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Louisiana

# Dairy Digest

*Your Herd Management Resource*

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## NOVEMBER - DECEMBER 2005

### Dairy Market News

**Bill Herndon, Dept of Ag. Econ., Mississippi State University**

#### October and November Advanced Class I Prices Continue to Rise

Milk and dairy product prices continue to be supported by strong domestic and international demand despite the surge in milk production across the U.S. The devastating effects of Hurricane Katrina certainly damaged the dairy industry in Mississippi, Louisiana, and Alabama and these impacts will be felt for many months into the future. However, the relatively small amounts of milk produced in these states will have very little effect on national or regional farm milk prices despite the huge impacts in the storm affected areas. Only about 1 million pounds of milk (or 0.2%) is produced each day in the impacted area compared to 480 million pounds nationally. The hurricane-impacted affects will not influence total milk U.S. output or supplies.

However, Hurricanes Katrina and Rita will certainly have a dampening effect on the U.S. economy that may depress dairy product demand and consumption. The Milk Income Loss Contract (MILC) program appears to be another casualty of the storms. Congress, as it strives to finance the huge recovery efforts, has so far failed to extend the MILC program that terminated on September 30, 2005.

The October and November Class III Advanced skim milk prices were once again the Class I movers (based on the value of skim milk used in cheddar cheese production) because they were greater than the corresponding Class IV prices (representing skim milk value in butter and milk powder products) for both months. The Federal Milk Marketing Administration (FMMA) for Federal Order 7 announced on September 23 that the October Advanced Class I milk price would be \$17.37 per cwt. (for 3.5% butterfat milk). This Advanced Class I price includes the Class I "base" price of \$14.27 plus the \$3.10 Class I differential for the pricing zone which includes Atlanta, Georgia. This represents an INCREASE of \$0.57 per cwt. above the corresponding September price of \$16.80.

The FMMA for Federal Order 7 announced on October 20 that the Advanced Class I price for November would be \$17.66 which includes the Class I "base" price of \$14.56 plus the \$3.10 Class I differential for the pricing zone which includes Atlanta, Georgia. This represents an INCREASE of \$0.29 per cwt. above the corresponding October price of \$17.37.

Dairy producers need to remember that Class I price is an important, but not only, factor influencing revenues derived from the sale of their milk produced during the month of October.

<b>Advanced Class I Milk Price @ 3.5% bf</b>	<b>North Central MS Zone Price</b>	<b>Price Change vs. vs. October 2005</b>	<b>Percent Change vs. October 2005</b>
October 2005	\$17.37	—	—
September 2005	\$16.80	↑\$0.57	↑3.4%
August 2005	\$17.54	↓\$0.17	↓1.0%
October 2004	\$17.88	↓\$0.51	↓2.9%
October 2003	\$17.37	No Change	No Change



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## **Market Conditions.**

Very uncertain is the phrase being used to characterize the U.S. economy in the wake to two catastrophic hurricanes that hit the Gulf Coast. Both of these storms caused horrific loss of lives, decimated thousands of square miles, and instigated billions of dollars of damage to homes and businesses in Mississippi, Louisiana, Texas and Alabama. The relief and recovery costs have been estimated to total \$200 billion for Katrina and \$60 billion for Rita and a large portion will probably be financed from federal government sources. Economists are predicting that these storms will dampen U.S. economic growth by as much as 1-2%. However, they also point out that huge government spending for rebuilding activities will likely bolster business activities. Probably the most immediate affect of these natural disasters has been the sharp escalation in fuel prices that has impacted everyone. So, the economy will continue to feel ripple effects through much higher fuel prices, fuel shortages and the unprecedented costs associated with the recovery and rebuilding processes. Just how severely these massive disasters will affect the U.S. economy and consequently milk prices is uncertain. However, these impacts will likely be significant and could be detrimental to milk and dairy prices. Fall is the season of the year when milk prices usually trend up as milk output ebbs from the effects of hot, humid weather during the long summer months and fluid milk demand rises with the beginning of school. However, persistent growth in milk production across the nation has diminished this “normal” cyclical pattern. Adding to the uncertainty; inventories for most dairy products declined slightly. The USDA’s August 31 Cold Storage report shows total inventories of dairy products fell 4% between July and August and were 2% less than August 2004. Commercial holdings of various types of natural cheeses on August 31 ranged between 5% less and 33% more than July 31 totals and were between 3% and 17% less than last August’s inventories. Government owned stocks of butter increased from 35,000 to 55,000 pounds from last August to this August while government cheese stocks were 90% less than August 2004.

Raw milk continued to be imported into the southeastern dairy market in September to satisfy fluid needs and demand. For example, Florida milk handlers shipped in 135 tanker loads of milk during the week of September 26-30 compared to receiving 181 truckloads during the previous week and versus importing 140 loads during the same week of 2004. An additional 91 loads were imported into other southeastern states during the last week of September compared to 91 during the previous week and 40 tankers for the same week of 2004.

The relentless and incredible growth in U.S. milk output (+4.5%) continues to darken the outlook for milk prices over the next three to six months. November 2005 Class I price is expected to fall and be reported in the \$16.50 range as traders deal with numerous market issues and uncertainties. Additional negative market pressures will come from the higher energy/fuel costs while upside forces will come from increasing milk/dairy product demand as the Katrina and Rita rebuilding process begins.

Another positive factor on milk prices has been the Cooperatives Working Together (CWT) program that announced on September 28 the acceptance of 448 bids to retire almost 66,000 dairy cows. This will reduce future milk output by 1.2 billion pounds.

