Calendar of Events

December 8
LFGC annual meeting
Alexandria, LA
9:00 p.m. –12:45 p.m.
Contact: Ed Twidwell (225-281-9448)

January 14-17, 2018
AFGC annual meetings, Louisville Kentucky

Articles

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LFGC and AFGC Annual Meetings

The Louisiana Forage and Grassland Council (LFGC) plans to address several topics at its 2017 annual conference. The conference will be held on Friday, December 8 in Alexandria. The meeting site will be the LSU AgCenter's Woodrow Dewitt Livestock Barn Facility, located on the south end of the campus at LSU-A in Alexandria. The campus is located south of Alexandria off of Highway 71.

Presentations will be made on topics such as using a leader/follower grazing system, considerations for including clover in pasture and grass and legume seed production in Oregon. An invited presentation on the importance of managing grasslands to enhance pollinator habitat will be made by Liza Garcia from the University of Florida. Improved forages are not only good for livestock; they can also help feed bees. Bees are the primary pollinators and they benefit 1/3 of the world's crop-based production. Bee populations are declining, affecting plants that rely upon them. Managing grasslands to enhance bee habitat requires similar management practices to those needed to enhance pasture for grazing livestock. Several management strategies to

enhance pollinator abundance in grasslands will be discussed.

Registration and viewing of commercial exhibits will begin at 8:15 a.m. The meeting will begin at 9:00 a.m. and conclude with a lunch at 12:45 p.m. Lunch will be included in the $10 registration fee and anyone interested in forage production and management is invited to attend. Membership in LFGC will be available at the meeting for $35. Membership in LFGC is not required for attendance. The complete program is published below:

8:15 a.m. Registration and View Exhibits

9:00 a.m. Welcome and Introductions
Mr. John White, LFGC President

9:05 a.m. Utilization of a Leader/Follower Grazing System in our Dairy Operation
Mr. Ted Miller, Producer, Baskin, LA
Mr. Charles Opitz, Producer, Baskin, LA

9:30 a.m. Considerations for Including Clover in Pastures
Dr. Wink Alison, LSU AgCenter, Winnsboro, LA

10:00 a.m. Product Update from Exhibitors

10:15 a.m. Break

10:45 a.m. Managing Grassland Structure to Enhance Pollinator Habitat
Ms. Liza Garcia, University of Florida, Marianna, FL

11:30 a.m. Grass and Legume Seed Production in Oregon
Dr. Ed Twidwell, LSU AgCenter, Baton Rouge, LA

Noon NRCS Update
Mr. Kevin Norton, Alexandria, LA

12:15 p.m. LFGC Award Presentations
Dr. Ed Twidwell, LSU AgCenter, Baton Rouge, LA
Mr. Mike Turpin, Producer, Ruston, LA
Mr. Chris Ebel, NRCS, Many, LA

12:30 p.m. LFGC Business Meeting
Mr. John White, LFGC President

12:45 p.m. Adjourn and Lunch

AFGC Annual Conference

The AFGC annual meeting will be held on January 14-17, 2018 in Louisville, Kentucky. The theme of the meeting is "Forages: Opportunities for the Next Generation". The meeting will have workshops on clover management, horse pasture management, integrated crop-livestock systems, producing quality hay in a humid environment and new technology in grassland agriculture. The meeting will also feature the Forage Spokesperson Contest for producers and the Emerging Scientist Contest for graduate students. For additional information, contact AFGC Headquarters at www.afgc.org.

The Big Herd and the Little Herd

Cliff Vining of Pioneer says he has made "quite a journey" from cotton farmer to herdsman--a caretaker of two herds, one above ground and one below ground.

For the beef cattle herd above ground, he says if you put good grass in front of them, problems disappear. The underground herd of microbes that improve the soil is fed by "wasting" grass. What his cows don't eat they tromp down, providing food for the microbes. "The wasted grass feeds the little herd and those little creatures feed the grass," he said. "The small herd takes care of the big herd."

He rotates 200 to 300 mama cows through 10-acre paddocks. He uses electric fence, with no gates. He just drops the wire and cows walk over it to the next paddock. He says two things don't get along with electricity—steel and water. For that reason he uses fiberglass rods for posts, which work well and make building fence easy. There are water troughs and mineral feeders in each pasture.

Cliff started out with hybrid Bermudagrass in his pastures. Then he let the grass adapt and has ended up with Dallis grass, numerous annual grasses and a lot of clover. He also planted some switchgrass, which is now spreading on its own. It can grow taller than a man on a horse.

