

**2009 Competitive Grants**  
**Leopold Center for Sustainable Agriculture**  
**All Initiatives, Newly Funded and Renewed Grants**

**Marketing and Food Systems Initiative**

A Food Distribution Network for the Northern Iowa Food and Farm Partnership, \$24,525, 1 year, Andrea Geary, Center for Energy and Environmental Education, University of Northern Iowa [M2009-19] NORTHEAST IOWA

Accelerating Latino Leadership in Educational Initiatives for Entrepreneurial and Ecological Farming: Building a Culturally-Responsive Community of Practice, \$38,637 over 2 years, Katherine Richardson Bruna, ISU Multicultural and International Curriculum Studies [M2009-27] MARSHALL COUNTY

An Automated Mechanical Intra-row Weed Removal System for Vegetable Crops, \$54,666 over 2 years, Lie Tang, ISU Agriculture and Biosystems Engineering [M2009-23] STATEWIDE

Building Student Awareness and Involvement in the Farm to ISU Program, \$5,468, 1 year, Nancy Levandowski, ISU Dining Services [M2009-14] STATEWIDE

Cultivating the Agrarian Dream: Aspiring Agri-Entrepreneurs Helping One Another Choose Their Path, \$10,548 over 2 years, Paul Brown, ISU Agriculture and Natural Resources Extension [M2009-24] STATEWIDE

Developing and Implementing a Strategic Plan for Farm-to-School Programs in Northeast Iowa, \$30,000 over 2 years, Brenda Ranum ISU Extension Winneshiek County [M2009-04] NORTHEAST IOWA

Developing Production, Processing and Marketing of Aronia Berries on Small Family Farms in Southeast Iowa, \$25,647 over 2 years, Neric Smith, ISU Extension Jefferson County [M2009-05] SOUTHEAST IOWA

Enhancing Value and Marketing Options for Pawpaw (*Asimina triloba*) by Developing Pulp Separation and Preservation Techniques, \$23,938 over 2 years, Patrick O'Malley, Iowa State University Extension [M2009-20] STATEWIDE

Experiential Educational Engagement with Working Groups and Communities of Practice, \$17,456, 1 year, Betty Wells, ISU Sociology [M2009-18] STATEWIDE

Feasibility Study for the Creation of a Meat Processing Training Program in Iowa through the Community Colleges, \$20,000, 1 year, Gary Sandholm, Webster City Area Development [M2009-28] STATEWIDE

Growing Up Local: A Value Chain Analysis of Local Produce in Iowa, \$59,093 over 2 years, Brian Mennecke, ISU Logistics Operations and Management Information Systems [M2009-11] STATEWIDE

High-Tunnel Resource Manual and Producer Resource Kit Providing the Tools for Profitability, \$38,150 over 2 years, Ray Hansen, Iowa State University Value Added Agriculture Extension [M2009-16] STATEWIDE

Life Cycle Assessment of Confinement and Pasture-based Dairying in Iowa: Impacts and Options for Mitigation, \$4,500, 1 year, Mike Duffy, ISU Economics [M2009-12] STATEWIDE

Pottawattamie County Farm to Fork (Phase III), \$44,900 over 2 years, Shirley Frederiksen and Melvyn Houser, Golden Hills RC&D [M2009-02] POTTAWATTAMIE

Research and Assistance in Support of the Foodsheds in the Upper Midwest Initiative to Measure the Economic Impacts of Increased Local Food Production and Consumption, \$9,000, 1 year, David Swenson, ISU Economics [M2009-07] STATEWIDE

Routing Foods into Southeast Iowa, \$3,595, 1 year, Elizabeth Humble and Detra Dettmann, Pathfinders RC&D [M2009-10] SOUTHEAST IOWA

**The Actual Cost of Food Systems on Roadway Infrastructure**, \$24,923, 1 year, Omar Smadi, ISU Center for Transportation Research and Education [M2009-15] STATEWIDE

