



Department of Animal Sciences

Quarterly Newsletter Vol. 6 No. 1 Winter 2006

UF RECEIVES \$1.5 MILLION ENDOWMENT FOR DAIRY AND YOUTH PROGRAMS

Louis E. "Red" Larson's longtime leadership in Florida's dairy industry is being recognized by his four children who are establishing three endowments at the University of Florida's Institute of Food and Agricultural Sciences. The \$1.5 million gift, announced Nov. 5, 2005, at the College of Agricultural and Life Sciences' annual "Tail Gator" rally prior to the Florida-Vanderbilt football game in Gainesville, has prompted UF officials to name a building in Larson's honor. UF's Dairy Science building, part of the Department of Animal Sciences, will now be known as the L.E. "Red" Larson Dairy Science Building.

In announcing the endowments and building dedication, Dr. Jimmy Cheek, UF senior vice president for agriculture and natural resources, thanked the Larson family for the generous gift and said it will enhance teaching, research and extension programs in dairy science and the 4-H Youth Development Program. "The Larson children, with deep roots in Florida agriculture and strong family ties, have chosen to honor their dad in a very special way," Cheek said. "Red Larson and his wife, Reda, are the proud parents of four children - Woody, Barbara, Kathy and John - who have chosen to make a significant gift in their father's honor. Thanks to their generosity, three separate endowments are being established in UF's Institute of Food and Agricultural Sciences."

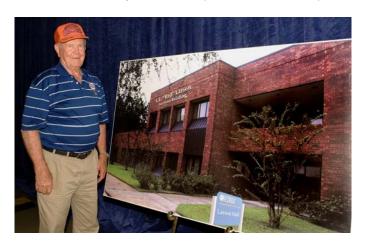
A \$300,000 gift will create an endowment to support teaching, research and extension programs, and a \$200,000 gift will create an endowment to support UF's statewide 4-H Youth Development Program. A \$1 million gift will create an endowment to provide support for the Faculty Challenge Initiative, which will provide support for faculty and students in the Department of Animal Sciences.

The initiative, which was announced last year by UF President Bernie Machen, aims to raise \$150 million to meet the demands of educating Florida's growing population and make UF one of the nation's premier research universities.

Red Larson, owner and president of Larson Dairy Inc. in Okeechobee has been a dairy farmer for more than 57 years. His farm covers 10,000 acres and includes more than 6,000 cows that produce 45,000

gallons of milk daily.

In October, Larson received the Southeast Farmer of the Year Award at the annual Lancaster-Sunbelt Expo in Moultrie, Ga. The southeast region includes farmers in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee and Virginia. His other honors include being elected to the Florida Agricultural Hall of Fame, Dairy Hall of Fame and Alumni of Distinction in UF's College of Agricultural and Life Sciences, and being named Dairyman of the Century.



The faculty, staff, and students of the Department of Animal Sciences are very excited about this endowment. We thank the Larson family for this gift.

DR. GLEN HEMBRY TO STEP DOWN AS CHAIRMAN OF THE DEPARTMENT OF ANIMAL SCIENCES

Dr. F. Glen Hembry announced on October 18, 2005, that his last day as chair of the Department of Animal Sciences will be June 30, 2006. That date will complete his 16th year as chair of first the Department of Animal Science and later the Department of Animal Sciences that was formed after the merger with the Department of Dairy and Poultry Sciences in 2000. Dr. Hembry plans to remain an active member of the faculty with a focus on teaching and extension.

A Search and Screen Committee has been appointed by UF senior vice president for agriculture and natural resources Dr. Jimmy Cheek. The committee's responsibility is to conduct a national search for candidates and encourage their applications. Goal is to have a new chair in place by July 1, 2006.

DIGESTER FIELD DAY: THURSDAY, JANUARY 19, 2006

What: UF/IFAS Digester Field Day

When: 1 to 4 PM, Thursday, January 19, 2006

Where: Dairy Research Unit, Hague, FL. The DRU is

located just off CR 237.

Why: To learn about the technology and economic

feasibility of digesters on Florida dairy farms.

