

Thinking about buying a manure treatment technology?

Deanne Meyer, Livestock Waste Management Specialist, UC Davis and UC ANR
dmeyer@ucdavis.edu

It's February and that means World Ag Expo. Many will be seeking cost effective solutions to improve herd or manure management. Complex situations require strategic analysis of information to sift through myriads of alleged "solutions" and find what will work for your dairy. For California dairy producers there are many competing challenges that influence what you may be interested in. Across the state producers are concerned about nitrogen and salt management and capitalizing on carbon emissions reductions opportunities.

Ask yourself AND others questions and listen to answers. Filter answers based on their quality and reliability. The gold standard for information is independent third-party verification of what a product does. Often University work accomplishes this when done independently. Alternatively, a third-party consultant can do this. Also valuable is when you talk with a producer who has the technology.

Why are you looking for a change? Identify what you want to modify and why. As an example, I want to modify manure streams to export nitrogen from the farm. In this scenario, your focus is on nitrogen management. As you evaluate your options, be sure to answer the question will this improve my nitrogen management? If your answer is not YES, you haven't accomplished your task.

Discussions with your nutrient management specialist, environmental consultant and dairy management team are important. Together you can evaluate your resource management needs and your regulatory obligations for your nitrogen zone implementation plan, obligations with the San Joaquin Air District, opportunities or needs to reduce methane emissions, and operating under a dairy General Order with the Regional Water Quality Control Board. Factor in future water restrictions through implementation of the Sustainable Groundwater Management Act.

What does it do? Which constituent does this address—nitrogen, salts, methane emissions? Do third party data confirm this from field scale projects, in all seasons and under your climatic conditions?

Article continues on the next page...

Special February Issue

Technology conversations.1
Western Dairy Management.....2
Western Dairy Management.....3

Newsletter Editor:
Jennifer Heguy
UCCE Dairy Advisor
jmheguy@ucdavis.edu

How does it work? What is the theory behind the operation? Do theory and reality overlay or are they very different? Is the mode of action physical, chemical or biological? Each mode of action may have a downstream impact on the utility of the waste stream.

Is it reliable? Does this work consistently, or does it have a track record of breaking down or not operating? When it is working does it do the same level of treatment daily? This is where a candid discussion with another producer is valuable. You may need to adjust what you learn with your climate and updated operational designs of the technology.

Is there a trained technical staff available to troubleshoot or fix should problems arise? Years ago, there was a genset associated with a digester that wasn't manufactured in the US. It took a minimum of 6 weeks to acquire parts (no locally available supply house) and fix breakdowns. Six weeks of downtime for every repair quickly cuts into profits and creates challenges if you're obligated for carbon credits.

As Sgt. Joe Friday said in the 1960s series Dragnet "all we want are the facts, ma'am." It pays to be diligent and get the facts straight. If you've made it this far, a [previous newsletter](#) article "There's a technology do I want it?" is worth rereading. Don't hesitate to reach out if you want to talk science!



2025 Western Dairy Management Conference March 31 – April 3 at the Peppermill in Reno

Connecting dairy producers and the allied dairy industry

Council on Dairy Cattle Breeding Producer Exchange and Reception

Monday, March 31 – 1:00 to 6:00 p.m.



WDMC Conference Schedule

Monday, March 31 – Registration 4:30 to 10:00 p.m.

Tuesday, April 1 – 8:00 a.m. to 5:35 p.m.

Wednesday, April 2 – 7:35 a.m. to 5:35 p.m.

Thursday, April 3 – 7:30 a.m. to 12:00 p.m.

Plan to Attend
Tuesday's – Platinum Sponsor Pre-conference
8:00am - Noon
Thirty - 30-minute presentations

Scan the QR code or visit www.wdmc.org to register

Early Bird Registration – \$425
Ends on February 25



<https://wdmc.org/>

Topics and speakers on the next page...



