Spring 1999

Center for Grassland Studies Newsletter, Spring 1999, Volume 5, No. 2

University of Nebraska

Center for Grassland Studies Newsletter

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From the Director

With the return of the graceful Sandhill cranes each year to the Platte River valley in central Nebraska, we are reminded that spring has arrived, and trees, flowers, shrubs and grasses are almost ready to break dormancy and spring forth with their splendor. It also causes us to remember the important role grasses play in the overall well-being of our wildlife populations. There are many species of wildlife, just as the Sandhill cranes, that are dependent on grasses for food, shelter and nesting sites. Some species of wildlife are almost totally dependent on grasses for their existence.

Demand for wildlife habitat is increasing. The desire for recreation revolving around wildlife has caused many landowners to place more emphasis on wildlife in their farming and ranching operations. In numerous cases, supplemental income from wildlife-related recreation is highly important to the profitability of the overall operation. When an agricultural producer plants the corner of a center pivot or leaves grasses in a fence row or windbreak, wildlife benefits.

Our grasslands that are used for grazing or other forage production can be effectively managed in a way to better support wildlife. Most wildlife biologists with knowledge in grassland habitats believe that wildlife and livestock are compatible when managed properly. In fact, livestock grazing can be a useful tool for enhancing wildlife habitat when carefully controlled.

Multiple use of grasslands is good for the environment and provides a greater degree of biodiversity. In the tallgrass prairie, some research has shown that light to moderate grazing levels result in richer species diversity than heavy grazing or no grazing at all. Biodiversity is an important issue today as people become more concerned about species decline. Ecologists have recognized for many years the importance of numerous species interacting together. All of these factors point to the importance of proper management of our grasslands.

I wish now to return to a subject that I commented on in an earlier edition of this newsletter. That was the 1999 annual meetings of the Society of Range Management and the American Forage and Grassland Council in Omaha during February. From all the indications, they were highly successful (in spite of a major snowstorm). There were approximately 1500 registrants. One highlight was the "Great Plains Grasslands at the Millennium" symposium. The Center for Grassland Studies was one of the co-sponsors. It was well attended and sparked numerous lively discussions. Papers presented at the symposium will be published in a special edition by the UNL Center for Great Plains Studies. The joint meetings, the first ever for these two societies, were highly successful and appreciated by those in attendance. Hopefully, we will see more of these kinds of joint efforts in the future.

Spring Creek Prairie Near Lincoln Provides Outdoor Classroom

Tallgrass prairie is one of the most endangered ecosystems on the continent. Large contiguous areas of tallgrass prairie have all but vanished in Nebraska, where much of the remaining habitat is in small units of 20 acres or less. One of the largest and most scenic exceptions to this rule is the 610-acre Spring Creek Prairie located 15 miles southwest of Lincoln. The mostly unplowed property is especially unique because it encompasses many diverse habitats in addition to the prairie including a pristine wetland, springs, a creek, ponds, and a mature woodland with old growth hackberries, American elms, cottonwoods, and 200 year-old bur oaks. Pioneer wagon wheel ruts along this branch of the Oregon Trail are clearly visible. All of these features are set into the tall hills of an ancient glacial moraine, providing beautiful prairie vistas that are hard to imagine in eastern Nebraska.

Audubon Nebraska purchased the former O'Brien Ranch in 1998 with three main objectives in mind: conservation, restoration and education.

Conservation

The combination of human and natural history makes Spring Creek Prairie a truly remarkable place in need of conservation. Audubon Nebraska lists benefits of its conservation efforts as:

- Protecting one of the last large remnants of tallgrass prairie in the state. According to Dr. James Stubbendieck, Director of the Center for Great Plains Studies and CGS Associate, "A property the size of Spring Creek Prairie is extremely rare and important (because) various components of the ecosystem do not function well in a small area."
- Protecting a large remnant of prairie habitat that is needed by declining species of birds and insects including upland sandpipers, bobolinks, and regal fritillary butterflies, which have all been found on the property.
- Providing a tallgrass prairie for outdoor education, recreation, research and restoration in close proximity to 1,000,000 Nebraskans.
- The benefits will continue in perpetuity, to be enjoyed for generations.

Restoration

After 100 years of grazing, restoration is needed to enhance the diversity and density of native wildflowers, grasses and wildlife. The objectives for restoration and stewardship of Spring Creek Prairie are to 1) return the prairie to a more pristine condition by increasing the diversity and density of native plant and animal species while minimizing exotic and invasive species, and 2) demonstrate successful prairie restoration and management tools that can be replicated on other tallgrass prairies in the region.

