PEST ALERT

State of New Hampshire
Department of Resources and Economic Development
Division of Forests and Lands
Forest Protection Bureau–Forest Health Section

Red Pine Scale
Matsucoccus resinosae

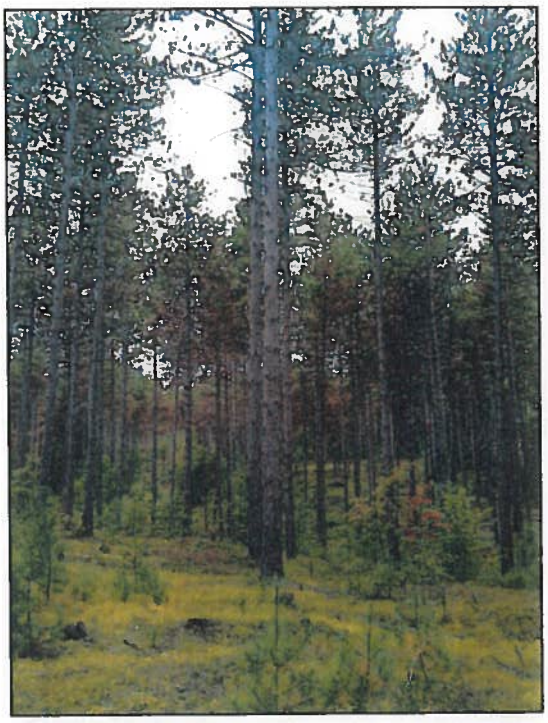
Host: Red Pine *(Pinus resinosa)* in the US

Distribution: Throughout southern New England, New York, New Jersey and eastern Pennsylvania. First reported in Connecticut in 1946 and New Hampshire in 2012. Most likely it was introduced to the US on exotic pines planted at the NY World's Fair in 1939.

Identifying symptoms: Foliage color changes slowly from light green to yellow to red appearing first on individual branches on the lower part of the crown then gradually over the entire crown. Masses of cottony white filaments become visible on the branches when infestations are heavy. Weakend trees may also be attacked by bark beetles causing rapid tree mortality.

Life History: The red pine scale has two generations per year. Adult females are brownish red and wingless. Preadult males resemble females but are smaller and soon after emergence become true winged adults inside a waxy cocoon. Although adult males are winged they do not fly. The summer generation lay their eggs in early spring and these mature in early August to lay the Fall generation. First stage larvae resemble adult females but are smaller and transform into an intermediate legless stage. The fall generation overwinters as first stage crawlers under bark scales and become adults the following Spring.

Intermediate stage nymphs



Symptomatic pines at Bear Brook State Park

Control: Several species of native predators attack red pine scale but are not abundant enough for effective control. Trials in Connecticut of introduced predators have also been ineffective. There are no effective chemical controls for plantations. Maintaining tree vigor may aid in slowing tree mortality and attack by bark beetles but avoid fertilizing as this only favors the scale. Harvesting during winter months will prevent spread of the scale.

Other Notable Pests: There are two other known piercing and sucking insects on red pine in the northeast. Both are adelgids and one is exotic and believed to have arrived with the red pine scale. *Pineus coloradensis* is native and feeds on the needles. *Pineus boerneri* is exotic and feeds on the needles as well as the branches and may be confused with the red pine scale. Damage has not been noted by either of these insects.