UF UNIVERSITY of FLORIDA

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

Dairy Update

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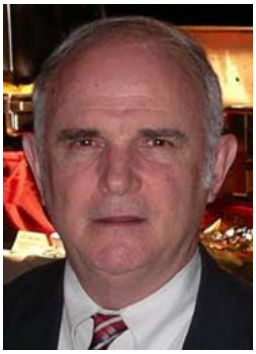
Dan Webb retired from UF

Professor Daniel W. Webb retired from the University of Florida on June 30, 2010. Dan Webb grew up on a dairy farm in central Mississippi, where he participated in 4-H and FFA showing Holstein cattle. He and his three brothers were the primary labor force for the family dairy while in high school and college. While in 4-H, Webb was a delegate to National 4-H Club Congress, National Leadership Conference and National 4-H Dairy Conference. Dan Webb received a BS degree from Mississippi State University, an MS degree from the University of Florida, and a PhD degree from Kansas State University. After graduating from Kansas State, Webb joined the dairy science faculty of the University of Florida. His assignments were in Extension and his academic interests revolved around the use of information and records in dairy herd management. Dan Webb coordinated the DHI program in Florida, and has served as general manager of Southeast DHI since 2000 when the DHI programs in Florida and Georgia were merged. In the near future, Dan Webb intends to remain working part-time with Southeast DHI.



Some Things I Have Learned

Daniel W. Webb

During 39 years of professional life, I have been privileged to know and work with many fine people, most of them dairy farmers or others associated with the dairy business. While I spent nine years of informal study of biology, math, chemistry, statistics and social science at three different land grant universities, my greater education has come from observations and analysis of dairy operations, mostly in Florida and the southeast. A few of those observations will be highlighted here.

Planning. A universal characteristic of the successful dairy farms was that they had a plan. The manager or chief decision-maker had a clear understanding of what he wanted to happen and where he wanted to be 10 years down the road.

Personnel relations. The best dairy farms have a manager with clear authority to manage. All too often, I have seen managers hired but not given the trust and freedom to make the important decisions. Further, managers need to expect a lot from their workers and make sure important tasks are performed according to the plan.

Good animal husbandry. High performing herds take good care of their cows. Feeding, herd health, milking management and breeding need constant attention. Failure in any one of these cow management areas can doom a dairy. The chain is no stronger than its weakest link.

Good genetics. I have observed that in herds where ordinary cows are being milked, there is a definite limit of performance. The top performing herds have a plan for milking better cows tomorrow than they have today.

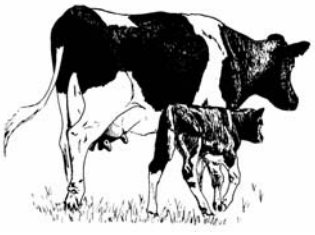
Performance information. Most modern dairies are large businesses that require data, information and records to know what works and what doesn't. Whether it's DHIA, cost accounting or field productivity, analytical information is mandatory.

Facility appearance. At the most successful dairies, facilities are in good repair, well painted and clean. Neighbors and farm visitors form their opinions of the industry by what they see. Employees perform better in well-kept facilities, too.

Judicious investment. I have visited farms that still make payments on facilities not in use. On the other hand, one successful dairy was noted for "no moving parts". There was nothing there except the cows and only what was needed to manage and care for them.

Implementation. While a plan is important, more can be said about how well the plan is carried out. Herds that prosper are those that "get it done". Herds that raise their own replacements *well*, have a greater chance for profit in the long run. Herds that raise their own replacements *poorly* have little chance. Herds that use AI and do it well have a significant advantage compared to bull-bred herds. However, well managed natural service can result in lower calving intervals and higher profit than poorly managed AI programs. It all comes down to how well the plan is implemented. A good motto I found on the office wall at one dairy reads, "Plan the work, and work the plan".

Daniel W. Webb is a Professor Emeritus in the UF Department of Animal Sciences.



