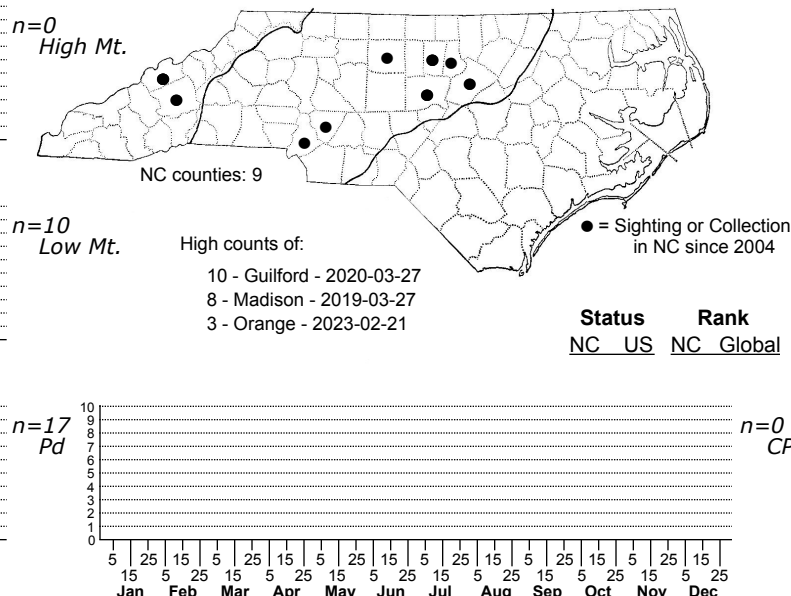
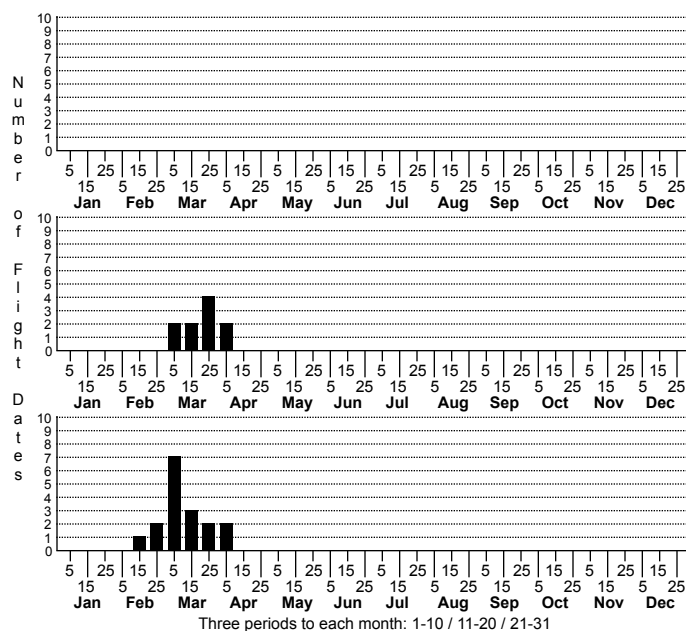


# *Pseudexentera spoliata* Bare-patched Leafroller Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS: The genus *Pseudexentera* currently has 19 recognized species that are found primarily in North and Central America, with 17 recognized species in the US. They are typically found in forested settings and most fly very early in the year. Many are challenging to identify, particularly the species with fasciate forewing patterns that often show substantial intraspecific variation in patterning and have slight differences in genitalia (Miller, 1968; Gilligan et al., 2008). There has been a long history of misidentified species in the group (Miller, 1968) and there is still much confusion about external traits that are useful in sorting out certain closely related forms. DNA barcoding has not proven to be particularly useful in sorting out species since recognized species often have two or more BINS that contain multiple species names. This likely reflects weak genetic differentiation between certain forms and the large numbers of misidentified specimens in collections. Miller (1968) conducted a taxonomic revision and reviewed all of the recognized species in North America, but did not provide detailed descriptions of external coloration, patterning, or intraspecific variation within species. Here, we treat our assignment of the fasciate specimens to species as provisional since they are based on images or pinned specimens that have not been barcoded or dissected to examine genitalia. Even with the latter, specimens cannot always be confidently assigned to species.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES: MacKay (1959).

ID COMMENTS: *Pseudexentera spoliata* is one of the fasciate species that has been a source of confusion with respect to identification. The general coloration of the head, thorax, and forewing varies from gray to light brown and the forewing patterning is variable. It is generally similar to certain other forms, particularly *P. hodsoni*, but the general consensus is that *P. spoliata* typically has a sub-basal and median fascia that is complete or nearly complete in most specimens, although in some the dorsal half of these is darker and more distinct than the costal half (Gilligan et al., 2008). This species typically does not have the distinct dark wedge-shaped sub-basal fascia on the dorsum that terminates near the mid-wing as seen in *P. hodsoni*. Certain *P. spoliata* BOLD specimens with wedge shaped sub-basal fascia -- and that strongly resemble *P. hodsoni* -- were apparently mislabeled at BOLD and actually are true *P. hodsoni* (see the *P. spoliata* account at BugGuide for a detailed discussion). Here, we treat these forms as *P. hodsoni*.

*Pseudexentera spoliata* typically has a dark, sub-basal fascia or a large dark basal patch that extends to around one-third the wing length and is outwardly angled near the middle. The dark mark is often complete, but on some specimens the costal third or half is fainter than the dorsal portion. A dorsal patch is present just before the tornus that extends from the dorsal margin inward for about one-third of the wing width where it often meets or nearly meets a dark oblique streak that extends from near the middle of the costa. A series of dark streaks are present along the costa that are interspersed with lighter areas. The tarsi are boldly banded and the hindwings are light to medium brown with a paler fringe.

DISTRIBUTION: *Pseudexentera spoliata* is found throughout eastern North America from southern Canada southward through much of the eastern US to as far south as Texas and Louisiana. Miller (1986) examined adults from New Brunswick, Nova Scotia, Quebec, Ontario, Colorado, Connecticut, New Hampshire, Massachusetts, New Jersey, New York, Ohio, Pennsylvania, Virginia, District of Columbia, Michigan, Wisconsin, Illinois, Indiana, Iowa, Missouri, Mississippi, Louisiana and Texas.

FLIGHT COMMENT: Local populations are univoltine. Miller (1986) reported records that ranged from 11 February to 30 May.

HABITAT: Local populations are generally associated with hardwood or mixed hardwood-pine forests as well as residential neighborhoods with oaks.

FOOD: The larvae feed on several species of oaks (Miller, 1986; Marquis et al., 2019). Some of the known hosts include White Oak (*Q. alba*), Scarlet Oak (*Q. coccinea*), Northern Red Oak (*Q. rubra*), Post Oak (*Q. stellata*) and Black Oak (*Q. velutina*).

OBSERVATION\_METHODS: The adults are attracted to lights during the early spring months. We need information on host use in North Carolina.

NATURAL HERITAGE PROGRAM RANKS:

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

COMMENTS: