricultural production and consumption. The booklet illustrates the innovations that small farms have to make in an era of agricultural consolidation and offers real-life examples of the farmers behind sustainable agriculture. Finally, *A Matter of Scale* charts a path through one of the thorniest philosophical issues in agriculture—the benefit and value of small farms. It explores many of the standard arguments, for and against, and presents carefully examined views.

A Matter of Scale: Small Farms in the North Central Region is available online at <http://ssfin.missouri.edu/report.htm>. Hard copies are also available upon request; contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

For additional information about small-farm activities in the North Central Region, visit <http://ssfin.missouri.edu/index.htm>

CALENDAR

JULY 20

Sustainable Agriculture Tour on Farm Composting Hampshire, Illinois

This tour will visit a farm composting operation and provide a discussion of on-farm composting methods, state regulations, how to include compost in a nutrient management plan, and marketing. The tour will include an equipment demonstration.

For details and registration, visit <https://webs.aces.uiuc.edu/asap/index.html> or contact Deborah Cavanaugh-Grant (217-968-512; cvnghgrn@uiuc.edu).

JULY 20

Pasture Walk Roblee Dairy Farm Normal, Illinois

Information on the use of summer annuals and brassicas and incorporating legumes and grasses in livestock operations will be presented at a pasture walk at Roblee Dairy Farm near Normal in McLean County. The walk will begin at 6:30 p.m. with a discussion led by several forage extension specialists from the University of Illinois and forage seed company representatives.

Directions: From Exit 125 on Interstate 74, travel northwest 1.5 miles on Illinois 150, then turn east for 1/4 mile on County Road 1900 North. Reservations are not needed to attend, but producers are asked to wear clean clothes and shoes for biosecurity reasons. For additional information, contact Steve Schwoerer at the McLean County Extension Center (309-663-8306) or Dave Seibert at the East Peoria Extension Center (309-694-7501, ext. 224).

JULY 25 TO 28

7th International Conference on Precision Agriculture Minneapolis, MN

Visit the conference website for information about the program, travel, lodging, area attractions and contact information for questions regarding conference activities. <http://www.precision.agri.umn.edu/Conference/>

AUGUST 4

Sustainable Agriculture Tour—Vegetable Farming on the Urban Edge Prairie Crossing, Grayslake

This event will include a wagon and walking tour of the Prairie Crossing Organic Farm, the neighboring conservation community and Liberty Prairie Reserve. Visitors will see fields in transition to organic from conventional farming, view the Learning Farm for school children, learn about the Prairie Crossing Conservation Community and enjoy a fresh organic produce lunch while surrounded by prairie, wetlands and oak savanna. For more information about the community, farm and reserve, visit <http://www.prairiecrossing.com/pc/site/>.

For details and registration, visit <https://webs.aces.uiuc.edu/asap/index.html> or contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

AUGUST 5

Watershed Planning: Utilizing the Internet

This University of Illinois Extension program is offering a web-based workshop at Black Hawk East Campus to assist individuals who are interested in learning more about mapping their watershed using information available on the Internet. The workshop will run from 9:00 a.m. to noon.

Using the Resource Management Mapping Service website, participants will learn how to map demographic data and, resource data, insert buffers, tabulate acreage for given areas, view aerial photographs and print and/or save their maps.

Pre-registration prior to August 1 is requested; by contacting Susan Meeker (309-694-7501 ext. 225; smeeker@uiuc.edu).

AUGUST 12

Sustainable Agriculture—Pastured Poultry Herscher, Illinois

Visit Dennis and JoAnn Dickman's unique pastured poultry farm. Chicken meal included. For details and registration, visit <https://webs.aces.uiuc.edu/asap/index.html> or contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

CALENDAR

AUGUST 30 TO SEPTEMBER 2

2004 National Rural Development Partnership Conference Oklahoma City, OK

This annual conference brings together partners from all levels of government, as well as private for-profit and non-profit organizations, to address the needs of rural America. For more information, contact Sharon Colbert (scolbert@ocdx.usda.gov).

SEPTEMBER 2

Orr Beef Research Center Field Day Perry, Illinois

The annual Orr Beef Research Center Field Day will be held on Thursday, September 2, 2004, at the beef center in Pike County (Perry, Illinois). Registration will begin at 2:00 p.m. followed by a tour of the current research trials at 2:30 p.m. and an evening educational program and a steak dinner. The program is being co-sponsored by the University of Illinois Department of Animal Sciences and University of Illinois Extension.

Dan Faulkner, U of I Extension beef cattle specialist, will discuss the current research trials at the Orr Center as well as the other Illinois beef research stations in Urbana and Dixon Springs. Other speakers on the program include Doug Parrett, U of I beef cattle specialist, and Dave Seibert, animal systems educator from the East Peoria Extension Center. Jim Dahlquist, manager of the Orr Beef Center, will discuss current research being conducted at the Orr Center.

The field day will also include commercial exhibits of beef cattle equipment, pharmaceuticals, and technology. Time will be provided prior to the program, between the tour and educational program and following the evening steak dinner, to visit with the exhibitors.

There is no registration fee and the evening steak dinner is free. Copies of the program can be obtained from your local Extension office or by contacting Jim Dahlquist (217-236-4961; dahlquist@uiuc.edu).

SEPTEMBER 9 AND 10

The Role of Farmers' Markets in America's Food System Des Moines, IA

Drake University and the Agricultural Law Center will sponsor the second National Workshop, held in conjunction with the third annual Iowa Food Policy Conference. Workshops, panel discussions, and reports from the 11

state partners within the State and Local Food Policy Council initiative will be featured.

Information about the program, speakers, agri-tours, and workshop registration will be available at http://www.statefoodpolicy.org/new_developments.htm. For more information, contact the Agricultural Law Center (515-271-2065).

September 15

Sustainable Agriculture Tour—Farming Alternatives Western Illinois

This tour will visit several locations that demonstrate successful alternatives to conventional farming. It will include stops at John Brook's fee hunting operation, Baxter's Vineyard and Winery and Warren and Phil Barn's buffalo ranch.

For details and registration, visit <https://webs.aces.uiuc.edu/asap/index.html> or contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

SEPTEMBER 18

Illinois River Sweep 2004

Previous Illinois River Sweeps have included over 1,700 volunteers cleaning up the shorelines of the Illinois River from Chicago to Grafton, Illinois. Community groups, 4-H clubs, service clubs, churches, schools, hunting and fishing clubs, and other organizations are encouraged to sign up by August 15 to participate. Friends of the Illinois River provide free t-shirts, work gloves, and trash bags for the clean-up event. To order by August 15, call toll-free (866-584-1310). For more information, contact Bob Frazee, University of Illinois natural resources educator (309-694-7501, ext. 226).

OCTOBER 15

Sustainable Agriculture Tour—Agritourism Millstadt, Illinois

Visit Eckert's Country Store and Farms, the largest family-owned and operated pick-your-own fruit farm in the nation. For more about Eckert's, visit <http://www.eckerts.com/Millstadt.htm>.

For details and registration, visit <https://webs.aces.uiuc.edu/asap/index.html> or contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

One-Day Permaculture Design Course

Sustainable agriculture expert Joel Salatin will give a one-day design course in permaculture July 27 from 9:00 a.m. to 5:00 p.m. at the Legion Hall in Kempton, Illinois. This is being offered in conjunction with a 15-day certification course.

A third-generation alternative farmer, Salatin has demonstrated the success of his techniques largely through the example he provides on his profitable Shenandoah Valley farm. The farm services more than 400 customers, farmers' markets, metropolitan buying clubs, and 30 restaurants with salad bar beef, pastured poultry, eggmobile eggs, pigator pork, forage-based rabbits, and pastured turkey through relationship marketing.

The family's farm, Polyface Inc., or "The Farm of Many Faces," has been featured in *Smithsonian* and *National Geographic* magazines and in a television series entitled "Lives of the 21st Century."

Salatin is the author of *Pastured Poultry Profit\$*; *Salad Bar Beef*; *You Can Farm: The Entrepreneur's Guide to Start and Succeed in a Farming Enterprise*; and *Family Friendly Farming: A Multi-Generational Home-Based Business Testament*.

For more information, contact Bill Wilson (815-256-2204; csc@stelle.net) or visit <http://www.permaculture.com> or <http://www.stellecommunity.com>. 🐾



Photo by Tom Gettings

Joel Salatin

Urbana-ECOLOGY 
News and Perspectives

University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
W-503 Turner Hall, MC-047
1102 S. Goodwin Ave.
Urbana, Illinois 61801

ROBERT ALLEN
ACES LIBRARY
1101 S GOODWIN AVE
URBANA IL 61801-4735
MC-533

Calculating the Learning Curve for Farmers

by Debra Levey Larson

FALL 2004

INSIDE

Reinterpreting Organic as an Alternate Industrial Food 3

Horse Pasture Management 5

Auction Provides Amish Farmers a Market 7

USDA NCR SARE Mini-Grants 9

While it may be fairly easy to count the number of hours a farmer spends in the field, it's more difficult to calculate how many hours a farmer spends learning about farming. Now, add to that the fact that farmers transitioning from conventional practices to organic farming are on a much steeper learning curve. If time is money, then what is it costing these farmers as they transition from conventional to organic farming?

Maria Boerngen, a doctoral student in the Department of Agricultural and Consumer Economics at the University of Illinois, wanted to find out more about this time investment. "Farmers transitioning from conventional to organic have to build a new set of skills," she said. "A measure of the time spent learning about organic practices could be useful in calculating conversion subsidies that could be offered to encourage farmers to make the transition."

Boerngen developed a survey that was mailed to 1000 farmers. She received 109 completed surveys from reduced chemical and organic farmers and 101 from conventional farmers. She presented a summary of the responses at a recent organic production workshop at the Extension Center on the Illinois State Fairgrounds in Springfield. The workshop was a professional development opportunity for Extension educators and other agricultural professionals.

