

2009

## Insect Pests of Evergreen Trees

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Harrell, Mark; Allison, Rachel; and Stepanek, Laurie, "Insect Pests of Evergreen Trees" (2009). *Publications, etc. -- Nebraska Forest Service*. 48.

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## Zimmerman pine moth



### Identification

- On pines—mostly ponderosa, Austrian and Scotch.
- Branches are broken or dead.
- Top of the tree may be broken or dead.
- Reddish or yellowish sticky masses of pitch (resin) are present on the trunk or branches.

### Control

- Spray bark with a drenching spray of permethrin (High Yield 38 Plus, Astro) or bifenthrin (OnyxPro)\* in the second week of April and second week of August.
- Spray bark with dimethoate\* before the end of April, but less effective than the sprays above.
- Remove heavily infested trees.

## Pine tip moth



### Identification

- On pines—mostly ponderosa.
- Dead needles are present at the shoot tip.
- Bud and shoot tip are hollow and may have a small caterpillar inside.

### Control

- Spray foliage with acephate (Orthene), spinosad (Conserve), carbaryl (Sevin), permethrin (Hi-Yield 38 Plus, Astro), bifenthrin (Talstar), cyfluthrin (Tempo), tebufenozide (Confirm, Mimic), or dimethoate\* in the third week of May and the first week of July.

## Ips bark beetles



### Identification

- On pines and spruces.
- Many holes about 1/16-inch in diameter are present in the bark.
- Bark may be loose and have tunnels and frass (like sawdust) inside next to the wood.

### Control

- Spray bark of trunk with carbaryl (Sevin), permethrin (Hi-Yield 38 Plus, Astro), or bifenthrin (Onyx)\* in April, after injury by fire or when freshly cut logs are brought near trees.

**\* Trade names are examples of available products. No endorsement is implied. Always follow pesticide label instructions.**

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More information: [www.nfs.unl.edu](http://www.nfs.unl.edu)

#### Photo credits

Spruce needle miner #2: Linnea Gillman, USDA Forest Service, [www.forestryimages.org](http://www.forestryimages.org)  
Pine tussock moth, William M. Ciesla, Forest Health Management International, [www.forestryimages.org](http://www.forestryimages.org)  
Spider mites #1: David Keith, University of Nebraska-Lincoln  
Aphids: David Shetlar, Ohio State University



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# Insect Pests of Evergreen Trees

## Sawflies



### Identification

- On pines—mostly Scotch and ponderosa.
- Needles are missing or chewed.
- Insects are present, often in groups.
- Insects typically rear back when disturbed.
- Insects have 9 or more pairs of legs (other insects have fewer than 9 pairs of legs).

### Control

- Spray foliage when the insects appear (mid to late April) with spinosad (Conserve), permethrin (Hi-Yield 38 Plus, Astro), carbaryl (Sevin), imidacloprid (Merit), acephate (Orthene), cyfluthrin (Tempo) or deltamethrin (DeltaGard)\*.
- For small trees, knock the insects off the tree with a hard blast of water or gently with a stick.

## Bagworm



### Identification

- On redcedar, juniper, spruce and pine.
- Foliage is brown or missing.
- Bags covered with dead foliage and up to 2 inches in length hang from branches.

### Control

- Spray foliage with Bacillus thuringiensis (Dipel, Thuricide), spinosad (Conserve), permethrin (High Yield 38 Plus, Astro), tebufenozide (Confirm, Mimic), carbaryl (Sevin), acephate (Orthene), malathion, deltamethrin (DeltaGard) or cyfluthrin (Tempo)\* when small bags appear (late May to June).
- For small trees, remove and destroy the bags.

## Spruce needleminer



### Identification

- On Colorado blue spruce, Norway spruce and white spruce (including Black Hills spruce).
- Clusters of dead needles are webbed together.
- Dead needles have a hole at the base.

### Control

- Spray foliage with carbaryl (Sevin)\* when the new damage is first noticed (June).

## Tussock moths

### Identification

- On pine—often widespread.
- Needles are missing or chewed.
- Caterpillars are present.

### Control

- If needed, spray with Bacillus thuringiensis\* or other product labeled for caterpillars on pine.



## Spruce spider mite



### Identification

- On spruce, juniper, pine and other conifers.
- Yellow speckling appears on needles—more common around the base of the needle and on older needles.
- Damage usually appears in early summer.
- Heavily damaged needles turn reddish brown and fall off.
- Tiny mites look like moving dots on white paper. Hold paper under branch and strike branch to dislodge mites.
- Mites are present April to May and September to October, not in the summer months.

### Control

- Spray with growing season oil (NOT on blue or white spruces), insecticidal soap (Safer, Concern), spinosad (Conserve), bifentazate (Floramite), hexythiazox (Hexygon), spiromesifen (Forbid), etoxazole (TetraSan) or abamectin (Avid)\* in April to May and September to October. Repeat with the same or different product in 7 to 10 days.
- Reduce applications of insecticides for other pests, which can trigger outbreaks of mites.

## Aphids

### Identification

- Mostly on spruce and pine.
- Insects are present, usually in groups.
- Shiny sticky material (honeydew) or dark material (sooty mold) may be present on foliage or objects below.

### Control

- Reduce applications of nitrogen fertilizers.
- Reduce applications of insecticides for other pests, which could trigger an aphid outbreak.
- Spray with growing season oil (All Seasons, Volck), insecticidal soap (Safer, Concern), permethrin (High Yield 38 Plus, Astro), imidacloprid (Merit), malathion, acephate (Orthene), cyfluthrin (Tempo), or deltamethrin (DeltaGard)\* as aphids appear (May through September) or apply a soil treatment with imidacloprid (Merit)\* prior to infestation if a serious infestation is expected. The soil treatment has a 60-day delay.



## Pine needle scale

### Identification

- Mostly on spruce and pine.
- White scales are present on needles.
- Needles may turn yellow then brown.

### Control

- Spray with growing season oil (All Seasons, Volck), insecticidal soap (Safer, Concern), acephate (Orthene), permethrin (Eight), malathion, bifenthrin (Talstar) or deltamethrin (DeltaGard)\* when eggs hatch and red crawler stage appears (late May to early June and again in July). Repeat in 7 to 10 days unless using oil.

