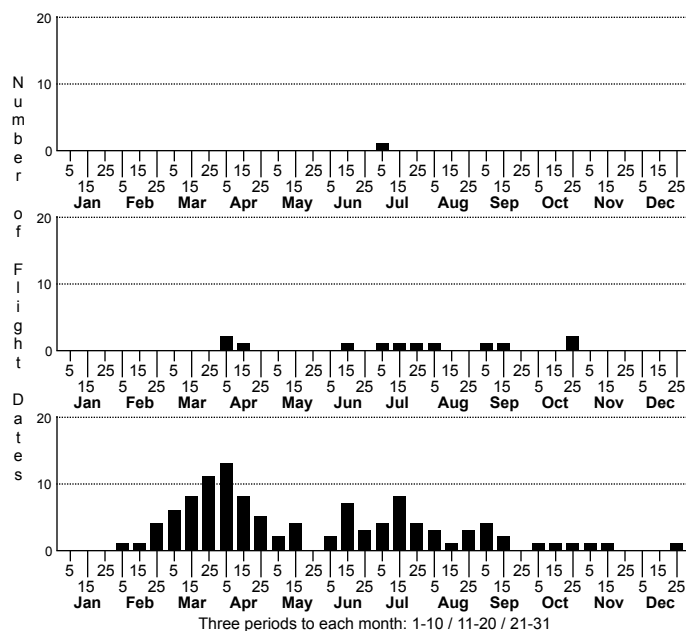


Proteoteras aesculana Maple Twig Borer Moth

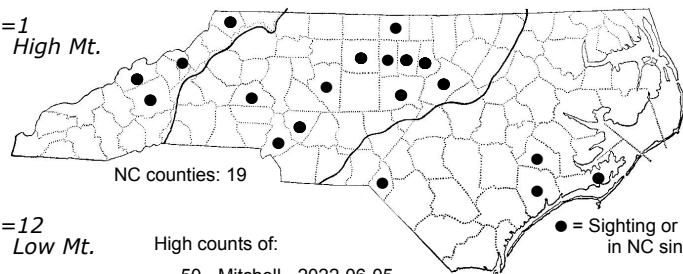


n=1
High Mt.

n=12
Low Mt.

High counts of:

50 - Mitchell - 2022-06-05
20 - Buncombe - 2022-05-05
10 - Guilford - 2020-03-13

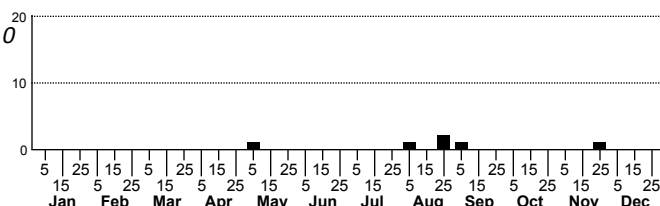


● = Sighting or Collection in NC since 2004

Status Rank
NC US NC Global

n=110
Pd

n=6
CP



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: In this species the head, thorax, palps and ground color of the forewing tend to be dull olive green with various shades of gray and yellowish-brown. Small blackish markings and dusting usually overlay the general ground color. The most prominent feature is a dark grayish to blackish band that curves inward from the middle of the costa and extends rearward to a point that is just dorsal to the anal angle. The margins of the band are irregular and the band typically breaks up well before reaching the outer margin. The costa often has a dark blotch at around one-fourth and a series of alternating dark and light spots along most of the length. As in other members of this genus, both the thorax and forewing have conspicuous tufts that give them a lumpy appearance. The hindwing is gray and the males have a yellow hair pencil that is bordered by blackish sex scales on the upper side of the costa of the hindwing (Seagraves et al. 2008). The green color in this species is not as bright as in *P. moffatiana*, which also possess blackish marbling at the base of the wing. The band running from the costa is not as black and contrasting as in *P. crescentana*.

DISTRIBUTION: *Proteoteras aesculana* is broadly distributed across much of eastern North America from southern Canada southward to the Gulf States and westward to the limits of the Eastern Deciduous Forest in eastern Texas, Eastern Oklahoma, Nebraska, and North Dakota. It also occurs along the West Coast from California northward to British Columbia. This species occurs in all three physiological provinces in North Carolina, but is relatively uncommon in the Coastal Plain.

FLIGHT COMMENT: The main flight season occurs in the spring in association with the leaf-out of maples and buckeyes, but adults can be found throughout much of the growing season which suggests that some populations may have two or more broods (Grehan et al., 1995; Powell, 1962). Seagraves et al. (2008) found a peak in late March or early April in Kentucky nurseries, with an apparent second smaller flight that occurred from early or mid-June through July. These likely were from individuals that emerged from the first brood. They found no evidence of egg-laying or shoot infestations during the summer months, which suggests that this species produces a single brood at their study site. Seagraves et al. (2008) surmised that the adults may overwinter given the very early emergence of males in March, but more study is needed to confirm this. We have records for almost every month of the year, with Piedmont populations reaching their seasonal peak in March and April.

HABITAT: *Proteoteras aesculana* is strongly associated with deciduous or mixed-deciduous forests, as well as urban areas where maples are planted as ornamentals.

FOOD: The larvae feed on both maples and buckeyes, although maples are the primary hosts (Riley, 1881; Forbes, 1923; Heinrich, 1923; Craighead et al., 1950; Powell, 1962b; Prentice, 1966; Wong et al., 1983; Miller, 1987; Grehan et al., 1995; Heppner, 2007; Brown et al., 2008; Lam et al., 2011). This species commonly uses Red Maple (*A. rubrum*) but will use other species including Bigleaf Maple (*A. macrophyllum*), Box-elder (*A. negundo*), Norway Maple (*A. platanoides*), Silver Maple (*A. saccharinum*), and Sugar Maple (*A. saccharum*). Horse chestnut (*Aesculus hippocastanum*) is also used. As of 2023, we have records of it using both Red Maple and Striped Maple (*A. spicatum*) in North Carolina, where flagged shoots with wilted leaves can be observed during and shortly after the spring leaf-out.

OBSERVATION_METHODS: The adults are attracted to lights and the larvae can be found in wilted shoots of maples and possibly buckeyes following the spring leaf-out.

NATURAL HERITAGE PROGRAM RANKS: GNR S4S5

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

COMMENTS: This species is relatively common in North Carolina and shows no evidence of marked declines in populations.