Agenda:

1:00 Welcome

1:05 Engineering aspects of digesters (Ann Wilkie, Roger Nordstedt)

2:00 Tour of the DRU's fixed film digester and manure handling system (Ann Wilkie, David Armstrong, Roger Nordstedt)

3:00 Economic feasibility of digesters on dairy farms (*Russ Giesy, Albert de Vries*)

4:00 Adjourn

Admission is free. For more information, contact Russ Giesy at (352) 793-2728 or by email at giesyr@aol.com.

JAMES UMPHREY RESIGNED FROM THE DEPARTMENT OF ANIMAL SCIENCES

James Umphrey resigned his position as Assistant in Animal Sciences on November 8, 2005. He indicated his resignation was for personal reasons as he felt a need to focus on his graduate program (which should be completed in summer of 2006) and the desire to start exploring new opportunities. James Umphrey has made significant contributions over the past 17 years to dairy programs; in particular the dairy youth and undergraduate programs. James indicated that he had the opportunity to work with some of the finest dairy producers, 4-H parents, volunteers, agricultural teachers and youth in the state. It is currently not clear how the position will be filled.

2005 CORN SILAGE AND FORAGE SORGHUM VARIETY QUALITY AND YIELD DATA AVAILABLE

Results of the 2005 corn silage and forage sorghum variety tests are now available. To see the results, visit www.animal.ufl.edu and click on "2006 Corn Silage

Field Day", then select 2005. Hybrid variety yield and quality data is available for midseason and full season varieties. For more information, contact Jerry Wasdin, email: wasdin@animal.ufl.edu or phone (352) 392-1120.

CORN SILAGE / FORAGE FIELD DAY: THURSDAY, MAY 26, 2006

The 2006 Corn Silage / Forage Field Day will be held at the Plant Science and Education Unit, Citra, Florida, on Thursday May 26. Contact Jerry Wasdin, wasdin@animal.ufl.edu, phone (352) 392-1120, for more information or visit the UF/IFAS Dairy Extension website at http://dairy.ifas.ufl.edu.

NATIONAL MASTITIS COUNCIL ANNUAL MEETING IN TAMPA: JANUARY 22-25, 2006

David R. Bray

The 45th Annual Meeting will be held on January 22-25, 2006 at the Hyatt Regency Hotel in Tampa. This is the second year in a row that it will be held in Florida. It was supposed to be held in New Orleans, but I guess the site there got flushed.

This year's program looks like the best one in years. The program is broken into topics where there are two to three papers per topic. The topics include: 1) mastitis resistance, 2) treating subclinical mastitis, 3) animal welfare considerations, 4) environmental management (*strep uberis*, both in pastured and housed cows, and alternative beddings), 5) machine milking and management, 6) update on mycoplasma mastitis.

There are not a lot of data slides in many of these talks which makes them easy to follow. Most presentations are suited to dairymen.

NMC is an inexpensive organization to join and most Florida dairymen should be members. All the folks who are trying to sell you products attend; you should also.

Join NMC and attend the annual meeting. Let me know if you want a brochure or more information. You can contact NMC at (608) 848-4615, email them at nmc@nmconline.org or visit their website at www.nmconline.org. Or call me at (352) 262-6586.

RUMINANT NUTRITION SYMPOSIUM: FEBRUARY 1-2, 2006

The 16th Florida Ruminant Nutrition Symposium will be held on February 1-2, 2006 at the Best Western Gateway Grand in Gainesville, Florida. The program features 2 days of presentations. Presentations on Wednesday **February 1** (starting at 1:00 PM) are:

- 1) Strategic Manipulation of RDP and RUP Supply to Meet the Protein Needs of Beef Cows *Dr. Alfredo DiCostanzo*, *University of Minnesota*, *St. Paul*, *MN*
- 2) Improving Nitrogen Utilization in the Rumen of the Lactating Dairy Cow Dr. Glen Broderick, U.S. Dairy Forage Research Center, Madison, WI

- 3) The Role of Amino Acid Nutrition in Milk Yield and Milk Components *Dr. Brian Bequette, University of Maryland, College Park, MD*
- 4) Milking Them for All They're Worth *Dr. David Zartman, The Ohio State University, Columbus, OH*
- 5) Encapsulating Nutrients to Improve Nitrogen Utilization and Reproduction Dr. Steven Emanuele, Balchem Corporation, New Hampton, NY
- 6) A Factorial Approach to Energy Supplementation for Grazing Beef Cattle *Dr. Matt Hersom, University of Florida, Gainesville, FL*

