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2016 Spencer Award recipients named

A farming couple who have been long-time advocates for sustainable agriculture and a perceptive USDA agronomist are the recipients of the 2016 Spencer Award for Sustainable Agriculture. David and Corrine Williams of Villisca and Ames resident Tom Kaspar will be accepting this prestigious award on March 22 at the Iowa Water Conference in Ames.

The Spencer Award is one of the largest and longest running awards of its kind in Iowa. Administered by the Leopold Center for Sustainable Agriculture, the award recognizes researchers, teachers and farmers who have contributed significantly to the environmental and economic stability of the Iowa farming community.

Tom Kaspar

Tom Kaspar is the go-to person for cover crop information. He began researching this conservation practice in 1990 with a grant from the Leopold Center. Kaspar is a soil scientist with the USDA-Agricultural Research Service (ARS) National Laboratory for Agriculture and the Environment, located at Iowa State University, Ames.

Kaspar says that he first heard about using cover crops with no-till from then Iowa NRCS State Resources Conservationist Jim Ayen. “He suggested that someone at our lab should be working on cover crops because farmers were growing soybeans on more and more land that was too steeply sloped. Erosion in these fields was too high even with no-till,” says Tom. “He suggested that cover crops with no-till would reduce erosion substantially, which, of course, has proven true.”

Kaspar had already worked with no-till and soil compaction, so adding cover crops to the equation was not a stretch. He had already attended a cover crop field day at Dick Thompson’s farm and heard him speak of this new resource. (Thompson was a founder of Practical Farmers of Iowa.) Kaspar planted his first research plots in the fall of 1990. He says that “at the time very few farmers in the upper Midwest were interested in cover crops and farmers were not clamoring that somebody do research on them. If I had based my research choices solely on practices that increased yield or on...
Summaries of three recently completed research projects, funded by the Leopold Center’s long-running competitive grants program, are available for review at Iowa State University’s Parks Library digital repository. The reports summarize how each project was conducted and what was learned. All Leopold Center completed grant reports in the Repository are searchable by year, grant ID number, or key word.

- **Increasing local food consumption in rural communities by partnering with nontraditional food retailers** [M2015-06] explored how some businesses in northeast Iowa could increase food purchases in communities that do not have grocery stores. Iowa Food Hub collaborated with nontraditional retailers in several communities, installing coolers and displays to stock and sell fresh food to local residents.

- **Use of grazing management to mitigate greenhouse gas emissions while increasing soil organic matter and water-holding capacity of cool season pastures in southern Iowa** [E2012-08] answered the question whether grazing could increase carbon sequestration and soil organic matter while reducing greenhouse gases. The three-year study showed that this did not affect carbon sequestration, but that by limiting daily forage allowance, cattle methane emissions could be reduced.

- **Covering the ground: A transformative approach to scientific learning for greater cover crop adaptation in Iowa** [E2014-20] studied how farmers across Iowa overcome barriers to adopting cover crops on their farms. Researchers spoke directly with farmers through focus group conversations. The researchers offered data-driven information on cover crop benefits and the farmers provided feedback to help with future messaging to encourage cover crop adoption.
what farmers were interested in, I would never have begun this research.”

In addition to conducting research, Kaspar takes his findings to the public. According to one of his nominators Matthew Bakker, “Tom has gone beyond simply publishing his research results in scientific journals. He has also been a willing speaker at numerous conferences, field days and other education events, and has taken extra effort to translate his research results into a form readily accessible to growers.” He has published fact sheets and book chapters, serves as a contact person, provided training to field staff and was instrumental in the creation of the Midwest Cover Crops Council (MCCC). Bakker is a research microbiologist with the USDA-ARS in Illinois.

Another nominator, Eileen Kladivko, is an agronomy professor at Purdue University as well as a founding member of MCCC. She says that Kaspar’s “work on cover crops has contributed to our understanding of cover crop establishment, growth, and winter hardiness, with particular attention to cover crops that are potentially useful in Iowa. Tom’s studies have clearly shown the significant effect that cover crops can have on reducing nitrate losses from tile-drained fields, which saves nitrogen for the soil and subsequent crops while protecting water quality.”

Originally from Omaha, Kaspar earned a B.S. in biology, an M.S. and Ph.D. in Agronomy-Crop Production and Physiology, all from Iowa State University. He began working for the USDA-ARS as an undergraduate, continued as a graduate student, and officially as a scientist in 1981. He and his wife Cathy, have two grown daughters.

“There is a lot to learn yet and I believe that we are just realizing the full potential of cover crops,” says Kaspar. “We know very little about different possible cover crop species, mixtures, or the effect of cover crops on soil micro- and macro-organisms and soil changes over the long-term. We need to continue to document on plot, field, and watershed scales, the soil and water quality improvements obtained by using cover crops over the long-term.

“Sustainability often doesn’t have a voice, it is a long-term endeavor. It doesn’t show up in a business plan for most farms, nor make farmers money in the short term. As an agricultural scientist, I must listen to both farmers and the public, but I also have to look at the big picture and the future.”

David and Corrine Williams

David and Corrine Williams own a six-generation heritage farm near Villisca in Montgomery County. David farmed with his father and brother for years and they purchased farmland of their own some 60 years ago. They also raised hogs and ran a cow-calf operation. David and Corrine have turned over the corn-soybean farm to their son, Bruce, and grandson, Aaron, the sixth generation to farm the land. Aaron also runs a farrow-to-finish swine operation, with the hogs going to Niman Ranch. Aaron’s brother, Josh, is a banker who helps with financial issues as well as planting and harvest.

They practice no-till and have done so for over 20 years. The farm also contains terraces and cover crops, which they added four years ago. David says that they learn more about cover crop management with each growing season. “We think it’s been great for keeping our soil loss down to a minimum.”

The Williamses have been strong advocates for farming sustainably. David was on the committee that organized the Iowa Environmental Council in 1995, an accomplishment of which he is most proud. He served on their board of directors from 1992-2000 and is now an ex officio member. David was on the Leopold Center Advisory Board from 1993-2002. The Williamses are recipients of the National Cattlemen’s Association Environmental Stewardship award as well as the Practical Farmers of Iowa Sustainable Agriculture Achievement Award.

He also helped establish the Wallace Foundation for Rural Research and Development located at the ISU Armstrong Research Farm, near Lewis. “We put together a farm, organized by a board of directors,” says David. “We ended up building a building on our farm. The board bought the land through a fundraising campaign. The Foundation is going on 20 years now.”

Corrine compliments her husband, “Dave’s always had pasture and hay on the hills and not put row crops there that would allow the soil to wash away, as Dave’s dad had taught him. David has always farmed right.”

About the Spencers

The Spencer Award honors Norman and Margaretha Spencer, who farmed in Woodbury County for 40 years. Norman graduated from Iowa State University in 1940 with a degree in agricultural engineering, and Margaretha in 1944 with a degree in home economics. Over the years, Norman maintained an active relationship with ISU’s College of Agriculture and several professors, encouraging them to conduct research on sustainable practices and family farming.

The award was established in 2001 by their children, Robert and Elaine, through an endowment from the family, and includes a $1,000 cash prize. The award is a tribute to their parents’ belief that it is the obligation of each generation to leave the world a better and healthier place for the next.
The research project “Science-based Trials of Row-crops Integrated with Prairie Strips” (STRIPS) at Iowa State University was recently awarded grants from The McKnight Foundation and the Walton Family Foundation.

The Walton Family Foundation grant awarded the project nearly $359,000 over two years, ending in July 2018. The McKnight Foundation grant is for $140,000, also funded over two years. Both grants will enable the STRIPS team to train Technical Service Providers (TSP) and Certified Crop Advisers (CCA) for certification in prairie strips design, establishment, and monitoring. Adding certified technicians who can design and oversee establishment of prairie strips allows a greater number of Iowa farmers to use this conservation tool.

The STRIPS research team concluded that removing 10 percent of a row crop field from production and planting strips of perennial prairie in strategic locations within the field reduces sediment loss by up to 95 percent and water runoff by 40 percent. In addition, prairie strips can reduce phosphorus loss by 90 percent and nitrogen loss by 80 percent. The strips of prairie also increase pollinator and wildlife habitat.

The Leopold Center funded the first prairie strips research project that ran from 2004-2009: Variations in water and nutrient cycling and soil properties during agricultural landscape restoration (2004-E14). This project established the 14 sub-watersheds at the Neal Smith National Wildlife Refuge near Prairie City. In 2007, the first prairie strips were planted and water runoff flumes were installed. The STRIPS team measured water and nutrient runoff, crop yield, and soil organic matter; and led other studies including counts of bird and insect populations.

The project expanded in 2012 to Iowa farmers; now, 27 sites have prairie strips on at least one field. These sites include private farms, five ISU Research and Demonstration farms, Des Moines Water Works, and the Eastern Iowa Airport near Cedar Rapids. The STRIPS team monitors a subset of these fields, measuring sediment, runoff, crop yields and wildlife response.

The key to prairie strips being so effective is in the design. The STRIPS team farmer liaison Tim Youngquist is currently the sole designer for the prairie strips. With each of these 27 farms, he has walked the land, talked with the farmer, determined soil type, and mapped the field for slope and possible placements of the prairie strips. As the popularity of this concept grows, he can only reach so many farms.

With the funding from the McKnight and Walton Family Foundations, the team will be able to train others to do prairie strips design. The TSPs, CCAs, and others interested can enroll in a one-day workshop, to be held regionally this summer and fall, for certification in prairie strip installation. The one-day workshops will cover topics including field mapping, plant identification, seed mixtures and amounts, maintenance including mowing, burning and herbicide use, determining costs, and more. In addition, attendees will receive a $250 stipend for workshop completion, and a $1,000 bonus after successful installation of prairie strips on their first field. The STRIPS team will coach workshop participants to create a communications piece, such as a website or brochure, to support their professional credentials in prairie strips. Those who become certified will help promote this practice in their region as well.

