

Dairy Update

### **Department of Animal Sciences**

Quarterly Newsletter Vol. 4 No. 4 Fall 2004

### NATIONAL MASTITIS COUNCIL ANNUAL MEETING IN ORLANDO: JANUARY 16-19, 2005

### David R. Bray

The 44<sup>th</sup> Annual NMC Meeting will be held January 16-19, 2005 at the Coronado Springs Resort, Orlando, Florida. While this organization does not necessarily support the Florida dairyman, it does support the Florida Tourism Council. The last NMC meeting in Florida was held in Orlando in 2002.

NMC has been one of the driving forces in lowering the US Somatic Cell Count to 400,000. The membership is heavy with folks north of the Mason Dixon line, so their dairy farm experiences differ from ours, like milk quality bonuses. They make a lot of cheese, and many don't have much to do, as they only have two seasons there; winter and Road Construction.

While some of their views differ from mine, this organization has done much for the Florida dairy industry. NMC was the group that got the Milking Machine guidelines back to normal; we don't need 50 hp pumps anymore. They developed the testing procedures for teat dips and have published The Summary of Peer-reviewed Publications on the Efficacy of Pre milking and Post milking Teat Disinfectants since 1980. The Summary, which includes information such as product name, manufacturer, active ingredient(s) and product efficacy, is updated annually and published in the NMC Annual meeting proceedings.

The 2005 program looks interesting; the leadoff speaker is from UF and is the result of research funded by the first winners of the NMC Research Awards, on mycoplasma. There are not a lot of data in many of the talks and they are easy to follow. Most papers are well suited to dairymen, who usually do not attend.

NMC is an inexpensive organization to join and most Florida dairymen should be members. There is good



information from people with good intentions who try to help the dairy industry. This is the driving force in the lowering of your SCC. If you support that, go tell them; if you disagree, join and tell them too.

We are part of a Global Economy, and even though we will never sell "Florida Fresh" Aged Cheddar to Holland, or wish to sell milk for \$7.00/ cwt. or what ever the world price is, our neighbors in other parts of the US who are paid to have a lower SCC still want to sell their milk to our processors and hope that their low SCC will be a carrot to entice our processors to do so. You need to know what the rest of the country is doing and that we must lower our SCC to preserve our markets. Join NMC and attend the annual meeting. I have

not seen registration forms yet, but I assume it will be November before they appear. Let me know if you want a form or more information. You can contact NMC at: phone (608) 848-4615 or email: <a href="mailto:nmc@nmconline.org">nmc@nmconline.org</a> or website: <a href="http://nmconline.org">http://nmconline.org</a>.

### **DAIRY BUSINESS CONFERENCE: OCTOBER 27**

The 2004 Florida Dairy Business Conference will be held at the Marion County Extension Office in Ocala, FL, on Wednesday, October 27. The program is as follows:

9:45 Registration

10:00 Welcome

10:10 "Udder financial stress and MOOving out of it", Scott Peelin and Tom Rugie.

10:50 Break sponsored by our supporters

- 11:00 "How should you be looking at feed costs?", Brian Perkins, Monsanto Dairy Business.
- 11:30 "Economic feasibility of generating electricity from biogas", Russ Giesy, UF/IFAS Dairy Extension.
- 12:00 **Lunch** sponsored by our agribusiness supporters and provided by Sonny's BBQ thank you!
- 1:00 Presentation of Dairy Community Award
- 1:10 "DBAP03: what we've learned about your business" Albert de Vries, UF/IFAS Dept. of Animal Sciences.
- 1:40 "Coping with milk price volatility", Geoff Benson, North Carolina State University, Dept. of Agricultural and Resource Economics.
- 2:30 "Changes in consumer habits when choosing dairy products", Bob Degner, UF/IFAS Dept. of Food and Resource Economics.
- 3:00 "Test some newer products", Ryan Kitelyn, Dairy Farmers, Inc.
- 3:15 "Cow comfort: what's really important?", Brian Perkins, Monsanto Dairy Business.
- 3:50 <u>Dairy producer panel</u>: "How we manage to ride the waves", producers Don Bennink, Terry Reagon, and Joe Nickerson. These producers will share their

experiences of 2002+3 (the trough of our latest cycle) and 2004 (it was supposed to be the good times).

