

Dairy Digest

Newsletter of the Arkansas Dairy Improvement Program

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Dairy Situation

The Arkansas Milk Stabilization Board continues to meet the second Thursday of the month. The Board hopes to send recommendations to stabilize the dairy industry in the state for legislative review within the next two months. For additional information, contact a member of the Board or your local milk marketing cooperative.

Nationally, milk production continues to run 3% above year-ago levels due to additional milk cows and more milk per cow. In Arkansas and throughout most of the southeast U.S., milk production continued to decline. From April to June, milk production in Arkansas decreased 7% and cow numbers decreased 9%.

The milk-feed price ratio decreased again in July, for the sixth consecutive record low. According to USDA, the July ratio was 1.82, a 0.06 loss from June and 1.34 less than a year ago. Downward revision in corn and soybean prices revised the June ratio up 0.10 to 1.88. A ratio of 1.82 means that a dairy producer can buy 1.82 pounds of feed for every pound of milk sold. When the milk-feed ratio meets or exceeds 3.0, it is usually profitable to buy feed and produce milk. Prior to the last few months, a ratio of less than 2.4 was considered a low milk-feed ratio.

Feed prices increased again in July but have since decreased. Corn price was up 13 cents to \$5.61 for July, \$2.29 higher than a year ago when it was \$3.32 per bushel. Soybeans rose \$1.00 to \$14.20 per bushel, which is \$6.64 higher than a year ago. Baled alfalfa hay climbed \$5 to \$177 per ton, \$40 higher than a year ago.

The all-milk price used to calculate the July ratio was announced at \$19.40 per hundredweight, an increase of 10 cents, and is \$2.20 less than a year ago.

The higher feed prices are still expected to slow herd expansion and

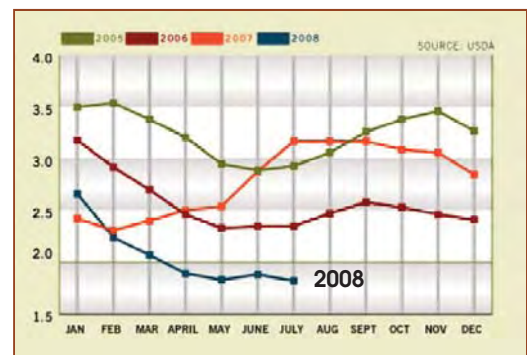
increases in per-cow production later this year. Milk production is expected to total 189.5 billion pounds this year and 190.3 billion pounds in 2009.

The good news for dairy farmers is that demand for dairy products remains strong. Despite relatively high retail prices, domestic cheese consumption is only slightly below a year ago. Exports continue strong and now account for over 10% of milk use. Cheese prices were expected to average \$1.935 to \$1.965 per pound in 2008 before recent drops, and USDA predicts an average of \$1.855 to \$1.955 per pound next year.

Exports are driving the powder market, with year-to-date shipments of nonfat dry milk and skim milk powder double that of the same period a year ago. Export sales now account for 50% of domestic powder production, according to ERS.

Cheese prices continue to decline as this is written. Milk futures have fallen \$1-\$2/cwt in the last month. Prices in the futures market bounce often, but some expect the Class IV prices may soon replace Class III as the Class I mover. July Class III price was \$18.24, down \$2.01/cwt. July Class IV price was \$16.60, up \$0.68/cwt.

Milk-Feed Ratio



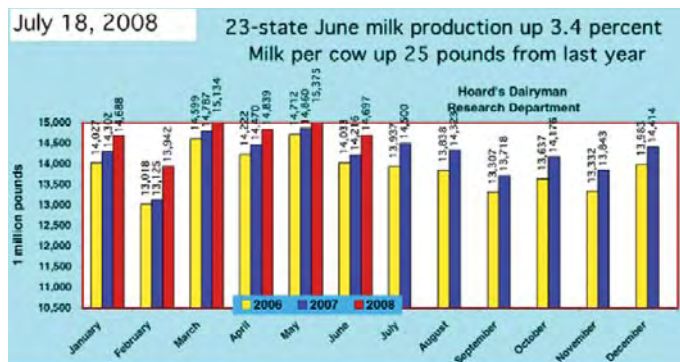
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Dairy Aspects of the 2008 Farm Bill

Christopher Wolf, Department of Agriculture, Food, and Resource Economics, Michigan State University

The 2008 Farm Bill was more of the same in many respects. However, several changes may have direct effects for dairy farmers. **Firstly**, the Milk Price Support Program was continued but renamed the Dairy Product Price Support Program. **Secondly**, dairy imports are to pay check-offs for generic advertising. **Thirdly**, the U.S. Department of Agriculture (USDA) is required to expedite the process of amending Federal Milk Marketing Orders. **And finally**, the Milk Income Loss Contract (MILC) program remains with the eligible milk per farm increased and a feed cost trigger now included.



