



MAY 2016

## IRRIGATION TECHNOLOGY WORKSHOP/ FIELD DAY FOR NUT AND FRUIT CROPS

Thursday, June 16, 2016

8:00 a.m. to 2:00 p.m.

Red Bluff Elks Lodge – 355 Gilmore Road, Red Bluff, CA

The University of California Cooperative Extension invites fruit and nut crop producers in the northern Sacramento Valley to attend a combination workshop/field day on Thursday, June 16, 2016.

- 1) 8:00 to 10:05 a.m. - Early morning workshop.** UC speakers will set the stage for the following field day by highlighting the importance of irrigation management to nut and fruit production and providing background information on a variety of irrigation technologies.
- 2) 10:30 a.m. to 11:30 a.m. - Mid-morning field stop.** Attendees are invited to a local walnut farm near Red Bluff. A replicated irrigation experiment in Chandler walnut has been underway since the beginning of the 2014 season. When to begin the irrigation season has been the question. You will have the opportunity to view how walnuts respond to beginning irrigation between 30 to 90 days after leafout. Yield, nut quality, amount of irrigation, and tree health are being evaluated. Commercial techniques for monitoring tree water stress and water use will also be shown and discussed.

### 11:30 TO 12:15 LUNCH – AT CRAIN ORCHARDS FIELD STOP

- 3) 12:45 to 2:00 p.m. - After lunch field stop.** Growers are invited to a local almond and walnut farm near Corning. A replicated almond irrigation experiment with Nonpareil, Monterey, and Carmel varieties has been underway since 2013. Seasonal amounts of irrigation water has varied by about 30 percent each year. You will have an opportunity to view these irrigation plots and learn how production has responded. Experiences with applications of aerial imagery in irrigation management will also be discussed. After viewing the irrigation experiment, attendees will learn about innovative “variable rate” or “zone irrigation” systems with automation.

PLEASE RSVP—This helps us prepare  
CALL (530) 527-3101 OR  
EMAIL: [clmclain@ucanr.edu](mailto:clmclain@ucanr.edu)

# IRRIGATION TECHNOLOGY WORKSHOP FIELD DAY FOR NUT AND FRUIT CROPS

Thursday, June 16, 2016  
8:00 a.m. to 2:00 p.m.

## AGENDA

- 8:00 TO 8:05 a.m.      **WELCOME AND OVERVIEW**  
*Allan Fulton, UC Irrigation and Water Resources Farm Advisor, Tehama County*
- 8:05 TO 8:35 a.m.      **Importance of Irrigation Management to Nut and Fruit Production**  
*Richard Buchner, UC Orchard Crops Advisor &  
Bruce Lampinen, UC Walnut & Almond Specialist*
- 8:35 TO 9:05 a.m.      **Ask The Tree About Its Water Needs — Traditional and New Techniques**  
*Ken Shackel, Professor and Pomologist, UC Davis*
- 9:05 TO 9:35 a.m.      **Advances in Monitoring ET and Soil Moisture**  
*Daniele Zaccaria, CE Agricultural Water Management Specialist, UC Davis*
- 9:35 TO 10:05 a.m.      **Beyond NDVI and Airborne Imagery -**  
*Michael Whiting, UC Davis, Emeritus, Department of Land, Air, and Water Res.*
- 10:05 TO 10:30 a.m.      **Travel to Crain Orchards Mid Morning Stop**  
(Directions on next page – no physical address available)
- 10:30 TO 11:30 a.m.      **View Walnut Irrigation Trial and Discuss Crop Monitoring Equipment**  
*Leads: Hal Crain, Ken Shackel, Bruce Lampinen, and Allan Fulton*  
*Demonstrations: PMS Pressure Chamber, Phytech Dendrometer,  
Tule ET Technologies, Cermetek Leafmon*
- 11:30 TO 12:15 p.m.      **LUNCH** - Sandwiches, chips, and drinks served at Crain Orchards field stop
- 12:15 TO 12:45 p.m.      **Travel to California Almond Packers and Exporters (CAPEX)**  
Afternoon Field Stop - 21275 Simpson Road, Corning, CA
- 12:45 to 1:15 p.m.      **View and Discuss Almond Irrigation Trial -Share Experiences with Aerial Imagery.**  
*Leads: Ken Shackel, Bruce Lampinen, and Allan Fulton*  
*Collaborator: CERES Imaging*
- 1:15 to 2:00 p.m.      **Variable Rate Irrigation for Larger and Smaller Orchards. Irrigation System Automation and Remote Data Acquisition.**  
*Leads: Matt Esteve and Luke Peterson, CAPEX*  
*Collaborators: h<sub>2</sub>o Optimizer, Wiseconn*
- 2:00 p.m.                      **WORKSHOP and FIELD DAY CONCLUDED**

