



Tallgrass Prairie

CENTER

Restoring a National Treasure



Mission: The Tallgrass Prairie Center restores native vegetation for the benefit of society and environment through research, education, and technology.

Natural Landscaping at UNI

Spring 2011

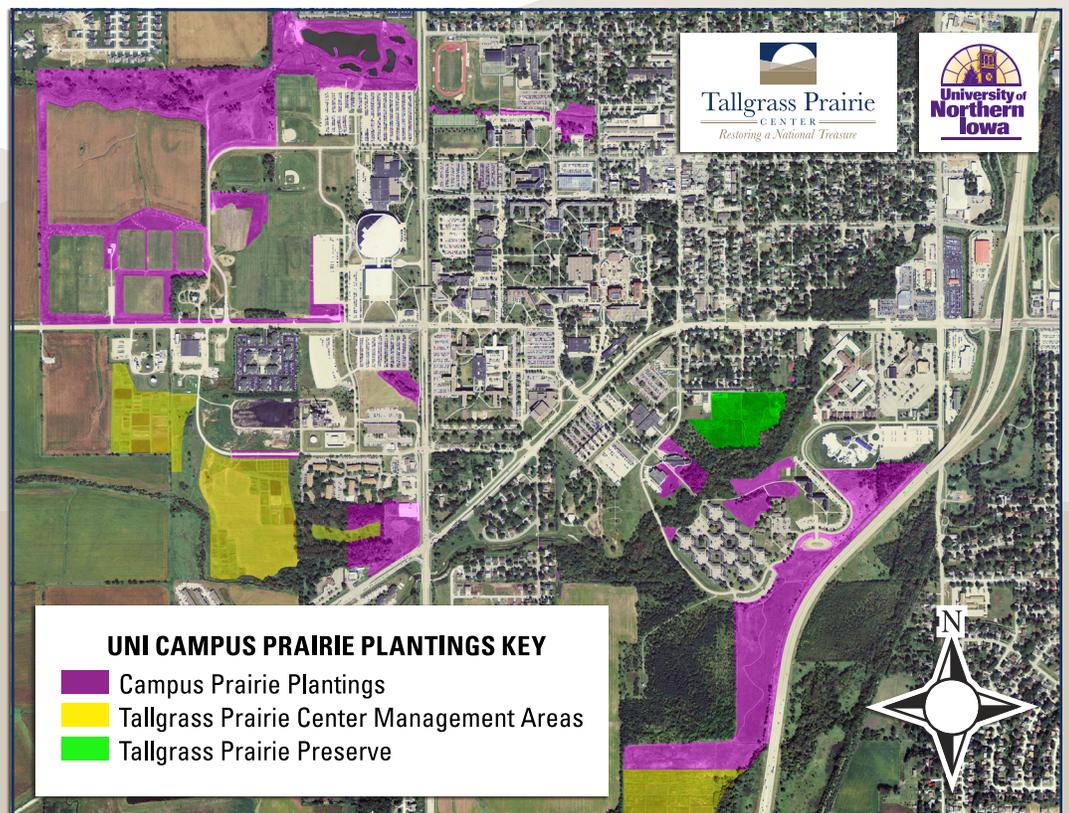
By: Dave Williams

It's been thirty-eight years since UNI professor Dr. Daryl Smith planted the first prairie on the campus at the University of Northern Iowa. "Planting prairie was experimental back in 1973. The new prairie planting was initially more weedy than anticipated and my colleagues called it Smith's foxtail folly" said Smith reminiscing about the campus prairie planting. "It was quite gratifying to see many of those same colleagues use the campus prairie as an outdoor classroom for students and research".

The second wave of planting prairie on campus occurred in the early 1990s with the creation of the Iowa Ecotype Project (now 'Natural Selections'). Small seed production plots were planted at three locations on campus; near Roth Hall, behind the UNI Museum and adjacent to the observatory in the Upland Forest Preserve. The Tallgrass Prairie Center has had as much as 15 acres of native seed increase fields in production on west campus.