Changing the name of the Price Support Program from “milk” to “dairy product” reflects what the program actually does, as it is an open offer to purchase cheese, butter and nonfat dry milk. The intention has been that keeping these products above a certain level will translate back to a floor on the farm milk price (set at \$9.90/cwt for the past several years). When the last World Trade Organization agreement was set in 1994, the Milk Price Support Program was rated at an enormous \$5 billion of support. That value turned out to be much larger than the actual support, as the U.S. milk price determined by market forces has been above support for most of the period since. This name change may actually affect trade agreements in a positive way by lowering the calculated effective support level in future agreements, although the exact result is unknown at this time. The program also has trigger net removal levels for cheese, butter and nonfat dry milk that result in product price support reductions. However, the current price climate is such that the support prices are below cost of production and, therefore, likely irrelevant.

Having imported dairy products pay a 7.5 cent/cwt assessment means they will pay half of the 15 cent/cwt assessment domestic production pays. This change was in response to the allegation that imports were free-riding on domestic dairy promotion efforts. The result will be to make imports marginally more expensive and is likely to be of concern in future trade agreements.

One of the criticisms of USDA in recent years has been the long period between proposed changes and implementing those changes, sometimes taking multiple years. Although if the changes were adverse to farmers, then the delay may have been welcome. California, operating their own state milk marketing order, is much more efficient at

ruling and implementing changes. However, to be fair, California regulators have a more uniform situation in the state than the federal regulators do. The 2008 Farm Bill revises Order amendment procedures. Within 30 days of a request for a hearing, the USDA must schedule a hearing for sometime in the next 120 days, request further information or deny the request. All post-hearing briefs must be filed within 60 days of the hearing date. The USDA must issue a recommendation within 90 days of the brief filing deadline and a final decision within 60 days of a comment deadline. The entire process could still take a year or more.

The Most Important Change

The most important change is likely to be inserting the feed cost adjuster into the Milk Income Loss Contract (MILC) program. Previously, MILC payments were triggered when the Boston Class I price was below \$16.94 (equivalent to a Class I mover of \$13.69). The new program uses that milk price as well as U.S. average farm price received for corn, soybeans and hay. These prices are currently used by USDA to calculate the milk-to-feed price ratio with a representative 16 percent crude-protein dairy ration. With the feed price adjuster, payments will occur when the cost of 100 pounds of feed (51 pounds of corn, 41 pounds of hay and 8 pounds of soybeans) exceeds \$7.35. Therefore, if the USDA dairy feed cost is less than or equal to \$7.35, then the MILC Class I mover target price is \$13.69/cwt. If the feed cost is higher than \$7.35, then the percentage difference between that feed cost and \$7.35 will be multiplied by 45 percent. The resulting percentage will be used to increase the target price for the month in question. For example, the May 2008 feed prices received by farmers (reported by USDA in Agricultural Prices and available online) were corn \$5.12/bu, hay \$166/ton and soybeans \$12.30/bu. Using these values, the feed cost is:

$$\begin{aligned}
 &(\$5.12/\text{bu corn})/(56 \text{ lb/bu}) * 51 \text{ lb} + \\
 &(\$166/\text{ton hay})/(2,000 \text{ lb/ton}) * 41 \text{ lb} + \\
 &(\$12.30/\text{bu soybeans})/(60 \text{ lb/bu}) * 8 = \$9.71
 \end{aligned}$$

\$9.71 is 32 percent (\$2.36/\$7.35) above \$7.35. The percentage increase in the MILC target price is 45 percent of 32 percent, or 14.4 percent. Therefore, the trigger for the Boston Class I price is increased by 14.4 percent, becoming \$19.38. To determine the trigger price on a Class I mover basis, the Boston Class I differential of \$3.25 is subtracted from the Boston Class I price (i.e., \$19.38 - \$3.25 = \$16.13, the Class I mover trigger). The May Class I mover was \$16.62 so no payment will be triggered for that month. Feed prices for each month since December 2007 have been enough to trigger adjustments in the MILC pay price. However, the Class I movers have been high enough so that no payments would have been triggered. The outlook is for continued high feed prices so that should milk prices drop, the MILC program could be an important safety net.

Another change to the MILC program is that annual payment limits were raised from 2.4 million (about 120 cows) to 2.985 million pounds (about 150 cows) per farm. As before, payment months run consecutively once a start date for that fiscal year (beginning October 1) is picked.

Herd Management Tips for Summer

Jodie A. Pennington, Extension Dairy Specialist

August and September are the times of year when most dairy cows in Arkansas are dry or close to going dry. Now is a good time to review your overall management program, but especially for dry cows.

- **Pregnant Cows:** If you do not have a recent pregnancy check, have a veterinarian check the bred cows and heifers that have not been confirmed pregnant to verify that they are pregnant. Some cows will lose their calf in the summer heat.
- **Dry Cow Management:** Proper management of the dry period is critical in order to take advantage of the present higher milk production and prices. Body condition score of a cow should be 3.5 to 3.75 on a 5 point scale. If a heifer is calving, her body condition score should be around 3.5.
- **All cows should be dry treated at dry off.** Follow the recommendations of your local veterinarian. A vaccination program might include BVD, IBR, PI₃, BRSV, Lepto-5, Clostridia-7 and possibly a vaccination for scours and/or mastitis. If necessary, cows also may be injected with selenium before calving to decrease retained placentas and possibly assist with rebreeding in the next lactation. Check your ration for selenium levels if you have more than 20% retained placentas in the summer plus consider injections of 7 cc of MU-SE at dry off and three weeks before calving. A balanced diet of forage and, if needed, grain should be provided to all dry cows. Trace minerals should always be available to cattle.
- **Calving Management:** Cows need to calve in a clean, dry environment in good body condition. Watch heifers closely in case they need assistance at calving. If a cow has problems calving or if she is not eating, you or the veterinarian may need to treat her so that she will begin eating soon and can begin producing large quantities of milk in early lactation. If assistance is provided, use a disinfectant

