

Letter

Fred Kirschenmann assumes duties July 1

Farmer chosen as next Leopold Center director

When the appointment of the new Leopold Center director was announced in early June, the leading candidate was in Washington, D.C., hammering out specifics for the USDA's new national organic standards. The next day, he was back in North Dakota to plant an 80-acre field of sunflowers.

On July 1, Fred Kirschenmann will open another chapter in his life—as the next director and first farmer to head the 12-year-old Leopold Center for Sustainable Agriculture. He brings with him a national and international reputation in organic agriculture, more than 20 years of putting theories of sustainability into practice on his own 3,500-acre farm, and service as a faculty member and administrator in four colleges.



Fred
Kirschenmann

Kirschenmann said he is grateful for the leadership provided by the Center's first director, Dennis Keeney, who retired in December. He also was looking forward to working with an "energetic and enthusiastic" ISU staff and faculty.

"The Center has a strong background in science and I want to build on that, but also recognize the challenges ahead of us," Kirschenmann said. "Dennis always used the metaphor of a journey toward sustainable agriculture practices. I see myself as becoming part of that journey."

"This is an opportunity to think about where we want to go with agriculture in the future, and for many farmers, we don't have a lot of time left," he added.

"The principles of sustainability must become actualized in a way that will really work for farms and farm families. There are no easy answers."

DIRECTOR

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Rotational grazing: Options keep farm running when water doesn't

By Laura Miller
Newsletter editor

Jim Bradford knows he might get second looks when he puts cows and calves in an Iowa pasture to graze on stockpiled forage in the middle of March. But this Guthrie Center beef producer knows that his new calves are in a clean, protected environment. His rotational system also can keep him ahead of the game, even during periods of drought.

La Niná and long dry spells last fall and winter worried many Midwestern farmers as they looked to the current growing season. Despite late-spring rains throughout Iowa, farmers in many parts of the state are bracing for the effects of drastically reduced row crop and forage yields. However,

managing crops, forages and livestock as a year-round system may be exactly what Bradford and other producers need to get through seasonal problems.

"It's amazing that in the dry years you are ahead with rotational grazing because this system is easier on forage," Bradford explained. "By moving livestock every few days, the plants get the rest and recovery they need, which really helps plant viability."

Bradford grazes 500 cows on about 1,300 acres, and raises corn on 150 acres for feed. Nearly 160 acres has been divided into smaller paddocks for a rotational grazing system in which livestock are moved every four to five days, depending on forage growth. His

GRAZING

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The Leopold Center begins its 13th year of awarding competitive grants. Grants for 18 new and 29 continuing projects are featured in a special section of this newsletter (see A1-A8).

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Jim Pease, an Iowa State University Extension wildlife specialist and Leopold Center grant cooperator, has received the Aldo Leopold Environmental Education Award from the Iowa Conservation Education Council. Pease helped develop a program to train "master conservationists," who donate a matching number of hours in their own communities to educate others and work on conservation projects. Pease has a two-year Center grant to expand the program. See photo story on page 4 about one of last fall's classes.

* * *

Dennis Keeney, who retired as Leopold Center director last December, was presented the 1999 Individual Award for Leadership in Environmental Stewardship in March by the Center for a Livable Future at Johns Hopkins University. The award is for his "pioneering leadership and foresight in linking agricultural sustainability, rural community development and water quality" during his tenure at the Center. He also has received the 2000 Soil Science Distinguished Service Award from the American Society of Agronomy.

* * *

Mark Lambert, a long-time Iowa public interest advocate, lobbyist and lawyer, is the new executive director of the **Iowa Environmental Council**. He replaces Linda Appelgate, who left earlier this year to pursue international public service. Most recently, Lambert had worked as attorney and lobbyist for Planned Parenthood and assistant director and lobbyist for the Iowa Civil Liberties Union.

* * *

As a participating organization in **Iowa Earth Year 2000**, the Leopold Center encourages Iowans to get involved in a national environmental event, the Great North American Secchi Dip-In. During this July 1-16 event, volunteers will learn how to

monitor water quality, including 159 streams, lakes and rivers in Iowa that do not meet clean water standards. For more information, visit the Earth Year site at <www.earthyear2000.com>, or contact the Iowa Earth Year staff at (515) 281-8401.

* * *

A handbook on **grazing** developed with funds from the Leopold Center is featured in one of the nation's most respected catalogs for fencing and grazing supplies. Iowa State University's *Pasture Management Guide* is "the best modern guide we've seen by far," notes Stan Potratz in his spring 2000 Premier catalog. "[It is] highly recommended for all Midwest cattle and sheep producers." The guide was funded primarily by

the Leopold Center and a grant from the USDA's Sustainable Agriculture and Research Education (SARE) program. The guide also is available from ISU Extension.

* * *

Friends of the Earth is distributing a new publication, *Protecting Groundwater from Pesticides: A Clean Water Action Guide*, free of charge as long as supplies last. The guide also is available at <<http://www.foe.org/safefood/groundwater/>>. The Iowa Department of Natural Resources is revising the state's water quality standards. Proposed changes can be found on the Internet at: <<http://www.legis.state.ia.us/Rules/2000/Bulletin/acb000517.html>>.



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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.

