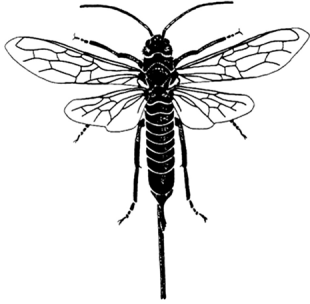


## Horntail Wasps



Horntails are large wasps in the family Siricidae. The most common species in the western United States is *Urocerus californicus*. There are about a dozen species of horntails in California. The adults often are more than 1

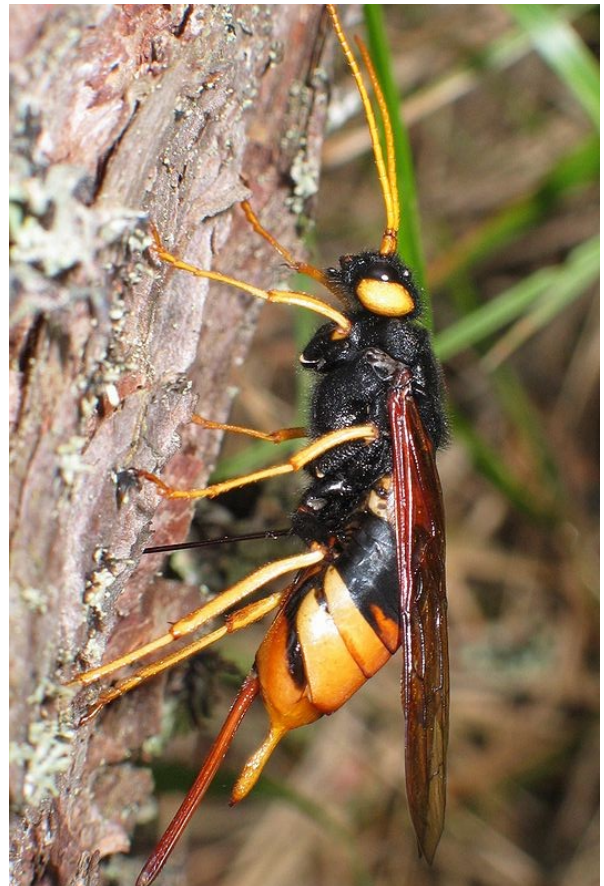
1/2 inches in length. They have a hard cylindrical body, and the head, thorax and abdomen are all about the same width. Adult coloration ranges from entirely gunmetal blue to black or dark brown with yellow bands. Males have a short triangular spine on the end of the abdomen. In females this spine is more elongate and spear-like, and is used to drill into the wood of trees to lay eggs. The ovipositor (egg-laying structure) in females is also elongate and projects backwards below the spine. Although the ovipositor plus spine resembles a huge stinger, these wasps cannot sting.

Female horntail wasps lay eggs in the bark or wood of dead or dying trees. Larvae are cylindrical with large heads and reduced legs, and have a small horn-like process on the last body segment. In natural environments, larval horntails bore through wood, feeding particularly on scorched, weakened or recently killed trees. Horntails commonly are seen attacking damaged trees in the wake of forest fires. They also will lay eggs in un-milled logs stored in lumberyards. Because the larvae actually eat the wood, their feeding results in large hollow galleries that may structurally weaken the building lumber, particularly when lumber is attacked by large numbers of larvae. Adults often emerge several years after the host tree has been milled into lumber. Their emergence from milled wood can sometimes be spectacular if this wood has been used in homes, as the adults leave large, pencil-diameter exit holes in walls or floors.

In California, horntail wasps most commonly attack pine trees and can be quite destructive in conifers in general, and even in second growth redwood in lumberyards. Horntail wasps and their larvae can be carried considerable distances

in shipments of timber or logs. Horntails have become introduced pests of pine plantations in countries without native pine species, such as Chile and Australia.

There is little that can be done to exterminate horntails in structural wood. The entire structure could be fumigated, but the effectiveness of this procedure is unclear. In any case, killing the horntail larvae and adults in the wood may create further problems. The resulting dead bodies are relatively large and may attract ant ants and other pests. Horntails will not lay eggs in wood already assembled into structures, except possibly log cabins. Therefore, once emergence from the original infestation is completed there should be no further problems.



Horntail wasp, *Urocerus gigas*. Photo by Holger Gröschl