

# Dairy Digest

Newsletter of the Arkansas Dairy Improvement Program

## Dairy Legislation

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**Act 968** (<http://www.arkleg.state.ar.us/assembly/2009/R/Pages/BillInformation.aspx?measureno=SB934>) was passed by the Legislature and signed by the Governor. The intent of Act 968 is to stabilize the dairy industry so there will be an adequate supply of milk for the state and to promote/maintain economic development that is associated with the dairy industry. As you know, fluid milk is different from most other food commodities since it cannot be stored for long periods of time and is uniquely required for growth of young children. In 2007, the economic impact of the Arkansas dairy industry was between \$600 and \$700 million.

There were changes from the initial program proposed by the Arkansas Milk Stabilization Board as the legislation proceeded through the legislature. However, Act 968 is similar to the initial proposal, except the Governor provided the money for funding from other sources rather than a milk tax and there are no investment tax credits. The funding is presently for two years, but the other legislation with a milk tax also would have required an appropriation in two years. Act 968 may provide money more quickly than the milk tax and should be of significant benefit to Arkansas dairy producers, especially in such tough financial times. Louisiana and South Carolina have similar legislation from tax credits, and Missouri has related legislation currently before their legislature.

All dairy producers should have received a letter from Woody Bryant, dairy farmer from Lonoke and chairman of the Arkansas Milk Stabilization Board, which states that the primary objective of the Board is to get funds into the hands of

producers as quickly as possible. The Governor and Legislature provided \$4.1 million in 2009-10 and \$5 million in 2010-11 to fund the program.

\*\*\* Details are still being developed to provide the payments.\*\*\*

Essentially, payments to dairy producers will be from two programs. Stabilization grants will be provided when the price of milk in central Arkansas is less than 70% of the weighted costs of production from USDA estimates for Missouri and Tennessee. The amount of the grants will be calculated monthly and paid quarterly and cannot exceed \$5/cwt of milk in a month or \$2/cwt yearly. Presently, the payments would be \$5/cwt due to the low price of milk relative to the costs of production but will not average above \$2/cwt for the year. Incentive grants are payable yearly at 50 cents/cwt when annual milk production exceeds the average of the two preceding years. An additional 50 cents/cwt will be paid if the increased milk contains less than 400,000 SCC.

There is no limit on the stabilization grants. Incentive grants are limited to \$50,000/year/producer and are payable if money is available after stabilization payments are made (which should not be a problem unless milk production from current producers increases dramatically in the next year). If milk production in the state continues at a rate of 190 million lb/year in 2009, the stabilization payments would be a maximum of \$3.8 million. That would leave \$300,000 for incentive grants, for an increase in milk production of 30 million lb, or a 15% increase. Milk production has been declining at a rate of 10-15% yearly. The funds associated with

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Act 968 may not all be used but could potentially provide an average of \$65,942 for each of the 138 dairy farms in the state over the next two years.

The specific legislation is at the web site above and is shown below.

## Act 968 of the 2009 Arkansas State Legislature

AN ACT TO PROVIDE FOR GRANTS AND INCENTIVES TO ASSIST ARKANSAS DAIRY FARMERS IN CONTINUING TO PRODUCE MILK IN THIS STATE; AND FOR OTHER PURPOSES.

**Subtitle:** TO PROVIDE FOR GRANTS AND INCENTIVES TO ASSIST ARKANSAS DAIRY FARMERS IN CONTINUING TO PRODUCE MILK IN THIS STATE.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. Arkansas Code § Title 2, Chapter 10 is amended to add an additional subchapter to read as follows:

### 2-10-201. Findings – Intent.

(a) The General Assembly finds that:  
(1) The State of Arkansas is at risk of losing its dairy industry if immediate legislative action is not taken to reduce the sharp decline in the number of its dairy farms; and  
(2) The loss of the dairy industry in Arkansas will result not only in the demise of dairy farming but also in significantly higher milk cost to Arkansas' citizens, including its children, and a loss of jobs in the processing of milk products.

(b) The intent of this subchapter is to:  
(1) Prevent harm to Arkansas' consumers and dairy industry;  
(2) Establish the Dairy Stabilization Program that will safeguard the interests of dairy producers in this state;  
(3) Ensure that dairy producers receive fair market breakeven prices;  
(4) Provide consumers a continuous and affordable supply of Arkansas-produced fluid milk and other dairy products;  
(5) Reverse the loss of dairy farms in the state;  
(6) Significantly curtail the increase in milk prices to the consumer by helping to ensure in-state production; and  
(7) Maintain and potentially increase jobs in the processing of milk products by stabilizing prices to dairy farmers.

