



USFS - Forestry Invitational



Virginia Tech Univ.



City of Winnepeg



City of Winnepeg



USFS - Forestry Invitational



Virginia Tech Univ.



City of Winnepeg



City of Winnepeg

spruce budworm

Choristoneura fumiferana

The spruce budworm prefers to feed on balsam fir, although white, red, and black spruce are also suitable hosts. Occasionally, heavy feeding occurs on hemlock, pine, and larch. After overwintering under the bark scales of host trees, budworm caterpillars emerge in spring to mine flower buds and older needles. As they grow older and larger, they move to the ends of branches and bore into vegetative buds. Later, they become free feeders preferring new foliage. At this time the 1-inch black-headed caterpillars are dark brown with light dots along their backs. Pupation occurs from mid-July to early August, usually at twig crotches or in webbing near branch tips. Pupae are reddish to light brown with darker bands and spots. After about 12 days, the adult moths emerge. Grayish with dark-brown markings, they have a wingspan of 3/4 inch. Occasionally this color pattern is reversed. Female moths lay light-green eggs on the flat surfaces of fir and spruce needles near the tips of branches in July and August. Eggs are laid in masses of about 20, with the eggs overlapping like shingles. Each female lays about 200 eggs. Eggs hatch within 8 to 12 days, and the small caterpillars disperse on the branches, where they molt once before hibernating. Spruce budworms produce one generation per year in the eastern United States.

Spruce budworms tend to be wasteful feeders. They bite needles off at the base and leave them hanging in a mass of silk. This causes masses of dried, red-brown needles hanging from the ends of the branches. They usually web two or three shoots together forming a feeding tube. Often during periods of high population, they eat all the new shoots early in the season.

spruce budworm

Choristoneura fumiferana

The spruce budworm prefers to feed on balsam fir, although white, red, and black spruce are also suitable hosts. Occasionally, heavy feeding occurs on hemlock, pine, and larch. After overwintering under the bark scales of host trees, budworm caterpillars emerge in spring to mine flower buds and older needles. As they grow older and larger, they move to the ends of branches and bore into vegetative buds. Later, they become free feeders preferring new foliage. At this time the 1-inch black-headed caterpillars are dark brown with light dots along their backs. Pupation occurs from mid-July to early August, usually at twig crotches or in webbing near branch tips. Pupae are reddish to light brown with darker bands and spots. After about 12 days, the adult moths emerge. Grayish with dark-brown markings, they have a wingspan of 3/4 inch. Occasionally this color pattern is reversed. Female moths lay light-green eggs on the flat surfaces of fir and spruce needles near the tips of branches in July and August. Eggs are laid in masses of about 20, with the eggs overlapping like shingles. Each female lays about 200 eggs. Eggs hatch within 8 to 12 days, and the small caterpillars disperse on the branches, where they molt once before hibernating. Spruce budworms produce one generation per year in the eastern United States.

Spruce budworms tend to be wasteful feeders. They bite needles off at the base and leave them hanging in a mass of silk. This causes masses of dried, red-brown needles hanging from the ends of the branches. They usually web two or three shoots together forming a feeding tube. Often during periods of high population, they eat all the new shoots early in the season.