The two grants have enabled the STRIPS team to add a graduate student, Rachael Whitehair, who will be assisting with the workshops. As part of her master’s degree, she will develop content for the training sessions, conduct follow-up evaluations, analyze the results, and more. Whitehair, from Shakopee, Minn., is studying agricultural education with a research focus in adult teaching. Nancy Grudens-Schuck, ISU associate professor of agricultural education, is Whitehair’s supervisor.

The STRIPS team will be mailing information about the workshops to TCPs and CCAs in the spring. The website will have workshop information as well.
The Leopold Center for Sustainable Agriculture has awarded grants for 21 new research and demonstration projects to begin this year. The grants will aid in the advancement of sustainable agriculture while protecting Iowa’s soil and water and help Iowa citizens increase the availability of locally grown foods. The new grants, totaling $1.4 million, are awarded through the Leopold Center’s four research initiatives: Ecology, Marketing and Food Systems, Policy, and Cross-Cutting.

“With 2017 being the Leopold Center’s 30th year of operations, we have reviewed the scope of our funded research projects. Over these three decades, the projects we have funded are innovative, forward-thinking and successful,” says Leopold Center Director Mark Rasmussen. “This year is no exception. The Center continues to advance agriculture and food systems in Iowa.”

The grants vary in length; five projects are for one year, nine will be conducted over two years, and seven projects run for three years. In addition to these new projects, work continues on many other multi-year projects supported by the Leopold Center’s long-running competitive grants program.

**Ecology Initiative**
The Ecology Initiative is funding five new research projects. Topics include nitrogen in prairie potholes on farmland, integrating rye seed production and red clover into corn systems, improving soil health and water quality through better soil phosphorus management, exploring whether cover crops increase soil resistance to climate change, and scaling up the use of perennial vegetation for water quality and landscape diversity.

**Marketing and Food Systems Initiative**
The Marketing and Food Systems Initiative has six new research projects starting in 2017. Topics include connecting Latino groceries to local food producers, increasing sales of fresh food to schools through food hubs; developing local food supply chains in northern Iowa; connecting, empowering and training Iowa food entrepreneurs; developing a virtual market; and developing online training for local food leaders.

**Policy Initiative**
The Policy Initiative has two new project grants: one will survey farmers about Iowa farmland ownership, tenure and succession; the other will explore opportunities for leveraging public resources to engage more Iowa farmers in water quality protection.

**Cross-Cutting Initiative**
Eight projects in the Cross-Cutting Initiative will begin this year. Topics include: education of beginning beekeepers, precision cover crop seeding, nutrient management for hop production, enhancing cover crop value with beef stocker cattle, comparison of perennial and annual cropping systems on soil health and nitrogen fertilization treatments, and others.

Descriptions of the work, who will be conducting each project and other details, are on the Leopold Center website: www.leopold.iastate.edu/grants/current

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**COMPETITIVE GRANT PROJECTS FUNDED FOR 2017**

**ECOLOGY**

- Prairie pothole soils: Hotspots of nitrogen losses from Iowa agricultural landscapes?
- Integrating rye seed production and red clover cover into corn systems and nitrogen management
- Improving soil health and water quality through better soil phosphorus assessment and management practices – phase 2
- Building the soil immune system: Do cover crops increase soil health and resistance to climate change?
- Scaling up the use of native perennial vegetation for water quality and landscape diversity

**CROSS-CUTTING**

- Evaluating performance and feeding suitability of corn genetic traits
- Revision of Extension publication PM 1713: Pasture Management for Livestock Producers
- How does soil health differ between perennial and annual cropping systems across contrasting nitrogen fertilization treatments?
- Enhancing the value of cover crops through utilization by beef stocker cattle
- Impacts of cropping system diversity and input reduction on greenhouse gas mitigation, soil and water quality, and economic performance of Iowa grain systems
- Optimizing nutrient management for Iowa hop production
- Precision cover crop seeding with existing planting equipment
- Promotion of the continued development of beginning beekeepers

**POLICY**

- Who will own Iowa’s farmland? A comparative study of farmland ownership, tenure, and succession in Iowa
- Promoting improved water quality from Iowa farms: Opportunities for leveraging public resources to engage more Iowa farmers and landowners in water quality protection

**MARKETING AND FOOD SYSTEMS**

- Latino groceries in the rural Midwest: Connecting tiendas to Iowa local food producers to amplify retail markets
- Fresh innovation: Testing fresh processed products to increase food hub to school sales
- Supply chain development in Northern Iowa: Connecting northern Iowa local food producers with Opportunity Village Processing
- Iowa kitchen connect: Empowering, connecting, and training Iowa’s food entrepreneurs
- Region 9 Virtual Market
- Online training modules and professional development: A national certification program for local food leaders
Reflections on the Leopold Center after 30 years

