Dear Producers:

Happy New Year - The Northeast Beef & Forage Group had a very active '05 and has scheduled programs that should make us even more active in '06. This year, you will notice a few changes we have made. Our Northeast Florida Beef & Forage Group newsletter is now scheduled to be mailed quarterly. We will also be adding to our traditional beef and forage programming by providing workshops on: wildlife management, horse production, and small ruminant production. In addition, in order for you to plan to attend our workshops more in advance, we have inserted a yearly calendar of NFBFG events in this newsletter.

As a group of extension agents, it is our hope that this newsletter will help provide answers and resources to situations that affect your livestock enterprise. If you have any questions about the articles in this quarter's newsletter, or any other questions, please feel free to contact your local extension agent. We are looking forward to seeing you at our 2006 events.

Sincerely,
David Nistler, Chair
Northeast Florida Beef & Forage Group

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FERTILIZING PASTURES AND HAY FIELDS
CINDY SANDERS,
ALACHUA COUNTY EXTENSION

The six soil-supplied nutrients required by plants in the largest quantities are nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), and sulfur (S). Micronutrients, iron, copper, zinc, manganese, boron, molybdenum, and chlorine, are also essential but are used by the plant in very small amounts. The soil can supply the plant with most, if not all of these nutrients, but often the supply of one or more of the nutrients is insufficient for optimum growth.

Nitrogen is the most important fertilizer nutrient used on grass pastures and hay fields. It is the nutrient that is most likely to be deficient and therefore the one that most often results in increased forage production. Phosphorus may be deficient in some areas, but some Florida soils are high in native P. Also, some...
pasture grasses (such as bahiagrass) may extract sufficient P from the subsoil, even when the P level in the surface soil is low. Potassium may need to be added to some pastures, but in South Fl., bahiagrass pastures on flatwoods that receive 50 pounds of nitrogen or less per year have shown little if any response to potassium fertilization. Under intensive hay or silage production, where nutrients are removed from the land, annual applications of P and K are needed. Where nutrients are being removed in harvested forage (hay) potassium may reach critically low levels, where not only plant growth is reduced, but plants may die. This is usually indicated by a thinning stand in bermudagrass hay fields. Potassium can very quickly become deficient; also calcium, magnesium, sulfur, and some micronutrients may eventually become deficient after several years of cropping. Calcium, magnesium, sulfur, and the micronutrients are seldom a problem in pastures where considerable recycling of nutrients occurs.

(Source: Fl. Forage Handbook modified).

“Managing weeds may be the most critical component to producing quality pasture forages and hay.”

Have you ever asked Santa for cleaner pastures? Ever noticed how tough weed management is when you’ve been bad? Don’t answer out loud.

Managing weeds may be the most critical component to producing quality pasture forages and hay. Weeds are extremely efficient users and competitors for soil moisture, solar radiation and mineral nutrients. If left unmanaged or managed incorrectly, weed populations may soon out-compete forage grasses for resources, quickly reproduce, and proliferate. Fortunately, livestock forage and hay producers have a growing number of options available for managing weeds. Manual removal of weeds is still an option and is effective if weeds are isolated or found in or near areas sensitive to mechanical or chemical control tactics. Mowing is still the old stand-by and often provides decent control of many annual broadleaf weeds. Grass weeds or grass-like weeds are typically not controlled by mowing unless it allows the preferred forage species to better compete and choke-out the weed. Over time, chemical weed management has become the method of choice due to its ease, convenience, and overall effectiveness. Chemical weed management still requires producers and applicators to make several key determinations before implementing a control tactic. They need to:

- Properly identify the
**WEED MANAGEMENT TIP FOR THE HOLIDAY SEASON**

- Weed (consult your local County Extension Agent)
- Reference information regarding the weed’s life cycle
- Determine best method of management and when the weed is susceptible to control.
- If chemical management is chosen, consider product options, effectiveness and costs.
- If using chemicals, consider neighboring crops and plants as well as crops in the rotation.
- Consult the chemical product label for use directions and considerations.
- Look for grazing, haying, or livestock withdrawal information on the label.

Access to identification keys can be obtained at your local county extension office. Many of these are available free of charge, extremely easy to use, and provide color photographs for people like me who need a little visual assistance. Having all the right information before heading out to manage those pesky weeds may save you time and money.

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**SPRING PASTURE/HAY WEED CONTROL**

**SATURDAY, MARCH 4, 2006**

**Time:** 9:00am-1:00pm  
**Place:** Joe Hendricks Farm  
Union County

**Topics:**
- Nozzel uniformity
- Spray Patterns
- Sprayer Calibration
- Proper mixing & loading
- Equipment maintenance

For information concerning CEU’s available and directions please see website.

http://nfbfg.ifas.ufl.edu

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**“We wish you and yours a Happy Holiday Season and the best in the coming New Year.”**

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**NFBFG 2006 CALENDAR**

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<thead>
<tr>
<th>Month</th>
<th>Topic</th>
<th>County</th>
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<tbody>
<tr>
<td>March</td>
<td>Spring Pasture/Hay Weed</td>
<td>Union</td>
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<tr>
<td>April</td>
<td>Beef Quality Assurance</td>
<td>Alachua</td>
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<td>May</td>
<td>Small Ruminant</td>
<td>Clay &amp; Columbia</td>
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<td>June</td>
<td>Horse Management</td>
<td>Bradford &amp; Alachua</td>
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<tr>
<td>July</td>
<td>9th Annual Hay Field Day</td>
<td>Suwannee</td>
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<tr>
<td>September</td>
<td>Wildlife Management</td>
<td>Baker &amp; Nassau</td>
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January is probably the best time of year to test the soil in your pastures and hayfields to determine nutrient levels and soil pH. Soil testing is one of the most cost-effective management decisions a 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 potential yield increases.

