Summer 2000

Center for Grassland Studies Newsletter, Summer 2000, Volume 6, No. 3

University of Nebraska

Center for Grassland Studies Newsletter

Volume 6, No. 3
Summer 2000

From the Director

We frequently talk about the weather and the impact that it has on different aspects of our lives. While we are facing a significant dry period in parts of Nebraska and the nation this year, such discussions are even more common. Drought in the Great Plains is a normal and recurring event, but during times when we have average or above average precipitation, it is easy to forget about drought.

Dr. Jim Stubbendieck brought to my attention recently some work done in the 1940s by Dr. Harry Weakly of the Agricultural Research Service, United States Department of Agriculture, and the Nebraska Agricultural Experiment Station on the history of droughts in Nebraska. Weakly's research, which covered 748 years, showed that there were 21 droughts lasting five years or longer. He stated that "the average length of these droughts was 12.8 years, and the periods between them averaged 23.9 years. Eight of the periods of drought averaged 20.6 years, and one of them lasted for 38 years." Weakly further pointed out that "these lengthy periods of drought make the 10-year drought of the 1930s seem almost minor."

Some of us can remember the impact the drought of the thirties had on the nation and, more particularly, the Great Plains states. Much has changed since the 1930s, including significant expansion in irrigated acres, greater use of improved conservation methods, plus other means of controlling wind and water erosion. Nonetheless, a major drought would have serious implications for our state and nation.

Extended periods of dry weather have a significant impact on plants and animals, as well as people. As you would expect, some grasses are better able to withstand drought than others. In general, warm-season grasses, after establishment, will withstand drought better than cool-season grasses. The first sign of water stress in plants is usually a deepening of color followed by a wilting of the leaves and/or stems. Continued water stress will force the plants into a dormant stage, and thus deterioration of the grass cover. If water is withheld long enough, the plants will expend their food reserves and die.
During times of stress, it is best to leave some foliage on the plant in order for it to photosynthesize and manufacture food material. Therefore, if the plant receives water before it dies, there would be sufficient energy for recovery. Trampling or mowing of grasses under severe stress can also be damaging to the tissue and harmful to the plant. Special care needs to be taken when managing grasses for whatever purposes under conditions of water stress.

If you have questions about managing grasses in times of drought, contact our office and we will do what we can to help
you find the information you need.

Ergot: An Endemic Disease of Grasses in the Great Plains

by John Watkins, Department of Plant Pathology, University of Nebraska-Lincoln

?Ergot is one of the oldest recognized diseases. The ergot fungus, Claviceps purpurea, is endemic to the grasslands and
grain-producing regions of the Great Plains. The disease occurs, to some extent, every year in cereal grains, in pasture and
roadside grasses, and in native and turfgrass seed production fields in Nebraska. Ergot affects only the inflorescence, where
the seed is replaced by the sclerotial bodies (ergots) of the pathogen. The economic importance of C. purpurea is twofold:
affected plants produce sclerotia instead of seed, thus reducing yield; and the alkaloids in the sclerotia are toxic to livestock
or humans consuming the infected products, i.e. flour, seed, or hay.

The disease first appears as an exudation of sticky, thick amber-colored droplets called "honeydew" exuding from infected
spicklets and adhearing to the head. Insects feed on this sugary ooze, and consequently, are usually in high populations
around the disease spikes. This primary infection and subsequent development of a sclerotium preempts the ovary. The most
noticeable phase of the disease is the appearance of horny, curved, black sclerotia that project from the spike. As they
develop, the floral bracts spread apart and the sclerotial bodies, when fully mature, usually protrude beyond the floral bracts.
The sclerotia remain attached to the plant until it is mature, and in large-seeded grass genera such as Bromis, Festuca, and
Lolium, may be as long as three-quarters of an inch. Narrow, smaller sclerotia are formed when smaller-seeded grass genera
such as Poa become infected. Unfortunately, sclerotia are usually harvested with the seed.

Some of the ergot sclerotia fall to the soil when the grass matures. The pathogen survives the winter months as sclerotia on
the soil surface. In spring, primary infections come from spores produced on tiny mushroom-like structures that develop
from the sclerotia. Arrival of the wind-blown spores must occur at full-flower development of the grass host. These primary
spores penetrate the young ovary tissues and eventually produce the "honeydew" ooze. This ooze contains millions of
microscopic secondary spores called conidia. Secondary infection of flowers on the same plant or primary infection of a new
plant occurs when insects and water carry the conidia to healthy flowers. With time, sclerotia form in the diseased flower
heads and complete the cycle.

