UF UNIVERSITY of FLORIDA

Institute of Food and Agricultural Sciences (IFAS)
Department of Animal Sciences

Dairy Update

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Three University of Florida Students Attend the First Dairy Challenge Academy

Mary Sowerby

Winds were blistery, but the sun was shining in Fort Wayne, Indiana, April 4 through 6, as 32 intercollegiate teams gathered to compete at the North American Intercollegiate Dairy Challenge and 95 students from 29 schools participated in the new Dairy Challenge Academy. The University of Florida was represented at the Dairy Challenge Academy by three Animal Science majors: Jackie Mariano, Lan Nguyen, and Illeana Brody, along with the UF Dairy Science Club advisor, Mary Sowerby.

"*When I first got to Dairy Challenge Academy, I was really nervous,*" reported UF Animal Sciences Pre-vet major Illeana Brody. "*Everyone when describing themselves seemed to have had so much prior knowledge and experience in the dairy industry I felt lost…But the team I was in made sure I knew what was vital for determining things such as cow comfort, calf health, and facilities. Ever since leaving Dairy Challenge I feel I have learned a great deal and hope one day I can apply this to my future studies*."

The Dairy Challenge Academy is a new educational format in addition to the traditional Dairy Challenge contest that is offered to relatively inexperienced dairy science students.

First day at the Dairy Challenge Academy began with a presentation on Dairy Profitability by Phil Plourd of Blimling and Associates, followed by a panel of diverse industry professionals on "Opportunities in the U.S. dairy industry for college graduates". Next, the students, industry specialists and educators worked in small groups at the Alan Kuehnert family dairy near Fort Wayne, where they focused on specific aspects like financial analysis, milking protocols, calf care and six other management areas.

That evening the Dairy Challenge Academy students were assigned to mixed-school groups of 8 or 9 students and guided by two volunteer Academy Advisors from industry who coached the students in analytical and team-building skills while analyzing a farm's records. On the second day Academy groups visited that dairy and worked on developing recommendations for nutrition, reproduction, milking procedures, animal health, housing and financial management.

Day 3 was presentation day as each group member discussed some aspect of their assigned dairy in front of all the other groups who also evaluated that same dairy. In addition, students had the opportunity to visit with sponsors and learn individually about jobs and internships.

To summarize the student's feelings about attending Dairy Challenge Academy, Jackie Mariano wrote, "*I thought the Dairy Challenge Academy provided a lot of good hands on experiences. It was valuable to actually go out to dairies and see the cows. I also enjoyed meeting students from all over the country and hearing about their experiences with the dairy industry. I learned a lot from the industry leaders that were present. I would recommend that others interested in the dairy industry participate in similar events.*"

Photo caption: Taking a break from their two-day drive to Dairy Challenge Academy in Fort Wayne, IN, (from right to left) students Lan Nguyen, Jackie Mariano, and Illeana Brody, plus advisor Mary Sowerby stopped to visit Mammoth Caves in Kentucky.

Biogas Recovery from Manure

Ann C. Wilkie

Interest in manure digester systems and bioenergy production continues to grow. Also, as greater attention becomes focused on greenhouse gas emissions from livestock production, it's more important than ever to learn about the latest developments in anaerobic digestion of livestock manures. The AgSTAR Program will hold its seventh national two-day conference at the Wyndham Indianapolis West in Indianapolis, Indiana on **June 11-12, 2013**. This conference is recommended for livestock producers and others interested or involved in the design, financing, operation, or regulatory oversight of

animal waste management systems, or in the development of alternative sources of energy.

This year's AgSTAR National Conference will highlight the latest projects, technologies and financial incentives for manure digestion, and will include two full days of technical presentations, networking opportunities, and exhibits. The conference will also include an optional, all-day site tour on Monday, June 10, with stops to visit the biogas recovery system at Fair Oaks Dairy and Caterpillar's Lafayette Engine Facility. Full conference information, including agenda, online registration and tour details, is available on the AgSTAR conference website at: http://www.epa.gov/agstar/news-events/events/conference13.html

AgSTAR is an outreach program designed to reduce methane emissions from livestock waste management operations by promoting the use of biogas recovery systems. These technologies produce energy and reduce methane emissions while achieving other environmental benefits. AgSTAR is a collaborative effort of the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture, and the U.S. Department of Energy. For additional information, visit the AgSTAR website at: http://www.epa.gov/agstar

For questions or information about manure bioenergy, contact: Dr. Ann C. Wilkie in the Department of Soil and Water Science at acwilkie@ufl.edu, (352) 392-8699, or visit the website, Biogas – A Renewable Biofuel at http://biogas.ifas.ufl.edu

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2013 Florida Dairy Production Conference Review

Mary Sowerby

The 49th Annual Florida Dairy Production Conference was held at the Alto Straughn Extension Professional Development Center in Gainesville on Wednesday, April 10, 2013. Seven speakers enlightened the approximately 100 members of the Florida dairy community and a delegation of 40 dairy producers from Canada.

