SCHEDULE OF EVENTS

Day One – Tuesday, November 19
FORAGE IRRIGATION WORKSHOP

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

7:30am CONTINENTAL BREAKFAST (workshop participants only)

8:00am-4:00pm EXHIBITOR/POSTER SETUP

8:30am-5:15pm FORAGE IRRIGATION WORKSHOP
Overview: Water and irrigation management is a key aspect of high yield, high quality alfalfa production. This one-day workshop is a primer on the skills necessary for managing irrigation on your farm for high quality forage production.

8:30am-12:00pm Principles of Irrigation and Water Management

Moderator: Leonard Lauriault, New Mexico State University

8:30 Introduction and Background – Importance of Irrigation Management in Forage Crops
Dan Putnam, University of California, Davis, CA

8:45 What is EvapoTranspiration and How to Estimate ET?
Howard Neibling, University of Idaho, Twin Falls, ID

9:15 Soil Moisture Monitoring – What goes on below the ground?
Matt Yost, Utah State University, Logan, UT

9:45 Irrigation Scheduling—When and how much?
Troy Peters, Washington State University, Prosser, WA

10:15 Questions

10:30 BREAK

10:45 Deficit Irrigation of Alfalfa—When you just don’t have enough
Dan Putnam, University of California, Davis, CA
11:10  Salinity Management for Alfalfa and Grasses  
Bob Hutmacher, University of California, Davis, CA and Director, UC West Side Research and Extension Center, Five Points, CA
11:30  Fertigation & Use of Degraded Waters  
Grant Cardon, Utah State University, Logan, UT
11:50  Discussion

12:00pm-1:00pm  WORKSHOP LUNCH (workshop participants only)

1:00pm-5:15pm  Putting the Pieces Together: Management of Irrigation on Farms  
Moderator: Glenn Shewmaker, University of Idaho, Kimberly, ID

Innovations and Solutions: Sprinkler Systems
1:00  Analysis of Sprinkler Systems: Comparing Center Pivots, Linears, Wheel Lines  
Howard Neibling, University of Idaho, Kimberly, ID
1:20  LEPA & LESA & Mobile Drip Innovations  
Matt Yost, Utah State University, Logan, UT
1:35  Variable Rate Irrigation with Overhead systems  
Troy Peters, Washington State University, Prosser, WA
1:55  Discussion

Innovations and Solutions: Surface Irrigation
2:00  Overview of Surface Irrigation Systems Design  
Khaled Bali, University of California Kearney Ag Research & Extension Center, Parlier, CA
2:20  Automation of Furrow and Flood Irrigation  
Peter Moller, Rubicon, Modesto, CA
2:40  Comparing Systems on my Farm  
Ronnie Leimgruber, Alfalfa Grower, Holtville, CA
3:00  Discussion

Innovations and Solutions: Drip Irrigation
3:15  Overview of Drip Irrigation Systems in Alfalfa  
Dan Putnam, University of California, Davis, CA
3:30  Management of Alfalfa SDI on our Farm  
Nate Ray, DeJager Farms, Chowchilla, CA
3:45  Management of Alfalfa SDI on our Ranch  
Greg Wegis, Wegis & Young Ranch, Bakersfield, CA
4:00  Discussion

4:15pm:  Innovations in Irrigation (Howard Neibling, Moderator)
  -  Pivots and Controls:  Rick Hanshew, Reinke
  -  Sprinkler Products:  Dan Schueler, Senninger
  -  Drip/Controls/Filters:  Domonic Rossini, Netafim
  -  Pivots and Controls:  Kevin Johnson, Valmont
  -  Sprinkler Products:  Bob Hand, Nelson Irrigation
  -  Drip Irrigation of Lagoon Water:  John Cardoza, Suscon
  -  Fixed Wing Remote Sensing:  Ria Van Hoef, TerrAvion

5:15  Adjourn

5:00pm-7:00pm  SYMPOSIUM WELCOME RECEPTION  
Hors D’oeuvres and No Host Cocktails, Exhibits Open, Posters on Display
Day Two – Wednesday, November 20
WESTERN ALFALFA & FORAGE SYMPOSIUM MAIN SESSION

