UNIVERSITY OF
FLORIDA Cooperative Extension Service
Institute of Food and Agriculture Sciences

Marion County Extension Service
2232 NE Jacksonville Road
Ocala, Florida, 34470
(352) 620-3440

# MARION COUNTY LIVESTOCK NEWS

Vol. 9, No. 6 MAY 2003

## 6th Annual

# Equine Health Conference

May 31 & June 1, 2003

**Sponsored by:**
**MBNA**
**Florida Quarter Horse Association**
**College of Veterinary Medicine-University of Florida**

**Registration Deadline:** May 19th, 2003
**Fee:** $100
**Make checks payable to:** Florida Quarter Horse Association

**Mail to:** F.Q.H.A., P.O. Box 325, Laurel, FL 34272

**For further information, contact:**
Peg Edmondson (941) 484-4687

**May 31st AM Moderator: Dr. Eleanor Green**

| | |
|---|---|
| 7:30-8:15 | Registration-Trade show |
| 8:15-8:30 | Welcome address: Dr. Eleanor Green, Peg Edmondson-FQHA |
| 8:30-9:15 | West Nile virus, EPM - *Dr. Michael Porter* |
| 9:15-10:00 | Equine Dentistry–*Dr. Toots Banner* |
| 10:00-10:30 | Break: coffee-refreshments-Trade show |
| 10:30-11:15 | Equine Nutrition- *Dr. Dana Zimmel* |
| 11:15-12:00 | The Parasite Puzzle- *Dr. Patrick Meeus* |
| 12:00-1:00 | Lunch and Trade show |

**May 31st PM**

| | |
|---|---|
| 1:00- 1:45 | Noninfectious inflammatory airway diseases- *Dr. Robert Mackay* |
| 2:00-4:00 | Demonstrations<br>Diagnostic techniques for evaluation of respiratory disease– *Dr. Dana Zimmel*<br>Equine Dentistry- *Dr. Toots Banner* |
| 4:00-5:00 | Trade show |
| 5:00 | Barbeque at the Livestock Pavilion |

**June 1st AM Moderator: Dr. Dana Zimmel**

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|---|---|
| 7:30-8:30 | Coffee-breakfast- Trade show |
| 8:30-9:15 | What we rarely speak about-urinary diseases in horses- *Dr. Eleanor Green* |
| 9:15-10:00 | Update on neonatal diseases- *Dr. Chris Sanchez* |
| 10:00-10:30 | Break: coffee-refreshments-Trade show |
| 10:30-11:15 | Limb deformities in foals- *Dr. Murry Brown* |
| 11:15-12:00 | Osteochondritis Dissecans in the young horse- Dr. Aric Adams |
| 12:00-1:00 | Lunch and Trade show |

**June 1st PM**

| | |
|---|---|
| 1:00-1:45 | Recent advances in mare reproduction– *Drs. Mats Troedsson* |
| 2:00-4:00 | Demonstrations<br>Embryo Transfer – *Dr. Malgorzata Pozar*<br>Eye Examination – *Dr. Mary Lassaline* |

# Spring Rancher's Forum

**Thursday, May 29, 2003**
8:45 am - 3:00 pm
**~ Yarborough Ranch ~**
**1355 Snow Hill Rd.**
**Geneva, FL**

a program by

## Central Florida Livestock Agent's Group

**~ University Professors ~**
**~On-Ranch Field Demos ~**
**~ Field Site Training ~**

**~ TOPICS ~**

**8:45 am - "Summer Grasses"**

**10:00 am - "Managing Horses & Pastures"**

**10:45 am - "Using Sludge on Pastures"**

**12:45 pm - "Invasive Weed Identification: "Tropical Soda Apple Crisis"**

**1:00 pm - "Herbicides to Control TSA"**

**2:00 pm - "Bio Control of TSA"**

**Reservations are required:**
**$8.00 fee includes steak lunch**

For more information or directions, please contact:
**Joe Walter**
(Livestock Agent Brevard County)
407-948-8810
or
**Mark Shuffitt**
(Livestock Agent Marion County)
352-620-3440



# 6th Annual Hay Field Day

**At**
**Shaw & Shaw Farms, Alachua**
**June 13, 2003**

| | |
|---|---|
| 8:30-9:00 am | Registration (Registration Fee $5.00/person) |
| 9:00 am | Demonstrations / Discussions* |
| | Hay Quality |
| | Soil Testing & Fertilization |
| | Economics of Hay Production |
| | Pesticide Safety |
| | Forage Diseases |
| | Weed Demonstration Plots |
| | Irrigation |
| 12:00 pm | Lunch |
| 1:00 pm | Equipment Demonstrations |

*Persons attending will be offered a choice of 7 presentations and must pick 5 to attend.

