

New Year's Resolutions For 2011

David R. Bray

Happy New Year to you all. It's time again to plan for a successful New Year on your dairy and give thanks that 2010 is gone. This time of year is a good time for planning, not only for this year but the future. This means how do we continue to improve the things we do well and what do we change or eliminate the things we don't do well.

- 1 Revisit your business plan. Make sure you can take advantage of upswing of the economy, where can you reallocate your resources to increase your profits. Continuing with cut-backs may not be the most profitable plan.
- 2 Set new performance goals for all the enterprises or areas of your dairy. These should have employee inputs also as this is the road map for success. These will then set the goals for your employees to strive to meet the whole dairy's performance and safety goals.
- 3 Implement some sort of employee retraining program to insure they understand their responsibilities in this quest for improvement to reach your goals.
- 4 These performance goals then are translated to employee job descriptions and compensation for their part of meeting the dairy's goals. These are to be explained at the employee performance review.
- 5 Do only what you can do well. If you can't raise calves, use a calf raiser or buy replacements. If you can't grow crops, buy them or have custom grown and or harvested.
- 6 Go visit other dairies in the country and go to Extension and other dairy meetings. You might get some new ideas and reconnect with people you have not seen in a while.
- 7 Replace out-dated, worn out milking equipment. If maintenance had slipped last year, the milking system is the only thing that makes you money on your dairy.
- 8 Milk clean dry udders and dip teats.
- 9 Dig out the back of your freestalls, add new sand.
- 10 Keep cows as clean, cool and comfortable as possible.
- 11 Inventory your blind quarters, replaced missing leg bands, apply new bands to new found blind quarters, and cull those 2 quartered beauties. Nothing builds employee satisfaction like milking a bunch of 2 quartered cows!
- 12 Hire help with more teeth than tattoos.
- 13 If you get out of breath tying your shoes, lose weight or wear pull on boots.

- 14 Keep a smile on your face, people will wonder what you are up to.
- 15 Keep mycoplasma at bay, pasteurize your calf milk.
Contact Dave Bray at drbray@ufl.edu or call (352) 392-5594 ext. 226.

47th Florida Dairy Production Conference: March 30, 2011

The 47th Florida Dairy Production Conference will be held Wednesday March 30, 2011. Location will be the Best



Western Gateway Grant, located just off I-75 exit 389 in Gainesville, Florida. The program will include in and out of state speakers who will discuss the latest in dairy production and dairy economics. The complete program will

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

Feed More Calcium to Reduce Movement of Phosphorus from Dairy Cow Feces

Charlie Staples, Daniel Herrera, Willie Harris, Vimila Nair, and M. Josan

Recommended concentrations of dietary phosphorus (P) for lactating dairy cows have been reduced in recent years in order to reduce the excretion of P in manure. This reduction in manure P has resulted in less P spread on dairy farm land thus reducing the amount of P moving with water to adjacent land and streams. The target concentration of dietary P for lactating Holstein cows is now between 0.32 to 0.38% of dietary dry matter depending on milk yield. Researchers in Wisconsin and Pennsylvania reported that feeding a diet below this lower concentration (0.32%) resulted in less milk production. Diets fed to milking cows can still be in excess of target P values if several feeds are included in the diet that contain a high P concentration such as brewers grains (0.59%), whole cottonseeds (0.60%), hominy (0.65%), distillers grains (0.83%), corn gluten feed (1.00%), wheat midds (1.02%), cottonseed meal (1.15%), wheat bran (1.18%), and rice bran (1.78%). The inclusion of these feeds in the ration may be attractive because of their lower market price from time to time.

Movement of P from manure depends upon its solubility. We conducted a study to try to reduce the solubility of P in feces by feeding more calcium (Ca). The theory was that the

extra Ca in the diet would bind with the P to form a less soluble complex (hydroxylapatite or whitlockite) resulting in feces containing P in a less soluble form, yet the same concentration of total P. Lactating Holstein cows were fed diets of 0.38% P that also contained either 0.64% or 0.95% Ca (dry matter basis). The source of Ca was either calcium carbonate or calcium chloride. Milk production averaged 76 lb during the 63-day study. Feces were collected from the cows and dried. Fecal samples were washed with water ten consecutive times to simulate long-term effects of a wet environment on P movement. Phosphorus was measured in the water extract after each washing. The extent of P extracted was reduced from an average of 48% to 38% when the dietary concentration of Ca was increased from 0.64 to 0.95%. When applying this to the cows in this study, soluble P is decreased from 16 to 11 grams per cow per day. When projected over a year's time for a 500-cow dairy, an extra 2010 pounds of P would remain on farm land rather than leaving through leaching. Calcium in the carbonate and chloride form were both effective but the calcium carbonate is the preferred form due to better fat-corrected milk production and market price for calcium carbonate. X-ray diffraction analysis of the fecal samples verified that more of the fecal P was in the unavailable form when cows were fed more Ca. Production and composition of milk as well as feed intake were not affected by feeding more Ca. Digestibility of nutrients including P was not changed. Solubility of P in dairy cow feces can be reduced preemptively by increased dietary supply of Ca when cows are fed the recommended dietary concentration of P.

