The North Carolina Dairy Stabilization and Growth Program's Strategic Planning Committee has been formed and begun work on a plan of action. This committee is made up of a cross section of NC’s dairy industry, including representation of dairy producers, various producer organizations, NCDA&CS, Farm Bureau, State Grange, NCSU’s Colleges of Agriculture and Life Sciences and Veterinary Medicine, Cooperative Extension Service, NC General Assembly, representatives of dairy equipment and supply, feed industry, veterinarians, agricultural lending agency, and dairy processors.

The Strategic Planning Committee has set four goals that will be used in determining the value of ideas or proposals as it relates to the development of the strategic plan. These goals are 1) will it enhance or add dollar value to the milk and dairy products produced in NC, 2) will it improve dairy farm family quality of life, 3) will it help increase farm numbers, and 4) will it increase the volume of milk produced in NC. These goals will be used to develop plans of action for the retention of existing dairies, expansion of existing dairies, relocation of NC dairies within NC, and recruitment of new dairies from within or outside of NC.

The Strategic Planning Committee has established a timeline for it to follow, and by mid-September representatives of the Planning Committee will have been on tours and fact finding missions to the states of Wisconsin and Pennsylvania. During October an initial draft of the strategic plan will be developed and then finalized during November. Workshops will be held for NC’s dairy producers and support industries during the winter months to discuss the plan.

The NC Dairy Security Committee is continuing its efforts to have a dairy response plan that will both protect against the spread of a foreign animal disease and allow for minimal disruption in the movement to market of NC’s milk. On farm procedures are being developed at this time, with the goals being that these procedures will be effective in helping protect your herd and prevent the spread of disease without being excessive. These foreign animal disease response procedures should be finalized this fall and explained to NC producers this winter.
**Piedmont Research Station Dairy Field Day**

The NCDA Piedmont Research Station will host a dairy field day on **Friday October 5, 2007**, starting at 10 a.m. Tours of the dairy research facilities, including the recently renovated and updated milking parlor, an opportunity to visit with NC State University researchers about the applied dairy research projects being conducted at the station, and comments from NCDA personnel will highlight the day's program. The station is located on Sherrills Ford Road near Salisbury, NC. Lunch will be provided.

**MILC Program Extended**

The USDA has announced the extension of the Milk Income Loss Contract (MILC) program payment rate calculation at 34 percent for Sept. 2007. The rule was published as a final rule in the Federal Register announcing the change. Under previous law, the MILC payment period and 34 percent rate expired at the end of Aug. 2007, and the payment rate for Sept. 2007 was zero percent. The house-passed farm bill extends the MILC Program through 2012.

**How Do I Replace Corn Grain in the Ration?**

Dr. Lon Whitlow  
NCSU Extension Dairy Specialist

Corn price has been driven up by a demand for producing ethanol. This has driven up the prices of other feed ingredients as farmers search for feed alternatives. In addition there are fewer acres devoted to other crops like cotton. This summer, dry weather has also played a role in feed prices.

With an increase in ethanol production, there is also an increase in production of distillers grains, which is the spent grain and solubles residue from the distillery. While distillers grains is not a direct replacement of corn grain, research has shown distillers grains can be fed at levels of 10 to 20% of the ration dry matter with good milk production results. Levels of use are dependent on other ration ingredients and total ration nutrient levels such as total fat and fiber in a properly balanced ration.

Distillers grains direct from the distillery are wet. Dairy operations near the distillery can use the wet distillers feed resulting in a cheaper alternative feed, but wet feed can not be economically transported long distances. Drying and transportation to North Carolina adds additional costs, making the price for distillers grains generally unattractive in our area. While relative prices may change, currently, feeds such as corn gluten feed, soy hulls, brewers grains and cottonseed are better nutritional buys in North Carolina.

Replacing corn grain with by-products can reduce starch and sugar contents of the diet. For example, the starch + sugar content of corn grain is 75%, but it is generally lower for by-product feeds. The starch + sugar content for some byproducts is: distillers grains 14%, corn gluten feed 30%, soy hulls 14%, brewers grains 14% and cottonseed 55%. Formulating the ration to contain a minimum of 25 to 30% NFC, 5 to 6% fat and using highly digestible fiber sources will ensure adequate fermentable energy when using by-product feeds.