## **Milk Production.**

Monthly U.S. milk production is continuing to grow (+4.5%) as the number of cows on U.S. dairy farms increase along with increasing output per cow. August milk output for the entire U.S. increased for the 14<sup>th</sup> straight month and U.S. milk output has increased more than 3.0% during the first eight months of 2005 compared to the same period in 2004. Selected August 2005 milk production statistics published by the USDA are listed in the table below and clearly show continued sharp growth in milk output occurring all across the country.

Dairy farms have been adding cows at a rate of 4,100 cows per week since February; for a total of 90,000 head as compared to the same period in 2004. The major western milk producing states (California, Idaho and Arizona) added 74,000 of these 90,000 cows.

<b>Milk Production Statistics</b>	<b>Percent Change in</b>	<b>Percent Change</b>	<b>Percent Change in</b>
<b><u>Aug 2005 vs Aug 2004</u></b>	<b><u>Total Milk Produced</u></b>	<b><u>in Milk/Cow</u></b>	<b><u>No. of Milk Cows</u></b>
U.S. Total	↑4.3%	↑3.8%	↑0.5%
California	↑2.6%	↑0.8%	↑1.7%
Wisconsin	↑4.6%	↑5.0%	↓0.3%
Idaho	↑13.4%	↑4.9%	↑8.1%
New Mexico	↑6.2%	↑4.9%	↑1.2%
Indiana	↑7.5%	↑2.5%	↑4.7%
Florida	↓1.2%	↑1.2%	↓2.2%
Kentucky	↓5.2%	↓1.4%	↓3.6%
Virginia	↓3.6%	↑2.6%	↑1.0%
Texas	↑10.9%	↑10.9%	No Change

### **Dairy Product Prices.**

Dairy product prices have remained somewhat stable for the past month after rebounding from a 10-15% downturn experienced during late July. These steady product prices are being credited to various activities of the Cooperative Working Together (CWT) program funded by participating dairy farmers through a 5-cent per cwt assessment. Recently, CWT announced that it had accepted bids to remove about 66,000 cows, or 1.2 billion pounds of milk production, during their third round of its herd retirement program. CWT has also been subsidizing dairy products exports in late July and early August when cheese prices fell below a \$1.40 per pound trigger price. These measures have established some stability in dairy markets as the U.S. economy waits to ascertain the impacts of Hurricanes Katrina and Rita. However, the wide gap (12-cents instead of the normal 3-4 cent gap) between 40-pound and 500-pound barrel cheddar cheese prices has created concerns for dairy traders and most believe that block prices will likely tumble 9-10 cents in early October. Case in point over the past four-plus weeks on the Chicago Mercantile Exchange (CME), 40-pound block prices have increased 5-cents while 500-pound barrel cheese prices declined by 6-cents. Over this same time frame, Grade AA butter prices fell by only 4.75-cents per pound and Grade A NDM prices remained unchanged at 98.25-cents per pound. International markets, primarily New Zealand, continue to purchase U.S. nonfat dry milk (NDM) and formulate these products into various forms of industrial food ingredients and additives. Once again, these exports are sustaining NDM prices that have been well above the support price level of 80-cents per pound and have not allowed USDA's Commodity Credit Corporation (CCC) to purchase any surplus quantities of NDM since November 2004. The table below shows CME cash dairy prices for selected products and dates.

<b><u>CME Cash Dairy Product Prices</u></b>	<b><u>Oct 3. Prices in \$/lb</u></b>	<b><u>Sep. 2 Prices in \$/lb</u></b>	<b><u>Price Changes in \$/lb</u></b>	<b><u>Percent Change</u></b>
40# Block Cheese	\$1.5500	\$1.5000	↑\$0.0500	↑3.3%
500# Barrel Cheese	\$1.4300	\$1.4900	↓\$0.0600	↓4.0%
Grade AA Butter	\$1.6475	\$1.6950	↓\$0.0475	↓2.8%
Grade A NDM	\$0.9825	\$0.9825	No Change	No Change

### **Futures Prices and Near-term Market Outlook.**

Traders believe milk prices will decline about \$2.00 per cwt over the three to six months based on CME futures contract prices for the upcoming three months. Once again dairy farmers are urged to guard against the expected plunge in milk prices by trying to manage price risks through forward contracting or using futures contracts. Current futures contract prices remain "relatively high" in comparison to average Class III milk prices recorded from 1980 to 2005. For instance, the 25-year average Class III price for November is \$12.22, \$12.19 for December, and \$11.98 for January. As shown below on October 3, the November Class III futures contract price of \$13.57 and the similar December futures price of \$13.40 were both more than \$1.20 per cwt. above the 25-year averages for Class III prices. This is almost 10% higher than their corresponding 25-year averages. Therefore, current Class III milk futures contract prices offer excellent opportunities to "lock-in" favorable milk prices and milk sales revenues. Farmers should take advantage of these attractive futures prices and avoid the risks associated with any future significant declines in milk prices.

<b><u>CME Dairy Futures Contract Prices</u></b>	<b><u>Oct. 3 Settlement Prices</u></b>	<b><u>Sep. 2 Settlement Prices</u></b>	<b><u>% Change 9/2 - 10/ 3</u></b>
<b><u>Class III Milk Futures</u></b>	— \$/cwt —	— \$/cwt —	
November Contract	\$13.57	\$13.57	No Change
December Contract	\$13.40	\$13.26	↑1.1%
January Contract	\$12.82	\$12.60	↑1.7%
<b><u>Butter Futures</u></b>		— \$/lb —	— \$/lb —
December Contract	\$1.6000	\$1.6000	No Change
March Contract	\$1.5460	\$1.5400	No Change

