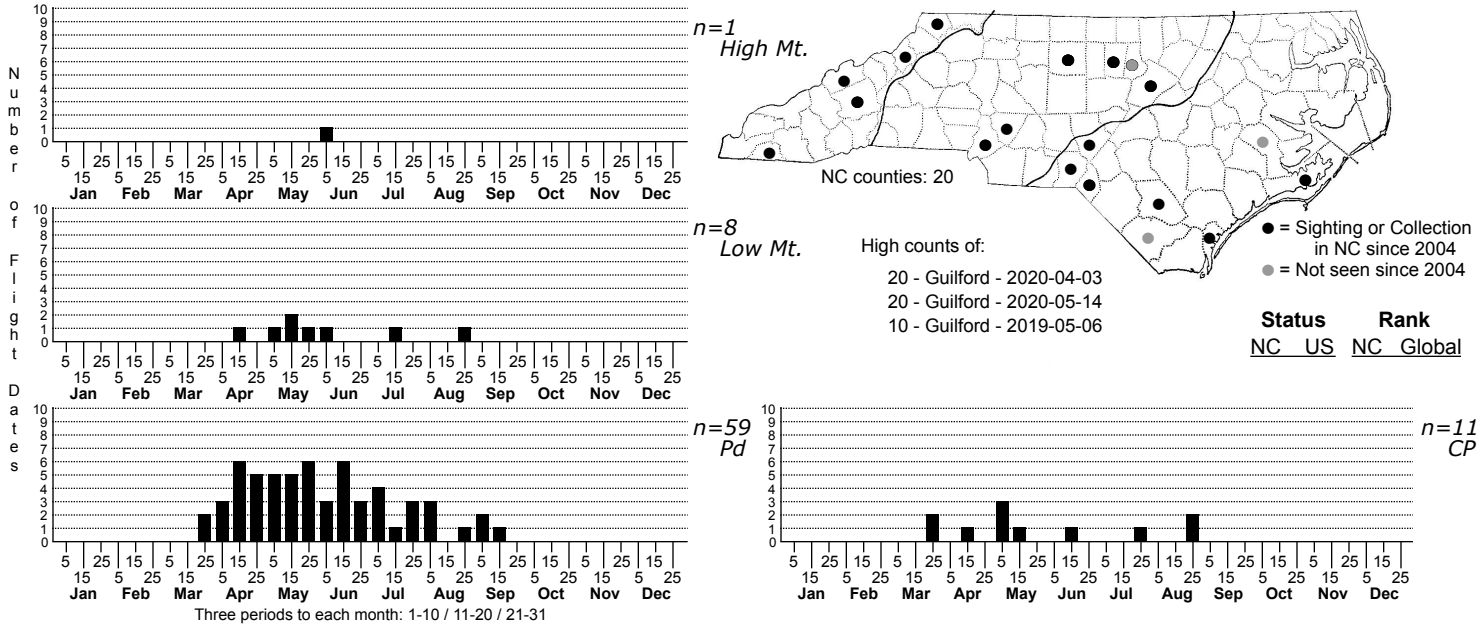
Cydia caryana Hickory Shuckworm Moth



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Grapholitini
TAXONOMIC_COMMENTS: Cydia is a large genus with over 200 described species that occur worldwide, and with around 50 species in North America. Several species are important economic pests that often feed on fruits and seeds.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Forbes (1923); Gilligan and Epstein (TortAI)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Payne and Heaton (1975)

ID COMMENTS: The following description is based in part on that of Forbes (1923). The palps are dull whitish and the head, antennae, and thorax are grayish brown to brown. The forewing ground varies from medium or dark brown to nearly black, and has pale-tipped scales that produce a lightly dusted appearance. The costa has a series of rather poorly developed yellowish-white to whitish strigulae that alternate with darker markings and that are most prominent on the apical half. The costa has three or four bluish-metallic or lead-colored lines that lead from these, the most prominent being one that begins just beyond the middle of the costa and extends towards the ocellus, and a second that is at around three-fourths and extends towards the apical third of the termen. The ocellus is inconspicuous and has a lead-colored vertical bar on both the anterior and posterior margins, along with four or five horizontal black bars that are often missing or poorly expressed. The fringe is silvery white to leaden-colored with a dark basal line along the termen. The hindwing is whitish on the basal half and fuscous on the remainder, with a silvery-white fringe and a fuscous basal line. Cydia caryana can be separated from our other Cydia by the combination of a dark brown to black forewing and a white patch on the hindwing.

DISTRIBUTION: Cydia caryana occurs throughout much of the eastern US and in adjoining areas of Ontario and Quebec. The range in the US extends from southern Maine to southern Florida, and westward to central Texas, central Oklahoma, Missouri, Illinois, and Wisconsin. This species occurs statewide in North Carolina.

FLIGHT COMMENT: Local population can have 2-5 broods per year and the adults have been found from January through November in different areas of the range. In most regions that fly from March or April through September. As of 2022, our records extend from late-March through mid-September.

HABITAT: Our records come mainly from residential areas. Natural habitats include rich, wet hardwood forests and montane mesic hardwoods but also include barrier islands and streamheads in the Sandhills, which would indicate that Mockernut or other hickory species may be used.

FOOD: The larvae feed on members of the Juglandaceae as well as Phylloxera leaf galls (Forbes, 1923; Heinrich, 1923; Moznette et al., 1940; Prentice, 1966; Payne and Heaton, 1975; Dinkins and Reid, 1988; Eikenbary et al., 1991; Lam et al., 2011; Gilligan and Epstein, 2014; Brown, 2022). The known hosts include Pecan (Carya illinoiensis), Shagbark Hickory (C. ovata) and Black Walnut (Juglans nigra). It is very likely that other native hickories such as Mockernut Hickory are also used, but this needs to be verified.

OBSERVATION_METHODS: The adults are attracted to lights and the larvae can be found in pecan fruits and other hosts during the summer months.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: This species occurs statewide and appears to be relatively secure.