DAY ONE – December 2, 2015

6:30am-7:00pm SYMPOSIUM AND EXHIBITOR REGISTRATION

8:00am-4:00pm EXHIBITOR SETUP

7:45am-5:00pm IRRIGATION MANAGEMENT WORKSHOP
Detailed alfalfa irrigation management training for practitioners. Includes lunch and breaks.

Morning Session
7:50 Welcome and Introduction Dan Putnam, University of California, Davis, CA

Principles of Irrigation Management in Forages Moderator Steve Orloff, UC Cooperative Extension, Yreka, CA

- 8:00 Crop Water Demand, Use and Importance of Water Management in Forage Crops
  Howard Neibling, University of Idaho, Kimberly, ID
- 8:30 Importance of Soil Characteristics to Water Relations
  Bob Hutmacher, University of California, West Side Research & Information Center, Five Points, CA
- 9:00 Importance and Limitations of Irrigation Scheduling Using ET
  Rick Snyder, University of California, Davis, CA
- 9:30 Importance and Limitations of Using Soil Moisture Monitoring for Irrigation Efficiency
  Daniele Zaccaria, University of California, Davis, CA
- 10:00 BREAK

Irrigation Efficiency/Tools Moderator Daniele Zaccaria, University of California, Davis, CA

- 10:30 Understanding Irrigation Efficiency with Different Systems: How it’s Defined, Why it’s Important.
  Eduardo Bautista, USDA-ARS, Maricopa, AZ
- 11:00 Managing Salinity: Principles and Practical Recommendations
  Steve Grattan, University of California, Davis, CA
- 11:30 Tools for Practical Irrigation Scheduling
  Troy Peters, Washington State University, Prosser, WA

12:00nn-1:00pm IRRIGATION WORKSHOP LUNCH

1:00pm-5:00pm IRRIGATION MANAGEMENT WORKSHOP

Afternoon Session
Putting the Pieces Together Moderator Howard Neibling, University of Idaho, Kimberly, ID

- 1:00 Improving Surface Irrigation Practices on Farms
  Eduardo Bautista, USDA-ARS, Maricopa, AZ
- 1:30 Improving Sprinkler Irrigation on Farms
  Howard Neibling, University of Idaho, Kimberly, ID
- 2:00 Improving Drip Irrigation in Alfalfa: What We’ve Learned to Date.
  Dan Putnam, University of California, Davis, CA
- 2:30 Putting the Pieces Together: How To Irrigate Alfalfa.
  Steve Orloff, UC Cooperative Extension, Yreka, CA
- 3:00 BREAK
Innovations in Water Management  Moderators Daniele Zaccaria, University of California, Davis, CA and Howard Neibling, University of Idaho, Kimberly, ID

- 3:30  Industry Panel
  - CDFA’s SWEEP Program  
    Carolyn Cook, California Department of Food and Agriculture  
  - Development of Advancements and Innovations  
    Dan Schueler, Senninger Irrigation  
  - FieldNet, Pivots, Pumps  
    Chuck Powell, Lindsay Corporation  
  - Drip Irrigation  
    Matt Hardigree, Jain Irrigation  
  - Puresense Monitoring System  
    David Clay, Puresense  
  - Drip Irrigation Systems and Education Tools  
    Inge Bisconer, Toro Micro-Irrigation  
  - Irrigation Management and Scheduling with Drip Irrigation in Alfalfa  
    Dennis Hannaford and Todd Rinkenberger, Netafim USA  
  - Remote Environmental Sensing and Irrigation Automation  
    Brett Norman, AgSmarts  
  - Irrromesh System  
    Jacob Moreno, IRROMETER

5:30pm-7:00pm  SYMPOSIUM WELCOME RECEPTION  
Cocktails and Hors D’oeuvres. Exhibits Open.

DAY TWO – December 3, 2015

6:30am-7:00pm  SYMPOSIUM REGISTRATION

7:00am-8:00am  CONTINENTAL BREAKFAST

7:00am-6:00pm  SILENT AUCTION OPEN

7:00am-7:00pm  EXHIBIT HALL OPEN

8:00am-12noon  SYMPOSIUM MAIN SESSION

Welcome Address:  Mark Walker, Dean College of Agriculture, University of Nevada, Reno, NV

Economics and Markets  Moderator Jay Davison, University of Nevada, Reno, NV
  - 8:10  Hay Situation in 2015 and Outlook for 2016 in the Western States  
    Seth Hoyt, The Hoyt Report, Ione, CA  
  - 8:40  Dairy Trends as Affecting Hay and Feed Prices  
    Bob Naerebout, Idaho Dairyman Association, Boise, ID  
  - 9:10  The Recent Economics of Drought, Milk, Exports and Western Hay Markets  
    Dan Sumner and Bill Matthews, Ag Issues Center, University of California, Davis, CA  
  - 9:40  BREAK

Water and Irrigation  Moderator Dan Putnam, University of California, Davis, CA
  - 10:10  Strategies to Improve Productivity in a Water-Stressed Future  
    Steven R. Evett, USDA-ARS, Bushland, TX  
  - 10:50  California’s Agricultural Regions Gear Up to Actively Manage Groundwater Use and Protection  
    Thomas Harter, University of California, Davis, CA  
  - 11:20  Impacts of Climate Change on Surface Water Supplies  
    Rick Allen, University of Idaho, Kimberly, ID  
  - 11:50  Discussion

