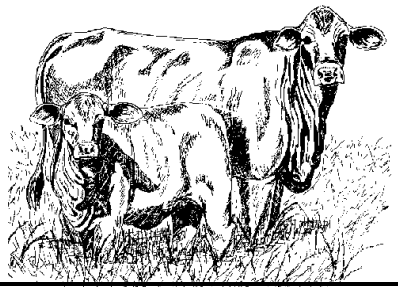
UNIVERSITY OF FLORIDA Cooperative Extension Service

Forage/Livestock Newsletter



Polk County

Summer 2003

Florida Cattle Market Update is now available on the UF Ona Range Cattle REC Web site: http://rcrec-ona.ifas.ufl.edu/markets.html

Coming Events:

- **July 28 - 31,** Beef Cattle Reproduction Management School, Deseret Ranch, Deer Park, FL
- **September 16 - 18**, Forage and Pasture Management School, Highlands Co. Agri-Civic Center, Sebring, FL

For more information on the above events contact the Polk County Extension Office (863) 519-8677 ext 102

Web Sites:

http://www.cflag.com/ - Central Florida Livestock Agents Group

http://sfbfp.ifas.ufl.edu/ - South Florida Beef Forage Program

Sign-up for Livestock Compensation Program by July 3

The Agricultural Assistance Act of 2003 extended the Livestock Compensation Program (LCP), originally created in 2002, into 2003. The 2003 LCP is an emergency initiative administered by the Farm Service Agency (FSA) that provides immediate assistance to eligible owners and cash lessees of certain types of livestock for damages and losses due to natural disaster. This program provides direct payments to eligible livestock producers for damages and losses under a Secretarial or Presidential disaster designation after Jan. 1, 2001, for natural disaster. Polk County is included as a disaster County. Call the USDA Farm Service Agency (FSA) at (863) 533-2051 Ext 2 for more information.

Eligible livestock include: beef and dairy cattle, buffalo and beefalo, when maintained the same as beef cattle, sheep and goats. The livestock must have been owned or have been subject to a cash lease on June 1, 2002 and owned or cash leased by the lessee for a minimum of 90 calendar days. More details are available at FSA's Web site: http://disaster.fsa.usda.gov

Tropical Soda Apple

Tropical soda apple (TSA) is a widespread problem weed in pastures/rangeland, citrus groves and natural areas. In pastures/rangeland, if TSA isn't controlled, forage production will decline resulting in lower animal carrying capacity, lower forage quality, and ultimately lower ranch profitability.

Table 1. Controlling Dense Stands

Fall	Oct. - Nov	Mow - 3" stubble
	Dec.	Monitor
Winter	Jan. Feb.	Mow
	Mar.	Monitor
Spring	April - May	Mow
	May - June	Spray - Remedy
Summer	July- Sept.	Monitor
Fall	Oct.	Spot Spray
	Nov. - Dec.	Monitor
Winter	Jan.	Spot Spray
	Feb. - Mar.	Monitor
Spring	Apr.	Spot Spray

The University of Florida Institute of Food and Agricultural Sciences(UF/IFAS) has developed Best Management Practices (BMPs) for ranchers and landowners to control TSA. The BMPs are an integrated approach involving three components: Prevention, Detection, and Control. Every cattle producer in Florida needs to practice these BMPs for three reasons: profitability, sustainability of the beef industry and to stop the spread of TSA to other states.

Prevention means not allowing TSA onto your ranch. The plant spreads through seed infesting cattle, horses, hay, grass seed, sod and contaminated mowing equipment. If you buy cattle and don't know were they came from, hold them in one pasture for six days before releasing them to other areas. Monitor this pasture for TSA plants and use control practices to remove the plants.

Detection means knowing how to identify TSA and understanding where you're likely to find it on your property. Bring plant samples to the Extension office if you're not sure what you have is TSA. In addition to open pasture/rangeland you're likely to find TSA on ditch banks, oak hammocks, swamps, cypress heads, around hay feeding areas, cattle loafing areas, and working chutes.

Controlling TSA infestations is difficult and will require a long term effort. Controlling dense stands should begin with mowing. The objective of mowing is to weaken the plant and prevent the plants from producing fruit and seeds. In addition, each mowing will kill 10 to 30% of the plants, unfortunately mowing alone will not control TSA. Mow the plants to a stubble height of 3 inches. See table 1 for the recommended protocol for controlling dense stands of TSA. Remedy® is the recommended herbicide for control of TSA because it will kill TSA without killing grass. For broadcast applications apply Remedy® at 1 qt/A plus 0.10 - 0.25 nonionic surfactant in 40 gal/A of water. For spot spraying use a 0.5% Remedy® solution plus 0.1 - 0.25 nonionic surfactant. Spray to point of runoff and include a color marker to insure that no plants are missed. It will take 2 to 3 years to control a dense stand of TSA.

Table 2. Control of Sparse Stands

Fall	Oct. - Nov.	Spot Spray
Winter	Dec - Jan	Monitor
	Feb	Spot Spray
Spring	Mar. - Apr.	Monitor
	May	Spot Spray
Summer	June ⇒	Monitor

Controlling sparse stands of TSA requires constant monitoring and spot spraying as shown in Table 2. Once again, the objective is to prevent TSA from setting fruit. Even immature fruit contain viable seed. From the time a TSA seedling emerges to first flower is about 90 days. Immature fruit will be present in an additional 30 days and mature fruit will be present in another 30 days. A number of different animals will eat the fruit including the immature fruit and spread the seed through their feces.