"We learned that the transition to organic management requires a total learning investment of 260 to 520 hours before organic practices are adopted," said Boerngen. "Once transition is complete, the difference in 'everyday' learning time is small, but statistically significant."

The survey responses showed that the learning time investment during the transition to reduced chemical farming was 2.9 hours per week, while during the transition to organic farming it was 5.2 hours per week. This transition period lasted one to two years.

After that transition time was past, Boerngen refers to "everyday learning time" — that is, the ongoing learning that takes place for all producers. "The survey revealed that conventional farmers spend 3.3 hours per week in continuing education about farming, while reduced chemical and organic farmers spend 3.9 hours per week," she said.



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen. Photos not credited in this issue were taken by Debra Levey Larson.

Please address all correspondence to:
Agro-Ecology Editors, W-503 Turner Hall,
1102 S. Goodwin, Urbana, IL 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Grant Program, the Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign and the University of Illinois Extension.



College of Agricultural,
Consumer and
Environmental Sciences

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of Agro-Ecology News and Perspectives, contact Deborah Cavanaugh-Grant, 217-968-5512, email: cvnghgrn@uiuc.edu

Learning Curve continued



More than 45 U of I researchers and Extension educators attended a workshop on organic production at the Illinois State Fairgrounds in Springfield in June. Boerngen was one of the presenters

"A lot of past studies have concluded that reduced chemical farming is just as profitable as conventional farming," said David Bullock, associate professor in the Department of Agricultural and Consumer Economics, and Boerngen's advisor. "But that leaves us with the question of why it seems so difficult to convince farmers to lower their chemical input levels. Our results show that there's a significant cost to learning how to be a profitable low-chemical-input farmer. Studies that don't account for that cost may be missing an important part of the picture."

Boerngen's survey also demonstrated significant differences when demographics were factored in. "When there was an incremental increase in the level of education, the probability that a farmer adopted reduced-chemical or organic practices increased by 29 percent," Boerngen said. "And a 10-year increase in the age of the farmer decreased the farmer's total weekly 'everyday' learning time by 1.25 hours."



Boerngen discusses an article in an agricultural economics journal with her advisor David Bullock.

She concluded that it is important to place a wage value on farmers' time in order to measure the actual costs of learning, and that these learning costs should be included in research studies that look at profitability. ♻️

Funding for this project was provided by the Illinois Department of Agriculture. Contact Boerngen at 217-244-2810, boerngen@uiuc.edu.

MARK YOUR CALENDAR —

Illinois Organic Production Conference:
Providing Farmers with Practical,
Science-Based Information on Organic
Production and Certification

January 12 - 13, 2005
Holiday Inn, Normal, Illinois

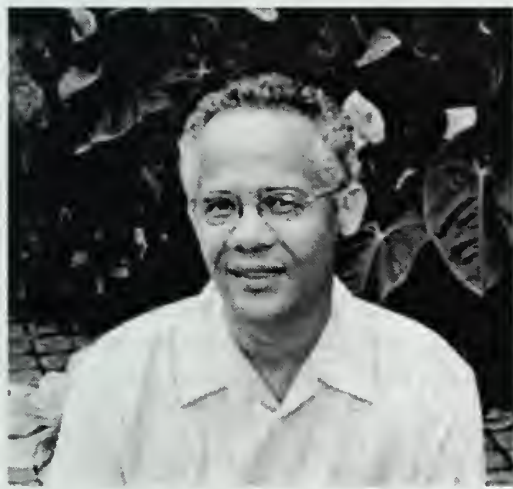
This is conference for Illinois farmers already farming organic or interested in converting all or part of their land. Topics will include organic transition and certification, marketing, pest control and fertility for vegetable and grain crops, composting, equipment and organic livestock issues.

Registration fee: \$75 in advance, \$100 at the door

For more information, contact Dan Anderson (217-333-1588; aslan@uiuc.edu) or visit <http://www.aces.uiuc.edu/asap/>.

Reinterpreting organic as an alternate to industrial food

by Ken Salo



Ken Salo

The relation between the USDA's October 2002 final rule requiring third- or private- party certification for any products labeled 'organic' and food quality continues to be hotly debated. Recently, legal scholars have begun to debate the significance of the USDA's preference for certification practices in the context of highly variable and diversified conditions of production, such as localized organic production systems, since certification practices assume uniform modes of production, more characteristic of industrialized systems.

However, the USDA, as per their Webpages (www.ams.usda.gov/nop), makes no claim that its certified organic food is either safe or more nutritious than conventionally produced food and says that "the certifier merely vouches for the producer and assures the buyer of the organic products' integrity" presumably by discouraging fraud and thereby avoiding unnecessary transaction costs. Notwithstanding this muted product claim, a cursory overview of the 1990 Organic Foods Production Act (OFPA) and the 2001 National Organic Standards Board principles make it clear that this act also aims to protect the environment and consumers. As an illustration, the 1990 OFPA defines "organic agriculture as an ecological management system that promotes and enhances biodiversity, biological cycles and soil biological activity" so, it may be argued, that an evaluation of its relation to environmental and hence food quality is a legitimate, albeit implicit, public concern.

Against this background, several sociolegal scholars, including me, are exploring the limits of the USDA's organic certification procedure on the evidence that a counterculture of oppositional quasi-legal (law-like) and especially local cultural practices have become resurgent in the wake of recent concerns about industrial food safety and nutrition.

Because of recurrent problems associated with the industrialization and globalization of food chains, most notably BSE, discerning consumers in industrialized countries are reinterpreting quality food and especially organic food to mean more locally and naturally (i.e., less industrially) produced food. My preliminary survey suggests evidence for food quality criteria linked not only to methods of production but more importantly to locality or place of origin.

Close-knit interpersonal relations of trust and the incorporation of products in everyday and environmentally sensitive public, domestic and civic food rituals and cultural or shared practices seem to enhance its identity as a quality food and hence a valued food deserving local legal and/or cultural protection.

Historical precedents for interpreting organic as specialized

Cultural theorist Raymond Williams traces this contrast between organic and mechanical to the intellectual tradition associated with the European Romantic movement, which arose in reaction to the Industrial Revolution and, he argues, continues to our own day. At that time a need to distinguish things “grown” or organic from those “made” arose, which in effect displaced organic producers to the margins of a rapidly industrializing society. However, over time, as industrialization not only failed to deliver its promised material wealth for all but also produced more environmental problems and social inequalities, a counter movement amongst other organic producers arose in response.

Comparative socio-legal scholars of this period point to important similarities and differences between the strategies of social formations and movements organizing during this period and those forming in our contemporary post-industrial and global moment. One of the salient differences is the apparent contradiction in the growing transnational connections of localized organic production practices. In several contexts, these transnational connections appear to have developed into stable transnational networks or nodes of production for locally produced and specialized produce.

To better understand and explain how these transnational networks of specialized products develop or are negotiated as products of interacting and localized social, technical, economic and political forces, some sociolegal scholars are turning to “conventions theory,” based mainly on the work, outside the food sector, of public policy scholar Professor Michael Storper (UCLA) along with economic policy scholar Robert Salais (CNRS, Paris).

Salience of “conventions theory” for food quality

In attempting to explain why certain patterns of interaction in economic life become stable as cooperative forms of social action and stable social orders, Storper and Salais reject rationalist ideas that social coordination is determined by shared proprietary interests such as property-based contracts for tradable rights and reduced transaction costs as too narrow an analytical frame to explain all possible interactions and complex interdependencies necessary for efficient production. Instead, they argue, efficient cooperative production — and, I would add, quality food supply chains — results from negotiations between specific sets of localized actors about what factors constitute quality as decided after consideration of a range of factors including local utility and legality, traditional/experiential knowledge and the degree of mutual acquaintance.

My preliminary and, as yet, theoretical review of organic production practices supports an assumption that the USDA’s preferred reliance on pre-production certification limits the use of its organic certification label as a marker of organic food quality. Instead, it has triggered a range of oppositional cultural practices that may, in certain localities, become regularized as alternate legalities and indicators of food quality through repeated use by localized producers and consumers. 🌱

Ken Salo is an assistant professor of international law and policy at the University of Illinois. For more information, contact him at kensalo@uiuc.edu.

Horse Pasture Management- Natural, Economical and Sustainable

But Select Pasture Species Carefully

by Dean Oswald

Horses will normally consume about 2 to 2.5% of their body weight in forage dry matter. A 1000-pound horse will need about 25 pounds of forage dry matter a day. With pasture it takes roughly 3 pounds of grass to equal 1 pound of forage dry matter, so the 1000-pound horse needs to consume 75 pounds of forage each day.

Pastures can furnish horses with nutritious, high-quality feed at a low cost minimizing the need for purchased hay and feed. Horses require fiber from forages in the diet for good health.

With the use of managed grazing, many horses can be maintained on pasture with little or no grain supplementation. Youthful, growing horses or those under heavy workload may require additional grain and/or hay to meet their nutrient needs. Horse disposition may be improved in a grazing situation through improved exercise and reduced stress.

Developing high-quality horse pastures requires understanding the growth requirements of forage species, good pasture management, and the relationship between forage species and horse health. Common cool-season grasses used in Illinois are Kentucky bluegrass, tall fescue, orchard grass and timothy. Orchard grass and timothy are high-quality bunch grasses that require higher management levels to be in horse pastures. Orchard grass can be quite productive but may be clumpy in a



poorly managed pasture. Timothy, while high quality, often has poor summer growth — it lacks heat and drought tolerance and usually is not persistent in horse pastures. Kentucky bluegrass, a sod-former, is very high quality in the early spring and fall but may go dormant and be less productive during the dryer, hot summer months.

Tall fescue can be very productive and withstand hoof action and abuse, but it may contain an endophyte fungus harmful to pregnant mares. Pregnant mares should be kept off endophyte-infected tall fescue the last two to three months of gestation. Abortions, extended gestation periods, weak foals, and little or no milk production are all possible results of grazing infected fescue. No reported health problems occur with other classes of horses. Other management options are now available with endophyte-free or friendly endophyte varieties of tall fescue that are harmless to horses and other livestock.

