

Pine Shoot Beetle



The common pine shoot beetle (*Tomicus piniperda*) is an invasive species from Europe and Asia that feeds primarily on pine tree species, *Pinus* spp. The beetle was first noticed in Ohio during 1992. It is currently known to occur in 15 states. In 2003 pine shoot beetle was detected in Ramsey, Dakota and Anoka counties in Minnesota.

Description – Adult beetles are cylinder shaped, ¼ inch long, shiny reddish-brown to black. Bodies of larvae are white with a brown head, legless, slightly curved, reaching a length of ¼ inch.

Life cycle – Overwintering adults emerge during the first warm spring days, when temperatures reach 50 - 54° F, approximately March or early April in MN or ND. Adults mate and lay eggs in vertical galleries in slash, pine stumps, logs, or severely weakened trees. Females prefer to lay eggs on pine sp. however, when populations are high, spruce, fir and larch logs may be used. Larvae feed, develop and emerge as adults in June. The adults fly to living pine trees where they feed by tunneling through new and one year old shoots, killing them. Adults spend 2 - 3 weeks in a shoot, each individual can feed on 1 to 6 shoots. Scotch pine seems to be the preferred host, however, Austrian pine, eastern white pine, red pine and jack pine can also serve as hosts. Around the time of the first fall frost, adults tunnel into the thick bark at the base of the tree.

Damage – Infested shoots wilt at the entrance point of the adult beetle, turning yellow to red. The infested shoots eventually fall to the ground. High levels of shoot feeding can reduce growth. Blue stain fungi has been associated with larval feeding in logs.



Adult boring through shoot



Damage caused by adult feeding



Larval galleries



Entrance hole of adult in shoot

Closely inspect and monitor all nursery stock and Christmas trees received from quarantine areas and ensure shipments are accompanied by a federal certificate or stamp demonstrating quarantine compliance.

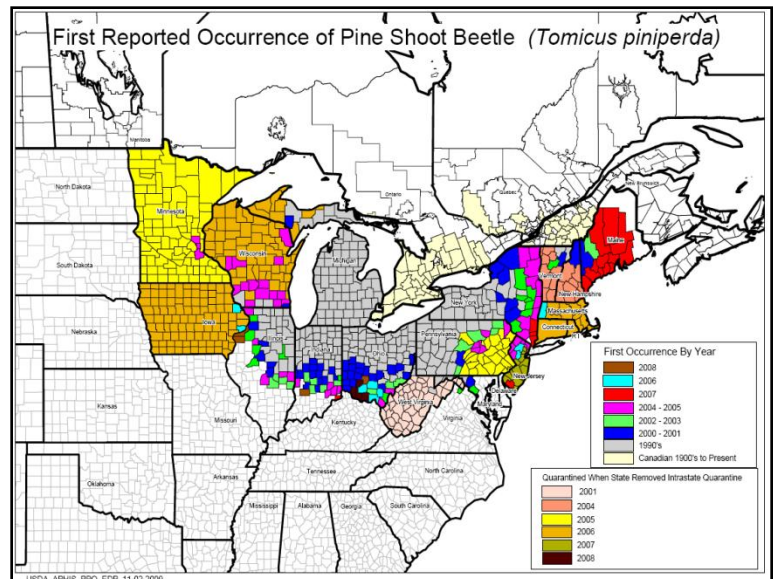
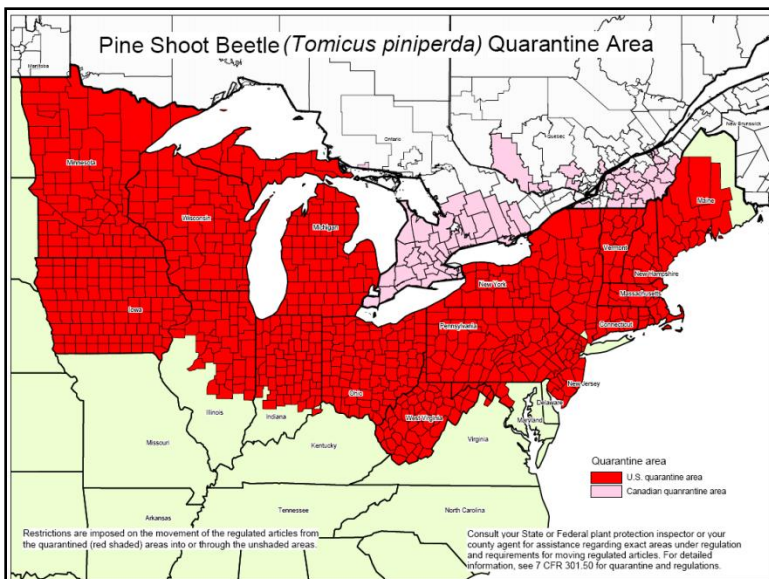


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