After Dr. Geoff Dahl had welcomed the participants, Dr. **Jan Shearer**, retired UF Extension Dairy Veterinarian (currently doing the same at Iowa State University), started the day off with a thought provoking discussion on "Welfare Implications for the Florida Dairy Industry." Dr. Shearer based his talk around "The Northwest Coast Indian Legend of the Man Who Killed Too Many" which is found in entirety in the conference proceedings (at http://dairy.ifas.ufl.edu).

Dr. Shearer concluded his presentation with a plea for understanding the differing views of society and agriculture with respect to the human-animal relationship. "While most people are appreciative of an abundant food supply, they want assurance that animals are being treated properly…. But, more importantly, those of us involved in agriculture need to embrace our sacred heritage as the providers of food and fiber for mankind; and in the process incorporate the dignity and respect for animals they deserve."

Next on the agenda was Dr. **Curt Lacy** from the Department of Agricultural and Applied Economics of the University of Georgia in Tifton, GA. Dr. Lacy provided a feed price outlook prefaced with a United States Drought Monitor report and stated that all other forecasting comments he made would depend on the weather. He projected that corn prices should average about $2.00 less in the coming year; soybean and soybean meal prices should soften some after September-October; and hay prices should decline with improved moisture and more moderate input prices resulting in higher production.

Dr. Lacy then proceeded to discuss methods of risk management including:

- Lock-in purchase and/or sales prices;
- Set in some type of ceiling price for purchases (i.e. using futures and options to set prices); and
- Establishing a floor price for selling.

He also suggested using seasonal price patterns to manage price risk especially when it comes to purchasing inputs such as feed and/or using Livestock Gross Margin – Dairy insurance and/or the Pasture, Range and Forage insurance, both subsidized by the USDA.

Ray West, Director of Southeast DHIA showed the audience trends in the SE DHIA industry. Please refer to the conference proceedings to look at the trends in milk production and reproduction which he reported. He also gave out 22 DHIA plaques for herds in Florida with over a 20,000 pound rolling herd average (RHA).

The top five herds were:

1.	White Oak Dairy, Mayo	27,406 RHA
2.	Brandy Branch Dairy, Baldwin	24,944 RHA
3.	Jeffco Dairy, Madison	24,581 RHA
4.	North Florida Holsteins, Bell	24,471 RHA
5.	Suwannee Dairy, Inc., McAlpin	23,353 RHA

Following a delicious lunch, Dr. **Peter Hansen** spoke about "Genetic Control of Heat Stress in Dairy Cattle." Dr. Hansen summarized his talk by saying "The likelihood that progress can be made in improving genetic resistance to heat stress in Holsteins and other dairy breeds has been improved by discovery of specific genes and gene markers present within and outside the Holstein breed that are related to thermotolerance. What is needed now is a better understanding of how selection for resistance to heat stress will affect overall economic performance of dairies in hot regions like Florida."

Dr. **Chad Dechow** from the Department of Animal Science at Penn State University, and a regular contributor to Hoard's Dairyman, next spoke about "Genetic Selection Opportunities to Improve Feed Efficiency". He pointed out that large gains in feed efficiency have been realized because of genetic selection for higher yield over the past five decades. He suggested dairy producers should work towards moderation in cow size to reduce feed requirements further and that Jerseys have some feed efficiency advantages in cheese production markets because of their smaller body size and higher milk solids concentration.

Dr. Dechow also noted Income over Feed Cost is currently considered in the Lifetime Net Merit Index which will help drive further increases in feed efficiency in the national dairy herd. He also suggested that additional

genomic selection tools in the future will accelerate genetic gain by facilitating direct selection for feed utilization.

Three dairy producers ended the presentations for the day. **Don Bennink** from North Florida Holsteins, Bell, FL, made an excellent case for redirecting some genetic trends, such as changing the selection for tall, very topline angular cattle now popular in the show ring to more production efficient, smaller and rounder cattle. He also explained the way North Florida Holsteins is currently using genomic (chromosomal) testing to identify the best heifers in their herd, then using in-vitro (laboratory) fertilization of their top heifer embryos to speed up genetic selection.

