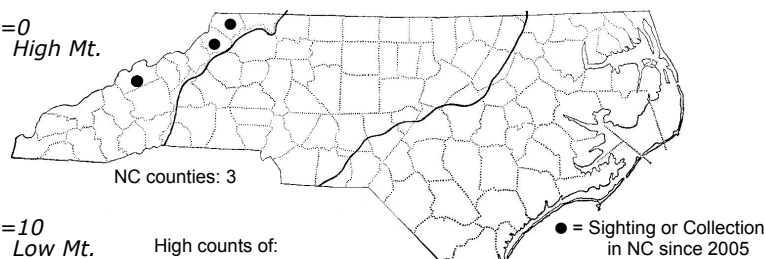
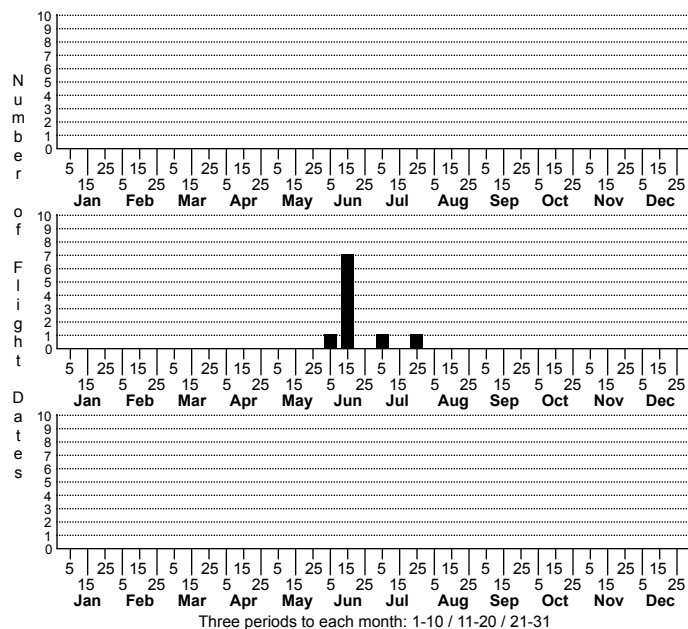


Olethreutes fagigemmeans None



High counts of:

- 1 - Madison - 2019-06-12
- 1 - Madison - 2023-06-19
- 1 - Madison - 2023-06-20

Status Rank
NC US NC Global



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: Heinrich (1926)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Olethreutes fagigemmeans* is sexually dimorphic, with males and females having more-or-less the same patterning, but differing in coloration (Gilligan et al., 2008). In females the major marks on the distal portion of the forewing vary from orange to orangish-red, while the interfascial region that surrounds the marks has a pinkish hue. The basal half of the wing has dull olive marks, with the interfascial areas whitish. In addition, the costal portion of the basal area is whitish. The orangish and olive colorations grade into one another near the center of the wing. Males are generally similar in patterning but have yellowish-olive marks with pale margins throughout the entire wing, along with silvery-gray interfascial areas.

The major dark marks include 1) a basal patch that extends obliquely outward from the inner margin at about one-fifth the wing length before ending near the center of the wing, 2) a narrow, subcostal basal streak that terminates near the end of the basal patch, and 3) a medial fascia that consists of a costal tooth, middle tooth and a dorsal patch with the apex narrowing posteriorly. The dorsal patch is often not joined to the middle tooth at the base. On females, the fascia color transitions from olive on the dorsal patch to orangish-red on the costal tooth. Beyond the medial fascia there is a triangular, subterminal patch with the tip projecting basally and often fusing with the median patch, and an elongated, oblique, postmedial bar that begins below the costa at around four-fifths the wing length and projects towards the middle of the outer margin. A series of four or five triangular spots are present along the apical half of the costa that curve posteriorly and narrow to a fine tip. These alternate with pairs of white dashes that continue as leaden lines that project towards the outer margin. The fringe has a mixture of whitish and dark-brown patches with a dark basal line, while the hindwing is brown with a whitish fringe that has a dark basal band. The females of this species are distinctively colored, but the males in some cases may require dissection.

DISTRIBUTION: *Olethreutes fagigemmeans* is endemic to eastern North America where it occurs in southern Canada (Ontario; Quebec; Nova Scotia), and in the US from Maine and other New England states southwestward mostly through the Appalachian region to western North Carolina, northern Georgia, central Alabama and Mississippi. The range extends westward to Indiana, southern Michigan and western Kentucky. As of 2024, all of our records are from lower-elevation sites in the Blue Ridge.

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

HABITAT: This species frequents rich hardwood forests and forest edge habitats.

FOOD: The hosts are poorly documented, with only American Beech (*Fagus grandifolia*) and American Hop-hornbeam (*Ostrya virginiana*) reported as hosts (Heinrich, 1926; Gilligan et al., 2008).

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR[S1S3]

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

COMMENTS: *Olethreutes fagigemmeans* appears to be rare in North Carolina with only three site records as of 2024. More information is needed on its hosts, habitat requirements and life history before we can accurately assess its conservation status within the state.