

## Leopold Center funds 33 new projects in 2009

viven the economic situation and uncertain revenue streams, the Leopold Center has taken a measured approach to its competitive grants program this year. Project investigators were given tentative approval to begin work on 2009 projects in February, with final approval pending the outcome of the state budgeting process in late spring.

"We have been able to absorb the university-wide budget reversion in the current fiscal year, and we are planning for a reduction in next year's fiscal budget that begins July 1," said Leopold Center Director Jerry DeWitt. "We will be able to fund our new and renewed grant projects this year, but we probably will not be able to fund as many projects in 2010."

The 33 competitive grants that began earlier this year will fund a wide range of projects and activities that support work in the Center's marketing, ecology and policy initiatives. The projects will receive \$708,936 for their first year of work, and

were selected in a competitive process that began last summer. Grants for 11 of the new projects are for one year, 16 projects will run two years, and six grants are for three years.

The Center also has renewed or is in the process of renewing 19 grants for multi-year projects already in progress. These projects bring the total amount of current grant-funded research at the Leopold Center in 2009 to about \$1.1 million.

DeWitt said all projects were evaluated on their potential to provide economic sustainability for farmers, conserve Iowa's soil and water resources, contribute to the social fabric of Iowa's rural communities, work with partners, and build on the Center's work in its three initiatives.

The 2009 grants include 18 new projects in the Marketing and Food Systems Initiative. The projects help address key challenges in regional food distribution

**GRANTS** (cont. on page 2)

## Search begins for new Center director

nationwide search for the next director of the Leopold Center has begun. Maynard Hogberg, who chairs the Animal Science department at Iowa State and also represents the university on the Center's advisory board, heads up the search committee. The committee was appointed by ISU Executive Vice Provost Elizabeth Hoffman in February.

"This is a high profile position and we are looking for a preeminent scientist to provide the leadership and direction for where we need to go in the future for sustainable agriculture in Iowa," Hogberg said. Applications for the position are due July 1.

Jerry DeWitt will complete his threeyear interim appointment as director of the Leopold Center on December 31, 2009, when he plans to retire after nearly 38 years of service to Iowa State University and involvement in sustainable agriculture. DeWitt is the third director of the Leopold Center, created by the Iowa legislature in 1987 as an ISU unit advised by an independent board of Iowa citizens and academics.

According to the position notice, candidates must be committed to the mission of the Leopold Center and show

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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 lowa 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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### CROSS-INITIATIVE GRANT HELPS LAUNCH NEW ON-FARM ENERGY WORKING GROUP

**GRANTS** (continued from page 1)

and market development for farmer networks, as well as technical assistance for beginning and immigrant farmers.

Eleven new grants are part of the Center's Ecology Initiative. Projects look at potential roles for woody biomass in an emerging bioeconomy, alternatives to wetlands for capturing soil field nutrient losses, grazing and livestock systems, third crops such as canola, and measuring the benefits of perennials on the landscape.

The Policy Initiative will sponsor two new projects: the potential for Iowa's farmers to supply biomass markets and ways



#### www.leopold.iastate.edu

Find descriptions, profiles for all new, ongoing Leopold Center competitive grant projects: www.leopold.iastate.edu/compgrants/ compgrants.html

for farmers interested in sustainability to use financial and risk management tools more effectively. Two grants cross all initiatives to fund an on-farm energy working group and on-line programs for beginning farmers.

#### 2009 New Leopold Center Competitive Grant Projects

#### Marketing and Food Systems Initiative

A Food Distribution Network for the Northern Iowa Food and Farm Partnership

Accelerating Latino Leadership in Educational Initiatives for Entrepreneurial and Ecological Farming

An Automated Mechanical Intra-row Weed Removal System for Vegetable Crops

Building Student Awareness and Involvement in the Farm to ISU Program

Cultivating the Agrarian Dream: Aspiring Agri-Entrepreneurs Helping One Another Choose Their Path

Developing and Implementing a Strategic Plan for Farm-to-School Programs in Northeast Iowa

Developing Production, Processing and Marketing of Aronia Berries on Small Family Farms in Southeast Iowa

Enhancing Value and Marketing Options for Pawpaw by Developing Pulp Separation and Preservation Techniques Experiential Educational Engagement with Working Groups and Communities of Practice

Feasibility Study for the Creation of a Meat Processing Training Program in Iowa through the Community Colleges Growing Up Local: A Value Chain Analysis of Local Produce in Iowa

High-Tunnel Resource Manual and Producer Resource Kit Providing the Tools for Profitability

Life Cycle Assessment of Confinement and Pasture-based Dairying in Iowa: Impacts and Options for Mitigation Pottawattamie County Farm to Fork (Phase III)

Research in Support of the Foodsheds in the Upper Midwest Initiative to Measure the Economic Impacts Routing Foods into Southeast Iowa

The Actual Cost of Food Systems on Roadway Infrastructure

Update of the Iowa Produce Market Calculator Web Site

#### **Ecology Initiative**

Assessment of Woody Biomass as a Niche Feedstock for Biobased Products in Iowa

Corn Silage Test Plot to Increase Profitability for Dairy Farmers and Reduce Winter Wind & Water Erosion

Evaluating Canola as an Alternative Oilseed Crop and Enhancing Winter Cover in Iowa

Evaluating Denitrifying Bioreactors for Edge-of-Field Nitrogen Management in Iowa's Tile-Drained Landscapes

Feasibility of Unheated Large Gutter-Connect Greenhouses for Iowa Winter Organic Vegetables

Greenhorn Grazing: A Modular Pasture and Animal Management Curriculum for Beginning/Transitioning Graziers Land Use Conversion to Perennial Vegetation

Optimizing Buffer Strips for Improved Ecosystem Services

Performance of Cropping Systems Designed to Reduce Nitrate Leaching into Shallow Municipal Well Aguifers Quantifying the Effect of Perennial Vegetation on Soil and Water Quality

Site Specific Implementation of Practices that Alter the Spatial/temporal Distribution of Grazing Cattle to Improve Water Quality of Pasture Streams in the Rathbun Lake Watershed

Iowa Farmers and Credit, Crop Insurance and Sustainable Agriculture

Shaping a Functional and Sustainable Biofuels Industry through Bridging Industrial Needs with Farmer Production

Meeting On-farm Energy Needs through Conservation, Efficiency and Renewable Energy On-Line Learning: Using Webinars to teach about Succession and Enterprise Development Issues



## A conversation with Director Jerry DeWitt

## Q. How is the Leopold Center adapting to the current economic downturn?



ike other departments and centers at Iowa State University, the Leopold Center will make major budgetary reductions for the fiscal year 2010 that begins July 1, 2009. Our approach has been to carefully plan and reposition our programs to avoid dramatic impacts on the overall work of the Center.

