

GEOMETRIDAE

IRIDOPSIS EMASCULATA

CATERPILLAR Dorsal red markings with irregular borders, noticeably expanded and constricted on A3 through A6; subdorsally and laterally green.

ADULT Wingspan 3.5 centimeters. Forewings pale gray-cream with narrow wavy black lines and a brown patch bordered by two black tooth-like marks in the subapical area.

ECOLOGY Caterpillars are common; feed on maple, alder, and *Vaccinium* during spring. Adults are nocturnal; fly in midsummer. Found in woodlands, riparian habitats, and wet and dry forests; widely distributed in western North America.

GEOMETRIDAE

ITAME BITACTATA

CATERPILLAR Green to gray-brown with white and brown shading on each segment separated at an oblique angle.

ADULT Wingspan 3.1 centimeters. Forewings gray with black dashes and lines.

ECOLOGY Caterpillars are common; feed on currants and gooseberries during late spring. Adults are nocturnal; fly in midsummer. Found in dry forests; widely distributed in western North America.

GEOMETRIDAE

ITAME COLATA

CATERPILLAR Mottled silver, gray, and white; darker patch near spiracles.

ADULT Wingspan 2.3 centimeters. Forewings gray; each forewing has a broad brown postmedian band curved and outlined in black.

ECOLOGY Caterpillars are common; feed on bitterbrush and sagebrush during spring. Adults are nocturnal; fly from mid- to late summer. Found in pine forests and juniper woodlands; widely distributed in western North America.

GEOMETRIDAE

ITAME GUENEARIA



CATERPILLAR Light red to orange-pink; lateral yellow patches on A1 and A2.

ADULT Wingspan 2.8 centimeters. Forewings pale gray; each forewing has a yellow postmedian band outlined with brown. Hindwings white to yellow.

ECOLOGY Caterpillars are common; feed on California coffeeberry during spring. Adults are nocturnal; fly in midsummer. Found in dry open forests and woodlands; distributed in the Pacific western states and the Southwestern states.

GEOMETRIDAE

ITAME QUADRILINEARIA

CATERPILLAR Green with dark brown patches sublaterally.

ADULT Wingspan 2.8 centimeters. Forewings gray with fine dark lines; each forewing has a bright yellow patch along the costal margin on the venter (not shown) of the forewing.

ECOLOGY Caterpillars are common; feed on snowbrush during spring. Adults are nocturnal; fly in midsummer. Found in wet and dry forests; widely distributed in western North America.

GEOMETRIDAE

LAMBDA FISCCELLARIA - OAK (HEMLOCK) LOOPER



CATERPILLAR Color highly variable, typically white, gray, and light brown; longitudinal lines in different shades of typical body colors; paired black dorsal spots.

ADULT Wingspan 3.7 centimeters. Forewings slightly falcate, gray to yellow-tan, each with narrow black postmedian and basal lines edged with orange, and a small black discal spot.

ECOLOGY This caterpillar is very common and may cause heavy defoliation of its principal host, white oak; present from June to September. Adults are nocturnal; fly in fall. Found in oak woodlands and coniferous forests; widely distributed in western North America.

GEOMETRIDAE

MELANOLOPHIA IMITATA

CATERPILLAR Green with multiple white lines creating a middorsal longitudinal band; lateral white line extends from T1 to A10.

ADULT Wingspan 3.7 centimeters. Forewings a dull mottled brown with narrow wavy lines and small black marginal spots.

ECOLOGY Caterpillars are common; feed on Pinaceae, particularly Douglas-fir, during spring and early summer. Adults are nocturnal; fly in early spring. Found in wet and dry coniferous forests; widely distributed in western North America.

GEOMETRIDAE

NEMATOCAMPA RESISTARIA - FILAMENT BEARER



CATERPILLAR Mottled caramel, brown, and gray-white. Two very long filaments middorsal on A2 and A3, each forked creating two smaller filaments with white tips.