Charlie Staples is in the UF/IFAS Department of Animal Sciences. Herrera, Harris, Nair, and Josan are in the UF/IFAS Department of Soil and Water Science. For more information, contact Charlie Staples at chasstap@ufl.edu, or call (352) 392-1958.

400,000 or Bust

David R. Bray

It seems our E.U. friends across the pond have found a new trade barrier to burden us with. They want all milk in the country they import dairy products from to have a cell count below 400,000. This is not a big challenge for much of the United States since they have been receiving cell count bonuses for a long time because their milk goes into cheese production and the cheese makers have found that high cell count milk produces less cheese.

Here in Florida where we are a fluid market and we actually import 20% of our milk, mostly in the summer, most processors have not paid or are not going to pay a bonus for low cell counts. My guess is, these regulations are not going to be a big money maker for the dairymen in the South.

What has to change to meet these regulations?

For most of us not much. We have invested heavily in new barns, fans and sprinklers, sand bedding and have done a remarkable job of teat dipping and dry low therapy. I don't know if there is a herd left in the state of Florida that has any

Strep Ag and most herds are Staph Aureus free. We are stuck with environmental organisms but the barns and bedding management improvements we have more a clinical mastitis problem than a SCC problem. The better the job of stall maintenance, the less mastitis or SCC problems we have.

Dry period

The dry period still is an important part of the prevention of problems. Every spring calving lots should have old dirt removed and replaced with new soil graded to prevent wet spots. Careless weed is still a big cause of teat end damage on cows, heifers and calves. The thorns cut teat ends on any aged animal and will draw flies and cause mastitis and blind quarters.

Know what you have

1. It's a good idea to do routine bulk tank cultures to determine what pathogens you have. Most of us here are free of contagious pathogens. If you have high levels of contagious pathogens your post milking teat dipping is not being carried out and/or your dry treatment scheme is not being carried out, or you are using the wrong product. You may need to get your veterinarian more involved in this area.
2. Monthly DHIA cell counts allow you to follow a cow's progress or lack thereof, and to find high SCC cows to do something with. If you have many high SCC cows that have never been treated, find out and do something about it. Treat these high cell count cows, check milking procedures because your milkers are not doing a good job of checking cows.

Milking procedures

1. Milk clean dry udders and teats.
2. Remove units when the cow is milked out, with the vacuum off.
3. Pre and post dip with a approved teat dip, NO teat sprayers for post dipping!
4. Maintain and check milking equipment on a regular basis.

Clinical mastitis

There are many schemes to treat clinical mastitis:

1. You can culture, use bi-plates to check for gram negative or positive bacteria and do selective treatments. This takes some skills to do. It is expensive and if your help has more tattoos than teeth – skip this one.
2. Treat every new case of clinical mastitis per label direction on the commercial tube you use.
3. Extended treatment schemes have worked in some cases. Be sure to follow recommended milk withholding for these procedures and again use your veterinarian for advice in this area.
4. You can't beat a dead horse. Once you have treated a quarter for five (5) episodes of clinical mastitis in one lactation, cull the cow because she is losing money. CULL JUNK COWS!

5. Constantly review your milking procedures to insure what you are expecting is what you are getting.

Summary

For most dairymen the New Regulations will not be a big problem. For the smaller older dairies it maybe more of a challenge since they do not have the options new dairies do, even though you are producing milk that meet all legal PMO standards.

Alternative to roller coaster exports

If all dairymen in the US and all their employees and suppliers would buy butter instead of margarine we would not have to put-up with this variable export market. We are not producing too much milk in the US, we are just not consuming enough. Shame on anybody associated with the dairy industry that does not buy and consume our own products. This would also use less soy products, so maybe our cows can have cheaper feed.

Contact Dave Bray at drbray@ufl.edu or call (352) 392-5594 ext. 226.

Florida Students Participated in the 5th Southern Regional Dairy Challenge

Albert De Vries and Mary Sowerby

The 5th Southern Regional Dairy Challenge was held November 18-20, 2010 at Mississippi State University in Tupelo, Mississippi. MSU hosted 70 students from 15 universities. Other participating schools included Alabama A&M University, Berry College, Clemson University, Eastern Kentucky University, Florida State College of Jacksonville, Louisiana State University, Middle Tennessee State University, North Carolina State University, Santa Fe College, Southern Illinois University, University of Kentucky, Virginia Tech, West Virginia University and the University of Florida.



Students at the 5th Southern Regional Dairy Challenge.

The Dairy Challenge events allows dairy science students to apply theory and learning to a real-world dairy while working as part of a team. Day one begins with each four- or five-person team receiving information on a real-life dairy, including production and farm management data. Following an operation evaluation, teams develop a comprehensive program including recommendations for nutrition, reproduction, milking procedures, animal health, housing and financial management. The first day concludes with an informal dinner with sponsors. Day two is a presentation day,

where team members present recommendations to a panel of judges. Competition is stiff, and team members must field questions from the judges. Presentations are evaluated based on the analysis and recommendations. The evening concludes with a reception and awards banquet.

