



July 2004

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## Opportunity to finish Environmental Stewardship Short Course

### *Classes offered in Tulare this month*

The California Dairy Quality Assurance Program (CDQAP) Environmental Stewardship Short Course for dairy producers will be offered in Tulare on July 20-21. This course is the first step for producers interested in environmental stewardship certification. The short course consists of three 2-hour classes. If you attended some but not all of the classes previously, you do not have to attend all three classes to complete the series – only those that you missed. Contact your local UCCE Dairy Advisor, trade association or creamery representative if you can't remember which part you still need to finish. These are the same classes we've been doing since 1998. Previous attendees are welcome back. Please remember to bring your binder if you have one.

The short course focuses on legal obligations of dairy operators related to water quality requirements (Federal, State, local). Course contents include review of regulations, risk assessment documents, pond storage needs, general manure management, and introduction to nutrient content of manure. Producers will be provided with information to develop emergency manure management and water pollution prevention plans specific to their dairies.

A new permit is anticipated from the Regional Water Quality Control Board for dairy facilities soon (fall 2004). Once it is implemented, many if not all dairies in the Sacramento and San Joaquin Valleys will need to get a permit. There will be an annual fee for this permit. Producers who complete environmental stewardship certification (which includes completion of the

Environmental Stewardship Short Course and a follow-up, on-site visit to the dairy by an independent, third-party evaluator) are eligible for special benefits. Benefits include a 50 percent discount on water quality permit fees and a free roadside sign that displays to neighbors and passers-by that the dairy has been “environmentally certified”. Over 200 dairies in the state have completed this certification process, and many others are well underway. More information about the process is available on the California Dairy Quality Assurance web site <http://www.cdqa.org>. You may also wish to visit with local producers in Kings and Tulare who have certified to get their perspectives. Following is the class date, time and location.

**July 20<sup>th</sup> and 21<sup>st</sup>**

**UC Cooperative Extension Office  
4437-B South Laspina St., Tulare**

Class 1 July 20<sup>th</sup> 1 to 3 PM

Class 2 July 21<sup>st</sup> 10 AM to noon

Class 3 July 21<sup>st</sup> 1 to 3 PM

## Dairy Energy Management Seminar in Tulare-September 29<sup>th</sup>

A seminar on dairy farm energy management will be held at the Edison AgTAC facility in Tulare on September 29<sup>th</sup>. The program will feature information on cow cooling, long day lighting, and techniques for evaluating the energy performance of equipment commonly used on dairies. Energy used by dairy farms will be reviewed and suggestions for improving energy efficiency will be offered. The concept of Energy Utilization Indices (EUI, or energy usage per cow per year) will be introduced. Topics covered will address energy used for the following purposes:

- Milk harvest and cooling
- Lighting, air circulation, and ventilation
- Water supply, washing, and water heating
- Compressed air systems

The program is free, but please call Southern California Edison at 800-772-4822 to reserve a place so they can plan for meals. Registration opens at 8:30AM. The seminar begins at 9 AM and ends at 2 PM. Lunch will be provided.

## **Vesicular Stomatitis Diagnosed in Texas Cattle**

### ***News of disease recalls bad memories for some California producers***

Vesicular stomatitis was recently diagnosed in cattle in Texas. **California producers should be extremely cautious about importing livestock from states which are currently experiencing outbreaks of this disease.** At this time this would mean **Texas and New Mexico.** Imported cattle should have been examined by an accredited veterinarian and include the required VS statement on the Health Certificate.

**Why should you care?** State and federal regulatory officials work to keep vesicular stomatitis from becoming established in the United States because of its similarity to foot and mouth disease, its negative impact on livestock production, and its public health implications.

Vesicular stomatitis is a viral disease that affects a number of different species including horses, cattle, and swine. It can also affect sheep and goats. The disease causes blisters and sores in and on the mouth, feet and teats. The sores can be so painful that infected animals refuse to eat and drink and show signs of lameness. Weight loss follows and in dairy cows, a severe drop in milk production occurs.

Just as important as the drop in milk production is the fact that the disease is clinically identical to foot and mouth disease. Vesicular stomatitis is recognized internationally as a reportable disease. Exports of U.S. livestock and animal

products would be restricted if vesicular stomatitis were allowed to spread in this country.