Early in the budgeting process for FY2009-10, I set transparent funding priorities to first maintain staff stability and productivity and to honor the Center's commitments to existing research and educational projects across Iowa. Our third priority would be to undertake new endeavors and make new investments as part of our annual competitive grant program, with funds typically awarded in January or February.

Since we were in the middle of the competitive grant process when the news of the FY2009-10 cuts surfaced, we notified all leaders of the prospective 2009 projects about the budget situation. They were given tentative approval to begin work on a limited basis in February, with access to only \$2,000 or 10 percent of their first-year funding, whichever was greater. Depending upon the severity of the impending reduction in the Leopold Center budget, project leaders were informed that some 2009 projects could be eliminated based upon their relative rating during the proposal review process.

Following the conclusion of the recent Iowa legislative session and the reconciliation of the state and university budgets, it now appears that staff levels will not be severely impacted and the Center will be able to honor commitments to projects that began prior to 2009. We also are proceeding with the 33 new competitive grants selected for funding in 2009 (see announcement on page 1).

However, the FY10 reduction will result in an estimated shortfall of approximately \$86,000. This means that three to five fewer competitive grants will be funded in our next round of pre-proposals, with the process scheduled to begin in June 2009.

We also plan to scale back our presence at some scheduled events in the coming year to reduce travel and program costs.

#### **Center Progress Report**

Another immediate and major change that has been influenced by the economy (and concern for the environment) is the elimination of our *Center Progress Report* in hard-copy format. This report, which has been published annually since 1992, highlights results of recently completed Leopold Center-funded research and projects. We provided the report to more than 5,000 people worldwide.

Our commitment remains to share this important information with you. We will continue to produce the *Center Progress Report* and publish it on-line in several print-on-demand formats. We believe this will offer access to our research findings in a more timely and economical manner throughout the year.

Another way to learn about our projects is via brief video reports on our work in the Ecology Initiative. Check out some of our first video research summaries in a new on-line feature, On the Ground with the Leopold Center: www.leopold.iastate.edu/research/eco\_files/ground/biomass.html

#### **Graduate students at the Center**

A second casualty of the state's grim economic situation is the loss of annual stipends for two graduate assistantships at the Leopold Center. These assistantships were awarded to students in the ISU College of Business who wanted to add a sustainable agriculture emphasis to their MBA degrees. This unique program has allowed very creative students from a number of disciplines to deal with real-life challenges in today's business world.

We are committed to continue working with administrators in the Colleges of Business and Agriculture and Life Sciences to bring this cooperative effort back on track next year.

# Q. How can the Leopold Center support Iowa farmers during these economic times?

I will be working with leaders in all three Leopold Center initiatives and other staff to cultivate our partnerships with Iowa organizations, farm groups, non-profit organizations and in local communities to help build their capacities and competitive edge to secure resources within and outside of Iowa. We know, for example, that our initial and continuing work with local food system efforts in northeast Iowa has resulted in significant external funding from the W.K. Kellogg Foundation. We will continue this and other work across Iowa. How and where can Leopold Center seed money make a lasting difference in Iowa?

I also want to better understand the implications of the major reorganization in ISU Extension at the local level. The 1987 Groundwater Protection Act that founded the Center charged us to work with ISU Extension to share our findings with the public. What unmet needs will now exist to which we can and should redirect some of our Center efforts and outreach? Where are the most critical educational and programming opportunities for the Center? The budget shortfall did not eliminate local needs related to sustainability and our work at the Center; perhaps it opened some doors for us.

Finally, I will work with our staff and advisory board to better focus and fine tune our investments on the most effective and needed programs and projects, research and education, that can and will make a difference on the landscape.

Please share your thoughts on how the Leopold Center may serve Iowans most effectively at this time. We will listen and respond with our best ideas.

Jung Dewith

## New team makes case for targeted conservation

an targeting your investments work for conservation as well as economics? Such an approach not only is possible, but also may be more effective when it comes to conservation practices on Iowa's landscape.

The Leopold Center is making a strategic investment in a team of ecological researchers that encourages the targeted use of trees, prairies and other perennials in key parts of the landscape to achieve multiple environmental benefits. They have outlined these benefits in a new four-color publication, A Targeted Conservation Approach for Improving Environmental Quality.

"Not all portions of agricultural landscapes are equally suited to protecting or enhancing environmental quality," said Lisa Schulte Moore, an assistant professor in Natural Resource Ecology and Management who coordinated the publication project. "Of course, we need to maintain the conservation practices we already have, but in this economic climate we also need to be strategic in our efforts to establish new practices where they will have the most impact, such as on land that is marginal for producing commodity crops."

The conservation practices explored by the research team also offer economic opportunities — for hunting leases when wildlife habitat is improved, for switchgrass and trees in emerging carbon and biomass markets, and for agroforestry niche products.

More importantly, the conservation practices result in major environmental benefits: clean air and water, productive soils, carbon sequestration, diverse wildlife and plant habitat, and biological controls for crop protection.

The team is leading a multi-year research project at the Neal Smith National Wildlife

Refuge in Jasper County and on nearby private farms. Members also are working on educational materials, landowner surveys and other activities.