Editor: Laura Miller



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Leopold writings remain hauntingly true

For the Health of the Land: Previously Unpublished Essays and Other Writings

Aldo Leopold [edited by J. Baird
Callicott and Eric T. Freyfogle]
Island Press/Shearwater Books, 1999
243 pp., \$22.05

For those who have thought long and hard about how Aldo Leopold's land ethic plays out in today's agricultural climate, *For the Health of the Land*—a collection of previously unpublished and rarely read essays—provides a feast for the mind. Prepared by philosophers J. Baird Callicott and Eric Freyfogle, this collection paints a vivid picture of Leopold's evolving philosophy about the land and how private landowners might effect his vision of land health.

Several practical pieces on game management were published between 1938 and 1942 in the *Wisconsin Agriculturist and Farmer*. Other essays appeared in conservation and related professional publications. Had Leopold not met a premature death in 1948, many of these pieces may have found a home in a book or manual to guide land-use practices of farmers and other rural landowners. Leopold illustrates, admonishes, cajoles, but as always, is straightforward in his message to landowners:

Science knows what chemical elements occur in each star, but not why one species shrinks while another becomes a pest. If more scientists were farmers we might make faster headway on the second problem. (p. 135)

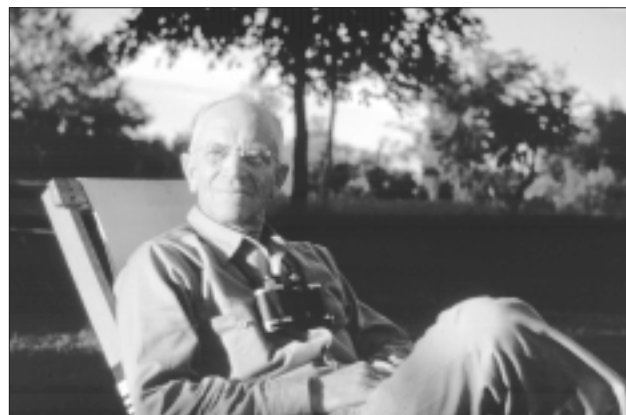
For the reader who is both hunter and land manager, the essays that appear in "Part I: Conserving Rural Wildlife" spell out how conservation and game farms can form a happy marriage, through common sense management of cover and by cooperative partnerships with landowner neighbors.

Leopold defines a farmer as "one who determines the plants and animals with which he lives."

For those more interested in following the threads of Leopold's philosophies toward those that eventually comprised *A Sand County Almanac*, Parts II and III of the collection may prove more satisfying. For example, the well-known meditation on the mating dance of woodcocks found in *A Sand County Almanac* is presaged in this collection by "Sky Dance of Spring." It ends with the benediction, "More people should learn the sky dance; we cannot conserve what we do not know exists."

Perhaps most haunting are uncanny references to issues such as drought, industrialized agriculture, and land degradation for which Leopold identified and proposed solutions more than 50 years ago. He suggests that conservation may be "an interspersion of land uses, a certain pepper-and-salt pattern in the warp and woof of the land-use fabric." This sounds a lot like today's ecological diversity discussions! Leopold also looks at human factors that affect the integrity of the land. He poses the dichotomy of farm as a "food factory" and "farm-as-a-place-to-live," commenting on the former:

It was inevitable and no doubt desirable that the tremendous



Aldo Leopold's words still ring true in new collection of previously unpublished essays.

momentum of industrialization should have spread to farm life. It is clear to me, however, that it has overshot the mark, in the sense that it is generating new insecurities, economic and ecological, in place of those it was meant to abolish. In its extreme form, it is humanly desolate and economically unstable. These extremes will some day die of their own too-much, not because they are bad for wildlife, but because they are bad for farmers. (p. 218)

Particularly in "Part III: Conservation and Land Health," Leopold presents a good argument for pursuing "wholeness in the farm landscape," and for using both restraint and vision in the employment of land resources. "Conservation, then, is keeping the resource in working order, as well as preventing overuse," he writes, "[and] is a positive exercise of skill and insight, not merely a negative exercise of abstinence or caution."

For the Health of the Land offers wisdom and wit for anyone concerned about the state of Iowa's land and economy. While the remedy for a troubled landscape lies with those who manage the land, this collection provides instruction into the relationship of land, people and conservation for any citizen. — E. Anne Larson

In farming, as in war, it is often hard to retrieve mistakes. —Aldo Leopold in For the Health of the Land, pg. 95

Learning to be a master at conservation



Participants in the Iowa/Poweshiek County master conservationist program, funded by a Leopold Center grant, learn about Lake Iowa Park's catfish-rearing project. They helped release catfish as part of their fish and pond management session.

Photos courtesy Iowa County Conservation Board



Center report looks at grape industry

Once upon a time, Iowa farmers grew grapes that were prized for their quality and shipped to neighboring states. Today those vineyards have almost disappeared, and most of the fresh grapes sold or processed in Iowa come from California and Chile.

A report prepared by Leopold Center education coordinator Rich Pirog shows that grapes could be a promising valued-added crop for Iowa farmers looking for specialty markets or agri-tourism opportunities. The report, issued in April, is making the rounds among local food system advocates, members of the Iowa Wine and Grape Advisory Council, and the newly formed Iowa Grape Growers Association.

The Center mailed 300 copies of the paper to people who have recently attended seminars for those interested in some aspect of a renewed grape industry in Iowa. Members of the advisory council also shared the paper with several legislators, and Pirog has provided information to a number of electronic and print media representatives.

