

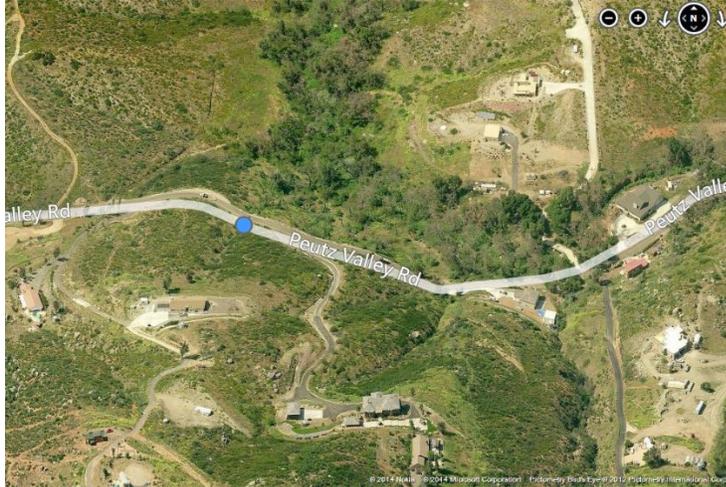
Goldspotted Oak Borer and Oak Mortality

Quarterly Situation Report

July 1 through September 30, 2014

Detection and Monitoring Efforts

http://ucanr.edu/sites/gsobinfo/Help_Monitor/Report_Goldspotted_Oak_Borer_Symptoms/

