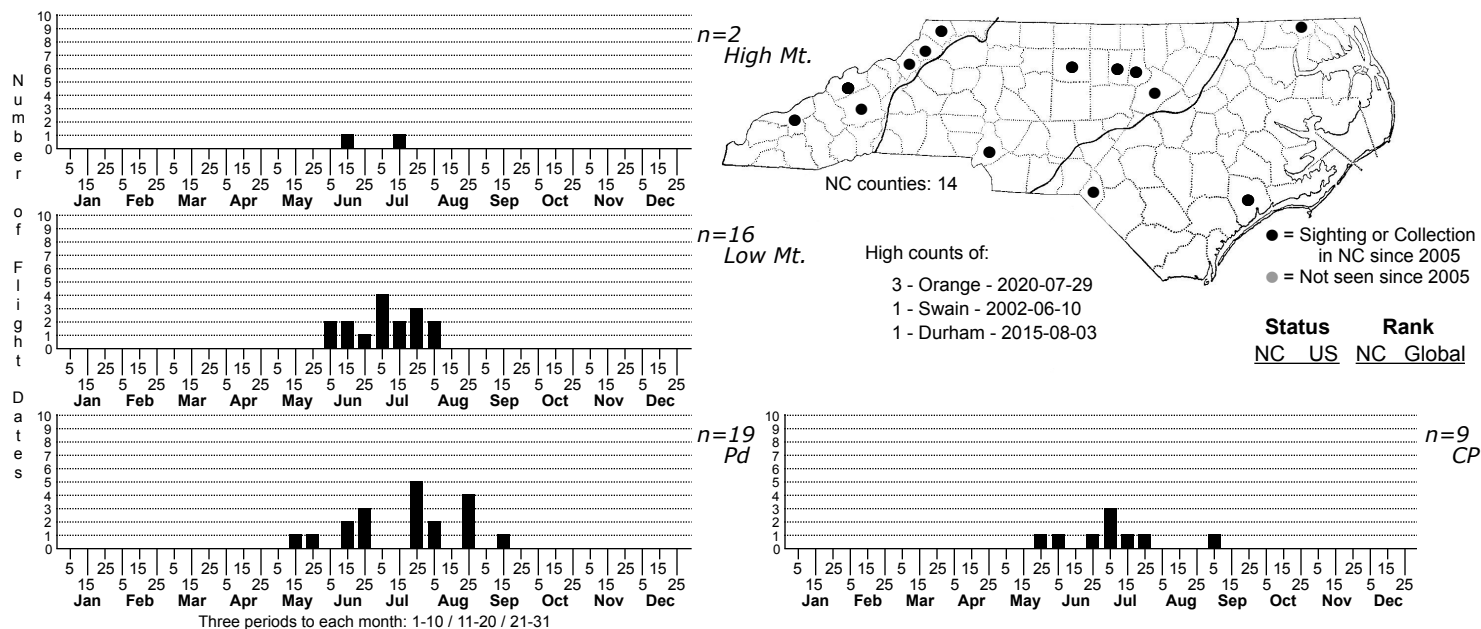


Caloptilia blandella Walnut Caloptilia



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini]

TAXONOMIC COMMENTS: *Caloptilia* is a large genus with nearly 300 described species; 64 species have been described from North America north of Mexico. The larvae mostly feed on woody plants and begin as leaf-mining sap-feeders. The latter instars usually exit the mines and feed within a conical roll that begins at the leaf apex or at the tip of a leaf lobe.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES: Microleps.org (Harrison, 2017)

ID COMMENTS: This species is easily identified by its bold yellow and dark purplish patterning. The forewing ground color is yellow. The dorsal margin of the forewing has a dark purplish edge that extends from the base to the wing tip, and widens about a third of the way before the tip. About a third of the way from the base, a broad dark purplish diagonal band extends from the dorsal edge to the costa. A series of fine dark spots are usually evident along the yellow portion of the costal margin. The tibia and femur of the front and middle leg are dark purple, while the tarsi are white with fine dark markings near the tarsal joints. The rear leg varies from whitish to rather dusky, with dark marking near the tarsal joints.

DISTRIBUTION: This species occurs through much of the eastern US and extreme southern Canada (Ontario; Quebec) where Black Walnut is present. In North Carolina, most records are from the Blue Ridge and Piedmont where Black Walnut is most abundant. One Coastal Plain record comes from the Tidewater where walnuts are unlikely to occur.

FLIGHT COMMENT: Adults are active in North Carolina from late-May through mid-August, with a peak in June and July.

HABITAT: Almost all records come from sites that are in or near alluvial forests or the bases of mountain slopes. One Coastal Plain record comes from the Tidewater where walnuts are unlikely to occur.

FOOD: Larvae feed on Black Walnut (*Juglans nigra*) (Harrison, 2017; Robinson et al., 2010) and have also been reported from Butternut (*J. cinerea*) (Eiseman, 2022). Chambers (1878a) reported mines on Mockernut Hickory (*Carya tomentosa*) that resemble the ones made by *C. blandella* on Black Walnut, but no one has subsequently reared *C. blandella* from hickories (Eiseman, 2019). In North Carolina, we have a single record from Black Walnut.

OBSERVATION_METHODS: The adults are attracted to both outdoor building lights and UV lights. The simple folded-leaf shelters resemble those of many leaf-folding tortricids (Harrison, 2017), so larvae in shelters should be reared to adults to verify their identity.

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: