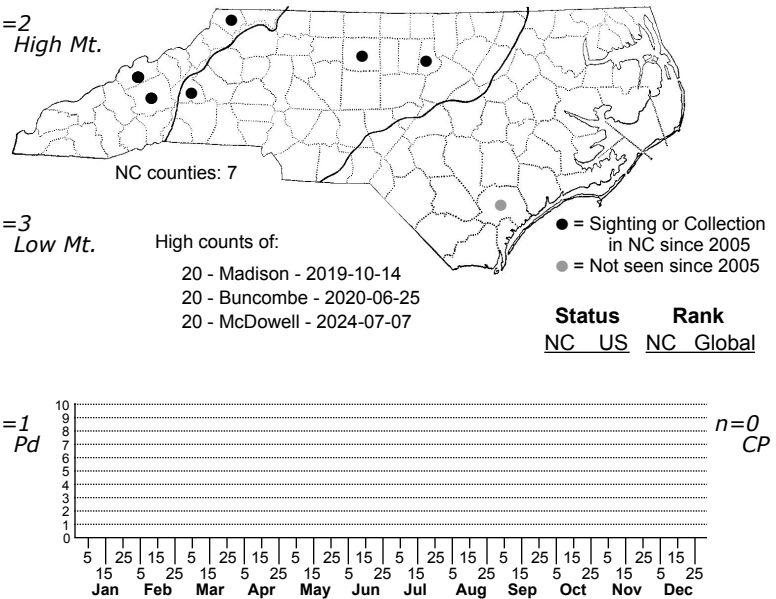
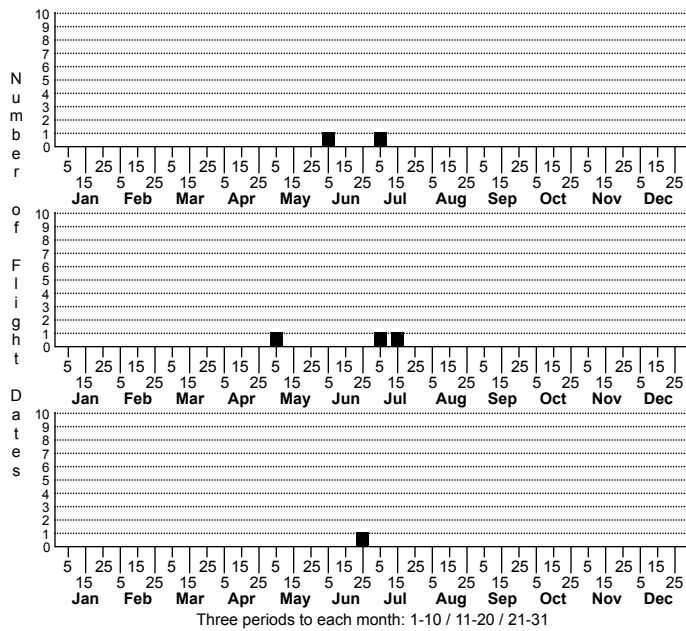


# Phyllonorycter lucidicostella Lesser Maple Leaf Blotch Miner Moth



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini]

TAXONOMIC\_COMMENTS: <i>Phyllonorycter</i> is a genus of small and often colorful moths, with 79 described species in North America. The larvae of most form underside tentiform mines on woody plants and pupate within the mines.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun, 1908.

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is primarily based on descriptions in Clemens (1859) and Braun (1908). The antenna is white, and the head and tuft silvery white. The forewing is silvery white from the base to about the middle, then grades from silvery white to pale golden from there to the tip. There is a pale golden to golden-brown streak that extends from the base to about the middle of the wing or just beyond. The streak slowly angles away from the costa and terminates close to or at the dark margin on the first costal streak. In addition to the basal streak, there can be varying degrees of golden coloration below the fold. In some specimens there is only a thin golden line that extends from the golden apical half of the wing along the fold toward the base. At the other extreme, individuals may have the entire basal half of the wing below the fold suffused with golden coloration. There are four costal and two dorsal silvery streaks that have a dark margin on the anterior (basal) edge. The second dorsal streak is often obscure and may lack the dark margin. The first dorsal streak is opposite the second costal streak, and the apical spot is black and rounded. The cilia are pale gray and have a dark marginal line. The hindwings are bluish gray with gray cilia.

<i>Phyllonorycter argentifimbriella</i> is very similar to <i>P. lucidicostella</i>, but has a forewing with less golden coloration, and a dark brown basal streak that often has a narrow golden margin (the streak is mostly golden in <i>P. lucidicostella</i>, but may have a darker margin). In addition, the streak of <i>P. argentifimbriella</i> is noticeably narrower than that of <i>P. lucidicostella</i>, and the second dorsal streak is more prominent (often greatly reduced in <i>P. lucidicostella</i>). These species segregate by host plants, so reared adults can be accurately assigned to species based on the hosts (oaks versus maples).

DISTRIBUTION: <i>Phyllonorycter lucidicostella</i> is found in eastern North America from Ontario and Nova Scotia, westward to Illinois and Minnesota, and southward to Kentucky and North Carolina. We have records from all three physiographic provinces, with most from the Blue Ridge.

FLIGHT COMMENT: Local populations appear to have two or more broods per year (Eiseman, 2019). Active mines of this species are often abundant on maples during October. Individuals presumably overwinter as pupae, with the adults emerging during the spring warm-up and leaf-out. As of 2022, our earliest records for occupied mines are from June, while the latest are from October.

HABITAT: This species feeds on maples and is generally restricted to habitats where the host trees occur. Examples include floodplains, streambanks, mesic hardwood forests, mixed-hardwood forests, and wooded urban environments.

FOOD: The known hosts include Florida Maple (<i>A. floridanum</i>), Silver Maple (<i>A. saccharinum</i>), and Sugar Maple (<i>A. saccharum</i>) (Eiseman, 2022). The mines are often common on Sugar Maple in the mountains during the summer and autumn. We also have rearing records for Florida Maple in the Piedmont.

OBSERVATION\_METHODS: The adults are attracted to lights, and the mines are sometimes common on maple leaves. The adults should be reared since two other <i>Phyllonorycter</i> species mine maple leaves and produce similar mines.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2S3]

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

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