



## **2021 Western Alfalfa & Forage Symposium**

*November 16-17-18, 2021*

*Grand Sierra Resort, Reno, NV*

*Program*

### **Organized by:**

*University Cooperative Extension Services of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming, in cooperation with grower members of the California Alfalfa & Forage Association.*

### **Hosted by:**

*California Alfalfa & Forage Association, representing thousands of California forage growers.*

### **Symposium Chairs:**

*Dan Putnam, University of California, Earl Creech, Utah State University, Emily Meccage, Forage Genetics International*

### **Schedule of Events**

#### **Day One - Tuesday, November 16, 2021**

- 6:30 a.m. – 7:00 p.m.**      **Symposium and Exhibitor Registration**
- 7:30 a.m.**                      **Continental Breakfast (Tour Participants Only)**
- 8:00 a.m. – 4:00 p.m.**      **Exhibitor/Poster Set-Up**
- 8:00 a.m. – 5:15 p.m.**      **Agricultural Educational Tour in Northern Nevada**

**Overview:** Tour stops will include a large western dairy production operation, a specialized goat dairy, Frey Ranch Distillery, the Derby Dam and Newslands Water Project, and a hay export operation.

- 5:00 p.m. – 7:00 p.m.**      **Symposium Welcome Reception**  
Hors D'oeuvres and No Host Cocktails  
Exhibits Open  
Posters on Display

## **DAY Two - Wednesday, November 17, 2021**

**6:30 a.m. – 7:00 p.m.            Symposium Registration**

**7:00 a.m. – 7:00 p.m.            Exhibits Open**

**8:00 a.m. – 12:00 p.m.          Symposium Main Session**

- **8:00 a.m.                    Welcome**

### **Session I. 8:00 a.m. – 10:00 a.m. Economics and Water Trends:**

- 8:10 a.m.            Status of the Western Forage Industry,  
*Josh Callen, The Hoyt Report, Twin Falls, ID*
- 8:35 a.m.            Current Trends and Challenges for the Western Dairy Industry  
*Paul Sousa, Western United Dairies, Turlock, CA*
- 9:00 a.m.            International Trade Dynamics in Hay and Impacts on Markets  
*Dan Sumner, University of California, Davis, CA*
- 9:25 a.m.            Water Situation in West and Impacts on Forages  
*Jason Kelley, USDA-ARS, Parlier, CA*
- 9:50 a.m.            Discussion
- **10:00 a.m.            Break**

### **Session II. 10:30 a.m. – 12:00 p.m. Water, Climate Change, and the Environment**

- 10:30 a.m.            The Important Role of Alfalfa in an Uncertain Water Future  
*Dan Putnam, University of California, Davis, CA*
- 10:55 a.m.            Key Role of Forages in Climate-Smart Agriculture  
*Josh Gamble, USDA-ARS, St. Paul, MN*
- 11:20 a.m.            Rethinking Methane – Livestock’s Path to Climate Neutrality  
*Frank Mitloener, University of California, Davis, CA*
- 11:45 a.m.            Discussion

**12:00 p.m. – 1:00 p.m. Symposium Lunch**

**1:30 p.m. – 5:00 p.m. Symposium Breakout Sessions – Two Sessions Run Concurrently**

### **Breakout 1: Pest Management**

- 1:30 p.m.            Burn-Down Strategies for Alfalfa Weed Control  
*Earl Creech, Utah State University, Logan, UT*
- 1:50 p.m.            Residual and Postemergence Weed Control in Seedling Alfalfa  
*Albert Adjesiwor, University of Idaho, Kimberly Research & Extension Center*