Legumes may be added to horse pastures to increase protein content and aid summer pasture productivity. Legumes also provide nitrogen to companion grasses. White (ladino) clover and alfalfa may be the best legumes for horse pastures. Well-drained soils with a pH of 6.2 and above are needed for successful establishment of alfalfa. Red clover is sometimes used for horse pasture but may cause excessive slobbering (which is more of a nuisance than a health risk). A balance of 40% legumes to 60% grasses is an acceptable goal. Pasture management is necessary to maintain legumes in the stand. Tall grasses tend to shade out legumes, and a rest period is critical for legume survival. Alsike clover should be avoided in horse pasture and hay due to the potential for photosensitization: symptoms include reddening and inflammation of the skin and mouth when areas are exposed to sunlight. The condition can also cause skin necrosis and liver damage. Light-colored horses are most susceptible.



Horses at the University of Illinois are fed a diet of hay and grain, the ratio depending on their particular needs.

Grazing management should be used to provide vegetative forage to horses. The preferred grazing height of forage for horses is 2 to 4 inches. Horses tend to be selective grazers, and they tend to overgraze preferred grasses and legumes. Several paddocks should be maintained to start grazing at 6 to 8 inches high with paddocks rotated when 2 to 4 inches of residue remain (with height depending on the species).

Overgrown, mature forages with seedheads are problems waiting to happen. Eye irritations can occur when horses graze through tall forage. Ergot may also be a concern with mature grass and grass weeds. Ergot fungus produces a spurlike structure in the seedhead of mature grasses when triggered by cool, wet conditions in the spring. Ergot can cause abortion and other health issues similar to tall fescue endophyte fungus. Grazing, clipping or harvesting grass before seedheads develop, easily prevents ergot problems.

Other forages to avoid include the sorghum family, which contain cyanide compounds and may cause spinal cord damage, urinary disorders, abortion, birth defects and paralysis. Pasture weeds like nightshade, cocklebur, horsetail and white snakeroot should be controlled to prevent poisonings. Some tree leaves are toxic to horses including oak, red maple, locust and black walnut.

High-quality pasture development can provide economical feed for horses. Plan ahead, select the best species for your soil type and horse nutrient needs, purchase high-quality seed, and be aware of available soil nutrients. Discuss your plans and management goals with extension crops or animal systems educators to achieve your goals. 🌱

Buying horse hay
The quality of buying pasture
Two types of pasture

Pastures for Horses
A Guide to Rotational Grazing

A booklet entitled *Buying Horse Hay* and a CD-ROM entitled *Pastures for Horses: A Guide to Rotational Grazing* are available online at www.publicationsplus.uiuc.edu. Search the online catalogue using the word "hay" or "horse," or call toll-free at 1-800-345-6087 for more information or to place an order.

Dean Oswald is an animal systems educator at the Macomb Extension Center. You may reach him at 309-836-2265, oswaldd@uiuc.edu. Funding for this project was provided through the Sustainable Agriculture Travel Scholarship Program. See page 11 for details as well as reports from three other recipients.

Auction Provides Amish Farmers a Market

by Debra Levey Larson

It can be a challenge for vegetable farmers to sell their produce when they only have a couple of bushels of cabbages or tomatoes. Roadside stands and farmers' markets are options, but Amish farmers may not have a lot of customers driving by their farms and they can't transport their produce long distances in horse-drawn buggies.

An auction held twice a week in a central location has provided an easy way for Amish farmers in the Arthur area to sell their produce quickly.


University of Illinois plant pathologist Mohammad Babadoost has been acting as advisor to a group of Amish farmers in the Arthur area since 1999. "After meeting with them several times, I learned what their needs are,"

needed to keep going. "Before, the 20-some growers took their produce to one location in buckets where it would be washed, sorted and marked for quality. But you need to have quite a bit of product to make it work. Now the co-op has 30 members — 28 Amish and two non-Amish farmers," said Graber.

Graber and his wife Betty own Graber's Greenhouse just south of Route 133 on Cadwell Road between Arthur and Sullivan. In addition to flowers, they sell sweet corn, tomatoes, onions and pumpkins at a roadside stand. "The auction is a big advantage for us. If we have too many tomatoes, we can take them to this common location and sell them, or we can buy produce wholesale that we don't grow on our own farm and then sell it at our retail roadside stand."

One of the first things that was accomplished with an initial investment of \$150,000 from shares that were sold in the co-op was the construction of a building in Arthur. It's located east of Vine Street and about half a mile south of Route 133 behind the massive CHI (Coach House Incorporated) buildings. The first auction was held there on a Friday morning in late May. At first, the plans were to hold an auction once a week, on Friday mornings, but after a few weeks, a Tuesday-morning auction was added.

Restaurant owners, grocery stores and individuals can all purchase flowers and fresh produce at the auctions, but they need to be prepared to buy in large quantities, such as two quarts of berries.



A truck backs up to the loading dock at the new Amish auction building in Arthur.

Babadoost said. "They already had a co-op of about 15 farmers but they needed help. I provided them with information, set up a library of books and publications about production and pest control and have been helping them with business and marketing." He said that the idea for an auction grew from a workshop sponsored using a grant from the University of Illinois Extension.

Amish farmer Ben Graber said that Babadoost gave them advice on production, tips on how to advertise and get the auction up and running and the encouragement they



Carts and skids overflow with fresh produce to be sold at the Arthur auction.

continued on next page



A row of horse-drawn buggies are parked behind the building to wait until the last of the produce is auctioned.

One customer, Sam Sabattini, owns a retail market in Springfield and also supplies produce to six grocery stores, four restaurants and three nightclubs. He farms 27 acres of tomatoes, green peppers, green beans and sweet corn but he comes to the auction to purchase other varieties of vegetables to fill in at his garden center. On his fourth trip to the auction, Sabattini bought 50 boxes of cucumbers, four boxes of lettuce, some cabbage and squash. "Right now I can get produce here earlier because it's grown in greenhouses. Later in the season, I'll bring produce from my own farm to sell," he said. "The auction will take 10 percent but it's worth it to get rid of larger quantities that I can't sell at my place."

Another auction customer, Joan Young, sells produce at the Paris farmers' market on Saturdays and the Charleston market on Wednesdays. She comes to the auction to supplement the produce assortment that she sells at her booth. She sees the centrally located auction as a good way for Amish farmers to sell. "Amish farmers would come by and say, 'I have a bushel of this or that. Can you sell it for me?' I'd have to buy it outright, not knowing the quality and if I'd get my money out of it or not. It was a gamble," she said.

Carolyn Kleven, a buyer for Cisco Farms, noted the need for a standard measurement. "They sell by the box, so it's hard to know how much is really there. I like to know how many pounds. Today they were selling cherries by the quart, and that's easy. I told them about it and I think they're going to work on that for future auctions," she said.

The auctions run from 10 a.m. until sell-out, which is usually around 1 p.m. A voice message with the date and time of the next auction and a list of what will be available to purchase can be heard by calling 217-543-5100. 📞

For more information, contact Mohammad Babadoost (217-333-1523; babadoos@uiuc.edu)

Ben Graber was a hog farmer in Indiana before moving to Illinois. Now he and his wife, Betty, grow vegetables and flowers in several tidy greenhouses and fields at their home on Cadwell Road just south of Route 133 between Arthur and Sullivan.

The greenhouse tomatoes are grown in the ground. As the vines grow, Graber clips them to a string that is attached to a pulley system strung in a grid about six feet above the ground. The tomatoes hang huge and plentiful from the vines.

A large PVC pipe comes up out of the ground in the greenhouse. Graber lifts the cap off of the pipe and shouts into it dramatically, "Betty, I need your help!" demonstrating the ingenious intercom system that sends his voice from the greenhouse through the pipe under the driveway and into the house.

In an adjacent greenhouse the aroma of fresh flowers is intense. A wide assortment of shade and sun-tolerant hanging plants, potted plants and annuals are sold in flats at competitive prices. At the height of the season, Betty Graber says she may have as many as 1,000 hanging baskets. When she has that many, taking some to the auction along with the boxes of tomatoes makes sense. "When we have too much to get rid of at our roadside business, we'll sell the surplus at the auction," said Betty Graber. She said that they don't get as high a price for the flowers and produce sold at auction that they could get selling them retail at their store, but it's great way to sell when they have too many tomatoes ripe at the same time and more baskets than they have space to hang.

The Grabers give tours of their Amish home and farm. The tours are arranged through the Illinois Amish Interpretive Center in Arcola. For more information, visit <http://www.amishcenter.com/tour.htm> or phone 217-268-3599 or toll-free 1-888-45AMISH.



Greenhouse-grown tomatoes are sold at Graber's store. Some are taken to the auction in Arthur.



At the height of the season, there are as many as 1,000 hanging baskets in Graber's Greenhouse.

University of Illinois USDA NCR SARE Mini-Grants

2004 NCR SARE Producer Grant Recipients from Illinois

The Producer Grant Program emphasizes the importance of farmer-driven research and indigenous knowledge, supporting innovative farmers and ranchers who are looking for ways to overcome obstacles using sustainable options. Individuals are awarded up to \$6,000. Group projects with three or more producers can be funded up to \$18,000. This year's recipients from Illinois are:

Lisa Haynes, Mahomet
"Determination of Economically
Optimal Organic Control of Onion
Maggot in Allium Crops"

Kristine Greiber, Chicago
"Resource Center City Farm"

Brenda Lyons, Sandoval
"Three Little Fishes"

Louis Reuschel, Golden
"Conducting a Variety Trial to Find the
Best Marketable Organic Tomato
Product"

Lori Bahre, Oakdale
"Growing Fish and Plants in a
Aquaponic System"

Don Spiker, Wheeler
"Use of Worm Casting Extract in Ag
Production"

Michael Vincent, Hull
"Integrated Cultural Production
Methods for Maximum Okra Seed
Yields"

A mini-grant program has been developed to provide educators (including personnel from Extension, Natural Resources Conservation Service (NRCS), other governmental agencies, and non-governmental organizations and educators from the non-profit and for-profit sectors serving the food and fiber system) with resources to develop and deliver programs and activities that enhance the sustainability of rural and urban communities and the food and agricultural system. University of Illinois has approximately \$10,000 for mini-grants made available through USDA NCR SARE Professional Development Program funds.

