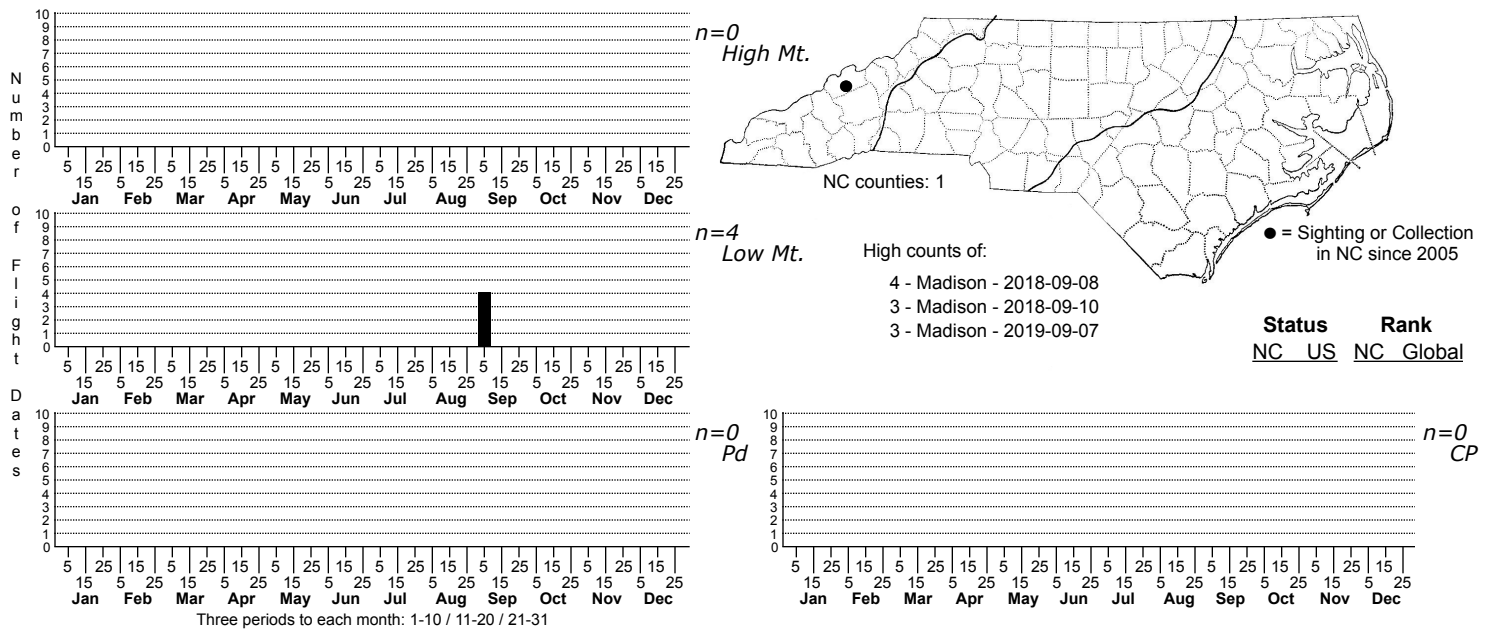


## *Podosesia aureocincta* Banded Ash Clearwing



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. *Podosesia aureocincta* is one of two species of *Podosesia* found in the state.

FIELD GUIDE DESCRIPTIONS: Covell (1984).

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Eichlin and Duckworth (1988)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Podosesia aureocincta* and *P. syringae* are sibling species and the adults are indistinguishable except for a distinctive orange-yellow band on abdominal segment 4 that is absent on *P. syringae* (Purrington and Nielson, 1977). In addition, local populations that are sympatric fly at different times of the year, with *P. syringae* typically flying in April-July in North Carolina and *P. aureocincta* in August and September. Both species are mimics of *Polistes* paper wasps. As of 2024, *P. aureocincta* is only known from a single site in Madison County, while *P. syringae* is widely distributed across the state.

As with *P. syringae*, the antenna of *P. aureocincta* is orange to reddish-orange and blackish on the apical third. The thorax is brownish-black with red scales scattered above the base of the wings and immediately adjacent to the abdomen. The abdomen is brownish-black and is constricted at the base in males, but less so in females. There is a narrow, orangish-yellow band on the posterior margin of abdominal segment 4. The anal tuft is brownish-black and pointed, while the forewing is brownish-black, except for a small hyaline area at the base where there is red on the margins. The hindwing is hyaline with narrow, black margins. The terminal half of the legs are yellow, and the proximal half mixed with red, yellow, and black. The hindlimb is very long and is dangled beneath the body as the moth flies in a slow, hovering flight that resembles that of a paper wasp. The detailed description that is presented in the *P. syringae* account also applies to this species.

DISTRIBUTION: *Podosesia aureocincta* is endemic to eastern North America where the range extends from New York and Pennsylvania southwestward through the Appalachian region to western North Carolina and northern Georgia, then southeastward to northern Florida. The range extends westward to eastern Texas, Louisiana, Mississippi, western Tennessee, Kentucky and Ohio, with apparent geographic isolates in Minnesota, Ontario and Quebec. As of 2024, our only site record is from Madison County in the Blue Ridge.

FLIGHT COMMENT: The adults have been found from June through December in different areas of the range, with most typically flying from July through September, except in the southernmost area of the range where the adults may fly through November and December. As of 2024, all of our records are from a brief period in early September.

HABITAT: Local populations are found in rural, urban and forested areas where native ash trees are present.

FOOD: The only known hosts are ash trees (*Fraxinus* spp.; Purrington and Nielson, 1977), but details about the specific species that are used are mostly not available. Specimens that were using Green Ash (*F. pennsylvanica*) in Mississippi late in the year were mistakenly identified by Solomon (1975) as *Podosesia syringae*, and were actually *P. aureocincta* (Purrington and Nielson, 1977).

OBSERVATION\_METHODS: The adults are diurnally active and are not attracted to lights, but do visit flowers. The males can be collected using synthetic pheromone traps (see Taft et al., 2004, for a list of species-specific pheromone blends).

NATURAL HERITAGE PROGRAM RANKS: GNR [S1S2]

STATE PROTECTION:

COMMENTS: This species appears to be uncommon throughout its range. As of 2024, we only have a single site record that is from a lower-elevation site in Madison County. The arrival of the Emerald Ash Borer beetle (*Agrilus planipennis*) in the state in 2013 could potentially impact populations of *P. syringae* in the future. The one site where *P. aureocincta* is known from in North Carolina has suffered the near complete loss of ash trees due to the Emerald Ash Borer.