Laboratory Pasteurized Count Reduction Procedures

David R. Bray

The LPC test is doing a standard plate count on pasteurized milk. The mastitis pathogens are killed and what remains are organisms that keep on growing in the milk and reduce shelf life. These organisms are not from cows' udders, they are usually spore –formers, like bacillus or other undesirables like pseudomonas, which live in rubber hoses and are in some water supplies. If a high LPC count is present or in your near future (250-300 cfu/ml is the usual cut off point) then the following procedures need to be done to ensure you stay below these levels.

1. Milk clean dry pre-dipped teats and udders. Sand bedding, muddy lots are a big supplier of these non–cow bacteria. Milking wet and or dirty teats will load up the tank with them.
2. Replace all rubber parts in the milking parlor: milk hoses, wash hoses, jetter cups, pipeline gaskets, milk pump gaskets and butterfly valves etc. While taken apart, inspect inside of the pipelines for any build-up or milk stone, including the pipeline from the milk pump to the bulk tank. The hot water supply to the bulk tank washers usually has rubber water hoses that get water into the milk supply. Replace all rubber parts every 6 months. No chasing of milk, especially not with a rubber hose.
3. Wash out pulsator lines. They should have clean outs on the corners so it can be flushed out. Wash out pulsator hoses, remove the twin pulsator hoses from the claw, run hot soapy water through them and the pulsators. Most pulsators will take a quart of water, rinse pulsators, change hoses if old (when liners split during milking, the milk runs through the pulsators into the pulsator lines and throughout the vacuum system). Dried milk film may be a big problem of high LPC's.
4. Wash out vacuum supply lines, trap to pump, balance tanks etc. DO NOT RUN WATER INTO VACUUM PUMPS!!!!
5. Inspect the inside of bulk tanks. You need a black-light or big flash light and a skinny person. Let the tank air out and if any internal cleaning of the tanks is needed, use a non scratch 3 M scrubber and soap and water. Do not use acids or strong chemicals that will kill the skinny guy in the tank. NEVER COMBINE ACID CLEANERS WITH OTHER CHEMICALS.
6. Make sure air injectors are working properly and chemical concentrations are correct for your system. Use a minimum of 160^{o} F water at the start of the wash cycle and dump the water at 120^{o} F. Sanitization of tanks and pipelines should be 1 hour or less with chlorine sanitizers. Some products are longer lasting. Check all labels of all chemicals, you might learn something important.
7. Make sure your milk cooling system is working properly. Chillers are necessary if you have an old tank with little cooling capacity. Ideally if we never get milk to above 40^{o}F we will have lower counts.
8. The plate cooler is a good candidate for LPC problems, lots of gaskets etc. If all things mentioned above fail this is it. It should be possible to isolate the plate cooler by hooking up the inline samplers in the pipeline in front of and behind the plate cooler and run LPC's on each sample. If the before sample is high or its dirty before the plate cooler, you then need to clean that part of the system and run the test again. If before the plate cooler is low and after the plate cooler is high, you tear it down. If neither are high and the bulk tank is high, it's the tank. Inline sampling device suppliers are (QMI) www.qmisystems.com and (BoldBioTech) www.boldbiotech.com.
9. Transfer hoses from the tank to the truck can be a problem also, especially on large dairies where bulk tanks are filled multiple times a day. It is possible that the hose does not get washed and sanitized every time causing bacterial build up. If by chance that is due to truck dispatch problems and the tank does get washed after it is emptied, you can get milkstone build up which allows these bacteria to hide and slough off under the milk stone and increase these bacteria causing LPC problems.
10. This is not an expensive process, no cows to treat, or cull, just good husbandry practices like keeping cows as clean and cool as possible, milking clean dry teats, have enough hot water and proper chemical concentrations, flushing out your milking system regularly, change rubber parts every six months. You might just as well get used to doing this because these tests are going to be here forever.
11. If you wish not to do these practices, there are dairymen in other parts of this country who will be happy to supply all the milk our processors need.