Because starch and sugars are important energy sources, rations formulated with lower amounts of corn must provide adequate amounts of fermentable energy. Fortunately, corn silage is also a good source of starch and sugar. Even in drought years, starch and sugar content of corn silage
can be similar to good years. Research shows that with rations based on corn silage, milk production can be maintained with by-product feeds containing low starch and sugar levels. On the other hand, hay-crop silages, which are lower in fermentable carbohydrates, must be supplemented with concentrate feeds that provide higher levels of starch and sugar.

Summary: Corn prices are high. In North Carolina distillers grains provide no cost advantage due to the cost of drying and transportation. If your rations are based on corn silage, even droughty corn silage, many by-product feeds can substitute for corn grain in a properly formulated ration and maintain excellent milk production. In comparison to corn silage rations, those based on hay or hay-crop silages must be supplemented with greater amounts of fermentable energy in the concentrate feed.

**A Call to War…..When Mycoplasma Strikes**

Dr. Mitch Hockett, Assistant Professor
NCSU Department of Animal Science

Recently I was in a discussion with a colleague at Louisiana State University, and she was telling me about a producer in her state who lost his entire farm due to mycoplasma. The more you discuss this topic with producers around the country, the more you realize how common an issue it is. Why, then, do we seem to know so little about it? One answer may be that the people who have dealt with it prefer not to ever mention it again. My goal in this series of articles is to prevent someone from being caught unaware. From experience, I can say that I have witnessed the physical damage done to the cows, as well as the mental, physical, and financial damage that mycoplasma may bring to the individuals who work with the cows on a daily basis.

In the first article I wrote about the enemy “mycoplasma” and some about how they differ from typical bacterial pathogens that cause mastitis. I also discussed some symptoms of myco in calves and cows. In this issue I will discuss about taking a closer look at yourselves and the current situation that exists on your home farm. The approach will be to ask yourself a series of questions. Answer them honestly, or you will be the only one being fooled.

First of all, **do you have a closed herd?** I think the best way to define a closed herd is one that has not brought animals in, and does not allow contact with animals from other dairies. Some may take a more aggressive definition to limit contact by people from other farms, but this is quite extreme. In this day of dwindling dairy numbers and necessary expansion to survive, most dairies have purchased animals from somewhere. If you are one of the few who have grown internally, then congratulations! For the rest of you, it is likely that you have mycoplasma on your farm. This does not mean that you have active infections and shedders or that every case of mastitis you see is myco, but it does mean that you need to be aware that usually farms bring myco in when animals are purchased or through contact with other infected animals. It would appear that downsizing is not an option in the industry, so large animal purchases will continue. Therefore, we must become educated about the animals that are purchased. Screen animals before they are bought. When possible, buy groups from a known source and have animals tested before they are purchased. At the minimum, do a bulk tank sample and if possible, screen milk from every animal. If you can stop myco at the door it will be worth the expense of testing the animals 1000 times over.

**Have your cows had unexplained mastitis cases that persist after treatment?** Or, **do cases appear to clear only to come back time after time?** If so, then there are several pathogens that could be the culprit. Every case of chronic mastitis is not due to mycoplasma. Milk samples should
be taken from mastitic quarters before treatment and cold stored until microbiology can be performed to determine the causative pathogen. This is a good practice for farms regardless of mycoplasma. Knowing the pathogen profile for a farm is priceless information, and knowing what antibiotic is effective against a pathogen is even better. Microbiology can give you this information and many veterinary practitioners in the state are equipped with laboratories to give you this information. The state veterinary lab and NCSU College of Veterinary Medicine have these services as well. Many producers hesitate because it costs money to run a milk sample. Ask yourself this question: How much money do I pour down the drain every day that I treat a cow for mastitis and she doesn’t get better? If you answer this honestly, the cost of the microbiology will prove minor, and the information could save you money in the long run. Additionally, bulk tank samples may be run to determine if myco is present in the herd already. If so, you may choose to sample strings of cows to narrow down to the infected individuals, and therefore you save money by not sampling every cow in the herd.

Do you detect many cases of pneumonia in your herd or in your calves that do not seem to respond to typical treatments? Mycoplasma often first rears their ugly head as respiratory infections. They can spread from cow to cow in this way, and do not have to colonize the mammary to spread. Calf loses can be tremendous if a treatment protocol is not established quickly. Cows may also die from mycoplasma infections in the respiratory system. Nasal swabs can be cultured to determine pathogen type. Producers may wish to have animals that die from pneumonia like symptoms posted to determine cause. Again, you may contact your local veterinarian, the state lab, or NCSU college of veterinary medicine for assistance. Remember that calves with mycoplasma often show a drooped ear due to infection in the ear, and if not treated, this may result in a tilted head. Be familiar with the signs so that your response may be quick.

