



A little prairie goes a long way for Iowa agriculture

By MELISSA LAMBERTON, *Communications research assistant*

On experimental cropland at the Neal Smith National Wildlife Refuge, a blaze of color marks patches where native wildflowers bloom. These narrow strips of tallgrass prairie aren't there for show—they're a long-term investment in the health and resiliency of Iowa agriculture. Research that began with the Leopold Center and U.S. Forest Service suggests that prairie conservation strips can offer vital environmental services on Midwest farms without compromising the benefits of row-crop farming.

Science-based Trials of Rowcrops Integrated with Prairies, or STRIPs, refers to the multidisciplinary research project team that aims to foster collaboration among farmers, conservationists, policymakers and scientists based on the premise that profitable agriculture and

environmental stewardship can coexist. The team held a field day on September 6 and a stakeholder meeting on June 21 to discuss the project's preliminary findings. "We can strategically place perennial vegetation to provide disproportionate conservation benefits," said Matt Liebman, team member and agronomy professor at Iowa State University. "A small change gives a large effect."

Historically, prairies dominated Iowa's landscape, creating the rich soils needed for productive agriculture. Now less than 0.1 percent of Iowa's prairies remain. By restoring some of those deep-reaching perennial roots to row-cropped fields, farmers and landowners can reduce erosion and nutrient loss, keep waterways free of agricultural runoff and improve biodiversity.

PRAIRIES (cont. on page 8)

Leopold Center launches new website

The Leopold Center's website has a new look and features designed to better share what's been learned from the Center's many projects and partnerships.

New to the site is a central location for items that showcase results of Leopold Center-supported research, programs and in-house projects. The site has more than 150 "Pubs & Papers" including the Leopold Center's widely quoted "food miles" reports, directories, guides, extension publications, informative presentations and other materials.

Users also can find details about the 453 projects that are part of the Center's

long-running competitive grants program. In 2004, user-friendly summaries of the findings from competitive grant projects were added to the website. Competitive grants now can be tracked from when they were awarded until their completion.

The website, www.leopold.iastate.edu, takes advantage of new technology that offers consistency, more flexibility in maintenance, and the ability to connect content throughout all parts of the site. Web pages are automatically updated when news releases, publications, photos and the Center's popular On the Ground videos are added.

The website project began in 2009

WEBSITE (cont. on page 2)

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The newsletter is on the web at:
www.leopold.iastate.edu

To subscribe, send an e-mail to
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LEOPOLD CENTER

LEOPOLD LETTER MISSION

The mission of the *Leopold Letter* is to inform diverse audiences about Leopold Center programs and activities; to encourage increased interest in and use of sustainable farming practices and market opportunities for sustainable products; and to stimulate public discussion about sustainable agriculture in Iowa and the nation.

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The Leopold Center for Sustainable Agriculture seeks to identify and reduce adverse socioeconomic and environmental impacts of farming practices, develop profitable farming systems that conserve natural resources, and create educational programs with the ISU Extension Service. It was founded by the 1987 Iowa Groundwater Protection Act. The *Leopold Letter* is available free from the Leopold Center at 209 Curtiss Hall, Iowa State University, Ames, Iowa 50011-1050; (515) 294-3711.



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Research Results

On the Web: www.leopold.iastate.edu/news/results

Summaries

Easy-to-read summaries are available for these recently completed projects funded by Leopold Center competitive grants. Find them on our current Research Results web page.

- Producer machinery and labor sharing arrangements workshops
- Update of the Iowa Produce Market Potential Calculator website
- From farm to market in northwest Iowa
- The actual cost of food systems on roadway infrastructure
- Local food producer website workshops
- The landowners' decision: Grazing and fire as management tools on Iowa grasslands and oak savannas
- State policy alternatives for biofuels industry support of sustainable production of biofuels feedstocks

NEW WEBSITE OFFERS COOL TOOLS, NEWS FEEDS

WEBSITE (continued from page 1)

under the leadership of then Director Jerry DeWitt, who recognized the value of online communication and increased use of the World Wide Web for many different purposes. He said he was pleased to see that progress continued while other changes at the Center were taking place.

“This new website is a great tool,” DeWitt said. “The value of being able to access what others have learned will help many people go forward with their work.”

Other features include:

- Home page photo featuring a different partner or project every week;
- Cool Tools page, with links to online calculators, directories, planners and other websites that have been developed with Leopold Center support;

- “Share” button next to news items allowing users to post a link on Facebook or Twitter accounts, email or bookmark, and
- News feeds that will automatically send subscribers links to all news releases and the Center’s monthly and quarterly newsletters.

Leopold Center communications specialist Laura Miller managed the project with support from graduate research assistant Melissa Lamberton and former undergraduate intern Amy Thompson. Juls Design of Ankeny did initial page design; former Leopold Center graphic design interns Tori Watson and Tina Marks supplied additional page design and visual elements. Technical expertise

was provided by John Rearick, ISU Brenton Center for Agricultural Instruction and Technology Transfer.

The Leopold Center is interested in user comments about how to improve the site at leocenter@iastate.edu. Like a garden, a website is a work in progress.



