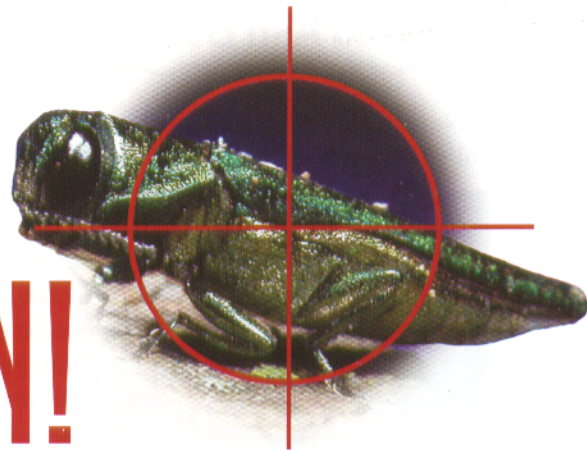




INSECT INVASION!



by Jerry Carlson and Karin Verschoor

Much as a virus or worm can infect an entire computer network, tiny insect invaders are threatening to wreak havoc on New York's forests. Two wood-boring insects, the sirex woodwasp and the emerald ash borer, have been spotted in or near New York State. Unwelcome visitors, both species are capable of quickly destroying an entire patch of forest. As such, these insects are the focus of intensive research and monitoring by the United States Department of Agriculture, the New York Department of Agriculture and Markets, and the New York State Department of Environmental Conservation (DEC).

Sirex Woodwasp

A large, wood-boring wasp, the sirex woodwasp is a devastating pest of pine trees. It is native to Europe and Asia, and has already destroyed millions of pines in Australia, South America and South Africa. Believed to have come into the U.S. in wooden packing material such as crates or pallets, this woodwasp's first known North American occurrence was in Oswego County in 2005. Since then, it has been found in Onondaga, Wayne, Seneca and Cayuga counties, and has just been detected in southern Canada.

Sirex Woodwasp (female) Adults: 2-1" long. Thick bodied; no "wasp" waist. Females: solid black body with spear-like ovipositor
Males: wide orange band on abdomen

Sirex woodwasps are solitary black wasps with brownish wings and orange legs. Females lay their eggs in pine tree trunks, where the eggs hatch into white, wood-boring grubs. The grubs then tunnel through the tree, eventually emerging as adults through holes measuring 1/4 to 3/8 inch in diameter. During the egg-laying process, female woodwasps also inject a toxin to weaken the



An example of an infected tree

tree, and infect the tree with a fungus which softens and modifies the wood so the larva can feed on it. The toxin impairs the tree's natural ability to fight off the fungal infection, and the portion of the tree above the injection site quickly dies.

Because of the danger that sirex woodwasps pose to New York's pines, DEC is asking the public to report any sightings of the insect or its damage. Away from its native Europe, these wasps have no natural enemies and so could spread unchecked if not detected early enough. Signs of possible infestation in pines include dying needles in the tree crown, or sudden tree death for no obvious reason. If you suspect a tree may be infected, look on the tree trunk for exit holes, often marked by oozing resin. Woodwasp exit holes will be randomly scattered on the tree, in contrast to regular rows of holes made by sapsuckers. Also, keep an eye on any cut wood with tunnels throughout the wood. The presence of white larva with a distinctive back spine or "horntail" on the rear indicates a sirex woodwasp infestation.



Detail of the characteristic back "horntail" spine