By Neil D. Hamilton
Professor emeritus of law, and Director, Agricultural Law Center, Drake University Law School

From my perspective, creating the Leopold Center was a key feature of the 1987 Iowa Groundwater Protection Act. It made possible one of the most important developments in Iowa State University’s long history of contributions to the improvement of American agriculture. Today, the concept of sustainability is widely understood across our economy and society — but this was not the case in the late 1980s. The Center, under the able leadership of Dennis Keeney, played a leading role in giving meaning to the term, and in legitimizing the study of sustainable agriculture in the nation’s land grant university system.

The Leopold Center’s work was directed (in part) by a dedicated citizen advisory board, on which I had the honor to serve for the Center’s first 21 years. We offered our guidance and support to the staff in making funding decisions about research projects to prioritize, and we endorsed the interdisciplinary “issues team” approach pioneered by the Center. Throughout its existence, the Center has supported critical research addressing the impacts of agriculture production on the environment, and has looked for ways to promote the economic and social sustainability of farming while protecting the soil and water resources on which we all depend. The Center achieved this mission by always being mindful to ask, “How will this research promote the goal of sustainability?”

As we consider the accomplishments of these 30 years, I believe the hallmark is the foundational role that research supported by the Leopold Center plays today. It is in the science underpinning the practices promoted to address Iowa’s serious water quality challenges, as referenced in the state’s Nutrient Reduction Strategy.

Much of the early Leopold Center research agenda — the late-spring nitrogen soil test, the efficacy of streamside buffers, and the value of strip intercropping — was unconventional, and researchers faced difficulties finding funds to test their ideas. This is where the Leopold Center has proved its worth and illustrates why it is still needed today. By helping Iowa’s researchers and hundreds of students engage in the search for more sustainable farming methods, the Center has made invaluable contributions to our agricultural future. It is important to recognize the efforts the Center has made to involve farmers and farm organizations in its work and to produce information and materials useful to farm audiences.

The path was not always easy or the course direct. The Leopold Center faced challenges ranging from sometimes uncertain institutional support to the continued resistance from those corners of agriculture threatened by a program willing to admit the reality of agriculture’s environmental impact and to ask “can we do a better job?” At times, it has been ironic that despite being located at an institution dedicated to academic freedom and unhindered scientific inquiry, the Center had to swim against a current of dogma. To the credit of its leaders and staff, it has done so with grace and candor — and in so doing brought honor and distinction to the College of Agriculture and Life Sciences and to Iowa State University.

The mission and calling of the Center remain as critical as in 1987 — perhaps even more so. As the reality of climate change and its impacts on agriculture and society become clearer, the voices needed to lead the search for truth will be even more vital. This includes someone to keep watch over the idea and ideals of “sustainable agriculture” as defined in the Iowa GWPA. In the early years, the struggle was for acceptance, but today the fight is for integrity. “Sustainable agriculture” should be more than a convenient label to slap on anything promoted in the self-interest of a business or organization.

As we move forward, agriculture’s road ahead will not be smooth. The search for funding to support the scientific inquiry structure that challenges the status quo will be difficult. Today, agriculture in Iowa and the nation may be sliding toward deepening economic and social crises caused in part by our ability to out-produce the markets for our products. Part of the problem — as is often the case — is self-inflicted; a combination of economic decisions driving ever-greater production, as well as political decisions threatening decades of gains in international trade of farm products. Combined with the fractious debate over water quality and hollow political leadership, which asks nothing more of producers than voluntary action based on enlightened self-interest, these forces yield a recipe for conflict. This is not unlike where we were as a state in 1987 when the debate over protecting groundwater led to creation of the Leopold Center. I believe finding solutions to our current problems will call for remedies based on original research, new knowledge, and practical insights. These traits define the legacy of the Leopold Center and make it a vital part of our state’s future. I wish it well!
Through the looking glass: 
The Leopold Center’s role in my career

By Lisa Schulte Moore
Professor, Natural Resource Ecology and Management, Iowa State University

The Leopold Center for Sustainable Agriculture is important to me, and I’m not alone. This central theme came to my mind as I set to write about the Center’s role in helping forge collaborations, leveraging grant dollars, conducting research to benefit farmers while conserving our natural resources, and communicating project results, over my 13.5-year career at Iowa State University.

The Leopold Center is important to me because it underwrote a workshop series on the potential for perennials in Midwestern agriculture, which I participated in as a newly minted Ph.D. from Wisconsin. It was through these workshops that I met and was inspired by Dick Schultz and Tom Isenhart, and where first learned about the Bear Creek Riparian Buffer Project. The project is 25 years-running, award-winning, and an internationally recognized study of the impacts of riparian buffers on stream stability, nutrient cycling, water quality, and wildlife habitat. Since then, I have sought to emulate these two masters in my commitment to meaningful connections with farmers, high quality research, and outstanding teaching and outreach.