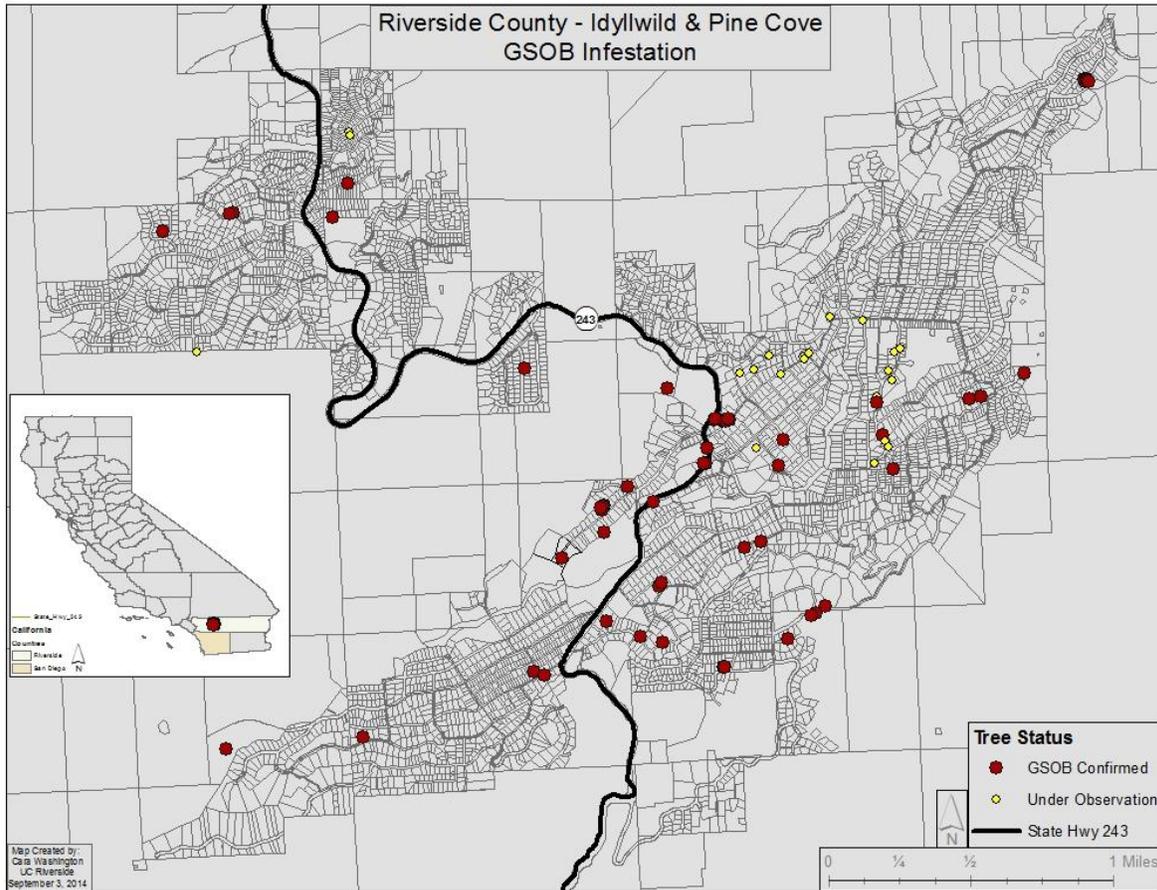


We encourage citizens to include tree photos when reporting suspected GSOB on gsob.org. Their photos with location data can enable us to detect the presence of GSOB and map it without a site visit. This report came from a property owner near Alpine in San Diego County. If photos prove inconclusive, a site visit may be made by agency staff or competent volunteer.



Finger or other object for scale

Tree location/settings:	On personal property & other private property, near home
If on personal property, number of trees impacted:	more than ten
What are the symptoms of infestation seen?	Woodpecker damage, borer exit holes, gallery patterns under bark, crown dying back, oak tree is dying/dead
