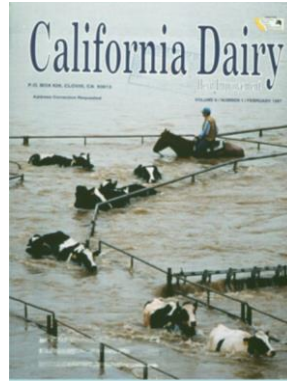




Presenter: Michael Payne DVM PhD  
UC Davis – School of Veterinary Medicine  
Firefighter, Station 68, Vacaville Fire Protection District

## Resources for Dairy Emergencies

## Just a few introductory thoughts about...



- Medical Emergencies
- Rendering Disruption
- Fire
  - Wildfire Smoke
  - Power loss
  - Hay fires
- Flood
- Acute death loss
- Foreign Animal Disease
- Rural Crime
- Trespass

*Mostly we just want to introduce topics and have you share your knowledge and experiences!*

## Medical Emergencies

Everyone knows to call 911.



Speech Facial Droop Arm Drift

- **Heart Attack**
  - 350,000 out-of-hospital cardiac arrests U.S./year
  - #1 cause death 1/10 survival
  - By-stander CPR ↑ survival 2-3 X
  - How long? 30 mins – 6 hours
  - “Row, row, row your boat”
  - “Compression-only CPR”
  - “Telephone CPR”
  - Aspirin: chew non-coated
    - 1 standard (325mg) aspirin
    - 4 low-dose (81 mg) aspirin
- **Stroke**
  - Cincinnati Stroke Scale
  - Any ~~one~~ 72% chance
  - No aspirin

## Training & Injury Documentation



## Rendering Disruption



## Rendering Service Disruption

- Short term plan in place
- Long term plan being developed.

**CDQAP Quality Assurance Update**

**A Plan for Rendering Disruptions**  
By Dr. Michael Payne, UC Davis, School of Veterinary Medicine and Director, CDQAP

Regulations make emergency mortality disposal mind-bendingly complex. CDQA, the dairy industry, renderers, and other regulatory agencies are working on short-term and long-term solutions.

Only four of the state's 46 rendering facilities process animal mortalities. Those that do typically operate at near capacity, meaning a heat event or mechanical problem in a single plant can disrupt mortality pick-up for hundreds of producers throughout a broad swath of the state. California dairy producers experienced large-scale service disruptions in 2006, 2017, and 2020 due to mechanical failures and heat events. During each of these incidents, CDQAP has spearheaded development of county-by-county emergency disposal plans.

**Multi-jurisdictional Roadblocks**

The reason why a comprehensive, state-wide solution has been so hard to achieve is because it is so complex, impacting the missions of numerous agencies. Regional boards may not allow on-farm composting or on-farm burial. Composting mammalian tissue is a violation of state regulation. Landfills almost never accept material from other counties. Counties' Board of Supervisors are often reluctant to

**STOP** **DETOUR**

**WIFSS**  
Western Interagency Fire Safety & Security

About Us Work With Us Outreach Training Research News

**Home / News / Saving your ranch and animals from wildfires**

**Saving your ranch and animals from wildfires**

Chris Brunner, December 13, 2017




**CDQAP Quality Assurance Update**

**Wildfires Bring Smoke, Power Loss & Other Challenges**

By Dr. Michael Payne, UC Davis, School of Veterinary Medicine and Director, CDQAP



With the worst of California's wildfire season just beginning, 25 major blazes have already destroyed 4,200 structures and consumed more than 4 million acres, more than any year on record. At least one northern California dairy cut an emergency fire break in front of an advancing fire front. Even for dairies not directly threatened by flames, the sheer magnitude of the fires can bring challenges, including wildfire smoke and the potential loss of electrical service.

**Smoke Exposure to Employees**

Much of the Central Valley remains under an air quality alert.

### Wildland Fires: Smoke

### Wildland Fires: Emergency Power

**CDQAP Ruminations: Dairies & Emergency Power**

Dr. Michael Payne



Most California producers have already invested in standby generators, but with power outages increasing in frequency and length, some may be wondering if their emergency plans and equipment are sufficient.

**Highlights: What you need to know about emergency power on California dairies...**

- While existing standby generators may service the milking parlor they may be inadequate to power other critical equipment. Planning ahead can help minimize problems during a prolonged outage.





## Preventing and Controlling Hay Fires on Dairies

**CDQAP Quality Assurance Update**

**Preventing Hay Fires on California Dairies**  
By Dr. Michael Payne, Director California Dairy Quality Assurance Program and firefighter for Solano County, California



Every year California dairy producers experience significant losses due to hay fires. Last May stacks burned on a Chico dairy for days, resulting in an air quality warning for the area. Last September over 1,100 tons of hay burned in Fresno County, spreading to farm equipment and a tractor trailer, causing at least \$500,000 in damage.

