

## HOW TO USE THIS CHART

This chart is intended to help inform ISHB (Polyphagous and Kuroshio Shot-Hole Borers) management decisions. Consider potential safety hazards, tree value (economic and ecological), available resources, and other factors unique to each situation when using this tool.

## **REPRODUCTIVE HOSTS**

A reproductive host is a species that supports 1) ISHB reproduction and 2) growth and development of the beetle's symbiotic fungi. These species are currently the priority for control efforts as they can produce more beetles that may spread the infestation. Some of the more susceptible reproductive hosts appear to be box elder, castor bean, valley oak, Engelmann oak, coral, and several species of sycamore, willow, and cottonwood.

Visit pshb.org for the full host list.

## LIMB FAILURE HAZARD

The branch collar is the point of attachment between a tree branch and the main stem. ISHB infestation in this area is a serious safety hazard and creates potential for limb failure, as a weakened collar may not be able to support the weight of the branch.

Infested trees—including those that have been treated or pruned—must be regularly monitored so that hazards can be identified and removed. When monitoring, consider beetle attacks in the branch collar as part of the branch.



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## IDENTIFYING + MANAGING ISHB: SUGGESTED STEPS



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