

Sawflies

Hymenoptera:
Tenthredinidae,
Diprionidae





Sawfly larvae have prolegs. Unlike caterpillars (Order Lepidoptera) sawflies have **6-8 pairs of prolegs**. Furthermore, there are **no crochets** tipping the prolegs.

Currant sawfly/
Imported currantworm



Dogwood sawfly



Common Sawflies

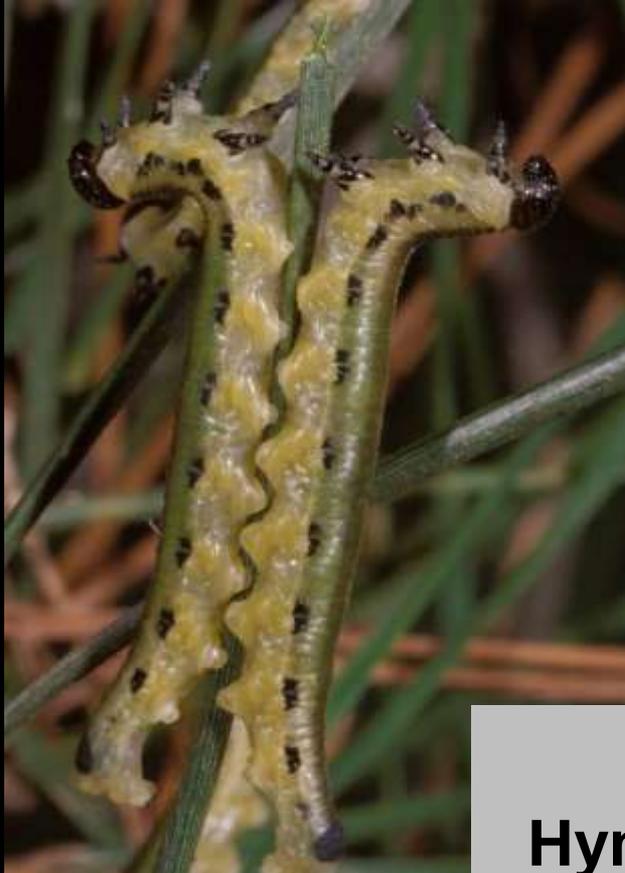
Hymenoptera: Tenthredinidae

Columbine sawfly



Mountain-ash sawfly





Conifer Sawflies
Hymenoptera: Diprionidae



Bullpine sawfly, female



Bullpine sawfly, male



European pine sawfly, female



European pine sawfly, male



Sex of conifer sawflies is fairly easy to determine

**Eggs are inserted into
plant tissues**



Sawflies at egg hatch



Eggs of most conifer sawflies hatch very early in the season, before bud break





Bullpine sawfly, which feeds on ponderosa pine, feeds throughout the winter, maturing in early spring



