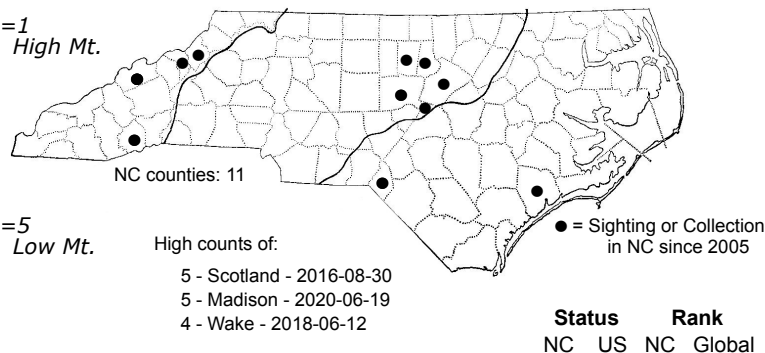
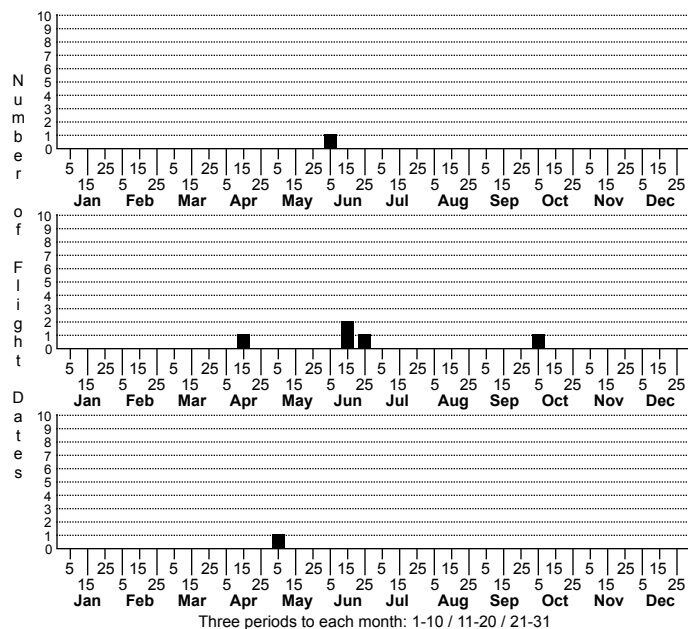


Caloptilia hypericella None



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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1918)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1918), Eiseman (2019)

ID COMMENTS: This species lacks the bold patterning that is seen in many *Caloptilia* and has an overall drab, ochreous coloration with darker mottling. Braun (1918) described the forewings as having an ochreous ground color that is overlain with shining purplish fuscous. The dark coloration on the dorsal half of the wing fades into a lighter wash of varying width that extends along much of the length of the costa. The lighter wash is often narrowest near the wing tip, broadens to reach its maximum width near the middle of the wing, then fades out towards the wing base. There is normally a series of minute fuscous dots on the costal edge. The face is whitish and the labial palps are whitish, but often overlain with extensive dark coloration on the terminal half that produces a somewhat two-toned appearance. The cilia are fuscous and have 3-4 indistinct darker lines running through them. The tibia and femur of the front and middle leg are dark brown to blackish, while the tarsi are whitish with dark spots near the tarsal joints. The rear legs are whitish, but dusted with fuscous coloration.

This species is superficially similar to some specimens of *C. rhoifoliella*, but is smaller (wing span 8.5-10 mm versus 12-13 mm) and lacks the series of dark brown dots or small rectangular blotches along the costa and fold. The light coloration along the costa also extends more basally in *C. hypericella*.

DISTRIBUTION: Populations are known from scattered localities in eastern North America, including Ontario, Quebec, Michigan, Vermont, and Massachusetts, southward to Alabama, Mississippi and Florida (Eiseman, 2019; MPG). As of 2024, we have scattered records of mines or adults from the mountains eastward to the Coastal Plain.

FLIGHT COMMENT: Local populations appear to have two or more broods per year. Larvae have been found in April, July, and late-August in Ohio and Kentucky (Braun 1918; Eiseman 2019). As of 2024, our limited records for adults extend from early-April through early-October.

HABITAT: Given the large number of host species used, populations likely occur in a wide range of habitats such as old fields, roadsides, rocky woods, and dry to mesic forests.

FOOD: As the name implies, *C. hypericella* is a specialist on *Hypericum* species (St. John's-wort). Eiseman (2019) found this species on *Triadenum*, which is now generally treated as being a subgroup within the genus *Hypericum* (Weakley 2015). Species in eastern North America that are used as hosts include Roundpod St. John's-wort (*H. cistifolium*), St. Peter's-wort (*H. crux-andreae*), St. Andrew's-cross (*H. hypericoides*), Dwarf St. John's-wort (*H. mutilum*), Shrubby St. John's-wort (*H. prolificum*), Spotted St. John's-wort (*H. punctatum*), Low St. John's-wort (*H. stragulum*), and Virginia Marsh St. John's-wort (*Triadenum virginicum*) (Eiseman, 2022). In North Carolina, we have records for *Hypericum crux-andreae*, *H. hypericoides*, *H. mitchellianum*, *H. punctatum*, and *H. stragulum*.

OBSERVATION_METHODS: The adults appear to only rarely visit lights, and searching for leaf mines on *Hypericum* species may be the most productive way to document local populations.

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: *Caloptilia hypericella* appears to be uncommon throughout its range based on the rather small number of locality records for eastern North America. It has likely been overlooked due to the small size of the mines.