Free Engineering Technical Assistance!

University of California Cooperative Extension has FREE engineering assistance for dairy producers who want to upgrade their lagoon irrigation systems to control the rate of lagoon water application to fields, reduce commercial fertilizer expenses, and comply with new permitting regulations. **Call before March 1 at the latest to schedule an appointment:** 209-525-6800. Up to $1000 is available in cost-share assistance.

Manure Management Workshop

February 22nd, 10 AM at Stanislaus County Ag Center, Harvest Hall, at the corner of Service and Crows Landing in Modesto.

New regulations will require that dairies practice nutrient management. Fortunately, there are methods to manage manure nutrients cost effectively. The Manure Management Workshop will feature practical and economically feasible strategies for regulatory compliance. Attendance is free for dairy producers. Lunch will be provided.

Topics Include:
- Fundamental principals of nutrient management
- Reducing manure nutrients through feed management
- Innovative manure collection systems
- Eliminating inorganic fertilizer costs
- Increasing crop nutrient uptake by triple cropping

Please RSVP to Kristen at 415-977-0380; ext. 308; khughes@suscon.org

The meeting is sponsored by University of California Cooperative Extension and Sustainable Conservation
### Dairy Day Programs

University of California Cooperative Extension and Co-Sponsor Allied Dairy Industries of Central California announce the following meetings:

#### SOUTH VALLEY DAIRY DAY

South Valley Dairy Day  
Tulare County Ag Building  
4437 S. Laspina, Tulare  
**Wednesday, February 16, 2005**

#### MID-VALLEY DAIRY DAY

Mid-Valley Dairy Day  
Merced County Ag Center  
2145 W. Wardrobe Avenue, Merced  
**Thursday, February 17, 2005**

This meeting is free of charge. For more information and making luncheon reservations, call one of the following Cooperative Extension offices:

<table>
<thead>
<tr>
<th>County</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merced</td>
<td>(209) 385-7403</td>
</tr>
<tr>
<td>Tulare</td>
<td>(559) 685-3303</td>
</tr>
</tbody>
</table>

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**Program**

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 a.m.</td>
<td>UCCE Research Update</td>
</tr>
<tr>
<td>11:00 a.m.</td>
<td>High Milk Production – Does it Pay?</td>
</tr>
<tr>
<td></td>
<td><em>Albert L. Nunes, CPA</em></td>
</tr>
<tr>
<td></td>
<td><em>Genske, Mulder &amp; Co.</em></td>
</tr>
<tr>
<td>11:30 a.m.</td>
<td>CDFA Dairy Activities</td>
</tr>
<tr>
<td>12:00 p.m.</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:45 p.m.</td>
<td>Animal Welfare: The Good, the Bad, and the Ugly</td>
</tr>
<tr>
<td></td>
<td><em>Carolyn Stull, Ph.D</em></td>
</tr>
<tr>
<td></td>
<td><em>UCCE Specialist</em></td>
</tr>
<tr>
<td>1:15 p.m.</td>
<td>Motivation: The Dairy Owner’s Role in Creating a Place Worth Working For-</td>
</tr>
<tr>
<td></td>
<td><em>Jorge M. Estrada</em></td>
</tr>
<tr>
<td></td>
<td><em>Leadership Coaching International, Inc.</em></td>
</tr>
<tr>
<td>2:00 p.m.</td>
<td>On-Farm Carcass Composting: The Mid-West Experience</td>
</tr>
<tr>
<td></td>
<td><em>Tom Glanville, Ph.D</em></td>
</tr>
<tr>
<td></td>
<td><em>Iowa State University</em></td>
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<tr>
<td>2:30 p.m.</td>
<td>Carcass Composting: The Tulare Experience</td>
</tr>
<tr>
<td></td>
<td><em>John Kirk, DVM</em></td>
</tr>
<tr>
<td></td>
<td><em>UCCE Specialist</em></td>
</tr>
<tr>
<td>2:45 p.m.</td>
<td>Calf Raising: Custom vs. Home Grown</td>
</tr>
<tr>
<td></td>
<td><em>Jim Reynolds, DVM</em></td>
</tr>
<tr>
<td></td>
<td><em>VMTRC, Tulare</em></td>
</tr>
</tbody>
</table>

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The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University’s nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, CA 94607-5200 (510) 987-8896.
Cow Study Yields Surprises About Source, Amount of Dairy Air Pollution

California dairy cows produce only half the amount of air pollution as had previously been believed and, perhaps more important, most of a dairy cow's contribution to smog comes not from her manure, but from her belching, says the UC Davis scientist conducting the first controlled study of its kind.