Pastures and Grass Hay Production

Although the crop loss caused by ergot is important in pastures and in hay production, the effects of the ergot toxins on livestock are of much greater significance. Ergot poisoning or ergotism is caused by consumption of ergot-infected hay or grain by livestock. Ergotism produces two general physiological reactions: constriction of blood vessels and muscle contractions. These reactions result in different syndromes in livestock. Small doses of the toxin act on the nervous system, causing reduced lactation, lethargy, paralysis, and sometimes convulsions. Larger doses bring about a degeneration or constriction of the small terminal arteries, which results in gangrene or mummification of the extremities and subsequent dropping of ears, tails, and feet. In pregnant animals, continuous doses of toxin will cause uterine contractions, leading to spontaneous abortion.

The primary factor in preventing ergotism in livestock in a pasture or hay situation is to avoid grazing a pasture or feeding hay that contains ergot sclerotia. If a producer notices the sticky "honeydewed" heads when the pasture or hay is flowering, then that pasture and hay are at risk for potential ergot poisoning if grazed or fed. Any suspect samples can be sent to the following laboratory to be analyzed for the ergot toxin: Veterinary Diagnostic Center, University of Nebraska, PO Box 83097, Lincoln, NE 68583-0907.

Feeding ergot-contaminated hay should be considered dangerous. It is best if livestock producers adopt a zero tolerance for ergot in either hay or feed grains.

Grass Seed Production

In both turfgrass and native grass seed production, ergot, in certain situations, can cause substantial losses in seed production. Pre-harvest losses from ergot in grass seed production can occur through seed replacement by sclerotia and loss of seed vigor due to diversion of host nutrients to the sclerotia at the expense of adjacent florets. Post-harvest losses are due to seed loss during cleaning to remove sclerotia and to seed that fails to meet purity requirements. Each re-cleaning increases production costs and results in loss of additional seed. In addition, when the host's floral tissue matures before the ergot sclerotia, such as with some bluegrasses and red fescue, the disease does not progress beyond the "honeydew" stage. However, loss of the seed crop in this situation is just as great as though sclerotia had formed.

Control of ergot in grass seed production can be accomplished by a single application of the fungicide propiconazole (Tilt). Timing of the application is important. Application at preanthesis controls ergot more efficiently than at midanthesis or late

anthesis. Adding a wetting agent or spreader sticker to the spray solution and thoroughly covering the head enhances the
efficacy of fungicide treatment. Machine and open-field burning can lower the germination of sclerotia on the soil surface
but not sclerotia buried below the surface. The higher the temperature from burning residue, the more effective the
treatment. The mowing of roadside grasses, and cleaning borders and headlands prior to formation of "honeydew" will
reduce secondary inoculum.

When establishing a seed production field use sclerotia-free seed so as to not introduce the pathogen into a field. Once
established in a seed production field, ergot may become a persistent problem. If losses reach unacceptable levels, the crop
may need to destroyed and the field rotated to a nonsusceptible host such as alfalfa for two to three years.

Compensatory Growth and Slaughter Breakevens of Yearling Cattle

by D. J. Jordon, Terry Klopfenstein, Todd Milton and Rob Cooper
Department of Animal Science, University of Nebraska-Lincoln

Introduction

Backgrounding systems are designed to grow cattle at various rates of gain. Predicting the amount of compensatory growth
based on winter rate of gain will allow producers to make informed and economically sound decisions when evaluating a
growing/finishing program. A two-year summary of yearling growing/finishing systems was done to determine the
compensatory growth response of animals following backgrounding and evaluate subsequent slaughter breakevens. A
secondary objective was to compare profitability of calf-feeding and growing/finishing (yearling) systems.

Procedures

In the summary of yearling trials, 180 medium-framed crossbred steers (519 lb) were used in each of two years. Steers were
purchased in the fall and wintered on cornstalks from approximately December 1 through February 15 (phase I), and placed
in drylots from February 16 through May 1 (phase II). Cattle were assigned randomly to one of five treatments used to
establish winter gains for subsequent evaluation of compensatory growth on grass. Treatments were: 1) "Fast" gaining steers
supplemented with wet corn gluten feed (WCGF) for the entire winter, 2) "Fast" gaining steers supplemented with corn
(CORN) for the entire winter, 3) "Intermediate" gaining steers fed to gain "fast" (using wet corn gluten feed) during phase I
followed by a "slow" rate of gain in phase II (FAST/SLOW), 4) "Intermediate" gaining steers fed to gain "slow" during
phase I followed by a "fast" rate of gain (using wet corn gluten feed) in phase II (SLOW/FAST), and 5) Steers

fed to gain
"slow" for the entire wintering period (SLOW). On approximately May 1, steers were placed on grass until October 1, at
which time they were placed in the feedlot for finishing. In-depth economic analysis was performed on all treatments to
compare wintering systems based on slaughter breakeven.