Contact Dave Bray at drbray@ufl.edu or call (352) 392-5594.

BIOENERGY – 2010 Farm to Fuel Summit

Ann C. Wilkie

In 2006, the Florida *Farm to Fuel* Initiative was statutorily created to enhance the market for and promote the production and distribution of renewable energy from Florida-grown crops, agricultural wastes and residues, and other biomass, and to enhance the value of agricultural products and expand agribusiness in the State. Since then, the Florida Department of Agriculture and Consumer Services has hosted four "Farm to Fuel Summits", each of which attracted several hundred participants.

The fifth Florida Farm to Fuel Summit is scheduled for August 11-13 at the Rosen Shingle Creek Resort in Orlando. The 2010 Summit will provide further opportunities for leaders from agriculture, academia, government and industry to discuss Florida's energy future and join in shaping the production of biofuels and renewable energy in the State of Florida. This high-profile event will feature speakers and panelists representing international, national and state perspectives on issues of research, production and distribution of biofuels, including biodiesel, bioethanol and biogas. This year's Summit will also include afternoon workshops on biofuels and woody biomass utilization, on

August 11th. For the 2010 Summit agenda and registration information visit the Farm to Fuel website: http://www.floridafarmtofuel.com/summit_2010.htm. For questions or issues about bioenergy, contact: Dr. Ann C. Wilkie at acwilkie@ufl.edu or (352) 392-8699. *Ann Wilkie is in the UF Department of Soil and Water Science.*

Changes in UF Dairy Science Curriculum

Albert De Vries

The Department of Animal Sciences at UF is making some changes in its undergraduate curriculum. Starting in the fall of 2010, students in the Animal Sciences major will choose one of 3 specializations: animal biology, equine, or food animal. The new food animal specialization is a merger of the previously offered beef, dairy, and meats options. The merger is a result of changing interests by students in these options, as well as a reaction to the leave of faculty who were deeply involved with the students and courses taught in these options during the last decade. Changes were also made in the lists of required vs. elective courses.

The dairy science course offerings have changed as well. Students interested in studying dairy science now can take the courses Biology and Management of Dairy Cattle and Dairy Cattle Practicum. Both courses are coordinated by Dr. Albert De Vries. Dr. Mary Sowerby coordinates a course in Dairy Herd Evaluation, including collegiate dairy cattle judging.

Aspects of dairy science are also presented in courses that cover multiple species, such as Introduction to Animal Science, Reproductive Physiology and Endocrinology in Domestic Animals, Genetic Improvement of Farm Animals, and Principles of Animal Nutrition. More advanced dairy cattle nutrition will be taught by Dr. Charlie Staples within the Food Animal Nutrition and Feeding course.

Other opportunities for students with an interest in dairy are taking a dairy focused internship and participation in the Dairy Challenge competitions, both at the Southern Regional and National levels. UF has again a vibrant Dairy Club, advised by Dr. Mary Sowerby. Students wanting an intensive hands-on dairy learning experience can participate in the Southern Great Plains Dairy Consortium – Teaching program. *For more information, contact Albert De Vries, devries@ufl.edu or (352) 392-5594 ext 227.*

UF Dairy Student Attends Large Dairy Herd Management Program in New Mexico

Albert De Vries

In 2008, UF became a cooperating institution in the Southern Great Plains Dairy Consortium – Teaching program. This year, UF dairy option student C. J. Middleton participated in the six-week long intensive hands-on dairy teaching program held in Clovis, New Mexico. The third annual SGPDCT program was held May 17-June 25 and brought together 36 students interested in dairy large herd management from 12 universities across the United States.

The SGPDCT was created to specifically address the need to improve the availability of dairy science education at universities in the Southwest and to ensure the growing dairy industry in that area a well qualified pool of prospective employees for future employment.

The program is divided into two concurrent sessions and covers topics such as herd evaluation, reproduction, nutrition, genetics, facilities and mastitis.

