WATER CONSERVATION, ALFLFA, FORAGES, BIOFUELS AND AGRONOMIC CROPS FIELD DAY.......................................................... – 2 –

CENTENNIAL CELEBRATION ......................................................... - 4 -

LATEST RESEARCH-BASED ADVICE ON WEATHERING A DROUGHT NOW AVAILABLE ON LINE ...................................................... - 5 -

HOLTVILLE PAPA MEETING ........................................................................ - 7 -

INTERESTING LINKS! ................................................................................. - 8 -

CIMIS REPORT AND UC DROUGHT MANAGEMENT PUBLICATIONS ............................................................ Khaled M. Bali and Sharon Sparks - 9 -
Please join us on the water conservation, alfalfa, forages, biofuels and other agronomic crops Field Day to be held from 7:30AM – Noon on April 17, 2014

Organized by:
University of California Cooperative Extension
Imperial County

Location:
UC Desert Research & Extension (DREC)
1004 E Holton Road
El Centro, CA 92243

Registration starts at 7:30 AM
For further information, call (760)352-9474 or e-mail: Oli Bachie (obachie@ucanr.edu) or Khaled Bali (kmbali@ucanr.edu)

Complimentary lunch will be served at noon; RSVP to tbmcneece@ucanr.edu

Note: Speakers will be UC scientists and other invited guests, including: Dan Putnam, David Grantz, Khaled Bali, Steve Kaffka, Eric Natwick, Oswaldo Chicaiza, Sam Wang, Vonny Barlow, Brent Boutwell, Oli Bachie, Jeffery Dahlberg, Dean Currie, Tom Gill, Dale Lentz, Alan Jackson, Frank Stemspki, & Rick Cesena
Water conservation, alfalfa, forages, biofuels and other agronomic crops Field Day
Thursday, April 17, 2014 @ DREC

Agenda
7:30 AM: Registration
8:00 AM: Begin Field Day

Stop I: Sugar Beet & Oil Crops
8:10: Irrigation & Fertilizer interactions, Steve Kaffka
8:25: Oil crops, Steve Kaffka/Nicholas George
8:35: IR-4 what it is & activities – Brent Boutwell

Stop II: Wheat
8:45: Durum wheat - Oswaldo Chicaiza

Stop III: Alfalfa and Irrigation practices
8:55: Alfalfa subsurface drip projects, Khaled Bali, Dan Putnam, Oli Bachie
9:05: Alfalfa varieties and water issue, Dan Putnam
9:15: Crop rotation work with alfalfa, Dan Putnam & Sam Wang
9:25: Deficit Irrigation possibilities, Dan Putnam & Khaled Bali
9:35: Blue alfalfa Aphids and control, Eric Natwick
9:45: Insects of Palo Verde, Vonny Barlow
9:55 UC ANR Drought Resources and online seminars, Daniele Zaccaria

Stop IV: Corn
10:05: Sweet corn for the low desert, Sam Wang

Stop V: Sudan grass and Sorghum
10:15: Sorghum Forages for California, Jeff Dahlberg
10:25: Sudan grass, Dan Putnam

Stop VI: Sugar beet nematode
10:35: Cyst nematodes of Sugar beet, Oli Bachie

Stop VII: Biofuels
10:45: Environmental costs of purpose-grown Sorghum and Energy Cane as potential lignocellulosic feedstocks, David Grantz

Stop VIII: Olives
10:55: Olive production and water use in Imperial Valley, Khaled Bali

Stop IX: Water and irrigation
11:05: Automation of Surface Irrigation Systems, Khaled Bali, Tom Gill, & Dale Lentz
11:15: Commercial automation gate, Allen Jackson (Rubicon Water) & Khaled Bali
11:25: Irrigation water, Dean Currie
11:35: Demonstration of AquaMon–RSVP radio communication and web reporting systems from the SIMAS flood irrigation sensors, Frank Stempski
11:45: Demonstration of cultivator & Planter for minimum tillage practices – Rick Cesena
12:00: Lunch
Come see what’s happening at the University of California Cooperative Extension – Imperial County!

Join us for the celebration of the UCCE Centennial!

Celebration will be held at:
DREC
1004 E. Holton Road   El Centro, CA

On:
May 8, 2014

Time:
4:00 P.M. TO 7:00 P.M.
March 17, 2014

CONTACT: Jeannette Warnert, (559) 240-9850, jewarnert@ucanr.edu

**The latest research-based advice on weathering a drought is now available free online**

Spring is here, and California farming is in full swing. But this year, the agriculture industry is operating under the burden of unrelenting drought.