for you, the cow and any equipment used. Watch cows closely for health problems, especially retained placentas and metritis. Calving is the best time to deworm cattle since early lactation is the time when deworming is most likely to be economical. Most herds on pasture may need to be dewormed but check with your local vet or do fecal egg counts to determine the level of contamination with internal parasites.

- **Management of Newborn Calf:** Make sure calf is breathing and assist if needed. Devices for artificial respiration are available, but most producers can tickle the nose with straw or hay to get the calf breathing. At times, it may be necessary to hold it by its hind legs to drain fluid from the lungs to get it breathing. Dip or spray navel with 7% iodine. Make sure the calf gets 4-6 pounds of good quality colostrum as soon as possible but within six hours of birth. Vaccinate if needed, especially for scours.

One of our publications, FSA3040, *Heat Stress in Dairy Cattle*, describes the effects of heat stress on a dairy herd. Heat stress can decrease milk production by 15%-30% per day as cattle eat less and also can lower reproduction performance and animal health. As the holding pen can be the most stressful location for the lactating cow, it should be given priority over other areas of the dairy for installing facilities to improve the cows' comfort during hot weather.

The holding pens should be shaded and cooled to make the area a desirable location for making cows comfortable during hot weather. In a typical Arkansas summer and a dairy facility with no housing other than the milking center, a well-cooled holding pen should result in cows wanting to come to the holding pen when fans and sprinklers are in use. Cows that are cooled in a holding pen usually produce 1.7-4.0 pounds more milk per day than cows that are not cooled in the holding pen. In one study, cows that were cooled five times per day for 30 minutes in the holding pen produced five additional pounds of milk per day compared to uncooled cows.

Summer's Heat Is Here

Dr. Donald E. Pritchard, Extension Dairy Specialist, NCSU

Here in the Southeast, summer's heat and humidity are already upon us. Two main responses cows usually have to heat and humidity are to eat less feed and produce less milk. Another problem that often occurs with heat and humidity stress is an elevation in the somatic cell count of the herd. Below are some suggestions for reducing these summer stress responses of your cows.

1. **Ask your nutritionist to check your rations for changes that will help maintain intake and/or milk production.** Also check to be sure your cows are receiving adequate levels of vitamins A and E, and selenium. These nutrients help promote a strong functioning immune system which is needed

to combat udder-invading bacteria and elevating SCC values.

2. **Keep your cows as cool as possible so they don't congregate in wet, mucky areas where they will surely end up with dirty udders.** Cooler cows usually have better functioning immune systems to combat udder-invading bacteria. Provide shade if the cows are on pasture or in an exercise lot. Install fans and water misters in your free stall barn alleys, parlor holding pen and return alleys to cool the cows. In certain areas of the country, cooling ponds are used to cool cows, but proper maintenance of the ponds is required to keep them from becoming contributors to a problem rather than a solution.

3. **Keep the cows' udders as clean as possible so the number of bacteria the teat ends are exposed to is minimized.** It is critical to keep cows and heifers out of mud. The cleanliness of the free stalls and alleys is very important for keeping udders clean, so the stall bedding material and the alleys may need to be cleaned at each milking (or perhaps more frequently) to minimize the soil that gets on the cows. Control flies so that they don't spread bacteria.
4. **If in a free stall, consider using a different stall bedding material that is less supportive of bacteria growth.** Since the teat ends are exposed to bacteria as the cows are resting in the stalls, try to use a bedding material that does not support the growth of bacteria. Sand is the preferred bedding material of many producers. If your waste handling system cannot handle sand, then use kiln-dried sawdust/shavings. Avoid green sawdust. Pine products are preferred to hardwood products. You may want to try adding a pH-altering product to the bedding material to slow the growth rate of bacteria in the bedding. Such products must be added every two to three days.
5. **Proper udder preparation at milking time is critical to reducing/preventing the introduction of bacteria into the udder during milking.** The use of pre-dips and post dips, proper wiping and drying of the teats when cleaning them and minimizing the machine-on time are all very important in reducing the new cases of intramammary infections and in keeping the SCC value low. Barrier post milking dips may be helpful in reducing environmental pathogen-caused infections.
6. **Every milking parlor should have fans and sprinklers to give cows an opportunity to get cool at least twice a day.** Studies show that fans and sprinklers can pay for themselves in two to three years.

While producers may not be able to prevent completely the impact of summer's heat and humidity, there are practices that can reduce the economic impact of heat stress on cows. Producers should talk with their consultants and/or county Extension agents about what practices to consider implementing for their dairy.

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