Thursday **February 2** program (starting at 8 AM):

- 1) Trace Mineral Nutrition and Immune Competence in Cattle *Dr. John Arthington, University of Florida, Range Cattle REC, Ona, FL*
- 2) Nutritional and Metabolic Effects on the Immune Competence of the Periparturient Cow *Dr. Jesse Goff, National Animal Disease Center, Ames, IA*
- 3) Uses and Abuses of Near Infrared Reflectance Spectroscopy for Feed Analyses – *Dr. Dan Undersander, University of Wisconsin, Madison, WI*
- 4) Factors Affecting Corn Silage Quality in Hot and Humid Climates Dr. Gbola Adesogan, University of Florida, Gainesville, FL
- 5) Milk Fat Depression in Dairy Cows Influence of Supplemental Fats Dr. Charles Staples, University of Florida, Gainesville, FL

Novus International will be holding a seminar on Tuesday, **January 31**, 2006, one day prior to the Florida Ruminant Nutrition Symposium, at the Best Western Gateway Grand in Gainesville, FL. A lunch buffet will be available prior to the seminar, with the speaker session beginning at 1:00 PM. The seminar will feature several well-known speakers from the industry, and is open to anyone who would like to attend. Topics to be covered include: 1) Antioxidant nutrition in dairy cattle, 2) Organic trace minerals for dairy cattle, and 3) amino acid nutrition in dairy cattle.

For information about the symposium, contact Charley Staples, phone (352) 392-1958, email: staples@animal.ufl.edu or Adegbola Adesogan, phone (352) 392-7527, email adesogan@animal.ufl.edu.

For registration information, contact
Tracy Nininger, UF/IFAS Office of Conferences &
Institutes (OCI), phone: (352) 392-5930, email:
TNNininger@ifas.ufl.edu

Or visit the Symposium website with all the details at http://conference.ifas.ufl.edu/ruminant/index.html.

3rd ANNUAL FLORIDA DAIRY ROAD SHOW: FEBRUARY 28 - March 7, 2006

The third Annual Florida Dairy Road Show will be held in Florida in the week of February 28-March 3, 2006. Previous programs have been well received and attracted over 90 participants in 2004 and 2005, but lack

of interest in Ocala forced us to look for an alternative location. The program will also be held on March 7, 2006, in Tifton GA in cooperation with the University of Georgia. The 2006 Dairy Road Show will focus again on practical cow management.

<u>Program</u>

AM

10:00 Welcome

- 0:05 Nutritional management of the transition period to optimize fertility in dairy cattle *Dr. Pedro Melendez*
- 10:50 How to reduce mastitis and somatic cell counts in your dairy herd

 Mr. David Bray & Mr. Brent Broaddus
- 11:30 New features in PCDART to schedule protocols

 Dr. Dan Webb & Mr. Ray West
- 12:00 Lunch, sponsored by Pfizer
- 12:50 Developing quality dairy replacement heifers Dr. John Bernard
- 1:35 Euthanasia and carcass disposal

 Dr. Jan Shearer (only in Florida)

 or Monitoring health and looking for sick cows

 Dr. Carlos Risco (only in Georgia)
- 2:20 Ranking dairy cows for future profitability and culling decisions

 Dr. Albert de Vries
- 2:50 Managing risks associated with cow movements

 Dr. Bradley Mills (Pfizer Animal Health)
- 3:10 Adjourn

Locations and Times

Tuesday, **February 28**, 2006, 10 AM Okeechobee County Extension Office 458 Highway 98 N, Okeechobee, FL Local contact: Pat Miller, (863) 763-6469

Wednesday, **March 1**, 2006, 10 AM Lafayette County Extension Office Route 3 Box 15, Mayo, FL Local contact: Chris Vann, (386) 294-1279

Friday, **March 3**, 2006, 10 AM Washington County Extension Office 1424 Jackson Avenue, Chipley, FL Local contact: Andy Andreasen, (850) 638-6180

Tuesday, March 7, 2006, 10 AM UGA Tifton Campus Conference Center at the Rural Development Center 15 RDC Road, Tifton, GA 31794 Local contact: John Bernard, (229) 391-6856

Registration

Registration received on or before February 20, 2006 is \$10 per person. Registration at the door is \$20 per person. The registration fee covers organization of the program, refreshments, and includes one copy of the proceedings. Lunch is provided free, courtesy of Pfizer Animal Health.