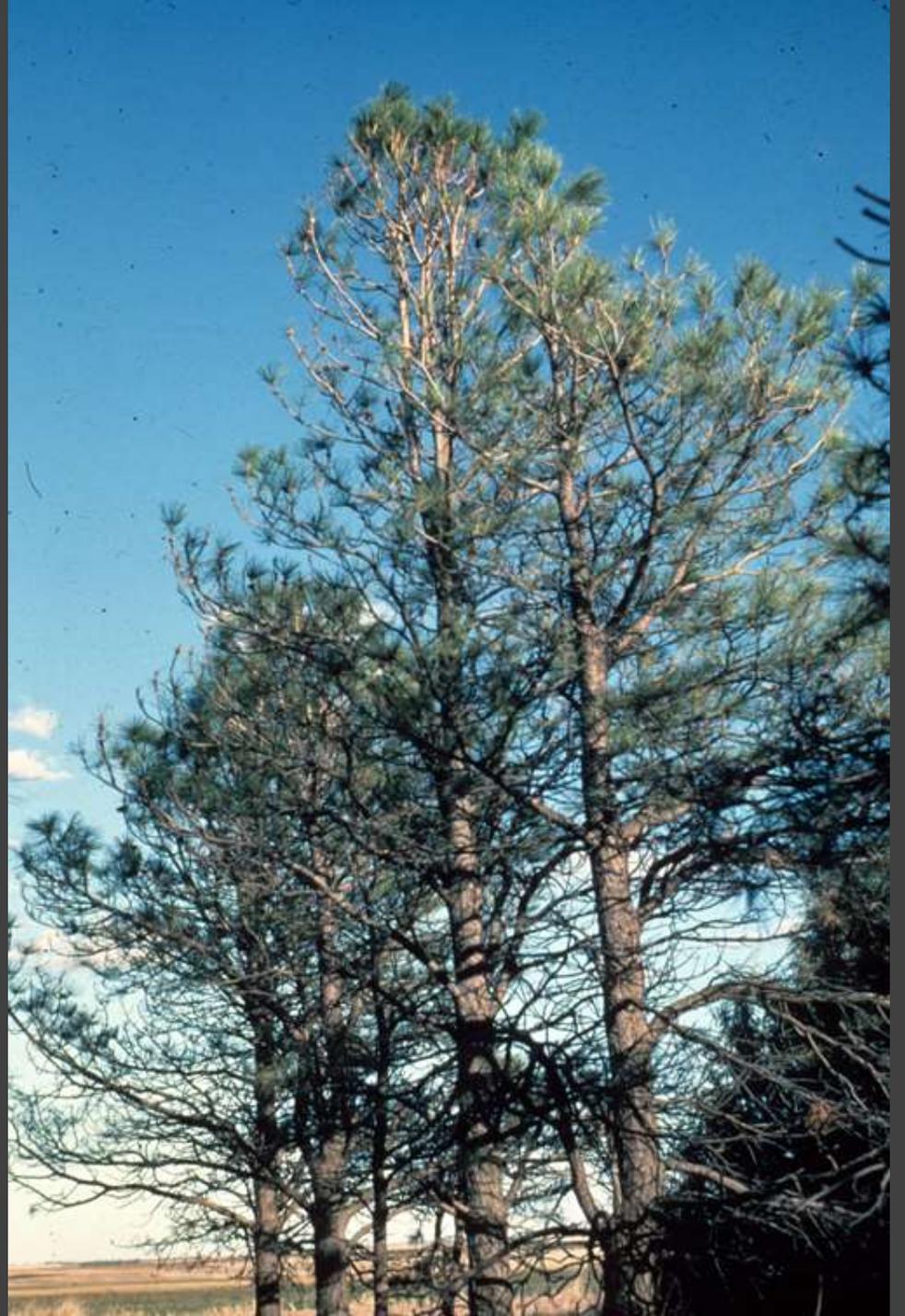


Conifer sawflies typically feed in groups (gregariously)

Defoliation activity usually occurs before budbreak



Tufted growth following conifer sawfly outbreak





Conifer sawfly pupae occur within a silken cocoon, in debris around the base of host plant.

Most species survive winter as a full-grown larva within the cocoon



Neodiprion autumnalis
is a sawfly that
emerges in autumn
and lays eggs at that
time





Neodiprion autumnalis is a species of sawfly that has repeatedly caused outbreaks in parts of Douglas and Elbert counties





During severe outbreaks these sawflies exhaust the older growth and then will feed on the new growth



During outbreaks
larvae may consume
all the foliage – and
die from starvation



Outbreaks can be predicted, in part, by checking for eggs in needles after fall egg laying



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Common sawflies develop on deciduous plants



