

Center for Grassland Studies

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UNIVERSITY OF
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Center's Advisory Council and Associates Tour North Central Nebraska

Every other year the Center for Grassland Studies hosts a tour somewhere in the state for its Citizens Advisory Council and Associates that features turf management and land management for both grazing operations and wildlife habitat. This year the event was held on May 22, beginning at The Prairie Club southwest of Valentine. In spite of the cold, windy and dreary weather, it was a fun and information-packed day.

The architect for The Prairie Club, which was built in 2008, is the same architect that is working on the course for the Rio 2016 Summer Olympics. The Club actually consists of two championship courses: the Dunes with native sand soil and only four trees, and the Pines with black soil and many trees. These courses present management challenges not encountered at most courses in the world. Both have severe undulation, and drainage and erosion are significant issues.

Almost as big an issue for Sand Hills courses is dealing with damage from gophers, moles and voles. And how many superintendents have to deal with foot-high sand drifts on the fairways?

From the greens to the blacks and rusts, our next stop was the Niobrara Valley Preserve (NVP) where we saw the aftermath of the July 2012 wildfire in that area. The Nature Conservancy (TNC) owns and manages the Preserve's 56,000 acres on which it has two bison herds and many cattle herds on grazing lands that are leased to area ranchers. The fire burned 90% of the east bison herd grazing lands, so many bison from that herd had to be sold, and 900 cattle were relocated.

There were some positive things to come out of last summer's fires in the state; they killed a lot of the invasive cedar trees, and provided excellent learning opportunities. In response to the 2012 fires, the TNC and UNL received a grant from the Nebraska Environmental Trust titled "Learning from the 2012 Niobrara fires." As well as funding a prescribed fire school at the Niobrara Valley Preserve, the grant is funding four natural resource undergradu-

ate student interns and a coordinator this summer. The Center for Grassland Studies contributed matching funds for the intern program, which is under the direction of UNL faculty members Dave Wedin, Walter Schacht and Mark Pegg. The interns are setting up long-term monitoring plots to measure vegetation recovery and soil erosion in burned woodland and grassland areas. They are also measuring the response of water quality in the Niobrara River and adjacent small streams. The interns briefly discussed their research during lunch at the NVP headquarters.

Wedin shared additional information about Nebraska wildfires. He said the approval of LB634 by the Nebraska Legislature in 2013 reflects the urgency of the wildfire situation in Nebraska. In 2012 approximately 500,000 acres burned in Nebraska wildfires. These fires were particularly severe in the

Niobrara Valley and the Pine Ridge. According to Scott Josiah, Director of the Nebraska Forest Service, the severity of wildfires has increased in Nebraska because of warmer winters, increased drought severity, increased fuel loads, and the dramatic expansion of eastern redcedar. Elaborating on this last point, Wedin noted that the expansion of eastern redcedar into the understory of ponderosa pine forests in the Niobrara Valley fueled particularly hot fires in summer 2012. He said data from the US Forest Service and the Nebraska Forest Service indicate that over 40,000 acres per year are being taken over by eastern redcedar in Nebraska.

Biological Diversity is to Ecosystem Health what Enterprise Diversity is to Economic Health. That's what you'll read on the web site of the Sandhill and Sun Ranch, our final tour stop of the day. Al Steuter, co-owner with his wife Lois, and longtime CGS Associate, headed a caravan across their 2,662 acre ranch in northwestern Brown County, providing commentary via radios that were distributed to the various vehicles. Al was the one who initially reported

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It was quite stunning to see so many blackened trees on portions of the Niobrara Valley Preserve land.

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The Center for Grassland Studies is a unit within the University of Nebraska–Lincoln Institute of Agriculture and Natural Resources. It receives guidance from a Policy Advisory Committee and a Citizens Advisory Council.

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.



Martin A. MassengaleCGS Director
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FROM THE DIRECTOR

In our last newsletter I spoke briefly about the drought of 2012. Since that time, parts of the country including eastern Nebraska have received some timely moisture, thus providing partial relief to the drought, while other parts such as western Nebraska are still very dry. Grazing lands in those latter areas remain in poor condition and need to receive best management practices for their condition.

