



UNIVERSITY OF
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IFAS

Department of Animal Sciences

Dairy Update



Quarterly Newsletter

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42nd ANNUAL FLORIDA DAIRY PRODUCTION CONFERENCE: TUESDAY MAY 3, 2005

The 42nd Florida Dairy Production Conference will be held at the Hilton University of Florida Conference Center, located at 1714 SW 34th Street, Gainesville on Tuesday May 3rd, 2005 from 10:00 AM – 4:45 PM.

Program

Tuesday, May 3, 2005, Century Ballroom

- 9:15 AM Registration
Presiding - *Dr. Glen Hembry*, UF Animal Sciences, Chair
- 10:00 **Welcome – Dr. Glen Hembry**
- 10:05 **Frequent Milking in Early Lactation: Considerations for Implementation – Dr. Geoff Dahl**, Department of Animal Sciences, University of Illinois, Urbana, IL
- 11:00 **Crossbreeding: Why the Interest? What to Expect – Dr. Les Hansen**, Department of Animal Science, University of Minnesota, St. Paul, MN
- 11:45 Luncheon
Presiding - *Mr. Brent Broaddus*, UF Dairy Extension
- 12:45 PM Awards
- 1:00 **The State of IFAS – Dr. Jimmy Cheek**, Senior V.P. Agriculture and Natural Resources, University of Florida, Gainesville, FL
- 1:15 **How to Make the Most of My Multicultural Workforce – Dr. Miguel Morales**, Monsanto Dairy Business, CA
- 2:00 **Reducing Variability in Your Breeding Program Using a Systematic Approach – Dr. Richard Wallace**, Department of Veterinary Clinical Medicine, University of Illinois, Urbana, IL
- 2:45 Refreshment Break
- 3:15 **Let There be Light: Photoperiod Management of Cows for Production and Health - Dr. Geoff Dahl**, Department of Animal Sciences, University of Illinois, Urbana, IL
- 4:00 **Update: Barn Cooling, Tunnel and Otherwise – Mr. David Bray**, Department of Animal Sciences, University of Florida, Gainesville, FL
- 4:45 Adjourn

Registration Information

Registration for the Dairy Production Conference includes the program, one copy of the proceedings, refreshment breaks, and the luncheon. The early registration fee is \$65 for fees postmarked on or before **April 22, 2005**. The regular registration fee is \$80 for fees postmarked after April 22, 2005, or at the door. To register, please visit the UF/IFAS Dairy Extension website <http://dairy.ifas.ufl.edu>.

Intervet Inc. \$65 Early Registration Offer for Florida Dairy Producers

Dale Hayes of Intervet Inc., Gainesville, offers Florida dairy producers \$65 off their next purchase of Intervet Animal Health Products purchased from an Authorized Dealer if they register early (on or before April 22, 2005). Florida dairy producers will receive a certificate of appreciation at the registration desk on May 3rd which may be used to obtain the \$65 value of Intervet products. Limited to one offer per Florida dairy farm. This offer equals one free registration per Florida dairy farm to attend the Florida Dairy Production Conference on May 3rd, 2005!

Sponsors

In addition to free registration for the conference program, sponsors may submit educational and product information for inclusion in a packet for all registrants. For more information regarding sponsorship, please visit <http://dairy.ifas.ufl.edu>.

Hotel Accommodation

A block of rooms is being held at the Hilton for Dairy Production Conference participants. The group rate is \$79 per night plus 9.25% tax. To qualify for this special rate, reservations must be made on or before April 14, 2005. Call the Hotel directly at (352) 371-3600 and be sure to mention that you are attending the Dairy Production Conference and group code "CDP" to receive the group rate. After the deadline, the discounted group rate and guest room availability are no longer guaranteed. For directions to the Hilton visit <http://www.ufhotel.com>.

More Information

Albert de Vries (Conference Information)
UF/IFAS Department of Animal Sciences
Phone: (352) 392-7563, E-mail: devries@animal.ufl.edu

PCDART WORKSHOP: MAY 4, 2005

A PCDART workshop will be held on Wednesday May 4th, 2005 from 9:00 AM – 12:00 noon in conjunction with the Dairy Production Conference. Location: Hilton University of Florida Conference Center (Dogwood Room), 1714 SW 34th Street, Gainesville. The workshop will be led by **Dr. Richard Wallace**, Department of Veterinary Clinical Medicine, University of Illinois, Urbana, IL and **Dr. Dan Webb**, Department of Animal Sciences, University of Florida, Gainesville, FL.