The Leopold Center is important to me because, as a young faculty member, its staff provided constructive feedback on my research ideas, helping me hone them into something that fit the Center’s mission and link with advisory board priorities. The board took a gamble on my first grant with them: $14,998 for a retrospective analysis of land cover change in the Clear Creek Watershed in Iowa and Johnson Counties. This grant helped me start a funding track record, fund one of my first graduate students, connect with landowners, and gather data that led to a couple of my first Iowa-focused publications. Center staff continued to push me to think harder about the work I wanted to do and how it could benefit farmers, which laid the groundwork for my current research focus on human-landscape interactions. In academic circles this is what I am now known for nationally.

The Leopold Center is important to me because it was an early investor and continues to support the STRIPS® project, the most successful project of which I’ve had the privilege to be a part. The team began to form during my first semester at Iowa State in 2003, and was able to move from idea to implementation through a $125,000 grant from the Leopold Center in 2004. This five-year grant helped fund instrumentation of our initial research site at Neal Smith National Wildlife Refuge, and hire a field technician to coordinate research and efforts among the many project investigators. These roles are critical to generating the high quality data, such as that associated with STRIPS.

The STRIPS data have formed the backbone of more than 250 technical presentations reaching approximately 9,000 people, 16 student theses and dissertations, and 34 peer-reviewed publications to date. Research findings have captured the attention of the Iowa agricultural community, inspiring 34 Iowa farmers and farmland owners to implement prairie strips on 2,450 acres of cropland. Farmers and landowners have committed to plant additional prairie strips in Iowa as well as in adjacent states. Prairie strips have also captured the attention of the press, bringing positive national recognition through news outlets such as The New York Times and The Washington Post.

The Leopold Center is important to me because its staff and board members help communicate my research results beyond the boundaries of academia. For example, Center staff spearheaded production of prairie strips videos and outreach brochures: “A Landowner’s Guide” and “Costs of Implementing Prairie Strips,” as well as handouts for specific audiences including farmers, technical service providers, and the public. This communications work is an essential connector within the knowledge-to-action pipeline, but not something a young faculty member is poised to do on one’s own.

In reflecting upon the impact that the Leopold Center played in my career, I also think about my colleagues who have similarly benefitted, and the collective legacy of knowledge we are building on how to profitably, sustainably manage agricultural landscapes. Some of my colleagues include Dick Schultz, Tom Isenhart, and Dan Jaynes with the Bear Creek riparian buffer and saturated buffers work; Matt Liebman, Mike Castellano, and others with the Marsden Farm crop rotation study; Emily Heaton with Long-term Assessment of Miscanthus Productivity and Sustainability (LAMPS). Another is Kristen Hofmockel, a former ISU professor, who studies soil microorganisms and nutrient storage, now a lead scientist at the Environmental Molecular Sciences Laboratory in Richland, Washington. Her work illustrates the far-reaching impact of the Leopold Center.

As I travel the country and talk with my colleagues, it’s clear that these studies put Iowa at the forefront of research on sustainable agriculture. As I travel the countryside and talk with farmers, it’s clear that they value this work. Both researchers and farmers are inspired and thankful for the Center’s role in de-risking ideas and the scientifically generated evidence to support farm management decisions.

The Leopold Center for Sustainable Agriculture is important to me, and I’m not alone. It’s important to Iowa.

*See page 4 for an update on the STRIPS project.
Wood from Leopold trees inspires a new generation

Trees are extraordinary. They provide us with oxygen and shade while they are living, and give us material for shelter, structural support, and heat after they die. As one of the major figures in American forestry, Aldo Leopold was quite aware of this. He taught these lessons to his children, his University of Wisconsin students, and countless others through his words after his death.

Leopold came by his love of trees early. When Aldo was born in 1887, his grandfather Starker planted a red oak in honor of the new grandchild. The remnants of that iconic red oak are enjoying new life all over the country, including Iowa State University.

Aldo Leopold would be especially pleased if he could visit Chris Martin’s woodworking class. The ISU art professor teaches the class “Integrated Studio Arts: Intro to Furniture Design.” This semester Martin’s students have been constructing items using wood acquired from trees that have fallen at Leopold’s childhood home in Burlington, Iowa. Their journey from southeast Iowa to ISU art class is a long and winding one.

How the Leopold tree wood came to ISU

The stately Italianate home of Charles Starker, Aldo Leopold’s grandfather, sits on the bluffs of the Mississippi River in Burlington. Aldo Leopold was born in this house on Jan. 11, 1887. Aldo’s family moved to the home just behind Starker’s, now known as the Leopold House, in 1890. These homes and three acres of land comprise the Leopold Compound. Starker planted a tree on the property when each of his grandchildren were born, beginning with Aldo, the eldest grandchild.