The calf vs. yearling comparison utilized data from four years of calf-feeding and yearling growing/finishing systems
compiled at the University of Nebraska from 1995-1998. Calf-feeding trials were chosen that had begun in the fall of the
year, meaning calves would have been sorted from a pool of animals from which calves placed into the yearling systems
originated. Yearling systems were handled in the same way as described previously in the yearling trials; however, two
additional years of data were used that were not reported previously. Also, intermediate gaining treatments (FAST/SLOW
and SLOW/FAST) were omitted. Again, in-depth economic analysis was performed on all treatments for the comparison of
profitability of each treatment.

Results

Steers on the WCGF treatment tended to have a lower breakeven compared to steers on the CORN, FAST/SLOW, and
SLOW/FAST treatments ($64.56, 66.22, 66.23, and 66.25/cwt., respectively). Animals on the SLOW treatment had the
highest breakeven ($68.68/cwt.). Final weight appears to be the largest single factor that accounts for a reduced slaughter
breakeven (as final weight increases, slaughter breakeven decreases), accounting for 78% of the variation. Therefore, steer
calves grown at 1.5 lb/day were superior (reduced slaughter breakeven) to animals grown at 0.5 lb/day over the winter.
Additionally, feeding wet corn gluten feed as an energy source to increase winter gains tended to produce slaughter
breakevens that were lower than the same winter gains produced by feeding corn. Breakeven differences between WCGF
and CORN treatments are due to increased winter inputs (protein supplement) for the CORN treatment, whereas wet corn
gluten feed supplied energy, protein, and minerals in one package. Restricting animals over the winter (0.5-1.0 lb/day)
resulted in 25-32% compensation on grass compared to controls (1.5 lb/day).

Comparison of calf-feeding vs. yearling growing/finishing systems showed that animals on the CALF treatment gained more
slowly and consumed less feed compared to yearling systems. For feed efficiency, a year × treatment interaction was evident.
In 1995 and 1996, calves were more efficient compared to the yearling systems; however, in 1997 no differences in
efficiency were noted. Likely, the reason for the discrepancy in 1997 is that calves on feed in the spring of 1998 encountered
significant mud, which reduced performance (ADG and feed efficiency). In 1998, calves were more efficient

than both
yearling treatments, and the WCGF treatment was more efficient compared to SLOW. The WCGF treatment produced
carcasses that were heavier (~75 lb) compared to SLOW and CALF treatments. When comparing treatments that were fed
(and therefore sold and slaughtered) at different times, slaughter breakeven may not be appropriate. Profitability is a better
measure because it accounts for different marketing times. Calf feeding failed to show a profit in all four years, whereas the
WCGF yearling system was profitable in three years. The SLOW yearling system was profitable in 1998; however, it also
produced the largest losses in two of the years examined, with the most substantial losses occurring in 1996. While not
statistically appropriate based on the year × treatment interaction, averaging profit/loss numbers across years is realistic in
terms of producer profitability. The WCGF yearling system was advantageous compared to CALF or SLOW, showing an
average profit of $28.85/hd over the four-year period. Losses incurred by CALF and SLOW were $-20.87 and -30.24/hd,
respectively. Final weight was the largest determining factor in terms of both slaughter breakeven and profit/loss, explaining
47 and 49% of the variation, respectively.

Editor's Note: Jordan and Cooper are graduate students, and Milton is a former faculty member in the Department of Animal Science. For scientific details on this research, contact Terry Klopfenstein, 402-472-6443, tklopfenstein1@unl.edu.

[The following two articles appeared in the April 2000 issue of Agricultural Research, published by the USDA Agricultural Research Service.]

Amazing Graze

There is a new reason why it may be beneficial to allow cows to graze on pasture. That reason involves a compound called
conjugated linoleic acid (CLA).

CLA is a fatty acid found in beef and dairy fats. Scientific interest in CLA was stimulated about 12 years ago when a
University of Wisconsin researcher discovered its cancer-fighting properties in a study of rats fed fried hamburger. CLA
cannot be produced by the human body, but it can be obtained through foods such as whole milk, butter, beef, and lamb.
"The interesting thing is that dairy cattle that graze produce higher amounts of CLA in their milk than those which receive
conserved feed, such as grain, hay, and silage," says ARS dairy scientist Larry Satter. This is true even when the nongrazers
eat pasture grass conserved as hay.