6:30am-7:00pm SYMPOSIUM REGISTRATION
7:00am-7:00pm EXHIBITS OPEN
7:00am-7:00pm POSTERS ON DISPLAY
7:00am-8:00am CONTINENTAL BREAKFAST
8:00am-12:00pm SYMPOSIUM MAIN SESSION

Forage Cropping Systems, Water and Environment
Moderated by Glenn Shewmaker, University of Idaho, Kimberly, ID

8:00 Welcome
William Payne, Dean, College of Agriculture, Biotechnology, and Natural Resources, University of Nevada, Reno.

8:05 Implications of Climate Change Predictions on Forage Production in Western States
Alan Rotz, USDA-ARS and University of Pennsylvania, College Station, PA

8:30 Rotation Studies with Alfalfa, Small Grains and Corn
Earl Creech, Utah State University, Logan, UT

8:50 Benefits of Alfalfa in Crop Rotations
Nicole Tautges, University of California, Davis, CA

9:10 Snake River Aquifer Groundwater Recharge
Brian Olmstead, Twin Falls Irrigation Company, Twin Falls, ID

9:30 Experiments with Flooding Tolerance of Alfalfa for Groundwater Recharge
Helen Dahlke, University of California, Davis, CA

9:50 Discussion

10:00 BREAK

Economics and Industry Trends
Moderated by Earl Creech, Utah State University, Logan, UT

10:30 Western Dairy Industry Trends
Rick Naerbout, Idaho Dairymen’s Association, Twin Falls, ID

10:50 Hay Industry Trends
Josh Callen, The Hoyt Report, Twin Falls, ID

11:10 World Trends in Hay Exports
Bill Matthews, University of California, Davis, CA

11:30 Grazing Systems on 3 Million Hectares (7.4 million acres) in Argentina
Daniel Basigalup, Alfalfa Breeder, INTA, Cordoba, Argentina

11:50 Discussion

12:00pm-1:00pm SYMPOSIUM BANQUET LUNCH
Jim Kuhn Award Presented by Brandon Fawaz, CAFA Board of Directors
National Alfalfa & Forage Alliance Report Beth Nelson, NAFA

1:30pm-5:00pm SYMPOSIUM BREAKOUT SESSIONS – 2 sessions run concurrently

Breakout 1: Pest Management
Moderated by Rachael Long, University of California Cooperative Extension, Woodland, CA and Sarah Light, University of California Cooperative Extension, Yuba City, CA
1:30 Clover Root Curculio Biology and Control
   Steven Price, Utah State University, Logan, UT
1:50 Insecticide Resistance in Alfalfa Weevil and Related Implications for other Alfalfa Insect Pests
   Michael Rethwisch, University of California Cooperative Extension, Blythe, CA
2:10 Approaching IPM Program for Alfalfa Winter Insect Pests of Southwest Desert
   Ayman Mostafa, University of Arizona, Tucson, AZ
2:30 Sugarcane Aphid and Potential Strategies for Control
   Nick Clark, University of California Cooperative Extension, Hanford, CA
2:50 Discussion

3:00 BREAK

3:30 Precise Control of Rodents in Alfalfa Fields Using Drones
   Yoav Motro, Israel Ministry of Agriculture and Rural Development; and Tomer Regev, Alta Innovation.
3:50 Developing an Effective Management Program for Belding’s Ground Squirrels in Alfalfa
   Roger Baldwin, University of California, Davis, CA
4:10 Managing Weeds in Seedling and Established Alfalfa Stands
   Earl Creech, Utah State University, Logan, UT
4:30 Glyphosate Injury in Roundup Ready Alfalfa
   Tom Getts, University of California Cooperative Extension, Lassen County, CA
4:50 Discussion
5:00 ADJOURN

Breakout 2: Grazing & Forages Beyond Alfalfa
Moderated by Steve Norberg, Washington State University, Pasco, WA and Mylen Bohle, Oregon State University, Prineville, OR