## **Hurricane Losses in the Louisiana and Mississippi Dairy Industries**

**Gary M. Hay and Charles F. Hutchison, Dept of Dairy Science, LSU AgCenter**

Hurricanes Katrina and Rita had devastating impacts on every person and business enterprise in their paths. All but a handful of dairies in Louisiana (less than 10) had virtually no impacts from either on the storms. Every dairy farm east of the Mississippi River was impacted in some way by Hurricane Katrina, many very seriously; while virtually every farm in southwest, central, south central and northwest Louisiana was impacted by Hurricane Rita. Total losses include milk dumped during and immediately after the storms due to no electrical service; lost milk production during and immediately following the storm; physical damage to buildings, trees, equipment, etc.; future lost milk production due to long-term animal health problems; future costs due to animal health problems; loss of feedstuffs such as hay and silage; cost to clean up debris and repair fences, etc. Total losses to Louisiana dairy farmers over the next 12 months due to Hurricane Katrina have been estimated at \$21-\$23 million; while losses to dairy farmers due to Hurricane Rita will probably be in the \$1-\$2 million range.

Approximately 90% of the dairy industry in Mississippi is located south of I-20 and virtually every person, every business and every dairy in this region was impacted by Hurricane Katrina. Total losses over the next 12 months to Mississippi dairy farmers due to Hurricane Katrina will probably be in the \$17-\$18 million range.

## **Emergency Conservation Program (ECP) Cost-Share Funds Available for Clean-up in Hurricane Katrina Stricken Parishes**

Agriculture Secretary Mike Johanns recently announced that USDA is making more than \$170 million in emergency assistance available to agricultural producers in Alabama, Louisiana and Mississippi suffering from Hurricane Katrina. According to Willie Cooper, Farm Services Agency (FSA) Director in Louisiana; Louisiana has received an initial allocation of \$12,452,000 in ECP funds to help producers repair damage to their land and property.

USDA's Farm Service Agency's (FSA) Emergency Conservation Program (ECP) provides emergency funding and technical assistance for farmers and ranchers to rehabilitate farmland damaged by natural disasters. ECP participants can receive cost-share assistance of up to **100%** of the cost to implement approved emergency conservation practices such as debris removal and restoration of fences and conservation structures caused by Hurricane Katrina.

The sign-up period for receiving ECP funding for Hurricane Katrina is from September 15, 2005 to November 15.

The Emergency Conservation Program is administered by State and Parish FSA Committees, and is subject to the availability of funds. Locally-elected County Committees are authorized to implement ECP for all disasters except drought, which is authorized at the National Office of FSA. Some of the existing ECP eligibility rules have been waived because of the mass destruction caused by the hurricane.

Interested producers are encouraged to contact their local FSA Office for more information in determining if their damaged farm and/or pastureland may be eligible for assistance under this program.

## **Dealing with Low Quality Forage or Lack of Forage**

**Charles F. Hutchison, Dairy Specialist, Dept. of Dairy Science, LSU AgCenter**

The effects of Hurricanes Katrina and Rita were devastating to dairy farms throughout Louisiana. Many dairies are now faced with the problem of not having enough high quality forage to feed fresh and early lactation cows or enough total forage to feed the herd due to delayed ryegrass planting, reduced acreage due to trees in fields or on fence lines. Many producers lost some of their stored forage due to the hurricane and others had to feed a lot of their stored forage in the weeks immediately after the hurricane. Take an inventory and get a nutrient analysis on your remaining stored forages. If you are going to plant ryegrass, decide how many acres you will be able to plant. Calculate your forage needs for the next 6 to 7 months and compare to your current inventory including ryegrass pasture. There are several options if you are going to need more high quality forage or more total forage.

### **Lack of High Quality Forage:**

**1.** Feed more grain mix – This option will partially compensate (Remember, there is no substitute for high quality forage!) for the lack of high quality forage. However, too much grain mix in the diet and not enough forage will lead to the dreaded 'L' syndrome: low fiber, low rumen pH, low butterfat test, laminitis, low milk production, loss of body condition, loss of cows, lower income.

**2.** Feed more byproducts – This option will allow you to feed some extra fiber while at the same time providing a ration that has more energy and/or protein while avoiding the L syndrome. Even though you have more total fiber in the ration, you have to make sure that there is enough effective fiber in the ration to promote cud chewing and rumen function.

**3.** Purchase stored forages – Purchasing some ryegrass baleage or corn silage might be an option depending on where you are located. Alfalfa hay is another option in trying to get some high quality forage for your herd. However, you need to specify what type of hay you want such as a minimum of 22% CP and a RFV of 180 or higher. Yes, the cost for this higher quality hay will be higher than average to lower quality alfalfa hay, but remember the objective is to provide your cows with high quality forage.

**4.** Group cows by production level – This may take a little more work and you may have to work out some logistical problems but splitting your herd into a minimum of two groups such as: early lactation cows 120 days or less in lactation and cows above a certain level of production such as 70 lb and a group for lower producers and late lactation cows will allow you to feed the higher quality forage to the group of cows which will get you the most return on your forage dollar.

#### **Lack of Total Forage:**

**1.** The four options listed for lack of high quality forage is the place to start in dealing with a lack of total forage. Consider buying some lower quality forage for the dry cows and heifers.

**2.** Make sure your rations are balanced and that you are monitoring the nutrient content of the forages, byproducts and total ration. Monitoring the DM of wet forages such as corn silage, haylage and baleage will help maintain a balanced ration and may help conserve your forages.

**3.** Use hay racks for feeding round bales of hay and baleage, monitor refusals closely.

**4.** Proper storage of forage will go a long way in conserving the nutrient content and preventing dry matter losses of the forage.

**5.** Monitor your low producers closely and adjust the breakeven price for culling and dry offing as milk prices and ration cost change.

**6.** Consider outsourcing some of your replacement heifers to a custom grower. This will free up some of the pasture and stored forage.

