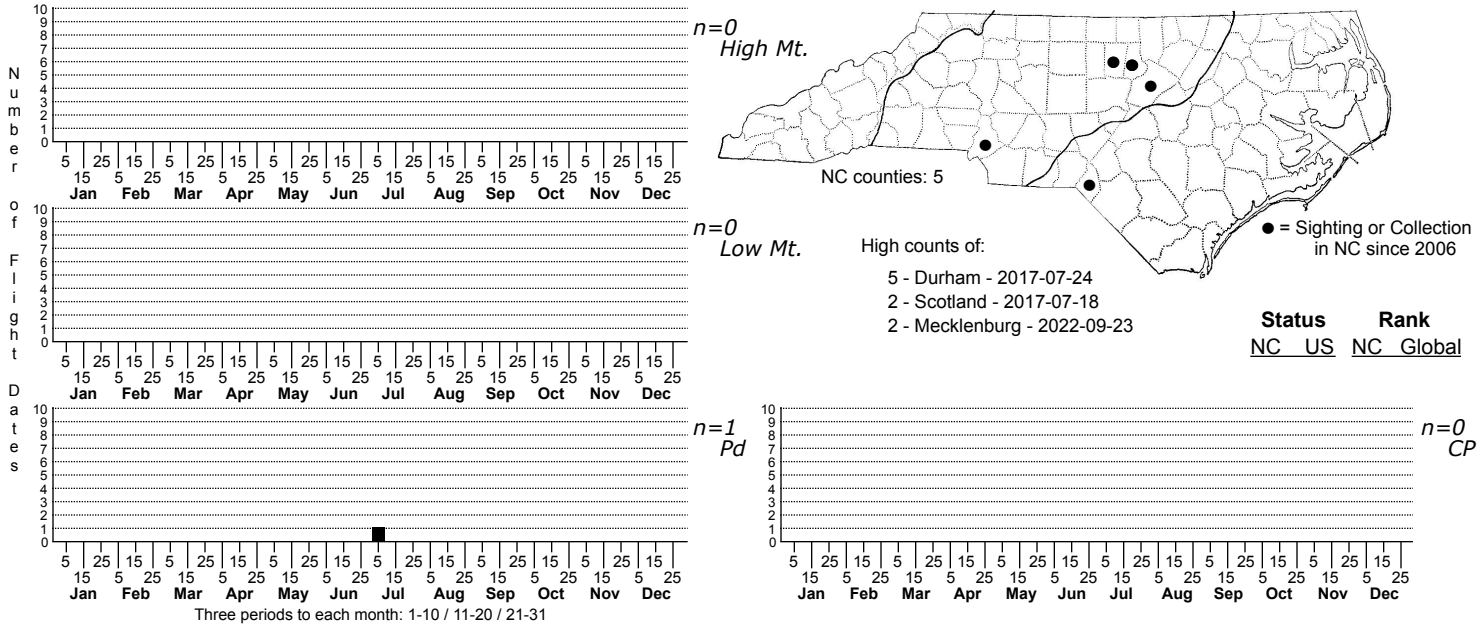
# *Paraleucoptera albella* Cottonwood Leafminer Moth




FAMILY: Lyonetiidae SUBFAMILY: Cemiostominae TRIBE:
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Chambers (1871)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Dyer (1902)

ID COMMENTS: The following is based in part on the description by Chambers (1871) and Forbes (1923). The head, thorax, and ground color of the forewing is snowy white, and there is a small snowy white tuft on the head. The antenna is pale fuscus with the apex and basal joint white. Beginning on the costa just beyond one-half the wing length, there is a short, pale golden, streak that is dark margined on both sides. The streak is posteriorly oblique and extends to about mid-wing. A second similar streak with dark margins (sometimes represented as to a golden spot with dark margins) occurs behind the first at about four-fifths. The ends of both streaks join a pale golden region that extends from the end of the first streak to the wing tip. The most conspicuous mark is a silvery gray metallic spot near the anal angle that is distinct black margined anteriorly and posteriorly. The black margin sometimes covering much of the underlying silver spot. A short golden streak that usually has a thin black anterior margin adjoins the anterior margin of the spot. There often is a minute indistinct fuscus spot at the apex of the cilia or other faint grayish black mottling. The abdomen is white and banded above with golden fuscous. This species is similar to Proleucoptera smilaciella 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 first fascia of Proleucoptera smilaciella 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: Paraleucoptera albella is a wide-ranging species that is found in both the eastern and western North America. The range includes much of southern Canada from British Columbia and Alberta eastward to New Brunswick and Nova Scotia. In the US, populations occur in the West in California, Arizona and Colorado. In the east, the range extends from New Hampshire, Vermont, and Massachusetts westward to Illinois and Minnesota, and southward to Kentucky and North Carolina. As of 2021, all of our records are from the western Coastal Plain and eastern Piedmont.

FLIGHT COMMENT: Adults are present from March through September is areas outside of North Carolina, with a seasonal peak in July through September. Populations throughout the range appear to have two or more generations per year. As of 2022, we have records of empty mines in July and an occupied mine in September, which implies that there are at least two generations per year in North Carolina.

HABITAT: Local populations are dependent on willows and populars. These are most commonly found in moist to wet habitats such as floodplain forests, riverbanks, wet thickets, ditches, and the margins of lake and ponds.

FOOD: In North Carolina, all of our records are from willows (Salix), particularly Black Willow (S. nigra). We also have a record from Coastal Plain Willow (S. caroliniana). Larvae are also reported to feed on several species of ornamental and native poplars (Populus spp.), including White Poplar (P. alba), Eastern Cottonwood (P. deltoides), Lombardy Poplar (P. nigra), and Canadian Poplar (Populus x canadensis) (Eiseman, 2022).

OBSERVATION_METHODS: The adults occasionally visit lights, but many records are based on leaf mines or adults that were reared from mines.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

STATE PROTECTION:

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