Some small areas may require a complete restoration through reseeding, while most of the prairie will be restored through a variety of methods including rest, prescribed burns, haying, and grazing that mimics the natural role originally played by bison. Audubon Nebraska will draw upon a wealth of expertise for guidance. This expertise will be assembled in a Land and Wildlife Advisory Committee that includes experts from the University of Nebraska, Nebraska Game and Parks Commission, resource agency staff, chapter representatives and local landowners.

Benefits include:

- An increase in the diversity and density of species native to a rare Nebraska ecosystem.
- An improvement in important wildlife habitat, especially declining grassland species.
- An opportunity to reintroduce species such as prairie-chickens.
- The demonstration of restoration techniques that can be replicated on other tallgrass prairies.
- A demonstration of grazing as a prairie management tool that improves the health of tallgrass prairies while remaining economically viable.

- As the benefits of restoration and prairie management materialize, they will remain in perpetuity.

Education

Spring Creek Prairie is an ideal place to tie human and natural history together so that people can better understand the relationships between the two. Because of the prairie's location, another objective is to connect urban eastern Nebraskans to a natural landscape and agricultural way of life that is still enjoyed in other parts of the state. Nearby universities and colleges will have access to the prairie; the University of Nebraska and Lincoln Public Schools are already using it for research and instruction. In addition to education "on-site," programs will be developed that enhance appreciation of different prairies found throughout the state. Informal educational opportunities will include self-guided nature trails and interpretive information in the ranch house, which will be renovated to serve as an office and visitor facility. There will also be miles of trails for hiking, birding, photography and cross-country skiing.

Benefits include:

- Visitors will have the opportunity to love and understand Nebraska's prairie landscape, thereby fostering a desire to protect it.
- Through an understanding of the site's human history, people will learn about the area's original inhabitants, the great migration that replaced them, and that ranching has protected this native prairie while allowing people to make a living off the land.
- Generations will benefit from having a convenient place to simply enjoy the beauty, wildlife and wonders of a large, scenic native prairie.

Evaluation

One measure of success will be a steady increase in visitation and people served. A priority will be placed on reaching under-served audiences, from children at risk to senior citizens. The success of restoration will be determined by an increase in the diversity and density of native species and a decrease in exotic and invasive species. The Land and Wildlife Advisory Committee will set appropriate goals after a baseline biological inventory is completed to determine a standard for progress. Outreach on education, sustainable grazing, and restoration techniques will be another measure of success.

Ongoing Funding

In addition to donations and grants, Audubon Nebraska will receive revenue from cropland rental, grazing leases, haying, admissions and retail sales. It will also build upon the endowment from the O'Brien Trust to provide another stream of steady support. If you are interested in supporting Audubon Nebraska's mission at Spring Creek Prairie, contact Dave Sands or Laurie Rapkin at 402-797-2301.

Editor's Note: Thanks to Dave Sands and Kevin Poague of Audubon Nebraska for providing the material for this article.

Other Preserved Virgin Prairies in Southeast Nebraska

Let us introduce you to two more virgin prairies near Lincoln:

Three parcels

Not very far from Spring Creek Prairie is a 226-acre area of virgin prairie owned by three different landowners. After years of negotiations, these landowners recently signed over conservation easements to the Lower Platte South Natural Resources District, a public agency. The three still own the land, but are

restricted to activity that will not significantly disturb or alter the prairie. Since the easements are in perpetuity, the preservation of this land will continue regardless of who owns the land in the future. Like Spring Creek Prairie, pioneer wagon ruts are in good condition. Unlike Spring Creek, there will be no public access to these three parcels. The soil is different than that of Nine-Mile Prairie and Spring Creek Prairie, and therefore hosts some different species.

Nine-Mile Prairie

When the great continental glacier melted more than 10,000 years ago, unique prairie plants and animals colonized the area of Nine-Mile Prairie from the south and east. The Prairie, which got its name because it is nine miles from downtown Lincoln, consists of 230 acres, 200 of which is remnant (never broken) land. About 350 kinds of plants (most native and some now quite rare) are known to grow on the Prairie, and more than 80 kinds of birds have been seen on the property. In addition to various mammals, the Prairie is host to a rich variety of insects.

