



# Connect

MAGAZINE

2020 ISSUE FOUR • THE PUBLICATION OF CAI-GREATER INLAND EMPIRE



## Industry RUNDOWN

### EXPLORING:

ASSEMBLY BILL 3182: UNDOING RENTAL RESTRICTIONS AND "FORCED" GOVERNING DOCUMENT AMENDMENTS

---

PARAMETRIC INSURANCE TO THE RESCUE: EARTHQUAKES, HURRICANES, HAILSTORMS AND OTHER CATASTROPHIC DAMAGE

---

THE 12 DAYS OF HOLIDAY LIGHTING: THE GOOD, THE BAD AND THE UGLY OF HOLIDAY LIGHTING.

---

AND MORE!

ALSO INCLUDED:  
2021 CAI-GRIE  
EVENTS CALENDAR

INSIDE BACK COVER

# GROWING THREAT

SMALL BEETLES POSE A GROWING THREAT TO TREES IN INLAND EMPIRE COMMUNITIES

BY: MR. RANDALL OLIVER, UNIVERSITY OF CALIFORNIA

“ A CERTIFIED ARBORIST SHOULD BE FAMILIAR WITH BEST PRACTICES WITH RESPECT TO BOTH MAINTAINING TREES AND DISPOSING OF INFESTED WOOD AND GREEN WASTE. ”



**Invasive shot hole borers, small beetles that have damaged or killed thousands of urban trees in Los Angeles and Orange Counties over the past decade, now appear to be spreading through parts of the Inland Empire. The extent of their presence isn't fully known at this time, but they already appear to be well established in some areas, particularly near the Santa Ana River basin. Over the next couple of years, the Riverside County Agricultural Commissioner's office and the Inland Empire Resource Conservation District will be conducting trapping and monitoring efforts to better evaluate the extent of infestation and determine priorities for tree removal and treatment.**

However, even before the magnitude of infestation is determined, area residents and homeowner associations should be aware of the pest and its potential for devastating damage to the trees in their communities. Unlike many insect pests, invasive shot hole borers infest a wide variety of tree species, including many common ornamentals, avocados and California natives. As much as a third of our urban forest potentially could be attacked by the tiny killers.

Invasive shot hole borers (ISHB) don't actually eat wood, but they do cause structural damage when they tunnel into trees and create galleries where they introduce and "farm" a fungus to feed their larva. This fungus causes a tree disease called Fusarium dieback. Over time, as the fungus spreads within the tree's inner layers, it disrupts movement of water in the tree. Deprived of water and nutrients, the tree suffers from branch dieback and breakage. Eventually, many infested trees die.

Those dead and dying trees pose potential risks to homeowners and their properties due to falling limbs and adding fuel for fires. They also represent a liability risk to HOAs and their management companies and contribute to the ongoing spread of the beetles to other trees in the area.

Since most homeowners and associations aren't aware of the problem, beetle infestations can cause extensive damage before they are identified. The beetles' small size and cryptic lifestyle make them hard to spot and harder to control. Invasive shot hole borers spend most of their lives inside their galleries, which makes it difficult to kill them with pesticide sprays. And when female

beetles do emerge to find new host trees, they aren't attracted by pheromones, so the trap and kill technique isn't an effective control method.

The best way to battle these bugs is to stop them before they spread to new trees. That requires awareness both of the pest and symptoms of infestation, as well as a willingness by associations and their residents to inspect and monitor their trees regularly. While it is unlikely to find a beetle on a tree's bark, there are a number of signs and symptoms to confirm their presence. Shot hole borers leave small, round entry-holes – about the size of the tip of a medium ball-point pen. In addition, trees under attack can exhibit a variety of other signs of infestation that are explained and pictured at [www.ishb.org](http://www.ishb.org).

While just a few years ago, there were no effective treatments for invasive shot hole borers, the science surrounding these pests and understanding of best management practices is advancing rapidly. For low to moderately infested trees, removal of actively infested branches and treatments with a combination of insecticide and fungicide have proven effective control measures (hence the importance of pinpointing infestations as early as possible). Treatment options include systemic pesticides that can be applied as a tree injection or as a soil drench and pesticide bark sprays (ideally timed in early spring and fall, when adult beetles are emerging). Heavily

infested trees may not be able to be saved and should be removed on a timely basis.

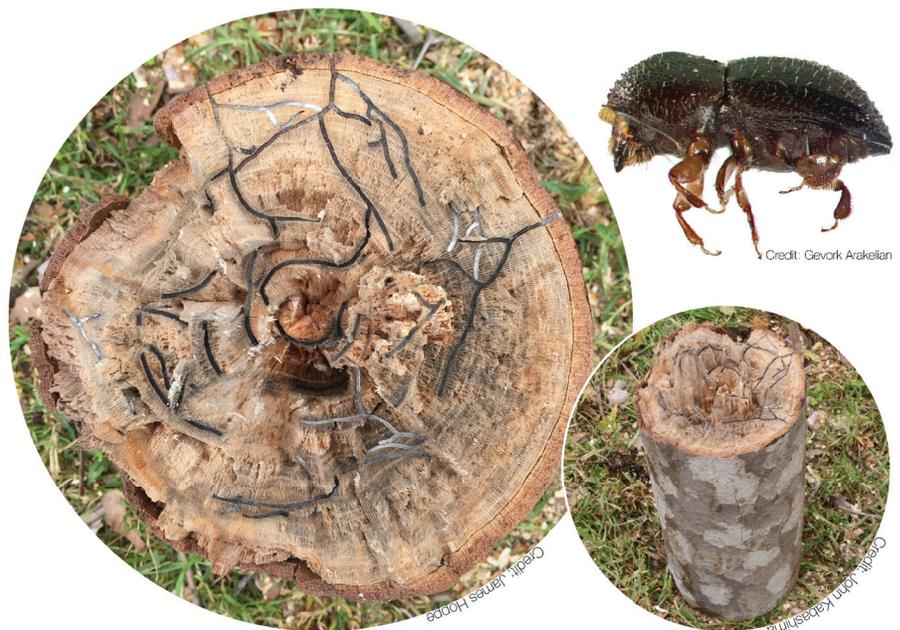
These beetles can survive in down wood for up to several months, so movement of green waste and firewood can spread these dangerous pests to other locations. Hence, correct disposal of infested plant material is of vital importance. Ideally, infested branches and wood from removed trees should be chipped and composted or solarized to ensure the beetles within them are killed.

A certified arborist should be familiar with best practices with respect to both maintaining trees and disposing of infested wood and green waste. HOA managers should consult with their contracted landscapers/gardeners to ensure that they understand and follow such practices.

HOA's and their managers can help further by using their existing homeowner communications to educate their residents about the threat posed by invasive shot hole borers and the fungus they carry. With coordinated action now, our communities can save their trees and avoid significant costs in the future.



*Randall Oliver is the ISHB Communications Coordinator for University of California Agriculture and Natural Resources Statewide Integrated Pest Management.*



*Photo Credit of University of California Irvine*