## **Dealing with High Somatic Cell Counts and Mastitis after the Hurricanes**

**Gary M. Hay, Extension Dairy Specialist, Dept. of Dairy Science, LSU AgCenter**

After the initial shock and stress of dealing with the immediate aftermath of Hurricanes Katrina and Rita, many dairy farmers in Louisiana and Mississippi are dealing with high bulk tank somatic cell counts (SCC) and increased levels of clinical and sub-clinical mastitis. ***Here are a few ideas to help get your herd back on track.***

If your herd was not experiencing high SCC levels before the storm, chances are you did not have any major problems with contagious mastitis. So, many of these high bulk tank SCC levels after the storm are probably being affected by two things:

**1.** A decrease in milk production during and immediately following the storm. This was probably caused by a combination of factors: cows not being fed adequate amounts of feed and not being fed at normal times: milking times and/or milking routines interrupted due to power outage or by having more routine chores and less hired labor than normal. Anytime milk production in a cow falls, there is a good possibility her SCC will increase due to the dilution effect.

**2.** An increase in the number of udder infections due to environmental streptococcus or other environmental pathogens could increase the SCC in a higher percentage of the herd. In other words, additional stress on the cows, less attention paid to milking routines, parlor maintenance, etc. due to additional stress on the owner could lead to more cases of environmental mastitis. These infections due to environmental pathogens will probably not respond very well to lactating cow antibiotic therapy, particularly in late lactation cows. So, the best way to deal with these animals is to try to get them back on normal feeding, milking and handling routines as quickly as possible. For late lactation cows whose milk production has fallen below the breakeven point, you may need to dry them off early and dry treat them instead of leaving them in the milking herd until 60 days prior to calving.

For herds that were having SCC problems before the storm, get back in touch with your veterinarian, county agent or co-op fieldman as soon as possible to get back on track in diagnosing and resolving your SCC problems.

In either case, it will be difficult to accurately diagnose and resolve these high SCC problems without SCC information on individual cows. Now may be the time to consider getting on a routine monthly individual cow SCC testing program if you are not already on a program. Contact the state DHIA office at 225-578-3290 for more information on routine SCC testing through the DHIA program.

# Potential Animal Health Problems as a Result of Hurricanes Katrina and Rita

Christine B. Navarre, Dept. of Veterinary Science, Gary M. Hay, Charles F. Hutchison and Cathleen Williams, Dept of Dairy Science, LSU AgCenter

## Stress Related Diseases

Watch for stress related diseases in the months following the hurricanes and prolonged high temperatures. Metabolic diseases may increase, particularly around calving time. Cows may be more susceptible to metabolic problems such as ketosis, fatty liver and milk fever. Nutritional management, especially in your dry cows, is critical to prevent these diseases and to maximize production and reproduction. The following are some suggestions in dry cow and fresh cow management.

**1.** Check the body condition of the cows as you dry them off, cows that were already dry in the aftermath of the hurricanes and bred heifers that are 120 days or less away from calving. If condition is lower than optimum, you might want to consider raising the energy and protein level of the ration being fed to recoup some condition or move them to the close-up dry cow pen sooner if the ration is more nutrient dense and does not contain anionic salts.

**2.** Use an approved dewormer for heifers as they enter the dry cow pen or at least 30 days before calving. Use an approved dewormer for the mature cows as they freshen.

**3.** Use two dry cow groups: Far-Off group for cows just dried off up until about 21 days before calving and a Close-Up group from 21 days before calving until parturition. This will allow you to feed a more nutrient dense ration to these cows since their DMI will be dropping during the last 3 weeks before calving and you can add some additives that will help prevent some of the aforementioned metabolic disorders from occurring.

**4.** After calving you may want to consider giving the fresh cows some glucose precursors. They come in the form of drenches, tubes or supplements for topdressing the ration to help prevent some of these metabolic disorders.

**5.** Monitor fresh cows closely for feed intake, appetite, milk production and temperature. Consult with your veterinarian and take appropriate action as needed. The sooner the response, usually the quicker the cure and less loss of production and possibly the cow.

Any nutritional changes should be made slowly to prevent digestive upsets that can lead to more serious diseases such as ketosis and displaced abomasums (DAs). Stomach worms and coccidiosis are also more common in stressed cattle. Dry conditions decrease spread of parasites, but once the rains come, parasites will emerge and can cause disease.

## Reproductive Problems

The number of abortions or early embryonic deaths may have increased due to the stress of the storms. It may be necessary to palpate your pregnant cows and heifers to confirm they are still pregnant. Finding any pregnant cows that are now open is needed so decisions to rebreed or cull can be made in a timely manner. Interruptions in the dry cow feeding program and daily feeding routines may cause an increase in the number of difficult births (dystocia) and therefore an increase in the number of retained placentas. This is especially true in cows that calved early due to the stress of the storms and in cows that calved during the extremely hot weather in late August, September and early October.

All cows with retained placentas are at risk of metritis or uterine infections; will take longer to breed back; and are at greater risk of culling for failing to breed back. Try to get your dry cows back on normal feeding programs and patterns as soon as possible and make sure you closely monitor the calving process on ALL your cows to assist any cows that might need help and reduce the number of potential calving problems and retained placentas.

## Calf Health

The stress of Hurricanes Katrina and Rita may have a negative impact on the quantity and quality of colostrum produced by cows calving this fall. Stress and interruption of feeding may reduce the quality of colostrum in your cows and heifers. This stress may also cause a decrease in the initial health of calves born this year; especially calves born during or immediately following the storms. This will increase the number of calves with failure of passive transfer and make calf diseases more common. You may see more problems with pneumonia and diarrhea in your pre-weaned calves.