**RSVP** to the Alachua County Extension Office at 352/955-2402, by June 6, 2003.

Cindy B. Sanders, Extension Agent – Livestock
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2800 NE 39th Avenue, Gainesville, FL 32609-2658
352/955-2402 (Voice), 352/955-2406 (TDD)
CBSanders@mail.ifas.ufl.edu (E-Mail)

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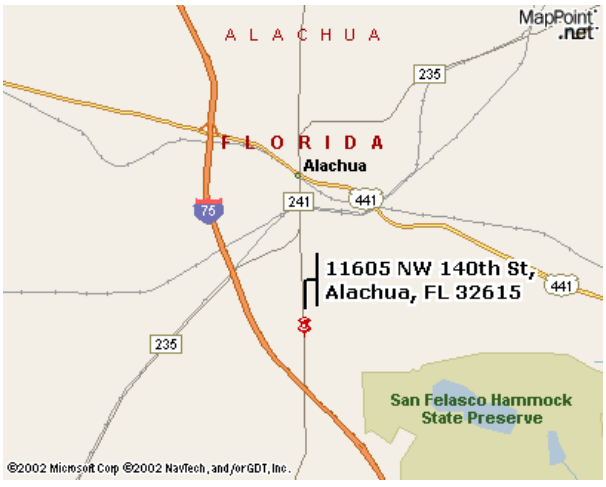
*Honoring the past, shaping the future*



# FROZEN EQUINE SEMEN

Rolf E. Larsen, DVM, PhD
Associate Professor (retired)
Department of Large Animal Clinical Sciences
College of Vet. Medicine University of Florida

**The Package**

The standard container (package) for frozen semen in the cattle industry (U.S.A.) is the 0.5 cc straw. Because a large number of units are frozen and inseminated each year, both on-farm and laboratory procedures are standardized and the equipment is familiar to most people who breed cattle. This is not the case as yet in the horse world.

The 0.5 cc (*½ cc*) straw has a number of advantages over other systems. These include familiarity, access to related products, and good geometry for freezing and thawing. The main disadvantage is small size. The ½ cc straw was designed to deliver a full artificial insemination dose of semen in cattle. Horses require 10-20 times more spermatozoa. Consequently, multiple straws must often be used to makeup one insemination dose. This negates one of the advantages *of ½ cc* straws -- the elegant delivery system whereby the straw becomes part of the insemination pipet itself. Use of multiple straws usually requires emptying these thawed units into a tube, then transferring the pooled sample to a conventional AI pipet. However, the good freeze/thaw characteristics available with this package argue for its continued use. Some laboratories concentrate the spermatozoa sufficiently to package a full AI dose in a single straw, though currently this is less common than the use of multiple straws. .

The 5 cc straw has the advantages of size, ease of hand-labeling (and reading of the label), and the capacity for a single straw to hold a full AI dose. These straws are approximately the same length (11 inches) as the canister of a liquid nitrogen tank. Shortened versions of the straw are available, with no obvious advantages over the standard length of the 5 cc, and the disadvantage of increased difficulty of handling in the liquid nitrogen tank.

Other packages include pellets (drops of semen frozen on dry ice), flattened plastic tubes, plastic bags, and metal tubes.

**Storage**

Regardless of how semen is frozen or how it is packaged, frozen semen is kept in liquid nitrogen (-196°C). This requires a liquid nitrogen tank. The most common type of tank is capable of holding liquid nitrogen and maintaining the temperature of - 196°C for 3 to 6 months without a refill. Practical management will require frequent checks of liquid nitrogen levels and refills every 4 to 8 weeks.

Holding tanks for the farm or office should be selected based on the capacity needed for the purpose. The larger the semen storage capacity of the tank, the shorter the interval between refills of liquid nitrogen.

Transport tanks are small, light, liquid nitrogen tanks designed to travel well and store frozen semen for only a week or less. Anyone shipping semen in a transport tank will expect the semen to be transferred to a holding tank on arrival.

**Thawing Semen**

Thawing instructions will be different for each package type and for each laboratory that packaged the frozen semen. Packages impermeable to water will usually be thawed in a water bath. Pellets require special procedures. They are not thawed or dissolved directly in water. For all semen handling procedures, direct contact between water and semen should be avoided. When semen has been thawed in a water bath, the package should be wiped dry before opening.

For ½ cc straws, the protocol in the past was a two-step, water bath immersion. Six seconds in 75°C water followed by immersion in 37°C water. This is being replaced by the simpler one-step protocol of30 seconds in 37°C water. Follow the directions of the laboratory that packaged the semen.

For 5 cc straws, the protocol is usually a slight variation on45 seconds in 45°C water followed by transfer to a 37°C water bath.

**The Decision to Freeze a Stallion's Semen**

Use of frozen semen is not a straight forward alternative to natural service or artificial insemination with liquid semen. Frozen semen should be considered a potential solution to using a stallion that would be otherwise unavailable for breeding (unavailable due to age, death, infertility, or training\performance \show\travel obligations). If the stallion is in a situation compatible with the use of AI, shipped chilled semen, or natural service, frozen semen AI is usually not indicated. Frozen semen is, of course, a logical step to preserve future breedings in case of death or infertility.

# *THE LAST WORD*
# Beef Cattle Management Tips

## MAY

- Harvest hay from cool season crops.
- Plant warm season perennial pastures.
- Fertilize warm season pastures.
- Check mineral feeder and dust bags.
- Check for spittlebugs and treat if necessary.
- Apply spot-on agents for grub and louse control.
- Vaccinate and implant with growth stimulant any later calves.
- Reimplant calves with growth stimulant at 90-120 days, when you have herd penned.
- Dispose of dead animals properly.
- Update market information and refine marketing plans.
- Remove bulls May 21st to end calving season March 1st.

## JUNE

- Check mineral feeder, use at least 8% phosphorus in mineral and not over 2 ½ to 1 calcium to phosphorus ratio.
- Check pastures for spittlebugs, mole crickets, and army worms. Treat if necessary.
- Check dust bags.
- Observe cattle for evidence of pinkeye and treat.
- Get heifers vaccinated for brucellosis if not already done.
- Pregnancy check cows.
- Update market information and plans.
- Make first cutting of hay.
- Put bulls out June 1st to begin calving March 11th.
- Reimplant calves at 90 to 120 days with growth stimulant.