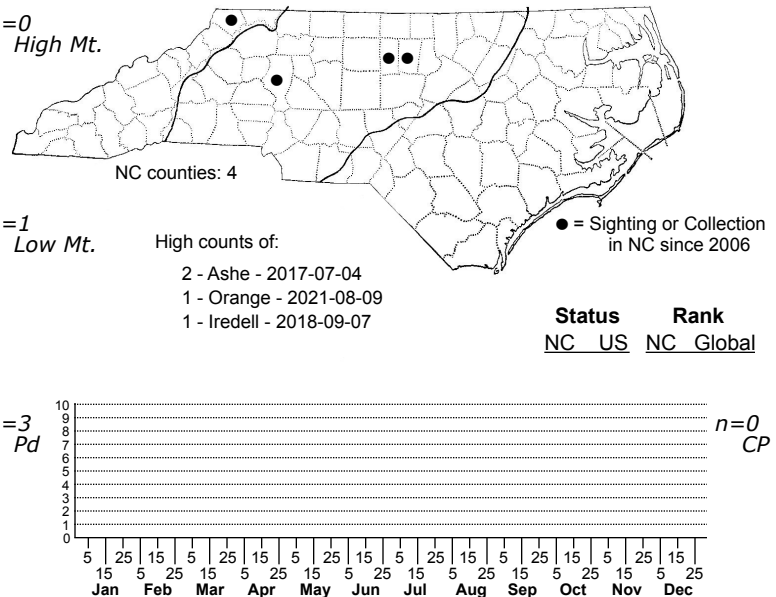
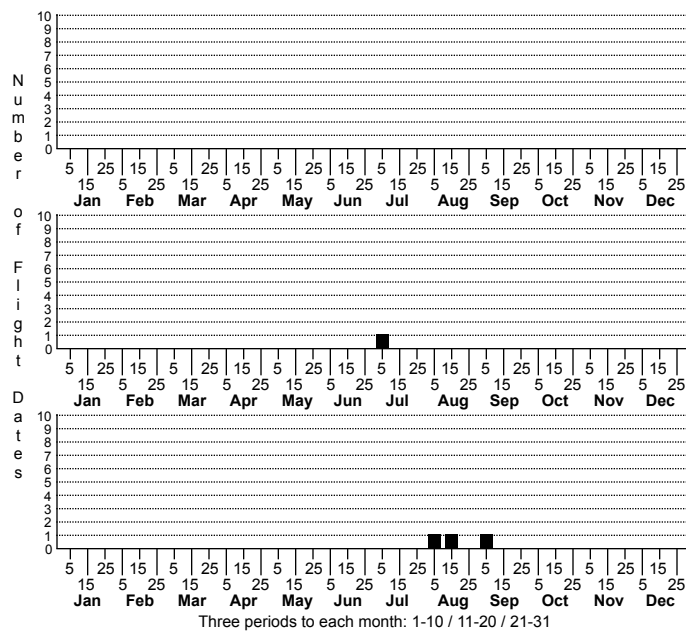


Olethreutes nitidana Shining Olethreutes



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Olethreutini

TAXONOMIC_COMMENTS: *Olethreutes* 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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Clemens (1860), Heinrich (1926)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Gilligan et al. (2008) note that this species can usually be distinguished by its the orangish-brown forewing color and the long slender teeth of the median fascia. The following detailed description is based in part on the descriptions by Clemens (1860), Heinrich (1926) and Forbes (1923). The palp is yellowish white with a blackish terminal segment. The head tuft is pale or light tan, and the thoracic tuft reddish to reddish-brown. The ground color of the forewing varies from yellowish-red to a sordid, light-rose color, and is overlain with darker reddish-brown marks and patches. The basal fourth of the wing has two patches that include a relatively large one close to the inner margin, and a smaller one that runs roughly parallel in the subcostal region. The pale-margined, medial fascia has two long teeth and a larger, triangular patch near the inner margin that often fuses with the subterminal patch that follows it. A postmedial bar is present that extends from the subcostal region to the middle of the outer margin, and the costa has reddish brown streaks that become much more pronounced towards the apex. The fringe is light reddish-yellow with a thin, reddish basal line. Certain specimens may also have blackish scaling along the dorsal third of the fringe. The hindwing is dark fuscous.

This species can generally be identified by its coloration and markings, but Gilligan et al. (2008) noted that it might be confused with orange specimens of *O. sericorana*. If need be, these species can be positively identified using differences in the male and female genitalia.

DISTRIBUTION: *Olethreutes nitidana* is found in eastern North America where it is typically found in areas with cool climates. The range includes southern Ontario and Quebec, and much of the northeastern US from Maine and other New England states westward to Iowa and Illinois, and southward to Kentucky, Virginia and western North Carolina. As of 2024, we have only two site records base on genitalia-identified specimens, including one from the Piedmont and a second from the Blue Ridge.

FLIGHT COMMENT: The adults have been observed from May through September, with a seasonal peak most commonly in July and August. As of 2024, our two records were from early-July and early-September.

HABITAT: The preferred habitats are poorly documented. Our two records as of 2024 were both near wetlands, including a mountain bog and a site near the shoreline of a Piedmont lake.

FOOD: Gilligan et al. (2008) noted that one individual was reared from a maple (*Acer* sp.).

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1S3]

STATE PROTECTION:

COMMENTS: This species reach its southern known range limit in North Carolina where it is apparently rare based only two site records as of 2024.