Finally, **Dale and Leon McClellan** presented a "Virtual Tour" of their M & B Dairy in Lecanto, FL. They highlighted their facilities, cow comfort via duel-chambered waterbed mattresses covered with composted screened-manure solids, feeding, breeding, and neighbor relations efforts, which all led to Dale being named Swisher Sweets Sunbelt Ag Expo Southeastern Farmer of the Year in 2012. If you are interested in taking a brief video virtual tour of M & B Dairy, check out the following website: http://www.mbproducts.com/farmtour/index.html

The conference concluded with a discussion of "Hot Topics in the Florida Dairy Industry" and a reception. Overall, feedback was that participants liked the Conference and they look forward to the 50th Conference to be planned for spring 2014.

The organizers thank the sponsors of the 49th Florida Dairy Production Conference:

Gold sponsors: Diamond V (David Greene) and Zoetis (Heath Graham and Kurt Piepenbrink).

Silver sponsors: Alltech (Brent Lawrence), Arm and Hammer Animal Nutrition (Fowler Branstetter), Graham Livestock Systems (Stan Graham), Venture Milling (Dennis Stucker), Merck Animal Health (Josh Churchwell), Sunbelt Ag Expo (Chip Blalock), JG Martin Consulting Agricultural Engineers (Jake Martin), and Morton Farm Management (Barry Morton).

Bronze sponsors: Immvac (John Stevenson), Select Sire Power (David McAuley and Rusty Bateman), and Zinpro (Charles Gay). Southeast Milk sponsored the milk.

Sponsor contact information is found in the proceedings. The proceedings of the 49th and past Florida Dairy Production Conferences are found at http://dairy.ifas.ufl.edu

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1500+ Visitors at the 2nd Family Day at the Dairy Farm

Albert De Vries

The second (now annual) Open House at the University of Florida Dairy Unit, also known as Family Day at the Dairy Farm, was again a great success. Over 1500 visitors from Gainesville and surrounding areas visited the 18 stations on March 16. Mostly families with smaller children, the visitors saw cows being milked, could pet a calf, learned about forages, cow comfort and veterinary health care, sat in big tractors and enjoyed free milk and cheese. They also learned about the contributions the University of Florida makes towards sustainable and economically viable dairy production in Florida and elsewhere.

"*I think it's really good just in general for the public to understand how their food supply works and where it comes from. So, I think it's a really great event for that purpose,*" said Jason Beutke who attended Family Day at the Dairy Farm.

Family Day at the Dairy Farm is organized by the Department of Animal Sciences, UF/IFAS Communication Services, and Florida Dairy Farmers, Inc. Donations from sponsors make the event financially feasible. The organizers are already planning for the next Family Day to be held in the spring of 2014.

For more information, contact Albert De Vries, devries@ufl.edu or visit http://familydayatthedairyfarm.info.

Using Herbicides to Accelerate the Drying Rate of Forages

Adegbola Adesogan, Jay Ferrell, Michael, Durham, Oscar Queiroz, and Fernanda Basso

If forages are ensiled when they are too wet, the fermentation goes bad because Clostridia bacteria convert the lactic acid needed to pickle the forage into butyric acid, which smells like rotten eggs and makes cows go off feed. Clostridia bacteria also break down proteins in the silage. Producers can wilt forages to an ideal moisture concentration (65 – 55%) before ensiling, but factors like high humidity, rainfall, thick plant cell walls, and high plant moisture concentrations often delay the drying rate of forages.

A study funded by the Southeast Milk Check-off tested if herbicide application can be used to increase the drying rate of ryegrass and sorghum without reducing the nutritional value of the forages. Plots of ryegrass were sprayed with glyphosate (Roundup weathermax, Monsanto Co., St. Louis MO) on April 4, 2012 at rates of 0, 0.25, 0.5, and 1.0 lb ae/A, representing Control (no herbicide) and Low, Medium and High rates of the herbicide, respectively. Loss of greenness (chlorosis) in the plants was monitored by visual observation on days 5, 7 and 9 after spraying. Changes in forage dry matter (DM) concentration were monitored until plots were harvested at 45% DM. Standing forage from each plot was ensiled in mini silos two days after spraying and when the forage DM concentration was 45%.