The first and most important management practice in a calf rearing program is to get the correct amount of colostrum with the correct colostrum quality to the neonatal calf ***within 4 hours of birth***. Good quality colostrum should contain a minimum of ***50-60 grams of antibodies*** per liter as measured by a colostrometer. The first colostrum fed to the neonatal calf should equal 4 to 5 % of its birth weight. On average, ***3-4 quarts of high quality colostrum*** should be fed as soon as possible after birth. Small calves may not be able to hold 3-4 quarts at one feeding. If not, then feed 2 quarts at the first feeding followed by 2 more quarts 4 to 6 hours later. All calves should consume 12-15% of their birth weight or 6-8 quarts of colostrum within the first 24 hours of life.

## Biosecurity

Stressed cattle are more likely to spread and acquire diseases. Review your vaccination program and try to make sure all of your animals are up-to-date on their vaccines. Before any new animals are brought into the herd:

- 1.** Know the source of the cattle to make sure you do not bring more potential disease problems and costs onto your farm,
- 2.** Check with your veterinarian to set up a disease testing program for any purchased animals,
- 3.** Check with your veterinarian to establish a set of quarantine procedures for isolating purchased animals. Diseases like BVD, Johne's, Anaplasmosis, Pasteurellosis and Mycoplasmosis could be brought into a herd with devastating financial consequences. Talk to your veterinarian about specific testing and quarantine procedures for your herd.

## Storm Debris Related Problems

Watch out for problems from animals either ingesting or stepping on debris blown down or uncovered during the hurricanes. Hardware disease from ingestion of metal can cause a drop in appetite and milk production and can lead to serious injury or death. Hardware disease is caused when a piece of metal or other debris pierces the diaphragm and causes an infection. The symptoms of hardware disease are cows that appear to be distressed or in pain; loss of appetite, drop in milk production and reluctance to move. Cattle may also appear to have indigestion and show signs of pain when defecating and may become bloated. These symptoms may subside or disappear within one to seven days, but may reoccur shortly afterwards.

If perforation of the heart has occurred, fluid due to infection may accumulate around the heart and produce abnormal heart sounds. The brisket may be quite flabby due to a large amount of fluid in it.

All cases of lameness or limping should be examined for nails in the hoof, deep cuts, etc.

Lead containing batteries and other toxic materials may be exposed due to building damage. Care should be taken to prevent animal exposure to these substances. Some roofing felt and other materials contain lead and should not be ingested by animals.

Toxicities can also result from animals ingesting leaves of fallen oak and cherry trees.

## Using Broiler Litter as Fertilizer for Fall Ryegrass

**Gary M. Hay and Charles F. Hutchison, Extension Dairy Specialists**

**Dept. of Dairy Science, LSU AgCenter**

With ammonium nitrate at or near record highs this fall (over \$300 per ton), some dairy and beef producers may be interested in using broiler litter as a replacement for some or all of the fertilizer needs for their fall ryegrass planting. Broiler litter contains the equivalent of approximately 58-48-37 lbs per ton of nitrogen (N), phosphorus (P) and potassium (K) on a dry matter basis. Based on current fertilizer prices, broiler litter is worth about \$40 to \$45 per ton as a fertilizer, not including transportation and spreading charges.

If you are considering using broiler litter as a substitute for commercial fertilizer, here are some additional things to keep in mind.

**1.** Broiler litter applications of 2-4 tons per acre have been effective in promoting grass growth in pastures. However, application of 8 tons or more have actually been shown to decrease pasture growth. The maximum application level for broiler litter is probably around 4 tons per acre.

**2.** The nitrogen in litter volatilizes very quickly, so broiler litter must be thoroughly incorporated into the soil shortly after application. Past research has shown that for optimal results, broiler litter should be incorporated into the soil prior to planting.

**3.** Forage growth response to broiler litter is slow and may be disappointing after the initial application. Nitrogen in broiler litter is organically bound and is not as readily available as the N in commercial fertilizer. To stimulate good ryegrass growth in the fall 4 tons of broiler litter per acre can be incorporated into the soil prior to planting and another additional 50 units of N per acre in the form of commercial fertilizer applied at planting to stimulate early-season growth.

**4.** Excess application of broiler litter can lead to excess levels of phosphorus in the soil and if applied improperly can cause nutrient runoff into nearby streams and waterways. Either of these can lead to fines and/or further regulation by state and federal regulatory agencies tasked with enforcing the U.S. Clean Water Act. Recent studies have shown applications of no more than 4 tons per acre of broiler litter when applied correctly with incorporation into the soil should be environmentally safe.

**5.** Dry cows and springing heifers should ***NOT*** be grazed or kept in fields which have been fertilized with broiler litter due to high levels of potassium (K) in the litter which will increase K levels in the grass. This can cause an increase in milk fever after calving.

**6.** Broiler litter that has not been deep-stacked and cured may contain pathogenic organisms such as salmonella and coliforms which at least have the potential of contaminating the milk supply if the litter is improperly handled on the farm.

Using broiler litter to fertilize fall ryegrass fields has the potential to save dairy and beef producers money on fertilizer costs as long as producers make very careful calculations on the total costs of incorporating litter into the soil as compared to commercial fertilizers; the litter is applied properly to avoid potential soil overloading and runoff problems and dry cows and springing heifers are not exposed to stacks of litter or fields where litter has been applied. Make sure you have broiler litter tested for nutrient content and that you have a recent soil test prior to application.

