

Marion County Extension Service
2232 NE Jacksonville Road
Ocala, Florida, 34470
(352) 671-8400



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MARION COUNTY LIVESTOCK NEWS

AUGUST 2007

2007 Florida Equine Institute & Allied Trade Show

Thursday, September 20
8:00 am – 4:00 pm

Southeastern Livestock Pavilion
2232 NE Jacksonville Road
Ocala, Florida 34470

UF Professors ~ Equine Industry Professionals
Allied Trade Show ~ Live Animal Demos

Discussion Topics:

- “Bermudagrass Horse Hay – Facts & Myths”
- “Horse Psychology – The Language of Horses”
- “Equine Health Care & Disease Prevention”
- “Understanding & Riding with Natural Aids”
- “Stretching Your Hay Supply – What to Feed
When Hay is Scarce?”

– Registration is required –
\$25.00 (before September 10th)
\$50.00 (on-site or after September 10th)

Call Marion County Extension
352-671-8400

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Florida Equine Management Courses

Plan now to attend one of these upcoming
Fall 2007 courses.

Florida Equine Management II and Florida
Alternative Therapies for Managing the
Equine Athlete will begin Monday,
September 17th, 2007.

These courses will meet at Central Florida
Community College (CFCC) located on State
Road 200 in Ocala. Classes are scheduled to
meet from 6-9 p.m. for 9 weeks concluding
on November 13th.

Florida Equine Management II topics
include:

**Principles of Horseshoeing
& hoof care
Horseshoeing Demo & Hoof Care Lab,
Equine Conformation and selection,
Equine Dental care
Equine nutrition & feeding management,
Veterinary care and first aid
Farm safety & equipment maintenance
and Equine Behavior**

Alternative Therapies for Managing the
Equine Athlete is a new class and will
feature discussion of topics such as massage
therapy, magnetic therapy, acupuncture,
acupressure and homeopathy.

To register for one of these courses, contact the
Cont. Ed. Dept at CFCC phone: (352) 873-
5804 or 854-2322. For more information,
contact Mark Shuffitt at (352) 671-8400.

Summer Time and Hay Curing in Florida

The moisture content of fresh forage is around 75 – 85%, so getting forage to where it is dry enough for bailing – which is around 20 % moisture - requires removing a large amount of water. The number of days to bring the moisture down to 20% is typically 3 or more. However, you want to quickly cure your hay because rapid curing keeps the forage from respiring and consuming sugars. Once the forage is below 40% moisture the respiration rate is almost zero. Rapid removal of moisture also helps in maintaining the green color in the hay as well as avoiding spoilage due to rain. Drying of fresh cut forage is affected by different factors: solar radiation intensity, air temperature, relative humidity and soil moisture. Moisture can also move from the air to the crop when the relative humidity is very high as is the case when there is dew or rain occurs. Typical hay production practices in Florida include ‘tedding and raking’. Tedding disperses or scatters the forage over the entire field in order to capture all the solar radiation and use more efficiently the energy of the sun. Tedding also makes a thinner layer which produces a more uniform drying. Usually, tedding shortens the curing time by about ½ day. Raking should be done at 35-40% moisture to keep dry matter losses under 4%. If raking is done too late (when crop is at bailing moisture) losses can exceed 20%. Also, to minimize losses, hay should be raked in the same direction that it was mowed.

Yoana Newman
UF/IFAS Extension Agronomist

Spraying with Liquid Fertilizer

Many hay producers opt to spray herbicide in a liquid nitrogen solution (28-0-0, 32-0-0, etc) so they can fertilize and control weeds in one pass. This procedure can be a convenient one-pass solution for two problems. However, it is possible for herbicide and liquid N to react with one another and cause the solution to clabber, or gel, in the spray tank. To avoid that situation, here are some things to consider before using liquid N/herbicide solutions.

1. Not all herbicides are compatible with fertilizer blends. Read the herbicide label to ensure that special mixing steps are not required to improve compatibility.
2. If in doubt, perform a jar test. A jar test is simply when you mix herbicides and nitrogen solutions together in small batches prior to adding to the spray tank. It is important to mix the products in the same

proportions as you plan to spray and in the proper mixing order. If incompatibility occurs, it is much easier if you know this ahead of time and only have to dispose of 1 pint rather than 400 gallons.

3. As a rule, ester formulated herbicides (such as Remedy, 2,4-D ester, Outlaw, etc) are more compatible with liquid N than other formulations (2,4-D amine, Milestone, Weedmaster, etc). If using amine formulations, mix a 50% solution with water prior to adding to the liquid fertilizer.
4. Incompatibility is more common with fertilizers that contain phosphorus, potassium, or sulfur than with those containing nitrogen only.

Solutions to incompatibility

Sometimes the jar test indicates that the herbicide and fertilizer solution are not compatible. If this occurs, here are a few possible solutions.

1. Mix the herbicide with water prior to adding to the fertilizer. This can often minimize the interaction.
2. Change to a different herbicide formulation.
3. Use a fertilizer solution that contains only nitrogen.
4. Add a commercial compatibility agent.