Leopold Center home page on September 28 launch

Conversations

WITH INTERIM DIRECTOR MARK HONEYMAN



Voices from the past: C.F. Curtiss

We live in remarkable times. In agriculture, after a trying growing season the miracle of harvest is here. In academics, the school year has started with a swirl of lectures, students and research proposals. And in the civic arena, Iowa is awash in political candidates, media and opinion. At times, this triangle of forces - agriculture, academics and politics - seems to be veering almost out of control. In order to make sense of the present, I often look to the past.

Iowans experienced somewhat similar circumstances during the 1890s. The state was fully settled and harvests were large. There had been a deep economic recession and political unrest was widespread. Agricultural interests had issued ultimatums to the State Board of Trustees (the body that oversaw state colleges) insisting on a new “practical” curriculum. The Iowa triangle of agriculture, academics and politics was no less active 120 years ago!

One key figure from these times captures my attention: Charles F. Curtiss, dean of the ISC College of Agriculture from 1902 to 1932. He came to Iowa State in 1891, as part of the reorganization pushed by state agricultural leaders. At that time, there was one course and one instructor in agriculture. He crafted a four-year curriculum, helped form academic departments and soon rose to be department head of animal husbandry. In 1897 Dean “Tama Jim” Wilson became U.S. Secretary of Agriculture and Curtiss was named acting dean, and later dean and director of the experiment station.

In 1925 when Curtiss’ portrait was

hung at Chicago’s Saddle and Sirloin Club, one of his students, C.L. Burlingham, was a banquet speaker. He recalled how “Dean Curtiss instilled in us the dignity of agriculture. He taught us to spell Agriculture with a capital ‘A.’” The dean gave a short response that praised the institution’s researchers, teachers and students and explained how he had created a major college of agriculture during difficult, rapidly changing times.



Charles F. Curtiss in front of the Farm House, ca. 1909. Credit: Special Collections Department/Iowa State University Library.

The 1890s through the 1920s saw alternating economic downturns and booms in Iowa agriculture. Tractors and mechanization on farms became commonplace. Farm size grew. Rural electrification and telephone service expanded. New crops and improved livestock were introduced. The ag experiment station started in the late 1880s, an academic milestone. The extension service and 4-H began in Iowa in the early 1900s and colleges of agriculture flourished. Politics at the turn of the century were turbulent with women’s

suffrage, prohibition and populist efforts springing forth.

In Iowa, the turn of the last century was just as challenging as the turn of this century. So I looked to Dean Curtiss for insight.

Here’s what I found: a Victorian man with a celluloid collar who loved horses and livestock judging. He was “happiest making the rounds of the college farms astride his favorite horse.” He also

embraced, managed and spurred change during the birth of ag research, extension and mechanization. He was an innovator, bringing soybeans and alfalfa to Iowa. He was a leader, expanding from one ag course to a major agricultural college. He was an administrator who fostered the applied ag sciences that produced future leaders such as George Washington Carver and Henry A. Wallace.

So the lesson of history is that turbulence among agriculture, academics and politics is normal in Iowa and we benefit from strong leaders to guide us. We also need leaders who are grounded in the past but can be managers of change. Soon the Leopold Center will have a new leader to do those things. And I hope that person will be a leader who understands that in Iowa we have been taught to say Agriculture with a capital ‘A.’

Mark Honeyman

Nina Leopold Bradley remembered at Baraboo

By DENNIS KEENEY, former Leopold Center director



On a soft, beautiful early August evening, about 250 people, including family, extended family, neighbors, friends and admirers gathered at the beautiful Aldo Leopold Foundation learning center and headquarters to honor the brilliant, charismatic and gentle leader and conservationist, Nina Leopold Bradley. She died in May at age 93, leaving a full life of honors, achievements and most importantly family. Bradley was the third of five children born to Aldo and Estella Leopold, all of whom went on to

outstanding careers in earth and biological sciences.

For those of us fortunate enough to be able to attend, the evening was one to be savored and remembered. Buddy Huffaker, executive director of the foundation, called it a perfect but bittersweet setting. After several hours of mingling, hugging, sharing remembrances and greeting old and new friends, the ceremonies got underway in a tent surrounded by the yellow blossoms of compass plant and purple stalks of the blazing star that she loved. There were tears and chuckles as Nina's life was remembered by her younger sister, Estella, and by grandchildren who spoke, provided music and song, and helped all of us through the memorable evening.

From the beginning of the family experiences at Madison and especially the famous "Shack" the old chicken coop tucked out of sight on the Leopold Reserve near Baraboo, Wisconsin Nina was special. Fortunately for all of us, she elected to come back to the farm after marrying Charles Bradley. Together they hired staff, moved the foundation from a family organization to one capable of expanding, built the foundation buildings and established the strong research and education program that exists today.

While the presence of Aldo was felt everywhere, it was the time to remember Nina. It was Nina who inspired Paul Johnson, then a farmer legislator from Decorah, to name the sustainable agriculture center in Iowa after Aldo Leopold. We will be forever grateful to them for their vision and leadership.

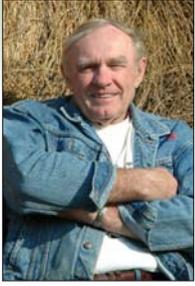
I was one of the fortunate who got to know Nina well. I visited with her and Charlie just after accepting the directorship in Ames, but before I left Wisconsin. It was a particularly inspiring time for me. Through the next two decades we crossed paths often. Nina had the gift of listening as if you were the only person in the room she cared about. She truly loved the land and its people.

