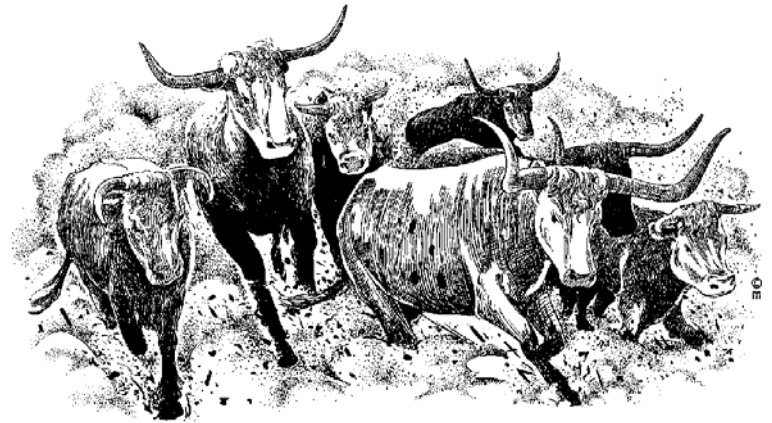


Marion County Extension Service
2232 NE Jacksonville Road
Ocala, Florida, 34470
(352) 671-8400



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MARION COUNTY LIVESTOCK NEWS

MARCH 2007

Spring Ranchers' Forum

Thursday, March 29th, 2007

9:00 am – 3:00 pm

Yarborough Ranch

1355 Snow Hill Road

Geneva, FL.

Agenda

- 9:00 am – Welcome
- 9:15 am – Pasture Management, Yoana Newman,
UF/IFAS Extension Agronomist
- 10:00 am – Live Horse Demonstration
- 10:45 am – Trade Show Break
- 11:00 am – Hay for Horses, Lori Warren
UF/IFAS Equine Nutritionist
- 12:00 pm – Lunch, Yarborough Family
- 12:45 pm – Government Farm Assistance
NRCS/FDACS/EPA/BPM/MDTL
- 1:30 pm – “Bio-solids” On Farm Use, Phil Kane
FDEP Central District
- 2:15 pm – Liability for Leases
- 3:00 pm – Evaluations & Give-A-Way

Reservations are required, \$8.00 cost includes lunch.
For more information, contact
Ruth Howard at (407) 836-8927

Make check payable to: CFLAG.
Additional donations for give-a-ways are \$5.00 each.
Local accommodations and map are available upon
registration. Visit us on the web at:
<http://cflag.ifas.ufl.edu/cflag.html>

Horse Genome

*Data on Equine Genome Freely Available to
Researchers Worldwide*

The first draft of the horse genome sequence has been deposited in public databases and is freely available for use by biomedical and veterinary researchers around the globe, leaders of the International Horse Genome Sequencing Project announced today.

The \$15 million effort to sequence the approximately 2.7 billion DNA base pairs in the genome of the horse (*Equus caballus*) was funded by the National Human Genome Research Institute (NHGRI), one of the National Institutes of Health (NIH). A team led by Kerstin Lindblad-Toh, Ph.D., at the Eli and Edythe L. Broad Institute of the Massachusetts Institute of Technology and Harvard University, in Cambridge, Mass., carried out the sequencing and assembly of the horse genome.

Approximately 300,000 Bacterial Artificial Chromosome (BAC) end sequences, which provide continuity when assembling a large genome sequence, were contributed to the horse sequencing project by Ottmar Distl, D.V.M., Ph.D. and Tosso Leeb, Ph.D., from the University of Veterinary Medicine, in Hanover, Germany and Helmut Blöcker, Ph.D., from the Helmholtz Centre for Infection Research in Braunschweig, Germany. Production of the BAC end sequences was funded by the Volkswagen Foundation and the State of Lower Saxony.

Sequencing of the domestic horse genome began in
(see Horse Genome pg. 2)

Horse Genome

2006, building upon a 10-year collaborative effort among an international group of scientists to use genomics to address important health issues for equines, known as the Horse Genome Project (www.uky.edu/Ag/Horsemap/). The horse whose DNA was used in the sequencing effort is a Thoroughbred mare named Twilight from Cornell University in Ithaca, N.Y. Researchers obtained the DNA from a small sample of the animal's blood. To download a high-resolution photo of Twilight, go to <http://www.genome.gov/pressDisplay.cfm?photoID=20008>.