**Update of the Iowa Produce Market Calculator Web Site**, \$24,837, 1 year, Shashi Nambisan, ISU Center for Transportation Research and Education [M2009-01] STATEWIDE

**RENEWED: Adding a New Generation to Iowa's Sustainable Farms**, \$25,000 for year 2 of 2 (\$50,000 total) Teresa Ophem, Practical Farmers of Iowa [M2008-15] STATEWIDE

**RENEWED: Establishing an Iowa Microenterprise Foundation**, \$10,000 for year 2 of 2 (\$20,000 total), Mark A Edelman, ISU Community Vitality Center; and Ron Prescott, Iowa Microloan Program [M2008-28] STATEWIDE

**RENEWED: Expanding Business Skills for Specialty Growers in Iowa**, \$11,370 for year 2 of 2 (\$27,580 total), Sherry Shafer, Mid-Iowa Small Business Development Center, and Penny Brown Huber, Grow Your Small Market Farm Business Planning Program [M2008-09] STATEWIDE

**RENEWED: Latino Farmers and Local Multicultural Food and Marketing Systems**, \$20,883 for year 2 of 2 (\$61,763 total), Jan L. Flora, North Central Regional Center for Rural Development [M2008-27] MARSHALL AND CRAWFORD COUNTIES

**RENEWED: New Champions Expanded Scope: Developing an Action Plan for Building an Expanded Regional Food Economy in Black Hawk and Surrounding Counties**, \$15,000 for year 3 of 3 (\$59,500 total), Kamyar Enshayan, Center for Energy and Environmental Education, University of Northern Iowa, Cedar Falls [M2007-07] BLACK HAWK AND SURROUNDING COUNTIES

**RENEWED: Pottawattamie County Farm to Fork**, \$6,000 for year 2 of 2 (\$12,000 total), Barry Deuel, Golden Hills RC&D [M2008-08] POTTAWATTAMIE COUNTY

**RENEWED: Producer Machinery and Labor Sharing Arrangements Workshops**, \$15,750 for year 2 of 2 (\$30,954 total), Roger Ginder, ISU Economics [M2008-02] STATEWIDE

### Ecological Systems Initiative

**Assessment of Woody Biomass as a Niche Feedstock for Biobased Products in Iowa**, \$73,664 over 2 years, John Tyndall, ISU Natural Resource Ecology and Management [E2009-26] LUCAS COUNTY

**Corn Silage Test Plot to Increase Profitability for Dairy Farmers and Reduce Winter Wind & Water Erosion**, \$8,000 over 2 years, Dale Thoreson, ISU Extension; and Kelli Boylen, Northeast Iowa Dairy Foundation, Calmar [E2009-02] WINNISHIEK COUNTY

**Evaluating Canola (*Brassica napus*) as an Alternative Oilseed Crop and Enhancing Winter Cover in Iowa**, \$88,684 over 3 years, Mary Wiedenhoeft and Stefans Gailans, ISU Agronomy [E2009-21] GUTHRIE, O'BRIEN, CHEROKEE COUNTIES

**Evaluating Denitrifying Bioreactors for Edge-of-Field Nitrogen Management in Iowa's Tile-Drained Landscapes**, \$55,000 over 2 years, Alok Bhandari, ISU Agricultural and Biosystems Engineering [E2009-11] STORY, GREEN COUNTIES

**Feasibility of Unheated Large Gutter-Connect Greenhouses for Iowa Winter Organic Vegetables**, \$13,750 over 2 years (pending), Steve McLaskey, Maharishi University of Management, Fairfield [E2009-24] JEFFERSON COUNTY

**Greenhorn Grazing: A Modular Pasture and Animal Management Curriculum for Beginning and Transitioning Graziers**, \$54,608 over 3 years, Byron Leu, ISU Extension [E2009-14] SOUTHERN COUNTIES

**Land Use Conversion to Perennial Vegetation: Quantifying Soil Water Regime and Aeration and the Implications for Enhancing Soil Resilience to Climate Change**, \$82,000 over 3 years (pending), Thomas J. Sauer, USDA National Soil Tilth Laboratory [E2009-18] STORY, BOONE COUNTIES