It will be up to the next generation to move the foundation forward. We can only hope they share her vision and energy.



Photos, top to bottom:

1. From left: Paul Johnson, who helped write the Iowa Groundwater Protection Act; Dennis Keeney, the Center's first director; and Leopold biographer Curt Meine at the August memorial for Bradley.
2. Fred Kirschenmann (left) visits with Carl Leopold and his sister, Nina Leopold Bradley, at a 2003 workshop in Iowa.
3. Keeney and Estella, Aldo Leopold's youngest daughter and last living child, at the memorial.
4. Keeney and Bradley at the Leopold Reserve in 1988.



TOWARD A SUSTAINABLE

Future

Two wake-up calls

The traditional playbook calls for companies to commoditize and exert maximum bargaining power on suppliers to drive down prices - even when purchasing from small businesses or subsistence-level farmers. More recently, firms have been rapidly outsourcing to suppliers in lower-wage locations. Today some companies are beginning to understand that marginalized suppliers cannot remain productive or sustain, much less improve, their quality ... As suppliers get stronger, their environmental impact often falls dramatically, which further improves their efficiency. Shared value is created. — Michael E. Porter and Mark R. Kramer

We're facing a future of higher prices and not-so-abundant resources, according to two recent wake-up calls. As suppliers to companies that operate on the world market, farmers would do well to be alert for the opportunities that could come about.

The first wake-up call comes from economic investment manager Jeremy Grantham. He sounded the alarm bluntly in his April 2011 newsletter when he suggested it is "time to wake up" regarding our investment decisions because the "days of abundant resources and falling prices are over forever." He summed up his analysis of our new future by reminding us that "the world is using up its natural resources at an alarming rate, and this has caused a permanent shift in their value. We all need to adjust our behavior to this new environment. It would help if we did it quickly."

Here are some of the points he used to summarize the future we now must "wake up to":

- The rise of population, the 10-fold increase in wealth in developed countries, and the current explosive growth in developing countries have eaten rapidly into our finite resources of hydrocarbons and metals, fertilizer, available land and water.
- Despite a massive increase in fertilizer use, the growth in crop yields per acre has declined from 3.5 percent in the 1960s to 1.2 percent today.
- The problems of compounding growth in the face of finite resources are not easily understood by optimistic, short-term-oriented, and relatively innumerate humans (especially the political variety).
- The fact is that no compound growth is sustainable. If we maintain our desperate focus on growth, we will run out of everything and crash. We must substitute qualitative growth for quantitative growth.

These are important observations. Unfortunately, Grantham uses them to encourage investors to take advantage of the short-term investment opportunities that these new realities pose for increasing personal wealth. Those of us interested in long-term sustainability would rather focus on the development of resilient systems that will sustain future generations - not only future generations of the *human* species, but all of the biotic community, the health of which is essential to the self-renewing capacity of the earth on which we all depend. That said, it was heartening for me to see Grantham, from the financial world, identify so many of the important challenges that all of us (and especially those of us in research and education institutions) need to take seriously.

A second wake-up call is from the January/February 2011

issue of *Harvard Business Review*, where Michael Porter and Mark Kramer address many of the same challenges but from a radically different perspective. Porter and Kramer see an opportunity to "reinvent capitalism and unleash a wave of innovation" that can not only reinvigorate business but also revitalize communities and improve environmental quality. This already is being done by companies that have transitioned to a new business model of "creating shared value."

Shared value involves "creating economic value in a way that also creates value for society by addressing its needs and challenges." This new business model recognizes two very important business realities that 1) markets can be defined by societal and ecological needs as well as economic needs, and 2) social and environmental harms very often end up creating "internal costs" for businesses thereby causing economic losses.

Porter and Kramer argue, therefore, that it is in the long-term business interest of companies to take advantage of shared value opportunities in their own communities and incorporate ecological restoration and social revitalization into their business plans. **Continuing the practice of commoditizing production and externalizing costs in the interest of short-term economic profits is no longer in their best business interests.** Shared value, in other words, invites companies to focus on "the right kinds of profits," e.g., profits that foster social and ecological benefits rather than diminishing them.

This shared value model, as Porter and Kramer point out, is very different from the corporate responsibility model. The corporate responsibility model is based on the principle of "doing good." Companies engage in it primarily to enhance their reputations, and it has very limited effect on the success of their economic performance. Consequently, it often is difficult for companies to economically justify following this model in the long term. While no one wants to discourage companies from operating by these ethical principles, Porter and Kramer suggest that corporate responsibility *by itself* will not likely result in the kind of ecological and social restoration that we desperately will need to face future challenges.

Farmers have, of course, long experienced the negative consequences of being suppliers to companies that operate under the old model of commoditizing production and exerting maximum bargaining power to drive down prices. Given the future challenges that Grantham describes, we can ill afford to push more farmers out of business. To do so would jeopardize

FUTURE (cont. on page 6)

Researchers evaluate canola as 'third' Iowa crop

By MELISSA LAMBERTON, Communications research assistant

As winter approaches, the green and gold patchwork of corn and soybean fields disappears from Iowa's landscape, leaving vast tracts of bare farmland. The state's two dominant crops are summer annuals that expose soil to erosion, nutrient loss and weed invasion during the rest of the year. A project funded by the Leopold Center's Ecology Initiative hopes to change that with canola, a winter annual and a potential "third" crop for Iowa agriculture.