The UC Division of Agriculture and Natural Resources is working to help farmers cope with the unwelcome outcome of historically low rainfall the last three years. UC scientists, with support from the California Department of Water Resources, have recorded video presentations on high-priority drought topics that are available for viewing on the [UC California Institute of Water Resources](http://ucanr.edu) drought webpages.

"We are bringing the latest research on drought and water from the UC system's leading experts to as many farmers, farm industry representatives, communities and students possible," said Doug Parker, director of the UC California Institute of Water Resources. "People working in the ag industry are busy this time of year. They can get information from these videos whenever and, using mobile devices, wherever it is convenient for them."

The first seven presentations in the "Insights: Water and Drought Online Seminar Series," each about half an hour in length, are now ready for viewing at [http://ucanr.edu/insights](http://ucanr.edu/insights). Topics are:

**Groundwater and surface water interactions under water shortage**
Thomas Harter, UC Cooperative Extension specialist in the Department of Land, Air and Water Resources at UC Davis.

**Crop water stress detection and monitoring**
Kenneth Shackel, professor in the Department of Plant Sciences at UC Davis

**Surface irrigation management under drought**
Khaled Bali, UC Cooperative Extension advisor in Imperial County

**ET-based irrigation scheduling and management considerations under drought**
Richard Snyder, UC Cooperative Extension specialist in the Department of Land, Air and Water Resources at UC Davis

**Salinity management under drought for annual crops**
Stephen Grattan, UC Cooperative Extension specialist in the Department of Land, Air and Water Resources at UC Davis

**Salinity management under drought for perennial crops**
Stephen Grattan, UC Cooperative Extension specialist in the Department of Land, Air and Water Resources at UC Davis

**Water-use-efficient tillage, residue and irrigation management**
Jeff Mitchell, UC Cooperative Extension specialist in the Department of Plant Sciences at UC Davis

Some of the topics that will soon be added to the online drought series are:
Managing deficit irrigation
Marshall English, professor emeritus at Oregon State University

Managing rice systems with limited water
Bruce Linquist, UC Davis

Climate change and paleoclimatology: 2013/1014 in perspective
Lynn Ingram, UC Berkeley

Available tools for estimating soil suitability to groundwater banking
Antony O'Geen, UC Davis

Irrigation management of tomato under drought conditions
Eugene Miyao, UC Agriculture and Natural Resources

How Will Monitoring Soil Moisture Save Me Water?
Dan Johnson, USDA-NRCS California State Water Manager

Winegrapes water management under drought
Paul Verdegaal, UC Agriculture and Natural Resources

Irrigation management of fruit and nut crops under Sacramento Valley conditions
Allan Fulton, UC Agriculture and Natural Resources

Alfalfa water demand and management under drought
Daniel Putnam, UC Davis

Field irrigation monitoring for maximum efficiency under drought conditions
Blake Sanden, UC Agriculture and Natural Resources

Subtropical orchards management under droughts
Ben Faber, UC Agriculture and Natural Resources

Additional valuable information from California academic institutions for dealing with the drought in the short-term and long-term is available at California Drought Resources, http://ucanr.edu/drought. The pages are regularly updated to bring new developments from the state's university and colleges to a broad range of communities, including farmers, ranchers, landscaping professionals, policymakers and California residents.

For more information on Insights: Water and Drought Online Seminar Series, contact Faith Kearns, UC California Institute for Water Resources, faith.kearns@ucop.edu.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:30</td>
<td>Registration Begins</td>
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<tr>
<td>7:00</td>
<td><strong>Continuing Education Update &amp; Renewal Requirements</strong></td>
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<td></td>
<td>Monica Siemens, PAPA</td>
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<tr>
<td>7:30</td>
<td><strong>Laws and Regulation Update</strong></td>
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<td></td>
<td>Speaker TBA, Imperial County Department of Agriculture</td>
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<td>8:30</td>
<td><strong>Electronic Use Reporting of Regulatory Forms</strong></td>
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<td></td>
<td>Luis Angulo, Agrian</td>
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<tr>
<td>9:30</td>
<td><strong>Break</strong></td>
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<tr>
<td>9:45</td>
<td><strong>Use of Owls as a Supplement to Rodent Control</strong></td>
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<tr>
<td></td>
<td>Dr. Mike Glassey, All Pro Environmental Services and Pest Control</td>
</tr>
<tr>
<td>10:45</td>
<td><strong>Techniques for Managing Aquatic Habitats</strong></td>
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<tr>
<td></td>
<td>Tony Stillwell, TARGET</td>
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<tr>
<td>11:30</td>
<td><strong>Lunch</strong></td>
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<tr>
<td>12:00</td>
<td><strong>New Products for Pest Control – Vendor Display and Demonstrations</strong></td>
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<td></td>
<td>Multiple Vendors</td>
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<tr>
<td>12:15</td>
<td><strong>Ant Identification and Control</strong></td>
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<tr>
<td></td>
<td>Dr. Mike Glassey, All Pro Environmental Services and Pest Control</td>
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<tr>
<td>1:15</td>
<td><strong>Rodent Identification and Control</strong></td>
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<td></td>
<td>John Slagor, TASCO</td>
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<tr>
<td>2:00</td>
<td><strong>Lettuce Production and Management Techniques</strong></td>
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<tr>
<td></td>
<td>Dr. Sam Wang, ANR Desert Research and Extension Center</td>
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<tr>
<td>2:45</td>
<td><strong>Nematodes of the Low Desert</strong></td>
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<tr>
<td></td>
<td>Dr. Oli Bachie, UCCE Imperial, Riverside, and San Diego Counties</td>
</tr>
<tr>
<td>3:30</td>
<td><strong>End of Program – Thanks for Coming!</strong></td>
</tr>
</tbody>
</table>

