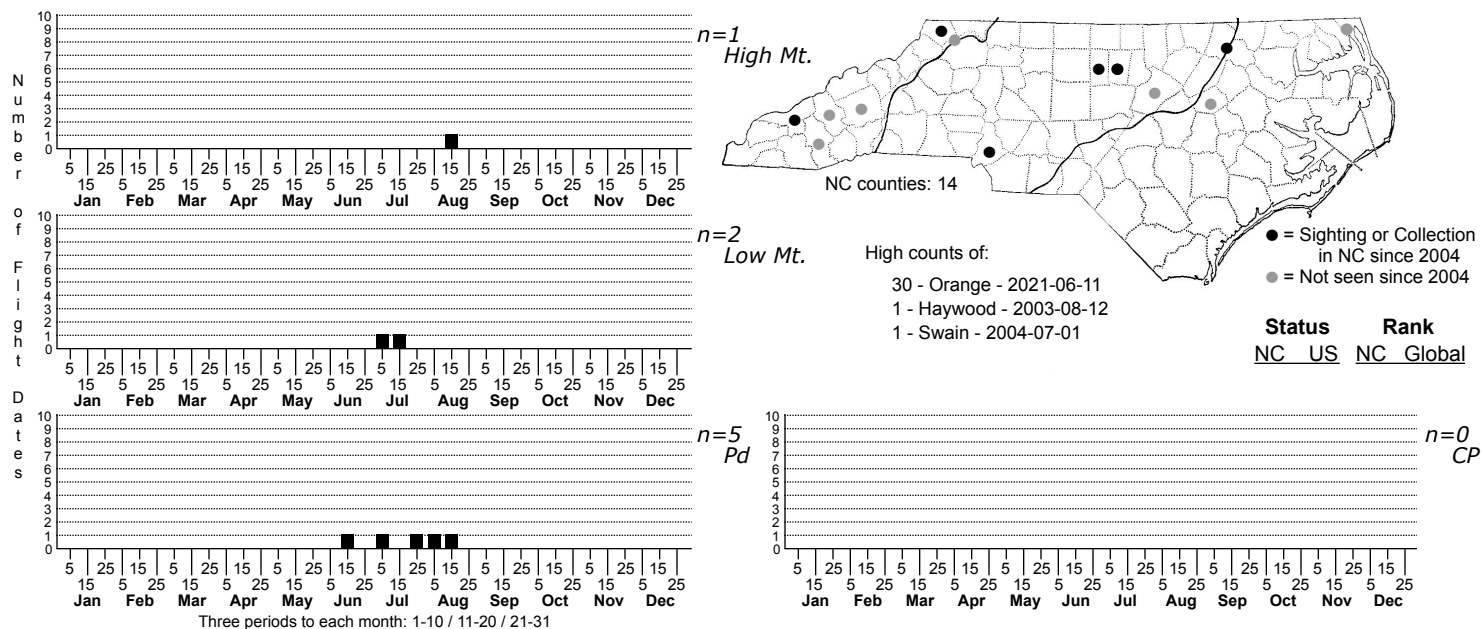


Synanthedon rileyana Riley's Clearwing Moth



FAMILY: Sesiidae SUBFAMILY: Sesiinae TRIBE: Synanthedonini

TAXONOMIC COMMENTS: 133 members of the Sesiidae family occur in North America north of Mexico. Species in the genus *Synanthedon* constitute half of the 30 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.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Eichlin and Duckworth (1988)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Thorax is brownish-black with a yellow collar and yellow around the base of the wings. Abdomen is cylindrical in shape, brownish-black ringed with yellow on the posterior edge of segments 2-7. Anal tuft of male short, brown-black, somewhat triangular with yellow lateral tufts that are short, flared. Forewing mostly hyaline with narrow brown margins variously powdered orange-red, particularly on the basal margins, and possesses an oblong, distinctly red discal mark. Hindwing hyaline with very narrow margins and a small orange-red discal spot (Eichlin & Duckworth, 1988). Legs largely yellow or yellow-orange, antennae dark. Sexes similar but female with broader outer margin of forewing. Wing length 7-12 mm (Eichlin & Duckworth, 1988).

DISTRIBUTION: Please refer to the dot map.

FLIGHT COMMENT: Please refer to the flight charts.

HABITAT: Open waste areas, roadsides, fields, and sand prairies where food plant grows, often in abundance.

FOOD: The only sesiid that feeds upon members of the Solanaceae family, particularly Carolina horse nettle (*Solanum carolinense*) (Eichlin & Duckworth, 1988; Taft, Smitley, and Snow, 2004), a "weedy" nightshade likely familiar to those who spend any amount of time in the field.

OBSERVATION METHODS: The ubiquity of the host plant would make targeted searches for *rileyana* difficult. Though not attracted to lights or bait, as with most sesiids males of this species can be lured to traps using synthetic, chemically engineered sex attractants (see Taft, Smitley, & Snow, 2004, for list of species-specific pheromone blends).

NATURAL HERITAGE PROGRAM RANKS: GNR S4S5

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

COMMENTS: This species closely mimics a Yellow Jacket hornet (*Vespula* sp.). Common and widespread but inconspicuous and only infrequently encountered in natural settings.