Mary Wiedenhoeft, professor in agronomy at Iowa State University, initiated the project in 2009 with Stefan Gailans, a Ph.D. student in ISU's Graduate Program for Sustainable Agriculture. They hope to determine whether a winter or spring variety of canola is more suitable for Iowa agriculture.

"Canola is quite foreign to Iowa, so one of the major aspects of this project is that it's an example of alternatives that farmers can look to when they want to try something different on their own farm," Gailans said.

The researchers established three different cropping rotations: conventional corn/soybean and two alternatives with spring and winter varieties of canola (see table). In the alternative systems,

the canola is double-cropped with either spring or winter wheat and interseeded with red clover, a perennial legume that provides nitrogen to subsequent crops in the rotation.

The source of healthful vegetable oil, canola offers farmers a marketable annual crop that helps protect ecosystem resources. Increasing crop diversity—specifically, with annuals that fill in the gaps when corn and soybean aren't growing, or with perennial species—can help interrupt weed cycles, reduce pests and mitigate erosion from wind and water.

Canola can offer economic benefits, too. It actively takes up sunlight and nutrients during times of year when corn and soybean aren't growing. That allows farmers to take advantage of spring and fall growing seasons, generating revenue while keeping more cover on the ground. The additional nitrogen and organic matter held in the soil improves next year's corn crop, and the added diversity makes the farm more resilient in the face of shifting market forces.

A canola oil processing facility already exists in Cherokee, Iowa, and canola prices generally have been increasing over the last decade.

"I grew up on a farm in Iowa,"

Wiedenhoeft said. "I really want agriculture to be able to continue in Iowa. I want it to be productive but I also want it to be sustainable in relationship to the environment."



Above: Wiedenhoeft stands in a field of canola growing in mid-May when other crops are just getting established.

www.leopold.iastate.edu

Watch the video:
www.leopold.iastate.edu/news/on-the-ground/cover-ground-all-winter-long

Three Year Crop Rotation Experiment: Corn, Soybean, Canola, Wheat, Red Clover

	Year 1			Year 2			Year 3					
	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter
Experiment 1												
Corn	█	█	█									
Soybean					█	█	█					
Canola												
Wheat												
Red Clover												
Experiment 2												
Corn	█	█	█									
Soybean					█	█						
Canola												
Wheat							█	█	█			
Red Clover												
Experiment 3												
Corn	█	█	█									
Soybean												
Canola							█	█	█			
Wheat					█	█						
Red Clover												

Source: Leopold Center for Sustainable Agriculture

FUTURE (continued from page 5)

not only our food security but also the business success of the companies themselves. It seems like a good time to explore the shared value business model that Porter and Kramer propose. Farmers and rural communities need to share in the value of their production so they can care for their land and their people; not doing so would be to the economic detriment of the companies that depend on them for long-term economic success.

Perhaps we are on the cusp of another moment in history when crises can turn out to be opportunities to develop a more sustainable future.

Jeremy Grantham, April 2011. "Time to Wake Up: Days of Abundant Resources and Falling Prices are Over Forever," *GMO Quarterly Letter*.

Michael E. Porter and Mark R. Kramer, January/February 2011. "Creating Shared Value," *Harvard Business Review*.

Iowa legislature moves forward with food and farm plan

The Iowa Local Food and Farm Plan that the Leopold Center presented to the state legislature in January is moving forward. The legislature created a new state-level program based on the plan to boost production, processing, distribution, marketing and consumption of Iowa-grown food.

First-year operating funds of \$75,000 were included in the agriculture and natural resources budget signed by Iowa Governor Terry Branstad in July.

The new program is called the Local Food and Farm Initiative. The legislation outlined four goals for the initiative to pursue:

- Promote the expansion of local food production, processing, distribution and marketing of Iowa food;
- Increase consumer and institutional spending on Iowa foods;
- Increase the profitability of farmers and businesses engaged in local food enterprises; and
- Increase the number of jobs associated with local foods.

The program brings together the Iowa Department of Agriculture and Land Stewardship (IDALS), Iowa State University Extension and ISU's College of Agriculture

and Life Sciences.

At the helm of the new program is Craig Chase, who has been interim leader of the Leopold Center's Marketing and Food Systems research program since April. He will continue at the Leopold Center and with ISU Extension, where he co-leads a task force to develop ISU Extension's program response to consumer demand for more regional food. Chase also is a key player in a partnership with the Leopold Center, College and ISU Extension to improve the economic viability of regional food systems through additional research, training and outreach for fruit and vegetable growers.

The legislation specified membership of a Local Food and Farm Program Council within IDALS that will advise the coordinator. The council will include representatives from IDALS, Iowa Farmers Union, Iowa Farmers Market Association and three people appointed by the governor to represent Iowa resource conservation and development; a food processor, wholesaler or retailer; and a regional food system working group participant or expert in local food.

Chase said he sees a lot of interaction with the new state-level program and what

www.leopold.iastate.edu

On the web:
www.leopold.iastate.edu/marketing/iowa-local-food-and-farm-plan

he's already doing at the Leopold Center, the College and ISU Extension. "My job is to make the connections so that farmers get the resources they need," he said. "It should be an organized effort."