Condition of tree:	Tips of branches dying back, small branches dying back. Tree is dead



San Jacinto Mountains (Riverside County) Update

A total of 53 GSOB trees have been identified to date in Idyllwild and nearby Pine Cove. The trees removed during the course of the summer were hauled to tub grinder near Menifee (~2 hr. round trip) because the local grinder in Idyllwild was not available during the summer months. The increased haul costs were somewhat offset by the lower tipping fees at the Menifee site.

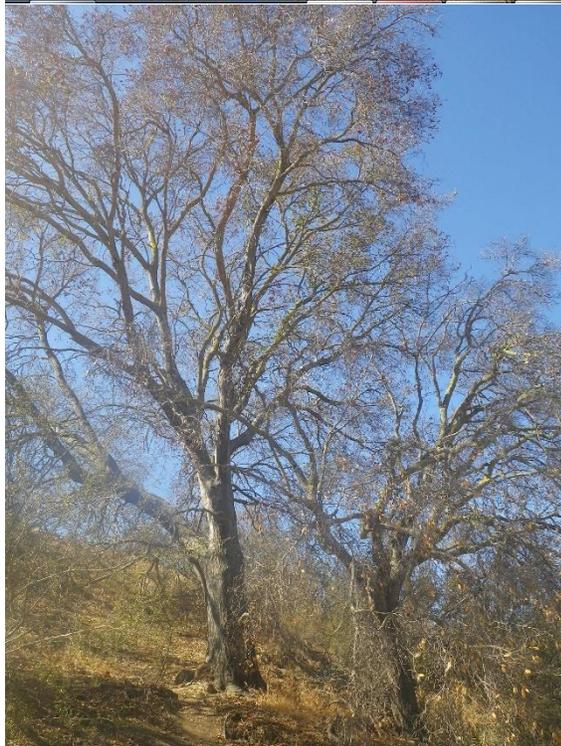
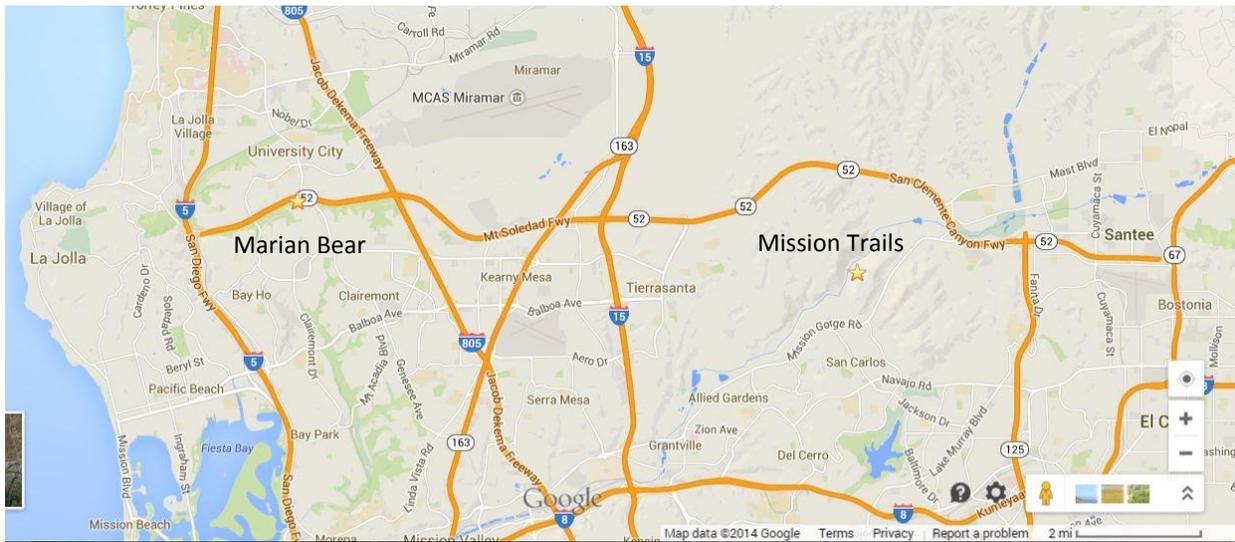