**Optimizing Buffer Strips for Improved Ecosystem Services**, \$76,505 over 3 years, Matt O'Neal, ISU Entomology and Lisa Schulte Moore, ISU Natural Resource Ecology and Management [E2009-09] POLK, SUTHERLAND, FLOYD, STORY COUNTIES

**Performance of Cropping Systems Designed to Reduce Nitrate Leaching into Shallow Municipal Well Aquifers**, \$50,000 over 3 years (pending) Robb DeHaan, Dordt College [E2009-22] SIOUX COUNTY

**Quantifying the Effect of Perennial Vegetation on Soil and Water Quality**, \$125,436 over 3 years, Thomas Isenhardt, ISU Natural Resource Ecology and Management [E2009-16] HAMILTON, STORY COUNTIES

**Site Specific Implementation of Practices that Alter the Spatial/temporal Distribution of Grazing Cattle to Improve Water Quality of Pasture Streams in the Rathbun Lake Watershed**, \$60,894 over 2 years, Jim Russell, ISU Animal Science [E2009-08] LUCAS, WAYNE, CLARK COUNTIES

**RENEWED: Agronomic, Ecological, and Economic Comparisons of Conventional and Low-External-Input Cropping Systems**, \$39,000 for year 3 of 3 (\$118,262 total), Matt Liebman, ISU Agronomy [E2007-09] STORY COUNTY

**RENEWED: Agronomic, Environmental and Economic Performance of Alternative Biomass Cropping Systems**, \$23,785 for year 2 of 3 (\$91,153 total), Lisa Schulte, ISU Natural Resource Ecology and Management, Ken Moore, ISU Agronomy, Rick Hall, ISU Natural Resource Ecology and Management, Arne Hallam, ISU Economics, Matt Helmers, ISU Agricultural and Biosystems Engineering [E2008-24] BOONE, STORY COUNTIES

**ACTIVE: Development and Implementation of Low Input Delivery Systems for Ethanol Coproducts in Forage Based Beef Systems**, (\$51,862 total), Daniel Loy, ISU Animal Science [E2006-12] LUCAS, UNION COUNTIES

**RENEWED: Energy Use and Nutrient Cycling in Pig Production Systems**, \$11,709 for year 2 of 2 (\$20,330 total), Mark Honeyman, ISU Animal Science, Peter Lammers, ISU Sustainable Agriculture [E2008-03] STORY COUNTY

**RENEWED: Grazing Compatibility in and for Future Years**, \$12,451 for year 4 of 5 (\$53,095 total), Chris Nelson, Southern Iowa Forage and Livestock Committee [E2006-01] ADAMS COUNTY

**RENEWED: Grazing Prairie: Improving Species Diversity while Maintaining Cattle and Goat Productivity and Resting Home Pastures**, \$15,680 for year 2 of 3 (\$55,659 total), Doran Ryan, Iowa Heartland RC&D, and Loren Lown, Polk County Conservation Board [E2008-05] RINGGOLD COUNTY

**EXTENDED: Optimizing Legume Establishment in Winter Small Grains**, (\$54,770 total), Kendall Lamkey, ISU Agronomy, Jeremy Singer, Soil Tilth Lab [E2006-10]

**EXTENDED: Participatory Ecology for 'Agriculture of the Middle': Developing Tools and Partnerships to Bridge Gaps among Science, People and Policy in Landscape Change**, (\$54,575 total), Lisa Schulte, ISU Natural Resource Ecology and Management [E2006-20] STORY, BOONE COUNTIES

**RENEWED: Providing Shaded Pasture with Perennial Biomass Energy Plantings**, \$2,386 for year 2 of 3 (\$8,060 total), Richard Hall, ISU Natural Resource Ecology and Management [E2008-01] POLK COUNTY