A major component of the learning process is hands-on training. Each day the group spends at least four hours in the classroom and every day the class either visits a dairy, lab or takes a field trip to enforce what was taught during class. There is a tremendous amount of hands-on. Nationally-known instructors are brought in from all over the country and are considered experts in their fields of dairy science. They include university faculty members from participating and other schools as well as industry experts.

C.J. Middleton noted: "We had speakers from all over the U.S. We discussed data analysis, nutrition, reproduction, mastitis, financial statements, etc. We worked with dairy veterinarians for the last week, just our group of seven students. We visited two cheese plants. We went to Southwest Dairy Day at Spandet Dairy where they milk in a 100-head rotary with cross ventilated barns! We went to heifer and calf feedlots and visited close to 30+ dairies in Texas and New Mexico! We were challenged to use our knowledge daily and we had sponsor dinners on several Wednesday nights. Everybody welcomed us with hospitality and entertained our questions. It is a great opportunity not just for dairy people but for anyone interested in large livestock production. It was a great opportunity and I'm glad and thankful for the opportunity to participate."

The availability of this program offers a great opportunity for students who attend UF and want the extensive dairy instruction UF is no longer able to offer. This program has been completely funded by private industry and a USDA grant. UF students participating in this program receive credit at UF. Read more about the 2010 program at http://www.progressivedairy.com. *For more information about the details of this program, go to http://sgpdct.tamu.edu or contact Albert De Vries, devries@ufl.edu or (352) 392-5594 ext 227.*

Effect of Sexed Semen on Dairy Heifer Supply from 2006 to 2012

Albert De Vries

Presently, all major North American artificial insemination (AI) companies sell sexed semen from dairy sires. These AI companies sell sexed semen which results in 90% dairy heifer calves. AI organization Genex Cooperative also offers sexed semen that gives a 75% chance of a heifer calf. The fertility of sexed semen is less than that of conventional (not sexed) semen. Used unbiased, the conception rate for the 90% sorted semen is approximately 75 to 80% of the conception rate of conventional semen.

Demand for sexed semen was greater than the supply of sexed semen until the end of 2008. But low milk prices in 2009 caused a sharp reduction in demand, and consequently

many AI companies produced less sexed semen in 2009 than in 2008.

In early 2006, when effective sexed semen became commercially available approximately 18,000 units were produced monthly. By the end of 2008, this number had increased to approximately 300,000 units. Total sexed-semen production for the U.S. dairy market in 2008 was estimated at 2.5 million units. For 2009, total sexed-semen production is more difficult to measure because demand was much less than the sorting capacity. Reports are that some AI companies produced less than 50% of the 2008 production. Estimates for 2009 are 1 to 1.4 million units of sexed semen produced.

The USDA-Animal Improvement Programs Laboratory (USDA-AIPL) reports that in Dairy Herd Improvement (DHI) herds, sexed semen was used for 1.4, 9.5, and 17.8% of all reported inseminations in heifers for 2006, 2007, and 2008, respectively, and for 0.1, 0.2, and 0.4% of all reported inseminations in cows. For heifers, 82% of all sexed-semen use was in first inseminations. For cows, 61% of sexed semen was for first parity and 43% for first inseminations of the first parity. Larger herds, herds with higher production levels, and herds in the Northwest, Mideast, Midwest, and Southeast used sexed semen more frequently than other herds and regions.

USDA-AIPL calculated that 37% of the 700 active Holstein bulls born in 1994 and later had their sexed semen used in the April 2009 national genetic evaluation. These 260 bulls were on average slightly better than the average bull-for-milk yield traits (fat, protein, yield), productive life, somatic cell score, daughter pregnancy rate, service-sire calving ease, service-sire stillbirth, sire conception rate, final score, and Net Merit.

