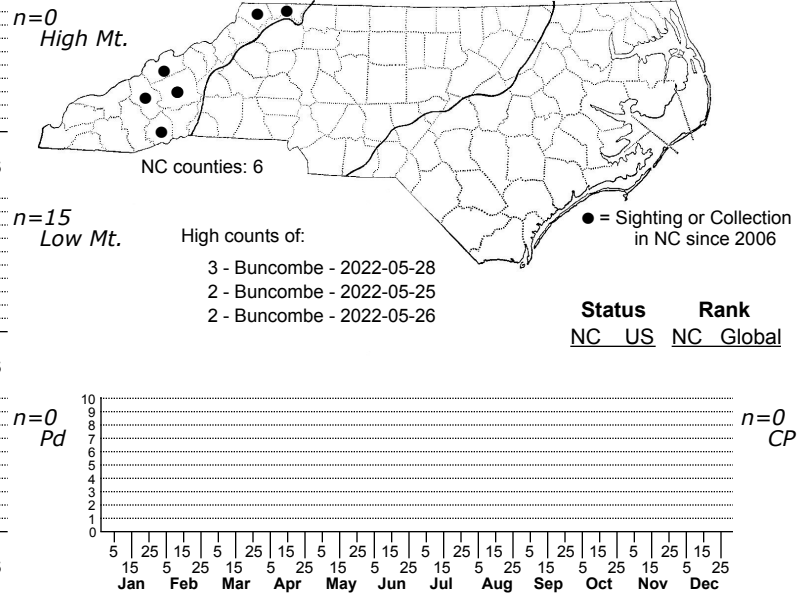
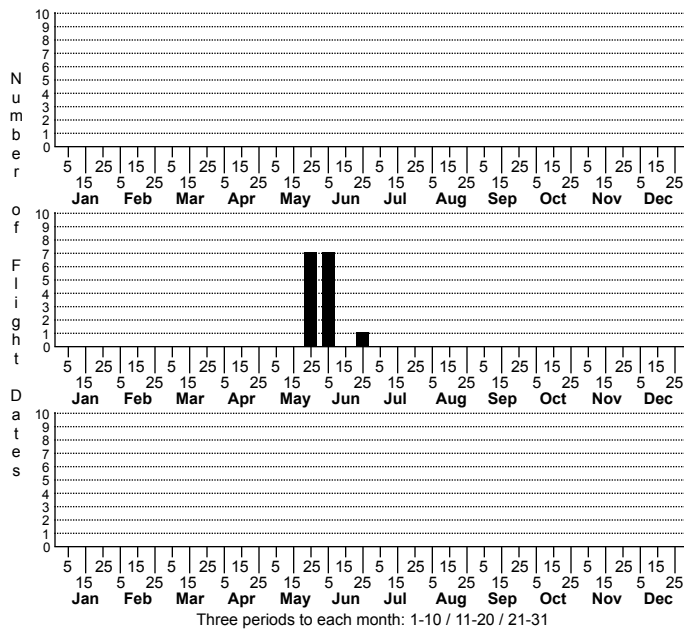


Olethreutes ferrolineana Iron-lined Olethreutes



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: Beadle and Leckie (2012)

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 an orangish to brownish-yellow ground color that is overlain with blackish scales that form fine striations, reticulations and specks. Silvery-blue dots and lines are also present throughout the wing. The black marks are usually sufficiently concentrated to form a large diffuse band or area of heavy dark scaling from near the middle of the costa to the submarginal region. Specimens also almost always have a postmedial bar that is orangish, and usually with varying amounts of dark specks or striations within. The postmedial bar is margined with a silvery-blue line on both sides, with the basal line usually extending nearly to the tornus. The fringe is orangish to yellowish with patches of darker scales on the outer two-thirds, and a narrow dark line at the base. The hindwing is typically dark brown, with a whitish fringe that has a dark basal line. In addition to the form described above, *O. ferrolineana* has morphs that closely resemble those of *O. coruscana*. In many cases genitalia are the only reliable way to obtain a positive identification.

Olethreutes astrologana, *O. ferrolineana* 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 ferrolineana 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. ferrolineana* 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. As mentioned above, certain forms of *O. ferrolineana* and *O. coruscana* look so similar that genitalia are the only reliable way to obtain a positive identification.

DISTRIBUTION: *Olethreutes ferrolineana* is found in eastern North America, including portions of southern Canada (Manitoba; Ontario; Quebec), and in the US from Massachusetts and New York southwestward through the Appalachian region to western North Carolina and eastern Tennessee, and westward to Arkansas, Missouri, Iowa and Wisconsin. As of 2024, all of our records are from the Blue Ridge.

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

HABITAT: Local populations are commonly found in open habitats such as old fields, meadows, forest edges and semi-wooded residential neighborhoods.

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

OBSERVATION_METHODS: The adults are attracted to lights and are occasionally found resting on the upper sides of low-growing vegetation during the day.

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 and restricted to the Blue Ridge where it reaches its southern range limit. Individuals have likely been under collected due to the short seasonal flight period.