**CDQAP Ruminations: Preventing and Controlling Hay Fires on Dairies**  
January 6, 2020  
By Dr. Michael Payne, Director California Dairy Quality Assurance Program and firefighter for Solano County, California

Highlights: What you need to know about preventing hay fires on California dairies...



## Side Note: If you're in the market for fire extinguishers

**RUOH ELIMINATOR**  
INTRODUCING THE INDUSTRY'S FIRST SELF-SERVICE, MULTIPURPOSE, RECHARGEABLE, DRY-CHEMICAL FIRE EXTINGUISHER.



- 1. SELF-SERVICE** reduces costs by eliminating third-party service requirements. Hydroblasts provide testing, and other periodic internal inspections.
- 2. NON-PRESSURIZED** design is more reliable and safer than pressurized extinguishers.
- 3. RECHARGEABLE KIT** (sold separately) has everything you need to reload your Eliminator® anytime and just from home.
- 4. UNIVERSAL DESIGN** is easy for left- and right-handed persons to operate, saving time when seconds count.
- 5. MULTIPURPOSE** fire extinguisher. Ready to combat liquids, and is 100% reusable for sustainability.
- 6. HIGH EFFICIENCY** valve assembly and nozzle improve agent discharge, loading down the tank and giving the user more protection.

- Rusoh Eliminator
- Self service: *no inspections* *recharging needed*
  - Monthly resuspension of powder
  - Reloadable CO2 cartridge
  - Replaceable powder canister

## Flooding and Evacuation



## FLOODING & LIVESTOCK OWNERS

**PREPARE**

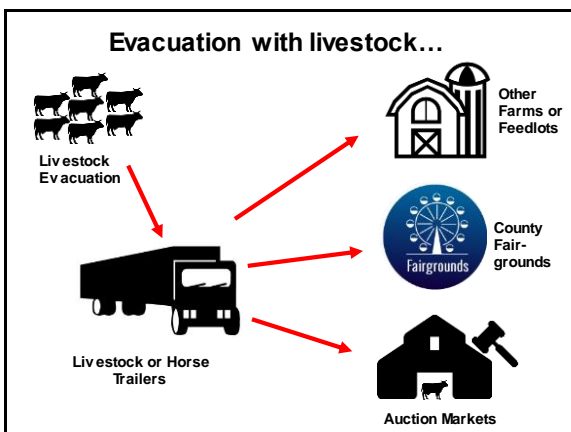
**FLOODING & LIVESTOCK OWNERS**  
Preparing, Responding, and Recovering

**OWNERS**

**RECOVER**


**CASE STUDY**

**FLOOD PLAN**



## Flooding and Evacuation

**CDQAP Ruminations: Coping with Flooding and Evacuation**  
Sep 7, 2017



Highlights: What You Need to Know About Preparing for Flooding & Evacuation

- An initial estimate of a dairy's risk of flooding can be made by reviewing the property's history and using FEMA's flood mapping program.
- Even a short one-page **all-hazards disaster plan** developed before the rainy season can help streamline emergency operations should a crisis develop.
- Other precautions producers in flood-prone areas can take include making provisions for emergency power, securing critical health records and bolstering...

## Acute Death Loss



1998 Modesto,  
Botulism toxin  
(cat carcass)  
430+ dead

1997 Hanford,  
Phorate in feed  
159 dead



## Acute Death Loss



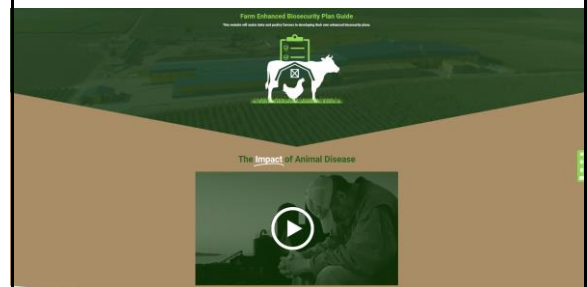
## Foreign Animal Disease



*Can Farmers Can  
Stay in Business  
During a  
Livestock  
Pandemic?*



## Foreign Animal Disease



*Listen to the introductory video...*

## Rural Crime

CRIME

**Police arrest man in connection to 2 armed robberies at Merced County dairies, one fatal**



Hector Delacruz, 38

## Dairy Security Recommendations



### Dairy Security Recommendations

By Dr. Richard Payne, UC, Davis, School of Veterinary Medicine and Director, CDQAP



California producers were shocked this month to learn of early-morning robberies of employees on two separate Merced County dairies. Both robberies were tragically violent, with the April 15th incident involving a knife attack and the April 20th crime resulting in a homicide. The Merced County Sheriff's Office believes the incidents are related and an [arrest has been made](#).