The third wave of campus plantings occurred in 2000 and 2001 when fuel prices began climbing and UNI experienced significant budget cuts. Recognizing the potential of utilizing prairie on campus, UNI's landscape architect Paul Meyermann began to experiment with native landscaping to replace turfgrass areas that required high maintenance and were expensive to manage. Meyermann partnered with UNI's Tallgrass Prairie Center (TPC) to plant and manage a variety of prairie plantings on campus in subsequent years, ranging from decorative plantings to multi-acre prairie reconstructions. Since 2001, this partnership has resulted in over 100 acres of campus prairie plantings. According to Meyermann, "Strategically utilizing prairie as part of our overall land management

strategy has allowed us to accommodate departmental budget reductions while maintaining landscape standards on the central campus grounds." Planting prairie on campus is still evolving. The next phase of UNI's campus prairie plantings is to train the UNI grounds crew in prairie management techniques, such as, site preparation, seeding, weed control, and prescribed burning. "Prairies require a different kind of management than typical Kentucky bluegrass landscaping", said TPC Restoration and Research Program Manager Dave Williams. "Teaching the grounds crew how to plant and manage prairie will ensure that campus prairie plantings will continue well into the future. We've only touched the tip of the iceberg- with over 900 acres on UNI's campus there is a lot of opportunity to plant prairie" said Williams.



For more information contact Dave Williams at 319.273.7957, dave.williams@uni.edu.

Map of the Mid-Continent Tallgrass Prairie

By: Daryl Smith

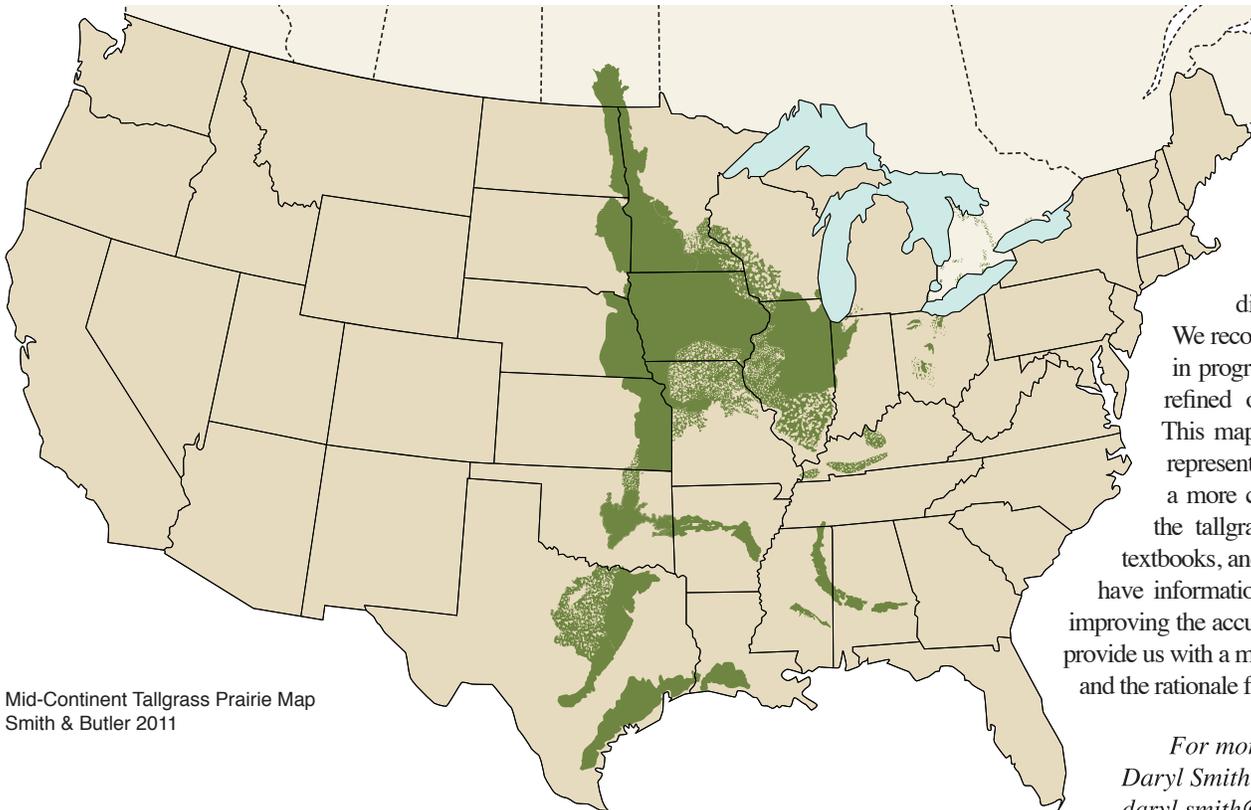
John Madson describes the extent of the tallgrass prairie in *Where the Sky Began*. He suggests that westward moving settlers first encountered the tallgrass prairie about 20 miles west of the Wabash River as they emerged from the forested floodplain, stepped “through a screen of sumac and wild plum”, and stood “blinking in a land that blazed with light and space”. Although they had encountered prairie outliers further east in Ohio and Kentucky, this was, in his words, the “real beginning” of tallgrass prairie “...that covered northwestern Indiana, the northern two thirds of Illinois, almost all of Iowa, reaching up into southern and western Minnesota to the broad grasslands of Manitoba, and over into the eastern portions of the Dakotas and Nebraska, with a long tongue extending down through western Missouri, eastern Kansas into eastern Oklahoma, and on into the Cross Timbers Country (and the blackland prairie) of Texas”.

