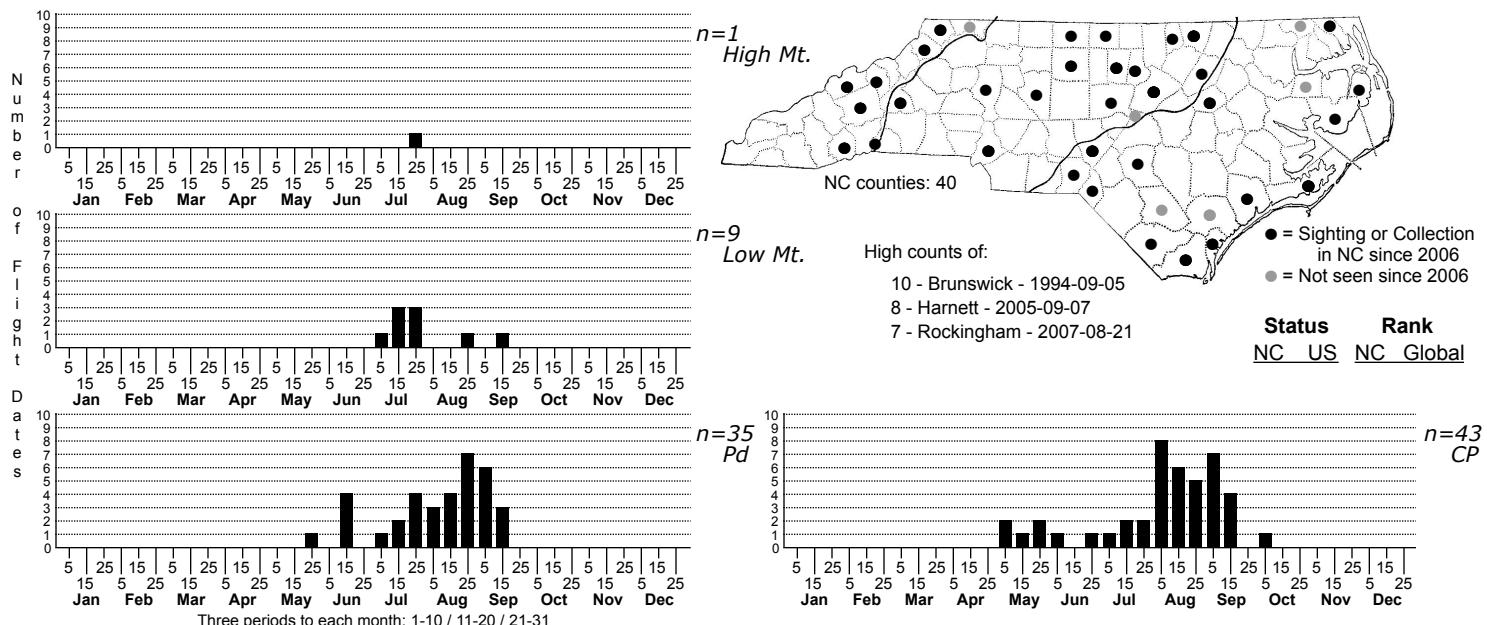


# *Manduca sexta* Carolina Sphinx



FAMILY: Sphingidae SUBFAMILY: Sphinginae TRIBE: Sphingini

TAXONOMIC COMMENTS: A large Neotropical genus (63 species) of which 10 occur in the United States and 4 in North Carolina. This is our most well-known species.

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, grayish-brown sphinx moth. *Manduca sexta* is very similar and often confused with *M. quinquemaculatus* which is grayer but similar in size and feeds on many of the same plants. *M. sexta* is browner and on the hindwing there is a median thick black line formed by the merger of two lines. In *M. quinquemaculatus* these two black lines are separate for their entire length with gray between them. Additionally, *M. sexta* has a series of small white dots at the base of the forewing which are absent in *M. quinquemaculatus*. The overall pattern is smudged in *M. sexta* but distinct, crisp and quite elegant in *M. quinquemaculatus*.

DISTRIBUTION: This species occurs across the state, but is rare in the high mountains.

FLIGHT COMMENT: Probably two principal broods.

HABITAT: This species occurs in open agricultural areas throughout the state. The larvae are known as tobacco hornworms and are a common pest of tomatoes in home gardens and tobacco in agricultural fields.

FOOD: Larvae feed on most members of the Solanaceae but most often on tobacco and tomato; other reported hosts include ground-cherry (*Physalis*) and Carolina Horse nettle (*Solanum carolinense*) (Wagner, 2005). In North Carolina, most of our records are from garden tomatoes, but we also have records from tobacco, garden peppers, Devil's-trumpet (*Datura innoxia*), and eggplant.

OBSERVATION METHODS: Adults are active from dusk onward at flowers and are attracted to strong lights, such as mercury-vapor lamps, but come only in small numbers to 15 watt UV lights. They do not come to baits.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S5]

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: Found primarily in agricultural areas and is not of conservation concern in North Carolina