Results from a study by Select Sires Inc. of 211 dairy farms suggest that—in heifers—age at first insemination and age at calving was younger when sexed semen was used. This is a result of the preferential use of sexed semen at first insemination. Cycle lengths were not affected by the use of sexed semen. Sexed semen did not affect stillbirth rates in heifers getting heifer calves, but among heifers getting bull calves (from sexed semen, a 10% chance), the incidence of stillbirths appeared higher. In all calvings resulting from sexed semen, the total incidence of stillbirth was similar as when conventional semen was used. Caution must be used when interpreting results from field data because of the preferential use of sexed semen (only heifers with good standing estrus are inseminated with sexed semen, for example). Heifer calves resulting from sexed semen appear to be completely normal.

Figure 1 shows the timing and number of sexed semen units used in the domestic dairy market. Until the end of 2008, the produced units have been used in inseminations almost immediately after they have become available. Production in 2009 has been reported to be significantly less, but the fraction of sexed semen used in all inseminations apparently did not change much. Dairy producers probably used up their semen inventories in early 2009 to save on expenses.

Furthermore, the vast majority of sexed semen has been used in virgin heifers. Our estimates are that in 2006, 99% of the produced sexed semen was used in heifers. In 2007, 2008, and 2009, these percentages were 96%, 85%, and 85%, respectively. The remainder was used in cows. Thus, more of the sexed semen was used in cows in late 2008 and 2009 than during the early commercialization in 2006, but the use was still limited.

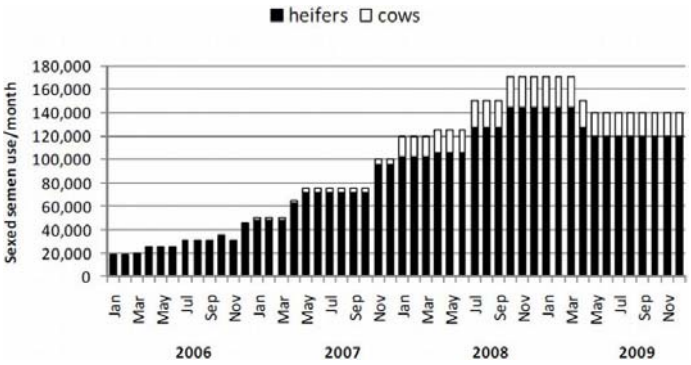


Figure 1. Estimated amount of used sexed-semen units in the U.S. dairy market from January 2006 to December 2009. Until late 2008, almost all produced units were used in inseminations within a few months. In 2009, less units were produced but apparently a similar number of sexed semen units were used as in 2008.

Data Records Management Systems (DRMS), in Raleigh, North Carolina, reported that the percentage of sexed semen inseminations of all reported inseminations in heifers was 18.7% in April 2008 and increased to 23.9% in December 2008 (John Clay, DRMS, personal communication) (Figure 2).

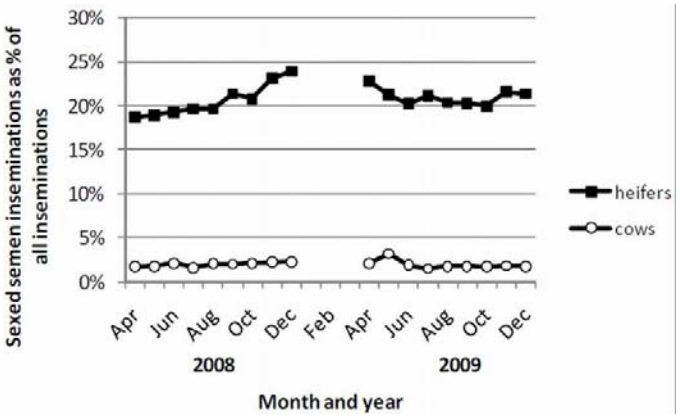


Figure 2. Sexed-semen inseminations as percent of all reported inseminations to DRMS, Raleigh, North Carolina, in heifers and cows in April–December 2008 and April–December 2009 (Source: John Clay, DRMS, personal communication).