The mini-grant program supports educational programs and activities that enhance the sustainability of agriculture and communities in Illinois. Appropriate outputs include projects that seek to implement community activities, production practices, financial planning or stewardship activities that improve the viability of Illinois agriculture and communities.

To achieve these products, educators from units including U of I Extension and NRCS, as well as other agricultural educators in the governmental, for-profit and non-profit sectors, are invited to submit proposals in support of educational programs, events, activities, demonstrations, and other innovative educational projects.

Competitive grants of up to \$1,000 are available. Funds can be spent between January 1, 2005 and December 31, 2005.

Priority will be given to project proposals with evidence of partnering and coordination among groups, organizations, and/or agencies. This may include offering educational programs at multiple locations.

APPLICATION REQUIREMENTS

There are two main components to an application:

A. *Project Proposal*. The project proposal consists of general information and questions to be answered. Proposals should be typed or printed in dark ink. The proposal must include the following elements:

■ Cover Page

- Project Title
- Contact information: Project Leader; Address; Phone; fax; e-mail
- Partners and/or collaborators
- Mini-grant funds requested, including the dollar amount
- Matching funds and source, including the dollar amount

continued on next page

■ **Project Description.**

The applicant should write a brief statement or paragraph to answer each of the following questions:

- What are the intended educational outcomes of the project?
(Describe who is intended to benefit from the educational event and what you would anticipate the person or persons to do as a result of participating.)
- What is the output or action plan to accomplish the intended outcomes?
(Describe briefly the actions and/or events that will occur to support the educational outcomes.)
- What is the evaluation plan to determine if your educational outcomes have been achieved?
(Describe indicators that will help determine if your outcomes have been successfully accomplished.)

B. *Budget request.* Submit a complete budget with narrative to explain planned expenditures is needed.

	Mini Grant Contributions	Other Contributions
Travel	_____	_____
Operating and supplies	_____	_____
Other expenses	_____	_____
TOTAL	_____	_____

Budget narrative (explain expenses):

■

APPLICATION PROCEDURE

Proposals must be emailed no later than 5:00 p.m. November 12, 2004. Decisions will be given by December 15. Submit proposals to Deborah Cavanaugh-Grant, University of Illinois, P.O. Box 410, Greenview, IL 62642 (cvnghgrn@uiuc.edu; 217-968-5512).

■

APPLICATION EVALUATION

Proposals will be reviewed by a subcommittee of the University of Illinois SARE PDP Planning Committee. Funding recommendations will be based upon well defined educational outcomes; effective plan of action; potential benefit or outcome of the project; appropriateness of the budget; cooperation among producer groups, organizations, or agencies in planning and delivering the project; and potential contribution to the profitability and/or stewardship of Illinois producers. Projects involving community food systems, etc. will also be considered.


■

REPORTING

A brief report outlining the accomplishments toward the intended outcomes is required within 30 days of completion of the educational project. This narrative can be written similar to annual accomplishment reports. ♻️

Sustainable Agriculture Travel Scholarship Program

A travel scholarship program has been developed to provide educators (Extension, Natural Resources Conservation Service, and other agricultural educators in the governmental, for-profit and non-profit sectors) with resources to increase their awareness, knowledge, attitudes and skills in order to develop and deliver programs and activities that enhance the sustainability of rural communities and the food and agricultural system. A total of \$5,000 in travel scholarships will be awarded each year on a first come, first served basis, at up to \$500 per scholarship. Matching funds (50/50) must be provided from other sources (county funds, specialization funds, etc.). Travel scholarships may be used to support participation in conferences, tours, and other programs as well as visits to study issues or programs with researchers, Extension personnel, educational institutions, foundations, or farm families.

Proposals may be submitted at any time during the year and should be submitted at least 30 days before to the proposed travel activity. Proposals (one page or less) should include a description and date of proposed travel activity, a proposed budget and a brief discussion of how participation will help the applicant develop or conduct programs which will help clientele improve the sustainability of their farming operations. Participants will be asked to write a short synopsis of the project to be published in a future issue of *Agroecology News and Perspectives*. 

For more information contact Deborah Cavanaugh-Grant, SARE Coordinator (cvnghgrn@uiuc.edu; 217-968-5512).

First World Congress on Organic Food

*A report from Ellen Phillips
Extension Educator - Crop Systems, University of Illinois Extension*

Experts from around the world gathered at the First World Congress on Organic Food: Meeting the Challenges of Safety and Quality for Fruits, Vegetables and Grains on March 29 at Michigan State University. A wide variety of producers, processors, retailers and other agribusiness representatives as well as academics and government staffers from both organic and conventional food production systems gathered to talk about food safety in organic production and processing.

The purpose of the congress was to assess the current state of knowledge within industry and science in order to guide future research and development to improve production, handling and processing methods in organic food production.

Sessions were held on the safe production of organic food; assessing health risks of organic versus conventional foods; organic pesticide use and safety; microbiological risks in production and processing of organic food; and regulations regarding food safety and quality.


Organic food production and food safety are not only a concern in the United States. A panel of experts from countries around the world, including Japan, Australia, Uruguay, and South Africa, shared about the dramatic increase in consumer demand for organic products worldwide. This is particularly true in the international food trade market for fresh fruits and vegetables.

Research on organic food production, handling and processing has not kept up with the demand for information needed by producers and businesses. It is estimated that only 0.13% of available research acreage in the land grant system deals with organic production. Most of the research has been production based. Few research projects have addressed critical safety issues

With both organic food sales and organic acreage increasing, additional research is critical. Of specific interest is the use of compost and manure and the potential for microbial contamination. Both of these products are used extensively in organic food production systems as important sources of plant nutrients and as soil amendments.

Compost teas have also become a hot topic in organic production as new equipment becomes commercially available. The safe, economical use of these teas needs to be addressed. Pathogens in irrigation water are a concern for both conventional and organic systems. Microbial resistance in conventionally raised livestock and how that might influence organically raised animals was the greatest concern. Further training for organic producers on the use of natural pesticides is also needed. Post-harvest handling was identified as critical since quality food can deteriorate quickly if foods are not stored and handled properly.

Some discussion sections took a broader perspective, addressing whether organic agricultural production could feed a growing world with a focus on the sustainability and economics of organic production systems. The need to educate the public about the differences between organic and conventional production is seen as a high priority, since current labeling laws can make consumer decisions difficult.

A proceedings and recommendations for future initiatives from the discussion groups will be available in the near future. For more information about the conference or about this topic, visit http://www.foodsafe.msu.edu/events/congress_organics1/index.htm. 

VALUE-ADDED CONFERENCE ILLUMINATES ALTERNATIVES

by Kevin McGuire, Julie Mellert and Rhonda Ferree
University of Illinois Extension in Fulton County

On June 17 and 18, we attended the 6th Annual National Value-Added Conference in Peoria, Illinois. Participants had the opportunity to find out more about alternative and sustainable agriculture in Illinois and beyond. We each brought away different information useful in our work.

We are working on a project, Advancing Alternative Agriculture in Fulton County (AAFC), to find out what types of alternative and sustainable agriculture are going on in the county. Some of the conference topics of interest were wind energy, organic gardening, beef raised for a niche market, and even a locally owned and operated vineyard.

Also of particular interest, in light of our AAFC project, was a presentation on consumer trends, which included findings from a Roper Survey commissioned by Organic Valley, the nation's largest certified organic brand. The nationally representative survey of 1,000 adults suggests that well over half of Americans (67%) would pay more for food produced without synthetic chemicals, an encouraging finding indicating a substantial market for those choosing such alternative production methods. Additionally, survey findings suggest that 73% of Americans consider whether or not a food is grown locally or regionally to be important information. Such attitudes bode well for local producers who can successfully market the food they grow to the significant share of consumers indicating a willingness to pay for food produced without synthetic chemicals. We know from the early stages of our AAFC project, for example, that one Fulton County producer is already selling produce using a CSA (community-supported agriculture) or "subscription farming" model.

Another fascinating aspect of the conference was the banquet presentation by Dr. Peter Johnsen, director of the USDA's National Center for Agricultural Utilization Research in Peoria. Dr. Johnsen described a stunning array of significant developments made by the "National Ag Lab" right here in our part of the world, including: mass production techniques that made larger quantities of penicillin available just in time for D-day during World War II; xanthan gum, a food ingredient now found in everything from salad dressings to ice cream; and "Super Slurper," a super-absorbent product that can soak up nearly 2,000 times its own weight in moisture.

Overall, the 6th Annual Value-Added Conference shed some new light on alternatives people are taking so they can stay on their farms and remain productive. 🌱

COMPOSTING, ORGANICS RECYCLING AND RENEWABLE ENERGY

by Duane Friend

Through the Sustainable Agriculture Travel Scholarship Program, I was able to attend and make a presentation at the 34th annual Biocycle National Conference.

Topics addressed at the conference included watershed protection strategies using compost. Compost-amended soil blends have been utilized as a component in "green roof" practices that greatly decrease storm runoff. Several states are using compost for erosion control in road and building construction, as well as for stream stabilization.

Composting wildlife road mortalities as well as livestock mortalities was discussed. Declining numbers of rendering plants are making composting an attractive alternative. Methods of composting these mortalities were addressed, along with pathogen tests on finished compost.

A panel discussion of biomass and energy policy addressed how federal and state energy policies encourage or discourage the development of projects such as landfill gas recovery and anaerobic digestion/methane recovery from livestock manure. Implications for tax revenues, job creation and emission reductions were mentioned.