Beginning in the 1920s the area was used by Professor John Weaver and his students for their pioneering studies in plant ecology. Today it is the longest-studied natural area in Nebraska. There are always research and management projects underway on the site. College, high school and elementary school classes often visit the Prairie.

The Prairie is owned by the NU Foundation and is leased to UNL. It is managed by a team of biological science professionals from UNL and interested citizens. The Waschiska Audubon Society maintains an information kiosk at the entrance gate and also holds "Prairie Days" at Nine-Mile Prairie in the fall. More information is available by calling 402-488-9032 or 402-472-2715.

Algae Control in Ponds With Barley Bales: On-site Results in Nebraska

by Roch Gaussoin, Department of Horticulture, UNL

Algal growth during the summer season in ponds can pose several problems. The algae that grow in ponds used for irrigation can clog pumps, block filters, cause odor problems, and is generally considered to be aesthetically unacceptable. The proliferation of algae appears to be closely associated with the level of nutrients, especially phosphorous, in the water. High nutrient levels are often found in ponds and lakes associated with parks, golf courses, housing complexes and industrial sites.

Conventional control of algae can be either mechanical or chemical. Both methods can be expensive and inefficient. Depending on the pesticide used, chemical control may limit irrigation use or harm non-target aquatic plants and fish. In some instances the algae problem may increase over time if competitive plants and algae-feeding fish are decreased.

Barley straw has been suggested for use in ponds for algae control, yet minimal replicated scientific research exists to substantiate the observed positive results. It is beleived that the barley, as it decomposes, slowly releases hydrogen peroxide into the water at levels that are toxic to algae. The Center for Aquatic Plant Management in the United Kingdom has the most active efforts in the development of this method of algae control. Following is a brief summary of their observations:

- This method will not kill algae already present; the bales must be in place prior to algae bloom.

- The algae are suppressed best when the straw is decomposing in a well-oxygenated environment.
- How much straw is needed depends on the surface area of the pond. Pond depth or volume does not appear to influence suppression.
- One-half to 1.5 oz of barley straw per 10 square feet of surface area (approximately 2-3 bales per acre) will provide good activity against the algae. Higher rates have been shown to provide better algae control if the problem is severe.
- Too much straw can deoxygenate the water.
- It is best if the straw is applied loosely so that water can move freely through it. A cage or netting can contain the loose barley.
- The barley works best when it is at or near the pond surface.
- It is better to use multiple "barley stations."
- Apply the straw in the fall or early spring; this will give the straw a chance to rot and get ahead of the spring/summer algae blooms.
- Water temperature will affect how quickly the bales will begin suppression. At temperatures below 50 F, 6-8 weeks are required, at 70 F, 1-2 weeks are sufficient.
- Once active, the straw will remain effective for approximately six months.
- No negative side effects have been reported; however, increased invertebrate populations and improvement of gill development in fish from ponds where barley straw was applied have been observed.

Nebraska Resuslts

In 1998 six golf course superintendents in Nebraska used barley bales to evaluate their effectiveness in suppressing algae populations. Following is a brief summary of their observed results:

Fremont Golf Club - Mick Reifert, CGCS, Superintendent. Four compressed bales in driving range netting put on frozen pond surface with cinder blocks to "sink" bales. Bales floated and moved freely around pond. Quote: "I would show you the algae but there isn't any." His biggest concern is where to get bales next year.

Lochland Country Club, Hastings, NE - Craig Ferguson, CGCS, Superintendent. Compressed bales installed after significant algae bloom. No positive results. He will use conventional means next year (aerate and copper sulfate).

Meadowlark Hills Golf Course, Kearney, NE - John Beideck, CGCS, Superintendent. Nine compressed bales on three surface acres. Reasonable/acceptable results. Applied in early spring, prior to bloom. Excellent results on a smaller pond. He will use barley bales again next year, if available.

Indian Creek Golf Course, Elkhorn, NE - Lon Camp, CGCS, Superintendent. Applied six compressed bales/surface acre in early spring along edge of pond when water was down. Previous year, algae problem was "disgraceful." In 1998 no algae was evident. He will use barley bales again, if available.

Grand Island Municipal Golf Course - John Hadwick, CGCS, Superintendent. Applied two barley bales to a "no turnover pond" of approximately 1/3 of an acre in early spring. Pond has a small aerator. Control was substantially better than ponds treated with copper sulfate. Will use barley bales again, if available.

