

Leopold Center for Sustainable Agriculture

ISSUE

This **Issue Review** provides an overview of the Leopold Center for Sustainable Agriculture located at Iowa State University (ISU).

AFFECTED AGENCIES

Department of Agriculture and Land Stewardship (DALs)

Department of Natural Resources (DNR)

Iowa State University (ISU)

CODE AUTHORITY

Iowa Code chapter [266.39](#) and [455E.11](#)

BACKGROUND

The Leopold Center for Sustainable Agriculture was established in 1987 with the passage of the [Groundwater Protection Act](#) and is located on the ISU campus. The Center is named after Aldo Leopold, an Iowa native recognized internationally for his work related to conservation and ecology. The goals of the Center include:

- Identify and reduce negative environmental and economic impacts from agricultural practices.
- Develop profitable farming systems that conserve natural resources.
- Inform the public of new research findings with the assistance of ISU Extension.

The Center is overseen by the Leopold Center Advisory Board and the membership is specified in [Iowa Code chapter 266.39](#). The President of ISU appoints the director from a list of candidates provided by the Board. Activities at the Leopold Center include: awarding competitive grants, assembling research project teams, and supporting educational programs.

CURRENT SITUATION

Funding

Groundwater Protection Trust Fund – The Leopold Center receives 35.0% of the fees that are collected and deposited into the Agriculture Management Account in the [Groundwater Protection Trust Fund](#). This includes the annual inspection and license fees paid by all commercial fertilizer licensees, and pesticide product registration fees. These fee programs are

administered by the DALs. The fees are deposited in the Groundwater Protection Trust Fund administered by the DNR and funds are transferred quarterly to the Leopold Center.

ISU Funding – The Leopold Center receives a State General Fund appropriation and other funds from ISU for operations and other core activities such as salaries and research materials. For FY 2014, the Leopold Center was appropriated 11.25 FTE positions in [HF 604 \(FY 2014 Education Appropriations Act\)](#), and 8.00 FTE positions are supported with Center funds. The other staff members have split appointments or are funded with outside grants or other funds.

Other Revenue – The Leopold Center has received funds from private donations. Federal funds and other agency funding have been received for grant programs and projects. Over its 25-year history, the Center has been awarded grants from the [W.K. Kellogg Foundation](#), the [Henry A. Wallace Center](#), and [Winrock International](#).

Table 1 summarizes the Leopold Center revenue and expenditures for the period of FY 2009 through FY 2012:

Table 1

Leopold Center For Sustainable Agriculture				
	FY 2009	FY 2010	FY 2011	FY 2012
Beginning Balance	\$ 871,988	\$2,816,244	\$2,929,934	\$ 2,467,341
Revenue:				
Ag Management Account	\$ 2,059,500	\$1,658,429	\$1,584,737	\$ 1,639,734
Iowa State University Appropriation	490,572	439,945	412,388	397,417
Iowa State University (Other Funds)	97,091	0	28,473	28,853
Foundation Funds	88,427	173,316	149,361	175,824
Funds Leveraged from Grants*	NA	260,572	223,574	103,249
Incentive Accounts	0	0	1,324	506
Total Funds Received	<u>\$ 2,735,590</u>	<u>\$2,532,262</u>	<u>\$2,399,857</u>	<u>\$ 2,345,583</u>
Revenue Available	\$ 3,607,578	\$5,348,506	\$5,329,791	\$ 4,812,924
Expenditures:				
Personnel	\$ 717,818	\$ 764,038	\$ 822,895	\$ 737,936
Operations	161,053	166,391	196,766	161,957
Competitive Grants*	913,446	1,154,130	1,515,339	1,504,009
Foundation Accounts	254,021	6,914	43,250	171,083
Leveraged External Grants/Projects	0	327,099	284,200	138,310
Total Funds Expended	<u>\$ 2,046,338</u>	<u>\$2,418,572</u>	<u>\$2,862,450</u>	<u>\$ 2,713,295</u>
Ending Balance**	\$ 1,561,240	\$2,929,934	\$2,467,341	\$ 2,099,629

Source: Leopold Center Annual Reports

* An audit of Leopold Center accounts was conducted in FY 2010 and the line item "Funds Leveraged from Grants" was added due to the audit. The FY 2009 ending balance and the FY 2010 beginning balance differ due to an accounting adjustment made by the FY 2010 audit.

