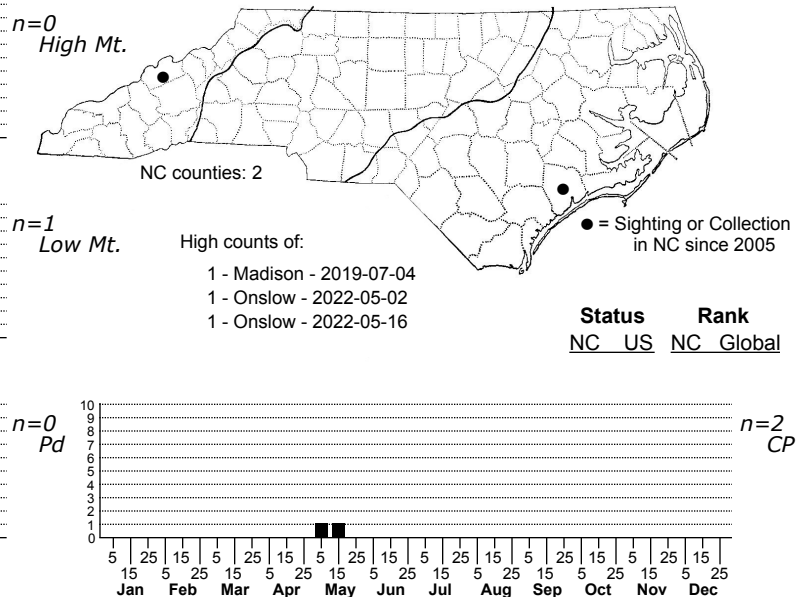
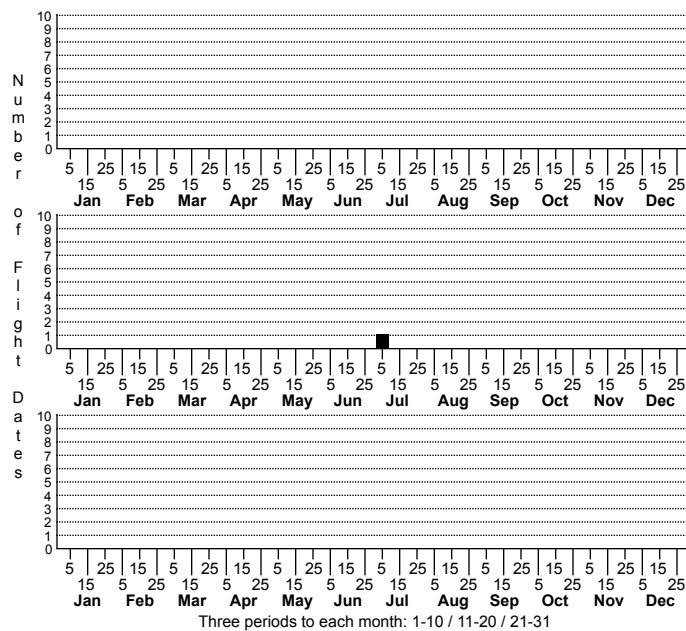


Synanthedon acerrubri Maple Clearwing



FAMILY: Sesiidae SUBFAMILY: Sesiinae TRIBE: Synanthedonini

TAXONOMIC_COMMENTS: North America has 136 or more species in the family Sesiidae, and the large genus *Synanthedon* constitutes around half of the 37 species found in North Carolina, many being similar in appearance to one another. Some sesiids, known broadly as clearwing borers, are significant pests of commercial crops. Almost all are mimics of wasps and hornets.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Eichlin and Duckworth (1988)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Synanthedon acerrubri* is best identified by a combination of characters that include an orangish labial palp, a reddish anal tuft, a black vertex with a few yellowish-orange scales posteriorly, and the absence of yellowish coloration between the veins on the apical third of the wing. The following description of the males is mostly from that of Eichlin and Duckworth (1988).

The antenna is black with a whitish tinge before the tip. The head has a brownish-black vertex with a few yellowish-orange scales posteriorly, and a white lateral line in front of the eye. The occipital fringe is orange, and the labial palp is orange with a black tip. The abdomen is brownish-black above with very narrow pale-yellow bands on the posterior edge of segments 2, 4, 6 and 7, and with the posterior two segments tending towards pale orange. The sides are mostly yellow except for segment 3 that is black, and the anal tuft is orangish-red with brownish-black on the basal half. The legs are shaded with diffuse regions of alternating pale yellow and blackish scales. The forewing is mostly hyaline, has a large blackish discal spot, and margins that are powdered with blackish scales. The hindwing is also hyaline with very narrow margins. The females differ by having a more robust abdomen that is often powdered with pale yellow dorsally on the posterior segments, an anal tuft that is entirely orangish-red, and an antenna with a contrasting whitish zone below the tip. The pale-yellow bands are only present on segments 2, 4, and 6.

This species is most easily confused with *S. acerni*, but the latter has an orangish vertex and extensive yellow shading between the veins in the apical region (often reduced on worn specimens).

DISTRIBUTION: *Synanthedon acerrubri* is endemic to eastern North America. The range includes portions of southern Canada (Ontario; Quebec; New Brunswick; Nova Scotia) and much of the eastern US from Maine and other New England states southwestward to western North Carolina, northern Georgia and northern Alabama, and westward to eastern Texas, Arkansas, central Oklahoma, Illinois, Nebraska, South Dakota and Minnesota. Populations appear to be absent from most of the southeastern Coastal Plain. As of 2024, we have only two site records, one from a lower-elevation site in the Blue Ridge and the second from the coast.

FLIGHT COMMENT: The adults have been observed from April through August in different areas of the range. Our sparse records as of 2024 are from May and early-July.

HABITAT: Local populations are found in residential developments and in hardwood or mixed hardwood-conifer forests with maples.

FOOD: The larvae specialize on maples, including both native and ornamental forms (Engelhardt, 1946; Eichlin and Duckworth, 1989; Solomon, 1995; Heppner, 2007). The reported host include Boxelder (*Acer negundo*), Red Maple (*A. rubrum*), Silver Maple (*A. saccharinum*) and Sugar Maple (*A. saccharum*).

OBSERVATION_METHODS: The adults are diurnally active and are often seen resting on vegetation or nectaring on flowers. They occasionally show up at lights during the early evening hours, and the males are attracted to pheromone traps.

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 in North Carolina and as of 2024 is only known from two sites in the state.