My presentation centered on the potential for reducing irrigation usage on compost-amended soils in Illinois. While most areas in the state do not have (or need) supplemental irrigation, several pockets have a predominance of sandy soils. One of the largest areas encompasses Mason County, which has approximately 285,000 acres of cropland, with 92,000 acres that are irrigated mostly by center pivot systems. The potential cost savings from reducing irrigation cycles can be substantial.

Field tests of compost-amended soil in Mason County are currently being conducted to verify potential water retention. Plots with 0, 10 and 20 tons of applied compost are being monitored for soil water differences during the growing season. In addition, crop yield, soil organic matter and soil nutrient levels are being monitored each year of the 4-year study. 🌱

Duane Friend is a natural resources management educator for University of Illinois Extension at the Springfield Center. He may be contacted at 217-782-6515; friend@uiuc.edu.

North Central Region




SARE Improves Website for Users

Bookmark SARE's newly revised website as your first source of information on sustainable farming and ranching technologies, networking opportunities, and funding sources for research and education initiatives. Quick links help users:

Get a grant	http://www.sare.org/grants
Search the SARE projects database	http://www.sare.org/projects/
Post or browse upcoming events	http://www.sare.org/events/show_events.asp
Order books and bulletins	http://www.sare.org/publications/index.htm
Find SARE contacts and regions	http://www.sare.org/about/contacts.htm

Topical indexes allow users to browse a variety of subjects, including animal production, crop production, and economics and marketing. The new site is also sorted by audience, giving farmers and ranchers, consumers, researchers and educators a fast track to the information most useful to them.

Please contact SARE at san@sare.org to provide feedback, ask questions, or report an error.

SARE's website is maintained by the Sustainable Agriculture Network (SAN) for the Sustainable Agriculture Research and Education (SARE) program. SARE is funded by the Cooperative State Research, Education, and Extension Service (CSREES), USDA, and works with producers, researchers and educators to promote farming systems that are profitable, environmentally sound and good for communities. SAN operates under a Cooperative Agreement with CSREES to develop and disseminate information about sustainable agriculture. For more information about grant opportunities and other resources available through SARE, visit www.sare.org. 

Business Management for Farmers: A Six-part Series for Farm Operators and Farm Managers

1
2
3
4
5
6

The six publications in the "Business Management for Farmers" series are written for and dedicated to farm operators and managers in the United States. The first four books deal with managing an established farm business. The fifth book focuses on getting established in farming, while the last covers planning the late career and retirement years.

All books in the series are well detailed with tables, figures, and worksheets designed to help readers understand the concepts being discussed.

The author is Kenneth H. Thomas, a retired extension economist in farm business management from the University of Minnesota. The series is derived from his research and thinking about farm business management during a career that spanned more than 30 years. The series should prove useful not only to managers but also to educators, lenders, consultants and others, including persons considering farming as a career.

"Business Management for Farmers" is being produced under the auspices of the North Central Farm Management Extension Committee, an outreach activity of 12 land-grant universities located in the north central United States. MWPS (MidWest Plan Service) 122 Davidson Hall, Iowa State University, Ames, IA 50011-3080 is publishing and distributing the series.

The individual books cost \$9 or \$10 per copy plus \$4.50 shipping and handling. Quantity discounts are available on individual purchases. When the six volumes are purchased as a set, the price is \$44 plus shipping and handling.

To order, send a request to MWPS at the address above; call 800-562-3618; e-mail mwps@iastate.edu; or visit the Farm Business Management section of the online catalog on the MWPS website at www.mwps.org. Visa and MasterCard are accepted and checks should be made payable to MWPS. A complete catalog of other publications is available on the MWPS website. ♻️

CALENDAR

October 19 to 21
Northeast SARE Conference
"Setting the Table: Tools and Techniques for a Sustainable Food System"
Burlington, Vermont

The Sustainable Agriculture Research and Education (SARE) program of USDA-CSREES hosts a conference every other year, moving it around the four SARE regions. The Northeast region SARE program hosts the 2004 conference in Burlington, Vermont. For details and registration, visit <http://www.uvm.edu/~nesare/conf.html>

October 29
Organic Livestock Training Satellite Broadcast
See page 16 for details.

November 1 and 2
7th Annual Farmer Cooperatives Conference
Kansas City, Missouri

Cooperative leaders from around the country who have successfully initiated novel approaches within their organization or helped start new ventures will speak at the conference. Ample time for discussion and interaction will be included in the program. For more information, visit <http://www.wisc.edu/uwcc/farmercoops04/index.html>.

November 2
Field Day
Dudley Smith Farm

John Johns from the University of Kentucky will be the guest speaker for the Field Day on November 2. For additional information, contact Chris Schroeder (cschroeder@centrec.com).

November 3
Dudley Smith Day
Pana

The focus of this year's meeting will be on "Energy and Sustainability." For information, contact Chris Schroeder (cschroeder@centrec.com).

November 4 to 6
12th National Small Farm Trade Show & Conference
"Smaller Is Better, Profit Is the Key"
Boone County Fairgrounds,
Columbia, Missouri

For details, visit <http://www.smallfarmtoday.com/tradeshow/default.asp>.

November 12 to 14
Growing Together: A Conference for Community Supported Agriculture
Tustin, Michigan

"Growing Together" will offer workshops for experienced and new CSA farmers, future CSA farmers, small farm advocates, community food/health advocates, educators and extension personnel. For details, visit <http://www.mlui.org/csaconference/>.

January 12 - 13, 2005
Illinois Organic Production Conference: Providing Farmers with Practical, Science-Based Information on Organic Production and Certification
Holiday Inn, Normal, Illinois
See page 2 for details.

February 11 - 12, 2005
North American Farmers' Direct Marketing Association Conference
Boston Park Plaza Hotel

Four pre-conference bus tours February 7 to 9 will be offered on agritourism, on-farm retail, farm direct marketing and farmers' markets. February 10 will include workshops on salesmanship, business transfers, business management strategies, and school tours.

The conference itself will feature several well-known speakers as well as more than 50 additional speakers from farms around New England and across North America.

A post-conference bus tour on February 13 and 14 will go to New York City for sightseeing.

For information, visit www.nafdma.com, e-mail, info@nafdma.com or call 413-529-0386. Registration will be available online around November 1. The pre-registration deadline is January 6.

Organic Livestock Training Satellite Broadcast

October 29, 2004 • Noon to 2:30 p.m.

Washington State University, in cooperation with the National Center for Appropriate Technology, Western SARE, Oregon State University, and Oregon Tilth, is offering a satellite broadcast examining the basics of organic livestock production and the opportunities it presents. The broadcast is sponsored by the University of Illinois Agroecology/Sustainable Agriculture Program, North Central Region SARE and Education Professional Development Program and the University of Illinois Extension.

For more information about the program, visit <http://ext.wsu.edu/noas/>.

LOCATIONS FOR VIEWING:

Champaign
Champaign County Unit
(co-hosted with Vermilion County)
801 Country Fair Drive, Suite D
Phone: 217-333-7672
<http://www.urbanext.uiuc.edu/champaign/map.html>

Bourbonnais
Kankakee County Unit
1650 Commerce Drive
Phone: 815-933-8337
<http://www.urbanext.uiuc.edu/k3/map.html>

Galesburg
Knox County Unit
180 S Soangetaha Rd, Ste 108
Phone: 309-342-5108
<http://web.extension.uiuc.edu/cie2/offices/location-t.cfm?OID=184>

Grayslake
Lake County Unit
100 South US Highway 45
Phone: 847-223-8627
<http://www.urbanext.uiuc.edu/lake/map.html>

Springfield
Sangamon/Menard Unit
Illinois State Fairgrounds
Phone: 217-782-4617
<http://web.extension.uiuc.edu/cie2/offices/location-t.cfm?OID=211> 

AGRO - ECOLOGY 
News and Perspectives

University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
W-503 Turner Hall, MC-047
1102 S. Goodwin Ave.
Urbana, Illinois 61801

Ag 86
v. 13: 4
2005

News and Perspectives

AGRO-ECOLOG Y

Science and Education for a Sustainable Agriculture



Volume 13 • Number 4

Pastured Poultry Hatching Buyers for Producers

by Kay Shipman

This article first appeared in FarmWeek, the statewide publication of the Illinois Farm Bureau, on October 13, 2004, and is reprinted with permission.

Dennis and JoAnn Dickman of Herscher market several unique products, but their pastured poultry set the Kankakee County farmers apart, as far as their Chicago-area customers are concerned.

The Dickmans annually sell about 4,000 chickens raised on grass near portable shelters that are rotated every four weeks.

The couple also sells pasture-produced brown eggs and two types of chicken sausage as well as recently developed chicken snack sticks and chicken patties, dubbed Cluckers.

In addition to their poultry products, the Dickmans grow sweet corn, soybeans, and corn on 380 acres. The couple also markets homemade noodles, jams, and jellies made by Amish farm families.

The Dickmans sell their sweet corn, chickens, and other products to customers who travel to their farm.

"More than 50 percent of our business is from Chicago, and they drive out here," JoAnn Dickman explained. The Dickmans also are regular vendors at the Kankakee County Farmers' Market in Kankakee and Bourbonnais and the market in Joliet.

The driving force behind the county farmers market, Merrill Marxman, Farm Service Agency executive director in Kankakee County, sees the market potential in pasture-raised chicken.