Country Club of Lincoln - Charlie Hadwick, Superintendent. Late installation, with results comparable to Lochland Country Club. Possibly will try again next year.

Summary

If guidelines reported by The Center for Aquatic Plant Management in the United Kingdom are followed, successful suppression of algae in ponds with barley bales appears feasible.

Author's Note: A portion of this article was taken from*: Farm Pond Algae Control With Barley Straw*, Bryan Butler, Faculty Assistant, Carroll Cooperative Extension Service, University of Maryland Cooperative Extension Service. Available at http://www.agnr.umd.edu/users/cmrec/3-7art2.htm.

CGS Offers New Grazing Livestock Systems Major

Final approval was received in April for the new Grazing Livestock Systems major to be offered through the Center for Grassland Studies beginning Fall 1999. The new major in the College of Agricultural Sciences and Natural Resources is designed for students whose career interests involve the production of livestock utilizing pasture and range as the principal feed resource. The curriculum integrates courses from different disciplines and provides a balanced education focusing on the interrelationships of ruminant livestock production, grazing land ecology and management, forages, and economic decision making. Students will learn through traditional courses, seminars, capstone experiences, and a planned internship. The overall goal of the major is to prepare students for productive careers in various phases of ruminant livestock agriculture and grassland management, and to be responsible stewards of natural resources. This curriculum should prepare students for successful careers in many different organizations, agencies, and in production agriculture.

Faculty involved in oversight of the major are Lowell Moser and Walter Schacht (Agronomy), Dennis Brink and Jim Gosey (Animal Science), George Pfeiffer (Agricultural Economics), and Martin Massengale (CGS). For more information, contact the CGS office.

Grassland Ecology Theme of Fall 1999 CGS Seminar Series

The theme of the Fall 1999 CGS Seminar Series will be Grassland Ecology. The seminars will be held on Mondays, 3:30-4:30 in the East Union beginning September 13. They are free and open to the public. Students wishing to receive one hour of credit for the course should sign up for Independent Study in the academic department of their choice, Section 006. Undergraduate students will be expected to write a summary of each seminar and submit it to the course instructor. Graduate students will be expected to present a seminar (topic to be approved by the course instructor). If students desire two hours of credit, they will need to discuss this with the instructor, Martin Massengale. Students taking it for credit should attend the August 23 orientation session.

Presenters will include faculty, people from the public and private sectors who work with some aspect of grassland ecology, and graduate students taking the course for credit. The list of presenters, topics and dates will be posted on the CGS Web site when available, http://www.grassland.unl.edu/seminars.htm.

The CGS has videotapes of all Fall 1998 seminars (theme - Prairie Restoration) and selected seminars from previous years. These videos are available for onsite viewing or checkout from the CGS reference center, and can also be rented ($5) or purchased ($10). See the Web site or contact the CGS for details.

Fair 2000 Symposium Sets Food Animal Research Priorities

FAIR (feed animal integrated research) 2002 was held April 11-13 in Baltimore to develop research and education priorities for food animals. FAIR -95 was held seven years ago, and the agenda developed was used by USDA and the land-grant university system in structuring research directions in the food animal sciences. About 200 participants representing 35 producer associations and research organizations reviewed plenary

presentations and developed research and education agenda through panel discussions.

Six general topics were addressed: 1) animal health and well-being; 2) food safety; 3) environmental sustainability; 4) economic sustainability; 5) animal agriculture in society; and 6) animal agriculture in the global marketplace. In general, emphasis was on interactions between animal science and societal factors, with lesser emphasis on enhancing productivity.

Public perceptions of animal welfare issues, food safety, and public health risks were discussed both in biological and social science contexts. The potentials for bioterrorism, reciprocal health interactions between domestic animals and wildlife, and environmental issues associated with the production, processing, and marketing of animal foodstuffs were considered in both research and education terms. Contributions from biotechnology are expected in nearly all areas, and the roles of public and private research were recognized as valuable components of the research portfolio and need to be partners in the mission. The need for systems research and education for decision making in a systems context was emphasized. Examples included interactions between health management, feed efficiency, space allocation per animal, and manure management as affected by herd size. The potentials for niche markets and value-added production and processing received attention.