"We have a box full of great tools — conservation tillage, grass waterways, field borders, contour buffers, riparian buffers and filters," Schulte Moore said. "But we also need to adopt a landscape view, use more native plants, build wetlands at the end of tile lines, expand our use of cover crops, and create new markets and policies that help landowners adopt these practices where they will do the most good."

#### About the new group

The team, which calls itself "The Perennializers," includes investigators of several previous projects supported by the Ecology Initiative, as well as new partners and collaborators from several disciplines. The Leopold Center's strategic investment, which will continue for five years, is being used to conduct research related to perennial systems and leverage funds for additional grants from other organizations.

The team project is "Integration of Water, Nutrient and Carbon Cycling Under Diverse Annual-Perennial Plant Community Systems in Agricultural Landscapes." Team members include:

- Jeri Neal, Leopold Center Ecology Initiative
- Matt Helmers, ISU Agricultural and Biosystems Engineering
- Nancy Grudens-Schuck, ISU Agricultural Education
- Cathy Kling, Center for Agricultural and Rural Development
- Matt O'Neal, ISU Entomology
- Matt Liebman, ISU Henry A. Wallace Endowed Chair for Sustainable Agriculture
- Rick Cruse, Iowa Water Center
- Keith Schilling, Iowa Department of Natural Resources and Iowa Geological Survey
- Lisa Schulte Moore, Heidi Asbjornsen, John Tyndall, David Williams, ISU Natural Resource Ecology and Management
- J. Gordon Arbuckle, Jr., ISU Sociology
- Cynthia Cambardella and Mark Tomer, USDA-ARS National Soil Tilth Laboratory
- Randy Kolka, U.S. Forest Service
- Pauline Drobney, Neal Smith National Wildlife Refuge



### SEARCH PROCESS INCLUDES ADVISORY BOARD MEMBERS

**SEARCH** (continued from page 1)

evidence of a "holistic viewpoint relative to solving agricultural, environmental and social problems as outlined in the Groundwater Protection Act." Candidates also must meet qualifications for tenure in an academic department in the ISU College of Agriculture and Life Sciences. The candidates must have a "distinguished record of research" and success in obtaining competitive grant and philanthropic funding.

Laura Jackson, University of Northern Iowa biology professor and chair of the Center's advisory board, also is serving on the search committee. "We have a diverse board that represents many aspects of agriculture in Iowa, and we are committed to working hard to attract outstanding candidates who can keep the momentum going in Iowa toward a more sustainable agriculture," she said.

The committee conducts the search, from which the advisory board selects three names to forward to ISU President Gregory Geoffroy for the final decision and appointment.

Leopold Center advisory board member Jim Penney, who recently retired as manager of Heart of Iowa Cooperative, is a member of the search committee. He served on the last director search committee in 2000, when Fred Kirschenmann was hired. Other advisory board members on the committee are Maury Wills, Iowa Department of Agriculture and Land Stewardship representative and organic grower; and Aaron Heley Lehman, a central Iowa farmer who represents Iowa Farmers Union on the advisory board.

Other members of the search committee are Rich Pirog, representing Leopold Center staff; Andy Baumert, State Relations Officer for ISU; Paul Brown, Assistant Director for Agriculture and Natural Resources, ISU Extension; Thomas Isenhart, Associate Professor, ISU Natural Resource Ecology and Management; and Matt Liebman, Henry A. Wallace Endowed Chair for Sustainable Agriculture at ISU.

The director job description is on the Leopold Center Web site at: www.leopold.iastate.edu/files/vacancy.pdf





## The foundation of any farm's success

The pursuit of quantity at all costs is dangerous in farming. Quantity should be aimed at only in strict conformity with natural law, especially must the law of return of all wastes to the land be faithfully observed. In other words, a firm line needs to be drawn between a legitimate use of natural abundance and exploitation.

- Sir Albert Howard, British organic agriculture pioneer

It seems we are becoming painfully aware of nature's limits. Given our diminishing fossil fuels and fresh water resources, plus our degraded soils, it is becoming more difficult to maintain the illusion that nature (or technology) always will be able to supply all the resources we need to maintain our current rates of consumption indefinitely. Nature's abundance and our technological prowess have, for several decades, led us to believe that we could overcome any barriers to maintaining our "non-negotiable" American way of life.

A similar view has penetrated our view of agriculture. For several decades it seemed that there was no yield goal that was unattainable. And despite the challenges of climate change and increased energy costs, let alone degraded soils, we continue to assure ourselves that the combination of nature's abundance and new technologies will enable us to overcome all of these challenges and not only maintain but increase current production yields.

Sir Albert Howard was one of the prescient agriculturalists of the early 20th century and was deeply impressed by nature's resilience. But he also was keenly aware of nature's limits, especially when it came to farming. He recognized that nature's abundance easily could deceive us because she appears so lavish, but he pointed out that in reality nature "works on very small margins." He argued that while the whole of nature appears luxurious to us, her "natural surpluses are made up of minute individual items: The amount contributed by each plant or animal is quite tiny: It is the additive total which impresses us."

Howard reminded us that regardless of our technological prowess, farming ultimately is dependent on the gifts of nature, and those gifts are tied to a complex, interdependent web of relationships composed of everything from soil microorganisms to plants and mammals. This living system is ultimately dependent on the "law of return." The health of the soil, which is the foundation of the entire web of life, is sustained by the return of all "waste" generated by the web. Decomposed waste becomes food for soil microorganisms, making up the life in the soil that is essential to soil health and free ecosystem services that provide for robust agriculture.

Howard was adamant that "the pursuit of quantity at all costs is dangerous to farming." Once we focus on quantity at all costs we turn away from the most important task: sustaining the ecological health of the land on which productivity ultimately depends.

Unfortunately, our industrial culture has required almost exclusively that farmers pursue quantity at all costs. As ecologist Paul Thompson put it so eloquently: "Farmers today are forced into a single ethical requirement: 'Produce as much as possible, regardless of the cost.""

