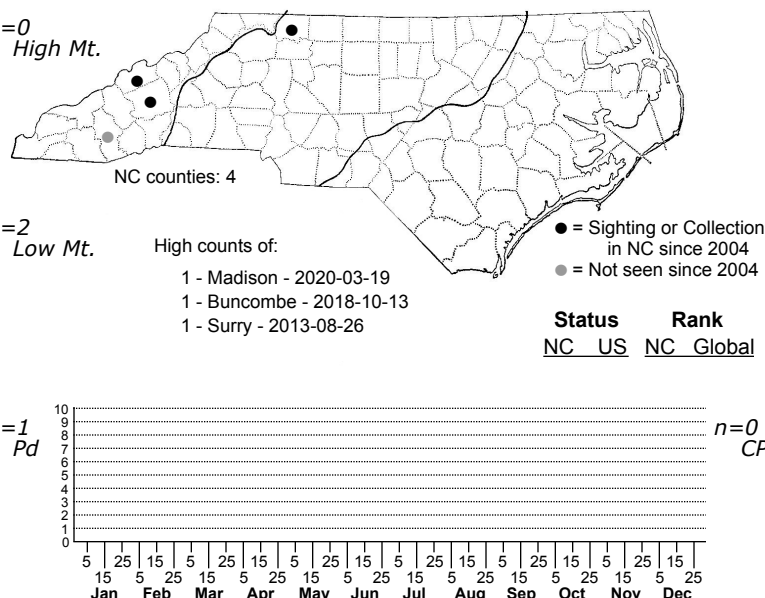
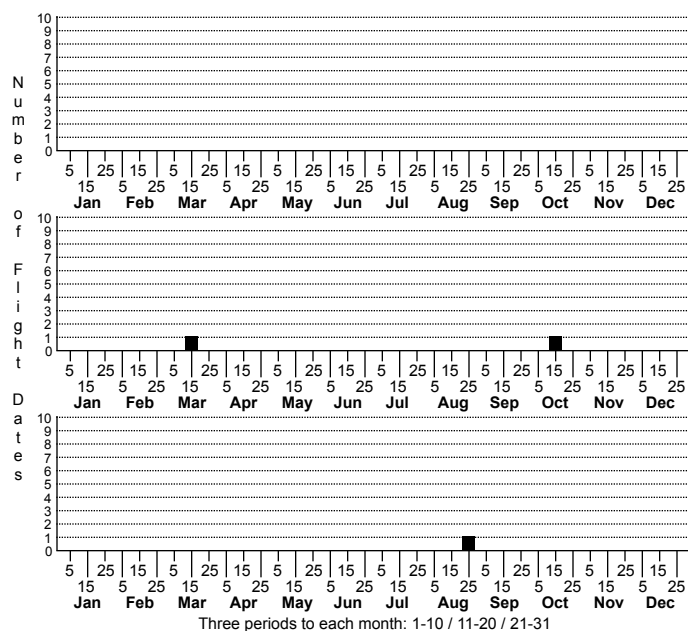


# *Lyonetia latistrigella* Rhododendron Leaf Miner



FAMILY: Lyonetiidae SUBFAMILY: Lyonetiinae TRIBE: [Lyonetiini]

TAXONOMIC\_COMMENTS: The genus *Lyonetia* includes six described species in North America that belongs to a family of about 200 very small, leaf-mining moths.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS: MPG; BugGuide; BAMONA

TECHNICAL DESCRIPTION, ADULTS: Walsingham (1882); Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman, 2019.

ID COMMENTS: The following description is based on Walsingham (1882) and Forbes (1923). The head, tufts, and palps are white. The antenna is brownish except for a white basal joint, and is as long or longer than the forewing. The thorax and ground color of the forewing is white. The forewing has a bold, oblique fascia that extends from the middle of inner margin to three-fourths of the way out on the costa. Beyond this is a large ferruginous patch that darkens dorsally. Associated with the patch are several small white streaks that have bronzy brown on the anterior margin. One or two occur dorsally, and three costally. At the apex there is a large round black spot, and the cilia often have one or two short dark lines. The front leg is often solid brown on the tarsal segments, while the remaining legs are whitish, with more limited brown banding at the tarsal joints. This distinctively marked species is difficult to confuse with any other.

DISTRIBUTION: *Lyonetia latistrigella* is found in eastern North America and as a possible introduced disjunct in California. In the East, widely scattered populations have been found in Quebec and the northeastern states, to as far south as North Carolina. As of 2020, our records are from the lower elevations of the mountains and Pilot Mountain in the Piedmont.

FLIGHT COMMENT: The flight season is poorly documented due to the scarcity of records for this species. Our records extend from March through October.

HABITAT: Local populations are dependent on ericaceous plants for reproduction and are generally found in the vicinity of rhododendrons, huckleberries, and other hosts. These typically occur in forested settings with acidic soils.

FOOD: The larvae are polyphagous and feed on members of the Ericaceae, with at least 14 species in 5 genera as documented hosts (Maier, 1995). At least nine species of *Rhododendron* serve as hosts, including ornamental hybrids, and well as native species such as Florida Flame Azalea (*R. austrinum*), Carolina Rhododendron (*R. carolinianum*), Catawba Rhododendron (*R. catawbiense*), Rosebay Rhododendron (*R. maximum*), Pink Azalea (*R. periclymenoides*), and Swamp Azalea (*R. viscosum*). Other native hosts are Leatherleaf (*Chamaedaphne calyculata*), Black Huckleberry (*Gaylussacia baccata*), Dangleberry (*G. frondosa*), Maleberry (*Lyonia ligustrina*) and Mountain Fetterbush (*Pieris floribunda*; Maier 1995, Eiseman 2019).

OBSERVATION\_METHODS: The adults occasionally visit lights; we also recommend searching for the leaf mines on the young, fresh leaves of rhododendrons or other hosts.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

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

COMMENTS: We have only four records for this species as of 2020, which suggests that it is uncommon throughout the mountains and western Piedmont. We need additional information on its distribution and abundance before we can accurately assess its conservation status.