WINTER 2004

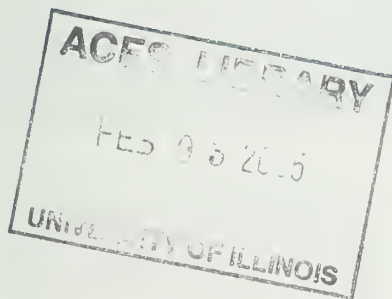
INSIDE

Integrating Pastured Poultry and Vegetable Production 4

How Effective are USDA Programs in Serving Small Farms? 6

Commentary Online 8

Farm Beginnings to be Launched in Three States 9



continued on next page



Agro-Ecology News and Perspectives is published by the College of Agricultural, Consumer and Environmental Sciences, Agroecology/Sustainable Agriculture Program, University of Illinois at Urbana-Champaign (UIUC). This newsletter is designed to inform its readers about the well being of human and natural communities through the adoption of agricultural practices and farming systems that are economically viable, environmentally sound, and socially just. This issue was edited by Deborah Cavanaugh-Grant and Debra Levey Larson, designed by Scherer Communications and produced by Roberts Design Company. Copy editing by Molly Bentsen. Photos not credited in this issue were taken by Debra Levey Larson.

Please address all correspondence to:
Agro-Ecology Editors, W-503 Turner Hall,
1102 S. Goodwin, Urbana, IL 61801.



This newsletter is printed on recycled paper using soybean ink and is funded through a grant from the North Central Region Sustainable Agriculture Research and Education (NCR SARE) Professional Development Grant Program, the Department of Natural Resources and Environmental Sciences at the University of Illinois at Urbana-Champaign and the University of Illinois Extension.



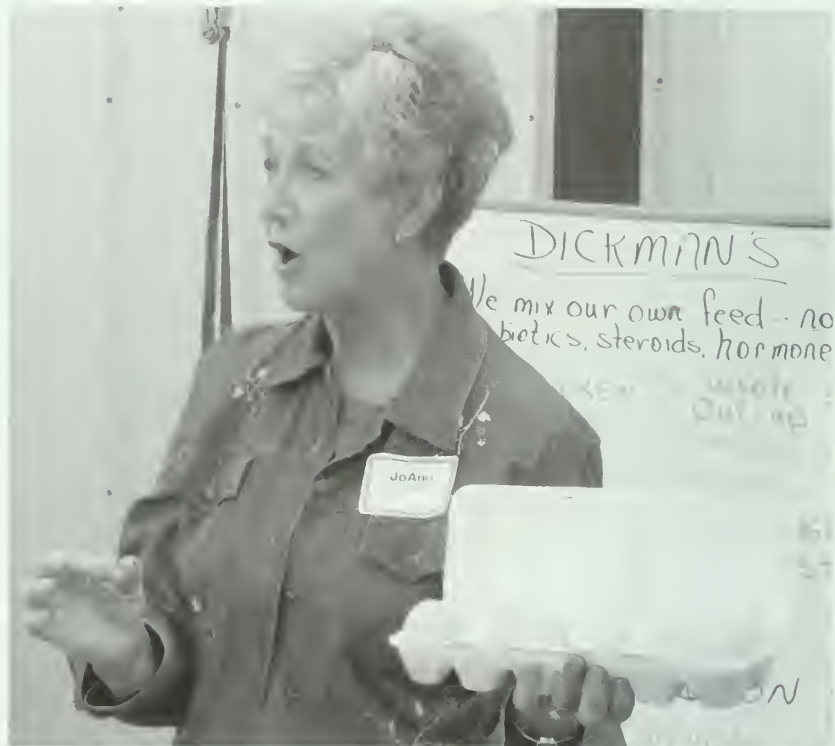
College of Agricultural,
Consumer and
Environmental Sciences

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The University of Illinois at Urbana-Champaign is an affirmative action/equal opportunity institution.

If you would like to receive future issues of Agro-Ecology News and Perspectives, contact Deborah Cavanaugh-Grant (217-968-5512; cvnghgrn@uiuc.edu).

Acrobat PDF files of this and past issues are available at <http://www.aces.uiuc.edu/~asap/news/newspersp.html>.



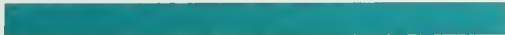
JoAnn Dickman holds a dozen of her farm fresh eggs as she addresses visitors at a recent tour sponsored by the U of I agroecology/sustainable agriculture program. The greenish colored eggs are from the Araucana chicken which is native to Chile. They lay green, blue, and mauve naturally colored eggs



The portable shelters are moved to new pasture every four weeks so the grass can recover from the manure.



The white Cornish Cross chickens on Dickman's farm are a meat bird chicken.




"It's the tip of the iceberg for pastured chickens," said Marxman, who has hosted a workshop on pasture-raised chickens.

Daniel Anderson, a research specialist with the University of Illinois' agroecology/sustainable agriculture program, agreed farmers have diverse marketing opportunities. "The market for organic food is still increasing," he said.

However, direct-marketing and non-conventional farms have different requirements than conventional farms and aren't suited to everyone, Anderson noted.

"The operations require an increase in labor from conventional farming, but the return is greater," Anderson said.

He encouraged farmers considering the transition to talk with producers with experience in the types of operations in which they're interested.

The Dickmans' farm was one stop on the U of I's Sustainable Agriculture tours this summer and has information online at www.dickmans.net. 

Kay Shipman, the legislative affairs editor at FarmWeek, has covered many stories on sustainable agriculture and local food systems. Photos by David Riecks.



The feed in the chicken troughs is an all natural mixture ground weekly by Dennis Dickman. It consists of corn, oats, soybean meal, fish meal, organic supplement, and arogonite.



The Dickmans do not hatch their own chickens. The chicks are purchased from Hoover Hatchery in Rudd, Iowa, and sent by air the same day they are hatched and arrive at the farm when they are one day old.

INTEGRATING Pastured Poultry and Vegetable Production to Restore Land Health

by Debra Levey Larson

Ben Lubchansky's project combining pastured poultry and vegetable production at the University of Illinois is like a giant board game. The squares on the board are vegetable beds (shallots, red peppers, squash, dry beans, and tomatoes), alfalfa-only pastures, and pastures containing a mix of legumes and grasses. The six "game pieces" that move from square to square look like playpens turned upside down, each one containing ten Barred Silver Cross chickens. Lubchansky has worked out a complicated rotation system in order to gather data on a wide variety of topics relating to land health.

"An organic farming system that integrates pastured poultry and vegetable production may hold answers to the main production challenges of organic agriculture," said Lubchansky, a graduate student in crop sciences in the College of Agricultural, Consumer and Environmental Sciences. "Organic farming faces challenges in maintaining soil fertility, preventing pest problems, improving profitability, and improving farm environmental quality."

Lubchansky speaks passionately about restoring ecological processes to farmland in order to reduce costs and inputs, increase profit margins and enhance health of farms and even regional ecosystems. "We seek to test the hypothesis that agricultural productivity can be maintained or

enhanced while land health is improved by designing systems that restore ecological functions to farmscapes."

He began the project unfunded—that's how much he believes in what he's doing. "Basically, my wife provided the start-up funding for the project in 2003, then I got some funding through the North Central Region Sustainable Agriculture, Research and Education to keep it going."

Now in his second year, Lubchansky has had the opportunity to observe how the daily foraging and scratching of the chickens helps reduce insect populations, allowing the nearby vegetable beds to thrive without pests. "I chose the Barred Silver Cross for a number of reasons," he said. "The breed is known for excellent flavor and only nine or ten weeks to harvest, or 63 days. I also chose them because they do well outdoors and they forage well. I needed a bird that knows how to scratch."

Lubchansky feeds the birds grain twice a day, at 7:30 a.m. and 3:30 p.m., and feels their crops, to make sure they have gotten an adequate ration. (The crop is an enlargement of the bird's gullet in which food is stored before digestion). Moving the pen to a new paddock stimulates the birds to eat more because they're always getting new growth to eat.

Lubchansky's findings to date include the following:

- Poultry. Lubchansky said he found ten weeks to be far superior to 9 weeks for time to processing. "The birds averaged 1.4 pounds heavier and had a much more beautifully developed form. They also cooked up more tender and flavorful. We processed at a mean live weight of 6.64 pounds at 74 days," he said.
 - Insect populations. "In general, nothing stopped the abundance of the cucumber beetle, but healthier plants grazed alfalfa and control resisted their onslaught better than weaker ones ungrazed pastures," said Lubchansky. He noted that the abundance of squash bug eggs may have been lower in the grazed and tilled treatments compared to the ungrazed treatments. The grazing and tilling function of disturbance may have reduced those treatments' suitability for overwintering of and colonization by adult squash bugs.
- "The diverse pastures, both grazed and ungrazed, showed higher numbers of worm casts on the soil surface than other treatments, indication of a more active, if not more abundant, worm population. Their function as soil builders cannot be underestimated," said Lubchansky.



Seen here are two of the six chicken pens which are rotated onto squares of pasture.

Finally, arachnid populations were strong and diverse in the grazed treatments, especially last year. This year, however, the ungrazed treatments seem to be holding the higher numbers of spiders, at least earlier in the year. Lubchansky said that these relatively undisturbed areas may be acting as safe zones or reservoirs for the populations — another important function. He stressed that these are just speculations based upon cursory observation.

- Vegetable production. Vegetable production has been consistently highest in the ungrazed, unvegetated control. However, the grazed alfalfa treatments have been nearly as or equally productive, depending on the crop. Lubchansky said that by adding poultry and deleting the overhead for tilling equipment, the grazed alfalfa, despite production differences, was twice as profitable as the vegetables-only control.

The highly palatable alfalfa did not fare well under the intensive grazing scheme, and alfalfa pastures were both pocked by bare spaces and highly invaded by annual weeds such as foxtail, pigweeds, and lambsquarters. Ungrazed alfalfa pastures were also highly invaded. “The diverse pastures have become dominated by perennial ryegrass, which we sowed as part of our mix. Its success is probably due to its relatively low palatability to the chickens and its dense bunching habit, which protects it from scratching.”

Looking Ahead

“I think we have a good look at many of the parts needed in a successfully integrated system of pastured poultry and vegetable production,” said Lubchansky. “A next order of integrations would combine what appears to be working in these systems, though separately at present.” He speculates that an integration giving the vegetables more space or a wider path around their border might be more successful. The accompanying pasture would be rich in legumes and broadleaves but would also contain a grass at some density to protect the pasture integrity.