This is not to diminish the importance of yield. Every farmer knows that yield is important, but when maximum production comes at the expense of the health of the land, yields cannot be maintained. Any farm's success always depends on the health of its land. As Aldo Leopold reminded us, land health is best defined as the land's capacity for "self-renewal." Self-renewal can be maintained only by virtue of a healthy biotic community.

It is time to recognize these fundamental requirements for success of any farming operation and begin to incorporate these essential elements of farming in our farm policies and practices. Farmers must be rewarded for producing land health as well as yield.

Tupenin Kunchennonin



The health of the soil, the foundation of the entire web of life ... something to pass from one generation to another.

Photo by Jerry DeWitt

#### Center adds on-line features

Check the Leopold Center Web site for new features designed to keep users better informed about projects and activities: www.leopold.iastate.edu

#### **News feeds**

News feeds (also called RSS, for Really Simple Syndication or Rich Site Summary) offer a handy way to check the latest headlines and postings on favorite Web sites and blogs. The feed requires a news reader or news aggregator, available from Google, Yahoo and most Web browsers. To subscribe to the feed, enter this URL into a news reader: http://www.leopold.iastate.edu/rss.xml, or go to the Center Web site and click on the orange RSS icon.

#### Videos

Another new feature is "On the Ground with the Leopold Center," a series of short videos that highlight ongoing research funded by the Center's Ecology Initiative. In these videos, project investigators explain their work and how it fits the Center's mission. Three projects are profiled and more video features will be added as they are produced.

#### **Photo gallery**

Each month a different Leopold Center project will be highlighted in the photo gallery. Some of the galleries also include audio features. Current galleries look at high tunnel structures and lowa landscapes and wildlife to celebrate Earth Day in lowa.

#### **Food Facts**

Information from seven research projects completed within the past year has been added to Food Facts, the Leopold Center's on-line publication of key findings from research, demonstrations, studies and surveys supported by the Leopold Center's Marketing and Food Systems Initiative and the Value Chain Partnerships project.

#### **Initiative pages**

The Center's research initiatives are easier to navigate, thanks to a new format for the Marketing and Food Systems Initiative page—one of the most visited pages on the Center's Web site—and the Ecology Initiative page.

## Contemplating conservation, Aldo Leopold

his year marks the 60th anniversary of the publication of *A Sand County Almanac*, and 61 years since Ames resident Lotus Miller learned about conservation from "The Professor" himself.

Miller was a student in the last class taught by Aldo Leopold, whose beloved essays were published a year after his death in 1948. A professor at the University of Wisconsin, Leopold died at age 61 from a heart attack while helping a neighbor fight a late-spring grass fire near his family's now-famous "Shack."

Miller and 60 other central Iowans gathered at the Ames Public Library on March 7 to hear Leopold's essays read aloud. The readings, accompanied by images of Leopold's family and scenes from nature, were part of the Second Annual Ames Reads Leopold event. The Aldo Leopold Foundation supports similar celebrations, which have spread to include more than two dozen communities across Wisconsin and other states. The Leopold Center was among local sponsors of the program.

"He was known as 'The Professor' and people just loved him," Miller recalled. "He was such a decent person, very down to earth. I don't think he would have liked to have all the attention focused on him personally."

Miller was in her second year at the University of Wisconsin, where she was working on a master's degree in zoology and botany. Her roommate was one of Leopold's graduate students, and the professor's death mid-semester had a "tremendous effect" on everyone.

"He did not have many prerequisites for his classes because he wanted farm kids to take them, too," Miller said. She enrolled in Leopold's introductory wildlife ecology course. "He knew that if we were going to save wildlife we would need farmers on the land to understand these things. It's a real tribute to his foresight."

Miller said she enjoyed Leopold's lectures, which he presented without notes. "It was all in his head, he knew what he wanted to say," she said.

She said she appreciated Leopold's ideas and his poetic observations of the natural world. "Some of his essays he read to us in class," Miller said.

Leopold had been in stable health, although he suffered from nerve and eye problems that caused a great deal of pain. His death on April 21 was only a week after he learned that Oxford had agreed

to publish his book of essays, then called "Great Possessions." An assistant, Joseph Hickey who had studied under Leopold, handled Leopold's teaching duties for the rest of the semester.

Miller grew up in Oregon, and her interest in science began at an early age, cultivated by a father who was a naturalist and photographer. After getting her master's degree, she started doctoral work studying the habitat range of the meadow mouse at Wisconsin and later at the University of California-Davis. She and her husband, Wilmer, moved to Ames in 1962, when he accepted a position in the ISU zoology and genetics department.

Leopold's conservation teachings have stayed with Miller throughout her 84 years. She co-founded the Ames Conservation Council that worked to save the 27-acre prairie behind Ames High School, helped the League of Women Voters on a study that led to building the Ames Resource Recovery Plant, and volunteered in the effort to preserve the Ledges from flooding caused by Saylorville dam.

Retired ISU wildlife specialist James Pease said the March event provided time to reflect on Leopold's ideas and what they mean personally. "Do we yet have a land ethic and if so, can you define it?" he asked the group in a discussion after three hours of readings. "If not, how do we get from here to there?"

Miller shared this observation: "Leopold wrote at a time when he was very discouraged with conservation efforts in Wisconsin," she said. "But he always maintained a steady, scientific approach and showed that each of us could do something. Today I'm very encouraged about conservation because the interest has continued."



Ames
resident
Lotus Miller
was in the
last class
taught by
Leopold.

Photo by Nata

## Local foods workshop draws record crowd

By LAURA MILLER, Newsletter editor

t least 250 people from six states attended the March 30 Leopold Center Marketing and Food Systems Initiative workshop. This was the fourth such event highlighting results of research and outreach projects supported by the Center and Value Chain Partnerships.

"We were excited to see so many new farmers, educators and business people who have not attended previous workshops, and wanted to learn more about the results of these projects," said Rich Pirog, Leopold Center associate director and leader of the Center's marketing initiative. "It clearly shows that the Leopold Center's investments are paying dividends in the state."