1:30 Optimizing Management of Small Grain Forages
   Mike Ottman, University of Arizona, Tucson, AZ
1:50 Simulated Grazing Timing and Regrowth of Annual Cereal Forage Cover Crops
   Carmen Willmore, University of Idaho, Shoshone, ID
2:10 In-Season Management of N in Timothy
   Steve Norberg, Washington State University, Pasco, WA
2:30 Teff as a Forage Crop
   Natalie Shaw, Washington State University, Prosser, WA
2:50 Discussion

3:00 BREAK

3:30 Rhodes Grass: A Potential Alternative Forage for the Low Desert
   Oli Bachie, University of California Cooperative Extension, Holtville, CA
3:50 Corn and Sorghum as Forages: Water and N Implications
   Nick Clark, University of California Cooperative Extension, Hanford, CA
4:10 Utilization of Sugarbeet as a Forage Crop
   Steve Kaffka, University of California, Davis, CA
4:30 Discussion
5:00 ADJOURN

5:00pm-7:00pm POSTERS ON DISPLAY - Authors will be present

5:00pm-7:00pm SYMPOSIUM RECEPTION
   Hors D’oeuvres and No Host Cocktails, Exhibits Open, Posters on Display
Day Three – Thursday, November 21

FORAGE QUALITY MINI-SYMPOSIUM MAIN SESSION
Co-Sponsored by NIRS Consortium & National Forage Testing Association

7:00am-8:00am CONTINENTAL BREAKFAST

8:00am-10:05am: Session I: Why Forage Testing?
Moderated by Mike Trammel, Noble Research Institute, Ardmore, OK
8:00 Importance of Forage Testing: Linkage of Forage Quality to Markets and Profitability
    Dan Putnam, University of California, Davis, CA
8:20 Horse Nutrition Requirements and What to Test?
    Natalie Shaw, University of Washington, Prosser, WA
8:45 Importance of Fiber and Digestibility Analysis to Predict Animal Performance
    Dave Mertens, Dairy Nutritionist, Mertens Innovation and Research, Belleville, WI
9:15 Representing the Value of Energy, Protein and Fiber in Feedstuffs
    Bill Weiss, The Ohio State University, Wooster, OH
9:45 Discussion
10:00 BREAK

10:30am-12:10pm: Session II: Lab Testing and Sampling
Moderated by Juan Solomon, University of Nevada, Reno, NV
10:30 Key Hay and Silage Sampling Protocols
    Jody Gale, Utah State University, Richfield, UT
10:50 How to Choose a High Quality Laboratory & Common Abuses of Forage Quality Testing
    Glenn Shewmaker, University of Idaho, Kimberly, ID
11:10 Standardization of Forage Testing and NFTA Certification
    Ralph Ward, Cumberland Valley Analytical Services, Waynesboro, PA
11:30 Misconceptions of NIRS Analysis
    Bobbi jo Anderson, NIRS Consortium, Hillsboro, WI
11:50 Discussion
12:00pm-1:00pm NIRS FORAGE QUALITY LUNCH

1:00pm-3:00pm: Session III: Interpretation of Lab Tests
Moderated by Dave Mickelson, S&W Seed, Arlington, WI
1:00 Quantifying the Potential Increase in Alfalfa Value and Identifying Molecular Markets that Influence It
    Steve Norberg, Washington State University, Pasco, WA
1:20 Importance of Dry Matter to Researchers and Producers
    David McIntosh, University of Tennessee, Knoxville, TN
1:40 Future of Forage Testing: What will the Future Bring?
    Panel Discussion Moderated by Patty Laskowski Morren
    Bill Weiss, Ohio State University, Wooster, OH
    Ralph Ward, Cumberland Valley Analytical Services, Waynesboro, PA
    Dave Mertens, Mertens Innovation and Research, Belleville, WI
    Bobbi jo Anderson, NIRS Consortium, Hillsboro, WI
    David Weakley, Forage Genetics International, Gray Summit, MO
3:00pm ADJOURN SYMPOSIUM

FOR UP TO DATE SCHEDULE, PLEASE VISIT OUR WEBSITE  www.calhay.org/symposium/