- 4:30 Evaluation
- 4:40 Adjourn

### Registration

There is no registration fee and no charge for lunch, but we would appreciate a RSVP. Please call Jeanne at the Sumter County Extension Office at (352) 793-2728 to RSVP.

### **Directions:**

Exit Interstate 75 at exit #354 onto route 27. Proceed east into Ocala, 27 becomes Blichton Street, then NW 10th Street. After 2.5 miles (from I-75), turn left (north) onto 301/441. After 0.5 mile, turn right (east) onto route 200A or NE 20th street (watch for signs for the Livestock Pavilion). After 0.5 mile, turn left (north) into the Livestock Pavilion & Extension Complex parking area. The meeting will be in the auditorium located on your right as you enter the facility.

The 2004 Florida Dairy Business Conference is sponsored by the Central Florida Dairy Advisory Committee. For more information, contact **Russ Giesy**, email <a href="mailto:giesyr@aol.com">giesyr@aol.com</a>, or phone (352) 793-2728.

### PDHGA ANNUAL WORKSHOP: OCTOBER 28

The PDHGA annual workshop is held in conjunction with the Dairy Business Conference. The program is as follows:

- 8:30 **Tour of M+B Dairy**, Lecanto, FL. Owners McClellan family. This dairy is the newest dairy facility in Florida. It was built for 699 cows and has several unique characteristics, including 1) confined cows with cow comfort technology, 2) free-stalls with mattresses (no sand), 3) daily capture of manure nutrients sent to hay fields. Location: M+B Dairy, 8760 S. Lecanto Hwy, Lecanto, FL.
- 9:30 Educational Meeting
  - **"Heifer economics",** Geoff Benson, NCSU Dept. of Agricultural and Resource Economics.
  - "AI vs bull breeding", Albert de Vries, UF/IFAS Dept. of Animal Sciences.
  - "Heifer health protocols we use in our heifer raising operations", Panel of Georgia producers, to be moderated by John Bernard, University of Georgia.
- 12:00 **Lunch**. Free if you pre-register before 10/26/04. Please call Jeanne at the Sumter County Extension Office at (352) 793-2728 to RSVP.
- 1:30 **Tour of Telfair Farms**, Nobleton, FL. Owner Art Studley.
- 3:00 **Tour of Hancock Farms**, Dade City, FL. Owners Richard & Francine Hancock.
- 4:00 Evaluation and Adjourn

The PDHGA Annual Workshop is sponsored by UF/IFAS, University of Georgia and the Professional Dairy Heifer

Growers Association. Please call Jeanne at the Sumter County Extension Office at (352) 793-2728 to RSVP for the lunch. For more information, contact **Russ Giesy**, phone (352) 793-2728 or email <a href="mailto:giesyr@aol.com">giesyr@aol.com</a>

### WEST FLORIDA DAIRY PRODUCTION CONFERENCE: NOVEMBER 4

The 2004 West Florida Dairy Production Conference will be held at the AG Complex in Chipley, Florida, Thursday, November 4, 2004. For more information, contact Andy Andreasen, email <a href="mailto:amandreasen@mail.ifas.ufl.edu">amandreasen@mail.ifas.ufl.edu</a>, or phone (850) 638-6180.

### 2004 SOUTHEAST DAIRY HERD MANAGEMENT CONFERENCE: NOVEMBER 16-17

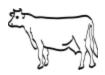
The 2004 Southeast Dairy Herd Management Conference will be held November 16-17, 2004 at the Georgia Farm Bureau Building in Macon, GA. This year's program has a strong emphasis on heat stress and reproduction. Details about the program can be found in the Sept/Oct DairyFax newsletter at <a href="http://www.ces.uga.edu/Agriculture/asdsvm/newslet-hme.html">http://www.ces.uga.edu/Agriculture/asdsvm/newslet-hme.html</a> or contact Dr. Lane Ely, University of Georgia, at (706) 542-9107 or laneely@arches.uga.edu.

# 16<sup>th</sup> ANNUAL FLORIDA RUMINANT NUTRITION SYMPOSIUM: FEBRUARY 1-2, 2005

The 16th Annual Florida Ruminant Nutrition Symposium will be held on February 1 and 2, 2005 at the Gateway Grand Best Western Hotel in Gainesville, FL. Ten presentations will be given on meeting the nutritional needs of dairy and beef cattle. Featured out-of-state speakers will include Dr. Dave Beede from Michigan State University, Dr. Chris Reynolds from The Ohio State University, Dr. Lon Whitlow from North Carolina State University, and Dr. David Ledoux from the University of Missouri. Contact Charles Staples (352) 392-1958 or Gbola Adesogan (352) 392-7527 in the Department of Animal Sciences for further information or check http://dairy.ifas.ufl.edu.

## 2<sup>nd</sup> ANNUAL FLORIDA DAIRY ROAD SHOW: FEBRUARY 7-11, 2005

The 2<sup>nd</sup> Annual Florida Dairy Road Show will be held in the week of February 7-11, 2005. The 2005 program will focus on health issues. Just like the 2004 Reproduction Road Show, the 2005 Road Show will focus on practical cow management and be held at several Extension Offices around Florida. The exact dates and locations are yet to be determined. For more information, contact Albert de Vries, email devries@animal.ufl.edu or phone (352) 392-7563.



## **42nd FLORIDA DAIRY PRODUCTION CONFERENCE:** MAY 3, 2005

The 42<sup>nd</sup> annual Florida Dairy Production Conference will be held at the UF Hotel and Conference Center in Gainesville, Florida, Tuesday, May 3<sup>rd</sup>, 2005. For more information, contact Albert de Vries, phone (352) 392-7563 or email devries@animal.ufl.edu.

### **CORN SILAGE FIELD DAY: MAY 26, 2005**

For further information concerning the 2005 Corn Silage Field Day, please contact Jerry Wasdin at wasdin@animal.ufl.edu or (352) 392-1120 or visit <a href="http://dairy.ifas.ufl.edu">http://dairy.ifas.ufl.edu</a>

### TRENDS IN REPRODUCTION 1976-2002

#### Albert de Vries

There have been several reports that reproductive efficiency in dairy herds has decreased over time. I looked at all Florida and Georgia herds that were on DHIA between 1976 and 2002 and calculated days to first service, days to conception, and pregnancy rate.

Figure 1 shows how the number of herds, the average herdsize and the average milk production has changed over time in FL and GA herds on DHIA. The number of herds decreased after 1982 to little over 300 in 2002, the average herdsize increased to approximately 330 cows, and milk yield increased from approximately 13,500 lbs / cow per year to 17,500 lbs in 2002.

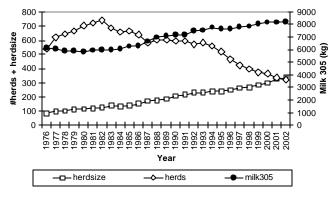


Figure 1. Number of herds, average number of cows per herd, and average 305-d milk production (kg) from 1976 to 2002 in the DHIA data set.

Figure 2 shows how average days to first service has increased from about 85 some 20 years ago to 110 days in 2002. Season of calving has a great effect on days to first service. In 2002, cows that calved in the spring had on average 127 days to first service while those that calved in the fall had on average 99 days. While these trends may be a sign of decreased reproductive efficiency in the cow (high producing cows don't show heat as long as low producing cows), it can also be the result of a change in management. The voluntary waiting period for breeding has increased on many dairies, and more cows that show heat may go undetected.

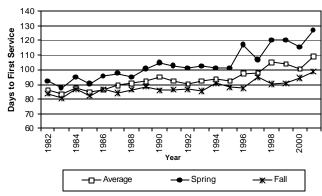


Figure 2. Average days to first service from 1982 to 2001 for calvings in spring, fall, and average for the year.

Pregnancy rate is the most important measure of reproductive efficiency. It is the percentage of open cows that are eligible for breeding that become pregnant in a 21-day period. Another way to think about pregnancy rate is the speed at which open cows become pregnant. Pregnancy rate is typically calculated per 21 days, because every open cow is assumed to have had one chance to become pregnant (an open cow ovulates approximately every 21 days). A quick way to calculate pregnancy rate is heat detection index \* conception rate. Cows that did not become pregnant in 21 days were either not bred or were bred but did not conceive. Although a 100% pregnancy rate is impossible to achieve, the best herds in the country have a pregnancy rate of 20 to 25%.

