

A SHIFT IN MILK MARKETING: IS THERE A LESSON WE CAN LEARN?

Roger P. Natzke

Recently the Board of Directors of SMI made a landmark decision when it decided to essentially go rBST free. Why? Is there a health issue? Is milk from cows treated with rBST inferior to that from non-treated cows? Is it more profitable to produce milk in the absence of hormone treatment?

The answer to each of these somewhat rhetorical questions is a resounding NO!!! Yet this group of dairy industry leaders took this bold step. Why? Because the customer wants it that way! No scientific evidence, just the clear mandate the customer demands it.

More than a decade ago, as research on rBST was just beginning, it took some rather ingenious methods to insure a market for the milk from cows on rBST trials— for fear that some activists would break the story and upset the consumers. Once the hormone was approved for use by the FDA and the milk was in the general supply and being accepted by our customers, we breathed a sigh of relief and assumed the battle was over. WRONG! The introduction of organic milk, the consumer shift to “natural” and “health foods” resurfaced the issue. The result: the SMI Board elected to accept what appeared to be the only option available: give the customer what they want even though it means reducing the profitability of milk production in Florida.

Whether we want to acknowledge it or not, we have another similar issue lurking out there ready to rear its ugly head: the issue of the legal limit for SCC. The current law states that milk with more than 750,000 SCC/ml is not to be sold or shipped across state borders. The Interstate Milk shippers, which set the standards for milk, have regularly had a proposal, endorsed by the National Mastitis Council, before them to lower the level from the current 750,000 cells/ml to 400,000 cells/ml. The compelling argument for it is that our competition in the international market has adopted the lower threshold.

Many in the scientific community, yours truly included, have argued that since there is no health significance involved, the standard should remain the same. There is plenty of scientific evidence to support that stand. Yet we recognize that somatic cells can be called pus cells. That term doesn't ring well with consumers. We also know that the milk business is a

competitive one and when competition gets tough, don't expect that competitors who can supply milk with fewer cells to refrain from making the consumers aware of the differences. If you think this suggestion is “off the wall”, I refer you to a recent Editorial in Dairy Today. It would be very easy to convince consumers that they really want the milk with fewer cells for their children.

Are we going to learn from our recent rBST lesson? When the mandate came to the Cooperative to begin supplying milk only from cows that do not receive rBST, it was a relatively easy process to stop giving injections and be in compliance. (Yes, I recognize that stopping “cold turkey” will have a negative effect on some cows.)

Complying with a lowered cell count standard will be much more difficult. Herds that are producing milk at or near the legal limit will need months and possibly even a year to get into compliance. It simply can't be done over night. While producing milk with fewer cells is difficult and especially challenging in the South. But it can be done. We have producers in this state that consistently produce milk with a cell count as low as we hear reported “up north”.

However, experience tells us that change never occurs without an incentive. In this case, because there is no source of funds to provide a financial incentive, the Cooperative may need to facilitate change by initiating and enforcing a more rigorous milk quality program. It will take a concerted effort on each farm, but through time the financial rewards will come. There is plenty of scientific evidence to show that cows with lower SCCs produce more milk. Thus with improved “milk quality” producers will be rewarded with increased milk production and with the knowledge that they will not be broadsided with the next consumer demand.

Are we willing to learn from our recent experience and take a proactive role or are we going to sit back and hope it never happens?

Roger P. Natzke is a Professor Emeritus in the UF/IFAS Department of Animal Sciences

NEW LIVESTOCK (DAIRY) AGENT

Mary Sowerby

Hello to both new and old Florida friends – dairy producers, 4-Hers and their leaders and parents, my IFAS co-workers, and other dairy industry folks. I feel a

bit like a boomerang that got lost in space a few years before returning back to Florida to resume UF dairy extension work. I have landed further north this time (from 1993 to 2000, I was in Hillsborough County). My new office is in Live Oak at the Suwannee County Extension Office (phone: 386-362-2771, email maso@ufl.edu). My primary territory will be Suwannee, Lafayette, Gilchrist, Levy, Dixie, and Madison Counties.

