

Goldspotted Oak Borer Quarterly Situation Report October 1 to December 31, 2017

Orange County Report

Our USFS Forest Health Protection partners have detected GSOB in the El Cariso area of the Trabuco Ranger District, Cleveland National Forest. This is the first discovery of GSOB outside of Weir Canyon in Orange County. It is approximately 27 air miles from the Weir Canyon infestation to the Blue Jay/Falcon Campground infestation; to date, no discoveries of GSOB

have been made in the intervening area between which raise the possibility that the new infestation is tied to the movement of firewood.

The USFS El Cariso Campground is located adjacent to Highway 74 (Ortega Highway), right at the border between Orange and Riverside



Counties. Private homes are scattered around the area. Two GSOB adults were observed on a purple prism trap in the campground. However, no GSOB-infested trees were found nearby.

A sticky trap located in an oak stand between Falcon Ridge Campground and Blue Jay Campground captured 22 GSOB adults. This location is roughly two miles to the west of El Cariso Campground. One 62" DBH coast live oak had >25 exit holes and woodpecker foraging. Several other trees have a lesser number of GSOB exit holes. All attacked trees still look relatively healthy at this point.

The coast live oaks crowns look okay for now. Early on in infestation? Note telltale exit hole and woodpecker work.



Los Angeles County Update

Surveys of oaks in the Green Valley community continued during the quarter by LA County Fire/Forestry Division personnel. Although there are still many more oaks to be surveyed, already > 1,000 oaks have been identified exhibiting signs of GSOB attack! A formal report of the survey results so far is being prepared. Limited funding has been obtained to help pay for some “high technical difficulty” infested oak removals/disposals by contractors. Funding is an issue moving forward, especially as more trees are found. There is concern about infested oak wood leaving the community and starting a new infestation elsewhere in the county.

San Diego County Update

2017 Cuyamaca Rancho State Park Wood Containment Study Update

Mike Puzzo, Environmental Scientist, California State Parks

Unfortunately, the results from the containment study were not definitive due to the small number of adult GSOB collected from the “control” barrels. The plastic screen mesh used in the study will be closely examined for signs of GSOB chew holes to see if the mesh was capable of containing them. They will find and exploit any open seams. The covered stalls created amazing micro habitats for lizards, small mammals and spiders which probably predated on not just GSOB adults, but whatever other insects were in the wood stalls under the screen mesh or plastic covering. Every time we checked on the stalls, we’d see dozens of lizards and spiders. Five purple sticky traps placed outside of the wood stalls captured about five GSOB adults.

Cuyamaca Resprouting Study Update

Raw data is currently being analyzed on several techniques to promote successful resprouting from stumps of GSOB-killed oaks. A full report on which methods have performed best will be shared with the group soon.



Dos Picos County Park Update

No additional GSOB-infested oaks were removed during this quarter.

San Diego County Parks GSOB IPM Program Update

The County of San Diego Parks and Recreation Department partnered with County of SD Agriculture, Weights and Measures (AWM) to implement a spray program to protect high-value trees in several parks that have been attacked by GSOB starting in 2015. The spray program has been part of an Integrated Pest Management program that also incorporates removing (and grinding) highly-infested oaks (and resulting hazard trees) and managing infested firewood to prevent further spread outside of the parks.



A bifenthrin pesticide is applied annually to the trunk and lower branches to trees identified by each park's staff and must have ≤ 25 exit holes. The purpose of the treatment is twofold; kill GSOB adults (beetles) as they emerge through the bark from infested trees and to kill larvae that hatch from eggs laid on the outer bark (of uninfested or lightly-infested trees) before they can bore through the bark into the cambium to feed. Per the pesticide label, reentry into the treated area is allowed "when dry".

County Parks consider the program a success. Since beginning the spraying program three years ago, out of 582 trees sprayed, only 42 have died. They plan to spray again this year. Cost is roughly \$20,000 to \$25,000 to protect trees at eight different county parks. Contact Region SD County Parks Manager Andrew Quinn if you have questions.

Other miscellaneous activities during the quarter:

Andrea Hefty of USFS Forest Health Protection gave a GSOB update at the California Forest Pest Council annual meeting in Davis on November 15th.

