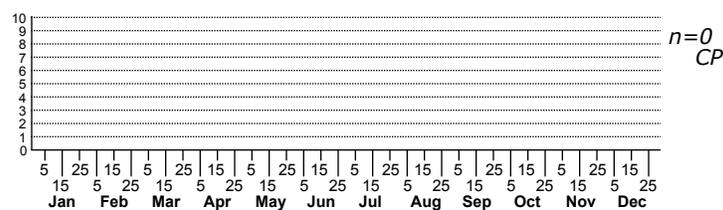
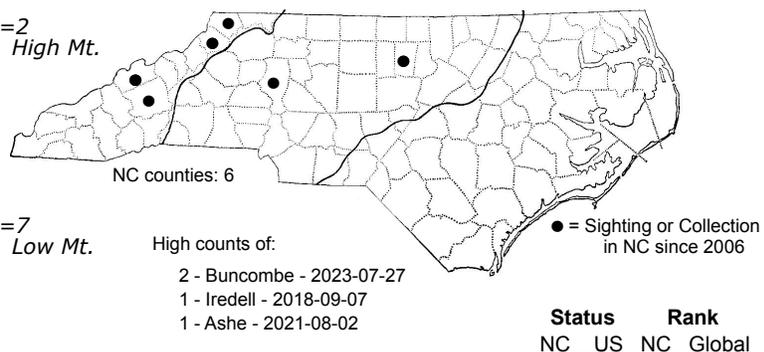
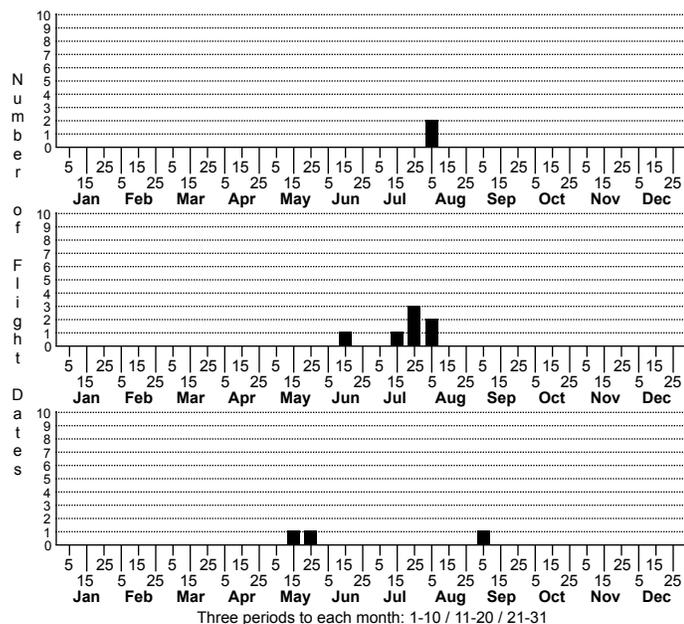


Olethreutes nigranum Variable Nigranum Moth



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: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Olethreutes nigranum* has an array of phenotypes that range from specimens with a prominent black band along the inner margin, to individuals with the band lacking. Gilligan et al. (2008) noted that the forewing pattern is constant, but variation in the degree that the black coloration is expressed produces many different phenotypes. The areas that surround the larger patches and the median fascia often have a pinkish to reddish coloration or wash, which is helpful for identifying this species. The most easily recognized form, including the one that prevails in North Carolina, has a heavy suffusion of black on the thorax. The black suffusion continues as a broad, diffuse band along the inner margin that abruptly narrows and terminates in the subterminal region. Less intense darker dusting is also sometimes present near the middle of the costa and in the subterminal region of the wing. Many specimens can have lighter dusting that can reveal some of the underlying patterning, while others may have little or no dusting. When exposed, the color of the medial fascia can vary from uniformly brown or olive green to dark reddish brown at the costa and inner margin.

Gilligan et al. (2008) noted that *O. clavana* often has black dorsal shading, but it is usually less developed. This species tends to be a little smaller and lacks any of the pink to reddish coloration that is common in *O. nigranum*. In addition, the basal half of the costa has a series of pale strigulae that are often partially fused to form a zone of pale wash that is absent on *O. nigranum*. The genitalia of the two species are very similar (see below).

DISTRIBUTION: *Olethreutes nigranum* is found in eastern North America and is generally found in areas with cool climates. The range extends from Maine and other New England states westward through southern Quebec and southern Ontario to Illinois and Missouri, then southward to Tennessee, North Carolina, Virginia, West Virginia, Maryland, Pennsylvania and New York. As of 2024, our records are all from the Piedmont and from both lower and higher elevations in the Blue Ridge.

FLIGHT COMMENT: The adults have been found from April through August in different areas of the range, with a seasonal peak typically from June through August. As of 2024, our records extend from late-July through early-September, with most from late-July and early August. Populations in North Carolina are univoltine.

HABITAT: Local populations are commonly associated with mesic hardwood forests with maples.

FOOD: The larvae feed on deciduous hardwoods, with maples appearing to be the primary hosts (McDunnough, 1942; MacKay, 1959; Prentice, 1965; Miller, 1979; Godfrey et al., 1987). The reported hosts include Silver Maple (*Acer saccharinum*), Sugar Maple (*A. saccharum*), hickories (*Carya*) and American Basswood (*Tilia americana*; MacKay, 1959). As of 2024, we have three rearing records that are all for Florida Maple (*Acer floridanum*).

OBSERVATION_METHODS: The adults are attracted to lights. More information is needed on host use in North Carolina.

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: