



## Horntails or Wood Wasps

Family: Siricidae



Pigeon tremex.

Photo by Kenneth R. Law, USDA APHIS PPQ, [Bugwood.org](http://Bugwood.org)



*Sirex noctilio*.

Photo by David R. Lance, USDA APHIS PPQ, [Bugwood.org](http://Bugwood.org)

### Injury

Horntails are seldom present in large enough numbers to cause significant damage. The larvae bore into the heartwood and sapwood of declining shade trees and may cause some weakening of the tree, making it more susceptible to wind breakage. Pigeon tremex attacks maple, elm, beech, sycamore, hickory and others. Horntails do not damage seasoned lumber or wood structures, although they may continue to develop and emerge as adults from green sawed construction grade lumber.

In recent decades, a non-native wood wasp, *Sirex noctilio*, was found in New York State and has been spreading to nearby states. Its primary hosts in North America are red pine, Scots pine, and related conifers. Because it can kill stressed or weakened trees, and has caused major damage to pines in plantations in the southern hemisphere worldwide, there is concern that this insect will become a problem in pine-growing regions of southeastern USA.

### Description

The horntails are a large family of wasp-like insects whose larvae are woodborers in either hardwoods or coniferous trees. The name horntail is given to these insects because of the horny spear-like plate on the last segments of the abdomen. This horny spear is its egg laying apparatus (ovipositor). Neither sex stings or bites people. Horntails are also called wood wasps or Siricids. Our most common species in New York State is the Pigeon tremex, *Tremex columba*.

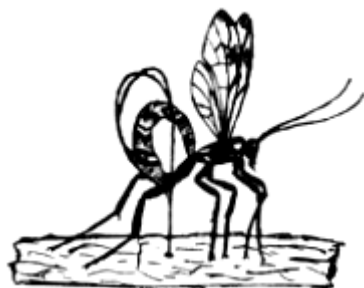
Adult horntails have a heavy body that is cylindrical in shape, and usually blackish or metallic blue with yellow and red markings. The males are generally smaller than the females, but often more colorful. Both sexes have four clear wings. Adults are usually 1 inch or more in length and are strong fliers. Larvae are milky white, soft-bodied and legless, ranging up to 1 3/4 inches in length, and are found tunneling in the wood.

### Life History

Adult horntails are attracted to weakened, dying, or recently cut wood. The female inserts her ovipositor as much as 3/4 inch into the wood to lay her eggs. Eggs are laid singly, but each female is capable of laying 300 to 400 eggs. After 3 to 4 weeks, eggs hatch and the larvae chew their way into the sapwood and heartwood. The

tunnels are bored during the 2 to 3 year time span of the larval stage. Tunnels may be from 1 to 2 feet in length. As the larvae chew, the tunnels become packed with a sawdust-like material, making them difficult to see to the uninformed eye. Pupation occurs in the tunnel made by the larva, in a parchment-like cocoon. The adults emerge in August and September, and are often seen resting on a tree stump or freshly cut pile of logs.

One interesting aspect of the life of *Tremex columba* is that there is a spectacular looking ichneumon wasp parasitoid that attacks it. The ichneumon wasp female drills her long ovipositor into the wood where the horntail larva is working. The ichneumon's ovipositor enables it to drill into the wood 3 to 4 or more inches to reach the horntail larva. She lays her eggs either on or near the horntail and the parasitic larva begins to feed. After pupation, the ichneumon chews its way out of the bark and may occasionally be seen resting on a tree. It is conspicuous because of its very long ovipositor (3 or more inches long).



*Ichneumon wasp*

## Management

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Wood intended for use as lumber should be kiln dried. Damage by this insect can be reduced by prompt utilization. In the home no control is necessary, as the horntails will not reinfest dried or seasoned wood or lumber.

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<http://www.entomology.cornell.edu/cals/entomology/extension/idl/idlfactsheetlist.cfm>