### 2-10-202. Definition.

As used in this subchapter, "milk producer" means a person or entity that operates a bovine dairy farm that possesses a valid permit signed by

the administrator of the Arkansas Grade "A" Milk Program.

### 2-10-203. Dairy Stabilization Grant.

(a) The Dairy Stabilization Grant is created.  
(b)(1)(A) If funds are available, the Secretary of the Arkansas Agriculture Department shall calculate monthly the difference between the average monthly blend price of milk received by Arkansas milk producers as estimated by the secretary and seventy percent (70%) of the average monthly cost of producing milk in Missouri and Tennessee as estimated by the United States Department of Agriculture. (B) If the average monthly blend price of milk received by Arkansas milk producers is lower than seventy percent (70%) of the calculated average cost of producing milk in Missouri and Tennessee, the milk producer is eligible for a monthly Dairy Stabilization Grant in the amount of the difference, which will be paid quarterly. The secretary shall pay the milk producer, by the 15th day of the month following the end of the quarter. (2) The secretary shall not pay a milk producer more than five dollars (\$5.00) per hundred weight of milk per month under subdivision (a)(1) of this section.

(c) Grants received by a milk producer under this section shall not exceed an annual average of two dollars (\$2.00) per hundred weight of milk.

(d) Grants authorized by the secretary shall be made to the milk producer from moneys appropriated by the General Assembly for that purpose.

### 2-10-204. Milk production and quality incentives.

(a) If funds are available, as an incentive to continue milk production and to improve milk quality, the Secretary of the Arkansas Agriculture Department may pay a milk producer the following incentive payments:  
(1)(A) Fifty cents (50¢) per hundred weight of milk for each hundred weight of milk produced above the milk producer's average annual milk production. (B) A milk producer's average annual milk production specified under subdivision (a)(1)(A) of this section shall be calculated over the two (2) years preceding the year of disbursement; and  
(2) Fifty cents (50¢) per hundred weight of milk if the milk contains less than four-hundred-thousand somatic cell count.

(b) A milk producer that begins milk production after the effective date of this subchapter qualifies for payments under subsection (a) of this section after the completion of one (1) continuous year of milk production in Arkansas.

(c) Annual payments to a milk producer under this section shall not exceed fifty thousand dollars (\$50,000).

(d) If funds are available the secretary shall pay the annual production and quality incentive payments to the eligible milk producers by January 15th of the following year.

### 2-10-206. Rules.

The Director of the Department of Finance and Administration and Secretary of the Arkansas Agriculture Department shall adopt rules to implement this subchapter.

# Confusion Concerning the Diagnosis, Cause and Treatment of Cystic Ovarian Disorders

*Michael O'Connor, Penn State University Dairy and Animal Science Extension*

The incidence of cystic ovarian disorders within a lactation has been estimated to average 10% with a range among studies between 6% and 23%. There have been several definitions of cystic ovarian disorders. The majority of ovarian cysts are follicular with a smaller percentage being luteal cysts. Originally, follicular cysts were defined as follicular structures over 2.5 cm in diameter that persisted for various periods of time without the presence of a corpus luteum (CL). Currently, experts define the follicular cyst as a follicle greater than 17 mm, usually accompanied by one or more other large follicular structures and no CL present. To further complicate this syndrome is the fact that most follicular cysts are dynamic in that they disappear and are replaced by new cysts or simply disappear with the onset of normal cycles. A smaller percentage of follicular cysts persist; these are classified as chronic cysts. Thus, accurate diagnosis of cystic ovaries can be a difficult task and is a major challenge to veterinarians.

Each type of cyst (follicular or luteal) requires a specific hormonal treatment. Studies using either progesterone analysis, ultrasound monitoring of ovarian structures or both methods have consistently shown a significant error rate in distinguishing between follicular and luteal cysts based upon palpation of the ovaries. Research from North Carolina State University determined that the overall correct diagnosis of the type of cyst was 51% with palpation and 85% using ultrasound. The investigators noted these differences were probably due to the more accurate detection of luteal tissue within the ovary using ultrasonography. Unlike the chronically cystic cows 30 years ago, which were in constant or frequent estrus, research data indicates that about 80% of the cows with a cystic disorder are anestrous – fail to exhibit estrus. There are several theories that attempt to explain the physiological mechanisms responsible for the development of cysts. It is a complex problem. From a management standpoint, we must look for health, genetic or management factors associated with a higher than average incidence of cystic ovaries in some herds.

