Dear Producers,

Spring has sprung, and in many areas we still face drought conditions. This is also the time of year producers are planting grasses for grazing or hay production. Traditionally, the month of May is usually dry, therefore at this point without irrigation methods, it may be beneficial to hold off new plantings until June. Contact your local extension agent for recommendations on establishing forages.

This newsletter contains some important articles about challenges that the beef industry is facing. As a group of extension agents, we hope that the information that we have provided in this newsletter will be educational and informative on these important issues.

I also want to personally invite you to two upcoming Animal Identification Workshops. This program will be offered in Nassau County on April 22, 2004 and in Alachua County at the UF Beef Teaching Unit on April 29, 2004. Look for the flyer about these workshops in this newsletter. Look forward to seeing you there.

Cindy Sanders
Chairman, Northeast Florida Beef & Forage Group

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Some Summer Forage Suggestions
Besides Bahia and Bermuda Grasses
Jacque Breman, Union County Extension Director

Sometimes you may have some rented land or smaller fenced parcels that you want to put some high quality cattle feed for replacement heifer growth or just to rotate your pastures, or to grow a silage crop, or for wildlife enhancement after a grazing period. There are other forage crops for our area besides Bahia and Bermuda grass pastures.

Your summer options depend on how wet or dry your soils are: On really wet soils Aeschynomene and Japanese Millet would be better performers. Brown Top Millet, Crabgrass and Alyceclover would do well on soils between really wet and well drained (a drier Flatwood site). On well-drained soils Pearl Millet, SorghumXSudangrass hybrids, sorghum for silage, Cowpeas, Hairy Indigo would be the better performers. Velvetbean interplanted with a tropical corn might be an alternative for conserved forage in fall.

Soils should be limed to a pH of 6.5 for sorghum for silage and for corn inter-planted with Velvetbean. Soils should be limed to a pH of 6.0 for all the other summer forages.
### Summer Forage Planting Rates and Dates

<table>
<thead>
<tr>
<th>Forage Crop</th>
<th>Planting Dates</th>
<th>Pounds of Seed per Acre</th>
<th>Planting Depth in Inches:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alyceclover</td>
<td>Apr. 15 - June 30</td>
<td>12 - 15</td>
<td>¼ - 1/2</td>
</tr>
<tr>
<td>Aeschynomone (dehulled)</td>
<td>Mar. 30 - June 30</td>
<td>6 - 8</td>
<td>¼ - 1/2</td>
</tr>
<tr>
<td>Brown Top Millet</td>
<td>Mar. 15 - June 30</td>
<td>15 - 20 broadcast</td>
<td>½ - 1</td>
</tr>
<tr>
<td>Cowpea</td>
<td>Apr. 1 - July 31</td>
<td>100 - 120 (broadcast) or 60 - 90 if drilled</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Crabgrass</td>
<td>Spring</td>
<td>3 - 5</td>
<td>1/4</td>
</tr>
<tr>
<td>Hairy Indigo</td>
<td>Apr. 1 - June 30</td>
<td>6 - 8</td>
<td>¼ - 1/2</td>
</tr>
<tr>
<td>Japanese Millet</td>
<td>Mar. 15 - June 30</td>
<td>24 - 30 broadcast</td>
<td>½ - 1</td>
</tr>
<tr>
<td>Pearl Millet</td>
<td>Mar. 15 - June 30</td>
<td>24 - 30(broadcast) or 10 - 12 if drilled</td>
<td>1/4 - ½</td>
</tr>
<tr>
<td>Sorghum for grazing</td>
<td>Apr. 1 - June 30</td>
<td>24 - 30 (broadcast) or 10 - 20 if drilled</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Sorghum for silage</td>
<td>Apr. 1 - June 30</td>
<td>6 - 8</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Sorghum X Sudan</td>
<td>Mar. 15 - June 30</td>
<td>10 -12</td>
<td>¼ - 1/2</td>
</tr>
<tr>
<td>Velvetbean</td>
<td>Mar. 15 - June 30</td>
<td>30 - 45 (broadcast) or 2 - 8 if drilled</td>
<td>1 - 2</td>
</tr>
</tbody>
</table>

UF-IFAS Extension fertilizer recommendations are based on soil test results. For the grasses or legume+grass combinations that are going to be grazed we recommend fertilizing at planting or preplant: 30 pounds actual Nitrogen per acre, all of the phosphorous and half of the potash recommended on the soil test. After the first grazing period, apply an additional 50 pounds actual Nitrogen per acre plus the remaining half of the potash recommended on the soil test results. For legumes that will be grown alone (Aeschynomene, cowpeas, velvetbeans, etc.) apply all the phosphorous and potash recommended at planting (no Nitrogen is needed because legumes fix their own). When you plant legumes alone, be sure to buy the right inoculum and inoculate the seed before you plant so they will be able to fix Nitrogen and grow properly.