The volunteer tree surveyors in Riverside County are becoming very proficient in their surveys and skilled in identifying GSOB attack. One of the tools they are using is a mobile device app called Theodolite which captures detailed location information with each photo taken and allows the picture and info to be emailed to the intended recipient(s) by data plan or using Wi-Fi after returning from the field. The app can be used to calculate tree heights also. Theodolite is currently only available for IOS-based products. There are other apps available, including our own GSOB Tracker that offer somewhat similar abilities on various platforms.

San Diego County Update

There is increased citizen concern about the rise of GSOB-caused oak tree mortality in the **Ramona** area. Dos Picos County Park is located in that community, and has just identified 31 new infested trees that will be cut and disposed of, nearly equaling the 37 trees previously removed. This article appeared in the local paper: <http://www.ramonasentinel.com/2014/09/16/beetle-claims-more-oak-trees-in-ramona/>

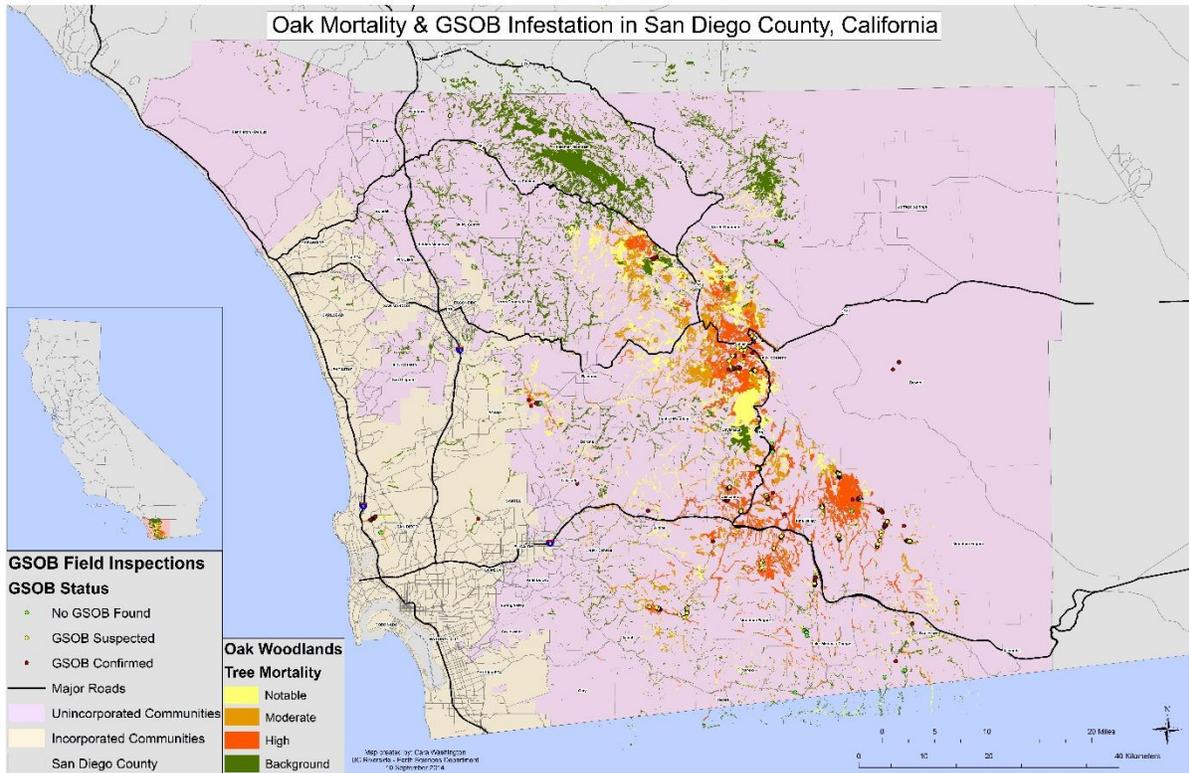
Further north in the county, **GSOB** has now been **confirmed** on the north side of Highway 76 **near the base of Palomar Mountain** by Dr. Tom Coleman. Oaks at risk there include trees on private land, Palomar Mountain State Park and adjacent Cleveland National Forest land.



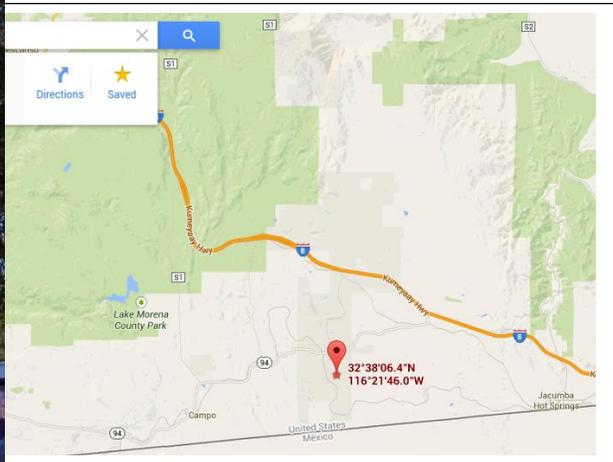
The **City of San Diego** has confirmed a total of 40 GSOB-infested trees on Marian Bear Park located near La Jolla on the coast.

Unfortunately, the **first GSOB-infested tree** was identified recently at **Mission Trails Regional Park** in the east city. (See surrounding photos & map)





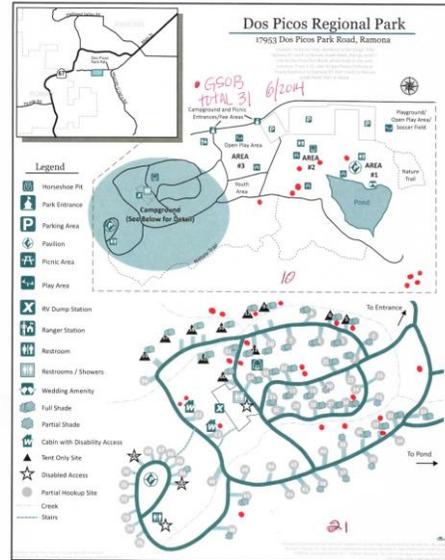
GSOB infestation was confirmed near the Mexican Border at Campo during a site visit made by San Diego County Agricultural Commissioner's staff and GSOB Citizen Scientist/GSOB Early Warning System volunteer Mark Ostrander. We've touched base with some of our Mexican counterparts to ask them to check that side of the border, but have not yet received a response.