The Iowa Local Food and Farm Plan that the Leopold Center developed in 2010 also noted the need for program coordination. The plan offered 29 operational recommendations for assistance in the areas of business training, loans, food processing, food safety and programs for beginning, minority and transitioning farmers in the state of Iowa.

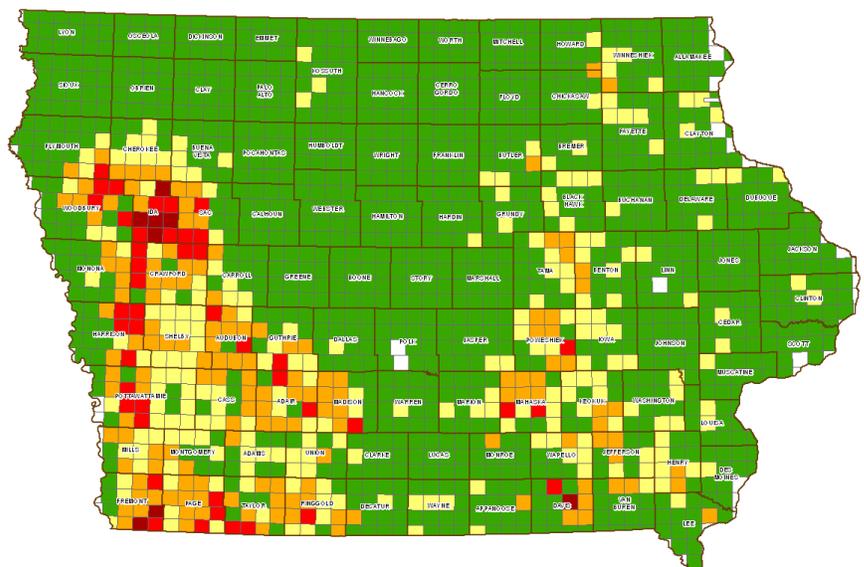
The statewide program was announced in August by Iowa Secretary of Agriculture Bill Northey. "This initiative is designed to get more of the food we produce here in Iowa on the table while keeping more of the food dollar on the farm," Northey said. "By utilizing the expertise of all three organizations it should help speed the development of this already growing part of Iowa agriculture."

'Losing Ground' study points to erosion problems throughout Iowa

The Environmental Working Group's report "Losing Ground" uses data from new, precise technologies to show how Iowa's important soil resource is washing away. Rick Cruse, director of the Iowa Water Center, spoke about the report at an Iowa Learning Farms webinar in August (www.extension.iastate.edu/ilf).

"Crisis is a strong word, but I think it fits this situation," Cruse said. In 2007, six million acres across Iowa eroded at twice the assumed "sustainable" rate of five tons per acre per year. That accounts only for sheet and rill erosion, not for the ephemeral gullies that appear in farmland during heavy rains. Moreover, research from ISU and EWG suggests that a truly sustainable level of erosion could be closer to a half-ton per acre per year.

One answer to curbing erosion lies in keeping more cover in the ground with longer crop rotations or perennial plants. "If we can implement the diversity with modern-day technology I'm convinced we could cut the erosion rates that we see more than 50 percent - and produce just as much," Cruse said.



Average Soil Erosion (tons/acre)

○ No Data ● 0 - 5.0 ● 5.1 - 10.0 ● 10.1 - 20.0 ● 20.1 - 50.0 ● 50.1 - 100.0 ● Greater than 100

2007 data shows millions of acres eroding faster than the "sustainable" rate of 0 to 5 tons/acre/year. Download the report at <http://www.ewg.org/losingground>. Copyright © Environmental Working Group, www.ewg.org. Reprinted with permission.

“LANDOWNER’S GUIDE” HELPS FARMERS GET STARTED WITH PRAIRIE STRIPS

PRAIRIES (continued from page 1)

In July 2007, guided by team leaders Matt Helmers, associate professor in ISU’s Department of Agricultural and Biosystems Engineering, and Heidi Asbjornsen, now an associate professor at the University of New Hampshire, researchers established a variety of treatments on 14 watersheds at the Neal Smith National Wildlife Refuge in Jasper County. Treatments range from conventional agriculture to reconstructed prairie to mixed systems with strategically placed perennial strips covering 10 or 20 percent of the watershed. Flumes at the toe of each watershed collect runoff for sampling.

Recent wet years have given the researchers opportunities to see prairie strips at work during high rainfall events. Unlike cool-season grasses which tend to lay flat under heavy rain, native prairie plants like Indiangrass, big bluestem and switchgrass have stiff, upright stems that resist water movement and trap sediment. In watersheds with 10-20 percent prairie strips in no-till cropland, sediment loss was reduced by more than 90 percent. Nitrate and phosphorus movement also decreased.

Small patches of prairie also offer significant havens for biodiversity. Researchers track the abundance of plants, birds and insects on the experimental watersheds, and have discovered species of concern such as field sparrows, dickcissels

and eastern meadowlarks feeding and nesting in the prairie strips. Prairies also create year-round habitat and food for beneficial insects that prey on crop pests and pollinate flowers.

Prairie conservation strips can provide greater environmental benefits when paired with other conservation practices, like minimum or no tillage, researchers suggest. Landowners also can manage their prairies for specific purposes, such as grazing, haying, hunting or bird-watching. The Conservation Reserve Program, the Wildlife Habitat Incentives Program, and the Environmental Quality Incentive Program offer technical assistance and financial incentives for establishing prairies which can help offset costs.