I return to this subject again because drought is one of the greatest threats to our grasslands in the Great Plains region. Droughts can have a major impact on a number of economic, ecological and social factors. One only has to look back to the “Dust Bowl” days of the 1930s to see how devastating they can be.

Scientists generally agree that global climatic change is happening and that temperatures are expected to increase throughout the world. Furthermore, some studies are predicting that crop yields will drop as these climatic changes occur. Additional probable risks include more variable weather, changing precipitation patterns, and more damage from crop pests (insects, diseases and weeds). Nebraska is in the western edge of the corn belt, which is a marginal rainfall area, and this makes the weather even more unpredictable. We have rapidly changing weather patterns in the Great Plains because air masses flow into the region from the west, south and north. At any one time, the weather in this area depends on which of these air masses is prevailing.

Farmers and ranchers should develop a plan to deal with drought prior to it occurring, as this would likely lessen the impact. The effects of drought can last many years. Therefore, the producer needs to also plan for drought recovery. First, one needs to assess the severity of the drought, as this will affect the length of time it takes the grass to recover, which in turn impacts forage production and the livestock carrying capacity. Stocking rates and grazing practices should be matched to the condition of the grass. Irrigation in this region now provides some additional options and lessens the impact of drought considerably.

On another subject, some of our students in the PGA Golf Management major who were working in the Greater Omaha area this summer had a rare opportunity to attend or assist with some part of the U.S. Seniors Open Golf Tournament held at the Omaha Country Club in mid-July. They learned first hand about a segment of the industry that they are not exposed to in their academic program. This experience should serve them well in their future careers.

M. A. Massengale

Alternative Bentgrasses and Their Use

by Keenan Amundsen, Department of Agronomy and Horticulture, UNL

Creeping bentgrass (*Agrostis stolonifera* L.) is among the most important turfgrass species to the golf industry. The mowing height of golf course putting greens prohibits the use of the majority of other grasses that are adapted for turf use. Estimates suggest that there are more than 150 different *Agrostis* species, but only five are routinely used for turf including creeping bentgrass, velvet bentgrass (*A. canina*), colonial bentgrass (*A. capillaris*), highland bentgrass (*A. castellana*), and redtop bentgrass (*A. gigantea*). Previous research indicates that a high degree of interspecific hybridization occurs in the bentgrasses, which means that viable progeny can be produced by mating two different bentgrass species. Interspecific hybridization is beneficial to turfgrass breeders because it allows for desirable traits from one species to be moved to another. As an example, creeping bentgrass is generally considered to be susceptible to dollar spot disease while colonial bentgrass is resistant. Belanger et al. created hybrids between creeping and colonial bentgrasses and identified progeny that were dollar spot resistant.¹

The National Plant Germplasm System (NPGS) of the USDA Agricultural Research Service Germplasm Resources Information Network is a repository for plant genetic diversity and it houses the largest publicly available bentgrass collection within the United States. More than 100 different bentgrass species are represented in the NPGS. In order to understand the usefulness of this collection, the plants need to be evaluated for turfgrass performance in different environments, and sexual compatibility

with high performing bentgrass lines should be assessed. A study was initiated in late 2012 to evaluate some of this wild bentgrass germplasm.

During the winter of 2012-2013, seed was ordered of 69 NPGS bentgrass accessions representing 11 different species collected from 12 countries (Table 1). Alpha, T-1, and Penncross cultivars were included to use as comparisons throughout the study. The majority of the NPGS accessions were chosen because they were collected from regions of warmer and more arid climates than much of the U.S. Highland bentgrasses were also selected, mostly originating from southern Europe, because this species is not commonly utilized for turf in the U.S. The germplasm system provides approximately 250 seeds of each accession, which is not enough to establish field trials, so each line was first established in the greenhouse. Once the plants began tillering and spreading, the plants were split to increase the amount of plant material. Each bentgrass line was plugged into 25 sq ft field plots at 1 ft spacing during the spring of 2013. The plants were established in three separate field studies. One study represents a fairway and is mowed regularly at 5/8", another represents a typical lawn and mowed at 3", and the third study is not mowed and will be used to evaluate seed yield potential and canopy architecture. The plants from the lower height of cut were evaluated for color, canopy density, establishment rate, and leaf texture two months following planting.

