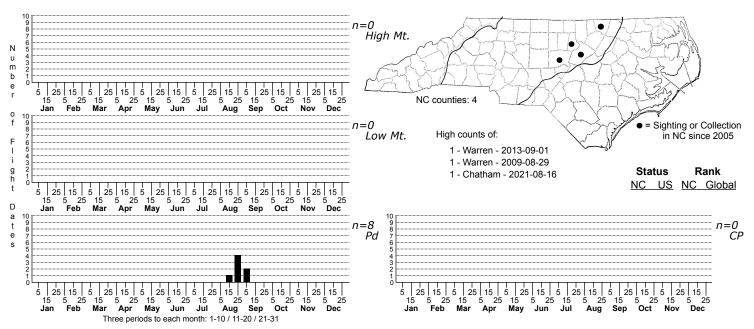
## Synanthedon arkansasensis Arkansas Clearwing



FAMILY: Sesiidae SUBFAMILY: Sesiinae TRIBE: Synanthedonini

TAXONOMIC\_COMMENTS: As currently recognized, <i>Synanthedon arkansasensis</i> appears to contain several cryptic species. These are currently under study and awaiting resolution. Here, we continue to recognize North Carolina material as a single species until research is completed on this group.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Eichlin and Duckworth (1988)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: <i>Synanthedon arkansasensis</i> is best identified using several characters that include a black antenna, yellow collar, a black thorax with lateral yellow stripes, a yellow, transverse band on the metathorax, and a black abdomen with yellow bands on all segments except for segment 1. The discal mark on the wing is black with orangish scales on the distal margin, and the apical fifth of the wing has yellowish-orange scales that fill the area between the veins. The following detailed description of the male is mostly from that of Eichlin and Duckworth (1988).

The antenna is black and the vertex of the head bluish-black. The front of the head is mostly bluish-black with white laterally, and with pale yellow dorsolaterally beneath the scape. The occipital fringe (collar) is yellow, and the labial palp is smooth and pale yellow. The thorax is bluish-black with a subdorsal yellow stripe on each side, and a yellow, transverse band on the posterior margin (metathorax). The area beneath the wing is mostly yellow. The abdomen is mostly bluish-black, with all segments except the first edged posteriorly with yellow. All segments below, except for the third, are usually edged posteriorly with yellow. The anal tuft is black above with a yellow to orangish-yellow margin. The tibia and tarsus of the foreleg are yellow, while the midleg has the tibia yellow with bluish-black at the spurs. The tarsus is yellow ventrally and bluish-black dorsally. The tibia of the hindleg is bluish-black dorsolaterally, with yellow ventrally and at the spurs, while the tarsus is mostly yellow. The forewing is hyaline, with the veins and margins blackish. Orange or yellowish-orange scales fill the area between the veins on the apical fifth, and outline the blackish discal spot, particularly on the distal edge. The underside is powdered with orange or yellowish-orange on the veins and in the apical region between the veins. The hindwing is hyaline, with black veins and margins, and a black costa that is often dusted with yellowish-orange scales on the basal half.

Female are similar to the males except for wider abdominal bands, an anal tuft that is mostly yellow with bluish-black laterally and medially, and more extensive orange powdering on the forewing, both apically, and along the costa and inner margin.

DISTRIBUTION: <i>Synanthedon arkansasensis</i> is primarily found in the southeastern US, with the range extending from southern Pennsylvania, New Jersey and Maryland southward to northern Florida, and westward to central Texas, central Oklahoma, eastern Kansas, Missouri, Kentucky and southern Ohio. As of 2024, our records are all from a cluster of counties in the east-central and northeastern Piedmont.

FLIGHT COMMENT: The adults fly year-round in Florida, and from May through September elsewhere in the range. This species has a brief flight period in North Carolina, with all of our records as of 2024 from mid-August through early-September.

HABITAT: The preferred habitats are poorly documented; many of our specimens are from semi-wooded residential neighborhoods.

FOOD: As of 2024, the hosts are undocumented.

OBSERVATION\_METHODS: The adults are mostly diurnally active, but are attracted to black lights in the early evening. They can also be taken using artificial pheromone traps.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2S3]

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 to rare in North Carolina where it is restricted to a cluster of counties in the triangle area.