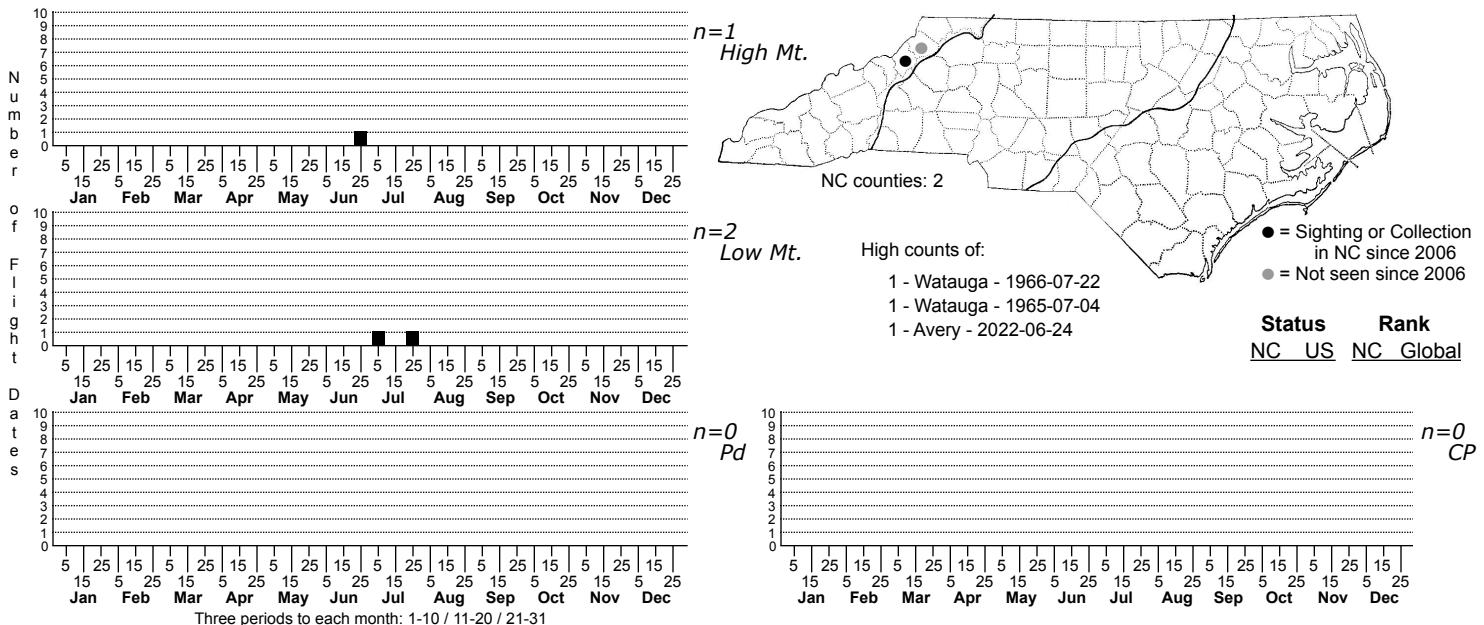


## *Sphinx chersis* Great Ash Sphinx



FAMILY: Sphingidae SUBFAMILY: Sphinginae TRIBE: Sphingini

TAXONOMIC COMMENTS: This large genus of some 27 species ranges from England to Japan and down through the Americas. There are approximately 14 resident species in North America and at least 5 in North Carolina. Two very different larval types occur in the genus and it is likely that *Sphinx* is composed of more than one genus.

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 large pale gray Sphinx moth with fine black streaks on the forewings and tegulae but no other conspicuous markings; hindwings and the sides of the abdomen are banded with pale and dark gray like other members of this genus. Unlikely to be confused with any other species in our area. Sexes are similar.

DISTRIBUTION: This is basically a northern species in the East, with only a few records from North Carolina.

FLIGHT COMMENT: Not enough data to be certain in North Carolina. Probably a spring and then summer brood.

HABITAT: A woodland species found where Ash is common, usually in basic-mesic hardwood forests in the uplands and rich, alluvial bottomlands.

FOOD: Larvae are apparently stenophagous, feeding primarily on ash (*Fraxinus*) species but also reported from privet (*Ligustrum*) and lilac (*Syringa*). Other reported hosts needing verification include birch (*Betula*), Fringetree (*Chionanthus virginicus*), poplar (*Populus*), and cherry (*Prunus*) (Mejia et al., 2020).

OBSERVATION METHODS: Adults visit flowers but not baits. Not enough data to know how well they come to lights; like other Sphingids, they may come relatively poorly to 15 watt UV lights but may be better sampled using high intensity UV lights, such as mercury-vapor.

NATURAL HERITAGE PROGRAM RANKS: G4 S1

STATE PROTECTION: Not currently listed by the Natural Heritage Program but probably should be considered for addition to the Rare Animal List, based on both rarity and degree of threat.

COMMENTS: Until 2022, this species was only known in North Carolina from two specimens collected by David Wray in the 1960s. It was recently discovered at Sugar Mountain, and as an apparently freshly emerged adult, probably represents a resident population rather than a long-distance stray. This species is likely to be a habitat specialist, restricted to high elevation forests with rich soils. As an Ash specialist in particular, it likely to be highly threatened by the spread of the Emerald Ash Borer, which has the potential to eliminate most of the Ash species in our state (see Wagner, 2007 for details about the magnitude of this threat).