Advance registration is requested since space is limited. Please email dore@animal.ufl.edu or call (352) 392-5592 by April 30th, 2005. For more information about the PCDART workshop, contact Dan Webb, UF/IFAS Department of Animal Sciences, e-mail: webb@animal.ufl.edu, phone: (352) 392-5592, fax: (352) 392-5595.

BEEF CATTLE SHORT COURSE: MAY 4-6, 2005

The 54th Annual Beef Cattle Short Course will be held at the Hilton UF Conference Center, Gainesville, Florida on May 4-6, 2005. The theme is "Maintaining Quality Production in a Dynamic Market Place". For more information, visit <http://www.animal.ufl.edu>.

SPANISH HERDSMAN SEMINAR ON *Detection and Management of Open Cows* APRIL 25-26, 2005

The objective of this workshop is to inform and train Spanish-speaking employees on dairy farms in the appropriate use of modern reproductive management technologies and strategies. Topics will include estrus synchronization and timed insemination, discussion of strategies for detection and re-synchronization of open cows, application of ultrasonography and rectal palpation for detection of non-pregnant cows. The goal is to prepare employees for greater service with the herd's veterinarian in order to achieve optimal reproductive performance. The program will include training on the Easi-Scan Ultrasound.

Instructors are:

- *Julian Bartolome*, DVM, University of Florida, Department of Animal Sciences and Facultad de Ciencias Veterinaria UNLPam, Argentina.
- *Carlos Risco*, DVM, Professor, University of Florida, College of Veterinary Medicine.
- *Jan Shearer*, DVM, Professor, University of Florida, College of Veterinary Medicine.

For more information on the Spanish Herdsman Seminars, contact Jan or Leslie Shearer, jks@ifas.ufl.edu or (352) 392-4700 ext 4112, or visit <http://www.vetmed.ufl.edu/lacs/SpanishHerdsman>.

GOT SCIENCE?

David R. Bray

One of the big problems for animal agriculture is that its opponents, the anti-animal organizations, ignore science and use rumors or inaccurate information to get their point across. A letter today to the local newspaper indicated that baseball was in big trouble because of steroid usage by its players. The last statement in the letter was, "if you don't like steroids, stay away from beef and dairy products because they are full of them."

There always seems to be a story on T.V. or in the newspaper about all the evil things these "factory farms" are doing to our environment. Florida dairymen have spent countless millions of dollars to preserve the state's water quality and are spending more to develop and implement management systems to further their efforts in preserving water quality. All we read or see in the news are people ranting that the neighboring dairy will pollute their well.

It has been all about water quality in Florida up to this point in time, but now dairymen are being introduced to the new EPA air emission agreement. Who knows what joy this will bring to the dairymen? This is not an odor issue but an air pollution issue from livestock operations. How this will affect dairymen is yet to be seen, but it smells like lawyers, T.V. cameras, uproars from the anti-animal crowd, and probably a big sucking sound from your wallet.

These organizations have lots of money and lawyers. American agriculturists must do a better job in educating the American public about animal agriculture focusing on scientific data about the issues. If you think how a cheese plant was forced to change how their dairymen produce milk, or how chickens are raised to sell to McDonalds, these people have lots of money, time, and determination. Again, in these situations, science was ignored and mob rule was the answer.

Now we come to milk quality. I have never seen a newspaper article or T.V. coverage about milk quality. It has been a non-issue, off the radar screen except for NMC. Since 1998 they have been trying to get NCIMS to reduce the somatic cell count (SCC) limit from 750,000 cells/ml to 400,000 cells/ml. NCIMS has not done this because the present limit is not a human health problem. NMC's first reason was everybody else did this, and we can't compete on the world market if our SCC limit is not reduced to 400,000 cells/ml, like Europe's limit. Guess what? We will never compete on the world market on a large scale. Every beef cow in the US does not need to grade choice for US to sell beef to

