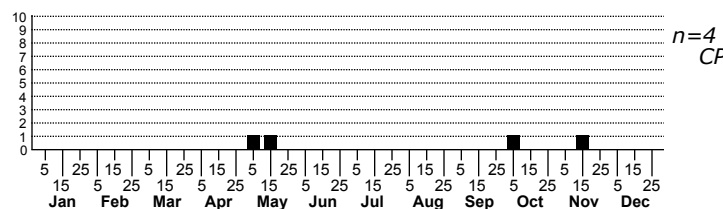
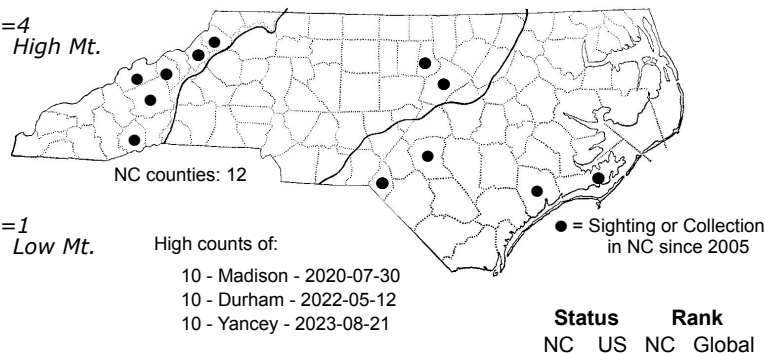
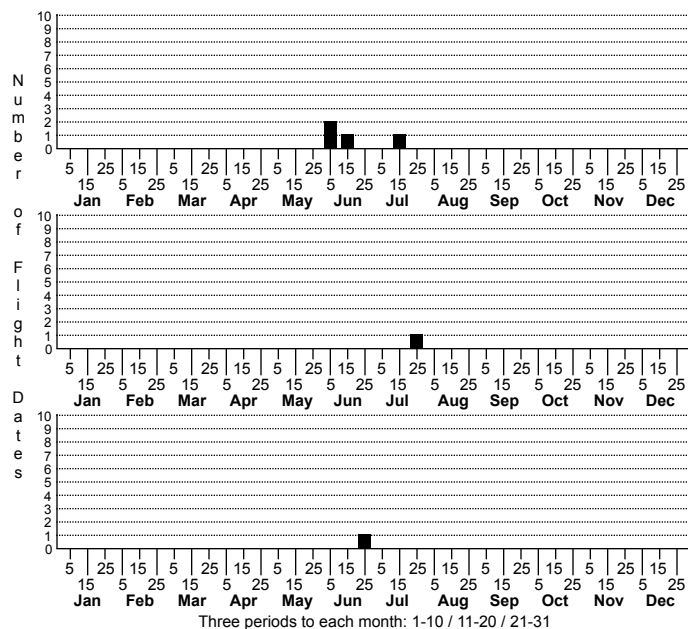


# *Leucospilapteryx venustella* None



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini]  
 TAXONOMIC\_COMMENTS: *Leucospilapteryx* is a small genus in the family Gracillariidae with only three recognized species. *Leucospilapteryx venustella* is the only one that occurs in North America.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes, 1923

TECHNICAL DESCRIPTION, IMMATURE STAGES: Diaz et al. (2014)

ID COMMENTS: The following is primarily based on the description by Forbes (1923). The head and eye-cap are silvery white, while the labial palp is white with two blackish spots. The antenna is dark brown. The forewing has a dark brown to brownish black ground color. There is a well-defined white streak that extends along the inner margin from the base to about half way to the apex. The costa has a small white costal spot at about one-fourth. This is followed by three ragged-edged, white streaks that are roughly equidistant. The first two are oblique posteriorly, straight, and run parallel to each other. They sometimes continue as a faint broken or fragmented streak that reaches well beyond the mid-point of the wing. The third is weakly oblique posteriorly and more curved. The cilia has a white patch with a dark margin, and contains a black dot. The fringe is mouse gray and mixed with white. The front and middle legs are brownish black except for the tarsi, which are whitish with fine black spots near the joints. The rear legs are white with brownish black bands. Individuals posture with the front legs raised, much like *Acrocercops* or *Caloptilia* species. *Leucospilapteryx venustella* is superficially similar to *Acrocercops astericola*, but the latter lacks a well-defined white streak that extends along the inner margin from the base to near the first dorsal blotch.

DISTRIBUTION: *Leucospilapteryx venustella* is found in eastern North America, including Ontario, Quebec, and much of the eastern U.S. In the U.S., the range extends from the northeastern states westward to Minnesota, and southward to as far as Florida and eastern Texas. This species occurs statewide in North Carolina.

FLIGHT COMMENT: Adults have been collected throughout most of the growing season, generally from April to September or later. As of 2023, we have records of adults from mid-May to early-October, with records of occupied mines from July to September.

HABITAT: The larvae feed on a variety of species in the Asteraceae, including many that are found in open, sunny habitats with moist to drier soils. Representative habitats included disturbed sites such as agricultural fields, roadways, forest edges, and waste areas, as well as woodland paths and mesic forests.

FOOD: The larvae are polyphagous and mine the leaves of composites, including species of *Ageratina*, *Ambrosia*, *Bidens*, *Eutrochium*, *Mikania*, *Pseudognaphalium* and *Rudbeckia* (Eiseman, 2022). As of 2024, hosts that have been documented in North Carolina include White Snakeroot (*Ageratina altissima*), Annual Ragweed (*Ambrosia artemisiifolia*), Spanish-needles (*Bidens bipinnata*), Bearded Beggarticks (*B. aristosa*), Climbing Hempweed (*Mikania scandens*), Joe-pye-weed (*Eutrochium* sp.), Fragrant Rabbit-tobacco (*Pseudognaphalium obtusifolium*), and Cutleaf Coneflower (*Rudbeckia laciniata*).

OBSERVATION\_METHODS: The adults occasionally visit UV lights, but many of our records are based on leaf mines.

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: This species is undoubtedly more widespread in the state than our records through 2023 indicate.