You can directly contact one of the organizing extension agents or organizers to register. Registration forms can be also be downloaded from http://dairy.ifas.ufl.edu and mailed to Brent Broaddus.

Organization / More Information

Brent Broaddus, UF/IFAS Dairy Extension 5339 County Road 579, Seffner, FL 33584 Phone (813) 744-5519 ext. 132; Fax (813) 744-5776 broaddus@ufl.edu

Albert de Vries, UF/IFAS Dept. of Animal Sciences Building 459, Shealy Drive, Gainesville, FL 32611 Phone (352) 392-7563; Fax (352) 392-7652 devries@animal.ufl.edu

John Bernard, Dept. of Animal & Dairy Science University of Georgia, Coastal Plain Experiment Station PO Box 748, Tifton, GA 31793 Phone (229) 391-6856 jbernard@uga.edu

EFFECT OF ENZYME ADDITION TO BERMUDAGRASS SILAGE-BASED RATIONS ON THE PERFORMANCE OF DAIRY COWS

A.T. Adesogan, D. B. Dean and C.R. Staples

This Milk Check-Off funded project was designed to investigate whether fibrolytic (fiber-digesting) enzymes can be used to improve the performance of dairy cows fed bermudagrass silage. An enzyme (Promote ®; Cargill; Minnetonka, MN) that had enhanced milk production from cows fed corn silage-based diets in other studies was used. This enzyme was also better than three other enzymes at improving the fermentation and digestibility of bermudagrass silage in our previous mini silo studies.

A ration consisting of a five-week regrowth of Tifton 85 bermudagrass silage, corn silage, and concentrate (35, 10 and 55% DM basis respectively) was fed to thirty Holstein cows (129 days in milk) for two 28 day periods. The following treatments were examined:

- 1) Control (no enzyme addition);
- 2) Enzyme applied to the concentrate at feeding (EC);
- 3) Enzyme applied to the total mixed ration at feeding (ETMR);
- 4) Enzyme applied to bermudagrass silage at feeding (EF);

5) Enzyme applied to bermudagrass at ensiling (TS).

The enzyme application rate at feeding was 4 g enzyme/cow per day and 0.13% of forage dry matter at ensiling. Voluntary dry matter intake and digestibility of dry matter, crude protein, and neutral detergent fiber (total fiber) were unaffected by treatment. Therefore



Southeast Milk, Inc. Dairy Check-Off

milk production and blood glucose levels were also unaffected. However, Cows fed the ETMR diet tended to have greater milk fat and milk protein concentrations and had lower blood β -hydroxybutyrate concentrations than cows fed the control diet. This implies that the ETMR treatment reduced back fat mobilization and therefore

improved energy balance. In addition, cows fed the ETMR treatment had lower ruminal acetate to propionate ratios. lower ruminal ammonia-N concentrations and tended to have lower blood urea-N concentrations than cows fed the control diet. These results indicate that feeding the ETMR diet instead of the Control diet improved the efficiency of rumen fermentation and nitrogen utilization. However, these benefits were not great enough to result in improved feed intake, digestibility or milk production in the cows. Therefore this study suggests that the performance of cows in mid-lactation that are fed bermudagrass silagebased diets will not be improved by enzyme addition.

Future work should determine the merits of feeding the ETMR diet in early lactation when performance responses to moderate improvements in energy balance and rumen function are more likely.

For more information, contact Adegbola Adesogan, phone (352) 392-7527, email adesogan@animal.ufl.edu.

43rd FLORIDA DAIRY PRODUCTION CONFERENCE: TUESDAY MAY 2, 2006

The 43rd annual Florida Dairy Production Conference will be held at the UF Hotel and Conference Center in Gainesville, Florida, on Tuesday, May 2, 2006.

Nationally known speakers from across the U.S. are confirmed to discuss the future of dairy production in the Southeast, economics of sexed semen for Florida dairy farms, optimal breeding decisions, update on RFID for dairy management, and making quality silage in the Southeast. The final program will be announced later in January. Keep an eye on the UF/IFAS Dairy Extension website http://dairy.ifas.ufl.edu. For more information, contact Albert de Vries, phone (352) 392-7563 or email devries@animal.ufl.edu.