



THE FORAGER

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To receive **The Forager** via email, or to submit a question or upcoming event: contact: se_johnson@ncsu.edu

N.C. Forage & Grassland Council Membership Form

Name _____ Name of Operation _____
Address _____ City _____ State _____ Zip _____
E-mail _____ Phone: _____
Occupation: Farmer ___ Industry ___ Agency ___ Other _____

_____ I prefer to receive a **printed** copy of The Forager in my mailbox. _____ I prefer the Forager be e-mailed to me.

_____ **Individual** — \$25.00 (producers, professional agricultural and industry personnel, etc.)
_____ **Corporate** — \$300.00 (businesses, organizations; manufacturers, etc.)

Make check payable to: N.C. Forage and Grassland Council Mail to: 2228 N. Main St., Fuquay-Varina, NC 27526

NCFGC GRAZING CONFERENCES

This year the NCFGC is offering winter forage conferences at three sites across North Carolina. The **2009 North Carolina Forage & Grassland Conferences** will focus on Managing Forage Costs. Outstanding local producers and USDA-SARE sponsored Extension Specialists John Andrae (SC) and Dennis Hancock (GA) are featured speakers. Program and tradeshow run from **1-7**. Register for Kenansville Jan 27, Albemarle Jan 28 or Waynesville Jan 29. Registration is \$15 (couples \$25; students \$10). Add \$5 more at the door. Registration and membership: \$30 (a great deal!) **Register by Jan 21** to assure your meal. Contact your County Extension Office or Kim Burdge at 919-552-9111 for a NCFGC Conference registration brochure.

Other Regional Forage Conferences:

NCSU-RME Grass-fed Beef Production and Marketing Trainings: Jan 13, 14, 15. Contact Geoff Benson at 919-515-5184.
The Virginia Forage and Grassland conference series is scheduled for Jan 12, 13, 14, and 15. Featured speaker is Harlan Hughes of North Dakota. Contact: Margaret Kenny at 434-292-5331.
Appalachian Grazing Conference March 6-7 Morgantown, WV. Contact becky.casteel@mail.wvu.edu or 304-293-6131.
[HTTP://www.wvca.us/dl/lfu/09_AG_C_Brochure_Reprint-09_full.pdf](http://www.wvca.us/dl/lfu/09_AG_C_Brochure_Reprint-09_full.pdf).

Do you have hidden talents that can help grow the NCFGC ?

Members needed to help with the NCFGC display at the 2009 conferences and other events. Contact V. Mac Baldwin or Sue Ellen Johnson if you are interested. Volunteers are also needed to support NCFGC activities. Members can help with Forager, a web-site, membership and displays. Get involved and help the NCFGC promote grasslands, open space and profitable forage management!

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The Forager

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THE NORTH CAROLINA FORAGE AND GRASSLAND COUNCIL
IN COOPERATION WITH
THE NRCS -GRAZING LANDS CONSERVATION INITIATIVE AND
NCSU-NORTH CAROLINA COOPERATIVE EXTENSION

FORAGES FOR BIOFUEL AND LIVESTOCK

There's news everywhere about bio-ethanol made from grasses. Grasses are on a long and exciting list of potential renewable energy crops. The list includes soybeans and canola (for biodiesel), corn, sweet potatoes, sweet sorghum, wood, grasses, and algae (for ethanol). North Carolina's biofuels future requires developing a complete "farm-to-fuel pump" system. Which crops will be used for energy feedstocks will depend on processing technology and field production economics. Technologies for processing forages as feedstock for "cellulosic" ethanol are **not** yet cost effective, but are under development worldwide. Perennial grasses may have cost advantages over annual crops, but represent a long term investment. A series of chemical and bacterial treatments are needed to release and ferment the sugars "locked" in the cellulose of grasses. Tennessee is subsidizing development of a prototype system using switchgrass for an ethanol industry. It is still unclear whether ethanol processing facilities will use different types of feedstocks and grasses or be dedicated to using a single renewable feedstock. Grasses may also be pelletized for burning. In North Carolina, years of research have evaluated warm season grasses for their yield, nutritive value and persistence. USDA-NCSU scientist Joe Burns released two switchgrass varieties in 2008— for bio-fuels and hay. {Limited seed should be commercially available from Ernst Seed Company this spring.} Big Bluestem (see photo) may rival Switchgrass in ->>



Native warm season grasses are good forages, UNTIL they form a seedhead. Then they lose quality rapidly.