Copies of the 30-page paper, "Grape Expectations: A food system perspective on redeveloping the Iowa grape industry," are available at the Center's web site, <<http://www.leopold.iastate.edu/grape.htm>>, or may be requested by calling the Center at (515) 294-3711. The producers' new web site is at <www.Iowagrapegrowers.com>.

New weed resource

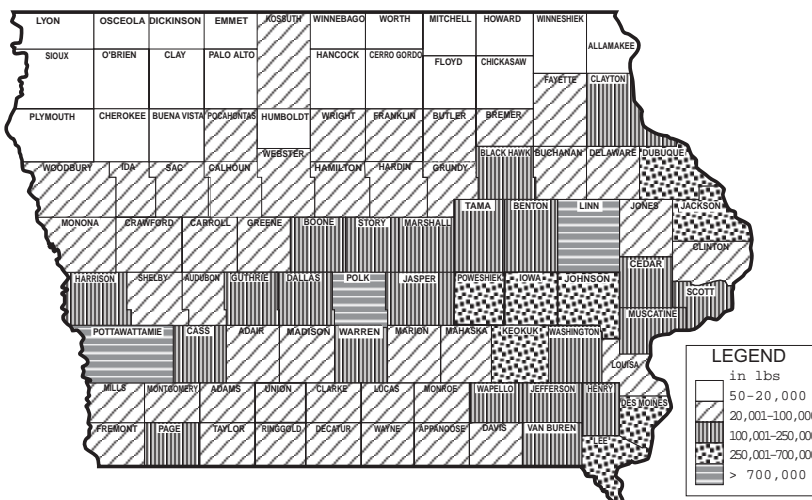
Improving the ability to predict emergence timing of weeds in row crops has been a major research emphasis at Iowa State University in recent years. The latest product of this research is a poster, "Weed emergence sequences: Knowledge to guide scouting and control." It depicts the emergence sequence of 16 important weeds of the northern Corn Belt.

This poster is available in 18 X 24-inch and 8.5 X 11-inch formats. Single copies of each poster are free. Multiple copies of the large poster are \$1.00, and the smaller poster, \$0.25, plus shipping and handling if mailed. The poster can be obtained at ISU Extension Distribution Center, 119 Printing and Publications, ISU, Ames, Iowa 50011, or by calling (515) 294-5247. Ask for IPM 64 (large poster) or IPM 64s (small poster).

Much of the information used to develop the poster was collected by the Weed Management Issue Team sponsored by the Leopold Center for Sustainable Agriculture. Funding to print the poster was obtained through the North Central Integrated Pest Management Program, and was a joint project of ISU, University of Illinois, University of Minnesota, University of Wisconsin, and the USDA's Agricultural Research Service.

ISU has two bulletins that provide additional information on weed seeds and emergence. They are IPM 48 and SA 11. These publications also are available through the ISU Extension Distribution Center.

Iowa Grape Production
Data from U.S. Agricultural Census 1920
Represents 1919 grape production in pounds



One man's path to community food activism

By Mary Adams,
Center editor

As a ten-year-old in northern New Jersey, Mark Winne loved to ride his bike out into the country to see the garden and truck farms that lined the roadways. But as he grew older, he says he had to ride farther and farther to find green and growing things amidst the suburban developments. He remembers a feeling of loss as he watched New Jersey's rural countryside disappear—but he gained a sense of purpose that has led to a career in educating people about food systems and food security issues.

Today Mark Winne is executive director of the Hartford Food System, a private nonprofit agency that works on food and hunger issues in Hartford, Connecticut. In May he spoke to a group of 50 on the Iowa State University campus about creating a sustainable food system. His appearance was sponsored by the Leopold Center, the Iowa Food Policy Council and several other groups.

Wrestling with hunger

A graduate of Bates College in Lewiston, Maine, Winne started out as a counselor and social worker. He became a food issues activist when he saw that many of the problems he was counseling people about were related to meeting their basic needs such as food and shelter. Winne joined the Hartford Food System in 1979 when it began organizing community self-help food projects designed to assist the city's lower income and elderly residents. Hartford, halfway between New York City and Boston, has a high proportion of people living at the poverty level.

The Hartford project began, Winne says, because "a progressive city administration was willing to try to solve some of the problems of food, housing and energy of low-income residents."

He says that every state wrestles with agriculture, hunger and health issues, but only Iowa and Connecticut have food policy councils. The councils can be vehicles to strengthen local food systems.

The stories of our food system are our stories, stitched of a local fabric into colorful patches, assembled by many hands into the larger quilt that is the food system, our food system.

— Mark Winne, speaking at the Community Food Security Coalition annual meeting, October 1999



Mark Winne

"[These councils] can create stronger linkages and offer more holistic education on food issues," Winne says. "The groups that join together [on food policy councils] aren't giving up power—they're gaining more power by banding together."

Educating schoolchildren

The Hartford group's Farm Fresh Start program is a model for development of Iowa's "Connecting Schools and Farms" program in Story County. The Nevada school food service is working to increase the purchase of locally grown food. Local farmers in Connecticut provided 70 percent of the total fresh produce purchased during an 11-week fall harvest. Students who participated in an accompanying food and nutrition unit in class also took more optional fresh fruits, green salads and cooked fresh vegetables at lunch.

Winne also chairs the Working Lands Alliance, a multi-interest coalition dedicated to preserving reasonable tracts of Connecticut's farmland.