In April 2009, sexed-semen use in heifers was 22.8% and then varied between 20.2 and 21.6% until December 2009. For cows, sexed semen accounted for 1.7% of all reported inseminations in April 2008 and increased to 2.3% in December 2008. In 2009, the use of sexed semen in cows decreased again to approximately 1.6% in cows. Note that this use in cows is significantly more than the 0.4% reported by USDA-AIPL for 2008. The low milk prices in 2009 apparently did little to the use of sexed semen that year. These usage data and production data prior to 2008 are the

basis for the following calculations on how the use of sexed semen affects the national heifer supply.

The number of new pregnancies with heifer calves from sexed-semen inseminations has increased from 7,200 in January 2006 to 58,000 in December 2008, after which it decreased to 40,000 to 50,000 per month in 2009 (Figure 3). The results for late 2008 are less than predicted in 2009. These estimates include 45% and 28% conception rates with sexed semen in heifers and cows, respectively. It also includes a small adjustment for abortions. And furthermore, 90% of the new pregnancies are heifer calves. Because cows have lower conception rates than heifers, cows contributed only 0.6% (2006) to 10% (2008 and 2009) of the new pregnancies from sexed semen.

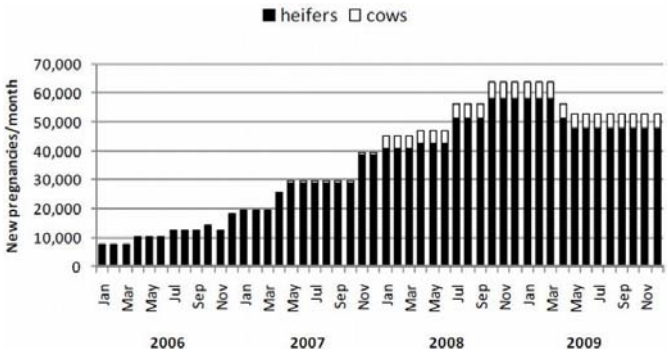


Figure 3. Number of new pregnancies with heifer calves per month in those heifers and cows inseminated with sexed semen from January 2006 to December 2009.

If these same heifers and cows had conceived with conventional semen (48% heifer calves), the number of new pregnancies with heifer calves would have been approximately 3,800 in January 2006 to 31,000 per month in late 2008 and back to about 24,000 per month in 2009. Thus, almost half of the heifers and cows would also be carrying a heifer calf if they had been inseminated with conventional semen. These heifer calves must be subtracted from the heifer calves from sexed semen to calculate the net gain. The monthly net gain in number of heifer calves ranges from 3,400 in January 2006 to 30,000 per month in late 2008 to 25,000 per month during 2009. Summed over the four years (2006 to 2009), the number of extra heifer calf pregnancies due to the use of sexed semen is 820,000. Per unit of sexed semen, about 17% more heifer calves were obtained.
These numbers of new pregnancies with heifer calves from sexed semen need to be compared with the total number of new pregnancies with heifer calves on U.S. dairy farms. USDA estimates available on the University of Wisconsin dairy markets Web site (http://future.aae.wisc.edu) showed the national population of dairy cows at about 9.1 million in 2006 and increasing to 9.3 million in late 2008 and 9.1 million in 2009. Commercial dairy cow slaughter and death losses accounted for approximately 3.2 million cows in 2006 and 3.5 million in 2009. Average annual national cull rate (including deaths) is then 35%, which agrees with the 2007 Dairy Report from USDA (2008). Culled and dead cows are replaced by calving heifers because the national cow population is fairly constant. Thus, approximately 275,000 heifers will calve monthly (starting first parities). We also estimated that approximately 440,000 cows will calve monthly (starting second and greater parities).