I am in the process of assembling an advisory committee for programming direction (any volunteers?). Dr. Dan Webb tells me this area is over-due for PC Dart enhancement training, so we will get that scheduled soon. I will be inviting Dave Bray to come visit some herds soon too, so if you have mastitis, cooling, stray voltage, or other facility problems, please give me a call and we will be sure to visit your dairy.

Several dairies in this area are already on the Dairy Business Analysis Program and some of you will be getting preliminary reports back from Russ Giesy soon. Russ tells me data is still being collected for 2006, however. So, if you have never been on the program and would like to start, or just have not found the "round to it" to get last year's data submitted, please give me a call and I would be glad to come help you get the needed data on the submittal forms. It is work to get all the data collected, but most states have nothing even vaguely comparable as far as information in return, without hiring a private accountant for big bucks. I would urge you to take advantage of this program, designed to help analyze where your enterprise financial strengths and weaknesses might be.

I am really glad to be back in Florida. I am looking forward to visiting with old friends and meeting new in northern Florida and around the state. Please give me a call if I can be of service to any of you.

*Mary E. Sowerby, Extension Agent III - Multi-county.
1302 11th Street, Live Oak, FL 32060. Email:
meso@ufl.edu, Tel: 386-362-2771; Fax: 386-364-1698*

IT'S MYCOPLASMA SEASON AGAIN

David R. Bray

Every year about this time our bulk tanks show positive for Mycoplasma. This year it's in our bulk tank for the first time in a couple of years. Twenty years ago this would have induced a rush of fear and panic here. Now it is common place for Mycoplasma to appear and disappear in most herds in Florida every summer. Mycoplasma is often treated as a secret disease and the answers are held only in C.I.A files. It is called a highly contagious disease that only can be controlled in the milking parlor, with extreme sanitation and numerous milk samples taken to identify this organism and the positive cows should be immediately culled to eradicate the disease from your dairy. These thoughts often originate with people who own microbiology labs.

Mycoplasma life style. Is Mycoplasma a contagious organism like strep ag which only lives in the udder, and when the infected udders leave, the organism leaves? No, Mycoplasma lives in various places in the animal, the udder and the respiratory tract, and seems to move from the respiratory tract to the udder by the lymphatic system and or blood, cow quarter to quarter infection probably is a within cow event, not from the outside milk contamination during milking. We have cultured *m. bovis* in calving pastures, cow lots, calf lots, and sand free stall beds. Mycoplasma sheds its organisms at some times and not at other, so it is here and gone for no reason. As you all know by now, Mycoplasma is untreatable since they have no cell walls and antibiotics don't work.

For these reasons I can't agree with those who think killing cows without clinical mastitis that test positive for Mycoplasma will eradicate the disease from the premises. My thoughts are not necessarily shared by everybody, but I'm in the education business and my job is to make you think. I will give you my thoughts and you can decide for yourselves. Always consult your veterinarian when you make radical practice changes.

History. Mycoplasma has been around since the 1970s and only in a few states with large herds, because those few states were the only states that tested for the organism because it took specialized media and it takes 7 days to grow on a plate as compared to 48 hours for most pathogens. The first big herds that had outbreaks treated every cow in the herd with antibiotics to cure and or prevent the disease. Unfortunately, they spread Mycoplasma through the bulk antibiotic mix and infected the whole herd. Not knowing this at the time, they concluded that this spreads during the milking process, especially since clinical mastitis starts in one quarter and spreads to multiple quarters in the cows. Back flushers were invented to stop the spread from cow to cow. There is no research to prove that back flushers do stop the spread. In fact, some research shows that the spread of Mycoplasma from one quarter to another is done internally through the lymphatic system or blood stream.

Popular control methods. Culture and cull methods: Cow killing is a popular way to try and control Mycoplasma. In Florida, most samples are taken by a bunch of milkers with dirty gloves, 5000 sample bottles and 20 alcohol pads squirting milk everywhere and contamination everything in sight. These samples are sent to the lab. A bunch of cows are positive and you kill them even though most were negative. You can often find one positive cow in a 6000 gallon tank of milk. Think what a bunch of fingers on a milk covered glove will do for spreading Mycoplasma to other samples bottle lids. If you wish to kill cows, at least resample the positive cows with a supervisor with clean gloves sanitized between each cow.

