

YELLOWHEADED SPRUCE SAWFLY (*Pikonema alaskensis*)**Refer to:**

Table 1; Group 2 (Page 60)

Monitoring Season

Early/mid season (April – July)

Control Season

Mid season (June – July) for pesticide and non-pesticide control activity

Rating

Insect pest; eventually fatal to host if left untreated

Hosts and Damage

- Attacks Engelmann, white, black, and blue spruce
- Damage is speckled unless in large populations
- Repeated attacks may kill or severely retard height and radial growth

Physical Characteristics

- Larvae are 16-20 mm long and have yellowish brown heads and shiny olive green bodies with paired grayish green lines the length of the body

Biology

- One generation per year
- Overwinters as larvae in soil-encrusted cocoons beneath trees
- Adults emerge mid May and June
- Larvae feed on new foliage then move to old foliage

Why Manage

- Widely distributed; populations are manageable
- Public perception and complaints; control spread to private property
- To maintain native species balance and variety (biodiversity)
- To establish tolerable levels of damage; prevent reduced use of parks
- Increased need for vegetation replacement; reduced vegetation value
- Increased plant susceptibility to disease and other pests
- Maintenance standards; may lead to increased maintenance costs if not controlled

Monitoring Procedures

- Pre-control monitoring
- Post-control monitoring
- Spot checking

Control Procedures (Focus on controlling with non-pesticide methods)

- Physical/mechanical: Larval control: handpicking and pruning; washing with water
- Pesticide: Malathion; insecticidal soap (foliar spray; backpack and truck mounted high pressure sprayer)
- Biological: None used at present



A



B



C, D



E

A) Damage and needle defoliation on a white spruce tree. B) Yellowheaded spruce sawfly larvae feed indiscriminately on needles throughout the tree; when younger they blend well with the tree's needles; the brown head capsule is a distinguishing feature. C) Mature larvae are darker green with prominent black stripes along the back; they reach 2 cm in length. D) Needle damage is unsightly appearing. E) Insecticide application to control larvae.