Of all conceiving heifers, 3% (early 2006) to 23% (late 2008), and decreasing to approximately 20% in 2009, became pregnant with sexed semen. Of the conceiving cows, 0.01% (early 2006) to 1.4% (late 2008) and then decreasing to 1.2% (in 2009) became pregnant with sexed semen. The remainder of the calving heifers and cows then became pregnant with either conventional AI or by natural service bulls, with 48% of these pregnancies resulting in heifer calves. Sexed-semen use has caused 1% (early 2006) to 8% (late 2008) to 7% (2009) more heifer calves in new pregnancies than if conventional semen had been used.

Figure 4 shows when the extra heifer calves that are a result of the use of sexed semen are conceived (conceptions), born (births) and when they are expected to enter the milking herd as heifers themselves (entering). We assumed that 80% of heifer calves enter the milking herd as heifers 24 months after they are born. The first heifer calves conceived with sexed semen in early 2006 were starting to enter milking herds in late 2008. The estimated numbers of extra heifers entering the national milking herd in 2008, 2009, 2010, 2011, and 2012, as a result of the use of sexed semen, are 8,000, 63,000, 156,000, 258,000, and 237,000. Based on the conceptions from sexed semen from 2006 to 2009, a total of 722,000 extra heifers are projected to calve in the five years from 2008 to 2012.

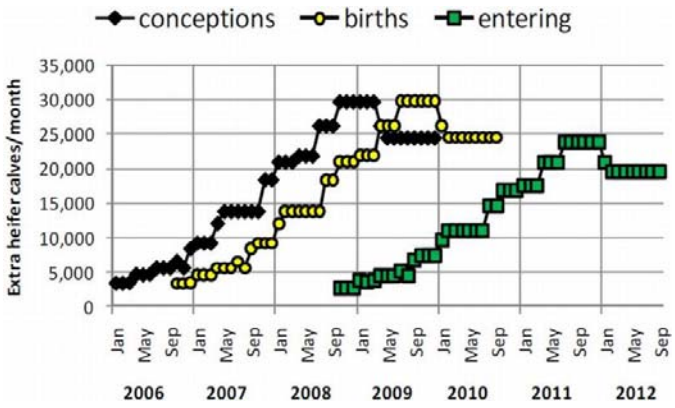
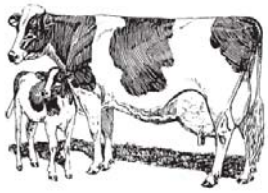


Figure 4. Number of extra heifer calves in the national population (heifers and cows) that resulted from inseminations (conceptions) with sexed semen from January 2006 to December 2009. These heifer calves are born (births) 9 months after conception and enter herds 24 months after they are born (entering).

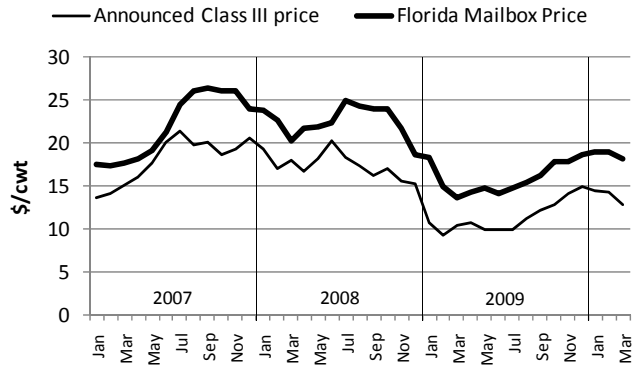
For more information, contact Albert De Vries, devries@ufl.edu or (352) 392-5594 ext 227. A slightly extended version of this article can be found at http://edis.ifas.ufl.edu/an242.



Prediction of the Future Florida Mailbox Price: August 2010 - July 2011

Albert De Vries

The realized Florida mailbox price closely follows the Class III price announced monthly by USDA. The figure shows the Florida mailbox prices and the announced Class III prices from January 2007 to March 2010. The correlation between both series of prices for those 39 months is 0.89.



The Class III futures markets provide settle prices for monthly contracts up to 24 months into the future. Economic theory holds that these settle prices are the unbiased predictors of what the market (the traders) believes will be the announced Class III price for that month in the future. These contracts are traded almost every day, so these settle prices change often. The close relationship between the realized Florida mailbox prices and the announced Class III prices, and the availability of Class III futures prices, provide an opportunity to predict the future Florida mailbox prices.

