



UNIVERSITY OF  
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## NORTHEAST FLORIDA BEEF & FORAGE GROUP

*March, 2005*

Dear Producers:

It's that time again when we need to start thinking about fertilizing pastures and hay fields. This newsletter contains information about fertilization, soil sampling, establishment, and weed control. If you are thinking about establishing fields with summer forages now is the time to start taking soil samples, preparing the land, and seeding. If you have already taken soil samples, and have questions about the fertilizer recommendations, feel free to call your local extension agent.

You will also find in this newsletter a upcoming Equine program to be held in Clay and Alachua Counties. We hope to see you there.

Again, we look forward to providing educational materials and programs this year to our producers, and look forward to seeing you at this year's programs.

Sincerely,

A handwritten signature in black ink that reads "Cindy Sanders".

Cindy Sanders, Chair  
Northeast Florida Beef & Forage Group

### Soil Sampling

Cindy Sanders- Livestock Agent  
Alachua County Extension Office

**T**his time of year is usually the time when we would want to fertilize pastures. Those pastures might be for grazing cattle, horses, or goats. These pastures may also be used for hay production. No matter what the need for the pastures is important to take soil samples every few years. This sample provides the pH of the soil as well as the levels of Calcium, Phosphorus, Potassium, and Magnesium.

The soil analysis will provide recommendations for fertilizer and lime. Without these recommendations, you may be wasting money on un-needed fertilizer or more importantly not sufficiently supplying the correct nutrients to the plant. There is no point in fertilizing if the extra forage produced is not used. To make a profit on the investment of fertilizer, the forage must be harvested, and the product (animal weight gain, milk, hay, or silage) must be marketed.

Fertilizer should usually be applied at the beginning of the growing season for the particular forage. For example, now is the time to be fertilizing bahia and bermudagrass fields. As well as fertilizing again mid-summer to extend the growing season.

Nitrogen is the most important fertilizer nutrient used on grass pastures. It is the nutrient that is most likely to be deficient. It is recommended that nitrogen applications be split up into two or three applications, to avoid leaching off.

The first priority for establishment of pastures is to adjust the soil pH, which is a measure of acidity. Dolomite lime can be used and should be applied according to soil-test recommendations. Not all forages have the same target pH. Soil pH can play an important part in forage growth and quantity.

- **Collect soil from 10-20 spots within a field.**
- **Mix these samples in a bucket.**
- **Sample from soil surface depth 0-4 inches**
- **Spread the soil material out to air dry (1 day)**
- **Place sample in bag with:**
  - **name, address, analysis requested, crop code and fees**
  - **Soil sample bags and forms are available from the Alachua County Extension Office**

FORAGE	TARGET pH
Bahiagrass	5.5
Bermudagrass	5.5
Small grains	6.0
Clovers	6.5



## Fertilization Recommendations for Bahiagrass

Jacque Breman  
Union County Extension Director

**Two New Changes** are being proposed by the University of Florida Bahiagrass Working Group:

- Target pH for Bahiagrass = 5.0
- If pastured and not going to apply more than 50 pounds of actual Nitrogen/acre/year = don't need to soil test (for P & K).

### **For New Plantings:**

- After seedlings emerge:  
30 pounds actual Nitrogen/Acre + all Phosphorous and half of Potassium recommended on soil test.
- 4 to 6 weeks later:  
50 pounds actual Nitrogen/Acre + half of Potassium recommended on soil test.

### **For Established Pastures:**

- **Low Option:**  
Apply 50 pounds actual Nitrogen/Acre.  
(ex. 167 pounds ammonium nitrate)
- **Medium Option:**  
Apply 100 pounds actual Nitrogen/Acre.  
(ex. 303 pounds ammonium nitrate)  
[test soil every 3 years to see if Phosphorous or Potassium may be limiting (low or very low range)]
- **High Option:**  
Spring: Apply 80 pounds actual Nitrogen/Acre  
(ex. 242 pounds ammonium nitrate)  
  
Summer: Apply 80 pounds actual Nitrogen/Acre  
(ex. 242 pounds ammonium nitrate)  
Follow soil test for Phosphorous & Potassium.

### **One Cut of Hay Option:**

- Apply an additional 80 pounds actual Nitrogen /Acre < six weeks from end of



and there is no backcrossing. To explain, breeds A and B are mated and replacements bred to breed C. Replacements from the AB x C cross can then be mated to either breed A or B. Replacement heifers should always be mated to a breed different from their sire. This system should maintain a higher level of heterosis (theoretically 87%) than the two-breed system. The three breeds should be similar in mature size, milking ability and birth weight so as to produce a more uniform calf crop.

**Rotational Terminal Cross Combination.** This program is a combination of rotational and terminal crossing. A two-breed rotation produces its own replacements. Older and less productive cows from these groups are then grouped and bred to a terminal sire and all calves are marketed. An example would be to use Angus and Hereford in the two-breed rotation and breed the third group to Charolais or Simmental bulls. This program works best in larger herds.

Crossbreeding programs should be tailored to individual operations according to level of management, herd size, potential market and facilities. To achieve maximum benefits from crossbreeding, a long-term plan is essential.

Some information from “*Florida Cow-Calf Management Handbook*”



## Pasture Establishment

Mike Sweat- Baker County Extension

Spring is traditionally the best time to establish new pastures in our area. One of the most important aspects of pasture establishment is proper land and seedbed preparation. Extra time preparing the soil for permanent pasture is time well spent.

Soil testing should be completed early to determine the need for lime. If needed, it is best to incorporate the lime during the soil preparation procedure. Fertilization should be made according to soil test results, it is best to wait until the grass has emerged before applying the fertilizer.

Soil moisture is one of the critical factors in determining when to plant a pasture. If adequate soil moisture is not present it is probably best to wait until after rainfall occurs,

Purchase only good quality seed that has an 80% or better germination rate. Recommended bahia varieties include Tifton 9, Argentine, Pensacola, and Paraguay. Each cultivar has benefits and limitations, check with your local Extension Agent for recommendations specific for your area or visit <http://edis.ifas.ufl.edu/AA184>

Broadcast seeds evenly to apply the seeds to the area at a rate of 15-20 lbs per acre. Lightly drag to incorporate the seeds to a depth of ¼ - ½ inch. If possible a roller should also be used after dragging to firm the soil around the seed and retain moisture. Another option would be to use a cultipacker-type seeder on a clean seedbed.

Mowing is probably the best broadleaf weed control option during establishment. Frequent, low mowing will allow sunlight to get to the young seedlings and promote vigorous growth. Once the grass becomes well-established, several herbicides are available to control broadleaf weeds.

For more information on planting bahiagrass pastures, contact your local County Extension Office.

**Baker County Extension Service  
1025 West Macclenny Avenue  
Macclenny, FL 32063**

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## ***HORSE MANAGEMENT WORKSHOP LOCATIONS***

SEE INSIDE FOR COMPLETE PROGRAM AGENDA

### **Clay County Cooperative Extension Service**

On Hwy 16 - four miles west of  
Green Cove Springs beside  
the Fairgrounds.



### **UF Horse Teaching Unit**

**From 441 North or South:** west on SW 63 Ave.  
beside Prairie Dental Clinic. This will be the  
Southernmost road intersecting 441 after crossing  
Payne's Prairie (or the last road before the Prairie if  
coming from the north). The farm is about 0.3 miles  
west of 441 on the right and has a small blue  
"University of Florida - Horse Teaching Unit"  
sign in front. The driveway runs between two private homes  
and the covered arena is straight ahead. Park in the  
lot to the right just before the arena.

