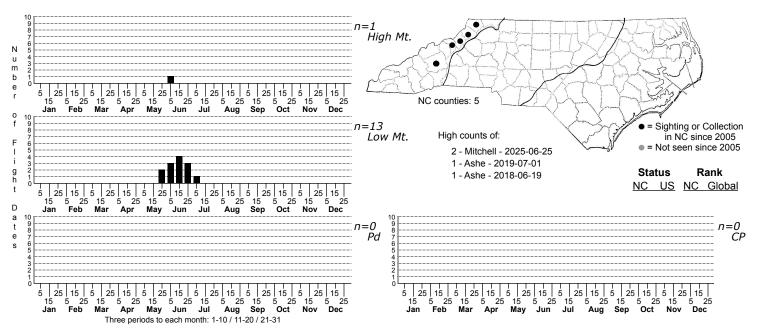
## Olethreutes appendiceum Serviceberry Leafroller Moth



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:

ID COMMENTS: <i>Olethreutes appendiceum</i> is variable in maculation and coloration, with a mixture of blackish, brownish, or olivaceous patterning. It can usually be distinguished by a combination of characters on the forewing that include, 1) a dull-white, submedial interfacial band at around one-fourth the wing length, 2) a medial fascia that is blackish near the costa and more olivaceous near the inner margin, 3) a patch of whitish scales at the tornus that projects inward to the center of the wing, and 4) a black apical spot at the apex. The forewing has a dark basal patch that extends from the wing base to the interfacial band at around one-fourth and has a broadly wavy margin. It is usually mottled with a mixture of dark brown and lighter brown scales. The dorsal half of the medial fascia, along with the pretornal patch and postmedial bar are often olive-colored with varying amounts of darker scaling. The areas around them are dull white with darker striations, except for the tornal patch that is lighter colored. The apical third of the costa three pairs of whitish strigulae that are separated with blackish spots, with the last much larger and forming a black apical spot. The fringe is whitish with a black basal band, except for a few blackish patches that are concentrated where the postmedial bar reaches the outer margin. The hindwing is brown with a white fringe that has a dark brown basal line.

DISTRIBUTION: <i>Olethreutes appendiceum</i> is found in both eastern and western North America, including Washington state and much of southern Canada from British Columbia eastward to Nova Scotia and Prince Edward Island. In the US the range extends from Maine southward to North Carolina and eastern Tennessee, and westward to western Kentucky, Illinois, Wisconsin and northeastern Nebraska. As of 2024, we have records both from the Blue Ridge and the Coastal Plain.

FLIGHT COMMENT: The adult have been documented from April through August in different areas of the range, with a seasonal peak typically in June and July. As of 2024, our records for the Blue Ridge range from late-May through early-July. Coastal Plain populations have a longer flight period and could potentially represent an undescribed species.

HABITAT: Local populations as associated with a variety of habitats, including hardwood forests, wetlands, forest margins and semi-wooded residential neighborhoods.

FOOD: The common name 'Serviceberry Leafroller Moth' is a misnomer since this species feeds on a wide variety of mostly deciduous hardwoods (Ferguson, 1975; Prentice, 1965; Godfrey et al., 1987; Gilligan et al., 2008; Brown et al., 2008; Robinson et al., 2010). The reported hosts include Rocky Mountain Maple (<i>Acer glabrum</i>), Red Maple (<i>A. rubrum</i>), Sugar Maple (<i>A. saccharum</i>), Mountain Maple (<i>A. spicatum</i>), Red Alder (<i>Alnus rubra</i>), Speckled Alder (<i>A. incana subsp. rugosa</i>), serviceberries (<i>American Hazelnut</i>), Paper Birch (Betula papyrifera), American Hornbeam (<i>Carpinus caroliniana</i>), Sweet-fern (<i>Comptonia peregrina</i>), American Hazelnut (<i>Corylus americana</i>), American Beech (<i>Fagus grandifolia</i>), huckleberry (<i>Gaylussacia</i>), American Witch-hazel (<i>Hamamelis virginiana</i>), American Hop-hornbeam (<i>Ostrya virginiana</i>), Quaking Aspen (<i>Populus tremuloides</i>), Choke Cherry (<i>Prunus virginiana</i>), an oak (<i>Quercus</i>), Sp.), Smooth Sumac (<i>Rhus glabra</i>), Red Currant (<i>Ribes rubrum</i>), brambles (<i>Rubus</i>), willows (<i>Salix</i>), Hillside Blueberry (<i>Vaccinium pallidum</i>) and a viburnum (<i>Viburnum</i>).

OBSERVATION METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR[S2S4]

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 within the state, but more information is needed on its distribution and abundance before we can accurately assess its conservation status.