For more forage management information contact your UF-IFAS Extension Agent and the listed UF-IFAS-Extension publications available online.

UF-IFAS Extension references which readers may want to get more information from include:

- Aeschynomene. [http://edis.ifas.ufl.edu/BODY_AA189](http://edis.ifas.ufl.edu/BODY_AA189)
- Alyceclover - summer annual legume. [http://edis.ifas.ufl.edu/BODY_DS123](http://edis.ifas.ufl.edu/BODY_DS123)
- Crabgrass as a forage and hay crop. [http://edis.ifas.ufl.edu/BODY_AG195](http://edis.ifas.ufl.edu/BODY_AG195)
- Fertilizing and liming forage crops. [http://edis.ifas.ufl.edu/BODY_AG179](http://edis.ifas.ufl.edu/BODY_AG179)
- Forage planting and establishment methods. [http://edis.ifas.ufl.edu/BODY_AG107](http://edis.ifas.ufl.edu/BODY_AG107)
- Planting dates, rates and methods of agronomic crops. [http://edis.ifas.ufl.edu/BODY_aa127](http://edis.ifas.ufl.edu/BODY_aa127)
- Producing millets and sorghums. [http://edis.ifas.ufl.edu/BODY_AG157](http://edis.ifas.ufl.edu/BODY_AG157)
- Minor use summer annual forage legumes. [http://edis.ifas.ufl.edu/BODY_AG156](http://edis.ifas.ufl.edu/BODY_AG156)
- Summer forage legume guide. [http://edis.ifas.ufl.edu/BODY_DS126](http://edis.ifas.ufl.edu/BODY_DS126)
The executive summary of the United States Animal Identification Plan (USAIP) states their goal as, “Protecting American animal agriculture by safeguarding animal health is vital to the well-being of all US citizens.” Building upon previously established and successful animal health and animal identification programs involving many animal industries, an industry-state-federal partnership, aided by the National Institute for Animal Agriculture, was formed in 2002 to more uniformly coordinate a national animal identification plan.

The USAIP currently supports the following species and/or industries: bison, beef cattle, dairy cattle, swine, sheep, goats, camelids (alpacas and llamas), horses, deer, elk, poultry, and aquaculture.

This identification plan is divided up into three phases: Phase I involves premises identification; Phase II involves individual or group/lot identification for interstate and intrastate commerce; and Phase III involves retrofitting remaining processing plants and markets and other industry segments with appropriate technology that will enhance our ability to track animals throughout the livestock marketing chain to protect and improve the health of the national herd.

The premises identification number is the “key” to the National Premises ID Repository and what allows authorized users to access necessary information, in particular the contact person of a premises when an animal health official needs to initiate communication when investigating an animal disease problem.

The USAIP 48-hour traceback objective requires that the information system records an animal’s or unit of animals’ origin and its movement to other locations for its entire life. The goal of a 48-hour traceback, most likely, will require the use of Radio Frequency Identification technology to automate the recording of animal movements. To support the successful transition and integration of RFID technology, the US Animal ID Plan will adopt the ISO code structure as the standard for the country’s national animal numbering system.

Phase I – Premise ID
All premises that manage and/or hold cattle are to be identified through the state premises system. This will be done through the Florida Department of Agriculture on a volunteer basis and has a target date of July 2004.

Phase II – Individual ID
Identification of cattle in interstate commerce and intrastate commerce. All cattle that enter either commerce are to be officially identified and their movement reported to the National Animal Database through the electronic interstate Certificate of Veterinary Inspection. Target July 2005.

Both interstate and intrastate movement. Target July 2006.

Phase III- Enhanced Tracking
USDA inspected cattle slaughter plants and state licensed markets are to have RFID readers in place by July 2005.

For More information go to:
www.usaip.info

Source: United States Animal Identification Plan Draft 2003
Determining Cattle Age for BSE
New rule Compliance
David Nistler, Duval County Cooperative Extension Service

As most of you know, on January 12, 2004, the U. S. Department of Agriculture (USDA) issued new rules to protect the public from Bovine Spongiform Encephalopathy (BSE). Among the new rules, specified risk materials (SRM’s) in cattle more than 30 months of age are not allowed into the human food supply.