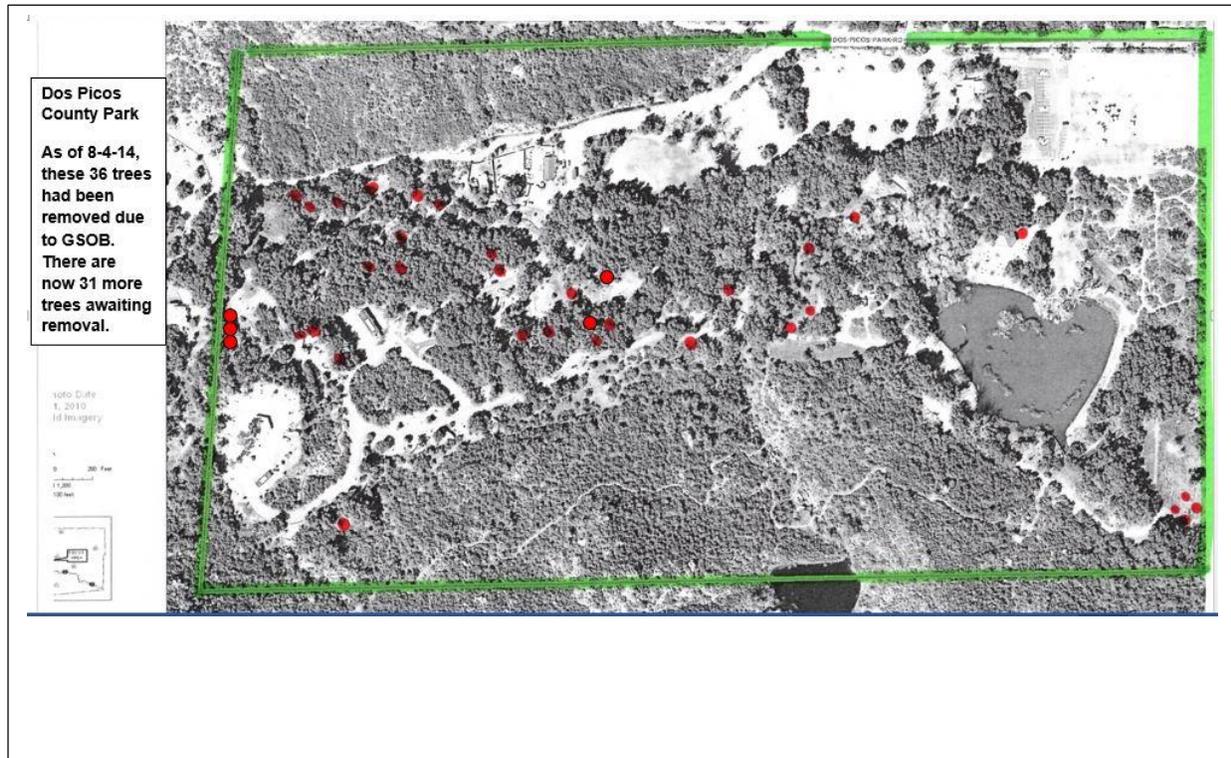
**Dos Picos Regional Park
District 3
All GSOB Trees removed
July 1 to Sept. 30, 2014**

* Additional GSOB Trees Identified This Quarter Previous # of GSOB Trees Already Removed

Campground	23	26
Day Use, Area 1	0	2
Day Use, Area 2	5	2
Day Use, Area 3	0	2
Along Service Road	3	5
Total	31	37



31 additional GSOB trees discovered at Dos Picos this quarter and are slated for removal. Besides the obvious esthetic losses being experienced by this predominantly oak tree park, the cost of felling and safely disposing of the infested trees is very expensive. The park is seeking to contract out for tub grinding the infested trees. Containment of infested wood using plastic becomes impractical with large volumes of wood. The park is also facing the challenge of GSOB infestation on neighboring properties and is currently working on an Integrated Pest Management Plan.