## **Dairy Science Club News**

**Bruce F. Jenny, Head, Dept. of Dairy Science, LSU AgCenter**

### **Dairy Science Student Receives National Award**

Justin Roberts of Kentwood, La is the recipient of the 2005 Outstanding Student Award presented by the National Student Affiliate Division – American Dairy Science Association at their recent annual meeting. The National SAD is a division of ADSA and met in conjunction with the American Dairy Science Association, the American Society of Animal Science and the Canadian Society of Animal Science Annual Meetings in Cincinnati, Ohio. The meetings were held from July 23-26 and attracted more than 130 students and advisers in addition to nearly 3000 professional members from the US, Canada, Mexico and elsewhere. The Outstanding Student Award is based on scholastic achievement and participation in local, regional, and national activities.

Justin was a student in the Department of Dairy Science majoring in animal, dairy, and poultry sciences with a concentration in dairy production and received his B.S. degree in May 2005. Justin was also an active member and leader in various organizations. He served as 2<sup>nd</sup> Vice-President and President of the Dairy Science Club and just completed his term as 1<sup>st</sup> Vice- President of the National SAD – ADSA. Justin was a member of the Les Voyageurs student speaker's bureau which represents the College of Agriculture, the Pre-Vet Club and served as Treasurer of the Agricultural Student Association. He is also a member of Gamma Sigma Delta Honor Society.

Justin was recognized as the Outstanding Graduating Senior in the College of Agriculture in May 2005 and entered the LSU School of Veterinary Medicine in the fall to begin studies for a D.V.M. degree.

### **Dairy Science Club Recognized at National Meeting**

LSU Dairy Science Club members Sean Armond, Tony Bridges, Abby Greenbaum, Mark Konzelman, Bridget Lyons, Karen McClelland, and Justin Roberts, along with club advisor Dr. Cathy Williams attended the American Dairy Science Association – American Society of Animal Science – Canadian Society of Animal Science annual meetings in Cincinnati, Ohio on July 23-26, 2005. The students attended the meetings as members of the Student Affiliate Division.

During the meetings the students participated in a dairy quiz bowl, business meetings, a career symposium, an awards luncheon, scientific sessions presented by ADSA members and a Cincinnati Reds' baseball game.

Bridget Lyons and Tony Bridges competed in the paper presentation contests. Bridget placed third in the dairy foods contest and was elected 1<sup>st</sup> Vice-President of the SAD for 2005-06. Karen McClelland gave a presentation about a club service project where the club organized and sponsored a campus blood drive for a former staff member who recently underwent major surgery. Dr. Cathy Williams will be serving as the 2<sup>nd</sup> Year Advisor for the National SAD. Justin Roberts was recognized with the 2005 Outstanding Student Award and the LSU Dairy Science Club received 2<sup>nd</sup> place in the club display contest, 3<sup>rd</sup> place in the scrapbook contest and 3<sup>rd</sup> place in the overall chapter contest.

### **Over 3000 Kids Tour the LSU Dairy Farm and Creamery**

Summer is a time for many young people to relax, enjoy a break from school and participate in various summer camps. It was also a time for many of these students to tour the dairy farm to learn where milk comes from and how dairy cows and calves are fed and managed or to tour the creamery and learn how ice cream and cheese are produced before it gets to the grocery store. During June and July more than 1,200 kids toured the dairy farm and over 1,800 toured the creamery. Most of these youth came from various summer camp programs in East Baton Rouge and neighboring parishes. The dairy farm and creamery, particularly the dairy store were also popular spots for contestants and other participants in the LSU AgCenter 4-H University and other campus activities. The LSU Dairy Farm and Creamery continue to provide unique educational opportunities for all the citizens of Louisiana to learn about agriculture in general and specifically about the dairy industry.

**TOP HERDS BY AVERAGE TEST DAY ENERGY CORRECTED MILK (ALL COWS)**

NAME	DATE	BR	COWS	DIM	ECM	MILK	FAT%	PRO%	RHA
KIRBY VARNADO	7/25	H	101	209	59.6	58.2	3.9	2.9	19288
LSU DAIRY	7/13	H	77	226	58.0	58.3	3.7	2.8	21962
CLIFFORD CHAMPLIN	7/18	H	198	232	57.7	57.7	3.7	2.9	21562
SE LA EXP STATION	7/15	H	204	242	54.4	55.2	3.6	2.9	21777
J PAUL ALFORD	7/5	X	102	218	54.2	53.1	3.8	2.9	19088
C JOHNSON & W LITWILLER	7/13	H	100	239	52.2	54.3	3.4	2.9	19522
FARMER'S DAIRY	7/5	H	49	246	51.2	51.6	3.6	2.9	18768
UDDER FRESH	7/13	H	96	252	48.0	52.7	2.9	3.0	17785
HILL FARM RESEARCH STATION	7/19	J	52	142	47.4	54.4	2.5	3.3	16422
PHILLIP ROBERTS	7/19	H	153	208	46.8	48.5	3.4	3.0	16186
O B MITCHELL	7/16	X	50	264	46.6	46.7	3.5	3.3	17290
LOUISIANA TECH DAIRY	7/11	H	48	237	46.2	49.8	3.2	2.7	18983
JOHN FAUNCE JR DAIRY	7/5	H	237	229	45.5	46.9	3.4	3.0	18012
GALEN NIGHTINGALE	7/7	H	74	241	45.5	49.4	3.1	2.9	20922
MARK WASKOM	7/22	H	79	273	44.3	45.1	3.5	3.0	17143
KARIE AND BRAD BLADES	7/6	H	179	301	43.3	44.0	3.5	3.0	17947
RUSSELL AND RUSTY CREEL	7/11	H	30	165	43.0	48.9	2.8	2.7	18597
ARVIN DECKER	7/6	H	62	230	43.0	46.6	3.1	2.9	19335
BOBBY GOINGS	7/4	H	106	204	41.8	43.5	3.4	2.9	16581
RODNEY HOLDEN	6/29	H	79	244	41.6	40.6	3.8	3.0	15388

