Phyllocnistis ampelopsiella No common name

n=0 High Mt.

n=0 Low Mt.

n=1 Pd

n=0 CP

Three periods to each month: 1-10 / 11-20 / 21-31

NC counties: 8

High counts of:
10 - Wake - 2018-06-08
5 - Scotland - 2018-08-13
3 - Durham - 2023-05-04

● = Sighting or Collection in NC since 2004

Status   **Rank**
NC   US   NC   Global
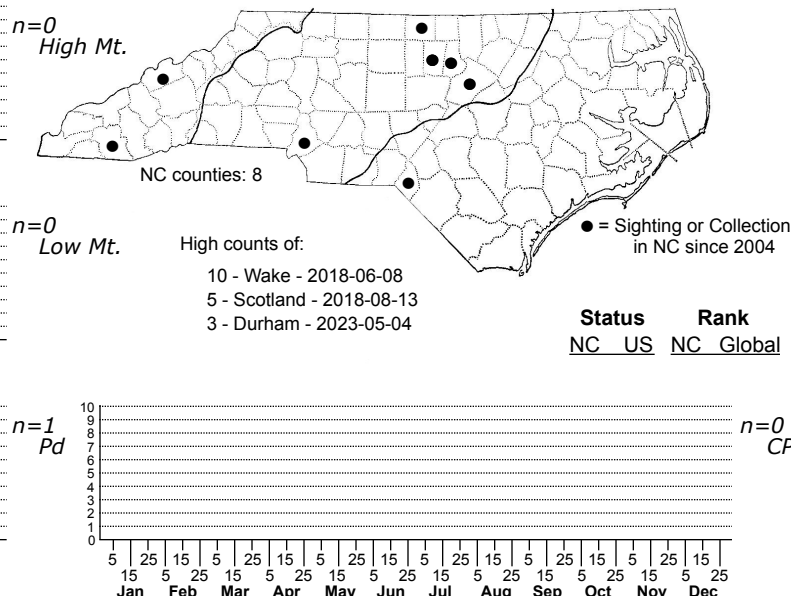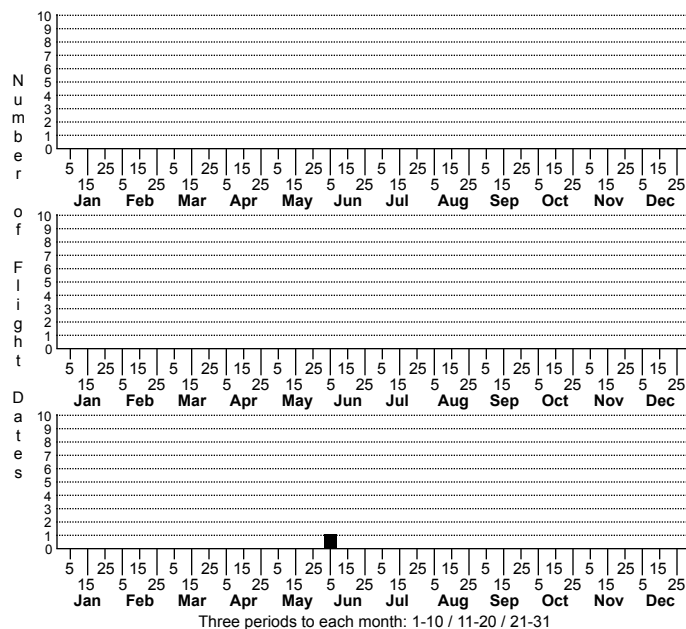
FAMILY: Gracillariidae   SUBFAMILY: Phyllocnistinae   TRIBE:

TAXONOMIC_COMMENTS: *Phyllocnistis* is a large genus with more than 125 described species worldwide, with 16 species currently recognized in North America. Davis and Wagner (2011) surmised that there may be hundreds of undescribed species in the neotropics. The adults of some species are very similar, and knowledge of the hostplant and mine characteristics is helpful in identifying morphologically similar species (Eiseman, 2019).

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS: MPG; BugGuide.
TECHNICAL DESCRIPTION, ADULTS:
TECHNICAL DESCRIPTION, IMMATURE STAGES: Chambers, 1871; Eiseman, 2019.

ID COMMENTS: The following is based primarily on Chambers’ (1871) original description. The forewing is snowy white and slightly golden towards the apex. The antenna, except near the base, is pale fuscous to darkish above. A pale blackish spot is present on the dorsal margin of the wings just posterior to the base. It adjoins an indistinct blackish median longitudinal line that extends through the thorax. A conspicuous oblique blackish basal streak begins at the base of the costa and progressively projects toward the middle of the wing. Just beyond the middle of the costa is a second shorter oblique costal black streak which projects towards the middle of the wing. Behind this is a narrow black line (sometimes incomplete near the middle) that curves from the costa to the inner margin where it widens. A conspicuous, circular black spot is present at the tip of the wing. Before it, there are two straight black costal streaks that extend into the fringe. The apical cilia has three blackish lines that converge towards the apical spot. Finally, there is a blackish marginal line, or a more diffuse blackish band, that originates near the apical spot and arches anteriorly towards the dorsal margin. Chambers (1871) noted that this species resembles *P. vitifoliella*, but differs in having a blackish median line through the thorax, a conspicuous black basal streak, and bolder blackish streaks throughout.

DISTRIBUTION: The range of *P. ampelopsiella* is rather poorly documented due to the scarcity of records in the US. This species occurs in eastern North America from southern Canada (Ontario; Quebec) and the northern US (Iowa; Wisconsin;Maine), southward to as far south as southern Florida. As of 2020, we have only three records for the state. These are from all three physiographic provinces.

FLIGHT COMMENT: Chambers (1871) noted that the larvae mine the leaves of Virginia Creeper from early summer until leaf drop in the fall. As of 2020, our earliest records for mines are from June.

HABITAT: Local populations are dependent on Virginia Creeper for successful reproduction. This widespread vine occurs in a wide variety of forest and forest edge habitats that range from swamplands and bottomland forests to drier woodlands.

FOOD: Virginia Creeper (*Parthenocissus quinquefolia*) is the only known native host used by this species in North America. Robinson et al. (2010) list this species as feeding on *Ampelopsis* and *Vitis vinifera*. *Parthenocissus* was historically placed in the genus *Ampelopsis*, which may be the basis for this listing. *Vitis vinifera* is a commercial grape that is native to the Mediterranean region. We are unaware of any records of this species mining the leaves of wild grapes.

OBSERVATION_METHODS: The adults appear to rarely visit lights. Most records are for either leaf mines, or for adults that were reared from leaf mines. We recommend searching for occupied mines on the undersides of leaves, and rearing and photographing the adults.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S4

STATE PROTECTION:

COMMENTS: This species is probably more common than our records suggest given that little effort has been put forth to document leafminers in North Carolina, and that the underside mines are difficult to spot without inspecting the undersides of the host plant.