Jason Ferrell
UF/IFAS Extension Weed Specialist

Recent Pesticide Blunders

This past spring semester, a student who was a national of another country made a comment to me after our class lecture on pesticide regulations in the U.S.: “we really have no laws regulating pesticide use in my country, and quite often, we have human deaths attributed to pesticides.” I didn’t tell the student, but I was thinking to myself: “we are highly regulated in the U.S., yet we still have plenty of accidents, stupid mistakes, but fortunately very few deaths attributed to pesticide use.”

FDACS keeps me abreast of their pesticide misuse investigations with emails, on practically a daily basis, of interesting encounters from around the state. Some are unbelievable for whatever reason – personal grudges with malicious intent, mischief seekers, attempting to maximize pesticide efficacy, plain ignorance, being in a hurry, etc. But, I thought that I would share some of these recent investigative reports. To summarize several:

- Palm Beach County (July): a pesticide storage trailer was parked on the side of the road, broken into, and set afire. The local fire department responded, put out the blaze, but herbicides were spilled and the area subsequently flooded.
- Santa Rosa County (June): a homeowner while mowing his lawn was drifted upon by an applicator

treating a nearby peanut field. The report stated that the wind speed at the time was 30 mph.

- Volusia County (June): a lady's 3 dogs were found violently ill in her front yard along with a tainted piece of pork covered with a blue/green substance. Their vet postulated the substance to be rat poison. The dogs subsequently survived following treatment.

- Jackson County (April): aerial application of a defoliant applied to a peanut crop rather than to the intended cotton crop.

Those are just a sample of some of the more colorful recent incidents in this state. The incident that prompted me to write this article came to me yesterday (July 19) from a colleague at Washington State University.

This is a horrific human tragedy that fortunately doesn't happen often in the United States; nevertheless, was reported by the Associated Press:

- Lubbock, Texas (July 18): a family in an attempt to rid their home of cockroaches used phostoxin in their home. A 2-yearold girl died and 4 adults were sickened by the released fumes. Phostoxin is a fumigant which releases phosphine gas, and is typically used industrially for insect control in storage facilities, such as grain warehouses.

Yes; pesticide use is highly regulated in the United States, but for obvious reasons. In Florida, we have stricter regulations than many states; but, that's not necessarily to our disadvantage. Our natural resources are at stake, yet precious to all. Our rapidly growing population demands and expects a cleaner and safer environment as well as their personal protection. With our climate, pest complexes, and cropping systems, the need for pesticide use will continue. At the same time, being a good steward of our natural resources, family, and neighbors should be placed at a premium.

Fred Fishel

UF/IFAS Pesticide Coordinator

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“Beef Cattle Management Tips”

August

- Treat for liver flukes as close to August 15th as possible, if they are in your area.
- Cut hay.
- Apply lime for fall and winter crops.
- Harvest Bahiagrass seed.
- Check mineral feeder.
- Update market information and marketing plans.
- Check for army worms, spittlebugs, and mole crickets, and treat if necessary.
- Check dust bags.
- Wean calves and cull cow 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.

September

- Cut hay.
- Heavily graze pastures to be interplanted to cool season pastures.
- Check mineral feeder.
- Check for mole crickets, spittlebugs, and grassloopers and treat if necessary.
- Check dust bags.
- Wean calves and cull cow herd if not already done. Remove open, unsound, or poor producing cows.
- Train cowboys to observe normal and abnormal behavior and signs of disease.
- Be sure any replacement purchases are healthy and have been calfhood vaccinated for brucellosis.
- September or October is a good time to deworm the cow herd if internal parasites are a problem.
- When replacement heifers are weaned, give them required vaccinations and teach them to eat – then put them on a good nutrition program.
- Determine bull replacement needs, develop selection criteria, and start checking availability of quality animals.
- Review winter feed supply and feeding plans so that needed adjustments can be made before supplies tighten and prices rise.

John Mark Shuffitt
Livestock Agent III
Marion County Extension

“Water Needs of Cattle”

Nutrition, forage quality and mineral needs get the bulk of attention during the summer grazing season, but water is livestock production's most essential nutrient. After all, cattle can survive weeks without food, but only a few days without water.

It's important that cattle receive a sufficient quantity of water each day to maximize feed intake, produce milk for the calf and maintain a healthy reproductive cycle. Research shows insufficient access to water reduces cattle's dry matter intake, which affects production across the board.

The quantity of water needed by cattle depends on air temperature, the animal's activity level, lactation and type of feed. As air temp, activity level and lactation increase, so does the animal's water requirement. A ration low in moisture, compared to a pasture ration of young vegetative grass, will require more water.

The following chart from provides an estimate of the daily water needs for various classes of beef cattle under varying summer temperatures.

Daily water intake in gallons

Type of beef animal	70°F	80°F	90°F
500-lb. calf	6.5	7.4	10.6
800-lb. growing heifer/steer	9.3	10.6	14
800-lb. finishing cattle	10.8	12.3	16.5
750-lb. pregnant heifer	9	10.3	14.6
Dry pregnant cow	10.8	12.4	17.6
Lactating cow	16.3	17.9	21.6
Mature bull	12.7	14.6	19.5

Compiled from 1996 NRC Requirements For Beef Cattle, and Winchester and Morris, 1956. Water Intake Rates Of Cattle. Journal of Animal Science, 15:722.