GSOB Outreach and Education

GSOB Events - Collaborative Tools Outreach Calendar for July through September 2014			
9/16/2014	<u>CA State Parks Guild meeting</u>	<u>Cuyamaca Rancho State Park</u>	<u>Kevin Turner</u>
9/9/2014	<u>GSOB Interpretive Presentation</u>	<u>San Diego</u>	<u>Kevin Turner</u>
8/23/2014 - 8/24/2014	<u>PTCA Seminar and Field Day-2014</u>	<u>Balboa Park, San Diego, CA</u>	<u>Jan Gonzales</u>
8/22/2014	<u>Professional Tree Care Association</u>	<u>Balboa Park</u>	<u>Tracy Ellis</u>
8/19/2014	<u>Inter-tribal working group Invasive Species</u>	<u>Pala Reservation</u>	<u>Kevin Turner</u>
8/10/2014	<u>Booth Multiple Species Conservation Meeting</u>	<u>County Operations Center, Kearny Mesa</u>	<u>Tracy Ellis</u>
8/4/2014	<u>GSOB Seminar</u>	<u>Campo</u>	<u>Tracy Ellis</u>
7/29/2014	<u>CFPC Field Tour</u>	<u>San Diego</u>	<u>Kevin Turner</u>
7/23/2014	<u>San Diego Mgt & Monitoring</u>	<u>San Diego</u>	<u>Kevin Turner</u>
7/22/2014	<u>SANDAG MSCP</u>	<u>San Diego</u>	<u>Kevin Turner</u>
7/14/2014	<u>Apple Outstanding Educators</u>	<u>Cuyamaca Rancho State Park</u>	<u>Kevin Turner</u>
7/12/2014 - 7/13/2014	<u>Insect Fair 2014</u>	<u>San Diego Botanical Gardens, Encinitas, CA</u>	<u>Jan Gonzales</u>
7/2/2014	<u>San Diego County Fair - USFS GSOB Booth</u>	<u>San Diego County Fair</u>	<u>Anabele Cornejo</u>

The summer of 2014 was very busy with outreach events. GSOB displays were staffed by our experts at several venues including the San Diego County Fair. GSOB presentations were made to a number of inter-agency groups, professional arborists and tribal groups. The Apple Outstanding Educators meeting was held over the course of 3 days and exposed approximately 400 teachers from all over the world to information about GSOB, the potential dangers of moving firewood and allowed them to try the GSOB tracker IOS application on their mobile devices. The intertribal working group on invasive species had good participation and interesting discussions about IPM strategies for GSOB

Apple Distinguished Educators – Mike Puzzo, California Department of Parks & Recreation

During the week of July 14th, 2014, 367 Apple Distinguished Educators (ADE) from 31 countries traveled to San Diego California for the 2014 ADE Global Institute. In addition to participating in seminars, and other enrichment activities in San Diego, the Distinguished Educators ventured to Cuyamaca Rancho State Park in eastern San Diego County to listen to local experts on topics covering natural, cultural and paleontological resources. The group of 367 was split into thirds; each third traveling to CRSP for their day of field trips on Tuesday, Wednesday or Thursday. On each of these days the group was broken down further into four groups that cycled through four different presentations.

Under the canopy of living and dying oak trees, Kevin Turner (UCR), Thomas Scott (UCR), Cara Washington (UCR) and Mike Puzzo (CA SP) presented the natural history, research, impacts and management options as it relates to Gold Spotted Oak Borer (GSOB). Though GSOB is only in San Diego and Riverside County, these 367 ADE walked away with the knowledge of how detrimental invasive species can be in their nonnative environments and that early detection and rapid response are key to controlling and eradicating invasive and exotic species. Participants were also shown how to use the GSOB Tracker IOS App on their mobile devices.