**TOP HERDS BY AVERAGE TEST DAY SOMATIC CELL COUNT (MILKING COWS)**

NAME	DATE	BR	COWS	DIM	SCC	MILK	FAT %	PRO %	RHA
NED SIMMONS	7/13	H	168	217	145	34.2	3.9	3.2	13475
HILL FARM RESEARCH STATION	7/19	J	79	247	175	31.1	3.4	3.5	11774
J PAUL ALFORD	7/5	X	102	218	216	53.1	3.8	2.9	19088
SE LA EXP STATION	7/15	H	204	242	230	55.2	3.6	2.9	21777
JEFF & MARY ADDISON	7/12	J	65	205	243	35.1	3.9	3.4	11809
CLINTON STEVENS	7/6	X	123	232	270	39.3	3.6	3.1	15047
ROYCE SALLEY	7/18	X	243	209	275	29.0	3.3	2.8	13005
CIRCLE G FARMS	7/15	H	157	240	281	39.5	3.4	2.8	17541
LOUISIANA TECH DAIRY	7/11	H	48	237	292	49.8	3.2	2.7	18983
PHILLIP ROBERTS	7/19	X	137	205	294	41.3	3.6	3.1	14995
BOBBY GOINGS	7/4	H	106	204	295	43.5	3.4	2.9	16581
PHILLIP ROBERTS	7/19	H	153	208	303	48.5	3.4	3.0	16186
LOUISIANA TECH DAIRY	7/11	J	38	190	331	28.1	3.5	3.1	13403
O B MITCHELL	7/16	X	50	264	347	46.7	3.5	3.3	17290
CLIFFORD CHAMPLIN	7/18	H	198	232	352	57.7	3.7	2.9	21562
JACKSON BRUMFIELD	6/30	H	64	174	364	29.3	.	.	12786
ROBERT HUTCHINSON JR	7/23	X	107	200	370	33.4	.	.	14027
LSU DAIRY	7/13	H	77	226	376	58.3	3.7	2.8	21962
RUSSELL AND RUSTY CREEL	7/11	H	77	218	384	45.6	3.2	2.9	17461
CHARNEL BAILEY	7/21	H	250	185	386	33.0	.	.	13834

**TOP HERDS BY AVERAGE TEST DAY ENERGY CORRECTED MILK (ALL COWS)**

NAME	DATE	BR	COWS	DIM	ECM	MILK	FAT%	PRO%	RHA
SE LA EXP STATION	8/16	H	206	231	54.7	52.2	4.0	3.1	21868
SCHILLING BROTHERS DAIRY	8/25	X	37	187	48.5	37.8	5.0	4.5	14849
GALEN NIGHTINGALE	8/11	H	72	257	47.7	49.7	3.3	3.0	21179
SCHILLING BROTHERS DAIRY	8/25	H	138	209	46.7	40.8	4.3	3.9	16918
FARMER'S DAIRY	8/3	H	51	262	45.6	46.7	3.6	2.8	18896
BILLY ANDREWS	8/6	H	95	265	44.1	46.8	3.2	2.9	19764
HILL FARM RESEARCH STATION	8/16	J	51	141	43.2	48.3	2.8	3.1	16776
O B MITCHELL	8/6	X	50	256	43.0	41.6	3.8	3.2	17383
UDDER FRESH	8/6	H	95	245	42.9	46.1	3.1	3.0	17780
LOUISIANA TECH DAIRY	8/2	H	48	248	42.8	43.5	3.6	2.8	19245
BOBBY GOINGS	8/5	H	102	204	41.6	42.8	3.5	2.8	16588
JOHN FAUNCE JR DAIRY	8/2	H	239	208	41.4	42.2	3.5	2.9	18045
BROWN DAIRY FARM	8/15	H	176	259	39.8	40.8	3.5	3.0	18375
ARVIN DECKER	8/4	H	62	252	39.5	41.9	3.3	2.8	19108
LADD BLADES	8/5	H	206	274	39.3	39.3	3.7	3.0	20040
HOLLIS BANKSTON & SONS	8/24	H	91	232	38.6	38.8	3.6	3.0	17250
MARK WASKOM	8/21	H	77	297	37.4	37.7	3.6	3.0	17207
RODNEY HOLDEN	7/30	H	79	250	37.1	36.3	3.8	3.0	15508
MARVIN FLETCHER	8/15	H	176	226	36.7	37.5	3.6	2.7	18159
KARIE AND BRAD BLADES	8/16	H	173	302	35.6	38.0	3.2	2.8	17850

**TOP HERDS BY AVERAGE TEST DAY SOMATIC CELL COUNT (MILKING COWS)**

NAME	DATE	BR	COWS	DIM	SCC	MILK	FAT%	PRO%	RHA
HILL FARM RESEARCH STATION	8/16	J	51	141	218	48.3	2.8	3.1	16776
SE LA EXP STATION	8/16	H	206	231	243	52.2	4.0	3.1	21868
CLINTON STEVENS	8/3	X	126	230	290	35.6	3.5	2.9	14958
JEFF & MARY ADDISON	8/11	J	65	206	302	28.8	4.4	3.4	11748
LOUISIANA TECH DAIRY	8/2	J	42	146	326	28.7	4.0	3.2	13479
VICKIN. SHARKEY	8/23	H	204	256	333	33.5	.	.	16330
LOUISIANA TECH DAIRY	8/2	H	48	248	336	43.5	3.6	2.8	19245
C S GOTTSCHALCK	8/18	H	133	199	347	32.9	.	.	13635
PHILLIP ROBERTS	8/23	H	150	227	363	35.0	3.6	3.0	16252
J PAUL ALFORD	8/1	X	101	210	374	36.6	3.3	2.9	18979
LADD BLADES	8/5	H	206	274	394	39.3	3.7	3.0	20040
O B MITCHELL	8/6	X	50	256	401	41.6	3.8	3.2	17383
FARMER'S DAIRY	8/3	H	51	262	407	46.7	3.6	2.8	18896
TO-BEV FARMS	8/1	H	198	233	416	32.3	3.2	3.0	16885
CIRCLE G FARMS	8/23	H	151	235	423	34.3	3.3	3.0	17260
PHILLIP ROBERTS	8/23	X	135	221	429	28.2	4.0	3.2	14919
RAYMOND SCHMIDT	8/4	H	67	276	434	25.3	3.3	3.0	17089
DARYL & MARY JO ROBERTSON	8/12	H	164	238	463	27.5	3.7	2.9	16761
BILLY ANDREWS	8/6	H	95	265	483	46.8	3.2	2.9	19764
HOLLIS BANKSTON & SONS	8/24	H	91	232	488	38.8	3.6	3.0	17250