There was a range in color, density, establishment rate, and texture in the 72 lines evaluated (Figure 1). An analysis of variance in-

(continued on next page)

¹Belanger, F., S. Bonos, and W. Meyer. 2004. Dollar spot resistant hybrids between creeping bentgrass and colonial bentgrass. *Crop Science* 44(2):581-86.

Table 1. Bentgrass accessions evaluated for long-term low-input sustainability, their National Plant Germplasm System (NPGS) Accession number, and country of origin.

NPGS ID#	Species	Origin	NPGS ID#	Species	Origin	NPGS ID#	Species	Origin
PI230124	<i>A. gigantea</i>	Iran	PI240131	<i>A. castellana</i>	Portugal	PI318924	<i>A. castellana</i>	Spain
PI230125	<i>A. gigantea</i>	Iran	PI240132	<i>A. castellana</i>	Portugal	PI318925	<i>A. castellana</i>	Spain
PI251250	<i>A. gigantea</i>	Pakistan	PI240133	<i>A. castellana</i>	Portugal	PI318926	<i>A. castellana</i>	Spain
PI532916	<i>A. gigantea</i>	Pakistan	PI240134	<i>A. castellana</i>	Portugal	PI318927	<i>A. castellana</i>	Spain
PI204391	<i>A. gigantea</i>	Turkey	PI240135	<i>A. castellana</i>	Portugal	PI318928	<i>A. castellana</i>	Spain
PI204393	<i>A. gigantea</i>	Turkey	PI240136	<i>A. castellana</i>	Portugal	PI318929	<i>A. castellana</i>	Spain
PI204394	<i>A. gigantea</i>	Turkey	PI240137	<i>A. castellana</i>	Portugal	PI318930	<i>A. castellana</i>	Spain
PI206627	<i>A. gigantea</i>	Turkey	PI240138	<i>A. castellana</i>	Portugal	PI318931	<i>A. castellana</i>	Spain
PI206628	<i>A. gigantea</i>	Turkey	PI240139	<i>A. castellana</i>	Portugal	PI318932	<i>A. castellana</i>	Spain
PI206630	<i>A. gigantea</i>	Turkey	PI240140	<i>A. castellana</i>	Portugal	PI469217	<i>A. castellana</i>	United States
PI206631	<i>A. gigantea</i>	Turkey	PI240141	<i>A. castellana</i>	Portugal	PI632483	<i>A. clavata</i>	Mongolia
PI206879	<i>A. gigantea</i>	Turkey	PI240142	<i>A. castellana</i>	Portugal	W6 19776	<i>A. clavata</i>	Mongolia
PI206880	<i>A. gigantea</i>	Turkey	PI240143	<i>A. castellana</i>	Portugal	W6 19681	<i>A. clavata</i>	Mongolia
PI383584	<i>A. gigantea</i>	Turkey	PI240144	<i>A. castellana</i>	Portugal	W6 21240	<i>A. clavata</i>	Mongolia
PI222073	<i>A. stolonifera var stolonifera</i>	Afghanistan	PI240145	<i>A. castellana</i>	Portugal	PI632584	<i>A. clavata</i>	Mongolia
PI230235	<i>A. stolonifera var stolonifera</i>	Iran	PI302830	<i>A. castellana</i>	Spain	PI462363	<i>A. keniensis</i>	Kenya
PI1171470	<i>A. capillaris</i>	Turkey	PI287740	<i>A. castellana</i>	Spain	PI195917	<i>A. lachnantha</i>	Ethiopia
PI1172698	<i>A. capillaris</i>	Turkey	PI287741	<i>A. castellana</i>	Spain	PI299461	<i>A. lachnantha</i>	South Africa
PI204397	<i>A. capillaris</i>	Turkey	PI287742	<i>A. castellana</i>	Spain	PI229720	<i>A. munroana</i>	Iran
PI206626	<i>A. capillaris</i>	Turkey	PI287743	<i>A. castellana</i>	Spain	PI230236	<i>A. munroana</i>	Iran
PI230233	<i>A. canina</i>	Iran	PI287744	<i>A. castellana</i>	Spain	PI221906	<i>A. stolonifera var palustris</i>	Afghanistan
PI230234	<i>A. canina</i>	Iran	PI287745	<i>A. castellana</i>	Spain	PI204390	<i>A. stolonifera var palustris</i>	Turkey
PI210428	<i>A. castellana</i>	Greece	PI289644	<i>A. castellana</i>	Spain	PI486302	<i>A. spp.</i>	Turkey