2025 Western Dairy Management Conference
March 31 – April 3 at the Peppermill in Reno
Connecting dairy producers and the allied dairy industry

Speakers and Topics:

- “Armstrong’s Folly”: The Development of the Saudi Barn and Evaporative Cooling for the Southwest Dairy Industry | **Dr. Robert Collier**
- How Health and Wellness, Product Science, and Technology Will Drive Dairy Innovation and Sales Growth | **DMI panel members - Paul Ziemnisky and Eve Pollet** moderated by **Stan Erwin**
- Understanding How the U.S. Fits Into Global Dairy Developments | **Dr. Torsten Hemme**
- How U.S. Dairy Processing Has Evolved and Where Is It Going? | **Corey Geiger**
- Needle-less Injection Systems for Managing Hormonal Synch Protocols | **Dr. Don Niles**
- Where Will My Workers Come From? | **Dr. Richard Stup**
- Domestic Investments in Dairy, Future Is Still Bright | **Gregg Doud**
- Group Feeding Economics – Milking the Feed Margin | **Dr. Albert DeVries**
- Factors Affecting Heifer Completion Rate and the Impact on Replacement Herd | **Dr. Michael Overton**
- Real-time Measurements, Monitoring Tools and Using Forage in Large Silage Piles | **Dr. Hugo Ramirez**
- Building an Effective Management Team for Your Dairy | **Dr. Greg Bethard**
- Unlock Forage Potential with Precision Chewing Management | **Dr. Richard Grant**
- Feeding for Milk Fat...How Can We Continue to Increase Milk Fat Yields? | **Dr. Adam Lock**
- Equipping Employees with Effective, Humane, and Efficient Cow Handling Techniques | **Dr. Jennifer Van Os**
- Beef on Dairy: From Conception to Harvest | **Dr. Pedro Carvalho**
- Using Genomics to Optimize Breeding Decisions for Beef and Sexed Semen | **Dr. Francisco Peñagaricano**
- Improving Dairy Herd Health Monitoring and Management Using Automated Monitoring Technologies | **Dr. Julio O. Giordano**
- How Will Soybean Production and Biodiesel Impact Protein Nutrition of Dairy Cattle? | **Dr. Paul Kononoff**
- Precision Management of Dairy Calves | **Dr. Melissa Cantor**

The University of California, Division of Agriculture and Natural Resources (UC ANR) prohibits discrimination against or harassment of any person in any of its programs or activities on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, status as a protected veteran or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 [USERRA]), as well as state military and naval service. UC ANR policy prohibits retaliation against any employee or person in any of its programs or activities for bringing a complaint of discrimination or harassment. UC ANR policy also prohibits retaliation against a person who assists someone with a complaint of discrimination or harassment or participates in any manner in an investigation or resolution of a complaint of discrimination or harassment. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to any of its programs or activities. UC ANR is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment and/or participation in any of its programs or activities without regard to race, color, religion, sex, national origin, disability, age or protected veteran status. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to: John I. Sims, Affirmative Action Compliance Officer and Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750- 1397. Email: jsims@ucanr.edu. Website: http://ucanr.edu/sites/anrstaff/Diversity/Affirmative_Action/.

Cooperative Extension

University of California

4437B S Laspina St

Special Edition
California Dairy Newsletter
February 2025



To view previous issues of the California Dairy Newsletter, visit the website below

<http://cetulare.ucanr.edu/Agriculture782/Dairy/>

Rubia Branco Lopes

University of California Cooperative Extension

4437-B S. Laspina St.

Tulare, CA 93274

559-684-3300



University of California
Agriculture and Natural Resources

Tulare County

It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 [USERRA]), as well as state military and naval service. This policy is intended to be consistent with the provisions of applicable state and federal laws and University policies. University policy also prohibits retaliation against any employee or person in any of its programs or activities for bringing a complaint of discrimination or harassment pursuant to this policy. This policy also prohibits retaliation against a person who assists someone with a complaint of discrimination or harassment or participates in any manner in an investigation or resolution of a complaint of discrimination or harassment. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to employment or to any of its programs or activities. In addition, it is the policy of the University and ANR to undertake affirmative action, consistent with its obligations as a Federal contractor, for minorities and women, for persons with disabilities, and for covered veterans. The University commits itself to apply every good faith effort to achieve prompt and full utilization of minorities and women in all segments of its workforce where deficiencies exist. These efforts conform to all current legal and regulatory requirements and are consistent with University standards of quality and excellence. In conformance with Federal regulations, written affirmative action plans shall be prepared and maintained by each campus of the University, including the Division of Agriculture and Natural Resources. Such plans shall be reviewed and approved by the Office of the President and the Office of the General Counsel before they are officially promulgated. Inquiries regarding the University's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1318.