Winter Grazing Workshop Set for Nov. 4-5

A two-day forum on extended-season grazing options will be held Nov. 4-5 in Jamestown and Streeter, N.D.

The workshop begins at 9 a.m. on Wednesday, Nov. 4, at the Quality Inn in Jamestown. Speakers from the NDSU Extension service, NDSU research centers and the USDA Natural Resources Conservation Service, along with producers utilizing these grazing methods, will present information on winter grazing of cover crops, swath and bale grazing, livestock nutrition, integrated systems, manure distribution, soil health and water quality.

Speakers include: Kevin Sedivec, NDSU Extension service; Jay Fuhrer, NRCS; Bryan Neville, NDSU-CGREC; Michael Undi, NDSU-CGREC; Jerry Doan, North Dakota Grazing Lands Coalition; Doug Landblom, NDSU-Dickinson REC; Fara Brummer, NDSU Extension; Mary Berg, NDSU Extension; Paulo Flores, NDSU-Carrington REC; and Miranda Meehan, NDSU Extension.

The keynote speaker will be Bart Lardner of the Western Beef Development Centre at the University of Saskatchewan. His talk is titled “Winter Grazing of Beef Cattle: Nutrient Benefits and System Investments.”

The program continues on Thursday, Nov. 5 at the Quality Inn with a breakfast buffet and a panel discussion with producers at 7:30 a.m. The producer panel will include: Paul Brown on bale grazing, Todd McPeak on zero export hay production and grazing, Cody and Deanna Sand on cornstalk grazing, and Brian Amundson on residue grazing and water development.

This discussion will be followed by a bus trip to the CGREC. Here, participants will be able to view plots and demonstrations on cover crop grazing, bale grazing, portable fencing and wildlife management.

The registration fee for this workshop (meals included) is $55. The registration deadline is Oct. 23. Contact Fara Brummer at: fara.brummer@ndsu.edu or (701) 424-3606.
Stockpiling forage to extend the grazing season can be an economically wise choice for the North Dakota cattle producer. The idea of banking tame pasture ground or hay ground in lieu of windrowing and baling can provide a source of forage for cattle, in addition to reducing labor and costs of preparing winter feed. You also can gain the benefit of adding nutrients to your ground through free manure distribution.

At the Dickinson Research Extension Center, animal scientists Doug Landblom and Songul Senturklu tallied the figures from two winters with three different grazing scenarios after weaning. Mature cows grazed a full season cover crop mix, corn residue, and sunflower residue followed by hay (73 days grazing, 61 days hay), or stockpiled tame forage and corn grain residue followed by hay (107 days grazing, 27 days hay). A control group of cows were fed only hay in the drylot (134 days hay).

Wintering costs for the drylot cows were 2.8 times higher than the forage grazed cows. The cows that grazed cover crop and crop residues incurred a higher cost due to farming cost associated with the cover crop; however, the wintering cost was still 1.5 times less than feeding hay all winter. Body condition scores of the stockpiled grazed cows did not change over the winter. There was no difference in reproductive performance of the cows across the treatments.

Factors to be considered for winter grazing of stockpiled forage are: cow calving date, body condition score of cows going into the winter, wind protection, water access, stocking rate of the cows on the pasture or range and type of forage on the grazing unit. Winter grazing is not recommended on native range unless you have a very specific goal in mind, as grazing pressure can shift plant species if the animals graze the pasture too short. Supplemental feed may be needed as the winter progresses. Forage testing your stockpiled forage just before or during grazing can guide your supplemental decisions. Your county Extension agent can assist you in this process.

Ken Miller of the Burleigh County Soil Conservation District agrees that grazing stockpiled forages can be a benefit to the rancher. He adds, “Winter grazing of stockpiled forage can cut your winter feeding costs significantly. However, in the fall, you can’t make a last minute decision to winter graze. You have to plan ahead in order to create the stockpiled forage. This is where a high stock density short-duration planned grazing system pays dividends.” Miller has used the Nutritional Balancer (NUTBAL) system on grazing cows in late December. According to the test results, the forage quality on the tested pasture was meeting the needs of his grazing cows.