Economists of the University of Wisconsin developed a formula to predict the Florida mailbox price. The formula is: Florida mailbox price = 0.888 x (Class III price) -0.541 (Q1) -1.511 (Q2) -0.092 (Q3) -0.000 (Q4) +6.208 where Q1, Q2, Q3 and Q4 are 0 or 1 according as whether the price pertains to quarters 1, 2, 3 or 4. For the Class III price, we use the Class III futures settle price for months into the future. The formula was developed by regressing the Florida mailbox price on the Class III price from 2001-01-01 to 2010-03-01. The inclusion of the 4 quarters implies that the difference between the Class III price and the Florida mailbox price is the smallest in the spring (Q2) and the greatest in the fall (Q4).

When we used this formula with the actual monthly prices from January 2007 to March 2010, we found that on average the actual Florida mailbox price was $0.61/cwt higher than what the formula predicted. In 20% of these 39 months, the actual Florida mailbox price was more than $2.40/cwt higher than what the formula had predicted. On the other hand, in 20% of the months the Florida mailbox price was at least $0.87/cwt lower than what was predicted. Accurate prediction of future milk prices remains difficult.

Using the Class III future settle prices of July 15, 2010 and the formula, we predict the Florida mailbox price for August 2010 to July 2011 as follows:

Month	Year	Class III settle price*	Predicted Florida mailbox price
August	2010	15.06	19.49
September	2010	15.18	19.60
October	2010	15.04	19.56
November	2010	14.83	19.38
December	2010	14.83	19.38
January	2011	14.55	18.59
February	2011	14.50	18.54
March	2011	14.53	18.57
April	2011	14.54	17.60
May	2011	14.52	17.58
June	2011	14.44	17.51
July	2011	14.50	18.99

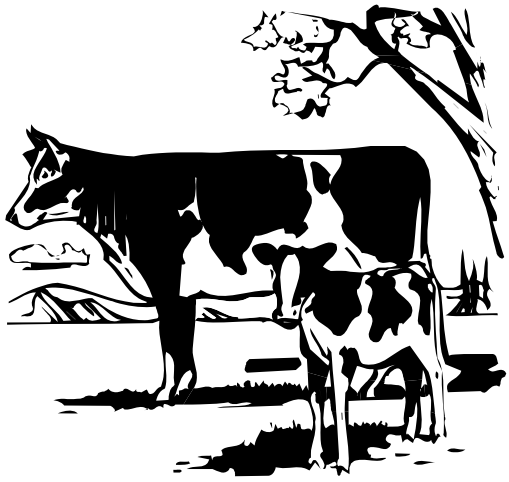
Class III settle price as of July 15, 2010.

For more information, contact Albert De Vries, devries@ufl.edu or (352) 392-5594 ext 227.

Dairy Extension Agenda

- South GA/North FL Dairy Update Lunch - Tuesday, **July 27**, noon to 1:15 PM at the Brooks County Ag Center, Quitman, GA. Speakers will be Dr. Ron Barnett on new small grain and grass forage species available for this area and Dr. Cheryl Mackowiak on the nutritive uptake of those forages. Please RSVP to Mary Sowerby (meso@ufl.edu or (386) 362-2771) to reserve your sponsored lunch by Friday, July 23.

- Dairy Risk Management Meeting, Tuesday, **July 27**, 7 PM to 9 PM, at the Lafayette County Extension Office, Mayo, FL. Dr. John Van Sickle will be leading the discussion on when to push the hedging trigger. This event can be viewed via polycom at any county extension office in Florida and the Tifton, GA, UGA conference center with advance notice of your intent to attend. Please contact Mary Sowerby (meso@ufl.edu or (386) 362-2771) by Friday, July 23, if you are interested in attending at a site other than Mayo.



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