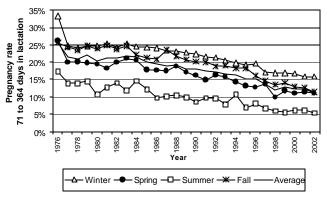


Figure 3. Average pregnancy rates for open cows between 70 to 364 days in lactation from 1976 to 2002.

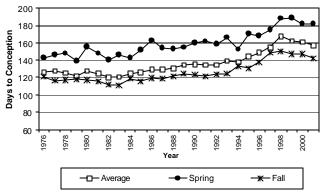


Figure 4. Average days to conception from 1976 to 2001 for calvings in spring, fall, and average for the year.

Figure 3 shows that the average pregnancy rate in Florida and Georgia has decreased from about 22% in the 1970s to 12% in 2002. Figure 3 also shows that the pregnancy rate in the winter is double that of the pregnancy rate in the summer. It has clearly become more difficult to get cows pregnant, especially in the summer. The summer pregnancy rate is a little underestimated because some dairy producers delay breeding.

The result of voluntary waiting period, pregnancy rate, and repro cull rate, is average days to conception (also called days open). Figure 4 shows that average days to conception increased from about 125 days in the 1970s to 160 days after 2000. Cows that calved in the spring take up to 40 days longer to conceive than cows that calve in the fall.

Remember that days to conception does not include open cows that left the herd, for example because they failed to get pregnant. Because some cows do get pregnant late in lactation, average days to conception is increased if a dairy producer tries to breed open cows longer before they become repro culls.

These trends in these figures are consistent with trends in many other parts of the country. Although changes in reproductive management may have impacted these statistics some, the decrease in reproductive efficiency in our dairy herds is reason for concern.

## SOUTHEAST DHIA INFORMATION SEPTEMBER, 2004

### Dan Webb

		Georgia	Florida
Item	All Herds	Herds	Herds
No. of Herds	274	189	85
No. of Cows per herd	394	251	712
PCT in Milk on Test Day	82	82	81
Milk lbs-All Cows	42	43	40
Daily Milk-Milk Cows	51.46	52.42	49.32
Total Feed Cost \$	3.21	3.26	3.04
Value of Milk \$ Value above Feed Cost \$	8.35 5.54	8.50 5.65	8.01 5.18
Feed Cost/CWT Milk \$	7.52	7.50	7.58
Rolling-Milk lbs	17,375	17,555	16,977
Days in Milk	228	229	225
Test Period Persistency	101	102	99
Std 150 day milk	61.57	62.58	59.31
sea 130 day milk	01.57	02.50	37.31
Age of 1st Lact Cows	26.46	26.76	25.79
Summit milk-1st Lact	60.98	61.12	60.68
Proj 305 day ME milk-1st lact	19846	19994	19514
Sire PTA\$-1st Lact	278	284	262
Age of 2nd Lact Cows	41	41	40
Summit milk-2nd Lact	76	77	75
Proj 305 day ME Milk-2nd Lact	20,138	20,406	19,540
Sire PTA\$-2nd Lact	254	257	247
Age of 3rd+ Lact Cows	67.53	67.96	66.57
Summit milk-3rd+ Lact	80	80	79
Proj 305 day ME Milk-3rd+ Lact	19,270	19,560	18,620
Sire PTA\$-3rd+ Lact	198	205	182
Days to 1st Serv (%herd VWP to 100D)	44.00	42.06	48.28
Days to 1st Serv (%herd> than 100D)	37.79	39.83	33.29
Days Dry-All Lact	76	75	79
Days 1st Serv-total herd	106	107	104
Days open-proj min-total herd	190	191	188
Con PCT	50.73	50.68	50.86
Con Rate-1st serv	52.26	52.00	52.84
SCCS % cows < 4	47	48	43
SCCS % cows = 4	17	17	16
SCCS % cows = 5	13	13	15
SCCS % cows = 6	10	10	11
SCCS % cows > 6	13	12	15
SCC Score (Herd avg)	3.75	3.68	4.00
PCT Dev.(Shipped - DHIA) Test Day	1.07	1.41	0.30
PCT Dev.(Shipped - DHIA) Annual	1.58	1.77	1.16