**RENEWED: Reducing Pesticide Use in Iowa Vineyards: Alternatives to Herbicides for Vineyard Weed Management**, \$12,121 for year 2 of 2 (\$25,776 total), Gail Nonnecke and Domoto, ISU Horticulture; Thomas Loynachan, ISU Agronomy [E2008-18] STORY COUNTY

**RENEWED: Screening Winter Triticale Cultivars and Breeding Lines for Forage and Biomass Production**, \$25,127 for year 3 of 3 (\$75,227 total), Emily Heaton, ISU Agronomy [E2007-15] CHICKASAW COUNTY

**ACTIVE: Soil Moisture Dynamics and Plant Transpiration under Contrasting Annual-Perennial Cover Types**, (\$77,770 total), Matt Helmers, ISU Agricultural and Biosystems Engineering, Heidi Asbjornsen, ISU Natural Resource Ecology and Management, Amy Kaleita, ISU Agricultural and Biosystems Engineering [E2008-17] STORY COUNTY

**EXTENDED: The Landowners' Decision: Grazing and Fire as a Management Tool on Iowa Grasslands**, (\$56,734 total), Lois Wright Morton, ISU Agriculture and Life Sciences [E2007-05] RINGGOLD, GUTHRIE, CARROLL COUNTIES

**ACTIVE: Variations in Water and Nutrient Cycling and Soil Properties during Agricultural Landscape Restoration, year 5 of 5 (\$125,000 total), Heidi Asbjornsen, ISU Natural Resource Ecology and Management [E2004-14] BOONE, STORY COUNTIES**

### Policy Initiative

**Iowa Farmers and Credit, Crop Insurance and Sustainable Agriculture, \$70,000 over 2 years, Chris Peterson, Iowa Farmers Union [P2009-07] STATEWIDE**

**Shaping a Functional and Sustainable Biofuels Industry through Bridging Industrial Needs with Farmer Production Capabilities, \$24,561, 1 year, Richard M. Cruse, ISU Agronomy [P2009-06] STATEWIDE**

**RENEWED: State Policy Alternatives for Biofuels Industry Support of Sustainable Production of Biofuels Feedstocks, \$20,000 for year 2 of 2 (\$40,000 total), Duane Sand, Iowa Natural Heritage Foundation [P2008-03] STATEWIDE**

### Cross-Initiative Grants

**Meeting On-farm Energy Needs through Conservation, Efficiency and Renewable Energy, \$80,000 over 2 years, Kamyar Enshayan, Center for Energy and Environmental Education, University of Northern Iowa [XP2009-01] STATEWIDE**

**On-Line Learning: Using Webinars to Teach about Succession and Enterprise Development Issues, \$25,500, 1 year, Teresa Opheim, Practical Farmers of Iowa; and Mike Duffy, ISU Beginning Farmer Center [XP2009-02] STATEWIDE**

**RENEWED: Sustainable Economic Development through Organic and Grazing Dairy Farm Establishment and Transition, \$9,808 for year 3 of 3 (\$43,075 total), Larry Tranel, ISU Extension [D2007-01] NORTHEAST IOWA**

**RENEWED: Grass-based Livestock Working Group (initiated May 1, 2008), \$57,250 for year 1 of 2 (\$117,250 total), Paul Brown and Andy Larson, ISU Extension [G2008-01] STATEWIDE**

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For more information about marketing projects, contact Leopold Center Marketing and Food Systems Initiative leader Rich Pirog, (515) 294-1854, [rspirog@iastate.edu](mailto:rspirog@iastate.edu); for ecology projects, contact Leopold Center Ecological Systems Initiative leader Jeri Neal, (515) 294-5610, [wink@iastate.edu](mailto:wink@iastate.edu); or for policy projects, contact Leopold Center Director Jerry DeWitt, (515) 294-3711, [jdewitt@iastate.edu](mailto:jdewitt@iastate.edu).

A description of these grants is on initiative pages at: [www.leopold.iastate.edu](http://www.leopold.iastate.edu)

\* ALL CAPS after project ID number shows the Iowa region where primary work will be done. 5-14-09