The forage drydown rates were about 2.5%/day for the Low rate, 2.8%/day for the Medium rate and 3.7%/day for High rate. However, the Control forage did not dry for 9 days after spraying, and then it dried at about 1 to 2%/day from day 10 to 18 after spraying and then it was wilted overnight to achieve the target DM of 45%. These results show that increasing the herbicide application rate increased the drydown rate of the forage. Therefore, the target DM of 45% was reached in the least time (9 days) with the High herbicide rate followed by the Low and Medium rates (12 and 11 days). After 20 days, the Control forage had still not dried to the target DM and therefore it had to be wilted overnight. Over 90% chlorosis (loss of green color) occurred in the plots with the High herbicide rate within 5 days of spraying. It took 7 and 9 days to achieve 90% chlorosis in plots with the Medium and Low herbicide rates. No chlorosis was seen in the Control plots throughout the trial.

Southeast Milk, Inc.
Dairy Check-Off

When ensiled two days after herbicide application, all silages had high concentrations of intake-limiting acids (acetic and butyric acid) showing that a bad fermentation had occurred. However, no difference in nutritional quality occurred among treatments except for a trend for greater crude protein concentrations in plots treated with the herbicide. This may have been because they were harvested at a younger maturity stage than the Control plots. When ensiled at 45% DM, the fermentation was good and no negative effects of herbicide rate on forage nutritive value occurred.

In conclusion, increasing the rate of herbicide application increased the drydown rate of ryegrass but did not reduce the nutritive value. These results need to be confirmed in a second year and we need to confirm that herbicide treatment leaves no harmful residues in the forage and does not reduce the performance of cows. We are currently analyzing the sorghum samples and we will report the results at a later date.

Adesogan, Queiroz, and Basso are in the Department of Animal Sciences. Ferrell and Durham are in the Department of Agronomy. Contact Gbola Adesogan at adesogan@ufl.edu

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Choosing the Right Silage Additive or Inoculant

Adegbola Adesogan

One of the main aims of silage making is to reduce shrinkage (dry matter losses) during the preservation process. Dry matter (DM) losses from silage range from 10% under good management to 40% under poor management and the financial implications are often ignored or underestimated. According to USDA, 109 million tons of silage was produced last year. If 40% of the silage was lost to shrinkage, the value would be $2.2 billion at a cost of $50/ton, whereas it would be $600 million if shrinkage was 10%. Therefore it is very important to reduce DM losses during silage making.

Dry matter losses occur during the three main stages of silage preservation which are the aerobic respiration stage before the silo is sealed, the anaerobic fermentation stage after sealing, and the aerobic feedout stage after the silo is opened. Heating and spoilage during feedout is one of the greatest contributors to DM losses. Spoilage occurs when yeasts and molds that were dormant during the fermentation begin to grow and convert nutrients into carbon-di-oxide and heat after air enters the silo. Spoilage reduces silage quality and feeding spoiled high-moisture shelled corn to dairy cows reduced milk production by 7 lb/day. Feeding spoiled silage also reduced fiber digestibility and DM intake in cattle and destroyed the rumen fiber mat which is needed for proper digestion and prevention of acidosis and a displaced abomasum. In addition, molds in spoiled silage may produce mycotoxins that can reduce the performance and health of cattle and directly cause serious health problems for producers.

Additives can be used to reduce DM losses and heating in silages, but an understanding of the effectiveness and role of the different types is necessary to achieve desired improvements in silage preservation. The following section describes the main silage additives used in the US.

Organic acids: Adding organic acids rapidly acidifies forages and prevents the growth of Clostridia and Enterobacteria that increase DM losses and protein degradation during ensiling. Examples of such acids include propionic, benzoic, sorbic, and formic acids etc. In the US, propionic acid is probably the most widely used silage preservation acid because its' strong antifungal activity increases bunk life by inhibiting spoilage yeasts and molds. When added at 1 to 2% of the forage fresh weight, propionic acid limits DM losses and increases bunk life but it is also corrosive. Buffered propionic acid (salts of the acid like ammonium propionate) is less corrosive and when applied at concentrations of 0.1 to 0.2%, it may not affect the

fermentation but can improve the aerobic stability though higher rates are often more effective. Propionic acid should be applied at the chopper to ensure uniform distribution throughout the forage. Applying propionic acid to a silo face is not recommended because the acid does not penetrate far behind the silo face. Propionic acid is more expensive than silage inoculants, therefore it should be used when quality silage is required from large acreages in a short period of time. Other acids like benzoic and sorbic acid are also effective mold and yeast inhibitors but due to their high cost, they are often sold in mixtures with propionic acid.