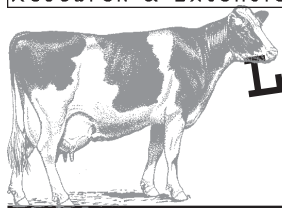
**TOP HERDS BY AVERAGE TEST DAY ENERGY CORRECTED MILK (ALL COWS)**

NAME	DATE	BR	COWS	DIM	ECM	MILK	FAT%	PRO%	RHA
LSU DAIRY	9/15	H	72	217	56.4	54.2	4.0	3.0	21976
GALEN NIGHTINGALE	9/12	H	73	260	45.8	47.4	3.3	3.0	21357
FARMER'S DAIRY	9/5	H	52	263	44.6	45.2	3.5	3.0	18913
O B MITCHELL	9/9	X	49	252	44.5	43.2	3.7	3.2	17485
TO-BEV FARMS	9/5	H	190	185	40.1	41.5	3.4	3.0	16831
HILL FARM RESEARCH STATION	9/20	J	59	149	39.9	42.7	2.9	3.4	17173
UDDER FRESH	9/13	H	95	231	39.5	41.0	3.3	3.2	17561
RUSSELL AND RUSTY CREEL	8/27	H	38	157	38.7	43.4	2.9	2.7	18924
LOUISIANA TECH DAIRY	8/30	H	48	228	37.3	39.6	3.2	2.9	19447
LOUISIANA TECH DAIRY	8/30	J	46	93	35.8	35.6	3.6	3.2	13536
C JOHNSON & W LITWILLER	9/13	H	107	209	35.0	36.2	3.4	3.0	19534
LEESFIELD DAIRY FARM	9/21	H	91	195	34.8	36.5	3.3	2.9	17420
JAMES ROGERS	9/20	H	83	200	33.4	33.9	3.6	2.9	13397
FRANCIS HOLMES	9/26	H	71	204	33.3	35.3	3.3	2.8	16255
RUSSELL AND RUSTY CREEL	8/27	H	83	184	33.0	35.9	3.1	2.8	17356
LANNY CONERLY	9/19	H	59	187	31.6	31.4	3.6	3.1	13510
ARVIN DECKER	9/6	H	48	207	30.7	34.1	2.8	3.1	18920
LANNY CONERLY	9/19	H	183	205	30.2	29.5	3.7	3.1	14139

**TOP HERDS BY AVERAGE TEST DAY SOMATIC CELL COUNT (MILKING COWS)**

NAME	DATE	BR	COWS	DIM	SCC	MILK	FAT%	PRO%	RHA
HILL FARM RESEARCH STATION	9/20	J	67	245	60	26.8	3.9	3.8	11744
HILL FARM RESEARCH STATION	9/20	J	59	149	156	42.7	2.9	3.4	17173
C JOHNSON & W LITWILLER	9/13	H	107	209	192	36.2	3.4	3.0	19534
LANNY CONERLY	9/19	H	59	187	200	31.4	3.6	3.1	13510
LOUISIANA TECH DAIRY	8/30	H	48	228	205	39.6	3.2	2.9	19447
GALEN NIGHTINGALE	9/12	H	73	260	286	47.4	3.3	3.0	21357
LOUISIANA TECH DAIRY	8/30	J	46	93	353	35.6	3.6	3.2	13536
LEESFIELD DAIRY FARM	9/21	H	91	195	368	36.5	3.3	2.9	17420
JAMES ROGERS	9/20	H	83	200	368	33.9	3.6	2.9	13397
CHARLES A BURFORD	8/29	H	136	182	378	26.6	3.3	2.9	14783
O B MITCHELL	9/9	X	49	252	398	43.2	3.7	3.2	17485
TO-BEV FARMS	9/5	H	190	185	405	41.5	3.4	3.0	16831
DUCKWORTH DAIRY	8/29	X	107	168	412	28.9	3.8	3.2	9177
LSU DAIRY	9/15	H	72	217	414	54.2	4.0	3.0	21976
LANNY CONERLY	9/19	H	183	205	423	29.5	3.7	3.1	14139
ROBERT HUTCHINSON JR	9/20	X	104	179	512	33.3	.	.	14198
UDDER FRESH	9/13	H	95	231	557	41.0	3.3	3.2	17561
BRENT & LAURIE DUNCAN	9/14	H	262	235	584	23.7	3.5	2.9	16941
FARMER'S DAIRY	9/5	H	52	263	589	45.2	3.5	3.0	18913
ARVIN DECKER	9/6	H	48	207	626	34.1	2.8	3.1	18920

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Louisiana

# Dairy Digest

*Your Herd Management Resource*

Contact your county agent  
for more information on any  
dairy herd management topic.

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Dairy Specialist