"Until we formed the alliance, there was no organized effort for farmland preservation. We were losing 8,000 acres of farmland a year, and by mid-century there would be no farmland left," he says.

The 70-member coalition includes bikers, environmental groups, farm groups, conservation and wildlife groups. The most recent session of the Connecticut legislature passed a bill with \$7 million in funding for farmland preservation, thanks to the efforts of the Working Lands Alliance. He notes that Iowa may want to look beyond the purely agricultural economic interests in preserving farmland to the rural quality of life issues that motivate activists in Connecticut.

A look at Iowa's new food policy council

Governor Tom Vilsack's recently formed Iowa Food Policy Council has strong Leopold Center connections. Chairing the new council is Neil Hamilton, who directs the Drake Agricultural Law Center and is a long-time member of the Leopold Center Advisory Board.

The new group will advise the governor and lieutenant governor on initiatives and ideas that "create a safe, nutritious and adequate food supply that balances economic, social, and environmental impacts." In his April 3 announcement, Vilsack said he wants to build a food production system that links producers, processors, distributors and retailers.

Policy council members include Kamyar Enshayan, an assistant professor at the University of Northern Iowa who has a Leopold Center grant to establish institutional buying of local produce in the Waterloo/Cedar Falls area; and Robert Karp, who oversees the Field to Family program and a Leopold Center grant to connect farmers with hotels and restaurants. Center education coordinator Rich Pirog is special advisor for the group. Representatives from the Iowa Department of Agriculture and Land Stewardship, Iowa Department of Economic Development, Iowa Department of Public Health, and Iowa Department of Human Services are non-voting members.

Kirschenmann brings a variety of experiences to job

DIRECTOR

(continued from page 1)

Kirschenmann will work part-time at the Center until November when he will become full-time director. The part-time appointment will allow him time to harvest this year's crops and transition management of his farm.

The announcement was made June 7 by outgoing Iowa State University president Martin Jischke. It came after a year-long search by an 11-member committee headed by Leopold Center Advisory Board member Wendy Wintersteen and several other advisory board members. The committee screened 30 candidates and named five finalists. In April, the Center's advisory board recommended three people to Jischke. Kirschenmann was at the top of the list.

"Dr. Kirschenmann brings new experience, vision and leadership to this position and I expect that many people at Iowa State and elsewhere will come to appreciate his noteworthy qualities," Wintersteen said. She added that his understanding of the philosophy, science and practical business aspects of sustainable agriculture will make him a good director. "He is an excellent choice to move forward the ideals of sustainable agriculture in Iowa."

Kirschenmann said he has respected Aldo Leopold for a long time. "His notion that we really need to solve our

problems ecologically is at the heart of his thinking," he added, "and I couldn't agree more."

"The principles of sustainability must become actualized in a way that will really work for farms and farm families. There are no easy

About the new director

He is president of the certified organic Kirschenmann Family Farms in Windsor, North Dakota, where he also was president (1990-1999) of Farm Verified Organic, a private organic certification agency. He recently completed a five-year term on the U.S. Department of Agriculture's National Organic Standards Board, and has chaired the administrative council for the USDA's North Central Region's Sustainable Agriculture Research and Education (SARE) program. He also finished work for the North Dakota Commission on the Future of Agriculture, and was a charter member of the Northern Plains Sustainable Agriculture Society in 1979.

He has been a member of the board of directors for the Henry A. Wallace Institute for Alternative Agriculture since 1994, and was president in 1997.

He earned degrees from Yankton College in South Dakota, Hartford Theological Seminary in Connecticut, and a doctorate in historical theology from the University of Chicago, where he earned numerous awards including a Rockefeller Fellowship. He was the first chair of the Department of Religion at Yankton College, and was Dean of the College at Curry College in Boston. He has authored or co-authored

numerous articles and book chapters dealing with ethics and agriculture.

About the farm

Although his operation is larger than the average 1,500-acre North Dakota farm, Kirschenmann tends fields at several locations, as do his neighbors, within a 22-mile area in Stutsman County in the south central part of the state. About 1,000 acres are native prairie, used for grazing livestock, and the rest is managed in a diversified operation. Kirschenmann raises eight to nine crops each year in three different rotations.

This year Kirschenmann planted durum and hard red spring wheat, rye, buckwheat, millet, flax, canola, also alfalfa and sweet clover for forage and green manure crops. He has 113 cows, and raises the calves until they are a year old.

Becoming a lover of the soil

So why should we be concerned about farm issues? I think we need to be concerned because there are some issues at stake here that go to the very core of who we are as human beings on a planet that nurtures our life. If I really want to answer the question "why should I be concerned about farm issues?" I have to ask more than food safety and environmental protection questions. I have to begin exploring my real connection to the soil, and how that connection, or lack of connection, effects who I become as a person and who I, together with other persons, become as a society ... it is an invitation to all of us to become lovers of the soil again—as a way of healing our soils and our souls.

From an essay by Fred Kirschenmann, "On Becoming Lovers of the Soil," in a 1997 book, *For All Generations: Making World Agriculture More Sustainable*. Other writings are linked from the Leopold Center web site <<http://www.leopold.iastate.edu/>>.

Rotational grazing offers flexibility

GRAZING (continued from page 1)

bigger concern this year are sources of water for each paddock, because many of the areas supplied by ditches and ponds were running very low all winter and spring. Dry conditions also may change the grazing time in each paddock, and force Bradford to move some herds to a dry lot where he can use existing water supplies and haul in hay.

