

# Common Conifer Pest in New Mexico Landscapes

**Pine shoot moths:** The odds are that you will have to identify this species from its damage. Infested terminal have a very distinct pattern to the needles- the lower needles are substantially longer than the upper needles. The pattern is the result of the damage done by the caterpillars feeding inside the shoot(s).

**Tip moth:** They attack developing tips of coniferous trees. They cause some dieback and can severely impact tree development. As with the pine shoot moths, you will probably recognize these moths in the field by their damage. The damage is typically to the tips of small ( $\leq 2\text{m}$ ) trees. While they can bore down into the developing shoot, they typically kill only the buds.

**Pitch moth:** This is another moth that you will typically identify from its damage. They are common in this area and can be found on many neighborhood trees. The caterpillars develop under the bark of trees and they attack sites can be identified by the development of large pitch masses that are clearly visible. The adults frequently attack trees where damage has previously occurred (limb pruning, mechanical damage, and wind breakage). Attack can result in structural weaknesses in developing trees.

**Tussock Moth:** The Douglas-fir tussock moth, periodically outbreak on Douglas-fir and true firs. The insect is easily identifiable as a caterpillar by the 'tussocks' of hairs that occur on its back. The adult female is also distinct. She is a squat, wingless insect that is seldom seen not on her pupal case. The adult male is fairly non-distinct, brown moth.

**Western spruce budworm:** can be a serious pest of the forest vegetation in western North America. The adult is a medium-sized, tan to reddish brown moth. Damage is fairly distinct and can occur over large tracts of forest when the moth is in an outbreak phase.

**Western tent caterpillar:** can be readily identified by the tent that a colony of caterpillars occupies. The moths are fairly robust and often have a pink tint. The caterpillars are also distinctly colored.

**Fall webworm:** Unlike true tent caterpillars, the tent of the fall webworm can cover entire branches or sections of the trees. The species occurs throughout much of the United States. The species has 2-3 generations per year in southern United States but seldom causes tree mortality. It is an ornamental pest because it is unsightly. The insect is typically kept under control by natural enemies.

Cooley Spruce Gall Adelgid: has a complex life cycle that involves two host species- the primary host is spruce and the secondary host is Douglas-fir. Cone like galls are produced on the primary host, but not on Douglas-fir. Although heavy infestations may result in some growth loss, typically the insects do not cause much damage other than aesthetic. However, the galls are potential problem if the trees being grown as a cosmetic crop. The wool only covers the eggs until the hatch.

Aphids: are common pests. They frequently feed gregariously and can be found on foliage and small branches. The feeding can result in yellowing of the foliage. There are only a few species that present any economic threat in forests.

A dark mold (sooty mold) frequently grows on the sweet 'honey-dew' that is secreted as a by-product of aphids when they are feeding. Ants frequently tend aphid colonies to collect and feed on this 'honey-dew' as well.

Scale insects: They are typically small and highly specialized. The females are wingless and often legless. Adult males usually lack mouthparts, but have a single pair of wings. The nymphs secrete a waxy or scale-like covering over their bodies. Scale insect can be distinguished to species by the shape of the scale and the host plant on which they are feeding.

- Juniper scale, *Carulaspis juniperi*- is an introduced pest of ornamental junipers
- Spruce bud scale, *Physokermes piceae*- is also an introduced pest. Notice where this species attacks and how it does look like a developing bud.
- Pine needle scale, *Chionaspis pinifolia*- is a fairly common insect in New Mexico. It seldom reaches pest status except in plantation or seed orchard settings.
- Piñon Needle Scale, *Matsucoccus acalyptus*-this is also a fairly common insect in New Mexico. Heavy infestations frequently kill small trees and weakened larger trees.