Pirog said the Leopold Center's role in connecting organizations, producers and business leaders was apparent at the workshop. "There was a high energy level among the participants, and people were very enthusiastic about achievements in these projects and opportunities for the future."

More than 100 people attended the Regional Food Systems Working Group session on local food efforts in regions across Iowa. Michael Smith, director of real estate and sustainability for Hy-Vee, said he sees many opportunities for Iowa producers in this area. The Iowa-based company operates 225 stores in eight Midwestern states.

"Local foods are a great market, a convergence of many good things," he said. "We already work with local producers, but we're interested in further establishing relationships with them."

Some of the greens and all of the tomatoes and cucumbers for the salad served at the locally-sourced lunch were grown in greenhouses in northern Iowa. For more than 25 years the company, Plantpeddler of Cresco, had been providing ornamental plants for regional and national export markets. Last year after participating in the Northeast Iowa Food and Farm Coalition, a local foods group, owners Mike and Rachel Gooder converted three of their eight-plus acres of greenhouse space to food production, growing about 26 small fruit and vegetable crops.

"I wanted to answer two questions: Can I produce good-tasting food during the Iowa off-season, and can I sell it?" Mike Gooder said, adding that he has been testing five types of markets.

"We have shipped ornamental plants around the world, but now I also sell tomatoes to a restaurant only a block from where they are processed. That is the golden part, when a local company can serve a local community," he said.

Keynote speaker was Virginia Clarke, who coordinates the Sustainable Agriculture and Food Systems Funders Network based in California. She discussed the evolving role of U.S. foundations in developing a more sustainable food system.

"Iowa rocks," said Clarke, referring to local and regional food systems work in the state. She said that the Leopold Center, which is a member of her organization, is well known throughout the United States for its research, collaboration and success in this area. However, she challenged workshop participants to work closely together, especially in the current economic climate.

"We are witnessing a radical change in the way we've been doing things," she said. "People from all sectors are paying attention to the local foods movement and sustainable agriculture, and this is a leadership moment."

The workshop featured sessions on Leopold Center-funded work ranging from saving energy on the farm, agritourism and niche meat markets, to the use of high tunnel enclosures to extend the growing season for vegetable and small fruit crops.

Other sessions showed progress on efforts to help Latino immigrants

Workshop presentations, video/audio reports, photos: www.leopold.iastate.edu/ research/marketing\_files/ workshop09/index.html

www.leopold.iastate.edu

get started in agriculture, grass-based livestock systems, on-line marketing tools, ways that small farms can share machinery, and intergenerational programs for beginning farmers. Working groups of the Value Chain Partnerships project that focus on niche pork, local and regional foods, fruit and vegetable production and small meat processors also reported on their activities.







TOP: Beth Larabee, Karen Jacobson, Becky Rasmussen and Blue Maas take last-minute registrations for the workshop.



MIDDLE: Presenters answer questions in the regional food group session, which attracted more than 100 people. BOTTOM LEFT: Farm radio show host Von Ketelsen (right) interviews Leopold Center Director Jerry DeWitt in a live broadcast during the workshop.

BOTTOM RIGHT: Keynote speaker Virginia Clarke

# It takes a community: Riceville meat locker rebuilds after fire

By LAURA MILLER Newsletter editor

errill and Rose Angell are thankful for the support from their northern Iowa community in picking up the pieces after a fire destroyed their almost-full custom meat processing plant last October. They are breaking ground on a new \$800,000 facility in May and hope to be open again by August or September.

But Merrill Angell's recovery process has relied on another community, sometimes called a community of practice. The Small Meat Processors Working Group, led by Iowa State University sustainable agriculture and rural sociology graduate student Arion Thiboumery and ISU Extension meat specialist Joe Cordray, has provided guidance that Angell could not get anywhere else.

The group formed three years ago to bring together processors, regulators, educators and business consultants to identify small meat processor needs and the resources to address those needs. The group also is part of the Value Chain Partnerships project coordinated by the Leopold Center.

"While we were trying to sift through the rubble, these people were all in the background trying to put together a plan and figure out what needed to be done," said Angell, who sent an e-mail to Thiboumery only days after the fire. "I did not know where to start, there are so many regulations and I was not insured for replacement by any means."

The Angells' business, County Line Locker, straddles the Howard and Mitchell county line in Riceville. The fire also destroyed a hardware store, which hit the community hard because two businesses were affected, Angell said.

Thiboumery asked several group members – a state meat inspector, two ISU Extension specialists and a community college advisor – to go with him to Riceville and help Angell consider his options. The first decision was whether to remodel an existing building or build new.

It just so happened that the working group was in the process of writing its second resource manual, Guide to Designing a Small Red Meat Plant (published by ISU Extension as PM 2077), to help plants meet various regulations and achieve necessary efficiencies. Thiboumery said the group had worked with an architect and state officials on the guide because so many of their members were interested in expanding or building new facilities.

"We're adapting one of the floor plan models in the book," Angell said. "We hope to be a USDA-inspected plant eventually, but right now we are looking at meeting the Iowa guidelines."

Thiboumery said helping people make connections within the small meat processing industry has been one of the goals of the working group.

"Meat processing is a heavily regulated industry and there has been a big knowledge gap between those people working in busi-





The Small Meat Processors Working Group helped County Line Locker examine its options after a fire destroyed the facility.

ness development and the regulators," he said. "It was easy for small meat processors to slip through the middle of this gap."

The group's first publication in 2007, the Iowa Meat Processors' Resource Guidebook, explains the steps needed to build, expand, or upgrade a meat plant and the resources available for accomplishing each step. It includes information related to business planning and feasibility, rules and regulations, plant design and construction and labor. Iowa Meat and Poultry Inspection Bureau Chief Dr. Gary Johnson, a member of the working group, said the guide is a good reference for new meat processors as they prepare to work with regulators.

Angell said he has appreciated everyone's support, including 10 area producers who are investing in the new facility, and economic development groups in Riceville and Howard and Mitchell counties. The business, which he purchased 13 months before the fire at age 54, will survive.