Twilight is stabled at the McConville Barn, Baker Institute for Animal Health, College of Veterinary Medicine, at Cornell University, with a small herd of horses that have been selected and bred for more than 25 years to study the mechanisms that prevent maternal immunological recognition and destruction of the developing fetus during mammalian pregnancy. The research, conducted by Cornell professor Doug Antczak, V.M.D, Ph.D., and funded by the National Institute of Child Health and Human Development, has implications in reproduction, clinical organ transplantation and immune regulation.

In addition to sequencing the horse genome, researchers produced a map of horse genetic variation using DNA samples from a variety of modern and ancestral breeds, including the Akel Teke, Andalusian, Arabian, Icelandic, Quarter, Standardbred and Thoroughbred. This map, comprised of 1 million signposts of variation called single nucleotide polymorphisms, or SNPs, will provide scientists with a genome-wide view of genetic variability in horses and help them identify the genetic contributions to physical and behavioral differences, as well as to disease susceptibility. There are more than 80 known genetic conditions in horses that are genetically similar to disorders seen in humans, including musculoskeletal, neuromuscular, cardiovascular and respiratory diseases. The SNPs are available at the Broad Institute web site (www.broad.mit.edu/mammals/horse/snp) and will be available shortly from NCBI's Single Nucleotide Polymorphism database, dbSNP (www.ncbi.nlm.nih.gov/SNP).

The initial sequencing assembly is based on 6.8-fold coverage of the horse genome, which means, on average, each base pair has been sequenced almost seven times over. Researchers can access the horse genome sequence data through the following public databases: GenBank (www.ncbi.nih.gov/Genbank) at NIH's National Center for Biotechnology Information

(NCBI); NCBI's Map Viewer (www.ncbi.nlm.nih.gov); UCSC Genome Browser (www.genome.ucsc.edu) at the University of California at Santa Cruz; and the Ensembl Genome Browser (www.ensembl.org) at the Wellcome Trust Sanger Institute in Cambridge, England. The data is also available from the Broad Institute Web site (www.broad.mit.edu/ftp/pub/assemblies/mammals/horse/).

Over the next several months, researchers plan to further improve the accuracy of the horse genome sequence and expect to deposit an even higher resolution assembly in public databases. Comparing the horse and human genomes will help medical researchers learn more about the human genome and will also serve as a tool for veterinary researchers to better understand the diseases that affect equines. A publication analyzing the horse genome sequence and its implications for horse population genetics is being planned for the future.

To learn more about the expanding field of comparative genomics, go to <http://www.genome.gov/11509542>. A complete list of organisms and their sequencing status can be viewed at www.genome.gov/10002154.

NHGRI is one of the 27 institutes and centers at the National Institutes of Health, an agency of the Department of Health and Human Services (DHHS). Additional information about NHGRI can be found at its Web site, www.genome.gov.

The National Institutes of Health (NIH) — The Nation's Medical Research Agency — includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. It is the primary federal agency for conducting and supporting basic, clinical and translational medical research, and it investigates the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov.

SOURCE:

National Institute of Health
<http://www.nih.gov>
Release - February 7, 2007

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John Mark Shuffitt
Livestock Agent III
Marion County Extension Service

**Celebrating the Fifty-fourth Annual
Beef Cattle Short Course
Hilton University of Florida Conference Center
May 2-4, 2007; Gainesville, Florida**