Culture and segregation method: positive non-clinical cows can be put into a separate herd and milked last. This is fine if you have room for a separate herd and it

has clean bedding, shade, fans, cooling and the cows can be fed the correct ration. Research has shown that if you post dip and segregate, you can slow down the spread of mastitis from cow to cow. If you separate and do a poor job of post dipping, you still have the spread.

If positive cows have been kept in the herd they were in, many of those cows will stay non clinical or become negative. You can dry treat them like a normal cow and a good chance she will calve free of Mycoplasma. Cows shed the organism; some don't, so go by clinical signs.

Calves. My thoughts are that Mycoplasma's biggest losses to the dairy farmer are from respiratory problems (cows and calves). The calves will have respiratory problems, get over it and will drop dead if she calves with her second calf in the summer.

The second problem in calves is tilt ear infections on head droop. Most don't recover from this and must be put down. Bad joints are also a problem. The best way to slow down the spread to calves is to use a real pasteurizer, not some tub over the top of a turkey fryer. Pasteurize for one minute at 158° F or two minutes at 148° F and it should be adequate.

Sources of Mycoplasma outside of the animal:

1. Mud or dirt in calving lots or pastures, regular pastures or lots and dirty free stalls. In Florida Mycoplasma lives in the soil and stalls all year long.
2. Calf feeding equipment and calf pens.
3. Bottles of antibiotics- *never use a syringe, needle etc. on more than one animal or use anything but a commercial tube for intra mammary infusion.* Mycoplasma is also air borne, it's a respiratory disease and you can contaminate the bottle top, syringe, hands and spread it to every animal you treat with that bottle. Remember that to culture Mycoplasma you add antibiotics to the plate to kill off the pathogens so the slow growing Mycoplasma will grow on the plate.

Sources of Mycoplasma inside the animal:

1. Nose, lungs and respiratory tract of the animals, also the udders of your own animals.
2. Purchased animals, calves, or fresh heifers, sharing a water tank or milking parlor at the country fair or picking up a respiratory problem at the county fair or at the neighbors fence.

How can you handle an udder Mycoplasma outbreak and how do you identify these positive animals?

1. Most mastitis outbreaks follow a respiratory outbreak three weeks before the mastitis problem. If you are going to separate animals with Mycoplasma, I would get every respiratory animal away from the rest of the herd until they stop blowing mucus everywhere.
2. You can sample these respiratory cows before or once they become clinical. If they don't become non clinical, cull them. Many will become non clinical and stop shedding. Some will shed and won't become clinical and some will do nothing.

If dairymen would cull every clinical mastitis cow that does not clear after treating for a week, or has clinical

mastitis in more than one quarter and drop in milk production, he would cull his Mycoplasma problem cows, his Staphylococcus cow, and his Streptococcus Uteris cows and not spend a cent on sampling. Any cow that has four treatment episodes in a lactation should be culled; she is rotten and not economically productive. No matter what the organism is, in Florida where we have no bonus plan for somatic cell count this is an economically way to do this.

Mycoplasma control. Mycoplasma never leaves a dairy; it lives there like the cows. It will be eradicated when the dairy is a parking lot.

1. Keep fresh dirt in calving and maternity pens and lots
2. Keep stalls clean, clean out the back of sand from free stalls at least once a year; this will also reduce other organisms.
3. Mow careless weeds, leaking milk, cut teat ends and million fly's going from teat end to teat end does not help.
4. Pasteurize calf milk or feed milk replacer.
5. No bottle antibiotics mixes.
6. Keep milking machines in good repair.
7. Cull chronic clinical cows.
8. Segregate respiratory cows.
9. Or follow the normal way and culture and depopulate the herd, everybody has their own comfort level to risk. You need to follow yours.

BIOENERGY – 2007 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. The Florida Department of Agriculture and Consumer Services hosted a "Farm to Fuel Summit" in Orlando, on August 30 through September 1, 2006, which attracted nearly 400 participants.