Those unexpected findings may substantially change the thinking and the practices of California regulators and dairy operators trying to reduce air pollution.

"Our discovery means our whole approach to dairy waste management and air-emissions management might change," said Frank Mitloehner, the UC Davis air-quality specialist who is conducting the study. "We have to re-think that the only good solutions are engineering solutions, such as capping or aerating manure lagoons, and consider biological avenues such as animal feeding and management."

"For the first time we can tell dairy farmers the source of their air pollution," Mitloehner added. "For the most tightly regulated pollutant, the 700 ozone-forming gases collectively called volatile organic compounds, that source is not the cows' waste. It's the cows."

For three months, Mitloehner has studied dairy cows in controlled environmental chambers to collect precise measurements of the volatile organic gas emissions they produce. The information is urgently needed by the $4.6 billion, 1.5 million-cow California dairy industry -- the largest in the world -- as dairy producers try to comply with strict new pollution rules.

The dairy-air study is planned to last for two more weeks, but the California Air Resources Board asked Mitloehner and others to present their preliminary findings today at a meeting of
the San Joaquin Valley Air Pollution Control District in Fresno.

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The study was prompted by concern over air quality in the San Joaquin Valley, which ranks as the worst in the country. The No. 1 source of ozone (smog) air pollution in the valley is exhaust emissions from trucks and cars. The No. 2 source is thought to be gases from cows on dairy farms.

Using state-of-the-art air-collection and analytical technology, and two environmental chambers to house the cows in, Mitloehner precisely measured animal and waste production of volatile organic gases and other pollutants like ammonia and methane. He also videotaped the cows to correlate the timing of emissions with their activities, such as eating, ruminating and excreting.

His preliminary findings indicate that cows and their waste produce about 6.4 pounds of volatile organic compounds (VOCs) per year.

The only previous estimate of total VOCs -- the estimate that California's rigid new air standard is based on -- is derived from a scientific study conducted in 1938. That old estimate says that a cow produces 12.8 pounds of VOCs per year -- twice the amount that Mitloehner found.

Furthermore, Mitloehner found that about 2.5 pounds of the total 6.4 pounds, or only about 40 percent, comes from excreta.

Mitloehner is lead scientist on the $85,000 study, which is funded by the U.S. Environmental Protection Agency and the San Joaquin Valley Air Pollution Control District.

His collaborators are 14 atmospheric scientists, engineers and physicists -- six from UC Davis, three from Stanford University, two from UC Berkeley, and one each from Harvard University, Iowa State University and the U.S. Department of Agriculture.

Mitloehner is an expert on dairies and air pollution. He is a UC Cooperative Extension specialist in the Department of Animal Science in the UC Davis College of Agricultural and Environmental Sciences.

He also is the chair of the UC Davis Agricultural Air Quality Center, which has 24 associated faculty members. UC Davis is a leading center of air-quality research; with 54 faculty members working on the subject, UC Davis has the largest university air-quality research program in the United States.

**Media contact(s):**
- Frank Mitloehner, Animal Science, (530) 752-3936, fmmitloehner@ucdavis.edu
- Sylvia Wright, UC Davis News Service, (530) 752-7704, swright@ucdavis.edu
March 9-11, 2005

John Ascuaga’s Nugget ◆ Reno, Nevada

Conference Hotel
John Ascuaga’s Nugget
1100 Nugget Avenue
Reno, NV 89431
800-648-1177
reservations @janugget.com

A block of rooms has been reserved at John Ascuaga’s Nugget hotel. Please ask for the Western Dairy Management Conference block when making reservations. Special room rates are $99 + tax (single or double rooms).

Registration
To register, complete and return the attached registration form for one person, copy as needed. The conference fee is $275 if postmarked by February 1, 2005. The fee is $300 after February 1. Fees include one copy of the conference proceedings, two lunches, and three breakfasts. Additional proceedings can be purchased for $25.