He notes, “When we winter graze, we rotate the livestock between paddocks just like we do in the summer. For example, if a paddock has 10 grazing days of forage available for the herd, we will graze the paddock for four to five days and rotate to a new paddock. We will do this on a half-dozen paddocks and then start over for a second time. The first graze will provide the necessary quality for the livestock. The second graze is less nutritious so we have to supplement with hay in order to meet the needs of the cow.”

Miller concludes with factors to consider when winter grazing: “water, shelter, fecal testing through NUTBAL, and a backup plan if the snow gets too deep.”
Central Grasslands Forum

Michael Undi Joins CGREC as Animal Scientist

Michael Undi has joined the Central Grasslands Research Extension Center as the new animal scientist. He grew up in Kadoma, a small agricultural and mining town in central Zimbabwe. As a boy, he tended cattle with others on communal pastures, learning the value of good herding practices and developing his interest in animal science.

After obtaining a degree in animal science at the University of Zambia, he earned a master’s degree in from the University of Saskatchewan and a Ph.D. from the University of Manitoba, both in ruminant nutrition and forage utilization.

He comes to NDSU after teaching and conducting research in Namibia and South Africa, and most recently at the University of Manitoba at Winnipeg.

Undi is interested in forages and livestock performance. At the CGREC, he will be investigating innovative methods of reducing winter feed costs for pasture-based beef herds. This will include studies on the use of corn residues with supplementation and estimating animal dry matter intake of baled-grazed, swath-grazed and stockpiled forage.

We welcome Undi and his wife, Thandi, to the CGREC and Streeter. He may be reached at michael.undi@ndsu.edu.

Equipment Demonstration Days Set for Oct. 6 and 9

The North Dakota State University Extension Service is hosting an Equipment Demonstration Day on Tuesday, Oct. 6, at NDSU's Central Grasslands Research Extension Center and Friday, Oct. 9, at the NDSU Hettinger Research Extension Center. Check-in for both events will begin at 9:30 a.m. and the program will start at 10.

Local county Extension agents, area and state Extension specialists, and livestock industry personnel are incorporating equipment demonstrations and education, including basic cattle nutrition and proper forage sampling.

Fara Brummer, area Extension livestock systems specialist at the Central Grasslands center, will discuss how bale processors and tub grinders can be used in preparing beef cattle diets. Auger and vertical mixers will be demonstrated to show producers the options available for providing cattle with total mixed rations. In addition, Carl Dahlen, Extension beef cattle specialist, will discuss mixer loading order and mixing times, along with methods to evaluate the consistency of mixed ration from the beginning to the end of the load.

Mary Berg, area Extension livestock environmental management specialist at the NDSU Carrington Research Extension Center, will present results of manure nutrient values collected from beef operations in North Dakota. She also will discuss the importance of calibrating manure spreaders and sampling manure before using it as a fertilizer.

The day will conclude with demonstrations of vertical and horizontal manure spreaders. The demonstrations will emphasize spreading width and patterns.

The program is free of charge, but anyone planning to participate should register by Oct. 2. Lunch will be served. Register online at http://tinyurl.com/equipmentday or by emailing Berg at mary.berg@ndsu.edu or calling (701) 652-2951.

Source: Mary Berg, NDSU Carrington REC
Editor: Ellen Crawford, NDSU Agriculture Communications
Native Plant Garden Showcases Prairie Plants and Their Names
Janet Patton, Research Assistant, CGREC

The native plant garden at the CGREC features native species found in the center’s research pastures and serves as a teaching tool, with plants labeled with common and scientific names.

It was established in 1996. Range scientist Bob Patton and his summer crew have maintained this garden through the years.

Located on the northwest side of the office, the garden is dedicated to Thomas J. Conlon, former director of the Dickinson Research Extension Center, who supported CGREC and its staff in the center’s early days.