Bradford is practicing some of the methods studied during the past eight years by the Leopold Center's Animal Management Issue Team. The team has looked at a number of systems, including rotational grazing, various herd combinations, winter grazing on crop residues, and developing the best mix of forages for productivity and Iowa conditions. Ultimately, grazing management decisions can be an effective way to minimize risk.

Jim Russell, Iowa State University animal scientist who heads the research team, says producers have many choices in a year-round system.

"How we put these systems together is based on risk management," Russell explained. "A farmer can look at all acres in a system—used for hay production, grazing and raising other crops—and manage it appropriately to bring the best returns."

Dry year options

In dry years, Russell said, those decisions might be to extend the grazing season one to two months by feeding on crop residues. Corn crop residue grazing is a key to profitable cow-calf production in Iowa in any year, he added. He says that with the hay acreages that might be used to supply summer grazing, and the likely high cost of hay this winter, corn crop residue grazing may be even more important. He also said that the additional acreage required for year-round rotational grazing becomes an advantage during a drought, because hay acres can be converted to pasture as needed.

According to Russell, many Iowa producers who used conventional grazing had to provide supplemental forage in

"It's amazing that in the dry years you are ahead with rotational grazing because this system is easier on forage."

—Guthrie Center producer Jim Bradford



1996 because of the drought.

Bradford said he appreciates the flexibility, both in the systems approach and the issue team's approach to research.

"Seeing it in the real world has more sway with me," Bradford said. "A lot of my decisions are made from the basic research, because I don't want to make the same mistakes."

Farmers help direct research

Bradford is one of six farmers on the 28-member issue team that meets twice a year to review results of various projects and suggest new directions of study. Russell works with the rest of the team members—all researchers or demonstration farm staff—to collect and analyze data, and write up the technical reports. The team, however, sets the research agenda, Russell said.

"Farmers have had a major contribution," he added. "They have led us to get involved in research areas that we probably wouldn't have done. I can remember the meeting where one farmer told us that grazing in July was easy, 'but you tell us how to graze in February,' and that was the beginning of our winter grazing research."

Another former team member agrees that the approach is unique. Jodi Hitz works with 60 producers in a 10-county area through Iowa State University Extension's Cow Herd

Improvement Program (CHIPS). She also worked on the Center's issue team while earning a graduate degree.

"For several years, farmers on the team told us that neighbors wouldn't let them graze cornstalks because they were worried about compaction," she said. "Now the team is looking into this question."

Hitz also is using the information she helped develop. She and her husband are setting up a rotational system on about 200 acres, putting in fences for 10 to 12 paddocks, trying to control weeds and add legumes, and provide water to all areas.

Goal to extend season

"Our goal is to extend our grazing season by 10 percent, which I think we can do," she said. "People are interested in learning how to extend their grazing season and get the most out of their grass, but they want to see it being done first. That's the unique part about this issue team, having farmers help you see the practical and applicable side of things."

The issue team currently operates on-farm projects in Atlantic and Nevada. Other research is being conducted at the ISU Beef Nutrition Research Center near Ames, the Rhodes Research Farm, and the McNay Research Farm at Chariton.



Managed rotational grazing uses small paddocks that are open to livestock only a few days at a time.

She tries to connect farmers, researchers, retailers and regulators

Kansas beef producer uses proactive approach

By Laura Miller
Newsletter editor

Diana Endicott is one of a new breed of beef producer. She runs a 400-acre certified organic farm in eastern Kansas with her husband, Gary. In addition to the greenhouse vegetables they sell to upscale Kansas City restaurants, they market their all-natural beef in supermarkets through a producers' co-operative that Diana helped organize three years ago. In the midst of dying rural communities and industrialized agriculture, their future looks bright.

"We're making connections with consumers," says Endicott, whose co-operative provides an estimated \$9,000 of beef wholesale each week to more than two dozen Hen House and Ball Food stores in the Kansas City area.

Coop sees growing success

The beef comes from 15 active members of the All-Natural Beef Producers Cooperative in central and southeast Kansas and west central Missouri. To qualify for membership, a producer must raise cattle without growth hormones or subtherapeutic antibiotics. All beef is corn-fed finished, butchered in small rural locker plants, USDA inspected, and dry-aged to improve tenderness. It sells for about \$1 more per pound than other beef products. Endicott says one selling point is that it comes from small "family" farms, not large-scale confinement operations.

Sales are modest but growing. She adds, "The potential is there. The only

question is who is going to fill it—large companies, independents or groups of producers."

Endicott's success, however, has a "very high learning curve." A recipient of several state and federal grants, she has successfully maneuvered the maze of federal regulations, and is developing "how-to" manuals for small

"Producers need to learn how to use USDA regulations to their advantage rather than sit around and complain about them."

— Diana Endicott

producers. She's also working on new marketing plans that could be replicated in other regions.

In demand on the lecture circuit during the off-season, Endicott came to Ames in February for Iowa State University's annual sustainable agriculture seminar series supported by the Leopold Center. Her trip was hosted by the Iowa Beef Center.

Key to survival

"Working together is the only way I'll be able to stay on the farm," says Endicott, who left a thriving landscape business in Dallas five years ago. "If it doesn't work this way, it never will."

