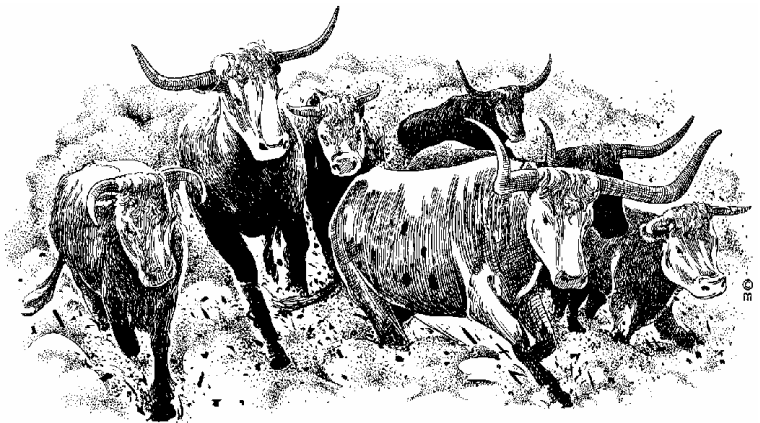


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MARION COUNTY LIVESTOCK NEWS

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Horsequest Web Site Provides Valuable Information

Extension professionals from 13 southern land-grant institutions have combined their equine knowledge and launched a comprehensive Web site, www.HorseQuest.info

This Web site allows Extension equine specialists the opportunity to join in collaborative programming that reaches beyond state boundaries.

This interactive site was established to provide clientele and other Internet visitors a source of reliable and up to date horse information through a knowledge base of commonly asked questions that have science-based, peer reviewed answers. HorseQuest allows you to ask questions or search for questions and answers asked by other horse people.

The site contains answers to questions in the subject areas of nutrition/feeding, health, breeding, parasites, training, marketing, diseases, facilities, horsemanship and managements just to name a few.

Funding for Horsequest.info, which is powered by RightNow Technologies Revelation knowledge engine, was provided through a U.S. Department of Agriculture, Agriculture and Telecommunications grant.

Although all information is available free of charge, users are required to log in when they first visit the site. Knowing where clients are from helps the experts better answer questions and helps account for geographical differences. The information is confidential and only used for statistical purposes.

Fire Ants & Biological Control

How they got here. Imported fire ants first came to the United States in the 1930s. Seventy years later there are five times more ants here in the States than in their native land of South America. Natural enemies of fire ants keep in check most of the ants in South America. But the fire ants that came to the States escaped their natural enemies and thrived in the southern landscape.

A crisis brews Until now, the only way to control fire ants has been to use insecticides. And the only way to maintain control has been to apply insecticides two to four times a year at a cost of at least \$10 an acre for each treatment. Treating all infested land would cost \$6 billion to \$12 billion a year.

Because of the expense and hazard of insecticide treatments most landowners do nothing. Uncontrolled, fire ants have become serious pests. They damage crops, livestock, and electronics and sting people. By killing wildlife and even endangered species, they upset the ecological balance of nature. Fire ant losses total almost \$7 billion a year in urban and agricultural areas.

Why natural enemies? The only reasonable solution for fire ants is classical biological control - release natural enemies to control the ants. Natural enemies of fire ants have been found in South America and have proven safe and effective. These natural enemies can be released to provide biological control of fire ants.

Two effective natural enemies of fire ants have been developed as biological control agents: *Thelohania* fire ant disease and decapitating flies.

Natural enemies provide control wherever ants are. They affect *only* fire ants, not other species. They also can improve and extend the effectiveness of insecticide treatments.

Experimental results Plots of land were treated with insecticide bait only. These treatments reduced fire ant populations by about 90 percent. But within several months fire ants reinvaded from surrounding areas.

Other plots were treated with insecticide bait, *and* natural enemies were released. The insecticide bait again reduced populations by about 90 percent, but fire ants did not reinvade. Even after two years, fire ant populations were still suppressed 96 to 100 percent by using natural enemies. As fire ant populations decreased, native fauna returned.