Information
For more information, including activities in and around Reno, visit the Western Dairy Management website at:

www.wdmc.org/

For questions by phone, please call:
785-532-2370

The Western Dairy Management Conference is managed by—Conference Management Services, LLC

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Registration Form
(please complete one form per person, copy as needed)

Name (print or type)__________________________________________

First name preference for nametag______________________________

Farm/Business Name__________________________________________

Address________________________________________________________________________

City_________________ State______ Zip_________

Phone_________________ FAX__________________

E-mail address________________________________________

Number of cows milked_____________________________________

Check the following categories and total for payment:

☐ 1 registration (postmarked by Feb. 1; $300 after)..... $ 275

☐ Additional proceedings _____ copies @ $25 each... $___

Conference Shirts (must be ordered prior to conference)
Indicate quantity and size (XS, S, M, L, XL, XXL)

☐ Longsleeve Denim w/logo—$40
  quantity_____ size______ ......................... $___

☐ Shortsleeve Polo w/logo—$35
  quantity_____ size______ ......................... $___

Total Fees....................................................................... $___

☐ Check enclosed payable to: Western Dairy Management

☐ Charge my ☐ Master Card  ☐ Visa  ☐ Discover

Account number__________ / ________ / ________ / ________

Expiration Date__________

Signature (required)________________________________________

Please mail or fax to:
Western Dairy Management Conference
PMB 348, 1228 Westloop, Manhattan, KS 66502
-Or- FAX: 785-532-2333
2005 Western Dairy Management Conference Schedule

Registration
March 8, 3:00 to 10:00 pm; March 9 and 10, 6:30am to 5:00pm; March 11, 7:30am to Noon

Seminar Schedule
March 9 and 10, 8:00am to 5:00pm; March 11, 8:00am to Noon
Seminars will be presented twice during the conference to accommodate everyone’s schedule.

Seminar Topics
- *Pregnant versus open: getting cows pregnant and the difference it makes*, Paul Fricke, University of Wisconsin
- *Managing the heat-stressed cow to improve reproduction*, Peter Hansen, University of Florida
- *Current thoughts about cow comfort and behavior in freestall barns*, Roger Palmer, University of Wisconsin
- *Impact of increased milking frequency during early lactation*, Matt Vanbaale, University of Arizona
- *4x 6x milking panel*, Matt Vanbaale, University of Arizona, moderator
- *Evaluating and selecting cooling systems for different clients*, Mike Brouk, Kansas State University
- *Got starlings? Bird control options for dairies*, Charles Lee, Kansas State University
- *Manure nutrient export strategies*, Deanne Meyer, University of California-Davis
- *How is accelerated heifer growth working?*, Mike Van Amburgh, Cornell University
- *Business analysis: Which financial tools should I use?*, Kevin Dhuyvetter, Kansas State University
- *Making decisions using records and data*, Normand St-Pierre, Ohio State University
- *Expansion issues and pitfalls: Cows/cow comfort/facilities/financial impacts*, panel discussion, Bill Wailes, Colorado State University, moderator
- *Fresh cow care means healthier cows with more milk*, Earl Aalseth, Pilchuck Veterinary Hospital
- *On-farm carcass disposal options for dairies*, Brent Auvermann, Texas A&M University
- *Selecting, training and developing personnel to deliver results*, Jorge Estrada, Leadership Coaching International
- *Strategies for shortening the dry period*, Ric Grummer, University of Wisconsin
- *Impact of short and no dry period on dairy cattle performance*, panel discussion, Robert Collier, University of Arizona, moderator
- *Water: The most essential nutrient*, David Beede, Michigan State University
- *Feeding to minimize acidosis and laminitis in dairy cows*, Randy Shaver, University of Wisconsin
- *Feeding and nutrition management for hot weather*, Joe West, University of Georgia
- *Managing corn silage from seed to feed*, Bill Mahanna, Pioneer Hi-Bred International
- *Applying feed efficiency principles on your farm*, Mike Hutjens, University of Illinois
Dairy Herdsman Short Course

April 19-21, 2005

California State University-Fresno
CATI Conference Room
Corner of Chestnut and Barstow
Fresno, CA

The dairy herdsman short course is designed for working dairy employees. Its purpose is to provide them with the opportunity to learn about the latest technology and training in all aspects of dairy management.

