UP COMING EVENTS

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This issue of the Okeechobee Livestock Letter focuses on drought management strategies for livestock and pastures. We hope that these articles will be beneficial to you during this time. Hopefully, by the time you read this, our rainy season will have finally begun and you will not have to worry about this. Nonetheless, this series of articles should be a good reference to you and your operation to help you develop a drought management plan.

- MANAGING LIVESTOCK DURING A DROUGHT -

When temperatures and humidity rise, it's important to keep a close eye on livestock. Temperatures in the high 80's and higher can cause serious problems. Heat stress can cause general discomfort, decline in animal performance, and animal death.
During these times, provide adequate shade, if possible, and plenty of drinking water. Heat from the sun is a major culprit in over stressed animals. If animals need to be worked, do it as early or as late in the day as possible.

Animals cool themselves primarily by panting and through water evaporation from the skin. Increased respiration during hot weather is especially important for pigs and other animals that do not sweat. Animals must replace the water loss to cool themselves.

Proper ventilation helps maintain livestock health during hot and humid weather. Without adequate air exchanges and airflow distribution within livestock buildings, heat and moisture accumulate and animal production is affected.

Use the temperature humidity index (THI) as a guide for heat stress. Listen to local weather reports for the temperature humidity index for our area. Some levels of concern include:

- **Above 75 THI** - Heat stress on high producing cows begins to decrease feed intake and lower milk production.
- **Above 80 THI** - Severe heat stress may occur for cows on pasture. Shade and ventilation are essential to minimize milk loss.
- **Above 83-85 THI** - Danger of fatal heat stress occurs.

Keep an eye on animals. If heat stress is a concern, check animal temperature. Dairy cow temperatures approaching 104 to 106 degrees F. are dangerous! At 107 degrees F., spontaneous heart failure is possible. The normal temperature range for cows is 100.4 degrees F. to 103.1 degrees F..

- **Water and Feed Requirements for Livestock During A Drought** -

Drought usually gets its reputation from its impact on crops. But its impact on livestock can be equally dramatic. Hot, dry weather increases the water needs of livestock but often decreases water supplies. Crops may not yield as planned, causing a feed shortage. Consequently, farmers may face special challenges, including decisions about whether to buy feed or sell livestock.

**Water Requirements**

Water requirements may increase to double the normal intake for animals during hot weather. Clean, fresh water is important. If animals do not meet their water needs, they refuse to eat, experience lowered production, become sick or die.

Water supplies also may become a problem as the drought wears on. Wells and piping may be inadequate if water demand increases dramatically; shallow wells, streams, and ponds may dry up. You may need to transport water.

Some general water estimates for various conditions and animals:

*Daily water intake for beef cattle - 88° F*


- Cows - 16.5 gallons for nursing calves, 14 gallons for bred dry cows and heifers.
- Bulls - 18 gallons.
- Growing cattle - 9 gallons for 400 lb. animal, 12 for 1000 lb., and 22.5 for 1200 lb.
- Finishing cattle - 14 for 600 lb., 17 for 800 lb., 20 for 1000 lb., and 22.5 for 1200 lb.

**Daily water intake for dairy cattle - 80° F**

- Dry cows (for maintenance and pregnancy) - 16.2 gallons for 1400 lb. animal; 17.3 for 1700 lb.
- Lactating - 1400 lb. cows (for maintenance and milk production) - 17.9 gallons for 20 lb. milk production, 24.7 for 60 lb. milk production, 38.7 for 80 lb. milk production, 45.7 for 100 lb. milk production.
- Heifers - 3.3 gallons for 200 lb. animals, 6.1 for 400 lb., 10.6 for 800 lb., and 14.5 for 1200 lb. (for maintenance and pregnancy).

Other livestock species daily water intake include:

- Horses, 8 - 12 gallons
- Swine, 3 - 5 gallons
- Chickens, 8 - 10 gallons per 100 birds
- Turkeys, 10 - 15 gallons per 100 birds

Extremely hot heat-stress weather could increase the high value another 20 - 30%.

**Feed Requirements**

Feed supplies may run low if crops are compromised or lost because of dry weather. Farmers unable to afford additional feed may face an emergency situation.

- More On Personnel Management...

Many of the dairymen attended a program on March 31 on various aspects of employee management and working with our Hispanic employees.

One of the topics discussed was the value in developing a written Personnel Policy Handbook for your business.
Several folks asked for written information after program, and not too long afterwards, I mailed copies of material to everyone. Dave Bray has obtained further information and has shared that with me.