Currently, most of the requirements for removing SRM’s are focused on the relationship between the age of cattle and onset of the disease, which has been around 30 months of age for other countries. There is some debate, if 30 months is the appropriate age in the U.S., based on the practices that were previously implemented to reduce the risk of BSE, but at this time 30 months is a regulatory requirement.

Documentation
USDA’s Food Safety and Inspection Service (FSIS) has determined that documentation (birth certificate, animal passport or animal identification systems that include the age of the animal), rather than dentition (kind, number and arrangement of teeth) can be the primary means of determining the age of cattle at harvest. Because many of the cattle processed in the U.S. do not have this information, dentition was included in the interim rule as an alternative for age determination. FSIS maintains that documentation is the best option because dentition provides a means of making only general determinations about age.

FSIS Notice 10-04
(http://www.fsis.usda.gov/OPPDE/rdad/FSISNotices/10-04.htm)

The characteristics of documentation that is most useful in determining the age of cattle offered at harvest are:

1. Documentation (e.g. records of certificates) that can be related to individual cattle and not just information about an entire lot; and
2. Documentation that provides evidence of age that goes back to the farm where the cattle were born, including that name and address of the owner.

FSIS says examples of farm or ranch documentation may include:

1. Pregnancy check records (checks for individual cows and the results of the check for each one);
2. Records of which cows were in a herd when a bull was put in with the herd, and when the bull was removed from the herd (to determine start of gestation);
3. Records that document when individual cows were artificially inseminated;
4. Calving records that document where (i.e., name and address of the producer) and when a calf was born; or
5. Identification applied to calves (e.g., records from branding, electronic ear IDs, or ear tags).

Dentition 101
Cattle have 38 teeth, 8 of which are incisors. The incisors, which are situated near the nasal region of the mouth, are found in the lower jaw. The other teeth are the premolars and molars, also known as cheek teeth, are found in both the back upper and lower jaw.

When determining age, FSIS rule inspectors will look for signs of age in the incisors. Incisors erupt at different months of age. Eruption is the emergence,
penetration or piercing of the tooth or teeth through the gum line.

Incisors are ordered in pairs, from No. 1 through No. 4. During an examination, the inspector looks at the animals’ mouth to see if at least one of the second set of permanent incisors (No.3) has erupted to determine if the animal is more than 30 months of age. Eruption of the third permanent incisor is the FSIS standard indicating that an animal is 30 months of age or older. Relying on the eruption of the third permanent incisor as the standard to verify cattle are 30 months of age may cause some cattle 24 through 29 months of age to be identified as 30 month of age.

For more information concerning dentition go to:

Source: Interim Guidance For Non-Ambulatory Disabled Cattle and Age Determination,

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Bovine Spongiform Encephalopathy a.k.a.
Mad Cow Disease
Mike Sweat, Baker County Extension Director

Bovine Spongiform Encephalopathy or BSE was found on a Washington state dairy back in December 2003, this was the first and only confirmed case in the United States. Bovine Spongiform Encephalopathy aka Mad Cow Disease is a chronic degenerative disease affecting the central nervous system of cattle, affected animals display changes in temperament such as nervousness, aggression, in coordination. BSE belongs to a family of diseases known as transmissible spongiform encephalopathies (TSE’s) which have been around for years. Other TSE’s include scrapie in sheep and goats, chronic wasting disease of deer and elk, and Creutzfeld-Jakob Disease (CJD) in humans. The disease is thought to be caused by an abnormal or altered protein called a "prion" in the brain. The disease is found almost exclusively in cattle over 2 years old. The incubation period for this disease ranges from 2-8 years and is always fatal. After the onset of the disease the animal dies within 2 weeks to 6 months. There is no vaccination available to prevent this disease. BSE testing currently is conducted only on brain tissue from slaughtered cattle.