John’s pen sketches a workable general map of the mid-continent tallgrass prairie. However, maps depicting the tallgrass prairie vary considerably and misplaced prairie areas and gaps become apparent upon closer state-by-state examination of these maps. Inconsistencies and discrepancies are more obvious at the margins of the tallgrass prairie. Undoubtedly, “the devil is in the detail,” even though it is difficult to

provide much detail when scaling the tallgrass prairie region to fit a relatively small map of North America.

Some of the variations from map to map are the result of differences in opinion as to what constitutes tallgrass prairie. Many mapmakers include the Sandhills of Nebraska as tallgrass prairie while others delineate it as a separate unique prairie system. Occasionally a map is quite provincial, i.e. terminating the tallgrass at the border of the United States and Canada while other maps depict a rather extensive prairie region extending up into Manitoba and Saskatchewan. More recently, the coastal prairie of Louisiana and Texas has been included as a part of the tallgrass prairie. Outliers in Ohio and Kentucky are usually included, but the more southern prairie relicts described by Reed Noss at the 22nd North American Prairie Conference and the black belt prairie of Mississippi and Alabama are often omitted.

For the past several months, we have been refining a map of tallgrass prairie to include prairie outliers and interfaces with other ecosystems to produce a more representative general map of the mid-continent tallgrass prairie as it likely existed just prior to Euro-American settlement. We have used state maps of original vegetation and EPA ecoregions (Levels III and IV) to better delineate the tallgrass prairie on our map. We



Mid-Continent Tallgrass Prairie Map
Smith & Butler 2011

have also sought assistance from prairie specialists within particular regions. We have marked regions identified as a mosaic of savanna and prairie with dots to indicate discontinuous prairie.

We recognize that this is a work in progress that will need to be refined on a continuing basis. This map should be useful as a representative general map for a more consistent illustration of the tallgrass prairie in websites, textbooks, and other writings. If you have information that will assist us in improving the accuracy of the map, please provide us with a map of proposed changes and the rationale for them.

*For more information contact
Daryl Smith at 319.273.2238,
daryl.smith@uni.edu.*

IOWA PRAIRIE CONFERENCE

The biennial Iowa Prairie Conference will be held at Iowa Lakes Community College in Estherville, IA on July 28-29, from Thursday noon through Friday. Contact: Gary Phillips <gphillips@ilcc.cc.ia.us> for more information

Reaching Out

By: Ryan Welch

Part of the Tallgrass Prairie Center's mission is to educate the public about the benefits of restoring native vegetation for environmental sustainability, as habitat, as well as for its unique aesthetics qualities. Our audience is as diverse as the plants in the prairie itself, and we employ a variety of educational and outreach tools toward accomplishing this goal. Recently our display and media were presented and distributed at three very different events throughout the state, including the Iowa Association of County Conservation Boards 'Winterfest', the Iowa Prairie Network's Central Iowa Meeting, and the statewide Iowa Prescribed Burn Conference held at Camp Dodge. Coming up this spring are two Earth Day events, and a prairie event at a museum in Clarion, IA. The Center will also be involved with a field day at UNI for one-thousand 9th graders hosted by the Cedar Valley Sustainable and Environmental Educators.

Another approach to outreach are the Natural Resource Research and Management Seminar series offered each semester, which to date has featured 32 different presenters on a broad range of topics related to natural resources over the past four years. Add to this a variety of tours we offer of our facilities and campus plantings to people of all ages throughout the year. The Center has offered workshops on native seedling identification, seed cleaning, prairie restoration, fire management, and plant propagation to the general public, as well as county, state, and federal agency personnel. We are always on the lookout for new events and new groups with which to share our goal of 'Restoring a National Treasure'. For more information on upcoming events follow us on Facebook (Tallgrass Prairie Center) or if you have an event you would like us to participate in email: Ryan Welch (rwelch@uni.edu) Outreach Coordinator.



