

Goldspotted Oak Borer and Oak Mortality

Quarterly Situation Report

April 1 through June 30, 2017

San Diego County Report

Cleveland National Forest- Insecticide Application to High-Value Oaks

The Cleveland National Forest completed planning and year one implementation for application of a contact insecticide, carbaryl, on high value oaks within three developed sites on the Palomar Ranger District.

On April 19-21, 223 trees were sprayed at Oak Grove Campground, Oak Grove Fire Station and on June 2, approximately 25 trees were sprayed at Pine Hills Fire Station near Julian, CA, for a total of 248 oak trees.

Work was completed by a contractor with oversight by the Forest Service. The work was funded through the R5 Forest Health Program, State and Private Forestry branch of the Forest Service. The Forest plans to continue the treatments yearly dependent on funding and need.



Photo: Lance Criley/USFS

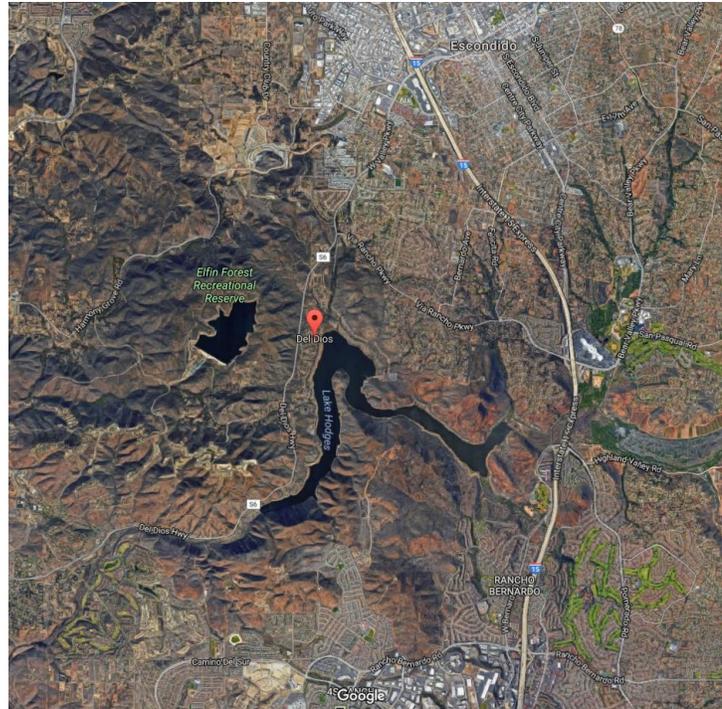
La Jolla Inter-Tribal Earth Day

On Saturday, April 08, 2017, Anabele Cornejo from the Cleveland National Forest and Joyce Schlachter from the Bureau of Land Management, staffed an Emerging Tree Pest Booth at the La Jolla Inter-Tribal Earth Day event and spoke to over 100 people about GSOB, shot hole borer and the importance of not transporting firewood out of the area. *(Photo by Rob Roy)*



GSOB Infestation and Community Meeting at Del Dios & Mt. Israel

On Wednesday evening, June 7th, the Del Dios Habitat Protection League hosted a community meeting in the old fire station. 85 very concerned people showed up! Tom Scott and Kevin gave presentations on GSOB and its management and Nick Basinski from SD County AWM provided information regarding licensed pesticide applicators, all of which was very positively received. Rancho Santa Fe Fire Protection District was also represented at the meeting.



Prior to the meeting,

we were taken on a tour of the area and viewed GSOB trees scattered through much of Del Dios. The adjacent area of Mt. Israel area has been hit exceptionally hard. There are GSOB-infested trees on County (trees within the road right of way), City of San Diego, and private lands. SD County Public Works is already removing GSOB trees within the county road right of way using a contractor, West Coast Arborists. We were told that WCA is following BMPs for handling GSOB-infested wood.

Stacy McCline of the Del Dios Habitat Protection League organized the meeting and is trying to coordinate the community's response to the GSOB threat. Stacy has already surveyed hundreds of trees in and around Del Dios and mapped some of the GSOB-infested trees.

Dos Picos Regional Park (SD County) - GSOB Trees Removed from April 1-June 30, 2017

Tree Location	Removed	Total # (since 2012)
Campground	1	136
Area 1	0	2
Area 2	0	30
Area 3	0	48
Service Road	0	13
Totals	1	229

Los Angeles County Report

Activities in Green Valley - Robin Farr, Green Valley GSOB volunteer coordinator

GSOB-infested Tree Identification Training was offered to residents of Green Valley and of other nearby communities on April 29th, May 20th and June 17th at the Green Valley Charitable Hall (which has GSOB-infested trees).

GSOB Multi-Agency Meeting: Vilius Zukauskas, Forester and Assistant Resource Officer, held a multi-agency, GSOB (goldspotted oak borer) status and strategy meeting on April 18 at the Green Valley Charitable Hall. Almost 20 people from the Forest Service, LA County Fire - Forestry Division - GSOB Task Force, Cal Fire, researchers from the University of California, and GV residents participated in a free-flow of talk and information.

Continuing the research in the best ways to control GSOB was an important topic. The group discussed the current situation and how to best prevent the spread of the beetles and the destruction of our oaks. They re-inspected many of the oak trees near the GVCH and conferred about status and removal. The exchange of ideas and information about methods of diagnosis and criteria for removal was useful to all. The research being done in GV about beetle life cycle and spread in our area was commended. Plans for continuing the research this year were consolidated.