The Leopold Landscape Alliance (LLA) currently owns the Leopold House. In May 2013, Burlington experienced a large storm and straight-line winds felled two red oak trees on the compound. The next summer, two sugar maples were victims of storms. LLA board member Steve Brower says one of the red oak trees — with a circumference of over five feet — was Aldo’s tree. The large trees were cut into more manageable-sized logs and lumber. Then word went out to groups that might want to own a unique piece of Leopold history. Serendipitously, Leopold Center Director Mark Rasmussen had traveled to Ft. Madison to give a presentation about the Center — Brower and other LLA board members were in the audience. After introductions and a home tour, Rasmussen decided to acquire some of the red oak lumber.

Linking with Martin

Enter Chris Martin, art professor and furniture crafter extraordinaire, who didn’t know Rasmussen, but became acquainted during the Center’s search for ways to use the wood. Together they went to Burlington in 2015, brought back some red oak lumber, and stored it in Rasmussen’s garage to dry.

Beginning this spring semester, Martin’s students were able to work with the wood. Rasmussen commissioned the students to build small, keepsake boxes that the Center will use as gifts for special occasions. Each student constructed two boxes, and in the process learned complex assembly techniques, and worked with power tools and a laser engraver — each box lid has a laser-cut oak leaf outline and a quote from Leopold. The students also gained experience in creating for clients as opposed to designing something for themselves.

The students also learned more about Aldo Leopold. Each received a copy of A Sand County Almanac, and read essays including “The Good Oak” as part of the course assignments. This gave them perspective as to why the wood they were working with was significant to so many people.

Professor Martin is no stranger to using reclaimed materials for his furniture creations. He lived in Ghana for two years with the Peace Corps, and spent last semester in India as a Fulbright Scholar. He sees the value in reuse, as new materials are scarce in many places in the world. With the box project, he is following in Leopold’s path yet again. Leopold used found wood, and nearby sand and clay from the Wisconsin River for primitive furniture, fireplace and mantel at the Shack outside Baraboo, Wisc.

Where else did Aldo’s tree go?

Leopold would be surprised to know how far that the wood from his Burlington tree has traveled from the property. Brower said that wood from the downed trees went to the Missoula, Montana Wilderness Institute; the Midewin National Tallgrass Prairie, Joliet, Ill.; the Leopold Foundation, Baraboo, Wisc.; and Les Cheneaux Club near Mackinac Island, Mich., where the Leopold family vacationed in the summers. Some of the lumber stayed closer to home at Port Louisa National Wildlife Refuge visitors’ center near Wapello; Starr’s Cave outside Burlington; and even in the Leopold House, in which two tables and a bed have been crafted from the lumber. The wood also has been transformed into unique bowls, turned by Jim Spring, the Shack craftsman. One of the students in Martin’s class saws away extra material of the corner reinforcements on a box made from Aldo Leopold’s red oak. After this trimming, the special boxes will be sanded and sealed.
The theme of this year’s Shivvers Memorial Lecture is “The Leopold Center at 30 and Beyond.” Paul Johnson, Ralph Rosenberg, and David Osterberg are former Iowa legislators who were instrumental in the creation of the 1987 Iowa Groundwater Protection Act and establishment of the Leopold Center for Sustainable Agriculture. They will share their thoughts on the past, present and future as the Center commemorates its 30th anniversary this year.

The Shivvers Memorial Lecture will be Tuesday, March 28, at 7 p.m. in the Richard and Joan Stark Lecture Hall, 1148 Gerdin Business Building on the Iowa State University campus, Ames.

Paul Johnson served in the House of Representatives from 1984-1990 representing Winneshiek County. He is former chief of the Iowa USDA-Natural Resources Conservation Service from 1994-1997, and also director of the Iowa Department of Natural Resources from 1999-2000. The retired farmer holds bachelor’s and master’s degrees in forestry from the University of Michigan.

David Osterberg served as a state representative from 1983-1994 for Linn County. He is a professor at the University of Iowa in the Department of Occupational and Environmental Health. His teaching duties includes a seminar in environmental health policy, and an introduction to occupational and environmental health. He is founder and past executive director of the Iowa Policy Project.

Ralph Rosenberg represented Story County in the House of Representatives from 1981-1990, and in the Senate from 1991-1995. He is currently the executive director of the Iowa Environmental Council. Prior to joining the Council in 2012, he led the Iowa Civil Rights Commission, the Coalition for Family and Children’s Services in Iowa, and co-founded a statewide nonpartisan institute for emerging leaders in all three branches of Iowa’s government.

The Shivvers Lecture is named in honor of L.C. (John) Shivvers, who was born in 1894 near Knoxville, Iowa, and became a pioneer of sustainable agriculture. He was elected to the Iowa Senate in 1962, but passed away that December, before he could take office. In a special election, his wife, Vera, took his place for the next two years, becoming the third woman to serve in the Iowa Senate. In 1969 she coordinated with ISU to establish the Shivvers Lecture Series as a lasting memorial to her husband. The Shivvers family continues to farm and oversee the lecture series.

