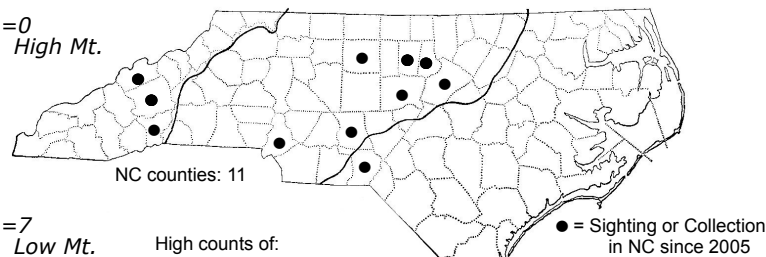
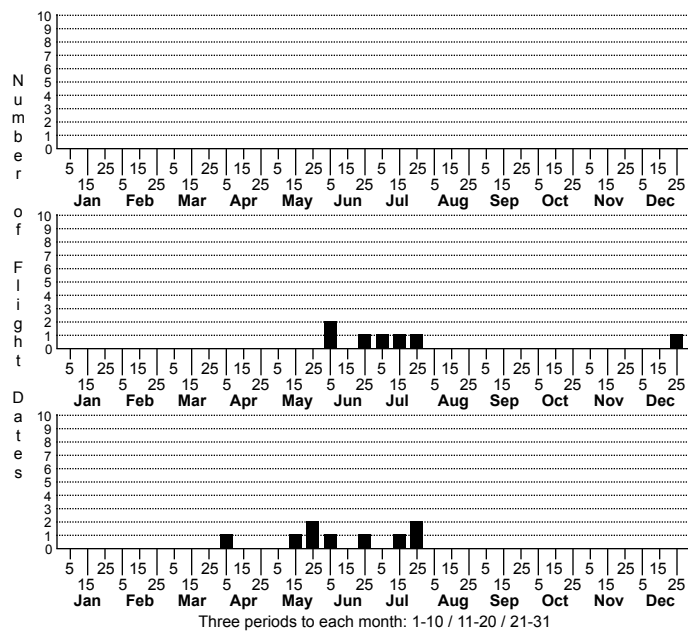


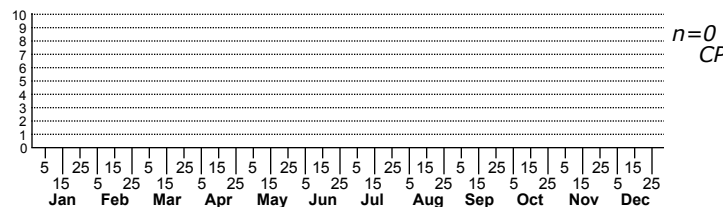
Caloptilia negundella Box-elder Leafroller Moth



High counts of:

15 - Madison - 2020-08-04
10 - Richmond - 2023-05-17
5 - Durham - 2022-05-12

Status Rank
NC US NC Global



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini]
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes, 1923; Chambers, 1876a

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1912)

ID COMMENTS: The following is based primarily on descriptions in Forbes (1923) and Chambers (1876a). The head, thorax and ground color of the forewing are light tawny brown to golden brown. The face is pale below and the labial palp is dirty yellowish white, with the tip of the joints fuscous to dark brown. The antenna is brown and obscurely annulated with darker color. A patch or wash of yellowish or yellowish brown scales is usually present near the base of the wing before the costal patch. The costal patch is light yellow, has a wide triangular base, and becomes truncated and flat-topped before reaching the inner margin. The anterior edge of the patch contrast rather sharply with the darker ground color, while the posterior edge extends posteriorly as a narrow band along the costal margin towards the apex. On some individuals the band is fragmented into one or more blotches, and on many individuals a small black spot is present near the posterior end of the truncated portion of the costal patch. A series of fine blackish dots extend along the costal margin from the anterior section of the costal patch towards the apex. The fringe of unworn specimens has three blackish stripes. The femur and tibia of the front and middle legs are dark brown, while the tarsi are white with a dark band that is followed distally with fine dots at the joints. The hindleg is lighter and faintly dotted at the tarsal joints. This species closely resembles of summer form of *C. ostryaeella* and is most easily distinguished by the presence of a dark band on the upper tarsi of the front and middle legs. The band is missing on *C. ostryaeella*.

DISTRIBUTION: *Caloptilia negundella* is found primarily in eastern North America, but a disjunct is present in California and a few scattered populations are known from Alberta, Saskatchewan, and Manitoba. In the East, population occur in southern Canada (Ontario; Quebec) and from the northeastern states westward to Illinois, Minnesota, and Oklahoma. The range extends as far south as central Mississippi and northern Florida. Populations are poorly represented in the southeastern Coastal Plain where Box-elder is less common. As of 2020, all of our records are from the Piedmont and lower elevations in the mountains.

FLIGHT COMMENT: Adults have been recorded from May through September in different areas of the range, with a peak in seasonal activity from June through August. As of 2020, we have adult records from June and July, with one winter-active adult in December. We have a record of an occupied leaf roll in June, suggesting that breeding is well underway by early June.

HABITAT: Local populations are dependent on Box-elder. This species is common in alluvial forests and along streambanks in the mountains and Piedmont. It also can occasionally be found in upland sites with nutrient-rich soils. Box-elder is less common in the Coastal Plain where it is primarily found in brownwater alluvial forests.

FOOD: This species is monophagous on Box-elder (*Acer negundo*) (Eiseman, 2022), which has been confirmed as the host in North Carolina.

OBSERVATION_METHODS: The adults are attracted to lights, and the leaf blotch mines and rolled leaflets are easy to spot on Box-elder.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: We currently do not have sufficient information on the distribution and abundance of this species to assess its conservation status.