He has sent a copy of a book chapter entitled *Personnel Policies*. Basically, it is a suggested index. There is no explanation, simply an outline, but it lists what needs (or at least the author recommends) be included in such a handbook.

If you would like a copy, let Pat know and we'll get it in the mail to you.

For anyone who didn't get one and is interested I have copies of the materials sent earlier. These are: *Job Descriptions and Job Images* by Dave Bray and *Understanding and Working with Hispanic Employees* by Miguel Morales, MVZ

I also still have copies of the hoof trimming manual *Hoof Care In Cattle* from the State University of Utrecht (Netherlands) which demonstrates the Dutch method of hoof trimming from the program of last summer if anyone still needs a copy.

- **Feeding and Managing Dairy Cows in Hot Weather** -

No need to tell its been HOT! No need to tell you the cows are suffering. But, maybe we can suggest some help. You might want to check with your nutritionist. From Texas A & M research we found the following suggestions:

*When the temperature gets above 90° F. a high producing cow needs 50 gallons of water a day. Keep it clean, cool, shaded and available.*

*The cow's first response to heat stress (that begins at about 78° F), is to reduce dry matter intake. At 100° F intake may be 25% lower. Its usually forage she'll forgo first. This can result in acidosis.*

*A consistent, well-balanced and palatable ration is essential to maintain intake. The slump can be minimized by using the highest quality forages available. If you reduce forage to maintain intake, milk fat can suffer.*

*Only feed what the cows can clean up, keep it fresh.*

*Increase concentration of nutrients. Raise the level of protein by at least 1% The addition of fat to the ration at on-half to two pounds per head per day improves milk production and body weight gain in high producers.*

*Increase mineral consumption. Florida research has shown potassium at 1.5% of the ration dry matter and sodium at .6%will increase milk production. Feed higher potassium and sodium only to milking cows, never to dry cows.*

*Keep your sprinklers and fans operational.*

- **Pasture to Plate Program** -
It's time again for beef producers to consider consigning cattle to the Pasture to Plate program. The Pasture to Plate program is an educational program for cattle producers. The purpose is to give cattlemen the opportunity to: (1) evaluate the feedlot performance of their cattle, (2) obtain individual carcass quality and cutability information on their cattle, (3) become familiar with custom feeding practices and procedures, and retained ownership without the investment and risk involved in feeding an entire pen of cattle.

The program is sponsored by the Marketing Committee of the Florida Cattlemen's Association in cooperation with the University of Florida Cooperative Extension Service.

What do you need to do?

Pick out how ever many steers you want to send. Select average steers for your herd, not the best, not the worst. Pick up a consignment form from the Extension Office and mail it to the Florida Cattlemen's Association

Follow the pre-delivery calf management requirements.

What will it cost you? $120 per animal consignment fee plus approximately $6 per head per day for feed and any medication costs.

What do you get? You get your individual carcass data, an opportunity to become familiar with custom feeding practices and retaining ownership without the investment and risk of an entire pen of cattle. (If you're trying to evaluate a bull for feedlot and carcass traits, you need the data from at least 16 of his calves. These do not all need to be evaluated in the same year.)

For a consignment form, contact Mark Kistler at the Extension Office For detailed information and questions contact: Mr. Jim Handley, Executive Vice President, Florida Cattlemen's Association, P.O. Box 421929, Kissimmee, FL 34742-1929 or call (407) 846-6221 or call Bob Sand at U of F Animal Science Department at (352) 392-7529

- South Florida Beef/Forage Program - Joins the Net

The south Florida Beef/Forage Program (SFBFP) has gone hi-tech with a new web site made especially for cattle ranchers in South Florida.

SFBFP web page (http://www.ifas.ufl.edu/~sfbp/beef.html) is dedicated to making timely and practical information available to cattle producers in south Florida via the Internet. The page features links which provide users a calendar of upcoming events, county newsletters, information on educational programs available, custom service providers, cattle breed information such as sire summaries, agricultural publications available and agricultural links that may be of interest.

One of the important items on the page is a directory of products and services. Enclosed in this newsletter is a form through which you can submit information to be posted in this directory on the web site. Return the form to Mark at the Extension Office.
- Martin County Forage Field Day -

July 22, the Martin County Extension Service will conduct a forage field day from 9 am until after lunch at 12:30 pm. The tour will meet and depart from the parking lot at the Florida Turnpike (Stuart exit) and SR-714 (Martin Hwy). The tour will include perennial peanut varieties in an orange grove, smut grass sprayed with Velpar, the Florida Agricultural Exposition, and presentations from Dr. Paul Mislevy concerning grass selection for hay and grazing and Dr. Jeff Mullahey discussion Tropical Soda Apple control.