Containment of the infestation was the other big issue. Up to 50 GSOB-infested oaks at the GVCH and nearby, closed Spunky Campground are being taken down and ground up. The GSOB infestation is heavy there, perhaps related to “community chipping days”, which may have concentrated GSOB-infested wood to that particular location.



Multi-agency group inspects the base of a GSOB-infested oak. - photo by Robin Farr

GSOB Tree Removals

The Angeles National Forest removed 50 GSOB-infected oaks at the Green Valley Charitable Hall (GVCH) site and the nearby, closed Spunky Campground on April 24 and 25. Rather than debark or burn the infested material, tree boles and branches were ground to < 3" minus. A contracted excavator and a self-propelled "tub grinder" were used for the first time on GSOB-infested oaks, which by handwork only would have been otherwise an enormous and overwhelming task. You can still see chips in the area around the GVCH. An USFS crew and the two operators of these machines felled and ground 50 large trees in 1.5 days! The ANF has prepared a "white paper" to evaluate the project.



Photo by Ron Sardisco



Excavator lifting most of an oak tree. The piles of chipped material are about 6 feet tall. Photo by Robin Farr.



A small remote control device runs the "tub grinder". Photo by Robin Farr.

Joint GSOB Survey and Monitoring Project

Following the removal of the 50 infested trees, USFS personnel spent three days tagging about 1,000 oak trees around the GVCH. Each tree has a numbered tag, its GPS location was logged, the health of the canopy was rated, the diameters of the trunks were measured, and the number of D-shaped holes in the bark recorded. The trees will be rechecked in the Fall. Data collected will document changes in each oak tree's condition following this summer's GSOB emergence period, especially the number of new exit holes and signs of decline in tree health. The USFS data collected will be combined with LA County Fire data collected from the trees they've surveyed on private property in GV. This will give a good picture of what occurred during the summer and add to everyone's knowledge about GSOB.



USFS and LA County Fire come to a consensus on protocols for measuring and rating tagged oaks. Photo by Robin Farr.

Orange County Report – Nathan Gregory of Irvine Ranch Conservancy

After completing post-flight gold-spotted oak borer (GSOB) surveys and the removal of highly infested trees in Weir Canyon last quarter, the Irvine Ranch Conservancy (IRC) began the next phase of treatment by spraying a total of 1,672 oaks, including both lightly infested and neighboring trees, with carbaryl in May. Initially, approximately 1,300 trees were sprayed, but three additional infested trees were found outside the survey area. These trees and all neighboring trees within a 100-m buffer were sprayed with carbaryl, and one of the trees, which was very heavily infested, was debarked and will eventually be removed. Additionally, monitoring has not detected any other infested trees in Weir Canyon or neighboring Blind Canyon.

An IRC technician has been monitoring the emergence of GSOB from infested bark under controlled conditions in collaboration with Tom Scott of UC Riverside and Kevin Turner of CAL FIRE. The first emergence was recorded on April 25th, and emergence continued through June with the heaviest activity observed from mid-May through early June. Finally, IRC produced a story map about GSOB natural history and the ongoing management in Weir Canyon:

<https://irc.maps.arcgis.com/apps/MapSeries/index.html?appid=4e26e71f2fce4596a49423c89a70a20e>

Riverside County

San Bernardino National Forest Tree Removal and Debarking

The San Jacinto Ranger District is felling and debarking GSOB-infested oaks on National Forest located on the periphery of the communities of Idyllwild and Pine Cove. They've tried several different methods of debarking, including the use of hand tools (Pulaskis etc.) and chainsaw mounted debarkers. Removed bark and branches are chipped. Their evaluation of debarking methods is forthcoming.



Black oak debarked with Pulaskis. Photo by Kevin Turner

Collaborative Tools Calendared Events

Event Date	Event Name	Location	Contact
5/8/2017 - 5/10/2017	Western Chapter ISA Annual Meeting	Paradise Point Resort San Diego	Kevin Turner
4/20/2017	Identifying Invasive Oak Pests and Diseases in San Luis Obispo County Workshop	Atascadero Library, San Luis Obispo County	Kim Corella
4/8/2017	La Jolla InterTribal Earth Day	San Diego County, La Jolla Indian Reservation Campground	Anabele Cornejo

Report from Jan Gonzales - University of California Cooperative Extension on GSOB outreach

Jennifer Pelham, Environmental Horticulture Advisor, delivered talks to the California Native Plant Society San Diego Chapter, giving updates on goldspotted oak borer and South American Palm weevil; John Kabashima gave update on invasive shot hole borer/fusarium dieback, June 20, 2017.

Tabletop Display –

- 05/8-10/2017, WCISA Conference, San Diego
- 06/20/2017, CA Native Plant Society San Diego Chapter meeting, San Diego

Handouts distributed:

- GSOB Trifold brochure – 600
- GSOB ID cards – 375
- GSOB Wood BMP's – 400
- GSOB, Forest Insect and Disease Leaflet (USFS) - 75
- Buy It Where You Burn It/Don't Move Firewood cards – 500

Please contact Kevin Turner at kevin.turner@fire.ca.gov regarding omissions or corrections needed for this report.