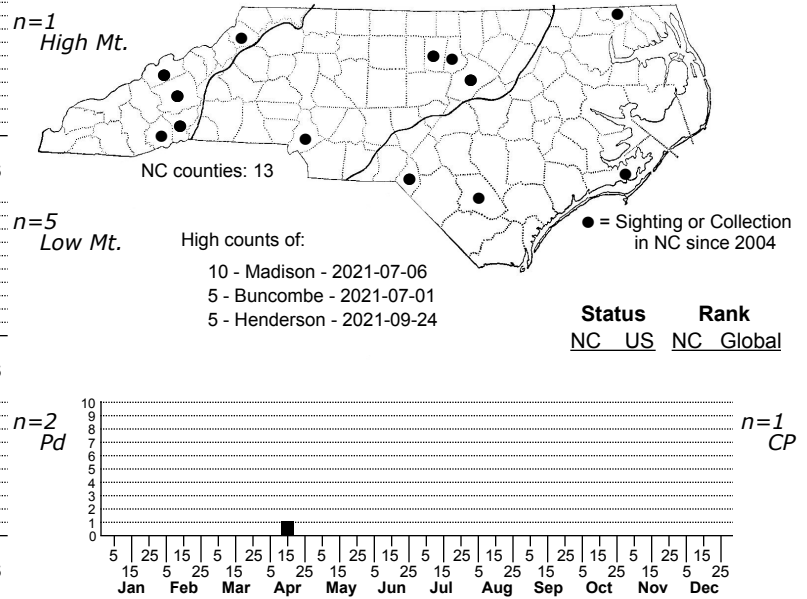
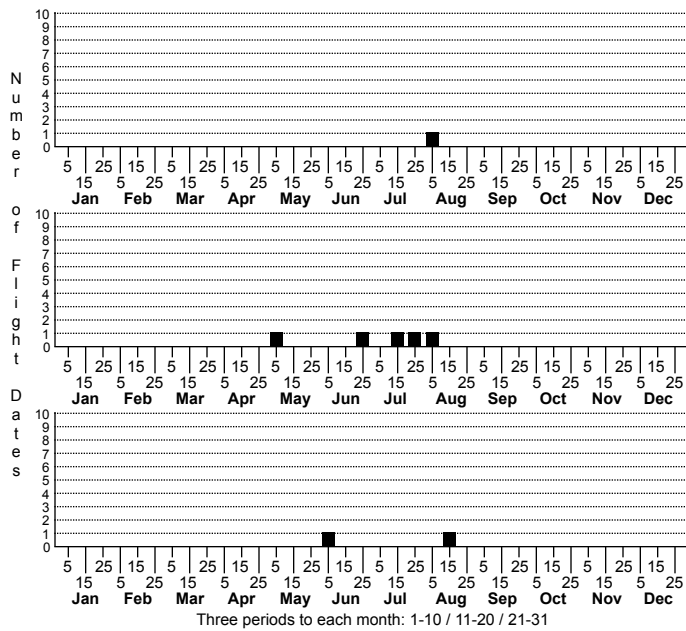


# *Proleucoptera smilaciella* No common name



FAMILY: Lyonetiidae SUBFAMILY: Cemiostominae TRIBE:

TAXONOMIC\_COMMENTS: The genus *Proleucoptera* contains only a single described species in North America.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Busck (1900a)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Busck (1900a)

ID COMMENTS: The following is primarily based on the original description by Busck (1900a). The antenna is golden white with a well-developed eye cap. The thorax, head tuft and face are silvery white, and the labial and maxillary palps are obsolete. The ground color of the forewing is silvery white. Beginning near the middle of the costa there is an outwardly obliquely golden yellow streak with parallel dark edges that extends to the middle of the wing. Between this and the apex there is a golden yellow blotch that is thinly edged with black. A conspicuous deep black spot is present at the tornus. A light golden band with thin black margins arches around the black spot towards the wing tip. It often converges at the wing tip with two fine dark streaks that radiate into the apical cilia. In addition to the two dark streaks, the white apical cilia have dark fuscous tips. The hindwing is dark purplish brown to nearly black, and the cilia a shade lighter. The legs are golden white with dark narrow banding on the tarsi, and the posterior tibia is hairy.

This species is similar to *Proleucoptera albella* and worn specimens can be difficult to place. Forbes (1923) notes that *P. smilaciella* is larger and that the first fascia (streak) is much narrower (three times as long as wide versus almost squarish in *P. albella*). The fascia is also more oblique and starts nearer the base. There are often three or four dark lines that converge on the apex (often partially missing on worn specimens, and rarely evident in *P. albella*). The silvery-gray spot is smaller than in *C. albella*, and is completely surrounded before and above with the golden yellow band.

DISTRIBUTION: *Proleucoptera smilaciella* is found throughout much of the eastern US from Massachusetts southward to Florida, and westward to Illinois and Texas. Populations have also been found in California, Manitoba, Ontario, and New Brunswick (Eiseman, 2019). We have records from the Blue Ridge, Piedmont, and Coastal Plain.

FLIGHT COMMENT: Local populations are multivoltine, with several overlapping generations occurring from May through September. The adults of the final brood overwinter and emerge following the spring leaf-out (Busck, 1900a; Eiseman, 2019).

HABITAT: Local populations are restricted to sites with greenbrier (*Smilax* spp.), particularly species that inhabit moist to mesic forests or forest edge habitats.

FOOD: *Proleucoptera smilaciella* is monophagous on greenbriers. Documented host plants include Cat Greenbrier (*Smilax glauca*), Smooth Carrion-flower (*S. herbacea*), Downy Carrion-flower (*S. pulverulenta*), and Common Greenbrier (*S. rotundifolia*). As of 2023, we have records from all of these host species, as well as Laurel Greenbrier (*S. laurifolia*).

OBSERVATION\_METHODS: The adults are attracted to lights, and the large leaf mines with communal larvae are easy to spot on the upper surfaces on greenbrier leaves.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

STATE PROTECTION:

COMMENTS: This species is probably more common than our records suggest since most records are based on leaf mines, which in general have received little attention from naturalists and field biologists.