“I think we have done well at teasing apart what works and what doesn’t, with some understanding of why, and how we can begin to recombine and refine,” Lubchansky concluded. “But there is no straight-shot answer here, just a toolbox of principles for people to choose from. Bottom line, these systems work. They save labor, maximize resources, increase profits, diversify portfolios, can produce healthy agro-ecosystems and are infinitely versatile — you can take these principles and combine them however you need to fit your own, individual farm, and that is their single greatest asset.” 🌱

Photos by Debra Levey Larson.



Lubchansky chose the Barred Silver Cross for their excellent flavor, rapid growth, and foraging ability. The chickens are kept ten to each pen.

How Effective Are USDA Programs in Serving Small Farms?



The Henry A. Wallace Center for Agricultural & Environmental Policy recently released the results of a study of the effectiveness of selected U.S. Department of Agriculture programs in serving the needs of small farms. The main finding is that most of the programs have not been evaluated, so their success in enhancing the economic well-being of the nation's small farms is not known.

The study focused on 19 programs, housed in seven agencies or offices of the USDA, that provide support for conservation, product and market development, farmland preservation, general farm operations and other efforts. Sixteen of the 19 programs either explicitly or more ambiguously intend to assist small farms through grants for research and other services, direct payments, loans or technical and information assistance. Only two programs, the Conservation Reserve Program and the Direct and Guaranteed Operating and Ownership Loans program (both administered by the Farm Service Agency), have been formally evaluated regarding the extent of support given to small farms. No evaluations have actually measured the effectiveness of these programs in fulfilling the objective of enhancing small farm viability.

"We found that most of the programs provide a variety of assistance directly to small farms or organizations serving small farms, yet collated statistics on the extent of support are sparse," said Kate Clancy, who co-authored the report. "In many cases, program administrators do not collect data on the size or gross income of the farms and ranches that receive benefits, and the legislation that defines each program does not require evaluations," she noted.

Information from such examinations would help to improve the quality of support and target research, extension, and other services to this important agricultural sector. According to the USDA's classification, "small farms" account for more than 90 percent of the nation's farms and ranches. The majority of farm and ranch operations have modest acreage, so responsible management of the soil, water and wildlife they encompass can offer significant public benefits. The small-farm sector produces an enormous range of foods and other products, and also boosts local economies, strengthens rural communities, helps to ensure food security, and enhances the quality of life for urbanites by providing green space and fresh, locally grown foods.



What do you think?

We'd like to know what you think about the *Agroecology News & Perspectives* newsletter. Please take a minute to fill out and return this postage-paid questionnaire. Your answers will help us make decisions about the future of this publication. Thanks!

If you return your completed survey by February 15, 2005, your name will be entered into a drawing. The winner will be allowed to make a selection from a list of several publications from Sustainable Agriculture Research and Education (SARE).

Name _____
Affiliation _____
Address _____
City/State/Zip _____
Phone _____
E-mail _____



Based on the findings of the study, the authors made the following recommendations:

— Simple evaluations should be done on all programs to understand what total and proportionate awards and other forms of support are going to small farms

— Funding should be appropriated to undertake formal evaluations of some key programs, particularly the value-added and market development grants programs to determine how effective they are, and most importantly, to use as a basis for funding decisions if they are not as effective.

— Funding should be directed to the USDA Small Farm Program so that it includes programs investigated in this study, as well as others, and provides more recognition and attention to small-farm issues within them.

— *Small Farm Programs: What Do We Know About Their Effectiveness in the United States?*—is available in PDF format at <http://www.warriorwallace.org>.

For more information, contact Suzanne DeMuth at the Henry A. Wallace Center for Agricultural & Environmental Policy, Winrock International, 1621 N. Kent Street, Arlington, VA 22209 (703-525-9430, ext. 675; www.warriorwallace.org).

Supported in part by a grant from the Wallace Genetic Foundation.

WarriorWallace.org: Center for Agricultural & Environmental Policy at Winrock International is a national center that works with people in the United States and around the world to promote economic opportunity, sustain natural resources and protect the environment.

Please tape here before mailing.

How Effective Are USDA Programs in Serving Small Farms?



The Henry A. Wallace Center for Agricultural & Environmental Policy recently released the results of a study of the effectiveness of selected U.S. Department of Agriculture programs in serving the needs of small farms. The main finding is that most of the programs have not been evaluated, so their success in enhancing the economic well-being of the nation's small farms is not known.

The study focused on 19 programs either through grants for technical and information Reserve Program and Loans program (both formally evaluated evaluations have accomplished the objectives of the

"We found that most small farms or organizations do not receive the extent of support a program provides. In many cases, program income of the farm defines each program's effectiveness."

Information from such support and target agricultural sector. For more than 90 percent of farm and ranch operations, the soil, water and air quality. The small-farm sector produces products, and also boosts income, ensures food security, and provides green space and fresh



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



B1170/1-494012-875009-191200
Debra Levey Larson
University of Illinois
College of ACES
62 Mumford Hall, MC-710
1301 W. Gregory Dr.
Urbana, IL 61801

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT 1239
CHAMPAIGN IL

POSTAGE WILL BE PAID BY ADDRESSEE

University of Illinois at Urbana-Champaign
Office of Mail Services
1611 S Oak Street
Champaign, IL 61820-9960




Based on the findings of the study, the authors made the following recommendations:

- Simple evaluations should be done on all programs to understand what total and proportionate awards and other forms of support are going to small farms
- Funding should be appropriated to undertake formal evaluations of some key programs, especially the value-added and market development grants programs, to see how effective they are, and most importantly, to use as a basis for improving those that are not as effective.
- More funding should be directed to the USDA Small Farm Program so that it can oversee the programs investigated in this study, as well as others, and advocate for more evaluation and attention to small-farm issues within them.

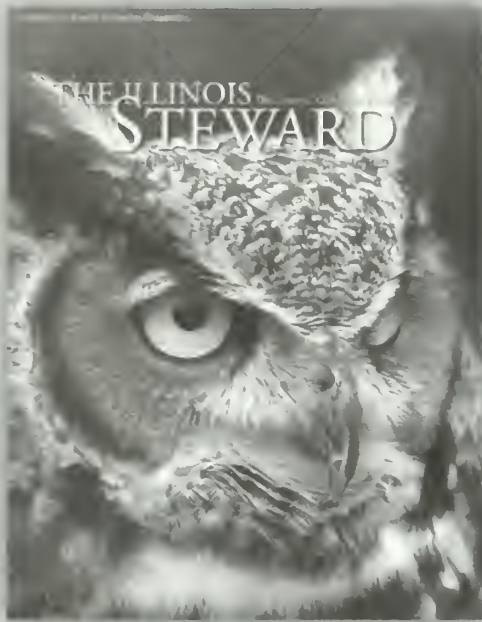
The full report—*USDA Programs: What Do We Know About Their Effectiveness in Improving the Viability of Small Farms?*—is available in PDF format at <http://www.winrock.org/wallace>.

For more information, contact Suzanne DeMuth at the Henry A. Wallace Center for Agricultural & Environmental Policy, Winrock International, 1621 N. Kent Street, Suite 1200, Arlington, VA 22209 (703-525-9430, ext. 675; wallacecenter@winrock.org).

The study was supported in part by a grant from the Wallace Genetic Foundation. 

The Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International uses its expertise in research, policy analysis and development to foster sustainable and equitable agricultural and food systems. Winrock International is a nonprofit organization that works with people in the United States and around the world to increase economic opportunity, sustain natural resources and protect the environment.

THE ILLINOIS STEWARD *magazine*



217-333-3650
ilsteward@uiuc.edu
ilsteward.nres.uiuc.edu

is published quarterly by the University of Illinois at Urbana-Champaign. This full-color magazine promotes respect, responsible use, and preservation of the natural world. Articles are written by U of I faculty and staff and other statewide conservation professionals.

The Steward would make a great holiday gift for a friend who enjoys nature and wants to learn about statewide efforts to promote stewardship.


We also have a large-format, gift-quality, *Illinois Steward 2005 Calendar*. The 2005 edition features aquatic habitats of Illinois and is a great way to enjoy a bit of the outdoors everyday. The calendar is yet another holiday gift opportunity. You can order yours by going to our Web site: <http://ilsteward.nres.uiuc.edu> and accessing the ordering information.

Commentary Online — *Join the Discussion*

Kyle Cecil, University of Illinois Extension educator in Galesburg, has written a commentary for the *Journal of Extension* titled "Integrating Ecology and Relating Natural Systems to Agriculture: An Increased Priority for Extension Agricultural Programming."

"Extension has historically assisted the farmer in developing farming systems that maximized food production in order to feed a growing population," writes Cecil. "Given this long tradition of agriculture-based Extension nationwide, many Extension educators may have a strictly agricultural production background and are perhaps not trained in natural resources management or

ecology. We cannot expect our clientele to incorporate these principles if we are not capable of or are unwilling to teach them. In rapidly changing environments, both organizations and the people who make up those organizations either change with the times or risk becoming obsolete."

The entire article can be read online at <http://www.joe.org/joe/2004october/comm2.shtml>. At the end are directions for how interested readers can respond in a discussion forum. 

FARM BEGINNINGS TO BE LAUNCHED IN THREE STATES



BRINGING FARM BEGINNINGS TO ILLINOIS

Leslie Cooperband, Extension specialist from the University of Illinois and Tom Spaulding, director of the CSA Learning Center, Angelic Organics CSA Farm in Caledonia, recently attended a training workshop for the Farm Beginnings Program in Farmington, Minnesota. "We learned about the nuts and bolts of the program," said Cooperband. "And we heard first-hand testimony about the success and impact of the program from beginning farmers and farmer mentors. We visited Minar's Cedar Summit Farm and Creamery which is one of the mentor farms in New Prague and attended a Farm Beginnings Class."