California State Parks Guild Meeting – Lisa Fields, California Department of Parks and Recreation

California State Parks Natural resource specialists held a “Guild Meeting” at Cuyamaca Rancho State Park September 16-17, 2014. These meetings bring together California State Parks Natural Resource Specialists of all levels from San Diego to San Luis Obispo County. The meeting provides a forum for communication about on the ground management issues, solutions, and lessons learned which leverages their collective knowledge, breaks down communication barriers, and provides opportunities to develop mentoring relationships.



State Parks Guild Meeting participants receive information and get a first-hand look at GSOB and the consequences of infestation at Cuyamaca Rancho State Park.

(Photos - Lisa Fields, CDPR)

The guild meeting was a focused field lesson on goldspotted oak borer threat, identification, and management. Kevin Turner, UC Cooperative Extension, and Tom Coleman, USFS, were in attendance to share their collective knowledge and experience. We began with a picnic lunch and introductions at the Arroyo Seco Picnic Area, followed by a short lecture about the history of GSOB in California, research conducted about the ecology and potential treatment of GSOB, and current treatment options. The need for proactive actions including forming collaborative relationships with regional landowners and managers, having a plan in place before GSOB is detected including the willingness to remove large trees immediately, and helping spread the “Buy it where you burn it” message was stressed. This was extremely relevant as many of the managers present do not currently have GSOB in their parks but the Department is at high risk due to the large number of campgrounds.

Other Outreach and Education Activities

We continue to produce and distribute GSOB ID kits to agencies, groups and individuals that will use them to help teach others about GSOB and the danger of moving Firewood. The GSOB “Don’t Move Firewood” roadside signs have been completed by Norco Camp and are being distributed.

UC Cooperative Extension GSOB Education and Outreach – Jan Gonzales

- Coordinated the use/set-up of GSOB display for events:
 - Cuyamaca State Park for the Apple, Inc. international educators tour, July 15-17
 - County of San Diego, annual multiple-species conservation plan update (MSCP), July 22
 - Western Tribal Integrated Pest Management workshop, Pala, August 19
 - Pacific Tree Care Association annual seminar, San Diego, August 23

- Cuyamaca State Park for internal State Park staff training.

Presented an update on GSOB issues to the Master Gardeners, July 22, 2014 so that they may provide current information to residents during their community outreach and education events.

- Responded to 14 phone calls and/or email inquiries regarding GSOB.
- Distributed handout materials:
 - 400 GSOB trifold brochures
 - 250 UCIPM GSOB Pest Note pamphlet
 - 100 Firewood Advisory handouts
- Participated in 6 GSOB meetings/conference calls with the GSOB Education and Outreach Committee.

Maintained website: www.GSOB.org by including new maps, updated links and resources.

Other Activities
De-barker and Wood Chipper Trials
(initiated this quarter)



In late August, we worked with Forester Gregg Bratcher of CAL FIRE Riverside/Riverside County Fire Department to conduct trials of two different methods for killing GSOB in infested wood. One utilized chainsaw-powered de-barkers to strip the bark off of infested wood. The other used a standard drum-style chipper to chip slabs of bark removed while creating bark-free cants. For both tests, the resultant chips were placed in barrels covered with screen to capture any emerging beetles. Corresponding untreated samples were placed in other barrels as controls. The CA black oak used for these test had lots of larvae. We don't expect to have final results of the effectiveness of either process until adult GSOB emergence occurs next June. If successful, these would be two more tools in the GSOB/firewood management toolbox.

Please direct any corrections, questions or comments about the quarterly report to Kevin Turner at kevint@ucr.edu . We welcome your future contributions to the report for any activities or information related to GSOB. For submitting information for the upcoming October through December 2014 quarterly report, please provide your input to me by close of business on January 8th. A reminder will be sent out through Collaborative Tools at the end of September.