Satter, who is based at the Dairy Forage Research Center in Madison, Wisconsin, conducted a study

comparing the amount
of CLA in milk from cows grazing on pasture to the amount from cows fed hay or silage. His findings: Pasture-grazed cows
had five times more CLA in their milk than those fed silage.

Do dairy producers need to graze cows to get them to produce more CLA? "Not necessarily," says Satter. Instead, he
devised a way to nudge the production of CLA by dairy cows fed typical confinement diets. He added extracted whole
soybean and linseed oils to the corn-alfalfa diet. The added oils boosted CLA content in the cows' milk to equal the levels
obtained from grazing.

ARS and the Wisconsin Alumni Research Foundation (WARF) subsequently patented the method to increase CLA in cows'
milk. The patent, issued in the spring of 1999, was based on a study conducted by Satter and his University of Wisconsin
colleagues.

"Animal fats have been criticized for years, but now the potential benefits of CLA in milk and meat from ruminant animals is
being seriously studied. Milk fat is one of the richest natural sources of CLA. If human trials show the same benefits as
studies with laboratory animals, the benefit of consuming milk products could improve the economics of dairy producers
everywhere," says Satter.--By Linda McGraw, Agricultural Research Service Information Staff.

This research is part of Animal Production Systems, an ARS National Program (#102) described on the World Wide Web at
www.nps.ars.usda.gov/programs/appvs.htm.

Larry Satter is at the USDA-ARS U.S. Dairy Forage Research Center, 1950 Linden Lane, University of Wisconsin,
Madison, WI 53706, phone 608-264-5353, fax 608-264-5147, lsatter@dfrc.wisc.edu.

New Trefoils Give Breeders More Options

Two new lines of narrowleaf and big trefoil plants from the Agricultural Research Service should help breeders develop
improved forages for livestock and wildlife.

Trefoil species provide excellent nutrition. Unlike alfalfa, these forages don't cause bloating. They also tolerate marginal
production conditions such as dry, saline, or flooded soils. Because trefoils are legumes, they fix nitrogen into the soil for
later use by grasses and forbs. This can reduce the need for fertilizer.

The ultimate goal of ARS agronomist Jeffrey J. Steiner and geneticist Paul R. Beuselinck is to increase forage quality on
pastureland. That way, farmers won't have to purchase as much feed to supplement the diets of their livestock

that graze on
pastures.

The popularity of birdsfoot trefoil, a related species, has grown steadily over the past few decades. But growers have only
been able to obtain a few commercial varieties of big trefoil, and those were not bred for U.S. farm conditions. No
commercial varieties of narrowleaf trefoil are available.

Both of the new releases--ARS-1207 narrowleaf trefoil and ARS-1221 big trefoil-- combine the characteristics of dozens of
different genetic populations that were collected from around the world. These populations, known as accessions, are stored
in the ARS-managed National Plant Germplasm System.

"This seed is intended for breeders, not farmers," says Steiner. "The germplasm enables breeders to evaluate all available
characteristics for each species without individually testing each accession." That way, he says, breeders can use the releases
to develop varieties adapted to local conditions.

The narrowleaf line descends from 41 different accessions originally collected in about a dozen countries. The big trefoil
germplasm incorporates more than 80 accessions from at least eight countries.

Big trefoil grows in warmer, wetter areas than birdsfoot trefoil. Narrowleaf trefoil prefers drier, warmer areas that may be
saline.

Researchers and breeders can obtain small amounts of seed from Steiner.--By Kathryn Barry Stelljes, Agricultural Research
Service Information Staff.

Jeffrey J. Steiner is in the USDA-ARS Forage Seed and Cereal Research Unit, 3450 S.W. Campus Way, Corvallis, OR
97331-7102, phone 541-750-8734, fax 541-750-8750, steinerj@ucs.orst.edu. Paul R. Beuselinck is in the USDA-ARS Plant Genetics Research Unit, University of Missouri, Waters Hall, Room 207, Columbia, MO 65211, phone 573-882-6406, fax 573-882-1467, beuselinckp@missouri.edu.