The Leopold Center has developed a new four-page fact sheet, *A Landowner’s Guide to Prairie Conservation Strips*, to help interested farmers get started. You can download the publication at www.leopold.iastate.edu/ecology/STRIPs or request a printed copy from the Leopold Center.

The STRIPs project is made possible through cooperation of the Neal Smith National Wildlife Refuge and the U.S. Fish and Wildlife Service, with support from the Leopold Center, Iowa Department of Agriculture and Land Stewardship, USDA National Institute for Food and Agriculture, U.S. Forest Service, ISU College of Agriculture and Life Sciences and USDA North Central Region SARE program.



Top: A walk through one of the prairie conservation strips.
Bottom: Researchers, farmers, conservationists and other stakeholders discuss how to bring project results to a broader audience.

Kirschenmann selected for national award

Leopold Center Distinguished Fellow Fred Kirschenmann is being honored as a visionary and for his lifetime of leadership in sustainable food and farming systems. He is among 10 food pioneers, including First Lady Michelle Obama, to receive the inaugural Leadership Award from the James Beard Foundation to mark the culinary arts organization’s 25th anniversary.

“Our Foundation is widely known for recognizing the best chefs and restaurateurs in America through our annual James Beard Awards,” said Susan Ungaro, foundation president. “Our new Leadership Awards shine the spotlight on game-changing pioneers who have inspired positive action to improve our country’s

food system.”

Honorees were chosen by an advisory board comprised of a dozen experts from diverse areas of expertise. The Leadership Awards recognize specific outstanding initiatives as well as bodies of work and lifetime achievement. Among the criteria used to select final honorees are excellence of work, innovation in approach and scale of impact within a community or the nation.

Scott Cullen, executive director of the environmental nonprofit GRACE, said Kirschenmann has a deep knowledge of history and hands-on experience as an organic farmer. “The incredibly holistic lens through which he views life allows him to interconnect and interweave complex ideas

into a clear and powerful synthesis that everyone can understand,” he said. “He’s a real gift to all of us.”

The group is recognizing the First Lady for launching her Let’s Move! campaign to address childhood obesity. Other honorees include California chef Alice Waters, FoodCorps founder Debra Eschmeyer, CEO of Bon Appétit Management Company and Will Allen, former basketball pro now working in community-based food systems. Iowa native Craig Watson, who is vice president of agricultural sustainability for Sysco Corporation, also is receiving the award.

The awardees will be honored guests at a dinner hosted by the foundation October 12 in New York City.

Delivering results

The Leopold Center's legislated mission is to conduct research on alternative systems and share those findings with farmers and the public. Certainly the most enjoyable way to do that is at summer field days! Here's a peek at recent field days featuring Leopold Center research. Many thanks go to our partners including researchers, farm managers, extension specialists, Practical Farmers of Iowa and Iowa Learning Farms. Based on not-yet-complete reports, 2011 could be a banner year. More than 1,100 people attended PFI's 30 field days; Iowa Learning Farms was averaging 45 people at each of its activities.

Low-external-input

Farmers Steve Barry from Shelby County and Ron Brunk from Grundy County inspect soybeans in a conventional two-year rotation damaged by Sudden Death Syndrome (SDS) at a field day in early September at the ISU Marsden Farm west of Ames. In the background are healthier plants in a three- and four-year rotation with oats and alfalfa. The project looks at systems with fewer external inputs than conventional cropping.

Landscape biomass

ISU forestry professor Rick Hall shows off the root system of an aspen tree, which helps hold eroding soil in place. The Landscape Biomass Research Team held a field day at the Uthe Farm in Boone County. The project examines five different cropping systems - various rotations of corn, triticale, switchgrass, sorghum, and aspen trees - at five different landscape positions, with the goal of developing a diverse portfolio of sustainable bioenergy feedstocks.

Beneficial insects

These refuges are attracting beneficial insects at the ISU Field Extension Education Laboratory west of Ames, which hosted a one-day workshop for farmers and gardeners in early August.

High tunnel

During a field day in July, ISU field specialist Shawn Shouse describes a rainwater catchment system that he developed for this high tunnel at the Armstrong Research and Demonstration Farm near Lewis. The grant led to a related project in Boone County, also featured at a field day.

Neely-Kinyon organic

More than 60 people toured organic plots at the ISU Neely-Kinyon Research and Demonstration Farm in late September. The Leopold Center is supporting a research project there, now in its 14th year, showing equivalent or greater yields for organic corn and soybean compared to conventional, with identical crop varieties.



Drinking water quality

Participants stand next to one of the City of Sioux Center's shallow wells to learn how water measurements are taken. This project compares different cropping systems that reduce nitrate leaching into groundwater supplies (also highlighted in new Leopold Center video at www.leopold.iastate.edu/news/on-the-ground/farm-practices-reduce-nitrate-loading-shallow-wells).



Iowa women volunteer for farmer-to-farmer project in Uganda

By ERIN FOSSELMAN, ISU Extension News Service

On her trip to rural Uganda, Jennifer Steffen, a farmer and retired watershed coordinator from southeast Iowa, felt very blessed to live in the Midwest.

“There are many things that we take for granted in our Midwestern farming practices that are completely out of the realm of possibilities for the women in Uganda,” Steffen said. “Everything was done manually with very basic hand tools.”