EVENTS

- ⇒ JAN 13, 14, 15 NCSU GRASS-BASED BEEF WORKSHOPS
- ⇒ JAN 12-15 VA FGC CONFERENCE CONTACT: 434-292-5331
- ⇒ JAN 17 CATTLEMEN'S CONGRESS - COUMBUS COUNTY INFO: 910-641-3996
- ⇒ JAN 27-28-29: NCFGC WINTER CONFERENCES MANAGING FORAGE COSTS INFO: KIM @ 919.552.9111
- ⇒ FEB 5: STOCKPILING FIELD WALK: SNOW CAMP NC INFO 919-513-1335
- ⇒ FEB 20: NCFGC ANNUAL MTG AT NC CATTLEMEN'S CONF: HICKORY. INFO: KIM @ 919.552.9111
- ⇒ FEB 23-24 NC DAIRY CONFERENCE-SALISBURY
- ⇒ MAR 6-7 APPALCHIAN GRAZING CONFERENCE MORGANTON WV

Forage Basics: Recognizing Annual Ryegrass and Tall Fescue

Two cool season grasses are common forages across NC. In NC most growth occurs from Oct-May. Tall fescue, a perennial, stays green but grows slowly in summer; annual ryegrass usually does not survive the summer. Annual ryegrass is more vigorous in shade. Tall fescue is more drought tolerant. If managed properly both can provide good quality pasture and hay and for cattle, horses, and small ruminants.

Annual Ryegrass: *Lolium multiflorum*

Leaf long narrow tapered to a fine point. No midrib.
Auricles: Clasp around the stem
Ligule: membranous, blunt



Seedhead:
Spike with spikelets alternating along the main stem



Tall Fescue: *Festuca arundinacea* [elatior]

Leaf long ribbed, narrow and tapered to a fine point. No mid-rib. Edges often coarse or cutting.
Auricles: Often short, stubby. not clasping.
Ligule: membranous, jagged



Seedhead:
Terminal panicle

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BIOFUELS –CONTINUED

Cont. from p 1 — productivity, yet have a better market as horse hay, according to Burns’ still unpublished research. Wildlife enthusiasts promote these native warm season grasses because of their benefits to wildlife as well as potential for ethanol production. Another potential ethanol/forage crop is “Miscanthus giganteus”. Originally an ornamental, this grass is planted vegetatively (using root pieces). Many perennial grass crops with energy potential can be difficult to establish, because of weeds, moisture etc. Once established many of the perennial grasses have very minimal fertility requirements. However, harvest management (cutting height)

can be critical to their survival. Producers should also note there are concerns about the invasiveness of several potential cellulosic ethanol species. At the NCSU Biofuels research farm in Duplin County we are screening numerous crops that have potential for both bio-ethanol and forage potential. Ask us when you hear about a new crop. Given production challenges and uncertain markets, the best strategy for forage growers may be to grow crops that have the potential to be processed for cellulosic ethanol, but that can also be profitable, high quality hay crops.

PLANNING A PASTURE WALK

Many of us learn best by visiting other farms and talking with other farmers. North Carolina forage producers are innovating and learning all the time. Forage and Grassland Council members or the general pasture public can learn from your successes — or mistakes. A pasture walk can be organized for 5, 15, or 50 people. Field walks can be fun and informative anytime of year. If you have a prized pasture or a pasture problem, contact your county extension agent or Sue Ellen Johnson, NCSU Forage Specialist, about scheduling a pasture walk.

Stockpiling Tall Fescue

Expert grazers “stockpile” forage for winter grazing. They fertilize tall fescue in early fall and allow it to grow *without grazing* through autumn months —until dormant. They then have good quality “pasture” for grazing in the winter. Stockpiled tall fescue provides higher quality and lower cost forage than hay. Other forages can be stockpiled, but don’t have the same quality as tall fescue. Horses and cattle can utilize stockpiled pastures. Look now at this cost saving alternative to feeding hay. A pasture walk focused on stockpiling is scheduled for Feb. 5 from 1–3 pm in Alamance County. Call 919-513-1335 for info.

QUESTIONS FROM THE FIELD

Q: I have some “old” pre-inoculated clover seed I would like to plant this winter, can I successfully plant this seed?

A: A lot depends on how the seed was handled and stored since the time it was bagged. If the seed has been kept cool but not frozen the inoculant in the seed coating may still be alive and able to nodulate the legume roots. Without nodules you will not get the nitrogen benefits of the legume for your forage. **Check the nodulation of several plants 4-6 weeks after planting. The nodules should be abundant (see photo) and pink inside when pinched.** If the initial inoculation failed, you can do an emergency late application of inoculum — better than nothing. You should also do a standard germination (ragdoll) test to determine if the seed itself is still viable.



A well nodulated legume has multiple nodules (>5) on each inch of tap root. The nodules are pink inside.

