

Volume II, No. 3

Northeast Florida Beef & Forage Group



May, 2003

Dear Producers,

This is the time of year when we really appreciate our forage crops, whether we use those pastures for grazing or hay production. Spring and summer months are the time when our forages in Florida are the highest quality and quantity.

As a group of extension agents, we hope that the information that we offer in this newsletter will be educational to you and assist you in your forage management decisions this summer. If you have any questions about your pastures or livestock, please feel free to contact your local extension agent.

I also want to personally invite you to our 6th Annual Hay Field Day, to be held on June 13, 2003, at Shaw & Shaw Farms in Alachua, Florida. Look for more information about the hay field day in this newsletter. Look forward to seeing you there.

Cindy Sanders, Co-Chairman
Northeast Florida Beef & Forage Group

6th Annual Hay Field Day At Shaw & Shaw Farms, Alachua June 13, 2003

8:30- 9:00 am Registration
(Registration Fee \$5.00/person)

9:00 am Demonstrations & Discussions*

Hay Quality

Soil Testing & Fertilization

Economics of Hay Production

Pesticide Safety

Forage Diseases

Weed Demonstration Plots

Irrigation

12:00 Lunch

1:00 pm Equipment

Demonstrations



***Persons attending will be offered a choice of 7 presentations and must pick 5 to attend.**

***RSVP to your local Extension Office
by June 6, 2003.***

Establishing Warm Season Annual Grasses & Legumes For Grazing

Cindy Sanders, Livestock Agent
Alachua County Extension Service

There are many varieties of summer annual grasses and legumes that do very well in our Florida environment. These varieties are usually rapidly growing, high-yielding, and high-quality forages, thus fitting well into a rotational grazing system with cattle or horses.

Millet is an annual grass that is usually grazed by animals that need high-quality forage, such as stockers, replacement heifers, first-calf heifers, or dairy cows. One variety of millet known as pearl millet is excellent for creep pastures or harvested as hay, green chop, or silage. Pearl millet can be planted from mid-March through June.

Producers should be prepared to graze millet rotationally. When plants start to mature and form heads, mowing will remove heads and prolong maturity in the plant. Plants should be grazed when they reach 12-24 inches, and grazed down to about 6 inches.

Alyceclover is a warm season annual legume that grows well in our area. Although an annual, it can re-establish each year by natural reseeding if the crop is allowed to make seed in the fall. Alyceclover should be planted between April 15 and June 30. Recommendation for planting is 15 to 20 lb/acre. Broadcasting or drilling is adequate with a seed depth of ¼ to ½". Alyceclover makes good quality hay if harvested before it's mature.

Hairy Indigo, another warm season annual legume is used mainly for grazing. Hairy Indigo is adapted to sandy soils that have good drainage and grows on land that may be too dry for other legumes. Like Alyceclover, Hairy Indigo will re-seed itself if left ungrazed during the fall. Recommended seeding rate is 6-8 lb/acre, with a depth of ¼ to ½".

Remember to always take a soil sample to determine your soil pH and fertilizer recommendations before establishment. Warm-season annual grasses and legumes prefer a pH of 6.0.



Soil Testing, Liming and Fertilization

Mike Sweat, County Extension Director,
Baker County Extension Service

Soil testing can be one of the most cost-effective management decisions a forage producer can make. A soil test through the University of Florida's Extension Soil Testing Laboratory costs only \$7 and will pay for itself many times over in savings from over liming and through yield increases. The desired pH level for Bermudagrass and Bahiagrass is 5.5. Those with acid soil in the range of 4.5 would see a yield increase from the addition of a ton of dolomite per acre which would raise the pH to around 5.5. However, if the soil is already at 5.5 or higher, then applying lime will have no measurable effect. Your money spent on lime would be better left in the bank!

A soil test will also recommend the optimum levels of fertilizer nutrients for the crop and level of production desired. It can save you money by allowing you to purchase and apply only those nutrients which will result in a yield increase. For example, if the soil Phosphorous level is extremely high, additional applications of phosphorous will have little effect on crop yield.