Look for an interview with the host farms of the 5th Southern Regional Dairy Challenge in Issue 18 of *Progressive Dairyman* magazine, delivered in mailboxes December 11, 2010 or on-line at <http://shar.es/XBZw5>.

Year after year, Dairy Challenge benefits the students, the universities, dairy producers and agribusiness - the dairy industry as a whole - as it generates prospective employees who are more experienced and knowledgeable, and will be better prepared to serve the industry of the future. The Dairy Challenge events are generously sponsored. For a list of sponsors: <http://www.dairychallenge.org/sponsors.php>

In addition to the Southern Regional event, there are Midwest, Northeast, and Western regional Dairy Challenge events. The National Dairy Challenge, where students from schools across the US and Canada compete, will take place March 31 - April 2, 2011, in Hickory, North Carolina. The University of Florida will host the 6th Southern Regional Dairy Challenge on November 17-19, 2011 in North Central Florida.



Florida students at the 5th Southern Regional Dairy Challenge in Tupelo, Mississippi. In back: Mary Sowerby (coach), UF students Jamie Burnham, Kim Hencken, Erika Schwarz, Lauren Mayo, Stephanie Kirchman, Lauren Ellison, Albert De Vries (coach). In front: C.P. Ryan (Florida State College of Jacksonville), David Kirkman (Santa Fe College).

Prediction of the Future Florida Mailbox Price: January 2011 - December 2011

Albert De Vries

In the Summer and Fall 2010 issues of Dairy Update, I described how the realized Florida mailbox price closely follows the Class III price announced monthly by USDA. 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 future Florida mailbox prices.

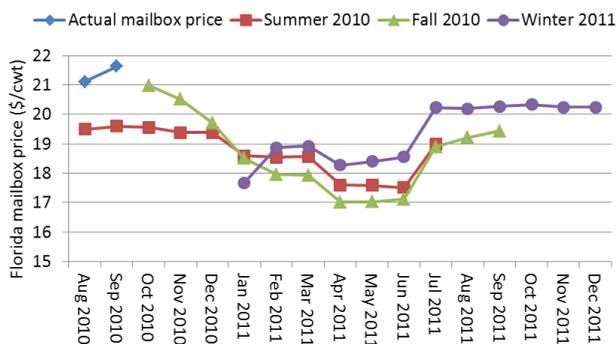
Using the Class III future settle prices of January 12, 2011 and a formula for the association between the Class III price and the Florida mailbox price, we predict the Florida mailbox price for January 2011 to December 2011 as follows:

Month	Year	Class III settle price*	Predicted Florida mailbox price
January	2011	13.52	17.67
February	2011	14.87	18.87
March	2011	14.93	18.92
April	2011	15.30	18.27
May	2011	15.44	18.40
June	2011	15.61	18.55
July	2011	15.90	20.24
August	2011	15.85	20.19
September	2011	15.94	20.27
October	2011	15.90	20.33
November	2011	15.80	20.24
December	2011	15.80	20.24

Class III settle price as of January 12, 2011.

Actual Florida mailbox prices are typically announced by USDA three or four months after the relevant month. Therefore the latest mailbox price currently announced is for September 2010. In the Summer and Fall 2010 issues of Dairy Update we also predicted future mailbox prices. Obviously, every day Class III futures are traded, the predicted future mailbox prices change a little bit. The figure shows the predictions from the Summer, Fall, and current Winter issues of Dairy Update, as well as the actual Florida mailbox prices for August and September 2010. It turned out that in the Summer 2010 issue (Class III settle date was July 15), our predictions were too low. Just a reminder that predicting is difficult, especially when it is about the future ...

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



Actual and predicted Florida mailbox prices.

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Learn About Bioenergy from Manure

Ann C. Wilkie

Interest in manure digester systems and bioenergy production is at an all-time high. 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 sixth national two-day conference at the Boise Centre in Boise, Idaho, on May 11-12, 2011. 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 technical presentations, networking opportunities, and exhibits. The conference will also include site tours of two local dairy farm anaerobic digestion systems. Full conference information, including agenda, online registration and tour details, will soon be available at the AgSTAR website, <http://www.epa.gov/agstar>.



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.

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

Dairy Extension Agenda

- The 37th Annual **Southern Dairy Conference** will be held in Atlanta, Georgia on January 25-26, 2011. Visit <http://southerndairyconference.com> or contact Dr. Jeffrey Bewley at jbewley@uky.edu.
- 22nd Annual **Florida Ruminant Nutrition Symposium** will be held in Gainesville, FL, on February 1-2, 2011. Visit <http://dairy.ifas.ufl.edu> or contact Jose Santos at jepsantos@ufl.edu.
- The 47th **Florida Dairy Production Conference** will be held in Gainesville, FL, on Wednesday March 30, 2011. The program will be announced shortly. Contact Albert De Vries, devries@ufl.edu, visit <http://dairy.ifas.ufl.edu>.