The biggest challenge is getting various groups together—producers, research institutions, retail industry and regulators. "Producers need to

learn how to use USDA regulations to their advantage rather than sit around and complain about them," she says. "But it's hard for some to encompass all the technology needed to do that."

Co-op members use e-mail to communicate with one another. Producers also must be able to read spreadsheets for carcass data, and implement labeling and lotting systems to retain product identification. The co-op maintains a site on the World Wide Web, <www.goodnature.net>.

Value-added products next

Endicott's operation received a state grant to develop value-added products, such as frankfurters and marinated roasts, from their low-end cuts of meat. All are being marketed under the "Good-Natured" brand name. The effort supports small-town locker plants also struggling to survive.

"We've lost half of the farms in our county to nonagricultural jobs. Everyone is going to the city for better opportunities and jobs. We forget that agriculture is the basis of these communities and there needs to be a balance for support in ag and non-ag sectors."

All-natural is key, too. "Raising animals in this way and marketing them to urban consumers makes an important connection," she explains. "Urban consumers need to know that how you raise and care for animals affects them, too, in the quality of their air and water. Only then can people really begin to understand the rural community, and keep a part of their heritage."

Survey finds favorable manure management practices among producers

Ninety-five percent of Sioux County farmers who applied manure to cropland reduced their commercial fertilizer applications, according to a survey conducted by Iowa State University Extension crops field specialist Joel DeJong and agricultural engineering field specialist Kris Kohl.

The survey of more than 300 livestock producers was part of a Leopold Center-sponsored project to help better manage livestock manure in Sioux County. The survey also showed that producers who test manure

make larger reductions in commercial fertilizer applications, than those who do not conduct tests.

Results also indicated that more than 60 percent of the producers who tested manure levels reduced nitrogen application by 75 percent or more. Only 24 percent of the producers who did not test manure reduced application to this extent. For more information, contact Joel DeJong at the Sioux County Extension office, (712) 546-7835, or project coordinator Mary Hettinga, (712) 737-4230.

The story of a boy, a book, and the Leopold bench

Photos courtesy of Lewis Gorman III.



Above, New Jersey Scout Lewis Gorman restored this trail, named for Aldo Leopold, as a Boy Scout project. He was inspired, in part, by a visit to the Leopold Center two years ago. Work began with insertion of barriers (above right) to hold fill that returned the grade to that of the surrounding terrain. Holes in the trail surface were filled with wood chips for drainage and stability. Shortly after it was finished, a seven-inch rain tested the trail. It held up beautifully.



By E. Anne Larson

Native Iowan and conservationist Aldo Leopold's words have inspired many over the half-century since his death and publication of the landmark *A Sand County Almanac*. Thanks to the ideals and energy of a New Jersey Boy Scout, Leopold's care for the land is alive and well today in an effort that started with a visit to the Leopold Center for Sustainable Agriculture.

It was the summer of 1998 when Lew Gorman III and his son, Lew IV, traveled to Iowa State University to attend a Boy Scouts of America Order of the Arrow conference. While walking the campus, the Gormans learned that earlier that spring the Leopold Center had planted an oak in front of Curtiss Hall to mark the 50th anniversary of Aldo Leopold's death.

Father and son were fascinated by the story and visited the Center, where they admired a bench made with Leopold's design. They left with a special edition of *A Sand County Almanac* and construction plans for the bench.

The Leopold oak

Fast forward to December, 1999, when then-Center director Dennis Keeney received an e-mail from the elder Gorman complimenting him on an essay, "Nurturing the New Oak." In the essay, Keeney bid farewell to the Center

after 11 years and reflected on the significance of the oak sapling taking root at ISU. "My son, Lewis IV, was 14 at the time [of our visit] and I didn't realize the impact this visit had on him," Gorman told Keeney.

ISU visit inspires project

As a result of the experience, the younger Lewis began work toward one of Scouting's most prestigious awards, the William T. Hornaday Award for Distinguished Service to Natural Resource Conservation. It is named after a pioneering conservationist (1854-1937) who helped found the National Zoo in Washington D.C., served as chief taxidermist for the Smithsonian Institution, and wrote more than 100 books encouraging Scouts to work on behalf of natural resources. According to Leopold biographer Marybeth Lorbiecki, one of Hornaday's avid readers was Aldo Leopold himself.

One of the four required conservation projects Lewis undertook was restoring a badly eroded trail at a local Scout camp in Pine Hill, New Jersey. He redesigned the trail on the contour to promote access to a nearby lake, and put Leopold benches on the waterfront at the end of the trail. When asked what the name of the trail should be, his answer was certain: "Since I started the conservation project, I knew that I wanted to name

the trail after Aldo Leopold."

During the restoration process, Lewis IV consulted a soil scientist, who advised placing holes in the compacted and eroded trail before restoration to allow rainwater to drain naturally. Accordingly, soil plugs were punched each foot along the trail and filled with wood chips. Tons of wood chips were then laid to bring the trail up to its original grade. The trail was completed the day before a hurricane dumped seven inches of rain on the trail within a 24-hour period. The renovated trail had no erosion.

Lewis plans to present a copy of *A Sand County Almanac* to the campmaster at Pine Hill, where future generations of Scouts can read about the man for whom the sturdy trail and simple yet comfortable benches are named. And perhaps they, too, will be inspired by the Aldo Leopold land ethic that endures over the decades.