Personnel from University of California Cooperative Extension, UC School of Veterinary Medicine, UC Cooperative Extension, UC Riverside and California State University-Fresno will assist in instruction. Simultaneous translation will be available at the sessions to assist Spanish-speaking attendees.

The seminar will consist of morning classroom teaching with afternoons providing hands-on training. Notebooks with written handouts will be provided to each participant.

Cost of short course

Registration fee for the short course is $180. Companies and/or dairies with more than one participant will be charged $180 for the 1st participant and $100 thereafter. Students will be charged $100. This fee includes a notebook with handouts, lunch, plus short course shirt. Pre-registration is required. No registration at the door will be accepted.

Enrollment in the short course will be limited to 40 participants. This limit is set to provide personalized teaching and hands-on training. Acceptance will be on a first come, first serve basis. All money will be returned in full for those not accepted.

Please complete the registration form in this brochure as soon as possible and send it in with the registration fee before April 11, 2005. If you need further information please contact Gerald Higginbotham, Dairy Advisor, UC Cooperative Extension, or (559) 278-6211.
Wednesday, April 20, 2005

1:30 Animal Care
   • Handling downer cows

1:00 Cow Health Diagnostics
   • Heart and lung sounds
   • Detection of displaced
     abomasums

2:30 Fresh Cow Management
   • Transition strategies
   • Fresh cow care

0:30 Reproductive Management
   • Reproductive tract anatomy
   • Hormones of the estrous cycle
   • Timed breeding programs

1:45 Fly Control on Dairies
   • Identification of fly species
   • Implementation of a fly control
     program

1:30 Lunch

1:50 Hands-on Exercises
   Lab 1 - Reproductive tracts
   Lab 2 - Cow health
   Lab 3 - Fly control strategies

2:00 Adjourn

Thursday, April 21, 2005

a.m.
9:00 Labor Management
   • Employee selection
   • Employee discipline
   • Conflict management
   • Performance appraisal

10:30 Prevention and Control of
     Mastitis
   • Basic mastitis control
   • Preventing serious outbreaks
   • Treatment strategies
   • Proper drug usage

12:00 Lunch

2:30 Dairy Herd Management
    Software Training
    • DHM Plus
    • Dairy 305

2:00 Herd Health
   • Early decisions for market cows
   • Diagnosis of common diseases
   • Vaccination strategies

3:00 Raising Replacements
   • Digestive system development
   • Colostrum management
   • Vaccination programs

3:45 Dairy Facilities
   • Maintenance of corrals,
     freestalls, etc
   • Manure management

4:15 Wrap-up Session

Directions to the CATI conference room:

Coming from the North and South on
Freeway 99:
- Take the CA-41 N exit towards Yosemite
- Merge onto CA-41 N
- Take the CA-180 E exit towards Kings Canyon
- Merge onto CA-168 W
- Take the Shaw Ave. exit and turn left
  onto Shaw Ave
- Get into right hand lane and turn
  right onto Chestnut Ave.
- Turn left onto Barstow
- The CSU-Fresno dairy and CATI
  Conference center is on the corner
  of Barstow and Chestnut

Upon request a list of nearby motels can be furnished.
Dairy Herdsman Short Course
April 19-21, 2005
California State University-Fresno
CATI Conference Room
Fresno, CA
Please send one form for each participant

Name ____________________
Street ____________________
City ______________________
State ________ Zip ________
Phone ____________________
Fax ______________________
Email ____________________

Graphic Image

Golf Shirt (Please circle size)
Men: M L XL 2X 3X
Women: S M L XL 2X

Enclosed is $____ for _______ people
to attend the meeting at $180 per person.
$100 for each additional participant from
dairy and/or company. $100 for students
Make check or money order payable to U
Regents. Mail to: Gerald Higginbotham
UCCE, 1720 S. Maple Ave., Fresno, CA
93711.
Dairy software used or would you like more
info on:
Dairy 305 __________________
DHM Plus __________________
Other ________________