Sweet on Switchgrass

With interest sprouting for its use as a renewable biofuel resource, here are factors to consider for establishing and growing this warm-season native grass.

By Kindra Gordon

Among conservation circles, switchgrass - a grass species that occurs naturally in every state in the continental U.S. except for Oregon, Washington and California - has always been well-liked as a forage for livestock grazing, haying, wildlife habitat and even prairie restoration efforts. It’s also earned a nice reputation as an ornamental plant in landscaping projects.

But switchgrass’ fame especially skyrocketed after it was mentioned in President Bush’s 2006 State of the Union address in reference to being used for the ethanol process. The President’s goal is for natural materials, like switchgrass, to provide 30% of America’s transportation fuels by the year 2030.

While the practical use of switchgrass in the ethanol milling process is still several years away, the interest in the plant itself has soared. Dwight Tober, a plant materials specialist with the USDA Natural Resources Conservation Service in Bismarck, ND, says many producers are interested in establishing switchgrass stands for seed production in anticipation of increasing demand for the forage should its potential as a renewable biofuel resource become reality.

To assist with providing information about switchgrass, Tober and his colleagues at the Bismarck USDA Plant Materials Center have recently compiled a report detailing switchgrass biomass trials in the Dakotas and Minnesota. The 18-page report evaluates the performance of ten different varieties of switchgrass for biomass yield and stand density at six sites in the three-state area based on 6 years of data collection. The report also provides establishment and management recommendations for switchgrass stands. Here, Tober shares some of the findings.

1. Consider Variety. Switchgrass can be grown from Texas to Canada and from New York to Nevada. But Tober emphasizes that the variety origin is a critical consideration. Additionally, if the goal is to produce switchgrass for ethanol production, a variety with a higher biomass performance should be selected. Additionally, Tober recommends seeding only foundation or certified seed.

In determining which switchgrass variety is suited to your region, Tober suggests working with your local NRCS office. Switchgrass performs best on moderate to fine textured deep soils in areas with greater than 14 inches of average annual precipitation. Western and

SWITCHGRASS NOT FOR HORSES OR SHEEP

Researchers have found that switchgrass is reported to be toxic to horses, sheep and goats when grazing pure stands, but no problems have been noted for cattle.

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northern varieties are adapted to drier conditions.

2. Seeding Tips. Switchgrass seed can be pricey at $5-10/pound depending on the quality and quantity of the seed, and availability can be limited. Seeding rates vary across the US. The recommended drilled seeding rate is 3.5 pounds pure live seed (PLS) per acre in western North and South Dakota and 4.5 pounds PLS per acre in the eastern part of the Dakotas. Recommended seeding rate is 10 PLS pounds/acre in the southeastern US. The recommended broadcast seeding rate is twice the recommended drill rates.

Spring or fall dormant seeding dates are recommended. As a rule of thumb, Tober suggests a spring planting at the same time as corn and soybeans. Fall dormant seeding should be after Oct. 15 in North Dakota. Because of the small seed size, a shallow seeding depth of 1⁄4 inch in a firm seedbed is essential.

To request the full research report titled “Switchgrass Biomass Trials in North Dakota, South Dakota, and Minnesota,” contact an NRCS office in North Dakota, South Dakota or Minnesota; or call the Bismarck Plant Materials Center at (701) 250-4330. The publication is also available online at http://plant-materials.nrcs.usda.gov/mdpcm/pubs/switchgrassBiomassTrials.pdf.

Texas Ranches Earn Special Honors

The mantra of the Texas GLC members could be “Follow Me” based on some recent recognition received at the 12th annual Lone Star Land Steward Awards program. The Award objectives are to recognize private landowners for excellence in habitat management and wildlife conservation. These examples of natural resource management salute the best conservation practitioners in the state’s 10 ecological regions and the important role of private landowners in the future of Texas natural resources.

For the third year the Lone Star Land Steward Awards are benefiting from an association with Sand County Foundation, an international non-profit organization devoted to private landowner conservation. Each ecoregion award will receive $1,000 from the Foundation, while the Leopold Conservation Award recipient will receive $10,000 and the Leopold crystal award.

