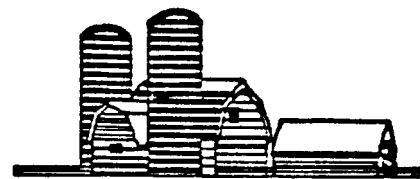


21st Century Dairying



A dairy newsletter for Fresno and Madera Counties

September 2004

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Dairy Herdsman Short Course

October 19-21
UC VMTRC, Tulare

The University of California Cooperative Extension Dairy Herdsman Short Course will be held at the UC Veterinary Medicine Teaching and Research Center (VMTRC) in Tulare on October 19-21, 2004. A brochure with registration information and course agenda is included with this newsletter. The registration fee is \$175 which includes three days of instruction, notebook with handouts from each presentation, lunches, and other take home materials. Translation services are provided for Spanish speaking attendees. To date approximately 200 individuals have attended the herdsman short course and have responded with high satisfaction with the program. Pre-registration is required since space is limited. It will be awhile till we are able to have another herdsman short course in the south valley area so you may want to take advantage now of the program. Please call Gerald Higginbotham, UCCE Dairy Advisor for Fresno/Madera Counties, at 559-456-7558 if you have any questions.



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Advanced Dairy Herd Reproduction Management Class October 22 UC VMTRC, Tulare

A special one-day advanced program for dairy employees who manage reproductive programs on dairies will be held following the Dairy Herdsman Short Course on Friday, October 22. This course is designed to provide a comprehensive Review and update on the latest reproduction techniques and strategies for maintaining a high level of reproductive efficiency on dairies. A brochure with registration information and more details is included with this newsletter. Pre-registration is required since space is limited. Please call Gerald Higginbotham, UCCE Dairy Advisor for Fresno/Madera Counties at 559-456-7558 if you have any questions.

Newsletter Renewal Reminder

By now you may have received a form in the mail asking if you would like to renew your subscription to the 21st Century Dairying newsletter as well as other newsletters produced from our office. In order to be kept on our mailing lists, please return the form with your newsletter selections at your earliest convenience. Instead of receiving a hard copy of this newsletter through the mail, you may access it at our offices web site which is <http://cefresno.ucdavis.edu>. At this web site you can sign-up to be notified when the next newsletter will be available electronically.

Professional Dairy Heifer Growers Southwest Regional Meeting November 5, 2004

The Southwest Professional Dairy Heifer Growers Association and the University of California Cooperative Extension are co-sponsoring a conference November 5 at the Stanislaus Agricultural Center in Modesto. The agenda will include renowned agricultural economist Dr. David Kohl who will send a powerful message on the drivers of production agriculture and the future view of the dairy business. Dr. Jim Quigley, internationally known for his expertise in calf rearing, will address the challenge of profitable calf rearing. The final topic will be a discussion on the upcoming individual animal identification requirements. Registration materials will be mailed soon but they can be obtained by calling me at 559-456-7558 or Rochelle Koch, conference chair, at 209-725-8253. The registration fee will only be \$35 which includes lunch! Quite a deal considering the agenda of the program.

The Impact of Contaminated Colostrum

John H. Kirk, DVM, MPVM
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Everyone knows that colostrum provides the nutrients and maternal antibody protection for the young calf. However, colostrums on some dairies can be highly contaminated with bacteria. When not properly handled, colostrums may contain coliforms, salmonella, cryptosporidia and other intestinal pathogens. Even when collected using recommended practices, colostrum may contain the Johne's bacteria, bacterial mastitis pathogens

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or mycoplasma.

Here are some places to look for possible sources of contaminated colostrums:

Cow preparation – When the udder and teats are not completely cleaned and sanitized prior to collection of colostrum at calving, fecal coliforms can easily be added to the colostrums. Great care should be taken to prepare the cow prior to collection of colostrums. The udder and teat should clean and dry prior to collection... just like a cows being milked in the parlor. The colostrums will never be any cleaner than at the first moment following collection.

Cleaning and sanitizing of equipment – Buckets or pails used to collect the colostrums should be very clean. After each use, they should be cleaned with detergent and hot water. This should be followed with a sanitizer. Steps similar to care of the milking equipment in the parlor should be followed. When not properly cleaned, equipment may serve as a place when bacteria can multiply to high numbers in between uses.

Milking equipment – The milking equipment used to milk the fresh cows should be just as clean, or cleaner than the milking equipment used to milk the rest of the herd. This equipment should be inspected and maintained on the same schedule as the main milking parlor. The best trained and most trusted employee should milk the fresh cows to ensure collection of high quality colostrums.

Cooling and storage – Like the milk going into the bulk tank for sale, the colostrum should be rapidly cooled to less than 40° F and kept cold until used. The number of bacteria will double every 20 minutes or so at improperly high temperatures. This is particularly true for contaminated colostrum. In just a few hours, the colostrum can contain lethal amounts of bacteria.

Cows with mastitis – Cows that freshen with mastitis may be putting large numbers of Streps, Staphs or environmental bacteria into their colostrums. Colostrum from cows with clinically evident mastitis should not be fed to calves.

Bottles, nipples and buckets – The equipment used to feed calves should be clean and sanitized just like the bottles used to feed the human babies at home. After each feeding, the calf feeding equipment must be thoroughly cleaned followed by sanitization. Remember that for a sanitizer to be effective, it must be used in a clean bottle and have sufficient time to act on any residual bacteria. Sanitizers are like teat dips; they need contact time to be effective.

It is possible to culture the colostrums to determine if significant contamination has occurred. Samples of the colostrums can be cultured by your veterinarian or your milk quality laboratory where you submit mastitis samples. Dr. McGuirk of the University of Wisconsin, School of Veterinary Medicine gives the following guidelines for colostrums quality:

Total bacteria count:	<100,000 cfu/ml.
Fecal coliform count:	<10,000
Other gram-negatives:	<50,000
Strep. ag.	0
Strep. non-ags	<50,000
Staph aureus	0
Other Staphs	<50,000
Salmonella	0

When excessive numbers of newborn calves suffer from diarrhea or other intestinal problems, the possible sources of colostrum contamination should be checked out to locate the possible source of the problem. Keep in mind that pasteurization of waste milk being fed to calves when properly done can virtually eliminate these problems.

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For special assistance regarding our programs, please contact us.

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