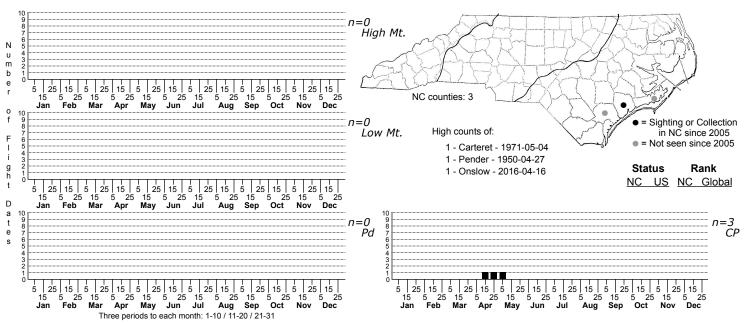
Hemaris gracilis Slender Clearwing



FAMILY: Sphingidae SUBFAMILY: Macroglossinae TRIBE: Dilophonotini TAXONOMIC_COMMENTS: A Holarctic genus of 20 species of which 5 occur in North America and 4 in North Carolina. They are often called hummingbird or bumblebee moths, and are among the best known sphingids to North Carolinians.

FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Hodges (1971); Tuttle (2007) TECHNICAL DESCRIPTION, IMMATURE STAGES: Williams (1979); Tuttle (2007)

ID COMMENTS: A hummingbird mimic that is slightly smaller but otherwise similar in coloration to $\langle i \rangle$ Hemaris thysbe $\langle i \rangle$. Differs from $\langle i \rangle$ H. thysbe $\langle i \rangle$ in having an even rather than ragged outer edge of the clear area on the forewings. The cell also has no line of scales through it and the underside has two bands of red running from the eyes to the abdomen; the legs are reddish instead of whitish. Smaller than $\langle i \rangle$ H. diffinis $\langle i \rangle$ and has a green rather than a yellowish thorax. Sexes are similar.

DISTRIBUTION: Primarily a northern species. <i>Hemaris gracilis</i>has a peculiar distribution, occurring across most of Canada and then down the coast in a narrow band at least to Florida.

FLIGHT COMMENT: Single brooded. Our only two records are both from the spring.

HABITAT: There is not enough information to determine its habitat use in North Carolina. The specimen from Carteret County was found along a logging road running through a regenerating stand of Loblolly, with patches of Wild Azalea present as nectar sources (JBS, pers. obs.). Generally, gracilis is associated with xeric heathlands and seems to have some affinity for sand barrens habitats (D. Schweitzer, pers. comm.) $\langle i \rangle$ Vaccinium vacillans $\langle i \rangle$ (= $\langle i \rangle$ pallidum $\langle i \rangle$ in Weakley, 2015) is widespread in the eastern United States, occurring especially on xeric wooded slopes.

FOOD: Larvae are stenophagous, reported from blueberries and perhaps other heaths (Wagner, 2005). Forbes (1948) mentioned the possible use of <i>Kalmia</i> and Williams (1979) observed oviposition on Hillside Blueberry (<i>Vaccinium pallidum</i>) and subsequently reared larvae on it. Adults were also observed by Williams nectaring on Hillside Blueberry.

OBSERVATION_METHODS: The species is diurnal and does not fly at night, come to lights or bait. Should be looked for during the day nectaring on flowers.

NATURAL HERITAGE PROGRAM RANKS: G4G5 S1S2

STATE PROTECTION: Listed as Significantly Rare by the Natural Heritage Program. That designation, however, does not confer any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: We currently have just three records for this species in North Carolina, all from a small area along the southern coast. Based on the freshness of the specimen recorded in 2016 by Mark Shields, this species appears to breed in North Carolina, rather than just occasionally migrating into our area. Why this species is so rarely observed is unknown, although it is likely to be confused with the two other species in this genus.