** The "Ending Balance" includes funds committed to grants awarded that have not been expended.

Activities

Competitive Grants – The Leopold Center has a Competitive Grant Program that provides funding for research projects in support of sustainable agriculture. The Center defines sustainable agriculture as one that maintains economic and social viability while preserving the high productivity of Iowa's land. Grants are available to all researchers and educators at all Iowa colleges and universities. Funding is also available to individuals or groups at nonprofit agencies and other foundations in Iowa. There are four research grant categories awarded:

- Ecology – research from these grants supports development of agricultural production systems that provide clean water, healthy soil, and robust farming operations. Some projects investigate agricultural practices to improve soil health and nutrient management through crop-livestock integration. Two examples of grants awarded in this category include:
 - [Investigation](#) of bacteria transport and implications for water quality from beef and hog production systems.
 - The effects of [winter rye](#) cover crop on corn seedling pathogens.
- Marketing and Food Systems – grants support new marketing strategies and business structures that support food supply chains in Iowa. This includes providing information from research projects that increase productivity and economic viability of food systems in Iowa. Two examples of grants awarded in this category include:
 - Establishing shared-use [processing facilities](#) in central and south-central Iowa.
 - Improving profitability for [small meat processors](#) in Iowa.
- Policy – research in this area focuses on local, state, or regional policies and how they affect sustainable agriculture. The goal is to connect public policy to sustaining natural resources. This includes providing basic research or data to implement new local or state policies, but not engaging in advocacy. Two examples of grants awarded in this category include:
 - The impact of [trust ownership](#) on the sustainability of Iowa's agricultural landscape.
 - Investigating opportunities for enhancing farmer adoption of targeted [prairie strips](#).
- Cross-Cutting – grants in this category began in 2010 with the goal to provide research and educational programs that adopt practices for crop and livestock production using a systems approach to balance goals of productivity and economics while protecting the environment. Two examples of grants awarded in this category include:
 - The [University of Iowa Biomass Partnership Project](#) (replacing coal with renewable fuel) at the University of Iowa Main Power Plant.
 - Demonstrating [farrowing alternatives](#) for small farms using insulated tents.

The Leopold Center [website](#) lists all grants completed since 1992, and provides a short overview of the grant and a link that provides more information on the project. The following is a summary of grants awarded for 2013.

Ecology:

- Biofuels Energy Return Study - Story County - \$6,468
- Agroforestry Systems - Statewide - \$7,532
- Cover Crop Systems Model - Boone County - \$23,400
- Tiled Area Riparian Buffer Strips - Story and Hamilton Counties - \$36,647
- Big Creek Watershed Ecosystem Services - Boone and Polk Counties \$35,000
- Winter Canola and Crop Rotation - Boone County - \$15,550

Marketing:

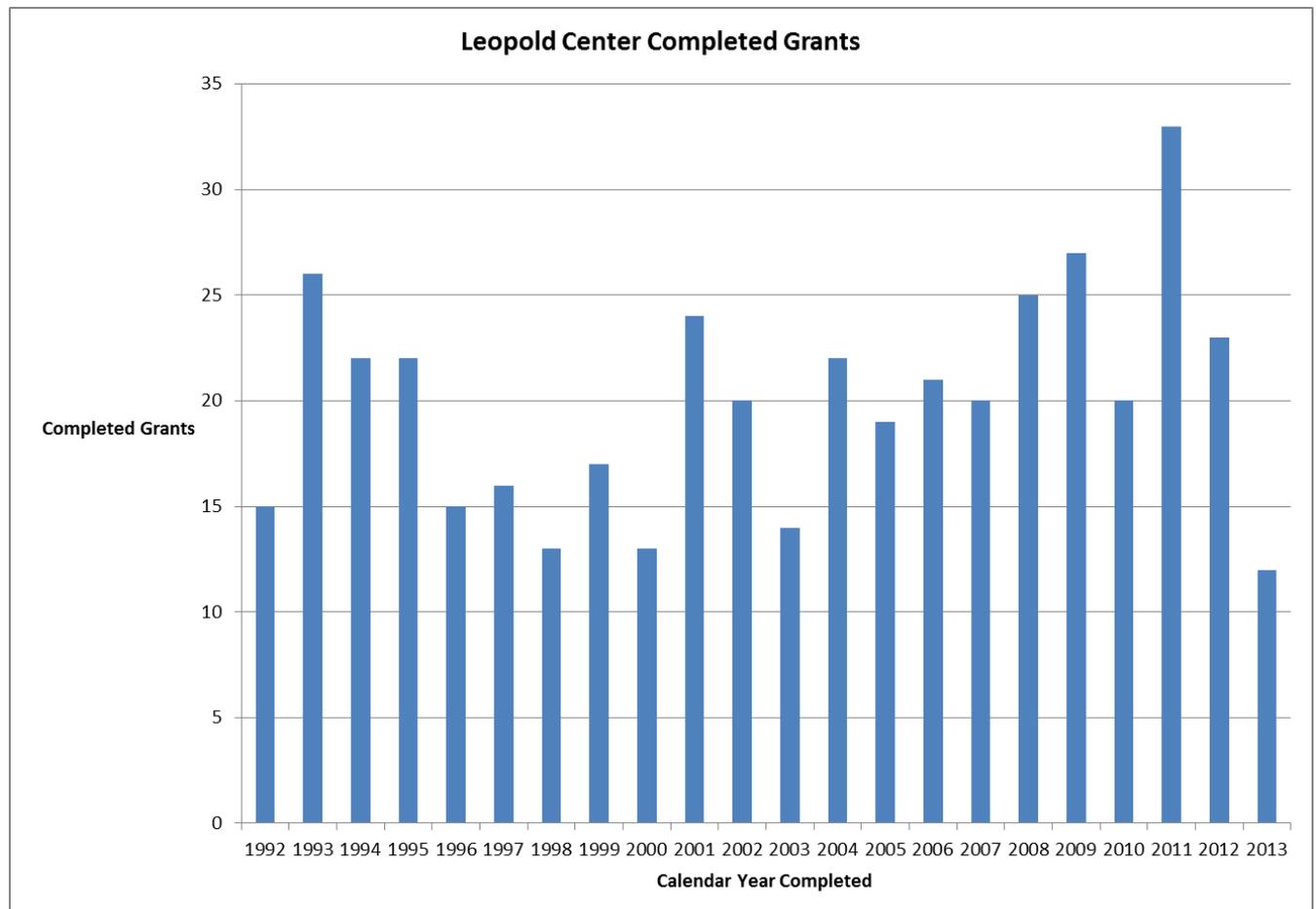
- Food Safety Training Statewide - \$28,391
- School Gardens - Polk County - \$15,435
- Iowa Grown Foods and School Menus - Allamakee, Howard, and Winneshiek Counties - \$25,000
- Small Scale Fruit and Vegetable Grower Equipment - Statewide - \$22,498
- Recordkeeping for Iowa Fruit and Vegetable Growers - Statewide - \$25,000

