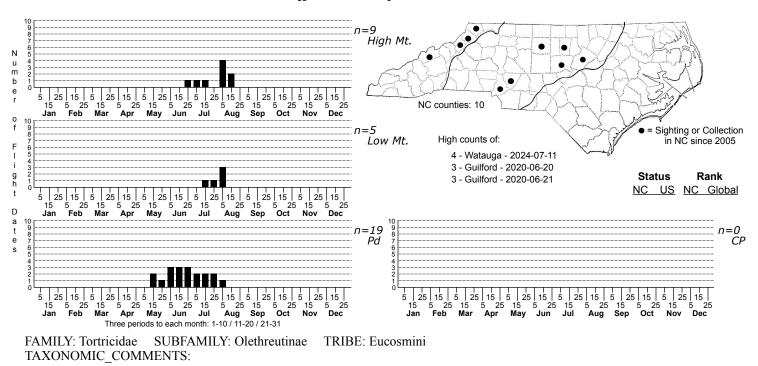


## Proteoteras moffatiana Maple Bud Borer Moth



FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Fernald (1905) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The fresh adults of this species are distinctive in having a lichen-green ground that is overlain with additional patterning. The following

description is based in part by that of Fernald (1905) and Forbes (1923). The ground color of the head, thorax and forewing of fresh specimens is light to medium green, but worn specimens can have a mosaic of green and silvery-white patches. The ground of the forewing is overlain with several dark marks, including a region in the basal third that is mottled with gray and heavy black marbling (Forbes, 1923). The most prominent mark is a black angular band that begins at the costa just beyond the middle and extends obliquely to the middle of the wing. From there it angles sharply to run roughly parallel with the costa to about three-fourths, then makes a somewhat stepped or arced cut before terminating just before reaching the outer margin. The costa usually has a relatively large dark blotch at around one-fourth and a series of smaller dark spots that increase in size as they extend towards the apex. As in other members of this genus, the thorax and forewings are heavily tufted, which produces a lumpy body appearance. The hindwing and dorsum of the abdomen are fuscous and the cilia have a thin dark marginal line near the base.

DISTRIBUTION: <i>Proteoteras moffatiana</i> is found in eastern North America and primarily in the eastern US, but also in southern Canada from Nova Scotia westward to Ontario. In the US the range extends from the New England states westward through the Great Lakes region to Minnesota, then southward to eastern Oklahoma, Alabama, and Georgia. It is absent or rare in the Coastal Plain. As of 2022 our records are all from the Piedmont and Blue Ridge.

FLIGHT COMMENT: Local populations appear to be univoltine throughout the range, with most flying from June though August. As of 2022, our records extend from mid-May through mid-August.

HABITAT: Local populations are associated with hardwood or mixed pine-hardwood forests where maples are present.

FOOD: The larvae feed on maples (Prentice, 1965; Miller, 1987; Godfrey et al., 1987; Heppner, 2007; Lam et al., 2011), including Red Maple ( $\langle i \rangle$ Acer rubrum $\langle i \rangle$ ), Silver Maple ( $\langle i \rangle$ A. saccharinum $\langle i \rangle$ ) and Sugar Maple ( $\langle i \rangle$ A. sacharum $\langle i \rangle$ ). Elderberry ( $\langle i \rangle$  Sambucus $\langle i \rangle$ ) and roses ( $\langle i \rangle$ Rosa $\langle i \rangle$ ) have also been reported to be hosts (Godfrey et al., 1987; Brown et al, 2008), but this is questionable given that members of this genus specialize on maples and buckeyes.

OBSERVATION\_METHODS: The adults appear to occasionally visit lights. More information is need on host use in North Carolina.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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 within the state to accurately assess its conservation status.