Acids are particularly useful if silage is made from wet silage. Drought stressed forage is usually wetter that it seems to be, therefore acid treatment may improve the preservation.

Ammonia and urea: Ammonia is very effective at increasing bunk life because it inhibits the growth of spoilage-causing organisms in silage. Applying ammonia also increases the crude protein concentration of silage and may increase the digestibility. The anhydrous form is best for uniformly applying ammonia to silage and it should be applied at 0.3 to 1% of forage DM. Ammonia poisoning may occur if ammonia is not uniformly distributed in the forage or if higher rates are applied. A main challenge with ammonia is that it is a very caustic and hazardous when inhaled or if it contacts skin. Therefore, protective clothing must be worn when handling anhydrous ammonia. Ammonia may also prolong the fermentation and increase DM losses because it is an alkaline with high buffering capacity. Therefore, ammonia is not ideal for forages with low sugar contents or high buffering capacities like legumes or for drought stressed corn with high nitrate concentrations.

Urea can be used as a forage preservative and it is safer to handle and apply than ammonia. To avoid toxicity problems, urea should be dissolved in water and uniformly sprayed on the forage during chopping. Silages treated with ammonia or urea will have high soluble nitrogen concentrations and care should be taken to ensure degradable and undegradable protein requirements of the cow are met when such forages are fed.

Enzymes: Enzymes added to silage include amylase for degrading starch into sugars and cellulases or xylanases for degrading cell walls into sugars. Sugars released by the enzymes increase the growth of silage bacteria and in some cases, fiber degrading enzymes also increase forage digestibility. Such enzymes are usually more effective on cereal silages and immature cool season grasses than on mature cool season grasses, legumes, or warm season grasses, which have more lignin. Nevertheless, Dean et al. showed that when applied at ensiling to bermudagrass silage, a fiber digesting enzyme reduced the pH and DM losses and increased fiber hydrolysis into sugars, reduced protein degradation to ammonia and increased aerobic stability. Three other enzymes tested in the study had only some of these beneficial effects. These different responses to enzyme treatment reflect the different responses to enzyme treatment of forages or total mixed rations in the literature. Muck and Kung reported that enzyme treatment increased liveweight gain, milk production and feed efficiency in 40, 33, and 27 % of 39 studies. This inconsistency is partly because enzymes differ considerably in their main activities, application rates, and microbial sources. Also, the optimal temperature (122 to 140 ^{o}F) and pH (4-5) for many commercial enzymes are greater than those in well-made silages. Lastly, low enzyme application rates are often used due to high enzyme costs.

Enzymes are sometimes added to bacterial inoculants to degrade cell walls and increase the availability of sugars used as growth substrates by the inoculant bacteria. This approach has sometimes resulted in improved fermentation and/or improved forage digestibility. Queiroz et al. showed that disease infestation reduced the NDF digestibility and fermentation of corn silage but a mixture of an inoculant and enzymes reversed these negative trends.

Inoculants: Inoculants are added to silage to dominate the epiphytic (natural) population of bacteria on plants that cause DM losses by inefficient fermentation of sugars. Three main types of inoculants are currently used.

Homofermentative bacterial inoculants: Homofermentative bacteria have been used to increase the acidification rate of forages and minimize DM losses for several decades. Rapid acidification is achieved by fermentation of plant sugars into lactic acid. This represents the most efficient type of fermentation because it avoids or minimizes DM and energy losses by preventing the growth of bacteria that cause such losses. The main bacteria used in such inoculants are Lactobacillus plantarum or acidilacti, Pediococcus pentosaceus or acidilacti and Enterococcus faecium. Pediococcus and Enterococcus spp. grow more vigorously at high pH than L. plantarum and may be more tolerant of residual oxygen in the silo. Therefore, some inoculants contain Pedioccocus and or Enterococcus spp. to 'jump start' the fermentation as well as L. plantarum for subsequent prolonged domination of the epiphytic bacteria. Homofermentative inoculants are particularly useful for improving the preservation of legumes like alfalfa and warm season forages with high buffering capacities and/or low sugar concentrations. These inoculants typically reduce DM losses by about 2-3% and they increased DM intake, liveweight gain and milk production in 31, 53 and 47% of 39 studies reviewed by Muck and Kung. They often cost $0.5 to $1.50; therefore, with a 2-3% reduction in DM losses and potential improvements in animal performance, they produce an economical response particularly with high silage costs of $50/ton or more.