CGS Facilitates Regional Collaboration

In early May scientists from the MINK (Missouri, Iowa, Nebraska, Kansas) Forage/Livestock Group gathered in Lincoln to
work on a joint proposal to the USDA Initiative for Future Agriculture and Food Systems program. It looked like a
computer fair, with several scientists using their portable computers to draft sections of the proposal as discussions were
taking place. The meeting was organized by the CGS, and a proposal for a project titled Sustainable Forage-based Beef
Production Systems for Family Farms was submitted by the CGS on behalf of the MINK Group. The proposal

is still under
review as this newsletter goes to press.

Another example of regional collaboration with which the CGS is involved is a newly-forming group of scientists from six
states who work in areas related to turf. The first meeting of the turf group will be in August in Lincoln.

CGS Citizens Advisory Council Holds 5th Summer Meeting/Tour

Our Advisory Council meets twice each year. The summer meeting has included tours in various parts of the state. Each
year we try to include stops that focus on areas related to the CGS three-pronged mission: forage/range /livestock,
wildlife/wetlands/natural habitats, and turf/landscape grasses; this year was no exception. About 40 Council members and
CGS Associates joined us in southeast Nebraska on July 11.

We began at the ranch of one of our Council members, Frank Bruning. Not only did we learn a great deal about how the
ranch utilizes a diverse grazing system with many pastures containing several different grass species, we also got to eat a
great lunch hosted by the Bruning family, for which we are most grateful! Thanks to UNL forage specialist Bruce Anderson
for helping with this part of the tour.

The next stop was the Meridian Wildlife Management Area near Alexandria where Brad Seitz and Jim Douglas with the
Nebraska Game and Parks Commission described land management strategies for the area. Brad and Jim then led us on to
the Father Hupp Wildlife Management Area near Bruning. This land is managed with wetland rotational grazing to reduce
invasion of reed canary grass and provide openings in vegetation for migratory waterfowl.

It was on to a soccer complex in York where UNL turfgrass specialist Roch Gaussoin, Extension Educator Gary Zoubek,
and York resident Orval Stahr explained how they worked together with many volunteers from the community to build and
manage the complex.

Thanks to all of those who assisted with pre-tour arrangements as well as helpful comments and answers during the tour.

Prussic Acid and Nitrate Poisoning

Prussic acid and nitrate poisoning occur in all livestock, but cattle and sheep are the most sensitive. The most dangerous
forages are those stressed by drought or other conditions, including sudan grass, forage sorghum, field corn, milo and

sorghum-sudan grass hybrids used for summer pasture, green chop, hay or silage.

All plants contain some nitrate, but excessively high amounts are likely to occur in forages grown under stressed conditions.
Nitrates are most abundant in the lower six- to eight-inch stem base of plants. Usually livestock do not graze lower stems
until leaves and tops have been removed, so nitrates rarely are a problem in summer annual pastures unless cattle are forced
to graze very short. Use extra caution when feeding hay or green chop because the nitrate-filled stems are mixed in with the
rest of the plant. Green chop is the most risky substance for nitrate poisoning and should fed immediately after chopping
because it can become ten times more toxic if allowed to heat.

The best poison prevention is to control the type and quantity of forage offered to livestock. Don't turn animals out when
they are very hungry and don't allow them to graze the bottom six inches of summer annuals. Sudan grass is best grazed
after it gets 18 inches tall. Sorghum-sudan crosses are best left until 20-24 inches to avoid prussic acid poisoning.
To reduce the nitrate content of your harvested feed, cut plants high, leaving eight or more inches of stubble so nitrates
remain in the field stubble. Another way to reduce nitrates in feed is to make it into silage. Up to half of the nitrates are
neutralized during fermentation in well-made silage.

Regardless of what you do to reduce nitrate levels, never assume your feed is safe. Always collect samples, especially from
what might be the most hazardous feed, and have them analyzed for nitrates before feeding.

For more information, including signs of poisoning in your animals, see NebGuide G86-775, *Prussic Acid Poisoning*,
ianrpubs.unl.edu/range/g775.htm, and NebGuide G74-170, *Nitrates in Livestock Feeding*,
ianrpubs.unl.edu/beef/g170.htm.

Editor's Note: The above is an excerpt from an article in the July 2000 Educator Extra published by the University of Nebraska Institute of Agriculture and Natural Resources. Forage specialist Bruce Anderson was the source.

CGS Associate News

For his research in the development of soil quality indicators, **John Doran** received the 2000 "Onassis Prize for the
Environment." The $250,000 award will be presented in November in Athens, Greece. Doran said he would use the money
to set up a nonprofit training organization for students and professionals.