State and county law enforcement agencies provide these recommendations for dealing with robbery and assault on farms.

**Discuss Security With Employees** - Training can occur independently or as part of regularly scheduled

- Discuss Security with Employees

- Facility Considerations

- During and After a Robbery



## Rural Crime

**CDQAP Ruminations:**  
Preventing of Rural Crime on Your Dairy

Dr. Michael Payne

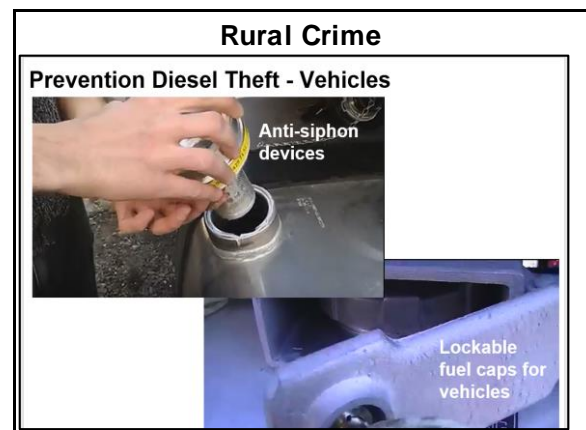
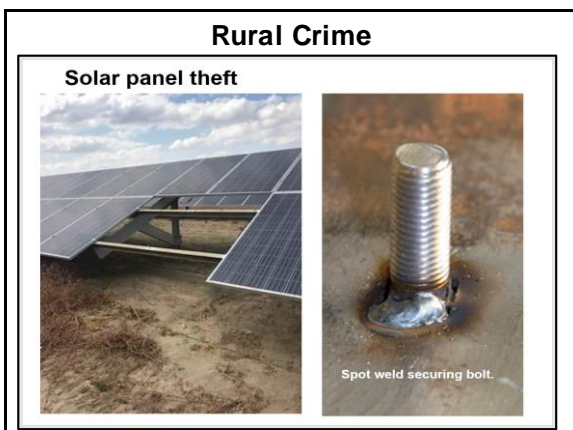
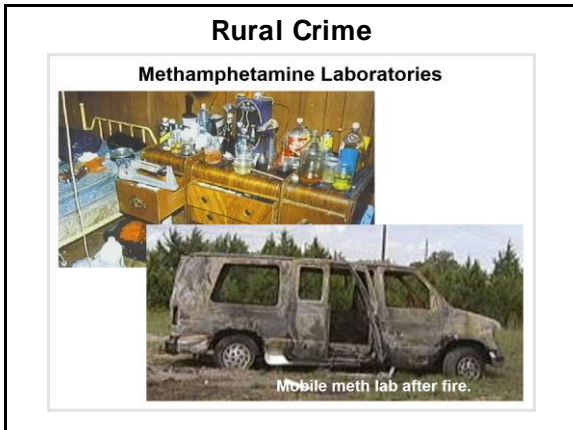
### DAIRY FARM SECURITY

CDQAP is teaming up with law enforcement experts to help protect your property and employees.

*California farms lose up to half billion dollars to theft and other rural crime every year. Here are some steps you can take to make your facility less inviting...*

**Highlights: What You Need to Know About Rural Crime on Dairies**

- California farmers lose tens of millions dollars to theft every year. Besides theft, producers face a host of other types of rural crime including illegal dumping, trespass, vandalism, clandestine drug labs and even assaults on employees.
- Always report rural crime, whether it's on your property or nearby. This helps Sheriff's





## Rural Crime

### Metal Theft



### CDQAP RUMINATIONS: Dealing with Trespass and Drones on California Dairies

September 16, 2018

Dr. Michael Payne



Trespasses for criminals or animal activities have public relations, animal health and even personal safety implications. Here's what you need to know about dealing with unwanted guests...

#### Highlights: What You Need to Know About Trespass and Drones

- California Penal Code makes entering a farm with the purpose of interfering or injuring it punishable by up to 10000 and/or 6 months in a county jail.
- Posting No Trespassing signs improves the ability of law enforcement to arrest generate trespassers.
- Property fraud and drug operations are other forms of trespass of concern to rural property owners.
- There are no California laws which allow someone to enter a farm and "rescue" livestock or poultry. Activities involving otherwise have been accepted in California.
- In most states of the nation, it is legal for landowners or tenants and not able to operate.

## Trespass and Drones on California Dairies



### Questions?

Michael Payne  
[mpayne@ucdavis.edu](mailto:mpayne@ucdavis.edu)

Home: 530-795-3199  
 Cell: 530-304-9306