"We've just been overwhelmed by the generosity in the community," he said. "Arion and the group have been a big part of this. I've looked to them for coaching and access to resources. It would have been really hard to do this without the working group."

#### **Leopold Center linkages**

The Leopold Center's Marketing and Food Systems Initiative funded a series of cost-accounting workshops for small meat processors as part of a 2007 competitive grant. The workshops were led by Iowa State University Extension's Center for Industrial Research and Service (CIRAS) and ISU Meat Science Extension.

A competitive grant that began this year is funding a feasibility study for the creation of a meat processing training program in Iowa through the community college system.

Funds from the Value Chain Partnerships project are supporting the Small Meat Processors Working Group's third publication: the Beef and Pork Whole Animal Buying Guide, published by ISU Extension (PM 2076). This consumer-oriented guide explains the many details of buying pork and beef as whole animals (or portions thereof). The guide contains information such as marketing terms, storage and handling recommendations, understanding meat inspection, and understanding meat weights (live vs. carcass vs. retail cuts), as well as common retail pork and beef cuts.

#### **National linkages**

The Small Meat Processors Working Group in Iowa is participating in the national eXtension network within the U.S. Cooperative Extension System. Supported by grants from the USDA Rural Development, the W.K. Kellogg Foundation and Heifer International, the Iowa working group is part of a new Niche Meat Processor Assistance Network that includes experts from 25 states working to help livestock farmers and ranchers who want to have meat processed to sell in niche markets, such as local, grass-fed, and organic. Resources include on-line Webinars and newsletters.

## Restoring values, balance and choice in new food era

By LARRY YEE Guest Columnist

EDITOR'S NOTE: Agriculture of the Middle is one of six core issues that help guide the work of the Leopold Center and clarify our role and response in critical areas. Retired University of California extension specialist Larry Yee has worked closely on the national AOTM initiative with the Leopold Center's Fred Kirschenmann and Steve Stevenson from the University of Wisconsin.

Read more about the Leopold
Center's core issues:
www.leopold.iastate.edu/
about/core.html

ften I am asked to define a farm "of the middle." Most people want an answer quantifiable either by number of acres or dollars earned. The quick but certainly not the definitive answer is any farm between \$50,000 and \$500,000 in gross revenue.

The reality is a great diversity of farming operations that numbers cannot define. For example, a 20-acre strawberry farm in California might have higher gross revenue than a 2,000-acre corn-and-soybean operation in Iowa, but both would be considered midsize. Trying to nail down a midsize family farm is like trying to describe beauty – hard to describe but you know it when you see it.

Midsize farming operations used to be present everywhere in our rural landscape. The number of farms in the United States peaked at about 7 million in the 1930s, and most were midsize farms. Today there are fewer than 2 million farms, with the largest number classified as small (those with income derived primarily from off-farm sources), and many others being the very large, corporate operations. Those farms traditionally in the middle mostly have disappeared and the trend continues.

Ironically, there is now a great demand for high-quality, differentiated food products, those which are best produced by midsize family farms. For these products, quantity is not as important as the quality, the story associated with that product, and the trust that consumers have for the producer of that product. This presents a tremendous opportunity for midsize family farms. But we need to first have the will, and then the resources, to create the infrastructure needed to aggregate these products and move them to regular

markets through new innovative business arrangements.

We have been calling these new arrangements "value chains" or "values-based value chains." Traditionally, most farmers have been and still are price takers. In a traditional supply chain, it is every chain link for itself, competing for its own self-interest. A value chain is simply a supply chain in which people play by the "golden rule."

In a value chain, the links (producers, processors, distributors, wholesalers, food services and/or retailers, and consumers) are partners in getting high-quality, differentiated products to market, adding value and values along the way. The partners cooperate as much as they compete, they serve the common interest as much as their own self interest, and they look out for each other, recognizing the importance of the other partners and their need to thrive economically.

In a value chain, trust is paramount and profits are optimized not maximized. Value chains strive for transparency and to the greatest extent possible all participants are treated fairly and equitably. Relationships are of the utmost importance, in fact, there is a bridge between producer and consumer where a chasm had existed.

Under this system, midsize farmers would have more choices. The current system offers two options: selling direct to consumers or selling into the commodity system. Consumers also would have more choices of products. If these value chains could be created in regions throughout the country, and networked with one another, a new third tier in our food system could develop.

Agriculture of the middle also can be

seen as a return to center or balance. Is this not what the global economic meltdown was about – the need to return the economic system to balance after wildly swinging to unrealistic extremes of excess? Nature evolves and adapts and natural systems seek equilibrium, of which diversity plays a key role. A healthy food system is no different; we need farms of all sizes, shapes and stripes. And we need both food as commodities and food as highly differentiated products and everything in between.

The Association of Family Farms (AFF) is the business development arm of the Agriculture of the Middle (AOTM) initiative. AFF is a market-oriented, not-forprofit, national organization whose mission is to enhance the economic viability and long-term success of family farmers and local/regional food systems by creating and managing value chain networks to bring significant quantities of high-quality, differentiated family farm products to market. The AFF business plan is in its final draft and soon AFF will begin seeking resources to put it into action, beginning with pilot projects and setting the foundation for the structure of the organization. Our goals are ambitious, but the world seems ready and before we lose yet another family farm, we need to act.

Nothing is inevitable. The food system we now have was developed and evolved through conscious choices. AOTM and AFF seek to create a food system that is diverse, fair and sustainable. We have the potential not only to develop a third tier food system where mid-scale family farms can thrive, but also to have a healthy influence on the entire food system by restoring balance, diversity and values.

My friend and founder of the VISA International, Dee Hock, once said, "In such times as these, it is no failure to fall short of realizing all that we might dream; the failure is to fall short of dreaming all that we might realize."