How To Collect A Sample

Properly collecting and identifying a sample is very important. A soil sample must represent the area that is being tested. Each sample should represent no more than 25-30 acres. Skip areas that may be wet or different from the rest of the field being sampled. Sample to a depth of six inches using a sampling tool or auger if available, otherwise use a shovel. With a shovel make a six inch slice straight down through the soil. Scrape an even slice of the soil from the shovel. Place each of the soil cores into a plastic bucket as collected. As a rule of thumb you should plan to take samples from 5-10 locations per acre and mix them together in the bucket. Be sure not to use a metal bucket if you are planning to sample for micronutrients.

After collecting, mix the samples and spread the soil out on paper to air dry, then fill sample submission bag to the line (approximately 2 cups).

Be sure to label the sample bag with your name and field number. Complete the Soil Test Information Sheet and indicate the test desired and crop to be grown. Mail all samples and the Information sheet to

the University of Florida Soil Testing Laboratory in the mailing box provided by the Extension Office.

Interpreting The Results

Computerized sample results with fertilizer and lime recommendations will be mailed to you and your Extension Agent in approximately three weeks. If you have questions on the recommendations, call your agent and discuss them as they relate to your individual situation.

One question that frequently comes up is due to the method that the lab uses to make fertilizer recommendations. The report will not say to use 10-10-10 at a specified rate, rather the report will be in pounds of nutrient per acre. Therefore, as an example, the result could indicate 100 pounds of N/acre, 25 pounds of P/acre, and 50 pounds of K/acre. This is provided to allow you to apply only those nutrients needed without the extra expense of purchasing and applying nutrients that are already sufficient in the soil.

Shop for nutrients rather than fertilizers and consider which blend most closely meets your needs. You may have to settle for coming close to the recommendation without hitting it on the head since not every combination of N-P-K is available.

Spring Bahiagrass Establishment Tips

Jacque Breman, County Extension Director
Union County Extension Service

As we begin our approach to the normally dry season of the year, many of us who haven't been able to plant Bahiagrass because of wet fields in February and March will be facing the challenge of planting in good moisture but having the potential of losing stands in April - May. Traditionally, we have lost stands from lack of soil moisture during this time. There are other reasons we can lose plantings. I'd like to list a few things that might help you make a better stand:

The best planting method is with a grain drill, so I'll list tips that help with that planting method first:



1. Turn and harrow; and level the soil so the seedbed is as smooth as possible.
2. Without the benefit of a soil test, broadcast a complete fertilizer that provides 30 pounds actual Nitrogen per acre (something like 200 pounds per acre of a 16-4-8 analysis fertilizer). This puts the fertilizer right where the seedling rootlets will be at germination.
3. Use a roller to pack the soil (this gets soil moisture column re-established).
4. Plant with a grain drill or cultipacker set to deliver 15 - 20 pounds seed/acre; leaving the seed at a depth of ½ to ¾ inch deep.
5. If you use a grain drill, roll the field immediately after planting to seal soil moisture and make a good seed-to-soil contact. If using a cultipacker, do not roll field again because you can pack the soil too hard for seedlings to emerge.

The method some of you are using (whether using a cone-spreader to broadcast seed or whether mixing the seed with fertilizer and broadcasting over a harrowed field) has some real problems with proper seed depth and soil moisture retention. If you are going to use this method, the following tips might help:

1. Turn, deep-harrow followed by repeated light cross harrowing the field with a pipe drag (6-inch diameter works well) until it is as smooth as possible.
2. Without the benefit of a soil test, broadcast a complete fertilizer that provides 30 pounds actual Nitrogen per acre (something like 200 pounds per acre of a 16-4-8 analysis fertilizer).
3. Broadcast 20 to 25 pounds of seed per acre.
4. **DO NOT HARROW AFTER BROADCASTING SEED!**
5. Make a drag out of chain-link fence weighted at the end with a piece of metal pipe (4-inch or larger) so that you "scratch" the seed in the soil between ½ and ¾ inches deep.

- Use a roller to pack the soil (this gets soil moisture column re-established) as well as insuring a good seed-to-soil contact for emerging seedling roots.

Once Bahiagrass seedlings are up (now you know why planting with a drill comes in handy, you can see the seedlings in rows) a couple of inches (this takes about 6 weeks from planting) apply about 60 pounds actual Nitrogen per acre (about 200 pounds of ammonium nitrate/acre).

