

**Leopold Center for Sustainable Agriculture
2012 New Competitive Grant Projects – All Program Areas**

ECOLOGY INITIATIVE

The complex role of tall fescue in grassland ecology, \$86,333 over 3 years, Diane Debinski, ISU Ecology, Evolution and Organismal Biology; Rebecca McCulley, University of Kentucky Plant & Soil Sciences; and Dave Engle and John Derek Scasta, Oklahoma State University Natural Resource Ecology & Management [E2012-01] RINGGOLD COUNTY

Implementing an ISU Extension Master Grazer Certification course, \$67,500 over 3 years, Byron Leu, ISU Extension; and Mary Drewnoski, ISU Animal Science [E2012-16] STORY COUNTY

Investigation of bacteria transport and resistance mechanisms and implications for water quality from confinement swine and beef grazing production systems in Iowa, \$162,100 over 3 years, Michelle Soupir, Matt Helmers and Ramesh Kanwar, ISU Agricultural and Biosystems Engineering; Michael Thompson and Antonio Mallarino, ISU Agronomy; and Laura Jarboe, ISU Chemical & Biological Engineering [E2012-05] FLOYD and STORY COUNTIES

Understanding soil organic matter change: Modeling root and soil interactions across agricultural landscapes, \$69,452 over 2 years, Cynthia Cambardella, USDA-ARS National Laboratory for Agriculture and the Environment; Todd Ontl and Lisa Schulte-Moore, ISU Natural Resource Ecology and Management; and Randall Kolka, USDA Forest Service-Northern Research Station [E2012-11] BOONE and STORY COUNTIES

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, \$142,848 over 3 years, James Russell, ISU Animal Science; Wendy Powers, Michigan State University; and Tom Isenhardt, ISU Natural Resource Ecology and Management [E2012-08] LUCAS COUNTY

Winter rye cover crop effect on corn seedling pathogens, \$87,156 over 3 years, Tom Kaspar and Tom Moorman, USDA-ARS National Laboratory for Agriculture and the Environment [E2012-03] STORY COUNTY

MARKETING AND FOOD SYSTEMS INITIATIVE

Convening the Regional Food Systems Working Group (RFSWG), \$42,700 over 2 years, Andrea Geary, University of Northern Iowa; Detra Dettman, Kamyar Enshayan, Jason Grimm, Melvin Houser, Laura Kuennen, Jan Libbey, Brenda Ranum and Teresa Wiemerslage, RFSWG Steering Committee [M2012-08] STATEWIDE

Establishing shared-use processing facilities at three possible locations in central and south central Iowa, \$21,000 over 1 year, Jack Porter, Neighborhood Investment Corporation; and Gary Huber, Iowa Food Cooperative [M2012-06] POLK and LUCAS COUNTY

Field evaluation and system improvement of a semi-automated mechanical intra-row weeder for vegetable crops, \$35,461 over 1 year, Lie Tang, ISU Agricultural and Biosystems Engineering; and Kathleen Delate, ISU Horticulture and Agronomy [M2012-24] STORY COUNTY

Improving profitability for small and very small meat processors in Iowa, \$22,788 over 2 years, Nick McCann, Winneshiek County Extension [M2012-16] STATEWIDE

Machinery management for small- and medium-sized horticultural farms, \$46,311 over 2 years, Georgeanne Artz and William Edwards, ISU Economics; and Darren Jarboe, Center for Crops Utilization Research and BioCentury Research Farm [M2012-11] STATEWIDE

Micro-farming: Reducing rural and urban food deserts through job training, \$16,994 over 1 year, Matt Mancuso, Iowa Western Community College [M2012-13] CASS, FREMONT, HARRISON, MILLS, PAGE, POTTAWATTAMIE and SHELBY COUNTIES

Procurement tools to develop sustainable local food purchasing models for farm to school chapters, \$36,000 over 2 years, Jason Grimm, Iowa Valley RC&D [M2012-07] STATEWIDE

Transitioning farmers to produce for wholesale markets, \$36,850 over 2 years, Johnice Cross, GROWN Locally [M2012-12] NORTHEAST IOWA

POLICY INITIATIVE

The extent and impact of trust ownership on the sustainability and resiliency of Iowa's agricultural landscape, \$43,326 over 2 years, Edward Cox, Drake University Agricultural Law Center; and Michael Duffy, ISU Beginning Farmer Center [P2012-01] STATEWIDE

Investigating opportunities for enhancing farmer adoption of strategically targeted prairie strips in Iowa, \$15,000 for 1 year (planning grant), J. Gordon Arbuckle, ISU Sociology; John Tyndall and Tricia Knoot, ISU Natural Resource Ecology and Management [P2012-08P] JASPER COUNTY

Sustainable Agricultural Land Tenure (SALT) Initiative II, \$47,024 for 1 year, Edward Cox, Drake University Agricultural Law Center [P2012-04] STATEWIDE

CROSS-CUTTING INITIATIVE

Attracting pollinators and natural enemies to add value to Iowa agriculture, \$87,473 over 3 years, Matthew E. O'Neal and Donald Lewis, ISU Entomology; Mark Gleason, ISU Plant Pathology and Microbiology; Cindy Haynes, ISU Horticulture and Agriculture Education; Andy Joseph, Iowa Department of Agriculture and Land Stewardship; Mike Duffy, ISU Economics [XP2012-07] STATEWIDE

Demonstrating farrowing alternatives for small farms: Insulated tents for sows and pigs, \$59,974 over 3 years, Jay Harmon, ISU Agricultural and Biosystems Engineering [XP2012-04] BUENA VISTA COUNTY

Farm metered energy analyses: Getting baseline data, ground-truthing changes, \$50,000 over 2 years, Teresa Ophem, Practical Farmers of Iowa [XP2012-06] STATEWIDE

The University of Iowa Biomass Partnership Project, \$25,000 for 1 year, Ferman Milster, Facilities Management, University of Iowa; Tricia Knoot, John Tyndall, Jesse Randall and Richard Hall, Iowa State University; Ronald Zalesny, Jr., Grant Domke and Mark Nelson, USDA Forest Service-Northern Research Station; Nathan Young, Iowa Flood Center; and Daryl Smith, Tallgrass Prairie Center and UNI Biology [XP2012-05] JOHNSON COUNTY

For more information about competitive grant projects, contact the initiative leader: Jeri Neal, Ecology Initiative, (515) 294-5610, wink@iastate.edu; Craig Chase, Marketing and Food Systems Initiative, (515) 294-1854, cchase@iastate.edu; Mary Adams, Policy Initiative, (515) 294-5832, madams@iastate.edu; Malcolm Robertson, Cross-Cutting Initiative, (515) 294-1166, malcolmr@iastate.edu

Descriptions of these grants are available on the Leopold Center website at: www.leopold.iastate.edu/grants/current

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