12:10pm-1:00pm  SYMPOSIUM LUNCH  Presentation by Beth Nelson, National Alfalfa & Forage Alliance
1:30pm-5:00pm  SYMPOSIUM BREAKOUT SESSIONS

Breakout #1: Pest Management (1:30pm-5:00pm) Moderators Rachael Long and Vonny Barlow, UC Cooperative Extension, Blythe, CA and Woodland, CA

- 1:30 Alfalfa Integrated Pest Management
  Vonny Barlow, UC Cooperative Extension, Blythe, CA
- 1:50 Toxic Plants to Livestock
  Steven Gallego, California Department of Food & Agriculture, Sacramento, CA
- 2:10 Weed Management in Grasses
  Earl Creech, Utah State University, Logan UT
- 2:30 Recent Developments in Alfalfa Weed Control: Glyphosate-Induced Injury in RR Alfalfa and Sharpen Herbicide
  Steve Orloff, UC Cooperative Extension, Yreka, CA
- 3:00 BREAK
- 3:30 Management Options for Blue Alfalfa Aphids in California Alfalfa
  Larry Godfrey, University of California, Davis, CA
- 3:50 Biology and Management of Clover Root Curculio and Stem Nematode in Alfalfa
  Ricardo Ramirez, Utah State University, Logan, UT
- 4:10 Developing an IPM Program for Controlling Pocket Gophers and Voles in Alfalfa
  Roger Baldwin, University of California, Davis, CA
- 4:30 Managing Foliar and Root Rot Diseases of Alfalfa for Improving Yield and Persistence
  Deborah Samac, USDA/ARS, St. Paul, MN
- 4:50 Discussion

Breakout #2: Alternative Forage Crops (1:30pm-5:00pm) Moderator Anowar Islam, University of Wyoming, Laramie, WY

- 1:30 Cutting Irrigated Hay Costs by Using Soybeans
  Steve Norberg, Washington State University, Pasco, WA
- 1:50 Adopting Cover Crops for Soil Improvement and Grazing
  Steven Hines, University of Idaho, Moscow, ID
- 2:10 Cereal Forages: A Tool in Managing Limited Water Resources
  David Wichman, CARC-Montana State University, Moccasin, MT
- 2:30 Grass, Legumes, and Grass-Legume Mixtures: Yield, Nutritive Value and Soil Water Use
  Anowar Islam, University of Wyoming, Laramie, WY
- 2:50 Discussion
- 3:00 BREAK
- 3:30 Sorghum: An Alternative Feed, Hay and Forage
  Jeff Dahlberg, University of California, Parlier, CA
- 3:50 Teff Hay: Recent Observations in the Southwest
  Mark Marsalis, New Mexico State University, Las Cruces, NM
- 4:10 Using Chlorophyll Meter and Tissue Testing to Determine In-Season Nitrogen Needs in Timothy Hay Production
  Steve Norberg, Washington State University, Pasco, WA
- 4:30 Alfalfa Contributes More Nitrogen to Following Crop than Previously Thought
  Eric Lin, University of California, Davis, CA

5:30pm-7:00pm  EXHIBITOR RECEPTION & CAFA AUCTION


DAY THREE – DECEMBER 4, 2015

7:00am-12:00noon  REGISTRATION OPEN

7:00am-8:00am  CONTINENTAL BREAKFAST

8:00am-12:15pm  SYMPOSIUM MAIN SESSION

Forage Quality and Utilization  Moderator Juan Solomon, University of Nevada, Reno, NV

- 8:00 Producing High Quality Hay for Horses
  Emily Glunk, Montana State University, Bozeman, MT
• 8:25  Forage Quality and Utilization: Total Track NDF Digestibility  
  David Combs, University of Wisconsin, Madison, WI
• 8:50  Forage Quality and Dairy Production: What quality attributes do we look for and why?  
  Jed Asmus, January Innovations Inc., Lodi, CA
• 9:15  Uniform Sampling Protocols for Single- and Double-Compressed Hay and Detection of a GMO Trait  
  Dan Putnam, University of California, Davis, CA
• 9:40  Discussion
• 10:00  BREAK

Hay Harvesting/Hay Management  Moderator Mylen Bohle, Oregon State University, Prineville, OR
• 10:30  Costs of Owning/Operating Harvest Equipment  
  Ben Eborn, University of Idaho, Soda Springs, ID
• 10:55  Influence of Harvesting Technologies on Quality and Yield  
  Dan Undersander, University of Wisconsin, Madison, WI
• 11:20  Humidity, Hay Moisture, and Harvest Management  
  Paul Brown, University of Arizona, Tucson, AZ
• 11:45  Hay Preservation/Storage Losses  
  Glenn Shewmaker, University of Idaho, Kimberly, ID
• 12:05  Discussion

10:00am-2:00pm  EXHIBIT TEARDOWN

Symposium website: http://calhay.org/symposium/