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The Leopold Center has renewed its partnership for 2017 with Blank Park Zoo’s initiative Plant.Grow.Fly. The mission of the program is to encourage Iowa citizens and organizations to become aware of pollinator issues and to take action to preserve them. The program’s focus is to increase pollinator habitat through special gardens. In Plant.Grow.Fly’s first three years, they registered 800 gardens. This year, the goal is to increase registered gardens to 1,000.

Gardens can be small or large, as long as there are plants available for pollinators to use. This year a category for acreages was added for those who have rural areas planted for pollinators such as roadside ditches, restored or reclaimed prairies, and prairie strips. Gardeners, farmers and landowners can go to the Blank Park Zoo’s website and the Plant.Grow.Fly page to register their land as pollinator gardens: www.blankparkzoo.com/conservation/plantgrowfly/

Shivvers Lecture offers glimpse behind passage of the Groundwater Protection Act

‘30th Anniversary Thursday’ on Facebook

Follow the Leopold Center’s Facebook page for a chronicle from the past 30 years posted each Thursday.

A “Celebrating 30 years” page also is on the Center’s website. This page contains essays and stories from past newsletters, annual reports, or other publications, as well as other items of interest. Posts will be added as 2017 progresses, so visit periodically for new entries: www.leopold.iastate.edu/celebrating-30-years

Plant.Grow.Fly. partnership renewed

The Leopold Center Advisory Board member Keith Summerville (left) and Director Mark Rasmussen talk with Sen. Kevin Kinney (D-Johnson) at the legislative breakfast held on Feb. 28. The Center annually hosts this open house in the Capitol building, Des Moines. Legislators stop in for a pastry and coffee and hear of the Center’s recent activities. Several legislators also brought their interns along for them to learn about the Center.
Local Foods

By LEIGH ADCOCK, communications specialist, ISU Extension and Outreach Local Foods Team

Ottumwa families try new foods thanks to FoodCorps Iowa

Cooking and trying new foods together can be a fun focal point for family time. Sixteen families with young children recently signed up for a family cooking night at James Elementary School in Ottumwa, where they worked with FoodCorps Iowa service member Regan O’Hanlon to prepare and cook a delicious dinner to share.

“I really like the idea of a family cooking night,” said O’Hanlon. “My supervisor, Jen Daugherty, has done family garden cooking nights during the summer. They have been really successful and a lot of fun for families to come out and work in the garden and cook together as a family and as a community group.” Daugherty is a horticulturalist and local foods coordinator for Wapello County Extension and Outreach.

O’Hanlon said the project received a $500 grant from a national nonprofit organization The Kids Cook Monday, available only for FoodCorps sites. The grant funded two family cooking nights in Ottumwa public schools, the first was in December and the second one will be later this spring.

Carrie Mendibles and her two daughters, Erinne (10) and Sophia (9), had a great time at the event. “I think there should be more events like this,” Mendibles said. “It brings families together. Kids can learn about the different foods as they are preparing them, and maybe even try new things.”

O’Hanlon and Daugherty cooked quinoa chili for a main dish, and the families shared side dish preparation of a massaged kale salad and rainbow vegetable pasta salad, served at stations around the school cafeteria. Recipe cards were provided for all the dishes.

O’Hanlon said the focus of the evening was to give families ideas for dishes they could prepare together at home. “I went around and asked people, ‘Would you make this at home? Even if you don’t like it this way, could you do it differently?’

Almost every family said that they would make at least one of the dishes at home. That was good feedback to hear,” said O’Hanlon. She is looking for community sponsors to fund additional cooking nights at other Ottumwa schools throughout the year.

FoodCorps is a national service program that connects kids to healthy food in school. The ISU Extension and Outreach Local Foods Program acts as the state partner for FoodCorps Iowa, overseeing FoodCorps programs across the state and helping recruit, select, and evaluate service members and programs.

For more information about FoodCorps Iowa, visit their website: https://foodcorps.org/apply/where-youll-serve/iowa/
Fresh food options for rural Iowans through nontraditional food hubs

Small-town grocery stores continue to close across Iowa and rural residents are having a harder time finding fresh, healthy food. A 2005 study (the most recent available) reported that the number of Iowa grocery stores dropped by half over the prior decade: from 1,400 in 1995 to 700 in 2005. Many rural Iowans must drive more than 15 miles to find a store that sells fresh produce, and often it is a large retailer such as Wal-Mart or Target.

How can we creatively address rural food insecurity and “food deserts”? The Iowa Food Hub, a nonprofit food aggregation, distribution, and marketing organization, based in West Union, recently completed a project that explored whether rural retailers who don’t normally sell food might be willing to serve as a food hub for their communities, selling locally grown products. The Leopold Center for Sustainable Agriculture and the USDA funded the two-year project.