Japan; every bulk tank of milk in the US does not need to be at 400,000 for folks in the North to sell dairy products to Europe. NMC leaders are well meaning people who seem to be college professors who don't own cows, veterinarians who don't own boots or coveralls, and allied industry people. They have ignored all science and have tried to find anything they can get their point across. NMC has every right to do what they have done, but I find it hard to believe that any organization connected with the dairy industry would try to impose more regulation on our nation's dairy farmers. Will this mean that these college professors and science trained people will ignore all science and determine that water quality regulation or air emissions should be lowered when available science says otherwise? The only benefit I can see for lowering the SCC to 400,000 is for the processors in the North, because once the limit drops to 400,000 no bonus money will be paid to those dairymen because the cheese makers can make high yielding cheese without paying for it. Again the big loser will be the dairymen. Every dairyman's goal should be to produce the highest quality possible; but he also needs to make a living.

DAIRY REPRODUCTION COOKBOOK

Amy Fischer-Brown and Peter Hansen

Would you like to order heat detection aids through the internet? Want to know the latest news about heat stress in dairy cattle? Maybe you've been meaning to review the OvSynch protocol, or read some tips to improve your AI technique. There are a lot of great websites out there that can help, but who has time to sort through them all?

Now all you need is one stop at the University of Florida Dairy Reproduction Cookbook. We've gathered useful websites about cattle reproduction and put them together under one cover. Like any good cookbook full of recipes, the Dairy Reproduction Cookbook offers a variety of information organized into topics that interest you, the dairy producer. You will find links related to artificial insemination, pregnancy diagnosis, and infertility problems, just to name a few. Content ranges from informative background articles to instructive video clips, as well as contact information for commercial distributors.

Open up the Dairy Reproduction Cookbook today at <http://www.animal.ufl.edu/reproguide>. We hope it will be your herd's online recipe for success!

2005 CORN SILAGE / CONSERVED FORAGE FIELD DAY: THURSDAY MAY 26

The 2005 Corn Silage / Conserved Forage Field Day will be held at the UF/IFAS Plant Science Research and Education Unit, 2256 West Highway 318, Citra, FL on

Thursday May 26 (Phone: (352) 591-2678). The previous corn silage field days were very successful and attracted over 250 attendees.

2005 Tentative Program

- AM
- 8:00 - 8:15 Registration – Coffee, donuts, orange juice and milk
- 8:15 - 8:20 Introduction – Dr. Jerry Bennett and Dr. Glen Hembry
- Dual presentations (A & B):
- 8:20 - 9:10 A **Corn and Sorghum Varieties** – Dr. Carol Chambliss, Jerry Wasdin and corn seed representatives
- B **Corn and Sorghum Management Decisions that Impact Yield** – Dr. David Wright
- 9:10 - 10:00 A **Corn and Sorghum Management Decisions that Impact Yield** – Dr. David Wright
- B **Corn and Sorghum Varieties** – Dr. Carol Chambliss, Jerry Wasdin and corn seed representatives
- 10:00 - 10:30 Break and Exhibit Time (attendees get lunch tickets from exhibitors)
- 10:30 - 11:15 A **Factors Affecting Corn Silage Quality in Florida** – Dr. Gbola Adesogan + **Corn and Sorghum Variety Hybrid Performance Trial Results** – Dr. Charles Staples
- B **The Good, Bad and Ugly of Round Bale Silage** – Dr. Matt Hersom
- 11:15 - 12:00 A **The Good, Bad and Ugly of Round Bale Silage** – Dr. Matt Hersom
- B **Factors Affecting Corn Silage Quality in Florida** – Dr. Gbola Adesogan + **Corn and Sorghum Variety Hybrid Performance Trial Results** – Dr. Charles Staples
- 12:00 - 12:45 Lunch
- 12:45 - 1:30 Exhibit Time
- 1:30 - 2:00 **Bagging Dos and Don'ts / What it Takes to get Quality Bagged Silage In and Out of the Bag** – Art Schuette and Panel.
- 1:30 - 3:00 Field Demonstrations: Field and Forage Equipment

Registration and More Information

To register, for directions, or other information, visit the Corn Silage / Conserved Forage Field Day website at <http://www.animal.ufl.edu>. Contact person is Jerry Wasdin, email: jwasdin@animal.ufl.edu, phone: (352) 392-1120.

