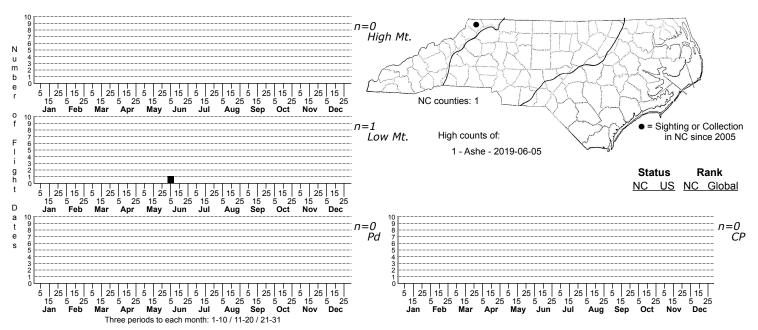
## Olethreutes valdanum None



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Olethreutini
TAXONOMIC\_COMMENTS: <i>Olethreutes</i> 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: TECHNICAL DESCRIPTION, IMMATURE STAGES: McDunnough (1956)

ID COMMENTS: <i>Olethreutes valdanum</i> has dark marks on the forewing with strongly contrasting regions in between. The head and thorax are mottled with shades of brown and the palp is sordid white except for two fuscous spots on the outside of the second segment and a dark brown terminal tip. The forewing has a dark brown basal patch that fills the basal third of the wing, and a broad medial fascia of similar color. The medial fascia lacks two well-defined conspicuous teeth as seen in many <i>Olethreutes</i>, and instead has three broad and irregular lobes that project posteriorly and are broadly fused at their bases. Other major marks include a pretornal patch just beyond the medial fascia, and an elongated postmedial bar that begins in the subcostal area and around four-fifths and projects towards the dorsal half of the outer margin. All of the darker marks are more or less concolorous and are variably suffused with olivegold scaling. The areas between are silvery-white with scattered, darker specks. They produce an irregular whitish band that separates the basal patch and medial fascia, along with a more complex, lobed, whitish band on the terminal fifth of the wing. The apical half of the costa has four pairs of whitish strigulae that are separated by dark brown marks. The fringe is dark brown with a dark-brown basal line, except that it is often cut with two or three whitish blotches on the apical half of the outer fringe.

<i>Orthotaenia undulana</i>, which is less suffused with olive-gold scales and has a silvery- white fringe with a dark-brown basal line. <i>Olethreutes fasciatana</i> is also similar, but has a single white band rather than two. <I>Phiaris glaciana</i> is also similar, but the second white band is usually unlobed and often fused with the white costal strigulae. <i>Olethreutes valdanum</i> appears to be rare in North Carolina, with only a single record from the northern Blue Ridge as of 2024.

DISTRIBUTION: <i>Olethreutes valdanum</i> occurs in eastern North America in areas with cooler climates. Specimens have been found in the northern part of the range in Alaska, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island. Farther south the range extends from Maine southward to Maryland and New Jersey, and westward to Ohio, Indiana and Illinois. As of 2024, we have a single specimen from a mountain bog in the northern Blue Ridge.

FLIGHT COMMENT: The adults have been observed from May through August in different areas of the range, with a peak seasonal flight usually in June and July. As of 2024, our one record is from early-June.

HABITAT: The larvae feed on Broadleaf Meadowsweet <i>Spiraea alba</i> and perhaps other <i>Spiraea</i> that live in wetlands (McDunnough, 1956). Our one record as of 2024 was from a mountain bog site.

FOOD: This species appears to specialize on Broadleaf Meadowsweet (<i>Spiraea latifolia</i>) and perhaps other <i>Spiraea</i> species. McDunnough (1956) reared single females from larvae that were on Northern Bayberry (<i>Morella pensylvanica</i>) and Sweet-gale (<i>Myrica gale</i>), but he considered these to be incidental since they were growing in close association with <i>Spiraea latifolia</i>) along a lakeshore.

OBSERVATION\_METHODS: The adults are attracted to lights and the larvae can be found by searching the terminal shoots of Broadleaf Meadowsweet shortly after leaf-out.

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: <i>Olethreutes valdanum</i> appears be very rare in North Carolina where we only have a single record from a bog site in Ashe County. The population there appears to be a major southern disjunct from the main range farther north.