Keep weeds mowed. **DO NOT USE PHENOXY HERBICIDE UNTIL BAHIAGRASS IS OVER 6 INCHES HIGH!** Once Bahiagrass is over 6 inches high and well-established, if you have a broadleaf weed problem you might want to use a phenoxy herbicide such as 2,4-D or dicamba at the label rate.

Keep livestock off your newly planted field until Bahiagrass is well-established, which probably will be late Summer or early Fall.

The following table might help you decide which variety of Bahiagrass you want to plant. Argentine and Tifton-9 both do well on wetter soils, Pensacola and Tifton-9 both do well on drier soils. Tifton-9 has a longer leaf, which makes it easier to roll hay in round bales.

Table 1. Forage yield (lbs/acre) at five harvests in one growing season.

Variety	May 31	June 29	Aug 3	Sept 9	Oct. 25	Total Yield
Tifton-9	1940	1110	3260	3340	1520	11,170 lbs
Pensacola	1190	950	2630	3090	870	8,730 lbs
Argentine	560	480	2220	3460	1040	7,760 lbs

Source: Chambliss, C. 2000. Tifton-9 Pensacola Bahiagrass. SS-AGR-25



Establishment of Bermuda Grass Pastures

Larry Varnadoe, Extension Livestock Agent
Nassau County Extension Service

Establishment of Bermuda Grass pastures should begin with proper planning and forethought. The Fall prior to the Spring in which establishment is to take place, select a well-drained sight and pull soil samples to determine pH and fertilization needs. If lime is recommended, apply it in the Fall or early Winter as lime requires 3-6 months to effectively raise the pH. The recommended pH for Bermuda is 5.5 – 6.

Land that is covered by old grass stands of bermuda and/or bahiagrass or crop litter such as cotton or corn stalks should be plowed in the Fall with a heavy disc harrow or moldboard plow and left fallow for the Winter. This Fall plowing allows litter to rot over the Winter and also exposes the roots of plants to cold temperatures which in turn reduces their ability to survive.

As soil temperatures warm in the Spring, fallow fields should be disked with a smoothing harrow to form a firm seedbed and also to destroy any weeds that have sprouted. If common Bermuda persists, an application of Roundup or similar product applied prior to disking may be needed to kill this pest. Multiple trips with a smoothing harrow may be required to destroy vegetation and firm the seedbed. Hybrid bermudagrasses produce few seed and therefore must be established using vegetative materials. This can be accomplished by: 1) planting sprigs, which consist of underground rhizomes, plant crowns and stolons or 2) planting plant tops which have been allowed to mature at least six weeks before being harvested. Sprigs should be planted in late February or early March, (soil moisture permitting) at the rate of 30 – 40 bushels per acre. Sprigs may be broadcast and disked in or planted with a commercial grass planter. Rolling with a heavy roller immediately after planting helps to insure adequate soil to plant contact. Tops should be planted in late Spring or early Summer (soil moisture permitting) at the rate of 1500 pounds per acre. Planting methods are the same as for sprigs.

Recommended rates of phosphorus and potassium plus 30 pounds of nitrogen per acre should be applied as soon as plants begin to grow. Apply an additional 70 pounds of N when stolons (runners) begin to develop. If weeds emerge after planting, spray with Weedmaster or similar product at the 1 quart per acre

rate in 30 gallons of water, 7-10 days post-planting. With a good stand of grass and adequate moisture, you should begin grazing or take a hay crop 75 – 80 days post-planting. Do not harvest hay if a frost is expected within the next 45 days as a significant loss of stand could result.

Wildlife Forage Plots

Marissa Brown, Extension Agent
Suwannee County Extension Service

There are many products on the market today that you can plant to feed wildlife, but how do you know what will grow and what the animals will eat? Many products are leftover seed that was labeled for wildlife plots and sold for quite a bit of money. Other products sold will not grow very well in the light sandy soils of North Florida. Maybe mixing your own seed is the best option for your plots. With all the options available it is hard to know the best option to fit your needs at an affordable price. First, what will grow in North Florida? Some plants grew better than others and likewise, some products outperformed other products. What grew well for us were small grains, either pure small grain stands or mixtures. The small grains we planted that did well were the three varieties of oats including Horizon 474, Horizon 314, and Buck Forage Oats. The mixtures we planted that did well were Buckshot, Rackmaster, Supreme Southeast Mixture, and Triple Treat. The Horizon 314 oats seemed to be less disease resistant showing much more leaf spot and loose smut than other varieties. Horizon 474 on the other hand seemed to be most resistant to disease. We noticed that the clover in the Rackmaster and Supreme Southeast Mixture did not emerge well, however, the small grain crops that were included in these plots did extremely well. The clover that makes up Triple Treat did extremely well, especially the crimson clover.