Lunch is sponsored but reservations are needed. Please call (561) 288-5654.

- Drought Affected Pastures and Ranges -

Cattle producers generally have two main options for meeting the nutrient requirements of cattle on drought affected pastures and ranges. The first is to provide supplemental feed to ensure the cow herd has adequate energy, protein, vitamins, and minerals. The second is to reduce the nutrient requirements of the cow to a point where they can be met with available forage.

Producers may consider renting additional pastures or moving cattle to areas where pastures are in better condition as alternatives to supplementation. In addition, producers may consider selling all or a portion of the herd to reduce stocking rates sufficiently for pasture conditions. Cow-calf/yearling producers may consider removing yearlings from drought affected pastures and placing them directly in the feedyard to reduce stock numbers.

Drought affected pastures and native range generally do not produce adequate forage to maintain "normal" stocking rates, so producers must provide supplemental energy to meet the needs of the cow herd. Pastures and native range that are dormant due to drought conditions may be low in vitamin A, phosphorus, and protein. Meeting the need for these nutrients is important if cow herd productivity is to be maintained.

Reductions in stocking rate will benefit range plants by reducing stress and will also provide more forage for remaining cattle. When stocking rates are reduced in accordance with production, only small effects on weaning weight maybe noted. If stocking rate is not reduced, supplemental feeding is necessary to maintain herd productivity and alleviate grazing pressure.

- Culling Strategies -

✔ Cull low or non-producing cows. If the drought persists, cull deeper than usual due to the high purchased feed costs. Commercial herds should use this as a time to cull older and lower quality cows.

✔ Early wean calves to insure cows rebreed for next year's calf crop.
Sell calves early if necessary.

To avoid high supplement feed costs, cull deeper into the herd and save the higher quality heifers as replacements. The heifers will not bring much at the market, so it's a good time to keep them for replacements. In addition, these heifers should be in production by 1998 for better markets.

- It's That Time Again! -

With more heavy rains imminent (we hope), and this nice hot weather we've been having, it's time for us to prepare for mosquito season by eliminating mosquito breeding sites. Obviously, we live in south Florida, eliminating standing water in the summer is not likely. However, anywhere it can be...won't be breeding mosquitoes.

Mosquitoes don't generally move far from where they hatch, so, the more standing water we eliminate, the less chance of getting bit or worse, catching a mosquito transmitted disease.

Due to the mild winter and expected heavy rains, we could experience unusually large populations of mosquitoes.

Children, adults over age 55 and people who spend a lot of time outdoors are at greater risk and should take special precautions.

Mosquitoes can breed in very small amounts of still water. Get rid of standing water then such as trash can lids, old tires, tin cans, birdbaths and the like. Or at least empty is every three days. Stored tires are especially attractive to the Asian Tiger Mosquito and unlike his cousins, it likes to feed during daylight hours making it that much worse a pest.

Horse owners should consider vaccinating their animals against Eastern Equine Encephalitis (EEE), an often-fatal viral disease that attacks the nervous system of horses. The virus is transmitted from infected wild birds to horses by mosquitoes, or from infected birds to humans on rare occasions. In Florida, the disease is a year round problem, but the majority of cases in horses occur from April to September, with a peak in July and August.

Prevalence of EEE depends on the weather, mosquito populations, the amount of infection in wild birds and the number of susceptible or unvaccinated horses.

- LIVESTOCK INDEMNITY PROGRAM ANNOUNCED!! -

USDA-Farm Service Agency has announced a Livestock Indemnity Program to help producers who lost livestock from weather-related conditions 11/27/97 - 5/01/98. Counties considered a primary disaster area
under Presidential/Secretarial Disaster Declaration are eligible. SIGN UP 7/6/98 - 9/01/98. Call your local FSA office for details. Producers in Okeechobee and Glades counties call 941-763-3345.

- Don't Forget -

Saw Palmetto Symposium '98  
August 12, 1998 - 11:30 AM  
Southwest Florida Research and Education Center
Discussion Topic:  
"The future of the saw palmetto berry industry"
For more information call: 941-658-3400

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For questions or comments regarding this publication contact Mark Kistler

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