Read about the Agriculture of the Middle and AFF concept in *Food and the MidLevel Farm: Renewing an Agriculture of the Middle*, edited by Thomas Lyson, Steve Stevenson and Rick Welsh (MIT Press, 2008)



Larry Yee recently retired from the University of California cooperative extension and has served as national program leader for Food Marketing Systems Innovations at the USDA. He is founder of an endowment and trust that operates the UC Hansen Agricultural Center and historic Faulkner farm near Santa Paula. He co-chairs the California Roots of Change Council and is a board member of the Food Alliance. He is a co-founder of the Association of Family Farms, http://www.familyfood.net.

## lowa's waters focus of latest Leopold Center annual report

owans were deeply concerned with water in 2008, and the latest annual report from the Leopold Center reflects the Center's work on a variety of Iowa waterfronts.

Whether it was responding to the summer's floods, efforts to maintain water quality, or ways to appropriately manage water resources, the Leopold Center has been active in water-related research, demonstration, and education over the past year. The FY2008 annual report, "Water," offers readers a brief, well-illustrated overview of how the Center maintains its long-standing commitment to Iowa's groundwater protection.

The report highlights research projects and outreach done under the auspices of the Leopold Center's current initiatives in ecology, policy, and marketing and food systems. In addition to the full-scale competitive grants program, the Center's 2008 significant involvement and investments included: a new grass-based livestock working group; cover crops research; an organic crops information web site; two new working groups for fruit and vegetable growers and small meat processors; ongoing efforts by the Green Lands, Blue Waters consortium; and a web site showing where produce travels to reach the grocery store.

The publication also includes updates from the some of the "strategic investments" funded by the Center beyond its extensive competitive grants program:

Quotables

"I always thought it would be in my best interest to spend a day with Steve walking his pastures, enjoying the abundance of wildlife that calls his farm 'home' and just talk cows and grass. But I haven't done it yet and it is my loss."

—Russ Brandes, a southwest Iowa farmer who presented the 2008 Spencer Award to Steve Reinart of Carroll County

See more pictures from the event on the Leopold Center Web site: www. leopold.iastate.edu/resources/spencer/ spencer08.htm Iowa's Grape and Wine Institute, Practical Farmers of Iowa on-farm demonstrations, promising students in the Graduate Program for Sustainable Agriculture at Iowa State, long-term organic crop research plots all over the state, and the Agricultural Systems Initiative in ISU's College of Agriculture and Life Sciences.

Director Jerry DeWitt's leadership of the Iowa Learning Farms project paid dividends in a new "culture of conservation" initiative. Distinguished Fellow Fred Kirschenmann continued his extensive speaking and writing career while taking on half-time leadership of the Stone Barns Center promoting sustainable agriculture. The first lecture in honor of former director Dennis Keeney focused on health links to agriculture.

The annual report was edited by Mary Adams of the Leopold Center staff and designed by longtime graphic collaborator, Juls Design of Ankeny.

Leopold.iastate.edu

Leopold Center
annual report, Water:
www.leopold.iastate.edu/
pubs/annual/annual.htm



The Iowa Chapter of Gamma Sigma Delta, the Honor Society of Agriculture, presented its Distinguished Achievement in Agriculture Award to Leopold Center Director Jerry DeWitt at its annual banquet April 9. The award recognizes exemplary contributions to agriculture in the form of teaching, research, extension, international or other distinguished service.

Leopold Center Associate Director Rich Pirog is the lead author of a chapter about food distribution for the new book, *Sustainability in the Food Industry*, published in March 2009 by IFT Press of Indianapolis. The book combines technical research summaries, case studies and marketing information and is edited by Cheryl Baldwin, Vice President of Science and Standards for Green Seal, a Washington, D.C.-based non-profit certification organization.

The Leopold Center is providing funds to cover 10 percent of the 2009 budget for an energy specialist to be employed in the Midwest office of the National Center for Appropriate Technology. Rich Dana will be working with small and midsize Iowa farmers who use sustainable production practices and could be eligible for Renewable Energy and Energy Efficiency grant programs offered through USDA Rural Development. Dana is an energy consultant, who most recently worked with the Grinnell Area Petroleum Replacement Initiative. To contact Dana and for more information on the program, go to: http://www.attra.ncat.org

Recommendations from the December 2008 Leopold Center workshop, "Learning from the Floods of 2008: Practical Strategies for Resilience," have been compiled into a new Leopold Center publication. To request a copy, contact the Leopold Center at (515) 294-3711, or view it on the Center Web site at: http://www.leopold.iastate.edu/news/pastevents/flood/strategies.pdf

Iowa State University graduate student Nick McCann, who also works with the Leopold Center and the Value Chain Partnerships project, received a top award at the Third Annual Big 12 MBA Case Competition at Baylor University in Waco, Texas. Teams of four MBA students were given a case written for the competition and given less than 24 hours to analyze the situation, research the possibilities, propose ideas and prepare a presentation. McCann is a first-year MBA student with a minor in sustainable agriculture.

Natalie Askren, a junior from Muscatine who is studying magazine journalism and art and design at Iowa State University, worked during the Spring 2009 semester as a Leopold Center communications assistant. Her primary responsibilities have been to prepare materials for the Center's Web site. The summer communications intern is Allison Severson, a senior in advertising and political science from Belmond, Iowa.

## Three members join advisory board

The Leopold Center welcomes three new members to its advisory board, all of whom are well-acquainted with the Center's work through the organizations they will represent on the board.

The new Iowa Department of Natural Resources representative is Bill Ehm, succeeding Lyle Asell, who had served on the board for more than a decade. Community supported agriculture (CSA) grower Susan Jutz is the new representative for Practical Farmers of Iowa, following northwest Iowa farmer Paul Mugge, who had served on the board since 1999 and in an ex officio capacity since 1996. John Sellers, Jr., of Corydon, returns as one of two farmers representing the State Soil Conservation Committee, a position previously held by Russ Brandes of Hancock.

#### Susan Jutz

Susan Jutz owns and operates ZJ Farm and the Local Harvest CSA near Solon in eastern Iowa. On 80 acres she raises vegetables to



supply a 250-member CSA enterprise, plus she direct-markets lambs from 40 ewes every year. She follows organic practices and uses rotational grazing for her livestock.