Soil pH is a measure of acidity and alkalinity determined through a soil test. The desired pH for Bermudagrass and Bahiagrass is 5.5. Acid soil in the range of 4.5 would see a yield increase from the addition of a ton of dolomite per acre by raising the pH to around 5.5. However, if the soil is already at 5.5 or higher, then applying lime will have no measurable yield 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 that may be deficient in your soil. For example, if the soil phosphorous level is extremely high, additional applications of phosphorous will have little effect on crop yield.

Properly collecting and identifying a sample is very important. A soil sample must represent the area that is being tested. Divide the farm into fields or areas for sampling. Avoid wet spots, feeding areas, burn piles, etc. Sample to a depth of six inches using a sampling tool, shovel, or trowel. Take a core of soil 4-6 inches deep from at least 15 spots in each field. Place all of the soil cores into a plastic bucket and mix them together. After collecting, spread the soil out on newspaper to air dry, then fill sample submission bag to 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. Soil sample bags, forms and mailing boxes are available from local Extension offices.

Computerized results with fertilizer and lime recommendations will be mailed to you and your Extension Agent in approximately two weeks. If you have questions on the recommendations, call your agent and discuss them as they relate to your individual situation.
Winter Management of Yearling Bulls
David Nistler, Clay County Extension

In Florida, winter and spring are bull buying season. An adequate amount of time spent studying performance information, EPD’s, pedigrees and other relevant information is necessary as sire selection is the most important tool for making genetic progress in the herd. Of equal importance is the care and management of the newly acquired bull.

Prior to the Breeding Season
Many newly purchased yearling bulls have recently completed a gain test, which have been provided a high plane of nutrition. Upon completion of this test, the energy level of the diet should be reduced and intake limited to prevent excessive fat deposition. Young bulls should be managed to be a body condition score of high 5 to low 6 at turn-out. This will give the bull adequate reserves of energy for use during the breeding season. Yearling bulls can be expected to lose 100 pounds or more during the course of the breeding season. Acquiring a new yearling bull at least 60 to 90 prior to the breeding season is critical from several aspects. First, this leaves ample time for the new bull to get adjusted to the feed and environment of his new home, as well as an opportunity for several new bulls to be commingled for a period of time prior to turnout.

Secondly, adequate exercise, in combination with a proper nutritional program, is essential to "harden" these bulls up prior to the breeding season. The nutrition of the bull will be dependent on body condition. Yearling bulls are still growing and developing, and should be targeted to gain about 2.0 pounds per day from a year of age through the breeding season. Bulls weighing approximately 1200 pounds will consume 25 to 30 pounds of dry matter per day. A mineral and vitamin mix should be offered that contains adequate calcium, phosphorus, and vitamin A. An exact mineral is difficult to recommend since it depends greatly on what your forage base is and what grain mix you may be feeding.

During the Breeding Season
The breeding season should be kept to a maximum of 60 days for young bulls. This will prevent over-use of the bull, severe weight loss and reduced libido. Severe weight loss may impair future growth and development of the young bull, and reduce his lifetime usefulness. When practical, supplementing young bulls with grain during the breeding season will reduce excessive weight loss.

"Yearling bulls are still growing and developing, and should be targeted to gain about 2.0 pounds per day from a year of age through the breeding season".

An Important Note on Feeding Cottonseed
Many producers may choose to supplement with whole cottonseed. Whole cottonseed is an excellent source of protein and energy. However, producers should be aware of potential gossypol toxicity when feeding cottonseed. Gossypol can cause a temporary reduction in fertility when cottonseed is fed above recommended levels, particu-
The Northeast Florida Beef and Forage Group is made up of UF/IFAS Extension Agents from 9 counties in Northeast Florida. The purpose of the NFBFG is to provide educational programming to North Florida livestock producers dealing with nutrition, health, reproduction, management, and marketing of their livestock and forage commodities. For more information and program dates and publications you may visit our website at [http://nfbfg.ifas.ufl.edu](http://nfbfg.ifas.ufl.edu).

**Winter Management of Yearling Bulls (Cont.)**

...larily in young males near puberty. The general recommendation is that bulls should not be fed whole cottonseed 60 to 90 days before the start of the breeding season. For more information on Gossypol toxicity contact your local extension agent or access the “Potential for Gossypol Toxicity When Feeding Whole Cottonseed to Beef Cattle” publication at: [http://edis.ifas.ufl.edu/AN130](http://edis.ifas.ufl.edu/AN130).