The **2007 Farm to Fuel Summit** will be held **July 18-20** at the Marriott Renaissance Vinoy Resort, in St. Petersburg. The 2007 Summit will be a great opportunity for industry leaders to further discuss Florida's energy future and join in shaping the future 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. Governor Charlie Crist has been confirmed as a keynote speaker and will be in attendance to outline his vision for Florida's Energy future. For the 2007 Summit agenda and registration information visit http://www.floridafarmtofuel.com/summit_2007.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 Department of Soil and Water Science.*

PASSING OF DR. BARNEY HARRIS

Dr. Barney Harris of Gainesville, Professor Emeritus of the University of Florida Institute of Food and Agricultural Sciences, died May 7, 2007, after losing a long battle with cancer. Dr. Harris was born December 20, 1931, in Prescott, Arkansas. He received his BS degree from Oklahoma State University, his Masters degree from LSU and his Ph.D. from Oklahoma State University. He taught two years at Southern Arkansas University in Magnolia, Arkansas and served two years in the Army stationed at San Diego, California. He moved to Gainesville in 1963, accepting a position at the University of Florida as Extension Dairy Nutritionist at IFAS. He was a member of numerous professional honor societies and received many prestigious awards before retiring in 1994. After retirement, he became a private consultant with several companies and continued to work with Florida's dairy industry. In lieu of flowers, contributions in Dr. Harris' name may be made to: the American Cancer Society, 2121 SW 16th St., Gainesville, FL 32608 and/or the Building Fund of Westside Baptist Church, 10000 Newberry Road, Gainesville, FL 32606.

2007 DAIRY BUSINESS CONFERENCE: MONDAY, SEPTEMBER 10

The annual Florida Dairy Business Conference is being planned for Monday **September 10**, 2007. Location is again the Marion County Extension Office. This is the day before the monthly SMI Board meeting in Ocala, so dairy producers can more easily attend both meetings with one trip away from the farm.

Greg Bethard has agreed to present ideas on cow management and profitability from his unique perspective as a consultant to large dairies, both across the US and worldwide. Greg was on the agenda 4 years ago and was one of the most popular DBC speakers in the series.

Dieter Krieg, editor of Farmshine, has agreed to speak on social issues of the day related to dairy production. He continues the trend of inviting agricultural communications folks to our conferences. Farmshine is a weekly magazine that covers farmers and agribusinesses primarily in the Northeast. Check out their website at <http://www.farmshine.net>.

Russ Giesy will speak about the potential impact of proposed environmental regulations on the sustainability of dairy farms in Florida.

Mary Sowerby, the newly rehired livestock/dairy agent in North Florida, will preside. Other speakers and topics are forthcoming. For more information, contact Russ Giesy, giesyr@ufl.edu, (352) 793-2728.

2007 FLORIDA DAIRY PRODUCTION CONFERENCE PROCEEDINGS AVAILABLE

Albert De Vries

The 44th annual Florida Dairy Production Conference was held May 1, 2007, in Gainesville, FL. In attendance were over one hundred dairy producers, allied industry representatives, UF students, staff, and faculty and others. Like the previous year, the 2007 conference was well received. We estimated that the owners or managers of nearly half of the dairy cows in the state were present. A copy of the 2007 proceedings is now available on the UF/IFAS Florida Dairy Extension website at <http://dairy.ifas.ufl.edu/dpc>. The website contains the complete proceedings from 1990 to 2007.

Dr. JOSE SANTOS HIRED AS ASSOCIATE PROFESSOR OF DAIRY NUTRITION

Word just came that Dr. Jose Santos has accepted the faculty position in Dairy Nutrition Research/Extension (the "Mary Beth Hall position"). Dr. Santos is currently associate professor at the University of California-Davis School of Veterinary Medicine. He is based at the school's Veterinary Medicine Teaching and Research Center in Tulare, CA. Dr. Santos is noted for his applied and basic research on nutritional management to enhance health, reproduction and lactation performance of dairy cattle. Dr. Santos obtained his DVM degree from São Paulo State University in Botucatu, Brazil in 1992. He received his M.S. and Ph.D. degrees in ruminant nutrition from the Department of Animal Sciences at the University of Arizona in 1995 and 1997 respectively. Starting date may depend on the recent faculty hiring freeze announced by the president of the University of Florida.

