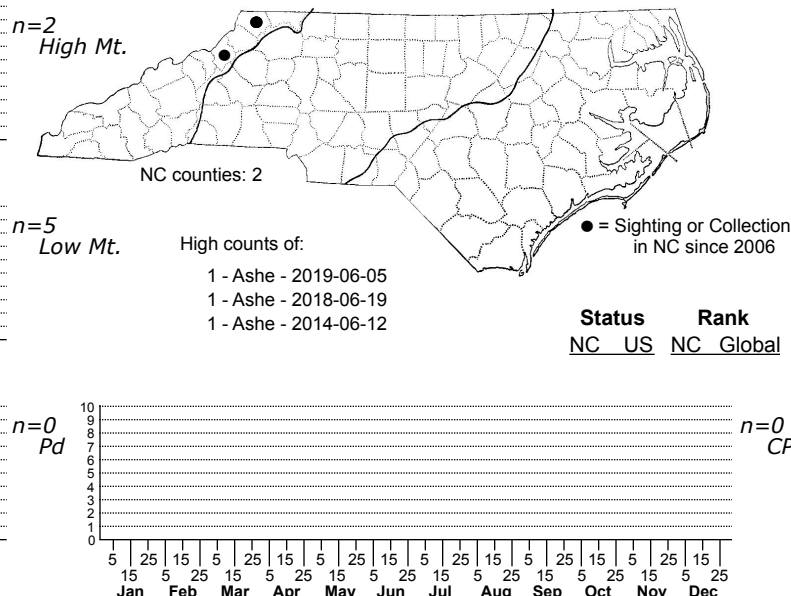
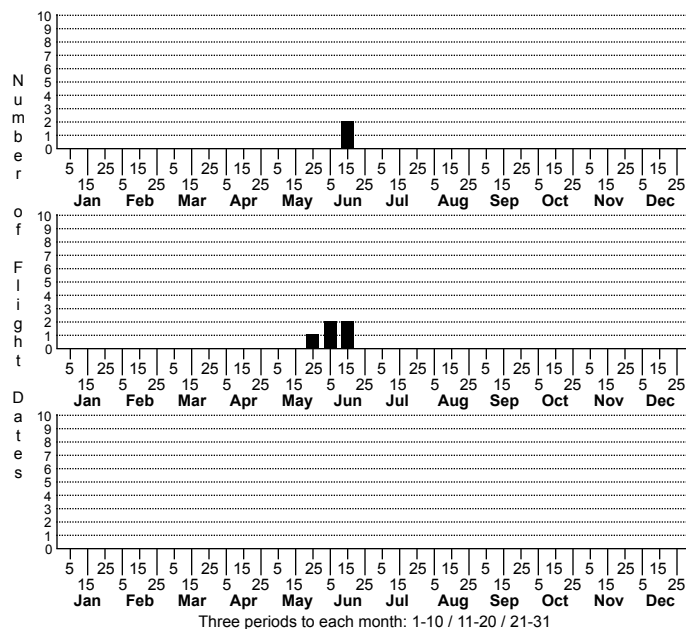


# *Olethreutes coruscana* None



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: Gilligan et al. (2008)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: In this species the palps are dull yellowish to yellowish-white with varying amounts of darker dusting. The second segment has a black spot on the side and the terminal segment is black. The head and thorax have a varying mixture of black and brownish-yellow to brownish-orange scales. The forewing consists of orangish and blackish marks that form a series of alternating, diffuse dark patches with orangish areas between them. The dark patches are rather ill-defined and consists of concentrations of numerous blackish striations and reticulations on an orangish background. Specimens typically have a large basal, medial, postmedial, and pretornal patch that are surrounded by orange regions with greatly reduced black scaling. Silvery-blue dots tend to be concentrated around the margins of the dark patches. The costa has a series of black spots along its entire length that alternate with light-yellowish regions. The fringe is often heavily dusted with black scales and there is a narrow dark line at the base. The hindwing is typically dark brown, with a whitish fringe that has a dark basal line.

*Olethreutes astrologana*, *O. ferrolinaea* and *O. coruscana* are similar species that all have mixtures of orangish to brownish-yellow scales that are intermixed with dark-brown to blackish scales, along with silvery-blue dots and lines. These species can all be identified by genitalia, but specimens in North Carolina also exhibit differences in maculation. *Olethreutes astrologana* has a forewing with a ground composed of orangish scales that are intermixed with darker striations and specks throughout. The silvery-blue dots are uniformly scattered across the wing except where they are organized as lines that extend from the costa. The two most posterior lines in the subapical area tend to break up into dots and usually terminate near the center of the wing. The fringe is pale to tawny with a dark line near the base. *Olethreutes coruscana* has the orangish and blackish marks segregated to form a series of alternating dark patches with orangish areas between them. Specimens typically have a large basal, medial, postmedial, and pretornal patch, and the silvery-blue dots are more concentrated around the margins of the dark patches. This species has a series of black spots along the entire length of the costa that is not present in *O. astrologana*. The fringe is darker and the hindwing is typically dark brown.

*Olethreutes ferrolinaea* is often intermediate between these two in some respects. The dark blotches are poorly developed relative to those of *O. coruscana*, but specimens almost always have a postmedial bar that is orangish and margined with a silvery-blue line on both sides. The basal line that margins the bar may be complete or broken, and usually extends nearly to the tornus. The postmedial bar is preceded by a diffuse medial patch that is darker than the general ground color and marked with silvery-blue spots. The black costal spots are not as well-defined as those on *O. coruscana*, and there usually are one or more short, silvery-blue, costal strigulae on the basal half of the wing. *Olethreutes astrologana* typically has the strigulae confined to the apical half of the wing, while *O. coruscana* often lacks them altogether, except for two associated with the postmedial blotch or bar. The fringe of *O. ferrolinaea* is usually orangish, with a dark basal line and several dark blotches in the posterior half, with the largest occupying the dorsal third or more of the fringe. *Olethreutes astrologana* has reduced blotching on the fringe relative to the other two species. Certain forms of *O. ferrolinaea* and *O. coruscana* look so similar that genitalia are the only reliable way to obtain a positive identification.

DISTRIBUTION: *Olethreutes coruscana* occurs in the northeastern and portions of the north-central US, and in Canada from Saskatchewan eastward to New Brunswick, Nova Scotia and Prince Edward Island. In the US, the range extends from the New England states southwestward through the Appalachian region to western North Carolina, and westward to central Kentucky, Illinois, eastern Iowa and Wisconsin. As of 2024, we have only four site records and all are from the northern Blue Ridge.

FLIGHT COMMENT: The adults have been observed from March through October in different areas of the range, with peak seasonal flights from May through July. As of 2024, our records extend from late-May through mid-June.

HABITAT: Local populations are often found in old fields, meadows, bogs and semi-wooded residential neighborhoods.

FOOD: The host plants (if any) are undocumented.

OBSERVATION\_METHODS: The adults are attracted to lights and often rest during the day on the upper sides of low-growing foliage.

NATURAL HERITAGE PROGRAM RANKS: GNR[S1S2]

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 rare within the state and confined to the northern Blue Ridge where it reaches its southern range limit.