In summary, while the context was focused on research priorities and planning, the participants also recognized the great need for education, particularly to the public, on waste management, humane animal handling, food safety, and health-related issues. These may be even more important for international marketing of animal products. A small group met after the workshop to condense the numerous recommendations and priorities raised by the discussion groups, and to focus on 4-6 research (and education) goals. The draft report will be reviewed this summer for content and clarity by a group of non-scientists, and this fall will be published as a short proceedings.

A summary document or tri-fold will be prepared for widespread distribution to decision-makers, legislative committees, and others with interest. Then, there will likely be an attempt to coalesce research planning efforts like Fair 2002, CROPS '99 from the tri-societies, and C-Fair from the American Society of Agricultural Economics into a combined document to speak with a more unified voice for research and education funding in the agricultural sciences.

Editor's Note: Information for this article was provided by Jerry Nelson, University of Missouri and Terry Klopfenstein, University of Nebraska. Martin Massengale (CGS Director) and Lowell Moser (CGS Associate) also participated in FAIR 2000.

Executive Order on Invasive Species

On February 3, 1999, President Clinton signed an Executive Order that directs federal agencies to expand and coordinate efforts to combat the introduction and spread of non-native plant and animal species. Three definitions within the EO are of potential interest to our readers:

- "Alien species" means, with respect to a particular ecosystem, any species that is not native to that ecosystem. Native species to the U.S. could be regarded as aliens if introduced into ecosystems in which they are not native. Non-native species will be viewed as potential invasive species until it is proven that they are not.
- "Invasive species" is an alien species whose presence does or is likely to cause economic or environmental harm or harm to human health.
- "Native species" means, with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.

An Executive Branch Invasive Species Council has been formed to oversee implementation of the EO. The Council has been assigned the task of developing and Invasive Species Management Plan and associated guidelines within 18 months.

"Today, I am signing an Executive Order directing federal agencies to expand and coordinate their efforts to combat a serious environmental threat: the introduction and spread of plants and animals not native to the United States.... The Executive Order mobilizes the federal government to defend against these aggressive predators and pests. Led by the Departments of the Interior, Agriculture, and Commerce, federal agencies will work together to prevent the introduction of non-native species and control those already here. My fiscal year 2000 budget proposes an additional $29 million to support these efforts, and I urge Congress to join us in protecting our economy and our natural heritage against the threat of non-native species."

President Clinton

CGS Associates News

David Baltensperger is the UNL representative on the *only* Fund for Rural America center proposal to be funded. The grant is to create the national Center for Crop Diversification. The institutions involved are U. of Missouri (primary award), Purdue U., Iowa State U., UNL, Colorado State U., and Oregon State U.

The 1998 recipient of the Entomological Society of America Recognition Award was **Fred Baxendale**.

Rhae Drijber was one of the recipients of this year's Holling Family Awards for Teaching Excellence.

Richard Ferguson, Tom Franti, Jim Gosey, David Mortensen, and **Walter Schacht** all received promotions in 1999.

For his lifelong contributions to agriculture, **Martin Massengale** received the 1999 Annual Agri Award at the Triumph of Agriculture Exposition held in Omaha in March.

Al Steuter, Nebraska's Director of Science and Stewardship for The Nature Conservancy, was presented with the Conservancy's coveted *One Conservancy* Employee Award in January. Cited were his contributions to grassland and wetland restoration, compatible economic development, grazing issues, bison management and ecoregional planning.

Jim Stubbendieck has received another grant from the Nebraska Environmental Trust Fund for the final phase of his work on recovery of the endangered Blowout Penstemon in western Nebraska. The proposal was submitted through the CGS.

The interdisciplinary UNL Turfgrass Science Team (includes CGS Associates **Fred Baxendale, Rhae Drijber, Roch Gaussoin, Bobby Grisso, Garald Horst, Scott Hygnstrom, Martin Massengale, Robert Masters, William Powers, Terry Riordan, Bob Shearman, Don Steinegger, John Watkins** and **Gary Yuen**) received the Herbert Davis Special Recognition Award for 1999 from the Nebraska Golf Hall of Fame for its research into grasses that are appropriate for Nebraska courses.

The U. of Nebraska Chapter of Sigma Xi presented **Roch Gaussoin** with this year's Outstanding Young Scientist Award.

Kim Stine was named the 1998 Range Management Specialist of the Year for the USDA Natural Resources

Conservation Service. She received the award at the Society for Range Management and American Forage and Grassland Council meeting in February.