Alternative Bentgrasses and Their Use *(continued from page 3)*

icates a significant difference among the individuals for each rating. Based on Fisher's Least Significant Difference ($p=0.05$), the cultivated accessions always performed among the best in each rating category, and none of the cultivated accessions was different from another. Additionally, four NPGS accessions (two *A. castellana*, one *A. gigantea*, and one *A. stolonifera*) were not different from the cultivated creeping bentgrass lines for all four of the traits evaluated. There were 45 NPGS accessions that had as dark of color, four that had as dense of a canopy, and 13 that established as quickly as the three cultivars. Eight entries had finer texture and 12 were significantly coarser than the cultivars.

Individuals with fast establishment rate, coarse texture (more coarse than creeping bentgrass), high shoot density, and upright growth may perform well in a lawn setting. Other NPGS accessions with finer leaf texture or other desirable traits may be important for bentgrasses grown on golf course putting greens. The data presented here are preliminary, based on a single date, and long-term performance of these lines still needs to be assessed. Individuals with improved drought or pest tolerance may be of great value to enhance these traits in future creeping bentgrass cultivars.

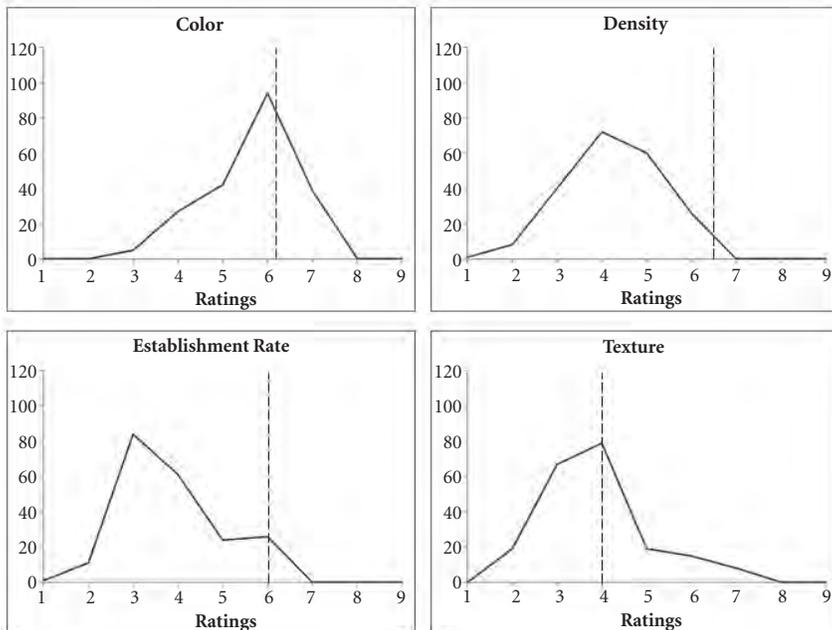


Figure 1. Distribution of color, density, establishment rate, and texture ratings for 69 NPGS bentgrass accessions. Vertical dashed line indicates the mean rating of Alpha, T-1, and Penncross cultivars. All ratings are on a 1 to 9 scale with 1 being the worst (light green, open canopy, slow growth) and 9 the best (dark green, high shoot density, fast growth) with the exception of texture, where 1 is fine and 9 is coarse texture; the three cultivars were assigned a texture of 4.

Center's Advisory Council and Associates Tour *(continued from page 1)*

and helped fight last summer's wildfire that burned so much of the Niobrara Valley Preserve, which he managed from 1984 to 2006. Fortunately, Al and Lois' ranch was spared the devastation that hit the NVP. The ranch has 120-150 cows; however, Al is quick to point out he doesn't consider himself a rancher, but is a conservationist. "I've been accused of managing my cattle for grouse hunting, and I must confess that is true," he commented with a smile. Al has a Ph.D. with specialties in grassland and fire ecology, does private consulting, and writes in his spare time. Al and Lois graciously treated us to refreshments at their house before we called it a day.