The collection changes from year to year as new species are added and plants spread and reseed. About 60 species can be found in the garden. Plants are propagated from locally collected transplants, cuttings and seed.

The garden changes through the seasons as well, starting in spring with the emergence of prairie smoke, chickweed, violets and sedges. These flowers are followed by meadow anemone, roses, purple coneflower and milk-vetch. Summer is in full swing when the goldenrods, blazing star, prairie coneflower and milkweed are in bloom. By autumn, the sunflowers complete their show and the grasses turn color.

Grasses are the hallmark of a prairie garden. This planting includes big- and little-bluestem, western wheatgrass, blue grama, buffalo grass and several species of needlegrass. The sedge collection has been growing yearly. Seeing these similar, often confusing species growing side by side is very helpful.

Buckbrush, roses and dogwood are the native shrubs in the garden. A mid-sized juniper (non-native) has been included for a bit of green in the winter.

The public is invited to visit at any time.

Photos by Janet Patton
County Corner: Importance of Removing Net Wrap
Breana Kiser, Dickey County Extension Agent

Net wrap bale covering is becoming common in hay production in North Dakota. Net wrap is beneficial in allowing faster baling time and a full edge-to-edge coverage that allows water to shed off the bales. However, taking the time to remove net wrap before feeding, processing or grinding hay is important. Recent research from North Dakota State University indicates that net wrap, if not removed, can cause digestive problems in some cattle.

Veterinarians and diagnostic labs are starting to see cases of deaths in cattle, with further investigation revealing that net wrap wads are disrupting the flow of nutrients through the rumen and the rest of the digestive tract.

This led NDSU Extension beef cattle specialist Carl Dahlen to research this issue. The study looked at five types of hay binding material. The study evaluated three types of net wrapping, sisal twine and biodegradable twine, each of which was incubated inside the rumen of forage-fed Holstein steers for two weeks. “Because none of the plastic products disappeared during our study interval, the potential exists for these products to build up in the rumen through time and possibly lead to associated complications,” Dahlen wrote in a report of the study.

The plastic products referred to are the net wraps and biodegradable twine. Although these products are biodegradable, they require UV light for this process.

The effectiveness of processing or grinding a bale with net wrap depends on how sharp the knives are and the speed of the processor. The best option is to remove the net wrap before processing or grinding; this way, cattle will run no risk of ingesting the net wrap.

Banana Bread
A CGREC staff favorite from the kitchen of Sandi Dewald

3 bananas
½ c. margarine
2 eggs
2 Tbs. buttermilk or sour cream
1 tsp. lemon juice

1 c. sugar
2 c. flour
1 ½ tsp. baking powder
1 tsp. soda
1 c. chopped dates

Cream together the bananas and margarine. In another bowl, combine eggs, buttermilk or sour cream, and lemon juice. Add sugar, flour, baking powder and soda. Mix well. Combine with banana and margarine mixture. Stir in dates. Pour batter into a greased loaf pan. Bake at 350 degrees F. for about 35 to 40 minutes, depending on the size of the pan. The bread is done when a knife inserted in the middle of the bread comes out clean.
Upcoming Events:

Oct. 6   Equipment Day at CGREC
Information and demonstrations on forage processing, cattle rations, basic cattle nutrition, proper forage sampling and using manure as fertilizer. Check-in at 9:30 a.m., program at 10. (See page 3 for more information.)

Nov. 4-5 Winter Grazing Workshop
Presentations on extended season grazing options on Wed. in Jamestown at the Quality Inn, starting at 9 a.m. Banquet at 6 p.m. Producers panel Thurs. at 7:30 a.m. followed by tour at CGREC.

Topics include: cover crop-, bale-, swath- and corn stalk-grazing; portable fencing; water quality; manure distribution and soil health; and wildlife considerations. (More information on page 1.)

In this Issue:

New Animal Scientist at CGREC
Stockpiled Forage and Winter Grazing
Importance of Removing Net Wrap
CGREC’s Native Plant Garden

Photos by Rick Bohn, CGREC