Building your own bench

The bench was used at "The Shack" on the central Wisconsin farm that Leopold and his family restored to land health. Free plans for this easy-to-build bench can be found on the Internet at <<http://www.epa.gov/grtlakes/greenacres/wildones/wo27bench.htm>>. Several outdoor furniture resources on the Internet also offer finished versions of the bench.

Summer interns join Center staff

Two student interns are bringing unique backgrounds in horticulture, environmental education and research to the Leopold Center this summer. The interns are Davenport native Ellen Cook and Amy Oliver of Des Moines.

Cook has been attending college in Massachusetts and will receive her degree in biology and environmental studies from Williams College this summer. Oliver, who has a horticulture degree from Des Moines Area Community College, is a senior at Iowa State University in public service and administration in agriculture.



Ellen Cook

"I found the Leopold Center while doing research for class," Cook says. "I was extremely interested by its projects and goals and what they might mean for farming and communities in Iowa."

A friend's apprenticeship for several organic farms sparked Cook's interest in sustainable agriculture. Class trips also gave her an opportunity to visit various farms in the Berkshires, and class projects turned into award-winning research papers.

Cook has combined research with other internship and summer opportunities. While an intern at an environmental center near Big Bend National Park in south Texas, she studied flora and land use. She also looked at air quality problems along the U.S.-Mexican border caused by coal-fueled power plants in the aftermath of the North American Free Trade Agreement (NAFTA). During an internship with the New York State Department of Environmental Conservation, she taught ecology and low-impact camping to 12- to 14-year-olds in the Catskill Mountains.

Oliver has studied prairie ecology the past two summers at Iowa Lakeside Laboratory at Lake Okoboji, and is assistant garden manager for Meredith Corporation in Des Moines. As manager, she maintains the extensively landscaped

gardens that illustrate some of the publishing company's national magazines and television programs. In 1995, she was a volunteer in the Oklahoma City Memorial tree planting. Her ISU degree will include a minor in botany.

"I've worked in botany, horticulture and agriculture, and the Leopold Center brings all these things together," Oliver says. "Eventually, I want to be a specialist in agriculture extension and extend my work to community issues such as groundwater protection, soil conservation and air quality."

Oliver says one of her life-long goals is to help people understand the importance of agriculture, and that agriculture can be developed without threatening natural resources.

Now in its eighth year, the summer intern program at the Leopold Center provides students with hands-on experience in sustainable agriculture. They also meet producers at field days, and work with educators from the Leopold Center's partnering organizations on various projects.

This summer they will help Center education coordinator Rich Pirog summarize conference and workshop evaluations and work on several local food system projects.



Amy Oliver

Larson takes Leopold land ethic into new arenas

After more than eight years at the Leopold Center, a long-time communications specialist is taking a new career path.

E. Anne Larson now manages landscape maintenance services at Perennial Gardens, an Ankeny landscape design firm. While at the Center, Larson set up the Center's first presence on the World Wide Web and directed all media relations activities. She was instrumental in orchestrating the Center's 1997 Year of Water.

Larson came to the Center in 1992 from a similar position with the Iowa School Board Association. A graduate of the University of Northern Iowa, she also did communications work at the Iowa Arts Council. Since 1994, Larson has pursued a horticulture degree, which she received in August 1999 at Iowa State University.

In leaving the Center, Larson said she will take with her Aldo Leopold's philosophy about caring for the land. "I first read *A Sand County Almanac* in 1972," she said. "The Leopold Center's approach to helping Iowa agriculture become more sustainable has further cemented my firm belief in the land ethic."

Larson's tasks will be shared by the other members of the Center's communications team, Mary Adams and Laura Miller.

Farming the Internet?

A new study at Iowa State University estimates that about one-third of Iowa farmers have Internet connections.

The survey indicated that slightly more than half of Iowa farmers have a computer and about one-third are connected to the Internet. This represents a slight increase in Internet access over levels identified by ISU economist Mike Duffy in a 1997 survey of Iowa Farm Business Management Association (IFBMA) members and a 1997 Iowa Ag Statistics Service survey. More information about the study is available at <<http://www.exnet.iastate.edu/Pages/grain/oogindo1.htm>>.

Hoping to help farmers cash in on their connections, a California company has set up a new Internet site to link small farmers. The site, <LocalHarvest.com>, includes a "Farmers Only" area where farmers create and update their profiles and can maintain customer mailing lists.

NEWS & NOTES

A Leopold Center-funded publication has received top honors from members of the Entomological Society of America. The handbook, *Integrated Pest Management of Alfalfa Insects in the Upper Midwest*, IPM 58, was selected as the outstanding extension publication for the past year in the North Central area, and received the 2000 Entomology Educational Project Award. The 48-page color guide is a project of the **Leopold Center's Integrated Pest Management issue team** and ISU Extension.

* * *

Iowans lost more than an administrator when **Paul Johnson** resigned in April as director of the Department of Natural Resources. Johnson was a key player behind the landmark 1987 Iowa Groundwater Protection Act that established the Leopold Center. Johnson also is a leading advocate of Aldo Leopold's philosophy that has guided the Center's work over the past 11 years. He returns to his family farm in Decorah. **Lyle Asell**, an assistant to Johnson and a member of the Leopold Center Advisory Board, has been named interim IDNR director.