Understanding Mosquito Control

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Assistant Professor

Extension Medical Entomologist

UF/IFAS/FMEL

It must be mosquito season because there is a new line of services available for killing mosquitoes. The newest systems include insecticide spray nozzles connected by tubing that is installed around fence lines and the perimeters. The tubing is connected to a reservoir of insecticide (30 - 255 gallons); release of the insecticide is regulated by a timer. Some systems allow programming of the timer to spray up to 96 times per day and include an override system for the homeowner to use in between the preset times if desired.

The first responsibility in any pest control application is to know the specific pest one is trying to manage: identify it, know its feeding habits, where it rests, when it moves, when it mates, where the eggs are deposited, etc. Entomologists and insect control professionals know from experience that a lack of understanding of pest behavior often leads to ineffective control measures and unnecessary exposure of the environment and non-target organisms to a pesticide.

Seventy-seven species of mosquitoes have established populations in Florida; over 150 species are known to North America. Different mosquito species exhibit different behaviors. The various mosquito species have preferences for the type of host they will feed on and the time of day or night they are flying/biting/feeding. Since species differ in many traits, what is known about one species can not be assumed to pertain to another species. For example, it is well established that mosquito activity (flight/feeding) fluctuates depending on the humidity, the wind, the season, the temperature, host availability, the time of day, and the mosquito species. There are some Florida species of mosquitoes that exhibit a narrow window of feeding that lasts approximately 1 hour right before sunset; others may feed at any time of day when a host is near.

In order to reduce the number of biting mosquitoes of any given species, one must monitor several variables and respond with appropriate control measures that are specific for the intended pest species. This is the science (and the art) of mosquito surveillance.

Surveillance should include:

- Proper identification of the pest species
- Considerations of the behavior of various species

- Population density monitoring; landing rates, trap counts, larval development
- Weather monitoring

Why is surveillance and precise identification of target species important?

- Effective and efficient mosquito control programs respond to mosquito density. It is inappropriate to apply an adulticide for mosquitoes if there are no adult mosquitoes present at the time of the application.
- Proper timing of application is critical. It can be very difficult to time a mosquito adulticide application that specifically targets resting or flying mosquitoes. The product must reach the mosquito in flight, or get through the vegetation where the mosquitoes rest. The insecticide must come into contact with the mosquito and be of a certain size droplet that has high probability of actually hitting the insect. Those that are too big will drop before contacting the mosquito and those that are too small will go around the mosquito body without contact. Every droplet of pesticide that misses a mosquito or has low probability of contacting a mosquito is a waste of product and an unnecessary exposure of the environment and non-target organisms to an insecticide. One needs to know what the mosquitoes are doing in order to time the application so that it will be effective.
- Scheduled spraying, that is, ANY application that relies on spraying on a regular interval without surveillance and decision making by humans, leads to inappropriate applications. Inappropriate applications can contribute to insecticide tolerance and resistance.

Mosquito control misting systems, or any other system that simply releases insecticides on a timer, whether it is a barrier application or to kill flying mosquitoes, lack the human element that is critical for effective and proper mosquito control.

Effective, efficient, and environmentally proper mosquito control organizations conduct their operations of applying pesticide based on surveillance to ensure that the application will have maximum effect on mosquitoes with minimal effect on the environment. Timed release of pesticides into the environment, with no biological surveillance or human decision making to assess the need and impact, is NOT a part of a responsible mosquito control application. Therefore it is against good mosquito control practices to advocate automatic release of pesticides simply based on a timer.

Hay and Pasture Insects

Carrol Chambliss

Extension Agronomist, UF/IFAS

Be on the look out for fall armyworms and grassloopers. Fertilized pastures and hay fields seem to attract the fall armyworm moth. They especially like bermudagrass. Populations reach a peak in late July, August and September. A large congregation of cattle egrets in a field fertilized for fall hay production may indicate an infestation of fall armyworms.

Spittlebugs build up in fields where grass has been allowed to accumulate throughout the summer. Circular spots where the grass is dying back indicates spittlebug damage. Fields with a severe spittlebug infestation should be grazed or harvested for hay or silage. This will open the field up and allow sunlight to desiccate the young nymphs. If the adults are emerging or have emerged at the time when the field is harvested, then they can be killed with an application of insecticide.