**UCCE San Diego Invasive Pest Program
Goldspotted Oak Borer Education and Outreach Activity
October 1 – December 31, 2017**

GSOB Mapping Projects - Organized and facilitated an online meeting on 11/27/2017 with cooperators to address GSOB infestation and management mapping projects including updating PDF maps on www.GSOB.org and development of an interactive online map view application. Project workflow, critical roles, responsibilities and task assignments were discussed and established. Working group includes Stacy Hishinuma (USFS FHP), Kim Corella and Kevin Turner (CAL FIRE), Nathan Gregory (Irvine Ranch Conservancy), Tracy Ellis (County of San Diego), Tom Scott (UCANR-UCR), Abigail Barazza and Jan Gonzales (UCCE SD). Next workgroup meeting to be scheduled in January 2018.

Rincon Oak Forum - Assisted with the coordination of and participated in the 2017 Oak Forum, 11/29/2017, hosted by the Rincon Band of Luiseño Indian tribe as part of their Native American Heritage Month events. The Oak Forum addressed invasive insects and weeds on tribal landscapes and the community organization needed to combat the spread of these pests. GSOB impacts, symptoms and management strategies were among the topics presented. Speakers included Andrea Hefty and Stacy Hishinuma (USFS FHP), Chris McDonald (UCCE) and Kevin Turner (CAL FIRE).



Hillcrest Farmers' Market - Coordinated and staffed booth for invasive pest outreach at the Hillcrest Farmers' Market (San Diego community), 12/31/2017. Booth featured tabletop display with wood and insect samples and handouts. Information on goldspotted oak borer, invasive shot hole borers and the Firewood Taskforce resources were shared with visitors to raise awareness about these tree pests. Three hundred plus (300+) people visited the booth throughout this day-long event.

Community Outreach Promotion - Sent letters to ~7 local community organizations in San Diego County announcing UCCE's availability to provide a brief presentation on invasive tree pests threatening their communities, specifically goldspotted oak borer, invasive shot hole borer and South American Palm Weevil. We will continue outreach and work to schedule presentations throughout the Spring of 2018.

California Forest Pest Council Annual Conference – Attended the annual CFPC Conference, 11/15/17-11/16/17, Davis, CA.

Coordinating Working Groups - Continue to actively participate in collaborative joint agency/cross-sector work groups:

- Emerging Tree Pests Education and Outreach
- Invasive Shot Hole Borer Coalition (Urban and Natural lands)
- UC ANR Invasive Shot Hole Borer working group
- Southern California Forest Pest Committee
- Statewide Invasive Shot Hole Borer Network

Invasive Tree Pests Tabletop Display

- 10/1/17, Santa Ysabel Farmers' Market and Sustainability Fair, Santa Ysabel
- 11/8/17, San Diego Farm & Nursery Expo, Del Mar
- 11/29/17, 2017 Rincon Oak Forum, Rincon
- 12/31/17, Hillcrest Farmers' Market, San Diego

GSOB Handouts Distribution

- GSOB Trifold brochure – 85
- GSOB ID cards – 220
- GSOB Wood BMP's – 240
- GSOB, Forest Insect and Disease Leaflet (USFS) – 5
- Buy It Where You Burn It/Don't Move Firewood rack cards – 60
- Other Miscellaneous (children's activity pages, folders, etc.) – 175

Collaborative Tools Calendar for July - September

12/31/2017	Hillcrest Farmers' Market- ETP Booth	Hillcrest Farmers' Market at 3960 Normal St. San Diego, CA 92103	Abigail Barraza
11/29/2017	2017 Rincon Oak Forum	Rincon Tribal Hall	Abigail Barraza
11/16/2017	California Park & Recreation Society Maintenance Management School SHB presentation	Lake Arrowhead , CA	Anabele Cornejo
11/8/2017	2017 San Diego Farm and Nursery Expo	Del Mar Fairgrounds	Abigail Barraza
10/30/2017 - 11/2/2017	Tribal EPA Meeting	Viejas Resort and Casino	Abigail Barraza
10/25/2017	San Luis Rey Watershed Council Annual Stakeholder Meeting		Anabele Cornejo
10/13/2017	Snapshot Operation San Ysidro Passenger Port	San Ysidro Passenger Car Port of Entry	Tracy Ellis
10/12/2017	Ag in the Classroom	Del Mar, County Fairgrounds	Tracy Ellis
10/1/2017	Santa Ysabel Farmers Market and Sustainability Fair	Dudley's Bakery Hwy 79 and Hwy 78 X	Tracy Ellis

(note: GSOB is almost always included at ISHB-focused meetings and vice versa)

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