“We see a diverse group of dedicated landowners managing their wildlife and natural resources in innovative ways,” said Linda Campbell, TPWD Private Land Programs Director. “They are models for others to emulate in today’s changing Texas.” Award sponsors include Texas Wildlife Association, Alcoa Rockdale Operations, The Nature Conservancy of Texas, USDA Natural Resources Conservation Service and Texas Farm Bureau.

The 2007 Leopold Conservation Award winner is Gary and Sue Price. The Price’s 1,900-acre 77 Ranch in Navarro County southeast of Dallas is designed to be economically and environmentally sustainable. The 77 Ranch was a winner of the Blackland Prairie Eco-Regional award in 1997. Gary is instrumental in the East Texas GLC.

A majority of the ranch’s income comes from a cow-calf operation that utilizes an intensive rotational grazing system. Seven large stock ponds provide water for both livestock and waterfowl leased annually to fishermen and waterfowl hunters. The cropland is enrolled in two USDA cost share programs for planting native grasses and forbs as critical habitat buffers. Careful management also provides forage and cover for many birds, including a small population of Northern bobwhites, otherwise rare in Navarro County.

The 77 Ranch is frequently used as an “Outdoor Classroom” for field days and workshops, which cover topics such as grazing management, native forages, grassland restoration, and wildlife management. The sessions are taught by professionals from both government and non-government organizations.

The McFaddin Ranch established in Victoria County in 1877, won the Lone Star Land Stewardship Award - Coastal Prairies. Bob McCan, Texas GLC Chairman, continues the family land management tradition on his share of the ranch under the name of McFaddin Enterprises.

The McFaddin Enterprise ranches include three divisions covering more than 75,000 acres managed holistically for both livestock and native wildlife. Rotational grazing, fire, and an integrated brush management system have improved diversity and production. All Divisions participate in studies on integrated brush management, quail management, research on invasive fire ants, and the effects of prescribed burning. They host many workshops and high school habitat judging competitions. Riparian vegetation and water quality studies have also been conducted on these ranches.

McFaddin Enterprises partner with many governmental and private entities to optimize income while fostering good land stewardship.

- Submitted by Mark Moseley, Texas NRCS
For The
Grazier’s Toolbox

Beef & Birds
With proper range management, cattle and wildlife creatures can co-exist.

By Kindra Gordon

“There’s a misconception that cows kill birds,” says Dave Steffan, a South Dakota rancher and retired rangeland management specialist with the Natural Resources Conservation Service.

But Steffan advocates that with proper grazing management, grasslands often support more songbirds and wildlife. And he says land managers need to communicate to the public that cows and birds can co-exist.

That was the impetus for a unique tour held June 8-9 by the South Dakota Grassland Coalition on two ranches in the Black Hills - the featured attraction was showcasing birds on the range. The tour invited bird watchers and ranchers to learn from one another about the importance of range management in providing habitat for wildlife, while also producing beef.

“Our goal is to bring birders and ranchers together and show that range management is beneficial to both. Beef and wildlife do not need to be mutually exclusive,” says Justin “Judge” Jessop with the South Dakota Grassland Coalition.

Mark Kieffer, one of the ranch tour hosts, utilizes rotationally grazing to help balance his goals of beef production and wildlife habitat. He says, “We use wildlife as a barometer of how well we are managing the range.”

Smart Strategies
For producers interested in integrating the habitat needs of birds and wildlife into their livestock operations, the Rocky Mountain Bird Observatory recommends these management strategies:

1) Birds need habitat with diversity. Landowners are encouraged to try to keep a mosaic of conditions to meet the broader needs of birds. For example, the more structurally diverse a habitat is with grass, shrubs, forbs (flowering plants), etc., the more species-rich the bird community found there will be.
2) Implement a rotational grazing system that varies the grazing patterns and timing in pastures annually. As an example, heavy spring grazing year after year in the same pasture may reduce, or eventually eliminate, cool-season grasses in that pasture. This can be detrimental to early-season nesting birds that require a cool-season grass component. Likewise, it is important to alter use in riparian areas to allow birds to utilize the area for nesting.

Additional management factors to consider:
• Use fire as a tool to create disturbance and alter habitat structure.
• Wait to hay areas until after July 15, when most birds are finished nesting.
• Use escape ladders to protect water quality and minimize loss of birds and other wildlife in stock tanks.
• Establish native shrubs, legumes or forbs to add diversity to the habitat. Avoid establishing monoculture stands of forages.
• Consider stocking rate. Overstocking will reduce habitat quality for most species of wildlife and birds.

