

New Pest Threatens California's Oaks

As if life wasn't tough enough already for California's oaks with Sudden Oak Death (see the California Oak Mortality Task Force web site, www.suddenoakdeath.org), continuing drought, more wildfires, and anthropogenic impacts from residential developments, firewood harvesting and agricultural conversions, a new pest has emerged in the last several years that is decimating some oak species in Southern California. This pest, called the gold-spotted oak borer or GSOB (*Agrilus coxalis*), has been killing thousands of oaks in the mountains in central San Diego County. This flat-header borer attacks the trunks and branches of mature oaks, feeding primarily at the interface between the sapwood and the phloem under the bark.



Experts think the GSOB (who some refer to as the Golden SOB!!), arrived in the county sometime in the last few years, hidden under the bark of imported firewood—most likely from Mexico—though that has yet to be confirmed. To date it has attacked coast live oaks (*Quercus agrifolia*), California black oaks (*Q. kelloggii*) and canyon live oaks (*Q. chrysolepis*), but has not been found on any white oak species. The beetle is about 10 mm long and 2 mm wide, with gold spots on its dark green forewings. It is a native of Arizona, Mexico and Guatemala. "The jury's still out on whether this is a natural expansion of the territory of this beetle or whether it is an introduced species," said Bob Atkins, San Diego County Agricultural Commissioner. A recently written Pest Note on the GSOB can be viewed at the Cleveland National Forest web site: <http://www.fs.fed.us/r5/cleveland/>.

Unlike some pests that seem to only target weak or stressed trees, the GSOB also attacks large, vigorous, and healthy trees, including urban trees in people's yards. As yet there is no recommended treatment, largely because so little is known about the insect. So far, more than 17,000 oaks have succumbed to the borer at elevations ranging from about 650 m above sea level to almost 2000 m. While residents of the affected areas watch in dismay as this new pest takes its toll, scientists are trying to learn more about the beetle and understand its life cycle and behavior so that treatments and management recommendations can be developed and tested. Until then, efforts are focused on educating the public and preventing the spread through the movement of firewood.

To protect Southern California's majestic oaks, federal, state and local officials are urging San Diego County residents not to bring in firewood from outside the county, and to avoid chopping down backcountry oaks for burning in the fireplace. They worry that without intervention, GSOB will continue to spread in San Diego County and will then move north into Riverside County and other parts of the state. For this reason, some districts in the Cleveland National Forest have also stopped issuing permits to cut oaks for firewood. While officials recognize that the range of the pest will likely continue to expand, they feel they can slow its progress by educating the public and modifying firewood harvest regulations.



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