Editor's Note: For more discussion and photos of recovery from the 2012 wildfire at the Niobrara Valley Preserve, see <http://prairieecologist.com/2013/05/29/wildfire-recovery-at-the-niobrara-valley-preserve-spring-green-up>



Due to both distance and weather, much of what we saw on our tour was out of a truck window. Here the view is of burned cedar trees after the 2012 wildfire in the area.



This ain't your grandfather's golf course! The Prairie Club in the Nebraska Sandhills offers unique challenges for golfers as well as course managers.



The Prairie Club golf course superintendent Brandon Arens (pointing) directs the attention of tour participants to a particular area of the Pines course.

CGS Associates

At the American Society for Horticultural Science national meeting in July, **Ellen Pappozzi** was honored as a new member of the 50th class of ASHS Fellows.



At the Niobrara Valley Preserve headquarters, Nebraska Game and Parks Commission wildlife biologist Bill Vodehnal talks about some of the NGPC projects in north central Nebraska.



UNL students describe the research they are conducting at the Niobrara Valley Preserve.



Dave Wedin provides some background and data on Nebraska wildfires, particularly those that occurred in summer 2012.



Al Steuter (holding hand radio) describes conservation measures used in the management of Sandhill and Sun Ranch.

How Does Winter Supplementation Affect the Complete Yearling Production System?

by Kari L. Gillespie, Terry J. Klopfenstein and Jim C. MacDonald, Department of Animal Science, UNL

Wintering programs are typically associated with high feed costs and thus, decades of research have focused on the effects of low nutritional inputs during the winter period as a means to lower costs, but then attain increased summer grazing gains (compensatory growth) during a period of higher nutrient intake. However, this philosophy may not have considered the benefits of a high winter supplementation level when cattle are retained through finishing, or when ethanol byproducts are available as a supplement.

In the last seven years, corn prices have nearly tripled. Previous economic analyses may no longer be relevant, and increasing gain prior to feedlot entry through backgrounding may be of greater value than previously realized. The objective of this study was to compare a high and low winter supplementation level in a forage-based backgrounding system regarding animal performance, and supplementation level profit sensitivity concerning corn price and distillers grains price relationship to corn.

Six studies, completed from 1987 through 2013, examined a high (HI) and low (LO) winter supplementation level within a forage-based backgrounding system, and subsequent feedlot



For several years researchers have been studying the effects of cattle grazing corn residue at the UNL Agricultural Research and Development Center near Mead, NE.

performance. Four studies utilized long yearling steers, and two studies used spayed heifers. Cattle were backgrounded on corn residue to achieve specific levels of gain, grazed through the summer, and then finished.

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Winter Supplementation *(continued from page 5)*

An economic sensitivity analysis was applied to the two backgrounding gain levels using four scenarios with varying corn and distillers grains prices. Across scenarios, modified distillers grains (MDGS) was the winter supplement fed at 2.0 lb/head daily for the low supplementation level and 5.0 lb/head daily for the high supplementation level, on a dry matter basis.

Calves supplemented at HI level gained 1.41 lb/d, compared to 0.57 lb/d for cattle at the LO level ($P < 0.01$) during winter backgrounding. Cattle supplemented at the LO winter level gained 0.33 lb/d ($P = 0.02$) more during the summer phase (1.39 lb/d for LO compared to 1.06 lb/d for HI), which is a classic compensatory gain response. The LO cattle required an additional four days on feed in the feedlot. Total dry matter intake and feed efficiency were similar. Gain during finishing was greater by 0.18 lb/d for HI cattle. This greater average daily gain, coupled with the maintained weight advantage from the winter phase, resulted in 81 lb greater final weight for HI at 1311 lb, compared to 1230 lb for LO.

Revenue was \$100.84 greater for HI than LO. Total costs between HI and LO tended to be similar when distillers grains were priced at 85% corn price, but were greater for HI than LO when distillers grains were priced at 105% corn price, regardless of corn

price. Profit was consistently greater for HI than LO, averaging a \$54.83 advantage for HI across the four scenarios. Profit advantage for HI compared to LO was greater at \$5.50/bu corn compared to \$7.50/bu corn, and greater when distillers grains were priced at 85% corn price compared to 105% corn price.