Jutz learned about the Leopold Center shortly after she moved to Iowa in 1994 and joined Practical Farmers of Iowa, which receives ongoing Center support for its on-farm research and demonstration program.

"The Leopold Center serves an important purpose in Iowa agriculture," she said. "I believe that the Center's primary role needs to be the support and promotion of creative thinking for agriculture that can lead to innovations desperately needed in Iowa."

And she's anxious to provide guidance to the Leopold Center. "My farming background spans my life," she said. "I believe I can bring a farmer perspective to the advisory board that represents multiple viewpoints."

Jutz is a past president of PFI, and has participated in on-farm research trials. She also is a member of the advisory board for the Henry A. Wallace Endowed Chair for Sustainable Agriculture at Iowa State University, and is actively involved in the development of local food networks for low-income and special needs families. She works with the Local Foods Connection, a private nonprofit group in Iowa City that is active in addressing local food issues.

Jutz has an undergraduate degree in psychology and sociology from the College of St. Catherine in St. Paul, Minnesota; and a master's in social work from the University of Minnesota. She has four sons, two of whom provide help with the CSA operation.

#### John Sellers, Jr.

John Sellers, Jr., is no stranger to the Leopold Center. He returns to the advisory board after a three-year absence when he served as a coordina-



tor for the Leopold Center's Grassland Agriculture Program from December 2004 to September 2008. The program was set up as a special project of the Center's Ecology Initiative to provide one-on-one technical assistance for Iowa producers interested in grass-based agriculture and to better connect the Center with partners involved in this type of agriculture.

Sellers worked with more than 125 farmers and individuals returning to agriculture. However, rising land prices and surging interest in the production of cornbased ethanol made grassland agriculture a tough sell, especially in southern Iowa, where Sellers' work was focused.

"It was frustrating because the timing was not right," he said. "There was no way that the \$40 to \$50 per acre income you would get from pasture rent could compete with a cash rent of \$120 or more for corn and soybeans."

He remains optimistic over the long term because when managed appropriately, these operations protect fragile soils and function well with little energy and external inputs. Grass-based agriculture also is a lower-risk way for young people to get into agriculture, he added. An early adopter of rotational grazing and biomass production in Wayne County, Sellers continues to manage 240 acres for forage production and wildlife habitat. He served more than 33 years on the Wayne County Soil and Water Conservation District board, and is serving a second six-year term on the State Soil Conservation Committee. He is chair of the Iowa Grazing Lands Conservation Initiative and past president of the Iowa Forage and Grasslands Council. He lives on the farm with his wife Jean.

#### Bill Ehm

Bill Ehm's interest in the Leopold Center goes back more than 20 years to when he was still farming full-time in southern Iowa. It was 1989, and Ehm was



named a member of the Iowa Environmental Protection Commission shortly after the passage of the Iowa Groundwater Protection Act that created the Leopold Center two years earlier.

"I had been a farmer for about 20 years and that's also the time I became very interested in water quality and agriculture," Ehm said. "I tried to farm in a sustainable fashion during my farming career. I have followed the Center since its creation and I believe that the Leopold Center can make a difference."

Ehm spent more than a decade on the Iowa Environmental Protection Commission, and eventually left farming to work full-time with the state's impaired waters program. He also served as director of the Soil Conservation Division of the Iowa Department of Agriculture and Land Stewardship.

In 2007, Ehm was appointed to a new position as water policy director for the Iowa Department of Natural Resources. Ehm is leading the effort that began in 2008 to create a strategy to better use Iowa's water resources. The plan addresses water quality and quantity issues, from transportation and water-based recreation to flood plain management, water supplies, allocation and conservation policies.

Ehm said he thinks the Leopold Center needs to demonstrate "innovative and sustainable concepts for producers" as well as policies that can promote sustainability on the landscape.

"I am concerned that many of the current agricultural policies lead producers to make decisions based upon short-term goals. I bring real agricultural experience and a strong desire to improve our resources: soil, water, air plants and animals," he said.

Ehm has a bachelor's degree in agricultural business from Iowa State University and a MBA from Drake University. He is a member of the Soil and Water Conservation Society and the AM Rotary Club of Des Moines, and a former school board member. He and his wife Rose Ann continue to own a cash grain farm in Clinton County and a broiler chicken operation in Union County.





## 2009 Spencer Award nominations due June 1

Nominations for the Spencer Award for Sustainable Agriculture are due June 1. The award will be presented later this year to an lowan who has helped family farms prosper and contributed to energizing lowa's rural communities and economy.

Individuals may apply for the award or be nominated by others. Agricultural organizations are strongly encouraged to submit nominations to highlight the achievements of their members. Contact Mary Adams by fax, (515) 294-9696, or e-mail madams@iastate.edu, or on the Web: www.leopold.iastate.edu/resources/spencer/spencer.htm

### Why don't we have sustainable agriculture now?

It's not for lack of knowledge about sustainable practices, or research, contends Dick Levins, professor emeritus of applied economics at the University of Minnesota, who presented the 2009 Shivvers Memorial Lecture March 1 in Ames.

"I think we would be closer to answering these questions if we face the fact that farmers no longer sit in the driver's seat of our contemporary food system," he told the audience of about 250 people.

"We are entirely too quick to say, for example, that we have problems with farm chemicals because farmers use them, not because farm chemical companies develop, manufacture, and promote them ...the economic environment in which farmers work is increasingly established by agribusiness and retailers, not by farmers."

He offered the nation's current banking crisis as an example, and asked the audience to start considering solutions for the nation's food system. "Are we going to just keep propping up the system or are we going to try something different?" he asked. "These are the opportunities that are going to take place over the next five years and we need to start thinking about these questions."

Read his prepared remarks and listen to his full presentation at: www.leopold.iastate.edu/news/pastevents/levins/levins.html





TOP: Levins presented a prepared lecture, followed by a free-ranging discussion with the audience. BOTTOM, he answers questions after the event.