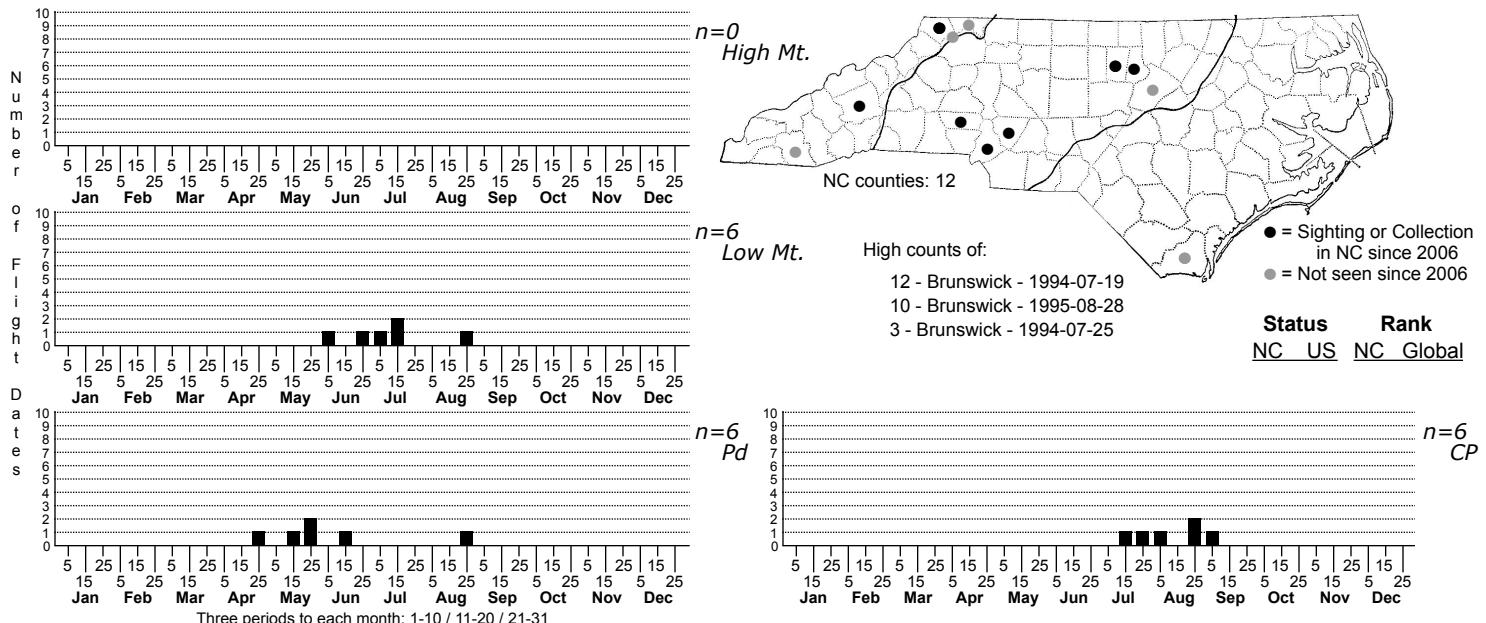


Smerinthus jamaicensis Twin-spotted Sphinx



FAMILY: Sphingidae SUBFAMILY: Smerinthinae TRIBE: Smerinthini

TAXONOMIC COMMENTS: A genus of 10 species across the Holarctic with three occurring in the United States and one reaching North Carolina. The hindwing pattern will recall *Paonias* to which *Smerinthus* is closely related.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Hodges (1971); Tuttle (2007)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948); Wagner (2005); Tuttle (2007)

ID COMMENTS: A spectacular brown or gray sphinx moth with a waved outer margin on its forewings and two iridescent blue eyepots on the hindwings, surrounded by crimson and yellow. Even with the hindwings not in view, the presence of the black half moon at the apex of the forewing distinguishes our species (this character is variable in size and sometimes missing on one wing). Sexes are similar.

DISTRIBUTION: Given its overall geographic range, this species should be expected to occur throughout the state.

FLIGHT COMMENT: In the coastal plain there are two broods (April, July) but records from the mountains indicate a single brood.

HABITAT: Any habitat that supports willows which usually means wet meadows or freshwater marshlands, or along ditches and small streams.

FOOD: Willows (*Salix*) seem to be the primary host plants, but no preferences among the species or specific willow habitats have been reported (Wagner, 2005). There are also multiple BugGuide records for larvae on poplar (*Populus*). A wide range of other hosts have been reported, including hornbeam (*Carpinus*), hazelnut (*Corylus*), ash (*Fraxinus*), apple (*Malus*), hop-hornbeam (*Ostrya*), cherry (*Prunus*), oak (*Quercus*), meadowsweet (*Spiraea*), basswood (*Tilia*), and elm (*Ulmus*) (Tietz, 1972). Research is needed into the host plants used in North Carolina.

OBSERVATION METHODS: Adults come to lights but not to flowers nor bait. The scarcity of records may indicate that higher intensity UV lights are needed instead of the 15 watt blacklights normally used for sampling. Although we have often searched for caterpillars on willows, this species has not been found. It is not likely that adults fly far from the foodplants as the females are quite heavy with eggs.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S3S4]

STATE PROTECTION: Not currently listed by the Natural Heritage Program but the scarcity of records suggests that it be added to the Watch List. While it has no statewide protection, permits are required to collect it on state parks and other public lands.

COMMENTS: This species appears to be quite scarce in North Carolina. Host plants and habitats do not appear to be limiting factors, nor does this species appear to show any geographic restrictions. Although use of higher intensity UV lights, such as mercury vapor, is likely to produce a more accurate assessment of its abundance and distribution, we note that it was collected using 15 watt blacklights on six different occasions covering two different years at Eagle Island in the Cape Fear River estuary.