



Tallgrass Prairie

CENTER

Restoring a National Treasure



Mission: The Tallgrass Prairie Center develops research, techniques, education and source identified seed for restoration and preservation of prairie vegetation in rights-of-way and other lands.

Fall 2007

Researching the use of prairie hay to generate electricity

In July, the Iowa Legislature awarded the Tallgrass Prairie Center \$330,000.00 to conduct research on the feasibility of utilizing prairie hay for electrical generation. The demand on corn for ethanol production has raised concerns that land owners may put Conservation Reserve Program (CRP) and other marginal land back into row crop production resulting in increased soil erosion, greater runoff of pesticides and fertilizers, and reduced habitat for wildlife. According to Center director, Daryl Smith, planting these sensitive lands into perennial prairie grasses and wildflowers will provide the farmer with an alternative market commodity-prairie hay while maintaining the wildlife and environmental benefits.



The Tallgrass Prairie Center has partnered in this project with Cedar Falls Utilities, Iowa State University, and Black Hawk County Conservation Board. This spring, 100 acres will be planted to various mixtures of prairie species to determine which mixtures produce the most sustainable prairie hay. "This is a five year research project. It takes about three years before the perennial prairie plants mature and can be harvested and we need at least two years of harvest data to interpret the results" says Dave Williams, Project Manager. Cedar Falls Utilities will test burn the prairie hay.

For more information on this project contact Dave Williams (319) 273-7957 or dave.williams@uni.edu

Tallgrass Prairie Center Open House

The 1st Annual Tallgrass Prairie Center Open House was held on Wednesday September 19, 2007. Seed harvesting and cleaning demonstrations, plot tours, displays of prescribed fire equipment, and print and media publications provided opportunities for visitors to get a taste of the broad-based activities at the Center. Participants also had a chance



to converse with staff and student employees about a wide variety of topics, from reconstructing prairies to current research using prairie biomass for electrical generation. All in all the open house was a great success. Thanks to all who came to see us, to Center staff and to student employees, Chris Barber, Jenny Wahl, Molly Schlubohm, Justin Huisman.

Aimed primarily at inviting local citizens and the University of Northern Iowa community to get acquainted with the Center, approximately 120 people turned out for this inaugural event. We hope to advertise the event more broadly next year.

Ryan Welch- Outreach Coordinator

Roadside Revival in Independence

September 13 and 14, over 125 attendees gathered in Independence for Iowa's main roadside event. This year's conference focused on planting native vegetation in road right-of-way and the measures necessary for working in this challenging environment. Evelyn O'Loughlin of Iowa DOT spoke on project design. Doug Sheeley of Polk County Conservation addressed seedbed preparation and seed installation. Brian Wilsey of Iowa State U. outlined his native cover crop research. Paul Bockenstedt of Bonestroo, Inc, St. Paul, MN, described a method for evaluating the success of young plantings, and Jack Pizzo of Pizzo & Associates, Chicago, IL, emphasized the importance of prescribed burn management.

The conference is an annual event organized by the Integrated Roadside Vegetation Management program at the University of Northern Iowa with funding from Iowa DOT's Living Roadway Trust Fund. This year's conference host was the Buchanan County IRVM program. Anyone looking for a place to hold an event would do well to consider the brand new conference facility at the Heartland Agribition Center in Independence, Iowa. Next year's roadside conference will be September 25 & 26 in Carroll, Iowa hosted by Sac County IRVM.



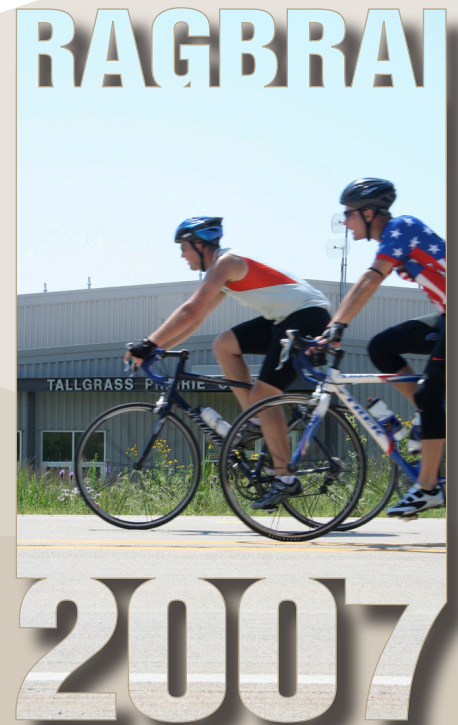
Jon Steege of Fayette County leads the roadside manager discussion panel at this year's Roadside Conference. Seated left to right- Ole Skaar, Iowa Department of Transportation, Linn Reece – Hardin County, Andy Friederichsen – Clinton County, Ben Hoskinson – Mahaska County.