The Iowa Food Hub team first experimented by installing coolers at a few sites in northeast Iowa retail locations, and then developed and managed the sites, and designed creative marketing strategies to build a customer base. But it didn’t do as well as they hoped.

In the summer of 2016, the team launched a food box program in Waukon, Monona, Elkader, and New Hampton. These communities each range from 1,000 to 4,000 residents, have very small farmers markets, and only Elkader has a Community Supported Agriculture (CSA) program. The towns were already on Iowa Food Hub’s delivery routes, and have growing farm-to-school programs where the school is an anchor buyer.

The team again used nontraditional sites for food access, including county extension offices, a retail dairy, and a community center. Iowa Food Hub provided coolers to hold the food boxes for customer pick-up during regular business hours.

Two communities succeeded in attracting enough customers to offer a 10-week pilot program. The pilot program went so well, Iowa Food Hub extended it eight more weeks. Weekly sales at each site ranged from $150–$300, resulting in total sales of about $2,500 per site over the course of the program.

Overall, 75 farms and food businesses have benefited from the Iowa Food Hub. This is a 36 percent increase from the start of the project. Approximately 10 farms and businesses are the primary suppliers for the food box program.

You can learn more about food hubs at:

www.extension.iastate.edu/localfoods/food-hubs/

The final report summary of this grant project is at: http://lib.dr.iastate.edu/leopold_grantreports/521/

Iowa communities examine factors for local food systems

As demand for locally grown food continues to rise, more Iowa communities are looking to expand their local food systems. As the name implies, a local food system encompasses many factors including producers, markets, nutritional education, institutional buyers (such as schools and hospitals), built infrastructure, processing, and much more.

Finding a community’s enabling and hindering factors requires strategic analysis and candid, sometimes difficult, conversations. The Community Capitals Framework (CCF), a processes developed by ISU sociology professors Cornelia and Jan Flora, examines how community members rank their own status in seven areas of capital: social, human, political, cultural, natural, financial, and built capital.

A graduate research assistant with the Local Foods Program in 2015-16, Ahna Kruzic, focused on six communities and conducted CCF analysis on each: Cedar Rapids, Decorah, Des Moines, and three outside of Iowa. She presented her research results to each city’s local foods coalition in a final report as part of her dissertation. Some of Kruzic’s findings for Iowa communities:

- Relationships are key to creating a successful local food system. All three communities identified that social capital is critical, and often cited it as a conduit to improving capacity in the other six areas of capital.
- Skilled farm labor availability can be a challenge, particularly in rural areas. Some farmers rely on area colleges for expanded markets and access to students looking for summer jobs.
- Couching local foods efforts in terms of personal and community health can increase interest from general audiences in local foods work.
- Federal farm policy had little impact on local foods systems, positively or negatively. Local support is vital, and some communities are investing in food policy councils, which research and develop supportive policy at the local level.
- All communities reported challenges engaging with diverse populations. Areas of concern were racial and ethnic diversity, income stratification, a lack of cultural awareness training within organizations, high poverty rates, and a lack of public transportation.

To read about Kruzic’s research beyond Iowa, download the PDF from the ISU Extension Store: Determining Factors for Local Food System Success (LF 0014): https://store.extension.iastate.edu/Product/14796

For information about the Community Food Systems Program visit the website: www.extension.iastate.edu/localfoods/community-food-systems-program/
Highlight Events

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

March 22-23
Iowa Water Conference
Scheman Building, Ames
The Leopold Center will recognize the 2016 Spencer Award honorees Tom Kaspar and David and Corrine Williams during lunch on March 22.

March 28
7 pm, Annual Shivvers Memorial Lecture
Gerdin Business Building, Iowa State University

March 28-29
Iowa Invasive Species Conference
Honey Creek Resort, Moravia
For researchers, landscape and nursery professionals, agriculture and forestry employees, environmental specialists, watershed coordinators/managers, landowners, government agencies, NGOs, and others interested. The conference will have sessions and presentations covering terrestrial, aquatic, and invasive pest concerns and solutions. Visit the website for details: http://www.iowainvasives.org/

April 25, 26, May 2
ISU Extension and Outreach High Tunnel Workshops
Full-day workshops will be held to learn more about soil management, tomato grafting, insect management and environmental control within high tunnels for produce. The free workshops will be April 25 in Fort Dodge, April 26 in Ottumwa and May 2 in Dubuque. Visit the ISU Extension website for details: www.extension.iastate.edu/article/high-tunnel-workshops-explore-common-challenges

April 30
Ames Reads Leopold
2-4 pm, Ames Public Library, 515 Douglas Ave.
Join guest readers as we review the writings of Aldo Leopold, widely acknowledged as the father of wildlife conservation in America. His most famous work, A Sand County Almanac, published in 1949, is still popular with naturalists and writers alike. Readers will share essays from this book, from other books he has written, and from other like-minded writers.