Burning of fields in the winter helps in spittlebug control. Susceptible plants include digitgrass (Pangola), limpograsses, and bermudagrasses. Chinch bugs have been a problem on Callide Rhodesgrass. Chinch bug damage usually occurs on the higher, dryer ground. Populations should diminish in September.

Vegetative Propagation of Forage Grasses

In order to obtain good stands, Coastal bermudagrass, Tifton 85, stargrasses, and other vegetatively propagated grasses require special attention. When preparing a seedbed, two factors are important: 1) dug sprigs or tops should be planted in moist soil and 2) the seedbed should be free of weeds.

There are four common reasons for stand failures: 1) planting in fields that have stands of other grasses (common bermudagrass), 2) use of dried out sprigs or tops, 3) prolonged drought after planting, and 4) grazing before the grass is established. The planting material should be planted on a clean, moist seedbed that is free of other growing grasses. When planting tops, use mature grass 8 to 10 weeks old. Use fresh planting material with at least three nodes or joints. Plant sprigs or tops the same day they are harvested. Cover the planting material immediately or within 15 minutes after dropping on the soil surface. Experience has shown that bermudagrass tops will dry out quicker than bermudagrass sprigs. Packing the soil around the planting material after it has been distributed and covered is very critical in maintaining moisture in the soil surface and preventing the planting material from drying out and dying. Grass planted in the summer usually requires 90 days or more before it is established well enough for any type of harvest to be taken. If less than 100% stand establishment has occurred, caution should be exercised during the first year after planting to allow for complete stand development. In north Florida, try to complete summer plantings by August 15.

Beef Cattle Management Tips

JULY

- ✓ Control weeds in summer pasture.
- ✓ Apply nitrogen to warm season pastures, if needed
- ✓ Check and fill mineral feeders and dust bags.
- ✓ Inspect pastures for armyworms and mole crickets, and treat if necessary.
- ✓ Wean calves and cull cow herd
- ✓ Observe cows for evidence of foot rot and treat.
- ✓ Consider preconditioning calves before sale including vaccination for shipping fever and IBR at least 3 weeks before sale.
- ✓ Update market information and plans.
- ✓ Re-vaccinate calves at weaning for blackleg.

AUGUST

- ✓ Cut hay.
- ✓ Apply lime for fall and winter crops.
- ✓ Harvest bahiagrass seed.
- ✓ Check pastures for evidence of armyworms, mole crickets, and spittlebugs, treat if necessary.
- ✓ Check and fill mineral feeders and dust bags.
- ✓ Inspect cattle for evidence of disease.
- ✓ Wean calves and cull cow herd.
- ✓ Pregnancy test and cull open heifers
- ✓ Check bred cows for evidence of abortion.
- ✓ 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.

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John Mark Shuffitt
Livestock Agent II
Marion County Extension Service

“The Last Word”

"Do not ever give a Queen a home appliance as a gift. Period. The end. Now, an exception can be made in the event she just happens to mention in passing that she wishes she had, say, a full Viking kitchen, and then she goes out of town for a few days; and when she comes back, her entire kitchen is renovated with fabulous Viking appliances. She will be touched. On the other hand, if it is her birthday and you, all on your own, select, purchase, and present her with a Crock Pot, well, its over."

"Never kick a cow chip on a hot day and always drink upstream from the herd."

— Common Sense

"Having the world's best idea will do you no good unless you act on it. People who want milk shouldn't sit on a stool in the middle of a field in hopes that a cow will back up to them."

--Curtis Grant

Management Lessons

Through out life we have the chance to see real good management and really bad management....

Please take a moment and read your Management Lesson session for today:

Number 1

A crow was sitting on a tree, doing nothing all day. A small rabbit saw the crow, and asked him, "Can I also sit like you and do nothing all day long?"

The crow answered: "Sure, why not."

So, the rabbit sat on the ground below the crow, and rested. All of a sudden, a fox appeared, jumped on the rabbit and ate it.

Management Lesson: To be sitting and doing nothing, you must be sitting very, very high up.