Cooperband said that the key elements to the program include community support in the form of a steering committee made up of farmers, lenders, agriculture professionals, mentor farmers and others who are interested in doing farm tours and field days and presenters. "We propose to develop two pilot programs in Illinois in 2005-06," she said. "One program will be in northern Illinois and southern Wisconsin that would build on the CRAFT Program from the CSA Learning Center. The other program, in central Illinois, will meet goals of farmer training for building local food systems in the region."


The collaborator-organizers would be a partnership among U of I Extension, the U of I Agroecology/Sustainable Agriculture Program, CSA Learning Center and The Land Connection.

The Minnesota-based beginning farmer program will be tested in three other Midwestern states.

The Land Stewardship Project's Farm Beginnings™ program has received a \$74,856 grant from the USDA's North Central Region Sustainable Agriculture Research and Education (SARE) program. The grant will be used to set up pilot beginning farmer education programs in Illinois, Missouri and Nebraska.

The programs will be based on the Farm Beginnings™ model, an initiative that provides participants an opportunity to learn firsthand about low-cost, sustainable methods of farming. Farm Beginnings™ participants take part in a course that teaches goal setting, financial planning, business plan creation, alternative marketing and innovative farming techniques. Established farmers and other professionals present at the seminars, providing a strong foundation of community resources, networks and contacts for those interested in farming. There are also opportunities to connect with established farmers through a series of farm visits and one-on-one mentorships.

Farm Beginnings™ is now entering its eighth year, and has more than 185 graduates — 60 percent of whom are farming. For information, visit http://www.landstewardshipproject.org/programs_farmbeginnings.html.

SARE offers competitive grants and educational opportunities for producers, scientists, educators, institutions, organizations and others exploring sustainable agriculture. The North Central Region SARE is based at the University of Nebraska-Lincoln. For more information on SARE, visit <http://www.sare.org/ncrsare>, or call 402-472-7081. 

CALENDAR

January 12-13

Illinois Organic Production Conference: Providing Farmers with Practical, Science-Based Information on Organic Production and Certification
Holiday Inn, Normal

See back page for details.

For more information, contact Dan Anderson (217-333-1588; aslan@uiuc.edu).

January 15

From Farm to Fork Workshop
Joliet [Illinois] Junior College
8 a.m. to noon

Food and farm entrepreneurs can learn how to move from a concept to creating a customer. Keynote speaker Ed Paulson is the author of *The Complete Idiot's Guide to Starting Your Own Business*. Presentation topics include Small Business Development Center resources for entrepreneurs; how to use the many resources available to alternative-agriculture entrepreneurs; hands-on advice from food entrepreneurs; crucial aspects of food safety and security; legal issues surrounding food and agriculture; and using U.S. census data to help in marketing efforts.

The registration fee is \$20. Registration begins at 8 a.m., and walk-ins are welcome.

For more information, contact Rich Schell (847-404-2950; schellville@excite.com).

January 19-20

Heart of America Grazing Conference
Roberts Conference Center, Bloomington, Ohio

For information, contact Bob Hendershot (740-653-1559; bob.hendershot@oh.nrcs.usda.gov).

January 19-21

Mid-America Horticulture Trade Show and Midwinter Conference
2005 McCormick Place Lakeside, Chicago
<http://www.midam.org>

January 20-22

Illinois Specialty Crops Conference and Pre-Conference Pumpkin Workshop
Crowne Plaza, Springfield

A one-day workshop on pumpkins will be held on Thursday, January 20, and will cover production, pest management, and marketing issues. The two-day conference will follow on Friday and Saturday. The conference will feature sessions on fruits, vegetables, and herbs as well as additional workshops on irrigation, risk management, and labor issues.

On Saturday, Wesley Jarrell, head of the University of Illinois Department of Natural Resources and Environmental Sciences, will provide updates on U of I research and Extension programs in fruits, vegetables and herb crops.

The conference agenda can be reviewed at www.specialtygrowers.org. To be placed on the mailing list to receive registration materials or to get exhibitor information, please contact Diane Handley, (309-557-2107; handley@iflb.org). Lodging reservations at the Crowne Plaza Hotel can be made by calling 217-529-7777. Ask for the Specialty Crops Conference rate.

The conference is jointly sponsored by the Illinois Specialty Growers Association, University of Illinois Extension, Illinois Department of Agriculture, and USDA Risk Management Agency. For more information, visit <http://www.specialtygrowers.org/>.

January 22

6th Annual Wisconsin FarmDirect Education Center, University of Wisconsin, Madison

The 6th Annual Wisconsin FarmDirect Conference is designed to assist individuals who are direct-marketing agricultural products or would like to explore the possibility.

Early registration is \$40 per person or \$70 for two people and includes a lunch prepared by local chefs with local products. Regular registration is \$50 per person, \$80 for two people. For more information, contact Kristin Kleeberger (262-548-7770; kristin.kleeberger@ces.uwex.edu), or visit www.savorwisconsin.com/events and search the Producer link.

January 24-26

Illinois Fertilizer and Chemical Association Annual Convention and Trade Show
Peoria Civic Center
<http://www.ifca.com>

CALENDAR

January 29

Urban Agriculture Symposium
Garfield Park Conservatory, 300 N.
Central Park, Chicago
8:30 a.m. to 3:00 p.m.

This second annual symposium, "Exploring Economic and Community Opportunities through Urban Agriculture," will feature keynote speaker Michael W. Hamm, chair of sustainable agriculture at Michigan State University. Registration includes lunch; register by January 21 for \$35, or pay \$45 at the door.

For more information, contact Aida Peralta (773-768-7779; peralta1@uiuc.edu), or visit <http://www.extension.uiuc.edu/> and search using the Calendar link.

2005 Illinois Tillage Seminars

Seminars will be held at the four locations listed below. Pre-registration is necessary and the deadline is one week prior to each scheduled meeting. For more details and to register contact the agency listed for each seminar.

February 1 at Hamilton's Banquet Center, Jacksonville
Contact the Morgan County Extension office at 217-243-7424.

February 2 at Holiday Inn, Rock Falls
Contact the Lee County Soil & Water Conservation District at 815-857-3621, Ext. 3.

February 3 at Holiday Inn Brandywine, Peoria
Contact the Peoria County Extension office at 309-685-3140.

February 4 at the Ruritan Club, Geff
Contact the Wayne County Extension office at 618-842-3702.

For additional information, contact Bob Frazee at 309-694-7501, Ext. 226 or Alan Gulso at 217-782-6297 or visit <http://www.extension.uiuc.edu/> and click on "Calendar."

February 5

Chicago Farmers Farmland Investment Fair
Joliet [Illinois] Junior College
8 a.m. to 2:30 p.m.

Informational booths will cover all aspects of buying and selling farmland, and presentations from experts in farmland investment will address buying a farm for the first time; trading real estate for a farm; generating

income from sources other than traditional crops; and other topics. Other presentations will discuss the organic grain market; transitioning to organic farming; federal organic regulations; hunting leases as an alternative income source, including the legal issues; what a landlord needs to know about owning a farm; and other development issues.

Registration includes lunch. Early registration is \$45 and must be received by January 24; after that date, registration is \$60. For more information, contact Jeff Martin (217-792-3934), e-mail Chicago Farmers (chicagofarmers@aol.com), or visit <http://www.chicagofarmers.org>.

Illinois Agriculture Drainage Seminars

The seminars will be held from 8:00 a.m. to 3:30 p.m. at four locations on the dates listed below. Registration is required one week prior to the meeting.

February 14 at Bremer (DACC) Convention Center, Danville

To register, call the Vermilion County Extension office at 217-442-8615.

February 15 at the Center for Agriculture, Sycamore

To register, call the DeKalb County Extension office at 815-758-8194.

February 17 at Ty's Buffet, Olney

To register, call U of I Extension - Richland Unit at 618-395-2191 or 618-943-5018.

February 18 at Knox Agri Center, Galesburg

To register, call the Knox County Extension office at 309-342-5108.

For more information, visit <http://www.extension.uiuc.edu/> and click on "Calendar."

February 16

Farm Conservation Programs
State-wide Teleconference
9:00 a.m. to 12:00 p.m.

Interested individuals are invited to listen to the teleconference at their local University of Illinois Extension Unit. Pre-registration by February 11 is requested.

For more information, visit <http://www.extension.uiuc.edu/> and click on "Calendar."

ORGANIC CONFERENCE JANUARY 12 AND 13


A conference focusing on organic production will take place on January 12 and 13 at the Holiday Inn in Normal. The conference is sponsored by University of Illinois Extension and the Agroecology/Sustainable Agriculture Program at the U of I.

The first day of the conference will begin at 9:00 a.m. and feature general presentations on organic certification and marketing.

Day 2 will offer 20 break-out sessions in four tracks: field crops, specialty crops, livestock, and miscellaneous issues relating to organic farming.

"This conference will be helpful both for those who are interested in learning more about organic agriculture but have no previous organic experience as well established, experienced organic farmers," said Dan Anderson,

research specialist at the U of I. "Livestock and grain producers interested in organic methods, certification and marketing will also find the conference helpful."

The conference includes all materials, as well as organic snacks and some meals. 

To register contact Dan Anderson (217-333-1588; aslan@uiuc.edu) or visit <http://www.aces.uiuc.edu/~asap/conf/index.htm>.

AGRO-ECOLOGY
News and Perspectives



University of Illinois at Urbana-Champaign
College of Agricultural, Consumer and Environmental Sciences
W-503 Turner Hall, MC-047
1102 S. Goodwin Ave.
Urbana, Illinois 61801

NON-PROFIT ORG
U S POSTAGE PA
PERMIT 75
CHAMPAIGN, IL

|||||||.....|||||||.....|

98 22
Robert Allen
ACES Library
1101 S. Goodwin
Campus Mail MC-633

223 08V05 17
45834 BU



UNIVERSITY OF ILLINOIS-URBANA



3 0112 075264504