At both the low corn price (\$5.50/bu) and the low distillers price (85% corn price), there was a greater profit response with high winter supplementation level than was observed with the high corn price and high distillers price. Because revenue was constant among studies, the greater winter cost due to supplement price is responsible for the various responses in profit difference across studies.

Total profitability across these scenarios resulted in an average \$55.54 additional profit when backgrounding cattle at a 5 lb/head/day MDGS supplement level, compared to a 2 lb/head/day supplementation level. Regardless of corn price or distillers grains price, HI was more profitable than LO.

Editor's Note: Gillespie is a graduate student, Klopfenstein is emeritus professor and MacDonald is associate professor.

Nebraska Grazing Lands Coalition and Nebraska Cattlemen Summer Grazing Tour Well Received

Blair, NE – On June 11, 2013, the Nebraska Grazing Lands Coalition (NGLC) and the Nebraska Cattlemen (NC) jointly hosted a Summer Grazing Tour in the eastern Nebraska Sandhills near Burwell. Ranchers, grazing enthusiasts, UNL Extension educators, agency representatives and other interested parties had an opportunity to get a first-hand look of four long-standing eastern Sandhills ranches northwest of Burwell including the Gracie Creek Ranch, the Shovel Dot Ranch, the Twin Creek Ranch, and UNL grazing research on the Barta Brothers Ranch near Rose, NE.

Bob Price and his daughter, Lindsey, welcomed approximately 235 tour participants to the Gracie Creek Ranch, which is an intensively managed yearling operation grazing year round. Bob and Lindsey launched the event with a slide show outlining the ranch's main production goal – to promote grassland conser-



The modern version of a roundup on the range at Shovel Dot Ranch.



Homer Buell (standing in truck) and son Chad talk about management of the Shovel Dot Ranch.



UNL range specialist Jerry Volesky describes long-term research being conducted at Barta Brothers Ranch.



Hay wagons are great people movers. Here participants are touring Gracie Creek Ranch.



Bob Price looks like he's accustomed to hosting large groups on his Gracie Creek Ranch!

vation through a profitable planned grazing system that allows for optimum levels of production and environmental services. To reach this goal, the Price Family has utilized a software program called The Grazing Manager wherein a year-round planned grazing system is implemented, supplementing when needed, which minimizes harvested feed demand. This has enabled the ranch to merchandise harvested hay as a separate profit center. Tour participants observed high quality yearling cattle rotating to a new paddock daily. The ranch strives for management simplicity and production flexibility to account for climate and market volatility. The Price Family firmly believes conservation and agricultural production practices can be integrated, profitable, and sustainable for future generations. Conservation practices abound on the operation, contributing to diversity and abundance of wildlife, which contributed to the operation being recognized by *BEEF* magazine with the prestigious "Stocker of the Year" award.

Homer (Shovel Dot Ranch) and Larry Buell (Twin Creek Ranch) rolled out the red carpet at the second and third stops. The Buell Family first took roots in the Nebraska Sandhills when Benjamin Franklin Buell homesteaded in southern Rock County in 1882. Since that time each generation has worked to preserve and maintain the unique landscape of the Sandhills while at the same time running a profitable ranch. The fourth generation, Larry and Homer and their families operated the Shovel Dot Ranch as a partnership for over 30 years, but in 2009, to facilitate the generational transfer of the ranch, they separated. At the present Homer, his wife Darla, and son Chad and his wife Tricia operate the Shovel Dot Ranch, while Larry and his wife Nick operate the Twin Creek Ranch along with their son-in-law Kelby and daughter Devon. Each ranch, using about 15,000 acres, is a cow-calf, backgrounding, yearling operation with management of native grasses of paramount importance. Similar to Gracie Creek Ranch, the Grazing Manager software program is just one of the tools that they use to set up grazing plans and monitor effects on range health over time. Homer provided information on the general grazing management and cattle production model while Larry shared significant comments on the importance of generational transition to secure a place for successive generations. Participants toured the nearby Sandhills pastures to witness range condition in recently grazed and soon to be grazed pastures. The Calamus River and its tributaries provided significant wildlife habitat. It was evident why The Buell Family was recognized in 2012 with the prestigious Leopold Conservation Award.