These are just a few questions that you may want to ask to get to know your own situation a little better. Many producers are surprised by the answers they get, even though they thought they were doing everything right. After all, what is wrong with buying animals and bringing them to your farm? The answer could be “nothing” or it could be “everything”. Producers who have survived outbreaks on their farm would typically change their management decisions if they could do it all over again. Take some time to look at your operation in the mirror and see if you are prone to a mycoplasm outbreak, or are you in the middle of one?

In the next issue I will outline management strategies for dealing with an outbreak of mycoplasma with feedback from individuals who have come through the fight.

**Organic Dairy Topics to be Featured at November Conference**

Dr. Steve Washburn  
NCSU Extension Dairy Specialist

The 22nd annual Sustainable Agriculture Conference will be held on November 9-11, 2007 in Durham, NC at the Durham Marriott and Civic Center in downtown Durham.

Sponsored by the Carolina Farm Stewardship Association, the theme for the 2007 Conference is: “The Changing Face of Local Food” which will include multiple educational topics and discussion. Three (3) 90-minute sessions on Saturday, November 10 will feature organic dairy production, moderated by Dr. Steve Washburn.
**Session 1** is from 8:30 a.m. until 10:00 a.m.: *“Developing and using an organic philosophy in dairy production.”* The speaker is Mr. Ron Holter, a very successful dairy producer from Jefferson, Maryland. Ron will provide information about the philosophical shift as his farm moved from conventional practices to being a pasture-based, seasonal-calving herd with use of many organic practices. The farm received official organic certification in 2005.

**Session 2** is from 10:30 a.m. until 11:45 a.m.: *"Transitioning to organic dairying in NC - Perspectives from two recently certified dairy farms."* Speakers in this session will be Mr. George Teague of Reedy Creek Farm in Guilford County and Mr. Chris Hoffner of Hoffner Dairy Farm in Rowan County. These two NC dairy farmers describe the reasoning behind their decisions to become organic dairy producers and discuss the challenges they faced in being among the first few dairy farmers to transition to organic milk production in the Carolinas.

**Session 3** is from 2:30 p.m. until 4:00 p.m.: *“Herd health strategies for organic dairy and livestock production systems.”* The featured speaker is Dr. Hubert Karreman, author of *Treating Cows Naturally: Thoughts and Strategies*, now in its second printing. Dr. Karreman is a practicing organic dairy veterinarian and owner of Penn Dutch Cow Care veterinary practice in Quarryville, PA. He will share his philosophy in use of natural approaches to maintain and improve animal health. Learn more about plant-derived medicines, colostrum whey products, biologics, acupuncture, and other alternative treatments for routine and emergency animal health situations. Dr. Karreman will also be a discussant during the other two sessions.

Registration information for the conference can be found at: http://www.carolinafarmstewards.org or by calling 919-542-2402 at the Carolina Farm Stewardship Association office in Pittsboro, NC. Rates for Saturday conference events vary ($75 to $125) depending on meals and whether or not registration is in advance. Registration for the entire 3-day conference is $250 in advance and $300 on site.

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**Cheesemaking Short Course**

The 4th annual Hands-on Cheese making Short Course will be held at NC State University on November 28-30. Because the course is very intensive and hands-on, only twenty (20) applicants will be accepted. Featured instructors are MaryAnne Drake (NCSU), Dave Barbano (Cornell) and Dave Potter (Dairy Connections). The three-day agenda covers a variety of topics, participants will get to make cheese on site, and a reference notebook will be provided. Topics include: basic cleaning and sanitation; overview of milk processing and regulations; milk and milk components; basic microbiology; microbiology and phage control of fermented foods; overview of cheese making; basic steps and chemistry; specialty cheeses; animal feed and nutrition; farmstead business economics; and packaging and labeling issues. The hands-on production will include Milled Cheddar, Farmers Cheese, and either Feta or Fresh Mozzarella with hands-on quality testing. Fee for the short course is $550 for registrations postmarked by September 28, 2007 and $650 after September 28. Fee includes short course materials, lunches and breaks. Hotel and other meals are not included. For more information and registration, contact:

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