Steffen’s trip was part of the rural development program, Bridging the Gap: Increasing Competitiveness of Ugandan Women Farmers in the Marketplace. The farmer-to-farmer program links Iowa farmers with eight groups of women farmers in the Kamuli District of Uganda.

The yearlong project is funded by the United States Agency for International Development (USAID). Iowa State University’s Global Extension program has partnered with a Ugandan non-profit organization, Volunteer Efforts for Developing Concerns (VEDCO), to provide farmer production and marketing expertise to Ugandan farmers. ISU’s Center for Sustainable Rural Livelihood (CSRL) and VEDCO have been providing outreach and education in the district since 2004. Due to their efforts, many area Ugandan farm families have achieved food security and are now poised to increase crop diversity, as well as grain yields and quality for sale to commercial markets.

“In Iowa, we have an amazing system in place to grow and market our crops.

Our Iowa farmers’ experiences allow them to identify the gaps in the Ugandan marketing system and help identify steps for improving local farmers’ maize quality and marketing,” said ISU Extension Value Added Ag Specialist Margaret Smith, co-director of the Bridging the Gap program. “Our ultimate goal is to improve profitability for these Ugandan women farmers and bring more money to their households.”

Steffen and two other volunteers spent

six days working with the groups of farmers on project objectives. The project focuses on improving maize grain quality and helping to organize collaborative or group marketing of the grain. In addition, soybeans are being introduced as food and as a cash crop. The lowans also helped train the Ugandan farmers to keep written farm business records.

During their trip, Steffen and the others traveled to maize mills and warehouses and met with the farmer groups to monitor record books and evaluate the soybean plantings. Meeting “rooms” were outside under the shade of spreading trees, where the gradual movement of the group following the shade marked the progress of the work sessions.

Steffen has farmed for many years on a diversified crop and livestock family farm near Birmingham. During their spare hours, Steffen and her husband, Chuck, manage habitat for upland bird species on acres they have enrolled in the Conservation Reserve Program (CRP). Her two sons, Ben and Spencer, are looking forward to being the next generation to live and work on the family farm in Van Buren County.

Steffen also serves on the Leopold Center for Sustainable Agriculture advisory board, most recently as its chair, and is a member of the advisory committee for the Henry A. Wallace Chair for Sustainable Agriculture at Iowa State. Her background in farming and conservation led to an appreciation

for the simple ways farms are managed in Uganda.

“The women farmers in the Kamuli District are industrious, hardworking and resilient,” Steffen said. “They are wonderful communicators and are willing to learn new, improved and economically advantageous methods of farming that have the potential to improve their livelihoods.”

Despite the differences in lifestyles between the Iowa volunteers and the Ugandan women, Steffen noted some similarities, “They value family and the farm and take pride in a job well done, just like we do.”

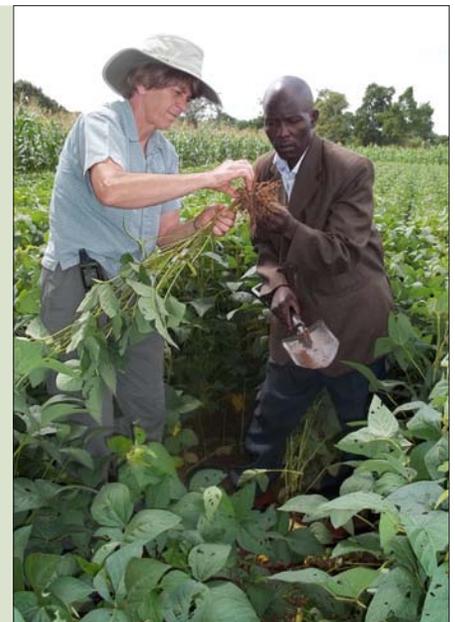
In Uganda, bicycles are used for all manner of transport. One day, while the volunteers were working with a group of farmers in the Butansi sub District, Steffen saw yet another sight that made her appreciate Iowa farming methods.

“I heard squealing, looked out on the road and saw a bicycle being pushed along with what I guessed to be a 200-pound hog tied to the frame. I suspected the hog was on his way to the butchery,” she said. “This made me think my days spent sorting and hauling hogs to market in Iowa were a cakewalk.”

Another group of Iowa women farmers went to Uganda in August. They were scheduled to continue work by Steffen’s group to improve on-site farm production, crop quality and farm record keeping in the Kamuli District.



Above: Steffen poses with a man and his daughter who are sorting fresh mushrooms harvested from a giant ant hill (and which they later enjoyed for dinner). Right: Steffen checks soybean nodulation with a local farmer and volunteer in the program.



News & Notes

The Leopold Center's 2011 Request for Pre-proposals (RFP) resulted in 74 submissions: 11 in policy, 24 in marketing, 24 in ecology and 15 in cross-cutting. After review by members of the Leopold Center staff and advisory board, the Center is requesting full proposals for 27 submissions. Proposals are due 5 p.m., Thursday, November 10. They will be evaluated by a review panel, advisory board and staff for consideration of funding in early 2012.

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John Olthoff, Dordt College professor who represents the Iowa Association of Independent Colleges and Universities on the Leopold Center Advisory Board, will serve as the new board chair. He replaces Van Buren County farmer Jennifer Steffen, who had served as chair the past two years. Iowa Department of Natural Resources administrator Bill Ehm will be vice chair; Keith Summerville, associate professor and associate dean at Drake University, will serve as member-at-large.