Policy and Cross Cutting Initiative:

- Sustainable Agriculture, Land Tenure, Risk Management - Statewide -\$46,249
- Cultivating Conservation - Allamakee County -\$26,751
- Rotation Systems - Boone County - \$43,625
- Energy Conservation and Renewable Energy for Small to Medium-Sized Iowa Farms - Statewide - \$17,000

Refer to **Chart 1** to see the number of grants completed by each calendar year.

Chart 1



Note: FY 2013 has partial year data.

Educational Support Program – Iowa nonprofit organizations, agencies, and educational institutions can apply for grants for educational events that support the goals of the Leopold Center. The maximum grant amount is \$1,000 and is paid after the event is held and a summary report has been submitted to the Leopold Center.

Special Projects Strategic Investments – Over the past 25 years, the Leopold Center has sponsored and funded a number of special efforts that have advanced sustainable agriculture in Iowa. These include:

- Nutrient Management Research – practices used in reduction strategy science assessment.
- Iowa Grape and Wine Institute – outreach and education for Iowa's grape industry.
- Iowa State University Graduate Student Program for Sustainable Agriculture – research assistance for graduate students.
- Henry A. Wallace Endowed Chair for Sustainable Agriculture – funds for sustainable agriculture research.
- Practical Farmers of Iowa – on-farm demonstration projects.
- Commercial Vegetable Production Research in the ISU Horticulture Department – two faculty positions and start-up funds for research.
- Sustainable Agriculture Land Tenure Project – guidance for landowners and tenants.
- Long-term Agroecological Research – organic crop research and demonstration.
- Iowa Learning Farms – conservation education for Iowans.

Iowa Learning Farms Program – Beginning in 2012, the Leopold Center has provided \$50,000 annually to the [Iowa Learning Farms Program](#). This Program is a collaborative effort by the Leopold Center, the DALS, the DNR, ISU Extension and Outreach, and the federal Natural Resources Conservation Service (NRCS) to provide conservation information to students, educators, producers, and landowners. The Iowa Learning Farm Program has three mobile Conservation Stations that are used as outdoor classrooms to demonstrate conservation practices.

Website Tools – The Leopold Center provides producers with a number of online tools on their website. Examples include:

- [Cover Crop Decision Tool](#) – provides cover crop information and allows a farmer to input variables to determine the cover crop they should be using.
- [United States Food Market Estimator](#) – provides market information on 200 different food groups listed by county in every state.
- [Iowa Market Maker](#) – allows the user to search for Iowa markets or businesses.

