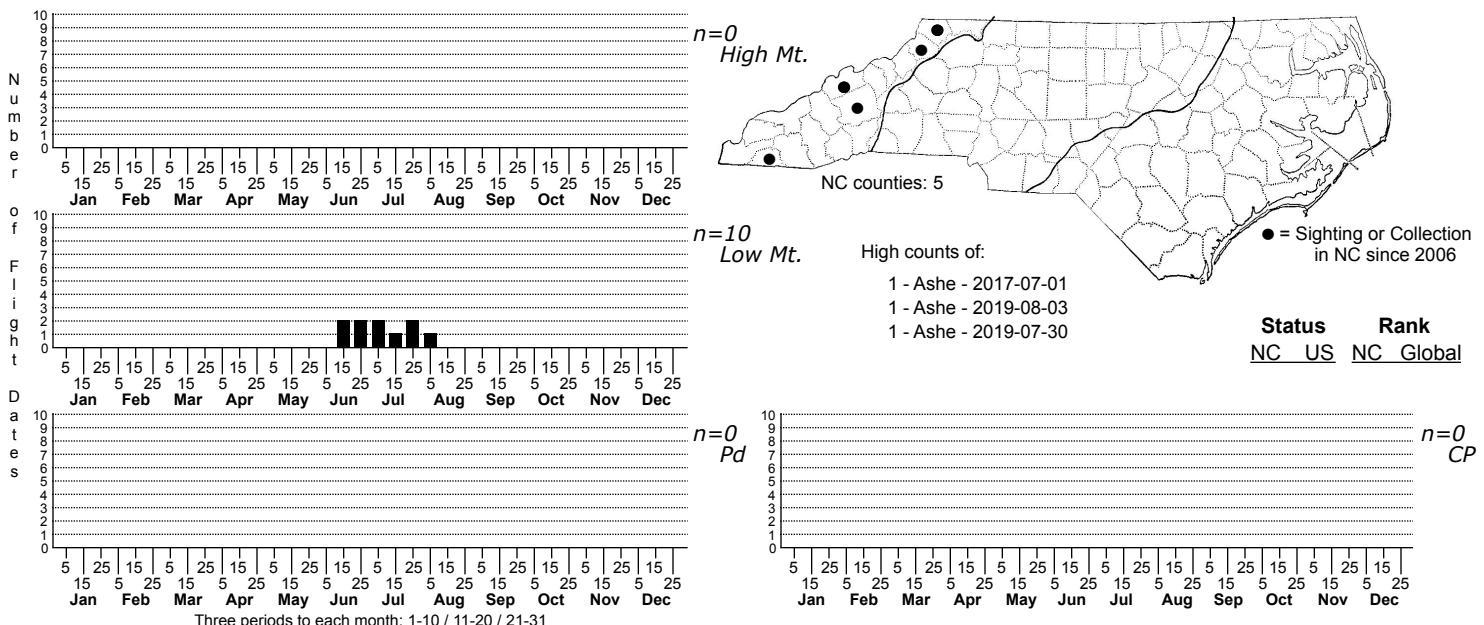


Olethreutes malana Malana Leafroller Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Olethreutini

TAXONOMIC COMMENTS: <i>Olethreutes</i> is a large genus with over 130 recognized species worldwide. North America has around 80 recognized species, with at least 37 species occurring in North Carolina. Some species are very difficult to identify due to interspecific similarities in color and forewing pattern and only subtle differences in genitalia (Gilligan et al., 2008). In many instances, knowledge of the host plant is essential for a confident determination. All of the Nearctic species are leaf-tiers or leaf-rollers on deciduous trees and shrubs.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Chapman and Lienk (1971)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Chapman and Lienk (1971)

ID COMMENTS: <i>Olethreutes malana</i> is one of our most distinctive <i>Olethreutes</i> and can be distinguished by the extensive white coloration on the forewing (Gilligan et al., 2008). The medial fascia is greatly reduced, with the remnants represented by a dark spot on the costa and some gray shading at the dorsal margin. The subornal patch and postmedial bar are also missing and replaced by whitish scaling with faint, darker dusting or mottling. The apical half of the costa and the outer margin have varying amounts of blackish dusting. The most prominent mark is a blackish sub-basal patch with scattered paler scales that extends from the inner margin to near the center of the wing. The patch has a posterior lobe that is darker than the remainder of the patch. The thorax has alternating horizontal black and white bands, and the thoracic tuft is black. The head has a blackish tuft, and the palps are mostly sordid-white with the third segment mostly black except for white at the extreme tip.

DISTRIBUTION: <i>Olethreutes malana</i> is endemic to eastern North America where it occurs in southern Ontario and Quebec, and in the US from Maine and other New England states westward to Illinois and Wisconsin, and southward through the Appalachian region to West Virginia, eastern Kentucky and western North Carolina. As of 2024, all of our records are from lower-elevation sites in the Blue Ridge.

FLIGHT COMMENT: The adults have been observed from June through September in different areas of the range, with a seasonal peak commonly in July. As of 2024, our records range from mid-June through early-August.

HABITAT: Local populations can be found in apple orchards, semi-wooded residential neighborhoods, fragmented landscapes with woods and fields, and mesic hardwood forests.

FOOD: The larvae feed on the opening buds and young leaves of Common Apple (<i>Malus domestica</i>) and were significant pest in past years (Fernald, 1882; Heinrich, 1926; Chapman and Lienk, 1971). They have also been reared on American Hazelnut (<i>Corylus americana</i>; Godfrey et al. 1987), and possibly on Chinese Plum (<i>Prunus salicina</i>) based on a museum note (Heinrich, 1926). Chapman and Lienk (1971) surmised that the larvae fed on native <i>Crataegus</i> and <i>Prunus</i> species prior to the introduction of commercial apples into the US, but this has not been confirmed. As of 2024, we do not have any host records for North Carolina.

OBSERVATION METHODS: The adults are attracted to lights, and the larvae can be found feeding on the young shoots and opening buds of the host plants. More information is needed on host use in North Carolina and elsewhere.

NATURAL HERITAGE PROGRAM RANKS: GNR[S2S3]

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

COMMENTS: This species appears to be uncommon in North Carolina where it reaches the southern limit of its range.