Fred Baxendale, John Fech, Roch Gaussoin, Steve Rodie, Bob Shearman, Don Steinegger and **John Watkins** were
among those team members who received the Institute of Agriculture and Natural Resources 2000 Team

Effort Award for
their contributions to the annual Festival of Color. The one-day program, which showcases environmentally compatible
landscapes, draws several thousand people.

The following UNL faculty members received promotions this year: **Rhae Drijber, Scott Hyngstrom, Robert Masters,**
Rick Rasby, Steve Rodie, Monte Stauffer, Dan Walters, and **Dave Wedin**.

After 42 years of government service in the environmental arena, **Dayle Williamson**, Director of the Nebraska Natural Resources Commission, retired on July 1. We are grateful for the contributions Dayle has made as a member of the CGS Policy Advisory Committee, and wish him well as he enters a new phase in his life!

Info Tuft

The fragmentation of prairie habitat has had an alarming effect on birds. At least one-third of grassland bird species are
declining at a statistically significant rate, including bobolinks, Henslow's sparrows, sedge wrens, grasshopper sparrows, and
dickcissels.

Resources

Native Warm-Season Grasses: Research Trends and Issues. $30.00. Most of the native warm-season grasses are climax
species that evolved under intermittent defoliation by grazing herbivores and periodic burning. Because of this, they do not
persist well under continuous grazing pressure and are subject to invasion by less desirable species unless prescribed burning
or other weed management strategies are followed. These and other issues pertaining to the production and use of native
warm-season grasses as well as current research findings are discussed. CGS Associates Ken Moore and Bruce Anderson
are the editors of this Crop Science Society of America Special Publication Number 30. CSSA Headquarters, Attn: Book
Order Dept., 677 South Segoe Road, Madison, WI 53711-1086, books@crops.org,
http://www.asa-cssa-sssa.org/cgi-bin/Web_store/web_store.cgi
(click CSSA Special Publications then scroll down to this book).

Grass: Its Production & Utilization (Third Edition). $54.95. Textbook on agricultural management of grassland. Topics
include: role of grassland in nature conservation and landscape, grassland and amenity uses, the impact of grassland farming
on the environment, and grass in organic farming; recent developments in agronomy, nutrition, grazing, and forage
preservation; and the changing nature of farm economics related to change in the basis for farm support. Approximately 40
illustrations supplement descriptions. Iowa State University Press, 2121 S. State Avenue, Ames, IA

50014-8300,
515-292-0140 or 1-800-862-6657, store.yahoo.com/isupress/0632050179.html.

The Western Governors' Association Web site has a section on the High Plains Partnership for Species at Risk. Check it out
at www.westgov.org/wga/initiatives/HighPlains/hppbroch.htm.

Calendar

Contact the CGS for more information on these upcoming events:

2000

Aug. 7: Turfgrass Field Day, Mead, NE

Aug. 29-30: Alternative Ag Expo, Sioux City, IA

Aug. 29-31: Carbon: Exploring the Benefits to Farmers and Society, Des Moines, IA, http://www.cvrcd.org/carbon.htm

Sep. 13/14/15: Grazing Tour with Burt Smith, Crofton/Atkinson/Imperial, NE

Sep. 16: Festival of Color, Mead, NE

Oct. 15-19: Bioenergy 2000: Moving Technology into the Marketplace, Buffalo, NY

Dec. 5-8: National Conference on Grazing Lands, Las Vegas, NV, http://www.glci.org/Call.htm

2001

Jan. 8-10: Turfgrass Conference and Equipment Show, Omaha, NE

CGS Advisory Council Member Honors

The CGS extends congratulations to Ron Klataske, who earlier this year received Audubon Nebraska's Fred Thomas
Nebraska Stewards Award. Among his accomplishments, the former regional vice president of the National Audubon
Society organized the first annual Audubon river festival in 1970 to help focus attention on the migration of sandhill cranes
that rely on the central Platte River (which was shrinking at an alarming rate at the time). He also established the Rowe
Sanctuary near Kearney, now recognized as a world-class wildlife resource. Ron is the current director of Audubon of
Kansas.

Kudos also to Bill Kubly, president of Landscapes Unlimited, one of the nation's leading golf course development companies
headquartered in Lincoln. In June Kubly was honored with the Ernst & Young "Entrepreneur of the Year" award for the

Nebraska-Iowa region. In 1999 Golf magazine named Kubly one of the 25 most influential people in golf, a list that included
Jack Nicklaus, Arnold Palmer and Tiger Woods!

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.

Mail

Home