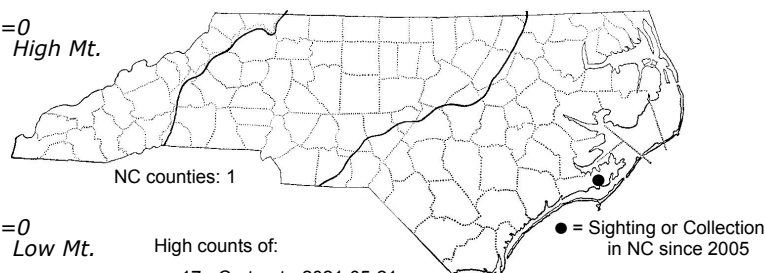


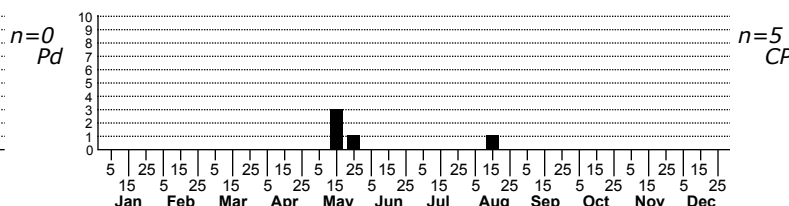
# Carmenta texana Texana Clearwing



High counts of:

17 - Carteret - 2021-05-21  
6 - Carteret - 2021-05-19  
4 - Carteret - 2021-05-20

Status Rank  
NC US NC Global



FAMILY: Sesiidae SUBFAMILY: Sesiinae TRIBE: Synanthedonini

TAXONOMIC COMMENTS: Of the 136 or more members of the Sesiidae that occur in North American north of Mexico, 37 have been recorded in North Carolina. Some sesiids, known broadly as clearwing borers, are significant pests of commercial crops. The great majority 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: *Carmenta texana* is rather boldly marked, with a predominantly black body that is marked with contrasting orangish to reddish bands and stripes. The abdomen of the male has orange to reddish bands on segments 2, 4, 6, and 7, and occasionally on segment 5, while the female is missing the band on segment 7. The following detailed description of the males is based on that of Engelhardt (1946) and Eichlin and Duckworth (1988).

The antenna is black with a bluish luster and has short pectinations. The labial palp is orange, with the third joint black towards the tip. The head is metallic black and the collar orange. The thorax is lustrous blue or greenish-black, and conspicuously striped with orange or reddish-orange along the sides. The posterior margin has a transverse orange stripe and matching lateral tufts, and there are orange or reddish patches beneath the wings and on the underside. The abdomen is shiny bluish-black, with an orange to reddish band on the posterior margin of segments 2, 4, 6, and 7, and occasionally on segment 5. Segment 4 has a wider band than the others, and the underside has some orange on segment 2, along with solid orange medially on segments 4-7. The anal tuft is fan-shaped, angular at the base, and rounded at the tip. It is mostly violet-black, with orange at the edges and in the center beneath. The tibia and tarsi are lustrous purplish black and ringed with yellow at the spurs and joints. The forewing is heavily scaled and violaceous-black, with transparent areas just posterior to the wide discal spot, and as a narrowly triangular region that extends from the discal spot to the wing base. Orange dusting is often evident in areas that margin the transparent portions of the wing, and the fringe is brownish-black. The hindwing is transparent, with black margins and brownish-black fringes above and beneath.

The females are similar to the males, but the forewing is darker, with the outer clear area being obscured with orange and purplish scales, and the inner one reduced to a short, narrow slit that does not reach the wing base. An orange streak is often present below the inner margin on the basal half of the wing, while the abdomen has an orangish or reddish band on segments 2, 4, and 6 (missing on segment 7), and sometimes has a faint band on segment 5. The anal tuft is glossy black, short and rounded.

DISTRIBUTION: *Carmenta texana* is found in areas with warm climates, with the range restricted in the US to all of Florida, along with coastal fringe areas from southeastern Georgia to North Carolina. As of 2024, we only have two site records for this species, and both are in Carteret County.

FLIGHT COMMENT: The adults fly year-round in Florida, and presumably only during the warmer months of the year elsewhere. As of 2024, our two records are from mid-May and mid-August.

HABITAT: Local populations are typically found in open habitats that support perennial herbaceous species such as thoroughworts. Typical habitats include old fields, weedy pastures, power line corridors, roadways, pine savannas, sandhills, and coastal scrub communities.

FOOD: The larvae are borers that primarily use members of the Asteraceae, but also use Fennel (*Foeniculum vulgare*) in the Apiaceae (Engelhardt, 1946; Eichlin and Duckworth, 1988; Brown and Mizell, 1993; Robinson et al., 2023). Engelhardt (1946) considered Late-flowering Thoroughwort (*Eupatorium serotinum*) to be the primary host plant. The adults have also been reared from an *Artemisia*, a *Grindelia*, and Snow Squaresstem (*Melanthera nivea*). Narrowleaf Yellowtops (*Flaveria linearis*) is sometimes listed as a host, but this may have been only a flower visitation record (Eichlin and Duckworth, 1988). We do not have any feeding records in North Carolina.

OBSERVATION METHODS: The adults are diurnally active and are not attracted to lights or bait. They are commonly found nectaring on native plants, and the males can be collected using pheromone traps.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1S2]

STATE PROTECTION:

COMMENTS: This species reaches its northernmost range limit in North Carolina, where populations may be disjunct from the main range farther south. As of 2024, we have only two records, with both from coastal habitats. Additional information is needed on its distribution and abundance within the state before we can accurately assess its conservation status.