

Remarks at the Nine-Mile Prairie 25th Anniversary Celebration (10/16/09)

By Dave Wedin, School of Natural Resources, UNL and Director of Nine-Mile Prairie

History

To many of us, Nine-Mile Prairie (9MP) symbolizes the birthplace of prairie ecology. It was added to the National Register of Historic Places in 1986. The state historic marker celebrates the University of Nebraska (NU) scientist John Weaver, the “father of prairie ecology.” Looking east toward the capitol in downtown Lincoln, and west to the 230-acre native prairie, I feel a connection to three big names in the history of science at NU.

John Weaver grew up in Iowa and came to Nebraska as an undergraduate to study under the famous botanist Charles Bessey. Bessey was installed in the Nebraska Hall of Fame in June 2009, and his bust is now in the capitol. Bessey came to NU in 1885, and led it to early prominence as one of the great public universities in the country. He died in 1915.

Today, we’re also celebrating a century of grassland research at the University of Nebraska. John Weaver received his bachelor’s degree from NU in 1909, and went on to receive a master’s here. Was this piece of land already known at that time as a beautiful prairie that had escaped the plow? Did Weaver and Bessey ever come here in those years? We don’t know, but I like to think they did. From Nebraska, Weaver went to the University of Minnesota where he finished his Ph.D. under Frederick Clements in 1916. Of these three biologists – Bessey, Weaver and Clements – Clements is probably the most famous. He was a Lincoln kid who went to NU in the 1890s, got caught under Bessey’s spell, and continued on for his Ph.D. here. Clements’ Ph.D. laid out a theory and framework that dominated the field of ecology throughout the 20th century. Every ecology textbook written in the last 50 years spends at least a page on Frederick Clements and his theory of succession. NU and the University of Chicago are known as the two birthplaces of ecology in North America.

John Weaver returned to NU as an assistant professor in 1915 and spent his career here, retiring in 1952. He is known for three things: 1) his detailed study of roots and below-ground ecology; 2) laying the foundations of grassland and rangeland ecology; and 3) promoting and defending Clements’ ecological theories until his death in 1966.

One standard that scientists use to measure their impact is the Science Citation Index, a computerized database of the entire scientific literature since 1990. Weaver is still one of the most cited NU scientists in the *current* scientific literature -- half a century after his retirement! His papers and books have been cited over 2300 times by other scientists since 1990. That count only includes works on which he was the lead author, not his papers co-authored with 40+ graduate students. Few scientists leave that kind of legacy and ongoing impact in their discipline.

Although 9MP was privately owned, Weaver recognized it in the 1920s as a unique native prairie remnant that became a research site for him and his students. A key paper describing the site’s vegetation, soils and climate was published in 1930 in the journal *Ecology* by Weaver’s student T. Steiger.

After WWII, 9MP and the land around it was taken over by the U.S. Air Force as part of the Lincoln Air Base. Lincoln had a fully operational SAC nuclear air base from 1952 to 1966. The bomb bunkers north of 9MP (visible from the entrance) are a tangible legacy of this cold war history. It’s an interesting twist that 9MP would probably never have been preserved if it had not been part of a nuclear air base and subsequently Lincoln Airport Authority (LAA) property for 40 years.

The LAA acquired 9MP as well as Air Park from the U.S. government in the 1970s. Throughout the 50s, 60s and 70s, this area was managed with annual haying. Sometime in the 1970s, NU biologists and members of the local Wachiska Audubon Society started drawing attention to 9MP as an area important for both conservation and history. Biology professor A.T. Harrison and Audubon member Ernie Rousek were the leaders of that effort. On behalf of the Audubon Society, Ernie personally leased 9MP from the LAA for several years. They began an effort to purchase 230 acres of the best remaining prairie from the Airport Authority as a nature reserve. Documents from that time are available on our website (<http://snr.unl.edu/9mp>).

In 1981, a legislative act was passed by the Nebraska Unicameral with the sole purpose of encouraging the LAA to protect 9MP and transfer it to either a conservation group or NU. Under the leadership of then-Chancellor Martin Massengale, the NU Foundation purchased it in 1983. Much of the purchase price was donated by Mrs. Marguerite Hall in honor of her late husband, Neil W. Hall. This wonderful picture of Mrs. Hall in front of the podium today was taken when she was here at 9MP for the dedication ceremony 25 years ago. She has since passed away. A family member told me one regret Mrs. Hall had was that she never got to see a prescribed fire. My only thought is that when we do burns today, the plume of smoke goes very high... perhaps Mrs. Hall can see it from where she is now.

Over the last 25 years, 9MP has been managed by NU faculty with help from the Wachiska Audubon Society. It has never had a regular budget. Instead, it has been managed by the passion and commitment of dozens of people. At NU, those people included



Martin Massengale, Director of the Center for Grassland Studies, welcomes the crowd of prairie enthusiasts.

Photo by Brett Hampton



Steve Waller, Dean of the College of Agricultural Sciences and Natural Resources, talks about the importance of Nine-Mile Prairie to the University of Nebraska, the state and the country.

