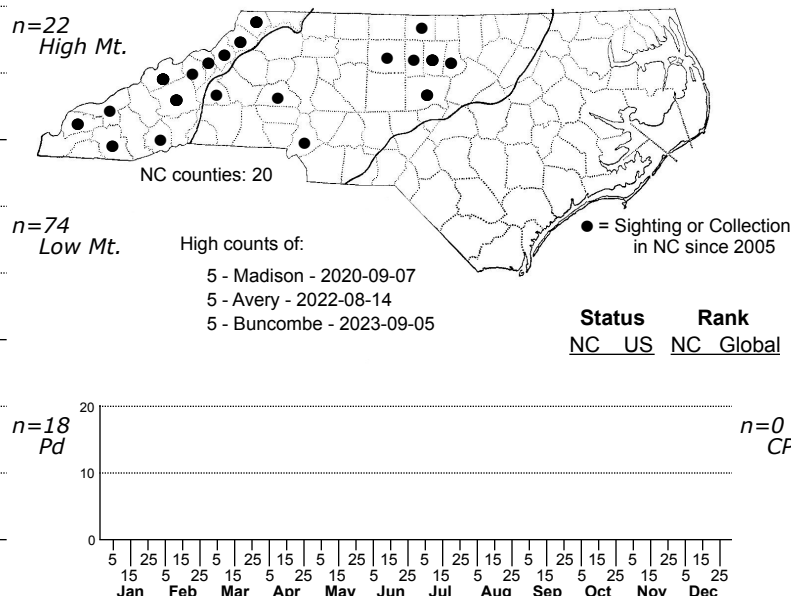
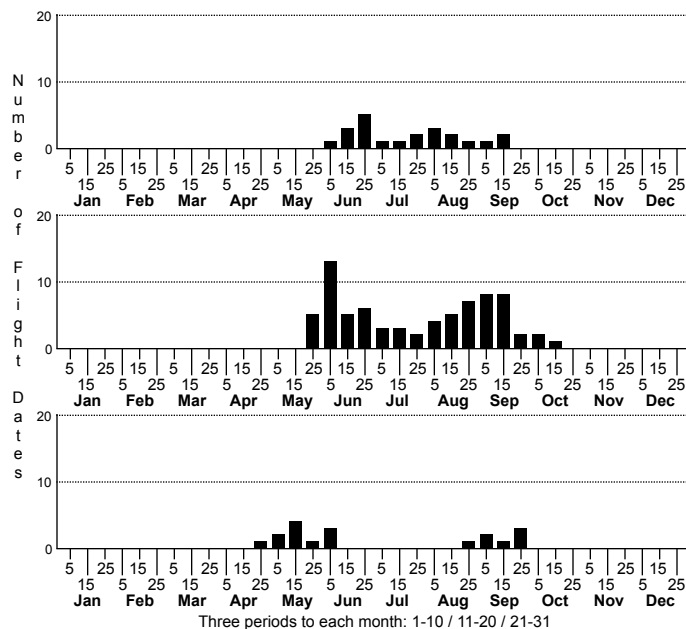


# *Pandemis lamprosana* Woodgrain Leafroller Moth



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Archipini

TAXONOMIC COMMENTS: The genus *Pandemis* includes around 67 described species worldwide, including four native and two introduced species in North America. Our four native species are very closely related and their status as being valid species has been questioned. Recent molecular and phylogenetic studies by Dombroskie and Sperling (2012) provide support for continuing to recognize all four lineages as species. We have only two species in North Carolina that are easily distinguished by both maculation and genitalia.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Robinson (1869)

TECHNICAL DESCRIPTION, IMMATURE STAGES: MacKay (1962).

ID COMMENTS: The following is mostly based on the description by Robinson (1869). The head, palps, antennae, and thorax are pale brown. The ground color of the forewing is light cinnamon brown and is overlain with three darker brown patches or bands. These include a basal patch that covers one third of the forewing, a broad, posteriorly oblique median band, and a small subapical patch on the costa. The outer margin of the basal patch and both margins of the median band are bounded by narrow pale lines, but the subapical patch is not. The latter extends only a short distance inward from the costa and ends in a more-or-less smudged, indistinct point on its inner side. The fringe is brown, while the hindwing is white to light gray with a concolorous fringe. This species is very similar to *Pandemis limitata* and is best distinguished by the subapical patch, which has a narrow pale line around the margin (lacking in *P. lamprosana*). In addition, *P. lamprosana* has a uniformly white to light gray hindwing, versus a two-toned gray and white hindwing for *P. limitata*.

DISTRIBUTION: *Pandemis lamprosana* is broadly distributed across much of the eastern and central US, and in adjoining regions of southern Canada from Manitoba eastward to New Brunswick and Nova Scotia. In the US the range extends from Maine and other New England states southward to South Carolina and Georgia, and westward to Mississippi, central Oklahoma, Missouri, eastern Nebraska, Minnesota, and eastern North Dakota. Populations tend to be absent or underrepresented in much of the southeastern Coastal Plain. As of 2022, all of our records are from the Piedmont and Blue Ridge.

FLIGHT COMMENT: The adults have been observed from May through October in different areas of the range, with the peak flights occurring from June through September. As of 2023, our records extend from late-April through early October. Many local populations are univoltine throughout the range (Chapman and Lienk, 1971), but some populations in North Carolina appear to produce both a spring and late summer brood.

HABITAT: Local populations are generally associated with mesic hardwood or mixed conifer-hardwood forests.

FOOD: The larvae are polyphagous and feed on a taxonomically diverse group of deciduous trees and shrubs (Freeman, 1958; Schaffner, 1959; MacKay, 1962; Prentice, 1966; Godfrey et al., 1987; Wagner et al., 1995; Robinson et al., 2010; Gilligan and Epstein, 2014). The known hosts include Red Maple (*Acer rubrum*), Silver Maple (*A. saccharinum*), Sugar Maple (*A. saccharum*), Mountain Maple (*A. spicatum*), Yellow Birch (*Betula alleghaniensis*), Paper Birch (*B. papyrifera*), American Hornbeam (*Carpinus caroliniana*), American Ash (*Fraxinus americana*), Honey Locust (*Gleditsia triacanthos*), American Witch-hazel (*Hamamelis virginiana*), American Hop-hornbeam (*Ostrya virginiana*), American Sycamore (*Platanus occidentalis*), Quaking Aspen (*Populus tremuloides*), Choke Cherry (*Prunus virginiana*), Scarlet Oak (*Quercus coccinea*), Northern Red Oak (*Quercus rubra*), Sassafras (*Sassafras albidum*), American Basswood (*Tilia americana*), American Elm (*Ulmus americana*), Slippery Elm (*U. rubra*), and Stinging Nettle (*Urtica dioica*). The larvae are also found in apple orchards.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S4-S5

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

COMMENTS: This species is common in the Piedmont and Blue Ridge and appears to be secure within the state.