The beef cattle industry continues to be a changing environment full of challenges and opportunities. Cattle producers face increasing demands for quality and consistent cattle and beef products while facing increasing production costs. This combination of demands looks to re-shape beef cattle production in the coming years. The 56th Annual Beef Cattle Short Course looks to address the issues of production management, profitability, and opportunities for quality strategies. The 2007 Short Course kicks off on Wednesday afternoon with a session identifying aspects affecting enterprise profitability. The program starts with the annual market outlook for the beef cattle industry. The market outlook is paired with an assessment of risk management and the cost of production for beef enterprises. The Wednesday afternoon program includes a discussion of international competition and opportunities for quality beef led by Clint Peck of BEEF Magazine. Persistently infected BVD is a current issue in the beef industry and is addressed during our afternoon program. The afternoon program concludes with an opportunity for the participants to interact and exchange information during the evening reception and Allied Trade Show. Identifying the aspects of quality is the theme for the program on Thursday. The day starts with a review of the 2005 Beef Quality Audit as it relates to cow-calf production. This assessment is a key tool to benchmarking the progress of production in the beef cattle industry. An interesting assessment of the relationships that contribute to the Choice-Select spread continues the theme of quality beef production. The morning concludes with an examination of the factors that affect cattle performance and grade. The morning promises to be an informative and valuable program to improve the quality of beef production. The afternoon program continues the assessment of quality in beef cattle. Live cattle, carcass, and beef production evaluation demonstrations will be utilized to emphasize the need for quality beef cattle production. The annual Cattlemen's Steak-Out on Thursday provides an event for all participants to enjoy a prime rib dinner and time for conversation and relaxation. On Friday, the program splits into two sessions to identify opportunities in Florida production. The first session looks to examine the utilization of Bos indicus cattle in Florida beef enterprises. This session will span the cow herd, growth and feed efficiency, and carcass traits and merit. The second session on Friday morning will address forage management for Florida pastures. Pasture management topics will include the cost of pasture establishment, selection and use of cool season forages, and weed control. The 2007 Beef Cattle Short Course promises to continue the tradition of being the best educational event for cattle producers in the Southeast. The spectrum of topics related to the production, profitability, and quality of beef cattle should provide something for every beef cattle producer.

Registration Information

The reduced early registration fee is \$90.00 if payment is postmarked by April 20, 2007. **After April 20, 2007, the regular registration fee will be \$120.00.**

The registration fee includes refreshment breaks, exhibitor's reception, Thursday's luncheon, one Cattlemen's Steak-out ticket, and proceedings. Extra Cattlemen's Steak-out tickets are available at \$10.00 each. Please refer to the registration card to purchase extra tickets.

CONVENIENTLY REGISTER IN ONE OF THREE EASYWAYS:

1. **ONLINE:** register online at:

<http://www.doce-conferences.ufl.edu/basic/214.aspx>

2. **FAX:** If paying by credit card, FAX completed registration form to: (352) 392-9059

3. **MAIL:** Please make check, money order, or purchase order payable to:

UF Foundation

Mail this form with payment to:

Beef Cattle Short Course

UF/IFAS Department of Animal Sciences

P.O. Box 110910

Gainesville, FL 32611-0910

PLEASE PRINT

Fed. ID: 59-0974739

Charge my:

VISA Master Card American Express Discover

Credit Card #: _____

Expiration Date: _____

Name of Cardholder:

Amount: _____

Signature: _____

Hotel Accommodations/Meeting Site

The Hilton University of Florida Conference Center, is offering a special group rate of \$139.00 single or double occupancy, plus 9.25% tax. To qualify for this special rate, reservations must be made prior to March 30, 2007. Please call the hotel directly at (352) 371-3600 to make your reservation and inform the attendant you are with the "Beef Cattle Short Course" in order for Hotel Reservations to recognize you as a Beef Cattle Short Course participant. After the deadline, the discounted group rate and guest room availability are no longer guaranteed.

Beef Cattle

Management Tips

MARCH

- Prepare land for summer crops.
- Begin grazing warm season permanent pastures.
- Check and fill mineral feeder.
- Observe bulls for condition and success.
- Rotate and rest bulls as necessary.
- Deworm cows as needed.
- Observe calf health and provide adequate nutrition for “good” weight gains.
- Hang forced-use dust bags by April 1st for external parasite control or use insecticide impregnated ear tags.
- Identify, vaccinate, implant and work late calves.
- Put bulls out by March 1st for calving season to start December 9th.
- Remove bulls March 22nd to end calving season January 1st.

APRIL

- Plant warm season and perennial pastures.
- Plant corn for silage.
- Check and fill mineral feeder.
- Check dust bags or apply treated ear tags.
- Check for external parasites and treat if necessary.
- Observe cows for repeat breeders.
- Deworm cows as needed if not done in March.
- Vaccinate against blackleg and brucellosis after 3 months of age and prior to 12 months of age.
- Market cull cows and bulls.
- Update market information and refine market strategy for calves.