Q: After replanting pastures this fall– how do I know if my planting was successful or if the pasture (or hayfield) needs more attention?

A: For a field newly planted to cool season forages this fall (2008) you should be able to identify at least 8+ individual plants of the desired plant species in a 1ft x1 ft square frame. Make a “frame” using cardboard or wire. Walk around the field and randomly drop the frame (about 100 times) and *really* count the plant /seedling numbers. [If there is complete cover by desired species in the frame (which is possible if you overseeded) a good plant count can be less than 8.] If there are weeds (such as henbit or chicory) present—are they out-competing or outgrowing the desired forage? Annual weeds can outcompete a perennial forage in its establishment year; limiting the long term success of the stand. **Exact thresholds for weed pressure in forage plantings have not been determined;** but if weed numbers are even half as many as the desired forage plants (1 weed plant : 2 forage plants) you should consider controlling the weeds to help your forages establish. If there appear to be equal amounts of weeds either in terms of soil cover or plant height you should address the weed problem as quickly as practical.

What’s New With the NCFGC?

VOTE on NCFGC BOARD CHANGES at this years **NC Forage & Grassland Council Annual Meeting FEBRUARY 20th at 4 p.m. at the Hickory Convention Center** during the NC Cattlemen’s Association Annual Conference. Following the membership meeting an educational “Producer Panel” will discuss *Pastures and success in the NC beef business*. Dr. Matt Poore will moderate.

BE AN ACTIVE SUPPORTER OF NCFGC! If you cannot attend the meeting but have an opinion about these changes or an interest in serving on the Board CONTACT US!

Opportunities to help the NCFGC in 2009 include helping with the booth, membership or registrations at conferences. Volunteers also needed to helping with the Forager newsletter and web-site. Contact V.Mac Baldwin President or any Board member or Sue Ellen Johnson NCSU Forage Specialist to get involved!

If you would like support of the NCFGC and the NCFGC display at your forage event — contact us!

Current NCFGC Board:

Producers: Steve Walker - 919-692-2196 ; Rick Morgan - 252-465-4122 (H) cypressglade@wildblue.net; Eddie Leagans - 336-998-2515 eleagans@yadtel.net; Mac Baldwin - 1-800-896-4857 vmac@baldwinbeef.com

Public servants: Charles Young -. (336) 219-2650 Karen McAdams - (919) 245-2058 ; Mark Hucks - (252) 459-9810 Steve Woodruff - NRCS steve.woodruff@nc.usda.gov

Industry: Kent Crowell - Pasture Management Systems 1-800-230-0024 x223; Wistar Heald - Evergreen Seed 919-567-1333; Chris Agee - Pennington Seed 800-286-6100 ext. 375

Among the proposed NCFGC BY-LAW changes :

- ◆ Doubling NCFGC producer members of the Board (up to 8 producers).
- ◆ Creating two new Board leadership positions:President- elect and Past president to assure leadership continuity. Also allowing the secretary to serve more than one year.
- ◆ Vice president has responsibility for coordinating conferences; President elect will be responsible for membership.

MASTER HAY MAKERS: 2008 BLUE RIBBON WINNERS AT THE NC STATE FAIR

This year’s show featured the great diversity of hay types in North Carolina. Winners were judged on both sensory characteristics (40%) and laboratory analysis of nutritive value (60%). *This year some great looking hays lost points because of high nitrates!* There were 42 entrants in this years hay show. Thanks to all the entrants and CES agents who made for a great competition ! The new Forage and Grassland Council display debuted at the Hay Show; invite the NCFGC to your local farming events! Thanks again to the hay show organizers- volunteer Betsy Randall-Schadel and CES agent s Charles Taylor and Amy Andrews. Next year the NCFGC is considering a having a hay maze to educate the general public as well as the hay show for hay producers! Let us know if you want to help!

Hay type	Grower	County
Alfalfa	Jeff Forman	Stanly
Other legumes (Lesedeza)	Edward Moore	Craven
Grass-Legume Mixture	No winner!!!	
Tall Fescue	Ed Gann	Stanly
Orchardgrass	Marjorie Leonard	Franklin
Bermudagrass	Dennis Lee	Jones
Other warm season grasses	John Hawes III	Brunswick
Small Grains	Ed Gann	Stanly
Other cool season grasses	Dale Sheets	Ashe

Next year there will be more classes for mixed hays! A single “flake” (or equivalent from a round bale) of hay is entered into the hay show. To learn more about hay shows and producing quality hay contact your county agent or the NC-Forage and Grassland Council.

Plan on visiting the educational hay display at forage meetings throughout our state!

Check out the Hay Show news story at <http://blogs.newsobserver.com/statefair/hay-now>