Dr. Twig Marston, UNL Extension Northeast District Director, welcomed the crowd to Barta Brothers Ranch and provided some historical perspective. The ranch had been gifted to the University of Nebraska Foundation in 1992 by Clifford and Jimmy

Barta. Research trials were started in 1998 on the 5,300 acre ranch resulting in the award of eleven M.S. and eight Ph.D. degrees thus far. UNL range management faculty members Dr. Jerry Volesky and Dr. Walt Schacht provided information on some of the trials that have been conducted including the results from a long-term grazing study (10 years), a 4- versus 8-pasture rotation system and supplementing yearling steers wet distillers grain on native range and feedlot performance. Current studies include: the response of plant and soil to stocking rate and grazing period length; plant, soil and yearling weight response to grazing systems (including mob grazing) on subirrigated meadow; and effect of grazing period length (number of moves/day) on harvest efficiency and trampled vegetation.

Central Sandhills Area Extension educator Bethany Johnston presented a progress report on a smartphone application that will greatly simplify information transfer for rangeland monitoring. Brown, Keya Paha, Rock Counties Extension educators Dennis and Pam Bauer and their 4-H crew served an excellent steak dinner. The evening concluded with NGLC Board member and tour chairman Tim Kalkowski moderating a panel of tour hosts and UNL grazing management faculty responding to questions from the crowd.

Plans are to continue to hold this event on an annual basis. For additional information, please contact, Ron Bolze, NGLC Coordinator: ron@nebraskagrazinglands.org or 402-426-2033.

The Nebraska Grazing Lands Coalition is an independent organization of ranchers, interest groups, and agencies whose mission is to collaborate on projects that improve the management and health of Nebraska grazing lands and ensure long-term stability of rangeland resources. The NGLC is funded through grants from the USDA-Natural Resources Conservation Service, the Nebraska Environmental Trust, and the Beginning Farmer and Rancher Development Program of the National Institute of Food and Agriculture, USDA.

Nebraska Cattlemen is a grassroots organization whose individual producer members determine issues of importance to the Nebraska beef industry. The mission of Nebraska Cattlemen (NC) is to work for Nebraska beef producers providing leadership, education, and representation. NC represents the beef cattle industry to the legislative and administrative branches of state and federal governments. NC addresses issues so producers can focus on what they do best – produce beef.

Source: News release issued jointly by Nebraska Grazing Lands Coalition and Nebraska Cattlemen. Photos courtesy of Nebraska Cattlemen.

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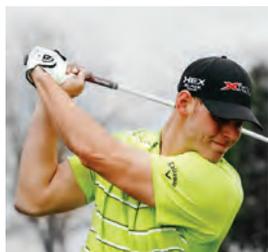
PGM Students Give Back

In one weekend in April, PGA Golf Management (PGM) students “gave back” to both the University of Nebraska–Lincoln and the community.

On Saturday, April 20, several members of the PGM Student Club partnered with Wilderness Ridge Golf Course to bring smiles to many participants in a “Special



PGM Student Club president Nick Sage must be thinking: “Funny... they didn’t mention this during my recruiting visit!”



As a fundraiser, on August 7 PGM student Andrew Frakes will attempt a world record for most 300-yard drives in an hour.

Olympics” event. Despite the chilly weather, all had lots of fun trying to hit golf balls either into the mouth of Golfzilla, or at PGM student Nick Sage in his velcroed “Snag Ball” costume (well... all had fun but Nick, who probably wouldn’t volunteer for that duty again especially after the golfers started throwing rather than hitting the balls at him!).

The Spring Scramble was held the following day. The PGM Student Club organizes this annual tournament to raise funds for PGM scholarships. This year we had 21 foursomes participate. Club members did a great job of lining up players, sponsors and prizes.

On an individual basis, PGM senior Andrew Frakes is using his long-drive ability to raise funds for charities, including Families for Effective Autism Treatment. In the previous issue of this newsletter we mentioned that Andrew had been selected as one of ten members of the Callaway Golf X Hot Long Drive Team. In addition to playing and promoting Callaway products around the country this summer, he has been training to break the Guinness Book of World Records for the number of 300-yard or better golf drives in an hour. Read more about Andrew’s attempt, which will take place August 7 in Texas, at <http://www.frakesmethod.com/#!worldrecordevent/c1oz1>.



PGM students help “Special Olympics” kids try to hit balls into the mouth of Golfzilla.