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Iowa growers who want to be sure they are following good postharvest handling and food safety practices can learn how to build their own vegetable wash stations. The plans are based on what's in use at One Step At a Time Gardens near Kanawha, and were expanded as a project of the Fruit and Vegetable Working Group. Find a link to the designs and an online tool to

other recommended postharvest handling practices on the Leopold Center's Cool Tool page, http://www.leopold.iastate.edu/cool_tools.

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Two new Iowa State specialists in food crop production - assistant professor Ajay Nair in horticulture and extension horticulturist Joe Hannan - offer online resources for fruit and vegetable growers. Nair writes the Iowa Vegetable blog, <http://iowavegetables.blogspot.com>, and Hannan has developed a new monthly newsletter and website at IowaProduce.org. They are part of a new ISU Regional Food Systems Partnership of the Leopold Center, ISU Extension and ISU College of Agriculture and Life Sciences.

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Joanna Hamilton, a graduate student from Tufts University, joined the Leopold Center for a nine-week summer internship. She interviewed

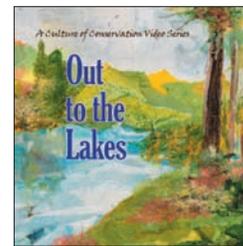
leaders of 16 groups who participate in the Regional Food Systems Working Group about their experiences that could be shared with others interested in making more locally grown products available in

their communities. She also helped adapt a manual for producers from the GROWN Locally cooperative in northeast Iowa. A native of Indiana, Hamilton is working on dual degrees in agriculture, food and environment and urban and environmental policy and planning.

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On-campus interviews for finalists for a new full-time director of the Leopold Center are expected to be held in November. Applications close on October 1 and as of press time, five applications had been received. A 10-member committee is conducting the search. Check the Leopold Center website for updates.

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Iowa Learning Farms has produced another video in its Culture of Conservation series. "Out to the Lakes" encourages viewers to think

about water quality and their personal relationship with their local lake or water body. The case study used in the film is Black Hawk Lake in west central Iowa. Discussion questions are included and an educational curriculum will be available soon. Free copies are available by request, at ilf@iastate.edu. The Leopold Center is a collaborating organization with ILF.

A matter of perception: Disparity in credit, insurance attitudes

Results of a recently completed survey of Iowa producers, ag lenders and crop insurance agents show a disconnect in their knowledge and understanding of sustainable and organic farming practices.

The survey was conducted by the Center for Rural Affairs in collaboration with the Iowa Farmers Union and funded by a competitive grant from the Leopold Center Policy Initiative. The purpose of the project was to understand each sector's attitudes and knowledge to determine the extent, if any, of discrimination against sustainable agriculture in lending and crop insurance practices.

"This analysis reveals real disparities between how conventional operations and sustainable farms and ranches are treated by lenders and insurance companies," said Traci Bruckner, assistant policy director at the Center for Rural Affairs and an author of the report.

The report recommends that the 2012 Farm Bill remove a 5 percent surcharge on insurance premiums for organic producers and provide insurance claim payments equal to the market premium for organic products. Bruckner said the current law puts organic producers at a significant disadvantage by levying the surcharge and only providing conventional crop price

coverage in times of crop failure.

The report points to a need for ongoing education about sustainable agriculture for lenders and crop insurance agents as well as producers, and makes several other policy recommendations.





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Highlight Events

Learn about how to get support for events: www.leopold.iastate.edu/grants/education

Pesek Colloquium

This year's speaker will be Andrew Revkin, who covered global environmental issues for the *New York Times* for 15 years and continues to write for their Dot Earth blog. He will present "9 Billion People + 1 Planet =?" at 8 p.m., Monday, October 24 in the Great Hall of the ISU Memorial Union in Ames. The series is hosted by the ISU Wallace Chair for Sustainable Agriculture.

Field Work: A Family Farm

Meet documentary filmmaker John Helde as he follows Judy and Charlie Swanson and their three grown children pursuing their dreams of farming as an extended family. The film, supported by Humanities Iowa, includes several seasons and addresses questions of size, scale and economics in agriculture. View the film, meet the filmmaker and listen to a panel discussion, Thursday, October 27, 7 p.m., Sun Room, ISU Memorial Union.

Iowa Organic Conference

The world market for organic products topped \$50 billion last year and the

demand for organic grains and produce continues to exceed supply. The Leopold Center is among the co-sponsors for the 11th Annual Iowa Organic Conference November 20-21 at the Scheman Building on the ISU campus in Ames. Keynote speaker is Joe Bennett, organic ag manager for Cascadian Farm/Small Planet Foods.

Aronia berry blast

This summer bicyclists from around the country got their first taste of aronia berries, the purple fruit from the native chokeberry shrub. Growers from Parnell, Homestead, Keota and Sigourney helped distribute 1,000 free smoothies to RABRAI bike riders on July 29 as they passed through the Iowa City area. The Midwest Aronia Association and Iowa Valley RC&D received a Leopold Center event grant to offer the product during the event that attracts more than 15,000 riders. Organizers are trying to establish markets for this crop, grown on an estimated 500 acres in Iowa.

More details, events

Check Leopold Center Web calendar:
www.leopold.iastate.edu/news/calendar