ADULT Wingspan 2.5 centimeters. Forewings falcate, pale cream to deep yellow with broad purple-brown borders and narrow wavy lines.

ECOLOGY Caterpillars are common; feed on the foliage of flowering trees, shrubs, and herbaceous plants such as maple, alder, snowberry, oak, and mint, during spring and early summer. Adults are nocturnal; fly in late summer. Found in open habitats, woodlands, and forests; widely distributed in western North America.

GEOMETRIDAE

NEMORIA DARWINIATA

CATERPILLAR The lateral flanges on A2 through A5 are characteristic of three common inchworms (see *Chlorosea banksaria*; the third species, *Synchlora aerata*, is not illustrated). Coloration in this species varies among light green, yellow, tan, and brown.

ADULT Wingspan 2.9 centimeters. Wings green with narrow, curved, white basal and median lines.

ECOLOGY Caterpillars are common; feed on many broadleaf trees and shrubs, such as white oak, myrica, ocean spray, bitterbrush, and snowbrush, during March to September. Adults are nocturnal; fly in midsummer. Found in woodlands, and wet and dry forests; widely distributed in western North America.

GEOMETRIDAE

NEOALCIS CALIFORNIARIA



CATERPILLAR This caterpillar is variable in color (shades of off-white, brown, and gray) and pattern. In fact, the lack of notable features in combination with the presence of mature larvae occurring in early spring serve as the best clue to the identity of this species.

ADULT Wingspan 3.6 centimeters. Forewings mottled cream to dark brown with wavy dark median and basal lines.

ECOLOGY This is the most abundant moth species that is capable of feeding extensively on foliage of numerous species of conifers and angiosperms in the fall and into the early summer of the following year. Caterpillars are very common; feed on broadleaf trees, such as big-leaf maple and serviceberry; shrubs, such as myrica and blueberry; as well as many conifers, such as pines and Douglas-fir. Adults are nocturnal; fly from late summer into fall. Found in woodlands, and wet and dry forests, particularly common west of the Cascade Mountains; distributed from California to British Columbia.

GEOMETRIDAE

NEPYTIA UMBROSARIA

CATERPILLAR Middorsal white band edged with a thin black line; laterally golden brown with a faint white spiracular line.

ADULT Wingspan 3.6 centimeters. Forewings mostly gray with jagged median and basal lines; each forewing has a small black discal spot.

ECOLOGY This is one of the most abundant conifer-feeding caterpillars in western forests. Caterpillars are very common; feed on conifers in spring. Adults are nocturnal; fly from mid- to late summer. Found in wet and dry coniferous forests; widely distributed in western North America.

GEOMETRIDAE

OPEROPHTERA BRUCEATA - BRUCE SPANWORM



CATERPILLAR Green; prominent subdorsal white bands.

ADULT Females are wingless. The male wingspan is 2.9 centimeters. Forewings solid dark gray to pale cream with fine dark lines.

ECOLOGY This species was previously known as *O. occidentalis* and is very similar in appearance to an exotic pest, *O. brumata*, the winter moth. This is one of just a few species of moths exhibiting a limited flight period restricted to November and December. Caterpillars are very common; feed on many broadleaf trees, such as big-leaf maple, oak, red alder, bitter cherry, hazel, and willow, from March to June. Adults are nocturnal, males fly in early winter. Found in low elevation woodlands and wet forests; widely distributed in western North America.

GEOMETRIDAE

OPEROPHTERA DANBYI

CATERPILLAR Green with white spots demarking the location of primary setae and three dorsal white longitudinal lines, lateral line light yellow.

ADULT Females are wingless. The male wingspan is 3.4 centimeters. Forewings elongate and gray with dark lines.

ECOLOGY This is one of just a few species of moths exhibiting a limited flight period restricted to November and December. Caterpillars are uncommon, generalist feeders on the foliage of flowering trees and shrubs, particularly ash, cherry, and oak, during the spring. Adults are nocturnal, males fly in early winter. Found in woodlands in the Pacific Northwest.