In some cases, adding homolactic inoculants has reduced bunk life because the lactic acid they produce is used as a growth substrate by yeasts that cause spoilage. Muck and Kung showed that inoculants (mostly homofermentative) improved bunk life in a third of reviewed studies, had no effect in another third, and reduced bunk life in a third of studies. Consequently, heterofermentative inoculants that

increase bunk life by producing strong antifungal compounds during ensiling are preferred for improving bunk life.

Heterofermentative inoculants: These bacteria ferment sugars into lactic acid, acetic acid and or ethanol in a fermentation that is often less efficient than that of homofermentative bacteria. Consequently, DM losses are greater when they are applied, but their beneficial effects on bunk life often outweigh the increased DM losses. Lactobacillus buchneri is perhaps the most widely used of these inoculants. It is added to silage because the acetic acid it produces during the fermentation has a strong inhibitory effect on the growth of spoilage yeasts and molds.

Adding L. buchneri to corn silages has improved bunk life in several farm-scale studies but no feed intake or milk production responses occurred when the treated silage was fed. In contrast, L. buchneri treatment of alfafa silage increased the bunk life of a total mixed ration and increased milk production in one study. Lactobacillus buchneri inoculants typically cost $1.50 to $2/ton. They are particularly cost effective in silages that are likely to heat such as corn and small grain silages and high DM forages. They are also likely to be effective in drought-stressed corn plants, which usually have high sugar concentrations that could enhance the growth of spoilage yeasts.

Combo inoculants: Combo inoculants contain a mixture of homofermentative bacteria that reduce DM losses and heterofermentative bacteria that increase bunk life. In several studies, such inoculants have improved the bunk life of silages without increasing DM losses. Queiroz et al. showed that a combo inoculant reduced the amount of spoiled silage and nutrient losses from corn silage by about 50% relative to the untreated control. Arriola et al. reported that applying a combo inoculant containing P. pentosaceus and L. buchneri to corn silage did not improve the performance of dairy cows. However, certain combo inoculants have been associated with other benefits including inhibition of mycotoxin production in diseased or damaged corn plants and they inhibited the growth of E. coli O157: H7 when it was added to aerobically exposed corn silage.

Using and choosing inoculants: Inoculants should be stored in a cool, dry area after mixing with non-chlorinated water and used within 24 hours to maintain the viability of the bacteria. To ensure uniform distribution in the forage, liquid inoculants should be used and they should be applied at the chopper at the rate and for the forage stated on the label. The most effective products have at least 100,000 cfu/g or 90 billion live bacteria per ton.

Summary: Additives will not overcome bad management, in fact excellent management may improve additive effects. The following questions should be used to choose additives:

1) Is my goal reducing shrinkage, heating or both? To reduce shrinkage, use a homolactic inoculant. To increase bunk life, use an L. buchneri inoculant or a propionic acid additive.
2) Have independent research trials demonstrated the efficacy of the product at reducing DM losses or increasing bunk life or animal performance?
3) Does the product give at least a two to one economic return?

Parts of this article were published in the proceedings of the 2013 Annual Meeting of the American Forage and Grassland Council. References are available upon request. Contact Adegbola Adesogan at adesogan@ufl.edu for more information.

Dairy Extension Agenda

- Wednesday to Friday, **May 8+ 9 + 10**, 2013. 62nd Annual Florida Beef Cattle Short Course, Straughn IFAS Extension Professional Development Center Gainesville, FL. Program and details at http://conference.ifas.ufl.edu/beef/index.htm

Prediction of the Future Florida Mailbox Price: April 2013 - March 2014

Albert De Vries

Using the Class III and Class IV future settle prices of April 22, 2013, and the announced Class III and IV prices until March 2013, the University of Wisconsin predicts the Florida mailbox prices for April 2013 to Mach 2014 as follows:

Month	Year	Class III settle price*	Class IV settle price*	Predicted Florida mailbox price
April	2013	17.25	17.75	21.81
May	2013	16.93	17.75	21.64
June	2013	17.62	18.30	21.48
July	2013	18.92	18.98	22.48
August	2013	19.51	20.00	23.25
September	2013	19.54	20.25	24.67
October	2013	19.48	20.25	24.64
November	2013	19.35	20.28	24.58
December	2013	19.00	19.97	24.46
January	2014	18.66	19.69	24.16
February	2014	18.27	19.36	23.80
March	2014	17.89	18.60	22.53

* Class III and IV settle prices as of April 22, 2013.

Daily predictions are found at http://future.aae.wisc.edu/predicted_mailbox/?state=Florida

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