Common Sawfly Example

Currant Sawfly

Nematus ribesii

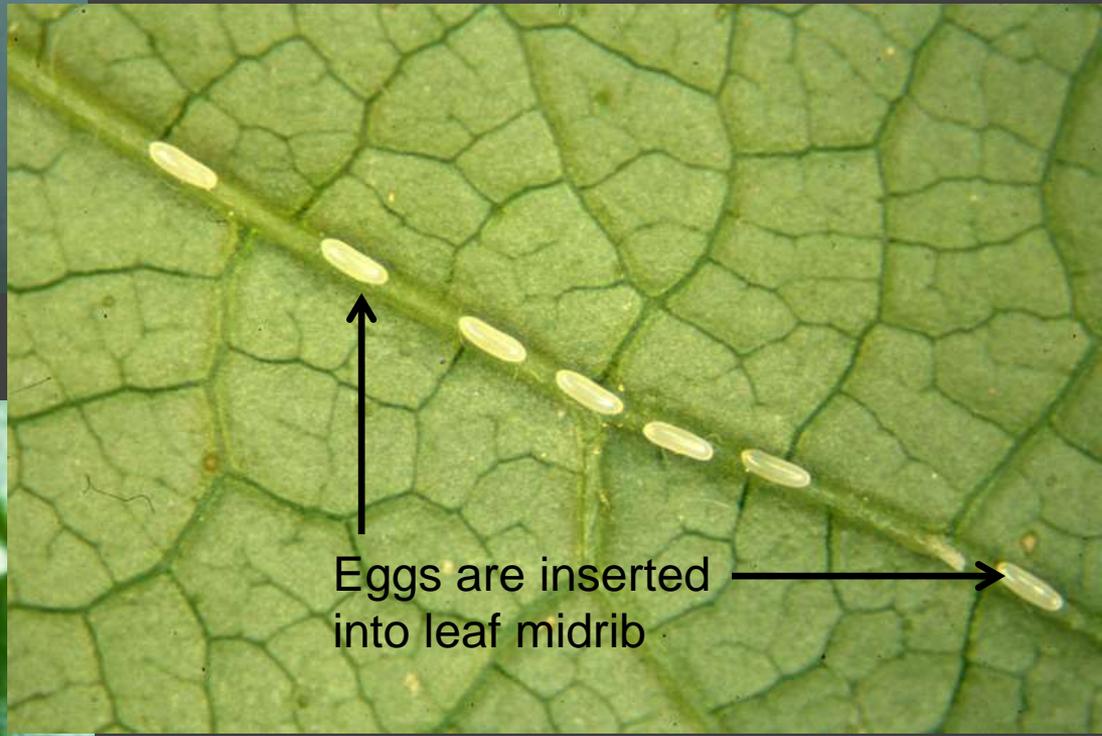


Male



Adults emerge in spring, shortly after new leaves emerge.

Female



Eggs are inserted into leaf midrib

Upon hatch, the young larvae first feed in the interior of the leaf, producing a “shothole” pattern of defoliation



Leaf Chewing Injuries Produced by Sawflies

Shotholes



Many sawflies on deciduous plants originally feed on the leaf interior – creating shotholes. These expand as the larvae grow.

Late stage larvae become more defoliators of more generalized pattern



Leaf Chewing Injuries Produced by Sawflies

Generalized Defoliation



Common Sawfly Example

Brownheaded Ash Sawfly

Tomastethus multicinctus





**Adults emerge shortly
after bud break**

Females insert eggs into the
edges of young ash leaves





Females insert the eggs into the edge of emerging ash leaves



Young larvae feed on the leaf interior producing shothole wounds



Older larvae produce a more generalized type of defoliation





Peak defoliation typically occurs suddenly, but persists for only about a week.



**Ash sawflies crawling
on trunk. Most drop
from the leaves then
burrow into the soil**



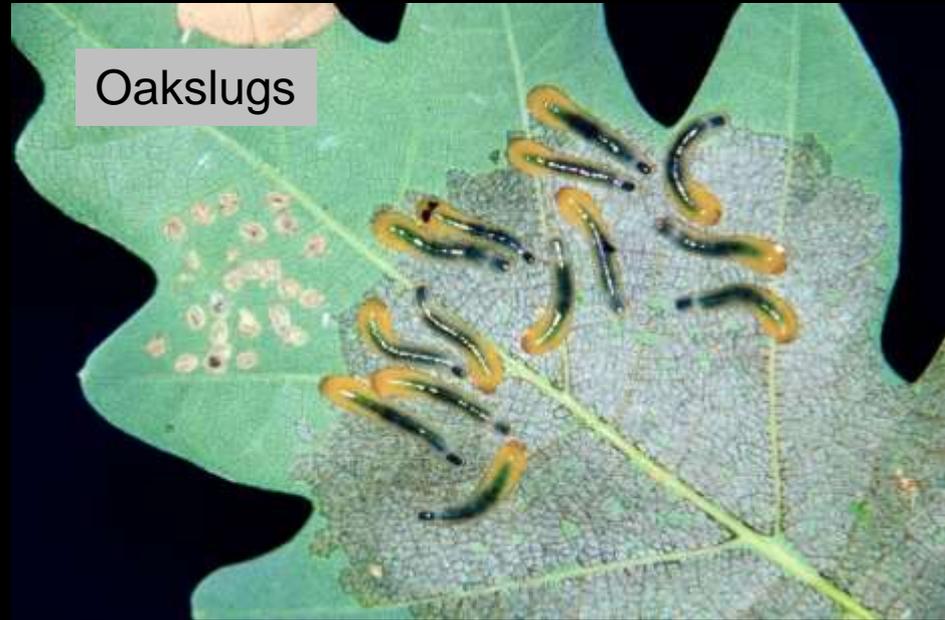


Pearslug



Slug Sawflies

Oakslugs



Roseslug





Slug sawflies are an unusual type of sawfly that produce skeletonizing injuries to leaves



Leaf Chewing Injuries Produced by Slug Sawflies

Skeletonizing



Roseslug



Pearslug



Oakslug

Pearslug (Pear Sawfly)

Caliroa cerasi

Host plants include sweet cherry, cotoneaster, hawthorn, and common pear



Adult females insert eggs into the surface of host plant leaves (various *Prunus* spp.)



Old egg scar



Young larvae chew small pits in the upper leaf surface – a type of shothole pattern injury

Older larvae feed as “skeletonizers”, leaving the main veins



Skeletonizing the upper leaf surface is a characteristic pattern of slug sawflies