* * *

Practical Farmers of Iowa (PFI) and Iowa State University received the National Award for Environmental Sustainability, one of 16 programs chosen nationwide for the honor by the nonprofit environmental group, Renew America. The award recognized an 11-year PFI-ISU partnership, which includes **numerous on-farm research and demonstration projects supported by the Leopold Center**. The Center has sponsored PFI cooperators the past two years through a funded partnership directed to on-farm research. A Center-funded competitive grant also helped PFI build its Field to Family local food system project. The award was presented in Washington, D.C. during Earth Week activities.

FROM THE FIELD : Dennis Morgan

Ogden farmer goes out on a limb with shelterbelts



This shelterbelt near Ogden is almost 10 years old.

Trees and tractors might not seem like good companions, but they have been for Dennis Morgan. This Ogden man has two passions that thrive side-by-side on the 850 acres he tends just off Highway 30 in Boone County. The first is a corn/soybean operation, which he has managed since 1972. The second is a love of trees, which has manifested itself in a five-acre Christmas tree business, a retail nursery that outgrew its owner, and one of the oldest shelterbelts planted for research in Iowa.

Morgan's shelterbelt consists of three rows each of 1,000 fast-growing hybrid poplars, one row of native shrubs and a row of sprouting cottonwood stumps. They are planted in a north-facing L-shape on 1.8 acres in the middle of a crop field. The intent is to reduce wind speed, which can decrease crop moisture loss and erosion. Shelterbelts also can create wildlife habitat, filter field runoff, increase populations of beneficial insects, serve as a site for manure disposal, or be used to produce biomass or mulch.

The long-term Leopold Center shelterbelt project began in 1991. The trees, planted as 12-inch bareroot seedlings, are now more than 25 feet tall. The shelterbelt has changed the microclimate, but has neither increased nor decreased yield in the surrounding crops. The second phase will involve growing only soybeans and corn adjacent to the shelterbelt. Data will be used to develop a model to predict yields in a sheltered field. The Center's seven-person agroforestry issue team also conducts research on a larger shelterbelt on the Christiansen family's Hiway Farm north of Morgan's property.

Morgan is hopeful that the shelterbelt will someday show economic returns. Meanwhile, he appreciates the intangible benefits.

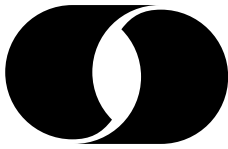
Morgan enjoys shelterbelt's other benefits

"I'm glad the shelterbelt is there," he says. "What kind of joy can I get out of \$2 corn? But with trees, I can go up there on a day when the breeze is rustling through the leaves. It's hard to put a price on that."

Morgan, a 1976 ISU graduate in farm operations, admits an infatuation with trees. He plants 400 to 500 coniferous trees and 150 deciduous trees every year for resale. He thinks farmers who plant trees are ahead in the long run, especially if land is marginal for row-crop production. Various cost-share programs to achieve 2 million miles of environmental buffers in the United States also help farmers establish shelterbelts.

Maintaining the trees doesn't consume too much time, either. "Instead of walking beans, we trim Christmas trees," he said. "It's something to do during down times."

Morgan encourages producers to consider shelterbelts, adding that his neighbors have been very interested in the project. "We aren't doing ourselves any service by tearing out trees and fencerows," he said. "I figure we only live once and we might as well enjoy it."



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CALENDAR OF EVENTS

June-September—Practical Farmers of Iowa field days. For a list, contact Rich Exner, PFI, (515) 294-5486.

June 21—Grazing Clinic, Corning. Contact: Brian Peterson, Natural Resources Conservation Service, (515) 782-4218.

June 20-22—Environmental Workshop, ISU 4-H Annual Roundup, Ames. Contact: Wendy Powers, ISU Animal Science, (515) 294-1635.

July 6—Grazing Clinic, McNay Research Farm, Chariton. Contact: Brian Peterson, NRCS, (515) 782-4218; or Joe Sellers, ISU Extension, (515) 774-8588.

August 24—Native grass seeding field day, Southeast Research and Demonstration Farm, Crawfordsville. Contact: Greg Brenneman, ISU Extension, (319) 337-2145.

August 17—Young Naturalists Camp field tours, Ames and central Iowa. Contact: Shelly Gradwell or Nan Bonfils, Practical Farmers of Iowa, (515) 294-0887.

August 25-26—Grape harvest seminar and tour, Indianola and Baldwin (limited registration). Contact: Golden Hills Resource Conservation and Development, (712) 482-3029.

August 28-29—Alternative Agriculture Exposition 2000, Sioux City. Contact: Sioux Rivers Resource Conservation and Development, (712) 943-7882.

August 29-31—Conference, "Carbon: Exploring the benefits to farmers and society," Des Moines. Contact: Jim Cooper, Chariton Valley Resource Conservation and Development, (515) 437-4376.

August 31 (tentative)—Native grass seeding field day, Johnson County. Contact: Greg Brenneman, ISU Extension, (319) 337-2145.

September 9—Iowa Environmental Council (IEC) annual meeting, "Time for a check-up: Developing indicators of Iowa's environmental health," Des Moines. Contact: IEC, (515) 244-1194.

September 17—Local food system event, "A taste of Jackson County," Maquoketa. Contact: Limestone Bluffs Resource Conservation and Development, (319) 652-5104.

NOTE: All events receive partial funding from the Center's conference and workshop program, or Center staff are involved in planning or presentations.