<http://www.plantiowanatives.com/Home.htm>

PLANT IOWA NATIVES

Plant Iowa Natives

**Interested in planting a prairie?
Or perhaps you're restoring a remnant savanna, prairie or wetland?**

Let www.plantiowanatives.com help you find the information, resources, and service providers to make it happen. From backyard landscaping to landowner habitat restoration programs, whether starting from scratch or restoring remnants, it's a great place to start. Links to information on native plants, where to buy seeds and plants, tips on landscaping, and incentive programs for landowners. Also find links to educational resources and organizations. Perhaps best of all, find professional service providers for everything from site preparation and seeding/installation to restoration and management, including prescribed (Rx) fire! Check it out. And Plant Iowa Natives!

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Another Roadside Attraction: AFIRM Winter Meeting & REAP Day at the Capitol (and Weed Sociology 101)

By: Kirk Henderson

County roadside managers from across the state were in Des Moines on March 2nd for their annual Winter Meeting. Held in conjunction with the annual Weed Commissioners Conference, this meeting usually takes place at the Ames Quality Inn. Digression alert- Many roadside managers also serve as county weed commissioner, a position created to buffer county supervisors from angry landowners. It's a thankless job that mostly involves listening to complaints and delivering bad news, responsibilities relished only by those with personalities perverse in nature. Strangely, the WC job used to be 'awarded' to the friendliest of retired farmers, a tradition from bygone days when farmers knew weeds because they actually had some and when farmers knew the other landowners because they actually lived on the other farms.

This year's Winter Meeting was moved to Des Moines to take advantage of "REAP Day at the Capitol," scheduled by chance for the same day. REAP stands for Resource Enhancement And Protection and is a program through which the state provides funding for a variety of conservation programs. On REAP Day conservation groups, as members of the REAP Alliance, set up displays in the rotunda hoping to remind legislators of the importance of this program to our natural resources and constituents.

If REAP were fully funded at \$20 million, the Living Roadway Trust Fund's three percent slice of the REAP pie would equal \$600,000.00. The 32.5% portion of LRTF shared by counties each

year absolutely invigorates roadside management at the county level, if you can imagine such a thing. By funding native seed, specialized equipment, education and research, LRTF gives counties a chance to keep up with technology and provide better service while rewarding roadside manager ingenuity and creativity.

For the March 2nd meeting, 40 people squeezed into a second floor conference room generously provided at the Wallace Building, home to Iowa's Department of Natural Resources and Department of Agriculture and Land Stewardship, two of three major state agencies with which IRVM's interests are intermingled, the other and primary agency of course being Department of Transportation. Attendees included four students and instructor Terri Rogers of

the Natural Resources program at Hawkeye Community College.

The Wallace Building provided a welcome change of scenery and an easy walk to the Capitol Building. The morning included presentation of the noxious weed wish list survey, i.e. which weeds should be removed and which should be retained from the current noxious weed list? A small but knowledgeable sampling of seven roadside managers voted unanimously to remove eight bygone threats – field bindweed, hoary cress, horsenettle, quackgrass, buckhorn plantain, red sorrel, velvet leaf and wild mustard. This would make a good start to the necessary updating of Iowa's noxious weed law. After lunch the meeting adjourned to our beautifully ornate state capitol building in search of elected representatives.



Hawkeye Community College participants at REAP Day with their members of the House of Representatives. Kressig photo

For more information contact: Kirk Henderson at 319.273.2813, kirk.henderson@uni.edu.

Student Employee Profiles



Nick TeBockhorst
Major: Biology with an emphasis
in Plant Science
Graduation Date: Spring 2013

What do I like about working at the TPC:

I enjoy working here because it is a fun and laid back environment. It is also nice to learn in real life some of the stuff that I am taught in the classroom such as burning, planting, and maintaining a natural landscape. Because of the variety of tasks we do here, coming to work is like completely leaving campus and escaping all the stresses of being a college student.

Future plans:

I someday hope to get into the commercial greenhouse production business. I would really enjoy a job where I could be in a lab part of the time researching and developing plants as well as spend half of my time in the greenhouse watering and growing plants.



Kelly Martin
Major: Art Education
Graduation Date: Spring 2013

What do I like about working at the TPC:

I enjoy feeling like I am a part of something really important. The opportunity to be involved with research is crucial for the restoration and reconstruction of our state's natural heritage. I am proud to be a part of that and have the opportunity to express my love for the tallgrass prairie as a lab assistant at the TPC.

Future plans:

I will be graduating with a BA in Art Teaching, and while contributing to the education of the next generation of prairie enthusiasts, I will also be contributing to the ecological restoration of Iowa, particularly over the summers when I will be on break from my art educator duties. I intend to continue being an activist in sustaining the careers that people hold protecting our precious natural resources.