OTHER STATES

Other states have sustainability programs but the Leopold Center remains unique in its mission and operations. All north central states have a federal [Department of Agriculture – Sustainable Agriculture Research and Education \(SARE\) Program](#). **Table 2** lists the programs in the states surrounding Iowa:

Table 2

Sustainable Agriculture Program In Other States	
State	Program Name
Illinois	Central Illinois Sustainable Farming Network
Kansas	Kansas Center for Sustainable Agriculture and Alternative Crops
Minnesota	Minnesota Institute for Sustainable Agriculture
Missouri	Missouri Center for Agroforestry
Nebraska (private organization)	Nebraska Sustainable Agricultural Society
North Dakota & South Dakota (private organization)	Northern Plains Sustainable Agriculture
Wisconsin	Wisconsin Institute for Sustainable Agriculture

IMPACT ON IOWA

Since 1988, the Leopold Center for Sustainable Agriculture has awarded over 500 grants, all in Iowa, and has worked with people in every county. **Chart 1** shows the number of completed grants since 1992.

Measuring Success – Funding Leveraged: The Leopold Center completed a [retrospective analysis](#) on six project areas comparing the money awarded by the Leopold Center and additional funding leverage from the funds. The analysis indicated that for every \$1.00 invested in grant projects, \$4.62 was leveraged to expand the work for the grant. The project areas represented 22.0% of grant funding distributed by the Leopold Center. **Table 3** lists the project areas, grant money awarded, and grant money that was leveraged:

Table 3

Funding Impact Analysis		
Project Area	Leopold Grant Awarded (A)	Dollars Leveraged (B)
Low-Input High-Diversity Systems	\$ 357,479	\$ 1,555,962
Long-Term Agroecological Research	900,000	2,390,969
Hoop Barns	526,451	1,231,272
Regional Food Systems	922,837	4,291,471
Practical Farmers of Iowa	100,000	1,041,879
Practical Farmers of Iowa-Niche Market	167,117	1,300,000
Bear Creek	900,000	6,100,000
Total	<u>\$ 3,873,884</u>	<u>\$ 17,911,553</u>
Average Amount Leveraged = (B)/(A)		\$ 4.62

Measuring Success – Local Food and Farm Project Economic Data: The Leopold Center recently completed an analysis on the impact of the [local foods industry on Iowa's economy](#). Iowa has 15 regional food groups that comprise the Regional Food Systems Working Group that was established in 2003. This Working Group covers 90 of the 99 counties in Iowa and works with a variety of stakeholders to support the production and marketing of locally-grown food. The study included responses from 103 Iowa farmers that reported over \$10.0 million in local food sales in 2012. In addition, responses were received from 74 food buyers that expended \$9.0 million on local food purchases for FY 2012. Overall, the development of local food systems has increased economic activity and strengthened agriculture in Iowa.

Improvement Goals: The Leopold Center website provides public information on completed grants, studies, and other projects and provides numerous online resources to a wide variety of users. Interested parties can subscribe to a variety of publications from the Leopold Center as well as provide feedback. This public interaction allows the Leopold Center to note changing attitudes and opinions of farmers, landowners, and citizens with regards to Iowa's resources. The Leopold Center also maintains awareness on Iowa farming practices and other actions taken by Iowa citizens to safeguard Iowa's water, soil, and other natural resources.

Operational Challenges: Promoting sustainable agricultural practices can create challenges for the Leopold Center that include:

- Dealing with the challenges that agriculture has in balancing short-term versus long-term utilization of resources. Especially given the reality of immediate demands for income and the marketplace trends that often over rule long term plans.
- Helping Iowans think about Iowa's agriculture and landscape, how it has changed with use, and what can be accomplished in the future.
- Helping Iowans balance private interests and public interests in regards to agriculture, farming, and food.
- Countering misinformation in regards to sustainability, the benefits of biological diversity, and proper natural resource utilization.
- Countering misinformation regarding the Leopold Center.
- Maintaining an active program with static funding levels.

Funding Challenges: Additional funding to the Leopold Center will likely increase the amount of funds available for research grants, educational support programs, and other special projects. Decreasing funding to the Leopold Center will decrease funding for research grants and the other services provided by the Leopold Center. Farmers, students, faculty, farmland, and consumers will be impacted. In FY 2003, when funds were transferred from the Groundwater Protection Trust Fund to the General Fund, funding was reduced to the Leopold Center by \$1.0 million. The Leopold Center began a fundraising campaign that year and personal donations were made to the Center with the assistance of the ISU Foundation. However, this decrease in funding forced the Center to suspend the 2003 Request for Proposals and no new grants were awarded that year.

STAFF CONTACT: Deb Kozel (515-281-16767) deb.kozel@legis.iowa.gov