**DIRECTIONS**

**From San Diego** – Travel East on I-80, Exit Highway 111 North & travel 2 miles. Turn right on S-8 and travel 5 miles. Turn right on Country Club Drive and follow road to Club House.

**From Arizona** – Travel I-80 West, Exit at Orchard Road (Holtville) travel approximately 2 miles and at stop sign in Holtville, turn Left on S-80, continue for 2 miles. Turn Left on Country Club Drive and follow to Club House.
INTERESTING LINKS!

California Ag Journal

The University of California publishes a monthly journal on peer-reviewed research and news in Agricultural, Natural, and Human Resources. Below you will find a link to that publication. Please feel free to visit as often as you like.

Ctrl + Click on the banner below to access:

http://ucanr.edu/blogs/blogcore/blogroll.cfm

ANR Blogs

Serving Agriculture and Natural Resource needs in California

Everything from almonds and bees to wildlife and wetlands! You’re sure to find many interesting articles on this link!

http://ucanr.edu/blogs/blogcore/blogroll.cfm

California Master Gardener Program

The University of California Master Gardener Program is dedicated to facilitating excellence in County Master Gardener Programs by increasing the professionalism of coordinators and volunteers. More than 45 California counties have UC Cooperative Extension Master Gardener Programs with UC trained Master Gardener volunteers ready to answer your gardening questions. Advice to Grow By -

http://camastergardeners.ucanr.edu/
CIMIS REPORT AND UC DROUGHT

MANAGEMENT PUBLICATIONS

Khaled Bali and Sharon Sparks*

California Irrigation Management Information System (CIMIS) is a statewide network operated by California Department of Water Resources. Estimates of the daily reference evapotranspiration \( (ET_o) \) for the period of April 1 to June 30 for three locations in the Imperial County are presented in Table 1. \( ET \) of a particular crop can be estimated by multiplying \( ET_o \) by crop coefficients. For more information about \( ET \) and crop coefficients, contact the UC Imperial County Cooperative Extension Office (352-9474) or the IID, Ag Water Science Unit (339-9082). Please feel free to call us if you need additional weather information, or check the latest weather data on the worldwide web (visit http://tmdl.ucdavis.edu and click on the CIMIS link).

Table 1. Estimates of daily Evapotranspiration \((ET_o)\) in inches per day

<table>
<thead>
<tr>
<th>Station</th>
<th>April 1-15</th>
<th>April 15-30</th>
<th>May 1-15</th>
<th>May 16-31</th>
<th>June 1-15</th>
<th>June 16-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calipatria</td>
<td>0.26</td>
<td>0.29</td>
<td>0.32</td>
<td>0.36</td>
<td>0.39</td>
<td>0.40</td>
</tr>
<tr>
<td>El Centro (Seeley)</td>
<td>0.24</td>
<td>0.28</td>
<td>0.31</td>
<td>0.34</td>
<td>0.36</td>
<td>0.38</td>
</tr>
<tr>
<td>Holtville (Meloland)</td>
<td>0.25</td>
<td>0.28</td>
<td>0.32</td>
<td>0.35</td>
<td>0.38</td>
<td>0.39</td>
</tr>
</tbody>
</table>

* Ag Water Science Unit, Imperial Irrigation District.

Link to UC Drought Management Publications

http://ucmanageddrought.ucdavis.edu/

The University of California prohibits discrimination or harassment of any person in any of its programs or activities. (Complete nondiscrimination policy statement can be found at http://ucanr.org/sites/anrstaff/files/107734.doc)

Inquiries regarding the University’s equal employment opportunity policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, One Shields Avenue, Davis, CA 95616, (530) 752-0495.