TEMPORARY HEAT STRESS ABATEMENT PRACTICES

David R. Bray

1 - If you have lost all of your barn roofs and they have not been replaced yet, you need to get temporary shade up for cows. Shade is your first line of defense from heat stress. You can hang shade cloth (80%) over the existing structure or add portable shade cloth structures. You can use sprinklers under the shade cloth if your fans have not blown into an ocean use them. If you don't have fans, use the sprinklers anyway. It is not as efficient but will work.

2 - Digging cooling ponds will work. Make them big enough, 50 square feet/cow, add continuous running water if possible, or clean out existing ponds.

3 - The most efficient way to cool cows is in the holding area. Floor mounted cow washers with overhead fans and sprinklers can cool cows to sub-normal levels and if you add exit lane sprayers your cows will be cool and hungry. Have water available at the parlor exit, the cows will go to where ever their there feed is and eat. If you can get 4 # extra dry matter in them you will not lose 8# of milk per cow per day, even if you provide no other cooling. Put your money in the thing that will give you the most profit, or save the biggest losses.

4 - If you have any questions, give me a call: (352) 392-5594 or e-mail: bray@animal.ufl.edu.

REPRODUCTIVE EFFICIENCY OF NATURAL SERVICE AND ARTIFICIALLY INSEMINATED DAIRY HERDS IN FLORIDA AND GEORGIA

**Albert de Vries, Christian Steenholdt,
and Carlos Risco**

Many dairies continue to use natural service bulls as part of their breeding system. One important reason why bulls are used is that bulls are expected to achieve better reproductive efficiency with a similar level of management due to a higher number of cows serviced with improved heat detection and improved conception rates when compared to AI. However, few studies have compared pregnancy rates and milk production in herds that use either AI, bulls, or a combination.

A grant from the Southeast Milk Inc. Dairy Check-off supported our study in which we estimated the effects of AI and natural service breeding systems on pregnancy rates by stage of lactation, season, and changes in milk production over time. This study was recently completed and published in the Journal of Dairy Science.

Remember that pregnancy rate is the most valuable measure of reproductive performance. It measures which percent of the cows that were eligible to get pregnant in a 21-day period actually got pregnant. We used lactation and herd DHIA records of Holstein cows in dairy herds located in Florida and Georgia. The lactation records that we obtained did not indicate if cows were bred by AI or bulls. Therefore, we used the reported genetic profile of service sires of the herd to determine the percentage of cows bred to natural service bulls (%NS). Two seasons were considered: winter (November through April) and summer (May through October). We had data from 1995 to 2002. Herds were assigned 1 of 3 breeding systems: AI (0 to 10 % NS), mixed (11 to 89 % NS) and NS bulls (90 to 100 % NS).

We estimated that seventy percent of the herds used bulls as a component of their breeding system during the study period. The overall pregnancy rate during the winter (17.9%) was twice as great as the pregnancy rate during the summer (9.0%). During winter, pregnancy rate for AI herds (17.9%) did not differ from that for mixed (17.8%) and NS herds (18.0%). During summer, the pregnancy rate for AI herds (8.1%) was slightly less than that for mixed (9.3%) and NS herds (9.8%). We also calculated pregnancy rates for various stages of lactation. During winter, pregnancy rates for cows at 71



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to 91 days, 92 to 112 days, and 113 to 133 days in milk were 1.4% lower for mixed herds compared with AI and NS. Pregnancy rate for NS herds was 2.6% lower during late lactation compared with AI and mixed herds. During summer, pregnancy rates for cows at 71 to 91 and 92 to 112 days in milk were 2.6% and 1.8% greater for NS herds compared with AI. However, from 260 to 364 days in milk, pregnancy rates for NS herds were less than that for AI and mixed herds. Rolling herd average milk production during the study period was less in the NS herds (15,829 lbs) compared with AI herds (18,768 lbs) and mixed herds (18,025 lbs), but the annual change in milk production was not different among breeding systems. The results indicated that use of natural service bulls did not result in meaningful disadvantages in pregnancy rates and changes in milk production over time.

A copy of the article can be found at <http://www.animal.ufl.edu/devries/publications.html>

(de Vries, A., C. W. Steenholdt, and C. A. Risco. 2005. Pregnancy rates and milk production in natural service and artificially inseminated dairy herds in Florida and Georgia. Journal of Dairy Science 88:948-956)