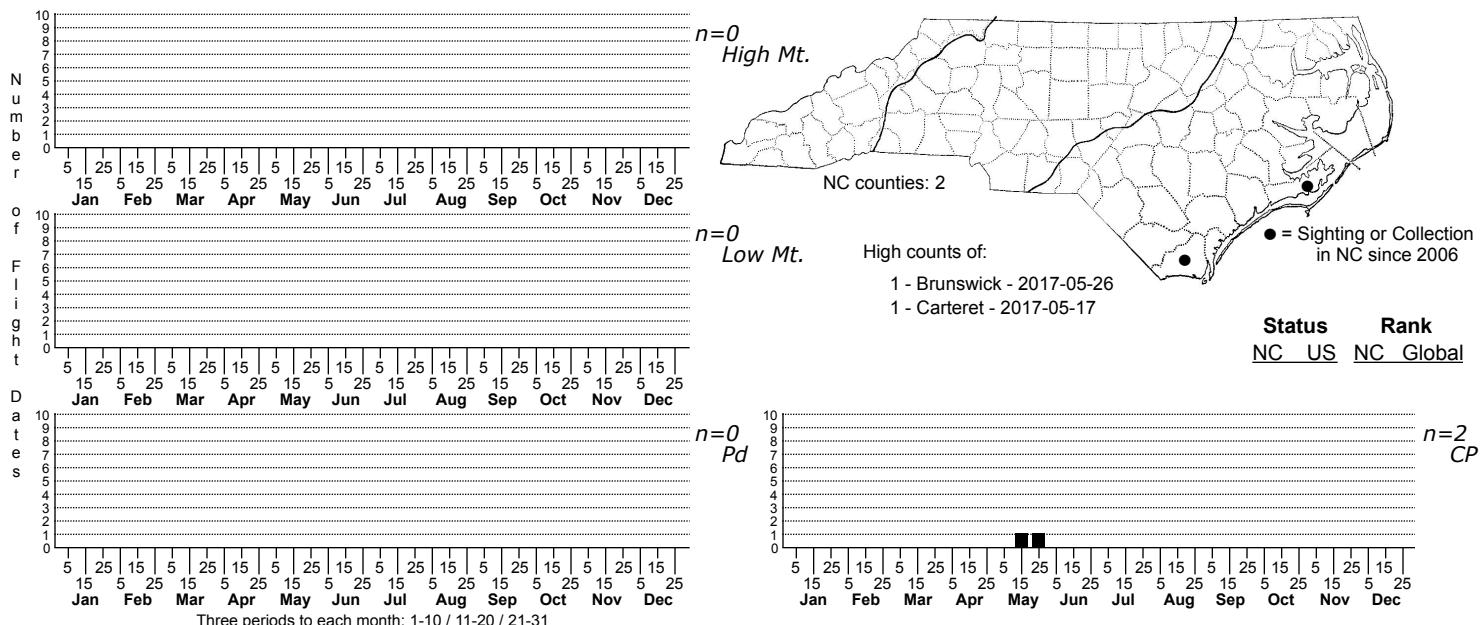


Synanthedon alleri Aller's Clearwing



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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Engelhardt (1946); Eichlin and Duckworth (1988)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Synanthedon alleri* is best identified by the mostly opaque, blackish front wings, the orange collar, the orange band on abdominal segments 4 and 5, and the hindleg that is orange with a broad and bold blackish band. The following detailed description of the male is based on those of Engelhardt (1946) and Eichlin and Duckworth (1988).

The antenna is long, slender, moderately dilated toward the tips, and rusty black. The labial palp is pure golden yellow and sometimes brownish-black at the apex, while the head is black and coarsely tufted on top. The collar varies from golden yellow to orange. The thorax varies from rusty-black to brownish-black, with a large orange to orangish-yellow spot beneath the wing, a narrow orange subdorsal stripe, and orange lateral tufts on the metathorax. The abdomen varies from dull black to brownish-black and has a blue-green luster. An orange band is present on the dorsum on segment 4 and commonly on segment 5, but some specimens may lack the orange band altogether. The side of the abdomen has some orange on segments 1 and 2, while the underside has solid orange on segments 4-7. The anal tuft is wedge-shaped, black and weakly edged with white, while the underside is black with a median orange stripe. The foreleg is mostly orange with brownish-black medially on the coxa, while the midleg is blackish with orange on the distal tuft of the tibia, and on the spurs and tarsus. The hindleg varies from golden-yellow or orange, with the tibia broadly banded with black above the posterior spurs. The forewing is mostly opaque and brownish-black except for a partly obscured, small, transparent quadrangle before the discal mark, and a long, narrow transparent region near the wing base. The underside has some faint orange powdering between the veins apically, on the discal spot, and more heavily on the basal two-thirds of the wing and on the costal margin. The hindwing is transparent and narrowly edged with dull black above and beneath. There is often a dusting of orange at the base and on the small discal spot. The females are the same as the males, except that the anal tuft is narrower and blunt, and the antenna simple.

DISTRIBUTION: *Synanthedon alleri* is found from central and northern Florida and extreme southeastern Georgia, westward along the Gulf Coast to Mississippi and extreme southeastern Louisiana. Bo Sullivan discovered this species in North Carolina in 2017 in Brunswick County and Carteret County, which represents a geographic disjunct from the main range farther south.

FLIGHT COMMENT: The adults fly essentially year-round in the main range, except for the coldest months of the year. They probably produce two broods per year, with larvae from the latter presumably overwintering. As of 2024, our two records from North Carolina are both from May.

HABITAT: Engelhardt (1946) noted that specimens from near Mobile, Alabama were found in open woodlands that bordered swamps.

FOOD: As of 2024, the larval hosts are undocumented.

OBSERVATION METHODS: The adults are diurnally active and are not attracted to lights. They are occasionally seen resting on vegetation during the day, and nectaring on late-blooming composites in the fall.

NATURAL HERITAGE PROGRAM RANKS: GNR[S1S2]

STATE PROTECTION:

COMMENTS: This species appears to be rare in North Carolina, where populations appear to be disjunct from the main range that extends from Florida westward to Louisiana.