- 2:10 p.m. Toxic Plants that Contaminate Hay and Other Forages in the Western United States  
*Bryan L Stegelmeier, Research Veterinary Medical Officer USDA ARS, Logan Utah*
- 2:30 p.m. Managing Pocket Gophers in Alfalfa  
*Roger Baldwin, University of California, Davis, CA*
- 2:50 p.m. Discussion
- **3:00 p.m. Break**
- 3:30 p.m. Grasshoppers: To Treat or Not to Treat?  
*Greg Abbot, USDA-APHIS, Logan, Utah*
- 3:50 p.m. Alfalfa Weevil Management & Resistance Issues  
*Ian Grettenberger, University of California, Davis, CA and Kevin Wanner, Montana State University, Bozeman, MT*
- 4:10 p.m. Blue Alfalfa Aphids in the Western US - Management Challenges and Successes Vary by Location  
*Michael Rethwisch, UCCE, Blythe, CA*
- 4:30 p.m. Using Drones to Control Pests in Alfalfa  
*Rachael Long, UCCE, Woodland, CA and Ken Giles, University of California, Davis, CA*
- 4:50 p.m. Discussion

### **Breakout 2: Water Management**

- 1:30 p.m. Innovative Technologies for Water Conservation in Flood Irrigation Systems  
*Khaled Bali, University of California, Kearney Research and Extension Center, Parlier, CA*
- 1:50 p.m. Optimizing Overhead Irrigation Systems  
*Matt Yost, Utah State University, Logan, UT*
- 2:10 p.m. Alfalfa on Subsurface Drip Irrigation (SDI) – Pros and Cons  
*Doug Larson, Ag Water Chemical, Fresno, CA*
- 2:30 p.m. Alfalfa and Groundwater Management Strategies to Address Drought and Limited Water Supplies  
*Helen Dahlke, University of California, Davis, CA*
- 2:50 p.m. Discussion
- **3:00 p.m. Break**

### **Breakout 3: Alternative Forages**

- 3:30 p.m. Sugar Beets and Safflower as Alternative Winter Forages  
*Steve Kaffka, University of California, Davis, CA*

- 3:50 p.m. Double Cropping Both Winter and Spring Canola as Silage and Grain  
*Steve Fransen, Washington State University, Prosser, WA*
- 4:10 p.m. Hemp Production and Animal Feed Potential  
*Serkan Ates, Oregon State University, Corvallis, OR*
- 4:30 p.m. Winter and Summer Annual Small Grain Forage Crops  
*Guojie Wang, Oregon State University, Corvallis, OR*
- 4:50 p.m. Discussion

**5:00 p.m. – 7:00 p.m. Exhibit Reception, Poster Presentations, and CAFA Auction**

Hors D'oeuvres and No Host Cocktails

Exhibits Open

Posters on Display

**Day Three – Thursday, November 18, 2021**

**8:00 a.m. – 12:15 p.m. Main Session**

**Soil Health and Fertility, Forage Systems, and the Future of Forage Crops**

- 8:00 a.m. Using Hay Tests Samples to Maximize Economic Returns from P and K Fertilization  
*Steve Norberg, Washington State University, Pasco, WA*
- 8:25 a.m. Recycling and Management of Manure in Forage Crops  
*Eric Young, USDA-ARS, Marshfield, WI*
- 8:50 a.m. Soil Health: Beyond Organic Matter and Carbon  
*Robert Dungan, USDA-ARS Kimberly, ID*
- 9:15 a.m. Regeneration Nation: Alfalfa's Role in Sustainable Agriculture  
*Emily Meccage, FGI International, Muncy, PA*
- 9:40 a.m. Discussion
- **9:55 a.m. BREAK**
- 10:25 a.m. Grazing Cover Crops, and Opportunity for Forage Producers  
*Darrin Boss, Montana State University, Havre, MT*
- 10:50 a.m. Management of Forages with High Nitrates  
*Hayes Goosey, Montana State University, Bozeman, MT*
- 11:15 a.m. Perspectives and Future of Research/Cooperative Extension (Multi-State Discussion of Priorities and Linkages Within Western States)  
*Steve Fransen, Washington State University, Prosser, WA*
- **12:15 p.m. Adjourn Symposium**

**For Symposium information, up-to-date schedule, registration, and sponsorship/exhibitor opportunities, please visit our website <https://calhaysymposium.com/>.**