*Thank You for Participating!*

# **Suggested Directions to Crain Orchards Mid Morning Field Stop**

**Approximate travel time 20 minutes**

From Red Bluff Elks Lodge parking lot (355 Gilmore Road, Red Bluff, CA)

1. Travel north 0.6 miles on Gilmore Road. Turn right at stoplight
2. Travel 0.1 mile east on Antelope Blvd, merge right onto I-5 southbound
3. Travel south on I-5 for 1.6 miles. Take South Main Street Exit 647A loop
4. Turn south (right) at stop light onto South Main Street
5. Travel 1.6 miles on South Main/Highway 99W to Altube Ave
6. Turn left (east) on Altube Ave, travel 1.0 mile to East Canal Road
7. Turn right (south) on East Canal Road, Cross the Tehama Colusa canal and travel 2.0 miles south
8. Turn left (east/northeast), enter gate and travel 0.7 miles on gravel road. Turn will be identified with large signs indicating "UC Field Day stop".

**PLEASE PARK AROUND SHOP AREA AND ASSEMBLE AT SOUTH END OF SHOP**

# **Suggested Directions to California Almond Packers and Exporters (CAPEX) – Afternoon Field Stop**

*21275 Simpson Road, Corning, CA*

**Approximate travel time 25 minutes**

From Crain Orchards Field Stop.

1. Turn south on East Canal Road and travel south 1.7 miles
2. Turn east (right) at La Barranca Ranch and cross the Tehama Colusa canal and stop at Tyler Road intersection
3. Travel south and west on Tyler Road 1.9 miles to Westover Road
4. Turn west on Westover Road and travel 1.0 mile west to Highway 99W
5. Turn south on Highway 99W and travel 0.6 miles south to Flores Avenue
6. Turn west (right) on Flores Avenue for 2.6 miles to I-5 intersection, southbound loop
7. Travel south on I-5 to 9 miles to Richfield/Finnell Avenue Exit 633
8. Travel west on Finnell Avenue 0.07 miles to Rawson Road
9. Turn south on Rawson Road. Travel 0.3 miles to Simpson Road.
10. Turn west on Simpson Road. Travel 2.9 miles west and north on Simpson Road.

**LOOK FOR SIGNS INDICATING "UC FIELD STOP". PLEASE PARK ON FARM ROAD ALONG EDGE OF ORCHARD AND ADJACENT ORCHARDS TO KEEP SIMPSON ROAD CLEAR. ASSEMBLE ALONG NORTH EDGE OF ORCHARD IN VICINITY OF PG&E DISTRIBUTION LINES.**



**University of California**  
Agriculture and Natural Resources



# Water & Land Resource Manager Newsletter

TEHAMA, GLENN, COLUSA, AND SHASTA COUNTIES

*Allan*

Allan Fulton, UC Farm Advisor



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*Cooperative Extension Work in Agriculture and Home Economics, U.S. Department of Agriculture, University of California, and County of Tehama, Cooperating.*

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