A few years ago he tried making some haylage and now that's all he bales. He can make 80 bales of haylage in a day, which includes wrapping. It eliminates winter supplement feeding, leaving only salt and mineral to put out.

The cattle are wintered on the hayfields. He uses a bale unroller to spread nutrients across the pasture, as well as to be sure all cows get an equal chance to eat. Recycling the nutrients is an important part of the system. When Cliff soil tests these fields, pH is generally in the sixes and only a small amount of nitrogen is needed.

His cattle are "environmental friendly." They have a touch of ear to handle the hot weather. He has a strict vaccination program, but uses very little dewormer. The cows seldom graze forage below six inches, so they rarely ingest worm larvae, which don't climb that high on the plant.

He has a second farm where heifers and some open cows spend the warm months, starting in April. The herd grazes the entire 200 acres. To keep cool, they follow the irrigation pivot if it's running, grazing under the mist. Otherwise they go to shade under the available trees during the hottest hours. The cattle are moved November 1 because the ground gets boggy when winter rain starts. Ryegrass and clover are used as cover crops to feed the summer grass—for the past eight years, no reseeding of winter forage has been necessary. Only 44 units of nitrogen is needed annually, put out about February 1.

With his two unique systems, the farms complement each other. His problem is too much grass--getting the grass eaten down for planting ryegrass in the fall and then grazing enough to make room for the summer grass to come through in the spring.

"I'm committed to this system," he stated. Cliff says he hunted the silver bullet that would do it all,

but he found out there is no such thing. "You must adapt to your environment and see what survives and what the cattle want," he said.

His cows calve in the spring, when the green grass is at its best. He believes in following natural cycles, which includes babies being born in the spring. Right now his calves are still on the mamas, helping to clean up remaining warm-season forage to make way for winter grass. In the fall he lets cows eat as low as two inches to open up for the ryegrass. If necessary he will mow the summer grasses.

"Everything works in a circle and has its place. When we tamper with something, it gets distorted. Man didn't design this system. We're trying to copy what was here, so we can produce more grass," he explained. "The harvesters (cattle) get more gain and it's less expensive because they're eating grass." Cliff added, "Most of the work is gone, just a little maintenance. A lot of things take care of themselves if you leave it alone."

He is active in the Louisiana Grazing Coalition, as well serving as a board member of Louisiana Forage and Grassland Council. Cliff also acknowledges the help he has had from NRCS employees, county agents, and other LSU AgCenter staff, as he developed his system.

Effect of Warm-season Annual Grasses on Forage-finished Beef Production

D.D. Harmon, J.L. Lee, D.W. Hancock, A.M. Shelton, R.L. Stewart, Jr., J.R. Segers and C.D. Teutsch
University of Georgia and Virginia Tech University

A 3-year study was conducted to evaluate forage production, animal performance and carcass merit from forage-finished steers grazing four warm-season annual forages. The grazing trial was conducted in 2014, 2015 and 2016 (70, 63 and 56 days, respectively). One of four forage treatments was assigned to 16 pastures (2 acre) in a randomized complete block design with four replications. Forage treatments were sorghum x sudangrass (SS), brown midrib sorghum x sudangrass (BMR), pearl millet (PM) or pearl millet planted with crabgrass (PMCG). Each year, two British-cross beef steers (about 950 pounds) were randomly assigned to one of the 16 pastures for forage finishing after being stratified by weight. Each pasture was subdivided into two, 1-acre paddocks for rotational stocking and put and take stocking was employed to maintain a consistent forage allowance. Shrunk body weight was recorded at initiation, middle and end of each grazing season to calculate total and average daily gain. Once forage became limiting, steers were harvested, hot carcass weight (HCW) was measured immediately before chilling, and chilled carcasses (24-hour) were evaluated for yield grade (YG) and quality grade (QG). Statistical analysis was conducted using PROC MIXED in SAS 9.4 with main effects of treatment, year and the interaction. Significance was detected at the 0.05 level with tendencies defined as $P < 0.10$. Total seasonal forage yield had a tendency ($P < 0.07$) to be higher for BMR compared to PMCG, with SS and PM as intermediates (6.5, 5.4, 5.9 and 6.0 tons/acre, respectively). The average daily gain of the steers had a tendency ($P < 0.07$) to be higher for BMR and PMCG compared to SS and PM (2.18, 2.14, 1.90 and 1.87 lbs/day, respectively). No treatment differences were detected for carcass variables HCW, DP, KPH, 12th rib back fat, marbling score, YG and QG ($P > 0.05$). These findings suggest that cattle on BMR, SS, PM and PMCG perform similarly, giving producers the option to match a forage type based on the availability, cost and their production system.

