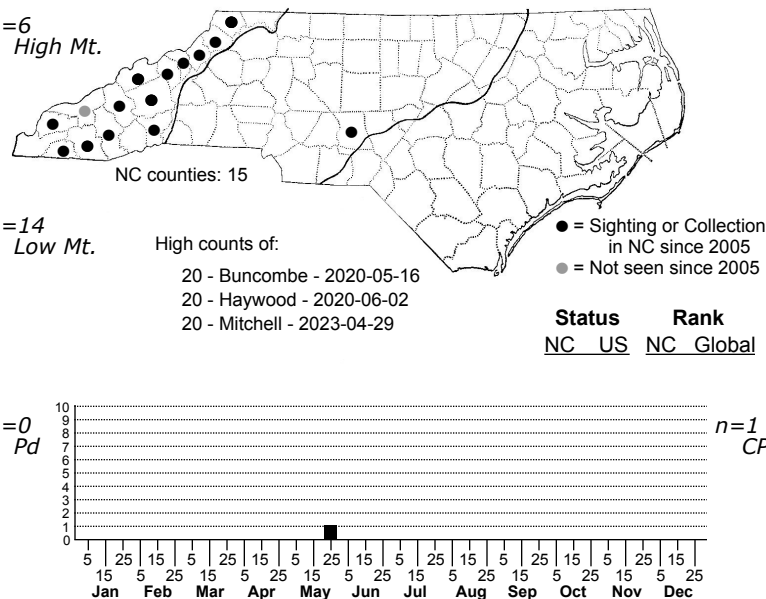
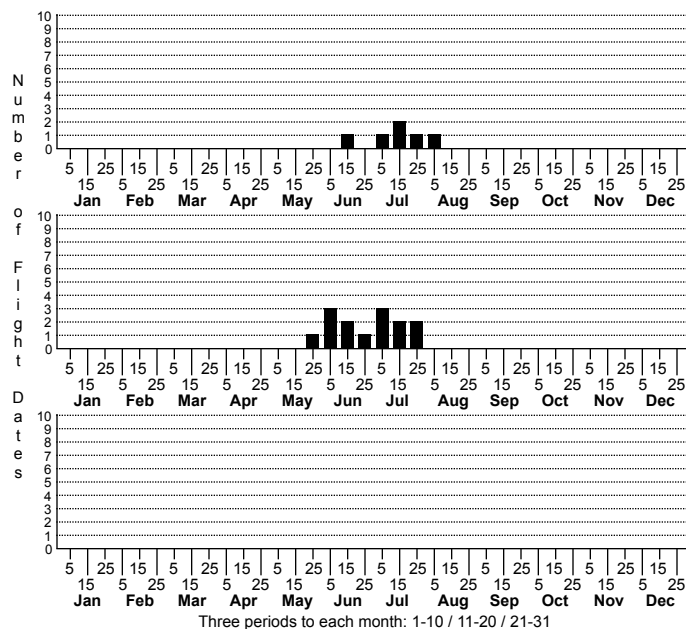


# *Olethreutes ferriferana* Hydrangea Leaf-tier Moth



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: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This species is a very distinctive *Olethreutes*, with bold reddish-brown forewing markings that are unique for this species. The head and thorax vary from reddish-brown to brown, and the palps are whitish with two dark dots on the second segment. The ground color of the forewing is whitish with numerous fine, brown striations. It is overlain with a dark-brown to reddish-brown basal patch that is complete, and a large concolorous posterior patch that occupied much of the dorsal half of the apical half of the wing. The only other conspicuous mark is a brown spot at the apex.

DISTRIBUTION: *Olethreutes ferriferana* is endemic to eastern North America where it occurs in southern Canada in Ontario, Quebec, New Brunswick and Nova Scotia. In the US, the range extends from Maine southwestward through the Appalachian region to eastern Tennessee, western North Carolina, and northern Alabama and as a possible disjunct in central Mississippi. The range extends westward to Arkansas, Missouri, Illinois, Wisconsin and southern Minnesota. As of 2024, all of our records are from the Blue Ridge except for one specimen from the extreme western Coastal Plain.

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

HABITAT: Local populations are strongly dependent on *Hydrangea arborescens* as a host and are generally restricted to mesic hardwood forests in the Blue Ridge, including cove forests at low elevations and stands of northern hardwoods at high elevations.

FOOD: Larvae are reported to feed on hydrangea (Forbes, 1923; Heinrich, 1926; MacKay, 1959), but no specific hosts are listed. In North Carolina larvae appear to specialize on Smooth Hydrangea (*Hydrangea arborescens*), but other *Hydrangea* species might be used.

OBSERVATION\_METHODS: The adults are attracted to lights and the larvae can be found in the distinctive leaf ties during the late-spring and summer months.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: Local populations are spottily distributed in the Blue Ridge due to their dependence on *Hydrangea arborescens* as a host plant, but generally appear to be secure.