So what did not do well? The Biologic seed mixtures did not produce a stand, nor did either of the Whitetail Institute seed mixtures, AlfaRack and Imperial White Clover. The seed included in these mixtures do not adapt to North Florida's light, well-drained sandy soils and may do very well further north in heavier, wetter soils. For successful wildlife food plots in North Florida mixtures from these companies are not suitable. With some high management there are some other mixtures that may

grow in our soils. These include the New Zealand mixtures, Pro Graze, Clover Plus, and Full Draw, however the amount of management required to grow and maintain a good stand may be more than the stand is worth.

Now that you know what will grow in North Florida, it is time to figure out what the animals will eat. At Joe Budd Wildlife Management Area in Gadsden County, animal utilization of food plots was tracked using exclusion cages to chart a control area. What they found was that animals did have a preference. Brassicas, wheat, crimson clover, and berseem were consistently heavily grazed. The most highly grazed plots were Buck and Bosses, all the oats, Supreme Southeast Mixture, Maximum, Clover Plus, and barkant turnips. Another factor to determine is what type of game you want. Deer enjoy the above recommended plots but if it is turkey or another game bird you want it is better to stick to a plot that will not grow very tall such as a clover mixture. The game birds like shorter crops because it is easier for them and their chicks to move around in.

In order to decide what to plant next fall for your wildlife plots there are many decisions to be made. Have an idea of what grows well in the sandy soils of North Florida and how much management you want to put into maintaining your plots. Expense is usually a big factor in deciding what variety to plant so keep in mind that mixing your own mixtures is usually much cheaper than pre-mixed combinations, and you can put whatever you want into it. For more information and recommendations please contact your local extension agent.



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- For individuals with disabilities requiring special accommodations, please contact the Alachua County Extension Service at least 5 working days prior to the program in order for proper consideration to be given to the request.
- For TDD service, call the Florida Relay Service Center at: 1-800-955-8771

Northeast Florida Beef & Forage Group
1025 West Macclenny Avenue
Macclenny, FL 32063

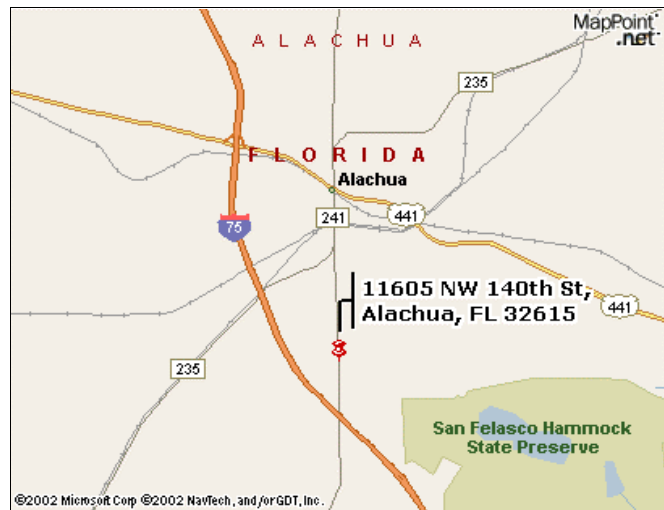
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Visit our website at <http://nfbfg.ifas.ufl.edu>

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Hay Field Day
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June 13, 2003*



(See inside for registration information)

More Livestock or Forage Questions?
Call you local UF/IFAS Cooperative
Extension
Service Agent from the Northeast Florida
Beef
and Forage Group in:

Alachua County

Cindy Sanders
Extension Agent - Livestock
(352)955-2402

Baker County

Mike Sweat
County Extension Director
(904)259-3520

Bradford County

David Dinkins
County Extension Director
(904)966-6224

Columbia County

Paulette Tomlinson
Extension Agent - Livestock & Forages
(386)752-5384

Nassau County

Larry Varnadoe
Agriculture & Natural Resources
(904)879-1019

Suwannee County

Marissa Brown
Extension Agent - Agriculture
(386)362-2771