Photo by Brett Hampton

Robert Kaul, Jim Stubbendieck, Rob Masters, Rob Mitchell and Jim Locklear. From Wachiska Audubon, Ernie Rousek and Carol Closter have been tireless in helping the prairie. Sadly and tragically, two of the prairie's greatest friends have died in recent months. If you're a regular visitor to 9MP, you've seen the color photos in the wooden information kiosk. Those photos were taken by George Schade, who died in May 2009. George was an NU faculty member in mechanical engineering. In the kiosk over the years were visitor register books. Those books were made by Curt Twedt, who died in September 2009. The register books remind us of Curt's efforts on behalf of conservation and prairies during his career with the Nebraska Game and Parks Commission.

Three other points round out Nine-Mile Prairie's recent history. In 2001, a U.S. postage stamp featuring a photo of 9MP by Michael Forsberg was released. In 2008, we made our contribution to the new electrical power grid for the 21st century when 9MP received a large Lincoln Electric System power line along its southern property line. And finally, in 2009 we expanded 9MP's entrance in cooperation with the Lincoln Airport Authority. It didn't even take an act of the legislature this time. The Airport Authority has been a wonderful neighbor and partner.

Stewardship, Science and Education

Nine-Mile Prairie also symbolizes NU's ongoing commitment to grasslands. NU manages over 25,000 acres of grassland. Most of this land is in the Sandhills at Gudmundsen Sandhills Laboratory, Barta Brothers Ranch, and Arapaho Prairie. We also have several areas near Lincoln including 9MP, Prairie Pines, Reller Prairie, and UNL Campus Recreation's 80 acres just south of us. The University of Nebraska-Omaha manages Allwine Prairie, a 160-acre preserve outside of Omaha. These grasslands are a tremendous resource, but also a tremendous responsibility. The different properties have diverse management goals including research, education, recreation, nature preservation, and beef production. However, regardless of the management goals, the public recognizes good (or bad) stewardship when they see it. Are we being good stewards? Are we teaching good land stewardship to our students by example?

These grasslands give NU a chance to do long-term research that would be difficult to do on other public or private land. Nine-Mile Prairie's current research portfolio includes studies of native thistles, nematodes, switchgrass, flickers, reptiles, orchids, and invasive plants. The unique role of 9MP as a university educa-



Photo by Brett Hampton

Grassland ecologist Dave Wedin, Director of Nine-Mile Prairie, provided historical background and context for the afternoon before the tours began.

tional resource complements the education/outreach mission and facilities at two other prairie areas: Lincoln Parks and Recreation's Pioneers Park and the Audubon's Spring Creek Prairie. More than 10 NU classes a year use 9MP. Although most are science classes, the list includes the occasional literature and art class.

A new education initiative is to certify more of our natural resources students in the federal "red card" wildland fire training system. The need for both wildland fire control and prescribed fire as a management tool has increased dramatically in the last decade. This effort is a partnership with the Nebraska Forest Service and its wildland fire educator Casey McCoy. The students trained by Casey or other state and federal agencies through summer fire fighting jobs now form the backbone of our student fire crew for prescribed burning at 9MP.

To maintain 9MP's unique legacy of prairie biodiversity, we need to continue to improve our management. In addition to prescribed burning on a roughly three-year rotation, our management includes cutting back encroaching woody vegetation and killing invasive species such as leafy spurge and sericea lespedeza. However, we still seem to be gradually losing species. One of our

two federally endangered species, a beautiful orchid, has not been seen in a decade. Species documented here in the 1920s are gone. Do we need new and creative approaches to managing for biodiversity? We may need to follow the lead of others in the southeast Nebraska prairie community and introduce grazing and haying into our management.

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Photo by Brett Hampton

Tour participants saw how seed is harvested at Nine-Mile Prairie.



Nine-Mile Prairie (continued from page 5)

Regardless of how we manage *inside* Nine-Mile Prairie's fence, the major conservation issue for the next 25 years is what happens *outside* our fence. Today, 9MP lies at the center of over 1300 acres of grassland. Our neighbors are diverse with diverse goals, but all are concerned with stewardship of their land and their neighborhood. Our partners already include the LAA, Wachiska Audubon, the Nebraska Game and Parks Commission, the Natural Resources Conservation Service, Prairie Plains Resource Institute, the Nature Conservancy, and UNL's Campus Recreation Department.

The key to Nine-Mile Prairie's future will be strengthening these existing partnerships and forming new partnerships based on shared goals for this unique open landscape.



Photo by Brett Hampton

Ernie Rousek (second from left), Dave Wedin and others aren't sure how badly they want to see the non-plant life of the prairie "up close and personal" as herpetologist Dennis Ferraro shows them a specimen.

Recent Accolades to CGS Associates

Steve Baenziger, Irv Omtvedt Innovation Award from UNL Institute of Agriculture and Natural Resources.

Chuck Francis, 2009 Educator's Award from the Sustainable Agriculture Education Association.

Roch Gaussoin, Cyril Bish Distinguished Professor of Horticulture Award.

Terry Klopfenstein, 2009 Morrison Award from the American Society of Animal Science.

Rick Rasby, 2009-2011 Wendell Burgher Beef Industry Award.

Richard Sutton, tapped as Fellow of the American Society of Landscape Architects.

Kim Todd and colleagues, 2009 Extension Materials Award from the American Society for Horticultural Sciences

Steve Waller, 2009 Distinguished Educator Award from the North American Colleges and Teachers of Agriculture.