The Tallgrass Prairie Center's Guide to Prairie Restoration in the Upper Midwest

Beginning in January of 2005, staff members Dave Williams, Greg Houseal, Kirk Henderson and center director Daryl Smith have worked diligently researching and writing a comprehensive tallgrass prairie restoration technical manual. After two plus years of careful review, much discussion and numerous revisions, principal writing is now complete and the project will soon enter the copy-editing phase. University of Iowa Press will publish and distribute the manual; the anticipated release date is fall of 2008.

This extensive project is an opportunity for the authors to share experience and acquired information with those restoring tallgrass prairie. It encompasses both types of prairie restoration: (1) prairie reconstruction of sites where prairie species no longer exist, and (2) prairie remnant restoration of sites containing relict prairie species. The authors hope the manual, which contains over one hundred original photographs and illustrations, will become a useful resource for all aspects of prairie restorations, conservation plantings, urban landscapes, schoolyard prairie laboratories and pasture renovations. It is intended for use by land owners, conservation agency personnel, ecosystem managers, native seeding contractors, prairie enthusiasts, teachers, roadside managers or anyone interested in prairie restoration.

The focus of the manual is restoration of tallgrass prairie in the Upper Midwest Region including Iowa, northern Illinois, southwestern Wisconsin, southwestern Minnesota, eastern South Dakota, eastern Nebraska, northwestern Missouri and northeastern Kansas.



Ragbrai riders zipped by the Tallgrass Prairie Center on W. 27th St. all day on July 26th. A web cam was posted for the world to see the masses of bikers ride by our front yard.

Fall Seminar Series

The Center is sponsoring a series of three guest seminars related to natural resource management and research. All seminars will be at the Tallgrass Prairie Center on the University of Northern Iowa campus, and begin at 3:30 PM, refreshments provided. We encourage all who are interested to come, enjoy refreshments, and participate in this educational and informative opportunity.

- October 10th: Dr. David Engle, Iowa State University. Grassland Heterogeneity: Use of Patch-burn Grazing as a Management Tool. A discussion of research related to this techniques and its application to Iowa.
- October 31st: Wayne Petersen, USDA-NRCS Iowa City. Mitigating Surface-Dominated Hydrology with Native Species in Urban Landscapes. Learn how historic hydrology of native ecosystems has been altered and techniques for improving water quality.
- November 28th Cindy Cambardella, National Soil Tilth Lab. Soil and Vegetation Linkages in Perennial Systems and Impacts on Ecosystem Services Such as Carbon Sequestration and Nutrient Cycling. An overview of work in perennial landscapes, including but not limited to prairie reconstruction, savanna restoration, shelter belts, and riparian buffers.

Contact Ryan Welch, Outreach Coordinator, 319-273-3828, rwelch@uni.edu for more information.



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Ecological Restoration Interns 'Brush' with Success!

Chris Barber (Senior, Biology) and Jennifer Wahl (May 07 B.S. Earth Science) were selected from among 6 candidates to be the Ecological Restoration Interns at the Center this past summer. The internship is designed to provide career-building experiences and knowledge in ecological restoration and natural areas management.

In addition to providing routine maintenance of seed production plots, Chris and Jenny had ample opportunities to work on state, county, and private natural areas in northeast Iowa. They assisted with local prairie seedings, learned how to design seed mixes and calibrate a native seed drill. They learned proper operation and safety of chainsaws and brush-cutting equipment. They removed brush and invasive species on several remnant preserves, including Clay Prairie State Preserve (UNI), Blackman Prairie (DNR), both in Butler County; Cedar Hills Sand Prairie (TNC) and Cedar Bend Savanna (BHCCB) in Black Hawk County; at Daubendieck Prairie (privately leased) in Chickasaw County; and assisted with wild parsnip control at Breen Prairie (INHF), Jones County. They also provided critical restoration management on UNI's 150-acre Biological Preserves System of prairie, savanna, riparian and upland forest systems, including implementation of a preserve-wide low-impact trail system. All totaled, over 1240 person hours were contributed to management by interns, associated staff and student employees during the 12-week internship period.

The interns also participated in a two-day Native Plant ID workshop at the Center, a tour of Hamm Marsh in Buchanan County with DNR Biologist John Pearson. Tuition for a one-hour credit, one week Prairie Ecology course with Director Daryl Smith at Lakeside Lab was also provided. Much thanks and appreciation to Chris and Jenny for their hard work and dedication to natural area preservation this past summer.

Greg Houseal- Program Manager



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