Source: 2017 AFGC Proceedings

Effectiveness of Existing Soil Rhizobia on Crimson Clover Performance

Robert Lane, Shyam Nair, Demi Matar, and Brittany McCoy
Sam Houston State University

Cool-season annual legumes are frequently over-seeded into perennial warm-season grass pastures to extend the grazing season, improve forage nutritive value, and provide biologically fixed nitrogen (BNF). Preinoculated clover seed is the industry standard, but research has shown that inoculated seed may be unnecessary in years following successful establishment of the same legume, and that specific strain/cultures/races of *Rhizobium* bacteria are more effective N fixers with specific legume species. We observed how preinoculated

and uninoculated "Dixie" crimson clover performed in a sandy loam soil collected from adjacent sites that had (a) a dense stand of inoculated "Dixie" crimson clover grown the previous year, (b) inoculated "Durana" white clover grown for the previous five years, and (c) a control site that had not been planted to a legume but was colonized by naturalized California burr medic. Treatment plants were grown in the greenhouse for 140 days. Inoculation treatment did not affect root or shoot dry matter or N content of crimson clover. Shoot N was higher in plants grown in soil in which crimson clover was grown the previous year. The results indicate that where other legumes have recently grown, existing rhizobial species/races/strains may meet BNF needs of crimson clover for biomass production, but BNF effects on N content of clover (inoculated or not) following inoculated crimson clover appears to be enhanced compared to that following non-crimson legumes.

Source: 2017 AFGC Proceedings

Residual Effect of Broadleaf Pasture Herbicides on Volunteer White Clover Stands

E.K. Twidwell and R.E. Strahan
LSU Agicultural Center

White clover is a very important component of many pastures in the southeast region of the USA. In Louisiana, white clover is classified as either a short-lived perennial or a reseeding annual. It is normally a reliable source of grazing from March through June. A management practice that could potentially have a negative impact on white clover stands is the application of broadleaf herbicides to control broadleaf weeds during the summer months. Several commonly-used pasture herbicides contain active ingredients that remain in the soil for many months after application and may hinder germination and growth of white clover. In this

study, six broadleaf herbicide treatments were applied on May 22, 2015 to an established mixed stand of bahiagrass and white clover. About ten months after herbicide application, GrazonNext HL applied at 1.5 pints/acre and Chaparral applied at 2.5 ounces/acre had the most negative impact on the proportion of white clover in the mixture. The

herbicide treatments which had the least negative effect on white clover populations were picloram, 2,4-D and Weedmaster. GrazonNext HL applied at a rate of 1.2 pints/acre had a moderate effect on the white clover population. Results of this study suggest that the application of GrazonNext HL (1.5 pints/acre) and Chaparral herbicides for summer broadleaf weed control should be avoided if white clover is a component of a pasture.

Source: 2017 AFGC Proceedings

Stocker and "Nelson" Annual Ryegrass Response to Different Stocking Rates

G. Scaglia
LSU Agricultural Center

"Nelson" annual ryegrass is a tetraploid cultivar developed for high forage production. It may support greater stocking rates than diploid cultivars like "Marshall" which has been evaluated in south Louisiana for several years. Despite the fact that the effect of stocking rates on animal and forage production is site specific, this information is needed for the correct management of the forage resources of a particular area. We used stocker crossbred steers with 550 pounds of average body weight in three consecutive grazing seasons. From previous work using "Marshall", we knew that a stocking rate (SR) of 1.8 steers/acre was appropriate to get, at the same time, good average daily gains maximizing gain per acre. Four SR were evaluated; 1.5 (SR!), 1.8 (SR2), 2.1 (SR3) and 2.4 (SR4) steers/acre. The number of grazing days were greater for SR1 in year 1 (112.6 days) followed by SR1 and SR2 in year 2 (98 and 94 days, respectively). Due to excessive rainfall during the fall in year 3, grazing days for SR3 and SR4 were the lowest at 41 and 40 days, respectively. Steers' average daily gains were greater for SR1 and SR2 in year 2 (2.77 and 2.85 lb, respectively) and SR1 in year 3 (2.68 lb). Final forage allowance (FA) was greatest for SR1 (0.70), followed by SR2 (0.52) while FA in SR3 and SR4 were smaller and similar between them (0.42 and 0.40, respectively). Smaller SR allowed for greater average daily gains and gain/acre. Environmental conditions affected grazing days which in turn affected gains.

Source: 2017 AFGC Proceedings

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