BSE disease first appeared in Great Britain in 1986 and has since affected over 178,000 cattle worldwide. The epidemic in Great Britain apparently peaked in 1993 and has since been on the decline due to eradication efforts. It is suspected that the cause of BSE in Great Britain involved animal feed containing contaminated meat and bone meal made from sheep infected with scrapie (a similar disorder in sheep) or from cows with BSE, as a protein source. This practice has since been banned in Europe and the United States.
Also imports of live cattle and cattle products have been banned from countries known to have BSE since 1989. Most cases in Great Britain have occurred in dairy cattle that were between 3 and 6 years old. Scientific evidence has found that BSE does not spread between cattle or from cattle to other animal species. The only known way to spread the disease between cattle is through consumption of animal by-products from a contaminated animal. This practice was banned in the U.S. in August of 1997. USDA has been closely monitoring for this disease for 13 years from cattle displaying any possible symptoms of BSE and the cow in Washington was the very first to test positive. The entire herd which had the BSE positive animal in Washington State has been depopulated and tested with negative results. In addition, eight additional operations in Washington had received animals from the herd with BSE. All of these herds were tested and samples were negative for BSE.

Since January 2004, USDA has tested 20,543 animals. On March 15, 2004, Agriculture Secretary Ann Veneman announced that USDA would expand the U.S. surveillance program for BSE following the recommendations of an international scientific review panel. Additional testing labs across the country have been established and some 268,000 animals from slaughter facilities and from herds across the country will be tested each year. The sampled carcasses will be held and not allowed to enter the food chain until test results show the samples are negative. This enhanced testing program is designed to detect BSE with a 95% confidence level even if there were only five positive animals in the entire country.

For more information on BSE, visit the North Florida Beef & Forage Group website which contains links to many BSE related sites at http://nfbfg.ifas.ufl.edu

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**Proper Animal Handling Practices**

Marissa Brown, Suwannee County Extension Service

Handling animals is something that many people do not spend much time thinking about. Some of the techniques, or lack of, that cattlemen use causes stress to the animals and are used all too excessively. Techniques such as cattle prods, tail cranking, and many more equally distressing ones, are not completely necessary when the behavior of animals is understood. Another thing to think about when moving animals through chutes is facility design. Cattlemen should take advantage of an animal’s natural instincts when designing chutes and crowd pens.

One of the first concepts cattlemen should understand is that of flight zone and point of balance. The flight zone of an animal is a radius around the animal in which it feels safe. If a handler enters this radius the animal will turn away. If the handler is outside this radius, the animal will turn and face him. The point of balance is the animal’s shoulder. If a handler is forward of this point the animal will move back. If the handler is behind this point the animal will move forward. Keeping these concepts in mind will make moving animals easier, especially in the chutes.
When moving cattle through chutes, electric prods should be replaced as much as possible with alternative driving aids such as flags, plastic paddles, and a stick with plastic ribbons attached to it. An electric prod should \textbf{NOT} be a person's primary driving tool. It should only be picked up and used when absolutely required to move a stubborn animal and then put back down. People should \textbf{NOT} be constantly carrying electric prods. A reasonable attainable goal for minimum electric prod use is 1 to 5\% of the cattle at a squeeze chute and 0\% when groups are moved.

If cattle will not move through the chutes very easily, there may be a reason other than the animals just being stubborn. There are many common distractions that impede the movement of cattle in the chute. Cattlemen may want to inspect their handling facilities for some of the following distractions:

- Sparkling reflections on puddles
- Reflections on smooth metal
- Chains that jiggle
- Metal clanging or banging
- High pitched noise
- Air hissing - should be silenced with mufflers or piped outside
- Air drafts blowing towards approaching animals
- Clothing hung on the fence
- Piece of plastic that is moving
- Fan blade movement
- Seeing people moving up ahead
- Small object on the floor - such as a coffee cup
- Changes in flooring and texture
- Drain grate on the floor
- Sudden changes in the color of equipment-colors with high contrast are the worst
- Bright light such as blinding sun-animals will move from a darker place to a brighter place, but they will not move toward blinding light.

- Animals may balk at one-way and back up gates-install them two to three body lengths away from the crowd pen.

Design of cattle facilities can have an impact on the ease of animal movement. Curved chutes and round crowd pens work much better than straight ones. The curvature takes advantage of the natural circling behavior of animals; that is, the tendency to go back to where they came from. It also takes advantage of the limited vision of the end of the chute. Animals cannot see people and other moving objects at the end and are more inclined to move forward. Be sure, however, that crowd pens are level and animals can see at least two to three body lengths in front of them.

Source: Dr. Temple Grandin, Colorado State University, www.grandin.com

Northeast Florida Beef and Forage Group Presents:

\textbf{Animal Identification Workshop}

\textbf{Thursday, April 22, 2004 at 6:00PM}
James Terrell Family Farm 
Callahan, FL

\textbf{Thursday, April 29, 2004 at 6:00PM}
Beef Teaching Unit 
Gainesville, FL

See attached flyer for details and directions.