UPCOMING GRAZING EVENTS

Oct 3-6, Denver - Nearly 2,000 leaders from across the U.S. dedicated to protecting farms, ranches, forests, trails, natural areas, parks and scenic vistas will gather at the Adam’s Mark Hotel in Denver. For more info on the largest gathering in the U.S. dedicated to land conservation, contact Patty Tipson at 202-638-4725 or ptipson@lta.org; or visit www.lta.org/training/rally/overview.htm.

Dec. 11-13, Fort Collins, CO - The 2007 Range Beef Cow Symposium, is a joint effort of the Cooperative Extension Services of Colorado State University, the University of Nebraska, South Dakota State University, and the University of Wyoming. The event, which is held every other year, will feature well-known speakers who will provide updates on production topics in the areas of beef industry issues, genetics, reproduction, range and forage management, cattle health, and beef nutrition. A trade show with displays from the beef industry is also offered.

For additional information, contact Colorado State University Extension Beef Specialist Jack C. Whittier, (970) 491-6233, jack.whittier@colostate.edu; or CSU Extension secretary Nancy Weiss, (970) 491-7640, nancy.weiss@colostate.edu.


Outdoor recreation is ‘Big Busine$$’

From birdwatchers to mountain bikers, the active set accounts for almost $300 billion in annual retail sales and contributes more than twice that to the U.S. economy.

Outdoor recreationists shell out $46 billion a year on the gear they need to hit the woods, the rivers and the slopes, according to a recent report by the Outdoor Industry Foundation. But they spend five times that much ($243 billion) on all the extras - food, lodging, entertainment and transportation.

The study does more than measure retail sales. It also tracks the “ripple effects” of the spending. In all, it estimates active outdoor recreation pumps $730 billion annually into the U.S. economy.

Among other findings: The industry supports about 6.5 million jobs. Annual tax revenues add up to $88 billion a year.

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Six U.S. cattle operations honored for stewardship efforts

Top award winner to be selected in February

Regional award winners recognized by the 2007 National Environmental Stewardship Award Program (ESAP) have been announced. Now in its 17th year, the national winner of the program will be named at the 2008 Cattle Industry Convention in Reno, NE next February. The regional honorees include:
Region I: Sunrise Club Calves, Shippenville, PA. 
Region II: Dec River Ranch, Aliceville, AL.
Region III: Oak Knoll Ranch, Salem, MO.
Region V: Roaring Springs Ranch, Frenchglen, OR.
Region VI: Yolo Land & Cattle Co., Woodland, CA.
Region VII: Alexander Ranch, Sun City, KS.

“The six regional winners have made extensive efforts to work closely with their local communities and government agencies, including the USDA’s Natural Resources Conservation Service (NRCS), to implement conservation programs that benefit everyone. They have seen the value in utilizing conservation programs such as the Environmental Quality Incentives Program on their operations. These folks showcase how the implementation of cooperative research efforts, educational events and government programs can really pay off,” the selection committee said of the honorees.

The ESAP Selection Committee consists of past award winners, university faculty, federal and state government agencies, conservation and environmental organizations. The program is administered by the National Cattlemen’s Beef Association and sponsored by Dow AgroSciences LCC and NRCS.

Outdoor recreation is ‘Big Busine$$’

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The trade group hopes the fresh statistics, the most comprehensive report it has commissioned, will help it make a stronger case for protecting the wilds from development, oil drilling and the like.

“The purpose is really to show the economic importance of outdoor recreation - we’re a force,” said Clint Wall, research director for the outdoor industry group.

Topping the list of avid outdoors’ types: wildlife viewing participants. Birding fanatics have been a boon to the segment, which attracted 66 million people last year.

Here’s a quick list of the top outdoor activities and the number of participants:
66 million: Wildlife viewing
60 million: Bicycling
56 million: Hiking, other trail activities
45 million: Camping
33 million: Fishing
24 million: Paddling
16 million: Snow sports
13 million: Hunting

Source: Outdoor Industry Foundation, Fall 2006 Report

To have your GLCI activities or upcoming events highlighted in this newsletter, contact Kindra Gordon at phone 605-722-7699 or kindras@gordonresources.com.