Resources

The National Agroforestry Center has developed a series of brochures on putting trees to work for you. Titles to date are: *Working Trees for Livestock; Working Trees for Livestock - Silvopasture in the Southeast; Working Trees for Agriculture; Working Trees for Communities; Working Trees for Wildlife*. There is even a coloring book in the series. Available free from National Agroforestry Center, USDA-FS/USDA-NRCS, East Campus - UNL, Lincoln, NE 68583-0822, 402-437-5178, ext. 11. These brochures and many other publications are available online at http://www.unl.edu/nac.

The Grazing Lands Conservation Initiative's mission is to provide high quality technical assistance on privately owned grazing lands on a voluntary basis, and to increase the awareness of the importance of grazing land resourses. It is comprised of coalitions of livestock producer organizations, scientific and professional grazing resource organizations, conservation and environmental groups, state and federal natural resource and agriculture agencies, and other interested groups. Check it out at http://www.glci.org.

The Nebraska NRCS office has a new homepage: http:\\www.ne.nrcs.usda.gov.

Info Tufts

In January Paul Johnson, former Chief of the USDA's Natural Resources Conservation Service, was appointed Director of the Iowa Department of Natural Resources.

Prairie Forum, an interdisciplinary journal of the Canadian Plains Research Center, will be publishing a special millennium issue in Spring 2000 titled "Changing Prairie Landscapes: A New Millennium." You are invited to contribute to this publication, which will focus on the variety of changes that have affected the North American Prairies over the past 100 years. Submission deadline is November 1, 1999. For details, see http://www.cprc.uregina.ca/pecos/pforum/call.html.

Congratulations to the UNL students who, under the direction of Chuck Butterfield and Walter Schacht, did well in the competitions at the 1999 Society for Range Management meeting in February. The Range Plant Identification team placed 4th out of 21 teams, and individual students garnered high placements in several written and public speaking contests.

A billion-dollar land rush is under way in Congress, with both political parties saying they want to preserve open spaces, protect wildlife and set aside environmentally sensitive places. Of course, the devil is in the details, but despite the differences, never before have lawmakers, liberal Democrats and conservative Republicans alike, been as eager to spend money for land conservation - as much as $2.6 billion a year under one proposal. For details on who is offering what bills, contact the CGS office.

From February through April each year 500,000 Sandhill Cranes crowd together along an 80-mile stretch of the Platte River in south-central Nebraska. *National Geographic* once named this annual migration one of the world's two greatest natural wildlife phenomena (the other being the Caribou migration in Alaska). It is the largest concentration of any species of crane anywhere in the world. For more information, see the Crane Meadows Nature Center Web site, http://www.cranemeadows.org/.

Funding for research in biodiversity and ecosystem dynamics is available through the National Science Foundation's Division of Environmental Biology. Deadlines are June 15 and December 15. See http://www.nsf.gov/geo/egch/biodiv.htm.

Calendar

Contact the CGS for more information on these upcoming events:

1999

June 12-16: 6th North American Agroforestry Conference, Hot Springs, AR (http:\\www.missouri.edu/~afta /makeplansNAAC.htm)

Jul. 19-23: VI International Rangeland Congress, *People & Rangelands: Building the Future*, Townsville, Australia

(http://irc.web.unsw.edu.au)

Aug. 15-20: International Congress on Ecosystem Health - Managing for Ecosystem Health, Sacramento, CA

(http://www.vetmed.ucdavis.edu/centers/iseh/ecosystemhealth.html)

Oct. 6: 1999 Range Forum, Maxwell, NE

Sep. 13-17: FAO/Netherlands Conference on Multifunctional Agriculture and Land Management, The Netherlands (http://www.fao.org/sd/agr99/)

Nov. 8-9: *The Practice of Restoring Native Ecosystems National Conference*, Nebraska City, NE

See also http://www.forages.css.orst.edu/Contents/Conferences/index.html

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On behalf of the Nebraska Golf Course Superintendents Association, **Dick Neumann** presented the Exceptional Service Award to Landscapes Unlimited, Inc. President **Bill Kubly** for his commitment to promoting the game of golf in Nebraska, particularly to youth. As President of the Golf Course Builders Association of America, Bill will help kick off the GCBAA's second season of "Sticks for Kids." Neumann and Kubly are CGS Citizens Advisory Council members.

Note: Opinions expressed in this newsletter are those of the authors and do not necessarily represent the policy of the Center for Grassland Studies, the Institute of Agriculture and Natural Resources or the University of Nebraska.

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