Cystic ovaries are most common during the first 60 days of lactation when cows experience the most health disorders and are under metabolic stress. Several surveys indicate that cows experiencing problems around the time of calving were most likely to develop ovarian dysfunction. These problems include twinning, dystocia, retained placenta and uterine infection. The condition is more common in second and greater lactation cows than younger cows. This is interesting in that older cows experience a higher rate of periparturient problems. Metabolic disturbances due to severe negative energy balance or ketosis were also related to development of cysts. More recently, it has been shown that cows overconditioned at dryoff were 2.5 times more likely to develop cystic ovaries after calving than herdmates in average condition. Since most cysts

develop in early lactation, people thought that high production was the major cause of the problem. More recently, it has been shown that cows either produce an equal amount or more milk when they are cystic. There is not much direct evidence of a major genetic component to this condition.

As noted above, each type of cyst, follicular and luteal, requires different hormonal treatments. Traditionally, gonadotropic-releasing hormone (GnRH) or a luteinizing hormone-like product was used to treat follicular cysts, and prostaglandin (PG) products were effective for luteal cysts. Since the standard Ovsynch timed-insemination protocol utilizes both GnRH and PG, this program has been used routinely to treat cystic ovarian conditions. Recently, the use of progesterone implants (CIDR) along with a PG injection has also been shown to be effective. A question frequently asked is which treatment is most cost effective. A comprehensive study conducted in Florida using 400 cows diagnosed with cystic ovaries compared treatment of cystic ovaries using progesterone treatment (CIDR) with a PG injection given on day 7 when the CIDR is withdrawn to the standard Ovsynch timed-insemination program protocol. Cows on the CIDR/PG treatment were watched for estrus, and those identified in heat were inseminated. The Ovsynch cows were time-inseminated without heat detection.

The percentage of cows inseminated using the Ovsynch and CIDR/PG programs was 82% and 44%, respectively. Conception rate (% conceived of those inseminated) and pregnancy rate (% of the total cystic cows in the group that conceived) for cows in the CIDR group was 23% and 9.5%, respectively. Conception rate and pregnancy rate for the cystic cows on the Ovsynch program were 18.3% and 14%, respectively. There were no statistically significant differences between treatments. However, the cost effectiveness of the treatments must be considered. As a followup to that study, a complex economic analysis (DeVries et al., 2005, *Journal of Dairy Science*) was conducted using success rates and the costs of treatment. The overall results were that the Ovsynch with timed AI protocol for cystic cows provided an \$11.39 greater economic advantage per cow than the CIDR/PG/heat detection system (assumed 46% probability of heat detection). If the heat detection rate following the CIDR/PG program improved to 70%, the benefit of the CIDR/PG program improved but was still less than the standard Ovsynch-timed AI program.

Diagnosis of the type of cysts and appropriate treatments are still a challenge. However, culling chronically cystic cows, developing a strategy to avoid overconditioned dry cows and providing balanced transition cow ration will certainly help minimize periparturient problems so that the incidence of cystic ovaries remains low.

Source: *Penn State Dairy Digest*, April 2009

## Short Notes

- (1) The deadline for bidding on the CWT program is May 1, 2009. See web site [www.cwt.coop/](http://www.cwt.coop/) for more details.
- (2) MILC payments for February have been paid and averaged \$1.51/cwt. March payments will be at least \$1.92 and probably close to \$2.10/cwt after the adjustment for the price of feed. April payments will be at least \$1.50 plus the amount for the feed price adjustor.
- (3) The following brief notes from Midwest Dairy Association are a reminder of the importance of sanitation and cleanliness in not only public relations with neighbors and potential customers for milk but also on animal health.
  - Dairy cows must be healthy and well cared for in order to produce pure, wholesome milk.
  - Dairy cows receive regular medical care, including periodic checkups, vaccinations and prompt treatment of illness.
  - Dairy farmers depend on healthy cows for their livelihoods. The public can be assured that dairy farmers care for their herd by providing a nutritious diet, good medical care and healthy living conditions.

### Upcoming Events

May 2 – Spring Dairy Show, Little Rock  
May 14 – Dairy Grazing Conference, Siloam Springs  
June 12-13 – Four-State Dairy Days, Bentonville  
June 27 – Dairy Camp in Conway

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