## THE GOLDSPOTTED OAK BORER



Goldspotted oak borer adults are smaller than a penny.

Adults are about 7/16 of an inch (1 cm) in length with six distinguishing orange spots on the wings.



Larvae are legless and white in color. Mature larvae can reach 13/16 of an inch (2 cm) in length. Larvae possess two pincher-like spines at the tip of the abdomen.

## CURRENT AREA OF INFESTATION



The goldspotted oak borer is currently known in California only in San Diego County, primarily in and around the Descanso Ranger District of the Cleveland National Forest.

### **DON'T MOVE FIREWOOD!**



Moving firewood has the potential to introduce this new pest to more California locations.

Please, do not move firewood!

For additional and current information:

http://groups.ucanr.org/GSOB/

www.fs.fed.us/r5/spf/fhp/ www.fs.fed.us/r5/cleveland/

# THE GOLDSPOTTED OAK BORER: A NEW THREAT TO OAKS IN SOUTHERN CALIFORNIA



The goldspotted oak borer is an oak pest new to southern California. It was linked in 2008 to oak mortality in San Diego County that has been occurring since 2002. The beetle is new to California, but has long been present in southeastern Arizona, Mexico, and Guatemala. This woodborer is aggressively attacking three oak species. Repeated attacks occurring over several years can kill mature trees. This new pest has the potential to kill native oak species throughout California.













### **BEETLE IMPACTS**



Feeding galleries of the goldspotted oak borer larvae are often black in color with no specific pattern. Larvae feed under the bark primarily on the wood surface.



High densities of larval galleries can patch kill areas of inner bark and lead to tree death. Patches of dense galleries are often indicated by dark, wet staining on the bark exterior.



Black or red staining on the main stem or larger branches can signify injury from the goldspotted oak borer.

#### **EVIDENCE OF INJURY**



Woodpeckers chip away outer bank to forage on goldspotted oak borer larvae. Woodpecker foraging in coast live oak exposes the dark larval galleries and inner bank.



When new adult beetles emerge, they create D-shaped exit holes about 3/16 of an inch (4 mm) in diameter. These exit holes indicate that tree damage is extensive.



Twig die-back and crown thinning can be symptoms of goldspotted oak borer injury.

### **HOST TREES**



Coast live oak is an evergreen species with cupped leaves. Its acorns are slender and sharply pointed.



Canyon live oak is an evergreen species. The underside of older leaves have a gray appearance while newer leaves have fine red hairs.



California black oak is a deciduous species that is found at higher elevations, at 5,000-7,000 ft in southern California.