Beef animals and horses readily spread TSA seeds. They eat the TSA fruit and carry the seeds in their digestive tracts. Research has shown that TSA seeds remain viable in a beef animals digestive tract for six days. Animals carrying TSA seeds have largely been responsible for spreading TSA to adjoining states. Some of these states are threatening to quarantine Florida cattle to prevent the spread of TSA. To prevent a quarantine of Florida cattle all cattle operators should voluntarily adopt BMPs developed by the UF/IFAS. When shipping cattle,

ship cattle from an area that doesn't have TSA or is TSA fruit free. Mowing a TSA infested pasture before shipping will eliminate the fruit and the consumption of TSA seed by cattle. When you receive a group of calves or cows on your ranch, hold them in one area for at least six days to avoid the spread of TSA to other areas of your ranch. If you buy TSA-infested hay or grass seed, contact the seller and ask him/her to stop selling these products and to control the weed on his/her property.

If you are harvesting hay, seed or sod from your property it is very important that TSA in these fields be controlled. TSA has been declared a noxious weed in Florida and it is unlawful to knowingly sell or transport material containing TSA seed. If TSA seed is found in grass seed, the entire lot could be condemned.

TSA is a serious problem in Polk County. Unfortunately, it is now so pervasive in the environment that it cannot be eradicated. It is important to keep it under control. UF/IFAS, the USDA-ARS with funding from the Florida Dept. of Agriculture is working on biological control agents that attack TSA. A TSA leaf beetle (*gratiana boliviana*) was released on the Costine Ranch, north of Lakeland on May 14. This beetle originated in South America. A second biological agent, the TSA flower bud weevil (*Anthonomus tenebrosus*) is being studied and could be released in the near future. The release and establishment of the TSA defoliating leaf beetle and perhaps the TSA flower bud beetle hopefully will reduce the ability of TSA to out compete more desirable vegetation.

Another biological control for TSA being studied at the UF/IFAS is a common, indigenous plant virus found in Florida which is lethal to TSA. The virus is called the *tobacco mild green mosaic virus* (TMGMV). As the name implies, the virus is found in tobacco where it causes a mild disease in tobacco plants. The virus kills TSA of all ages from seedling to mature plants. To be effective the virus extract must be introduced to the TSA plant by physically breaking the skin of the TSA plant. This can be done in the field by dragging a section of chainlink fence or similar device over the TSA plants and the spraying with a virus extract. This material is still being studied is not yet commercially available.

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Water Quality Best Management Practices

A few years ago delegates to the Florida Cattlemen's Convention voted to develop a set of Best Management Practices (BMPs) to protect water quality on cattle operations in Florida. A committee, headed by Michael Milicevic, was formed and spent two years developing a set of BMPs and a manual for cattlemen to use. The manual was written by cattlemen for cattlemen and contains common sense, economically-

viable guidelines for production practices designed to protect water bodies and maintain compliance with state water quality standards. The BMPs are not rules or regulations but voluntary guidelines for your ranch that considers water quality. **Copies of the BMP manual are available, at no cost, from the Polk County Extension Office.**

BMP's may be defined as "a schedule of activities or prohibitions, maintenance procedures and structural or management practices found to be most effective, economically viable, and practical methods to prevent or reduce the discharge of pollutants - given the present level of knowledge".

Cow/calf operations are generally considered low intensity agriculture with low levels of pollutant discharges. In general, areas where cattle congregate or have access to water bodies may have the greatest potential to contribute to water pollution.

The US Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (DEP) are currently developing Total Maximum Daily Loads (TMDLs) for water bodies in Florida, as required by the Federal Clean Water Act. TMDLs are the maximum amount of pollutants a water body can assimilate while staying in compliance with state water standards. Once the maximum pollutant load is calculated for a water body, both point and non-point sources of pollution may be required to reduce pollutant discharges.

Implementation of the BMPs described in the "Water Quality Best Management Practices for Cow/Calf Operations" manual provides a good argument that you have made reasonable efforts to reduce pollution from your ranch by the maximum practical amount. In order to do this you need to develop a plan and document your decisions. Help in developing a plan is available from the USDA Natural Resources Conservation Service (NRCS), UF/IFAS Extension, or from private consultants.

Beef Management Calendar

July

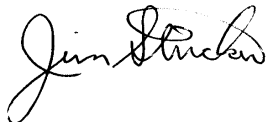
- Control weeds in summer pastures.
- Check mineral feeder.
- Check for army worms and mole crickets and treat if necessary.
- Wean calves and cull herd.
- Watch for evidence of footrot and treat.
- Consider preconditioning calves before sale including vaccination for shipping fever and IBR at least 3 weeks before sale.
- Check dust bags.
- Update market information and plan.
- Revaccinate calves at weaning for blackleg.

August

- Cut hay.
- Apply lime for fall and winter crops.
- Harvest Bahiagrass seed.
- Check mineral feeders.
- Update market information and marketing plans.
- Check for army worms, spittlebugs, and mole crickets, and treat in necessary.

- Check dust bags.
- Wean calves and cull herd.
- Watch for evidence of abortions.
- Observe animals regularly for signs of disease.
- If cattle grubs were found on cattle last winter or heel flies were observed in the pasture, treat for cattle grubs this month.
- Pregnancy test and cull open heifers from replacement herd.

Sincerely,



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