**It could (and did...) happen here.** Introduction of vesicular stomatitis into California could cause very real financial losses to producers and to the entire dairy industry. Many of you may remember that we experienced cases of this disease in California in the early 1980's. A handful of dairy producers in Kings and Tulare counties would not be in business today if not for insurance they carried. The affected dairies suffered huge losses from greatly reduced milk sales and they were forced to cull their herds drastically. At that time, the disease was traced to heifers imported from Idaho. Be very careful if you bring any animals in to your herd from out of state. Work with your veterinarian to develop a quarantine program for purchased animals to reduce your risk of introducing VS and other contagious diseases into your herd. Any animals exhibiting suspicious clinical signs should be immediately reported to your veterinarian and to the California Department of Food and Agriculture.

For additional information on vesicular stomatitis see the USDA webpage.

[http://www.aphis.usda.gov/lpa/pubs/fsheet\\_fa\\_notice/fs\\_ahvs.html](http://www.aphis.usda.gov/lpa/pubs/fsheet_fa_notice/fs_ahvs.html)

## **Local University of California Cooperative Extension Dairy Activities**

Despite recent budget cuts, UC farm advisors, specialists and faculty continue to serve the industry with educational programs and problem solving research. Following are some examples:

**Dairy Herdsman Short Course** -The Dairy Herdsman Short Course was created in response to requests from dairy producers. On many dairies, herdsmen are not sufficiently trained in the skills needed to adequately manage large dairies. The objective of this 3-day intensive program is to present the latest information in dairy herd management to improve the skills of participants. Over 190 people from throughout

the state have attended the short course. The next session will be October 19-21 in Tulare.

### **Treatment of flushed dairy manure by solid-liquid separation and lagoon aeration-**

Flushing and solid separation are major contributors to energy use for manure management. The efficiencies of solid separators and energy demand associated with manure collection and treatment are important aspects of manure management to consider in planning dairy housing systems. Solids build-up and odors are major concerns. Small aerators that are capable of aerating the surface layers of lagoons have been marketed to dairies to reduce solids and odors. There is a lack of scientific evaluation on the performance of these aerators. We conducted a project to evaluate the performance of such aerators with regard to their impact on the solid levels and odor threshold of dairy wastewater lagoons with an aim at developing guidelines for the proper applications of these aerators. Meanwhile, practical methods for quantifying and monitoring sludge levels in dairy lagoons were developed. The low rate aeration of the lagoons in this study resulted in less solids build-up and reduced odor, but it had insignificant impact on the existing sludge in the lagoons during the course of the study. More intense aeration is needed to cause significant degradation of solids in the lagoons. Additional studies of lagoon aeration are in progress.

### **Evaluation of the efficiency of “weeping wall” solid liquid separation-**

The objective of this project was to evaluate the effectiveness of a unique settling basin. This basin or “weeping wall” system has a large surface area for drainage. We wanted to determine the ability of the weeping wall to remove solids, and to characterize the particle size and nutrient content of the influent and effluent. The weeping wall was very efficient at removing particles greater than 0.125 mm in size. Percent of total solids removed was approximately 60%, which is much greater than most conventional screen-type mechanical separators that remove only 15 to 20% of total solids.

**Salmonella contamination of rubber boots worn on dairies-** Bio-security on dairies is important to reduce disease in dairy animals and to reduce the number of cattle arriving at slaughterhouses contaminated with potential human food borne pathogens. Measures to prevent the spread of pathogens from dairy to dairy play an important role, but strategies to prevent the movement of pathogens between cattle within a dairy are equally important. The objective of this study was to determine the extent that salmonella contaminate rubber boots worn by dairy workers as they move about the dairy. New rubber boots were cultured for salmonella after being worn in calving, hospital, and fresh cow pens on 27 selected dairies. On 15 of the 27 dairies studied, no salmonella were isolated. Six types of salmonella were isolated from boot swabs collected on 12 of the 27 dairies. On 92% of the salmonella positive boot dairies, the same types were found in the bulk tank milk and clinically affected cows, suggesting that the salmonella we detected in the environment were biologically related to the salmonella associated with the cows. These findings reinforce the importance of developing within dairy bio-security programs to control the movement of salmonella between housing areas. We also cultured boots after hosing them off to clean them. Salmonella was isolated from these “washed” boots 48 hours later. So salmonella can survive on boots presumably in small deposits of manure and this strongly suggests that conventional washing is an insufficient method for removing salmonella from boots.

There are many other examples of efforts by UCCE to serve the dairy industry including the California Dairy Quality Assurance Program, forage production research, and energy conservation projects. Highlights of other work will be included in future newsletters. For more information about these projects and other UCCE dairy programs, contact me at 559-582-3211 ext. 2739, or [ccollar@ucdavis.edu](mailto:ccollar@ucdavis.edu)

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