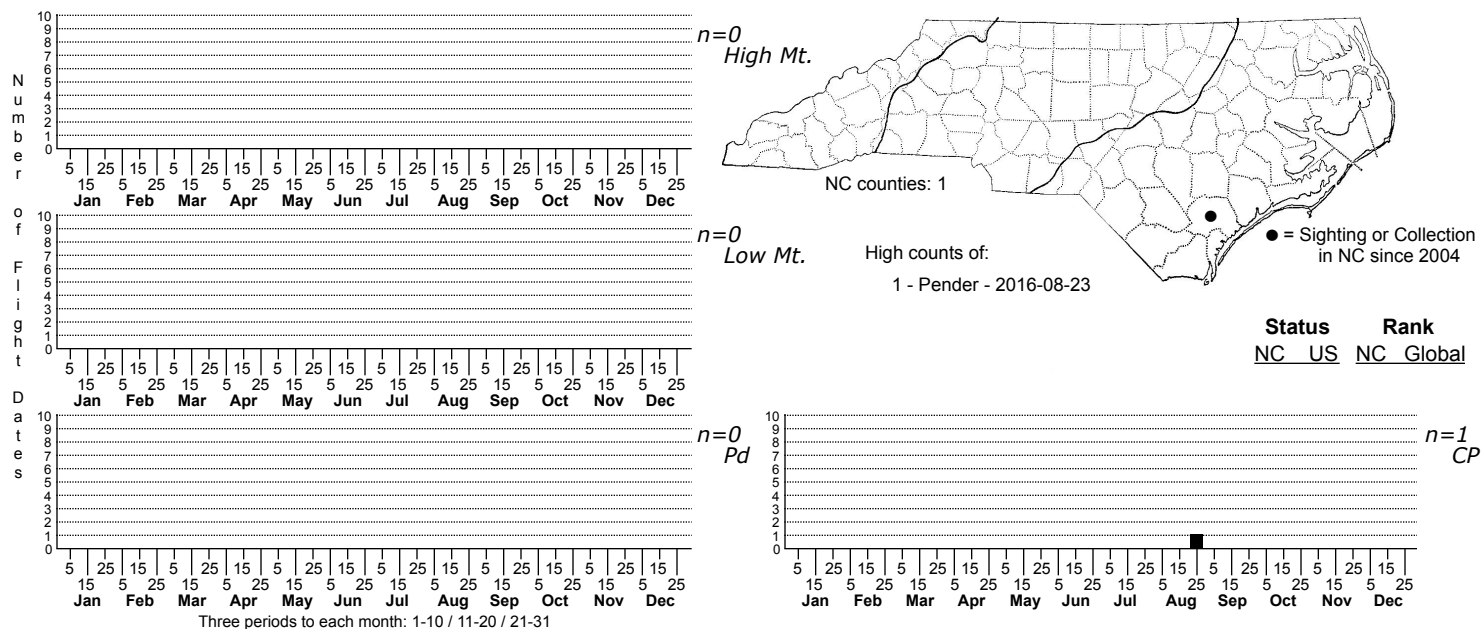


Catocala myristica Nutmeg Underwing



FAMILY: Erebidae SUBFAMILY: Erebinae TRIBE: Catocalini

TAXONOMIC_COMMENTS: One of 103 species in this genus that occur in North America (Lafontaine and Schmidt, 2010, 2015), 67 of which have been recorded in North Carolina. Despite its similarity in wing pattern to *C. robinsonii*, *C. angusi*, and *C. flebilis*, all of which belong to Species Group V of Barnes and McDunnough (1918) and Forbes (1954), bar-code results indicate it may actually be more closely related to members of Species Group VI.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Kons and Borth (2015)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

IDIOMENTS: A large, silvery or bluish gray Underwing with black hindwings. Banded and unbanded forms exist that do not appear to be sex related; both forms are common in the one population documented in North Carolina. The ground color of the forewings in both forms is pale white, with a opalescent, bluish or silvery cast that is quite distinctive. The reniform in both forms is filled with a large patch of dark rusty-orange that appears to match the color of some of the cracks and pits on the bark of Nutmeg Hickories, upon which the adults typically rest. In the banded form, a dark, jagged streak crosses the wing diagonally, from the base to the outer margin below the apex, also matching the dark cracks found on the bark of their host trees. Kons and Borth (2015) point out that *C. myristica* is very similar in appearance to *Catocala robinsonii*, which also has banded and unbanded forms. While the ground color is pale gray in *robinsonii*, it lacks the opalescent bluish-white or silvery cast, and has a much smaller and more diffuse patch of brown in the reniform. The banded form is also similar to the banded form of *C. angusi*, but that species also has less brown shading in the reniform and has a fuscous fringe on the hindwings, which is all white in *myristica*. *Catocala flebilis* is another species with a similar banded form, but differs in having a more mottled costal edge on the forewings, unlike the broad, mainly white costa of *myristica*.

DISTRIBUTION: This species is likely to be completely confined to one small site located in the Outer Coastal Plain.

FLIGHT COMMENT: Univoltine. The flight observed on August 23, 2016 may have been close to the peak in numbers. Most individuals had beak marks on their wings or otherwise showed some wear, indicating that they had been out for some time. As noted by Kons and Borth (2015), *Catocala robinsonii* emerges later; our records indicate that adults of that species start emerging towards the end of September, probably around a month later than *myristica*.

HABITAT: The sole known site for both this moth and its host plant is located in the southern Outer Coastal Plain where an outcrop of marl occurs right at the surface (Wet Marl Forest).

FOOD: Monophagous, apparently feeding solely on Nutmeg Hickory (*Carya myristiciformis*) (Kons and Borth, 2015).

OBSERVATION_METHODS: Adults are easily spotted resting on the trunks of Nutmeg Hickories during the day, where they are quite sedentary. Appears to come very poorly to blacklights (Kons and Borth, 2015).

NATURAL HERITAGE PROGRAM RANKS: G3G4 S1

STATE PROTECTION: This species has no legal protection under either state or federal law, although permits are required to collect it on state parks and other public lands. We recommend that it be added to the Natural Heritage Program list of Rare Animal Species and be designated as Significantly Rare.

COMMENTS: In North Carolina, this species is probably confined to the single site where Nutmeg Hickory occurs. This site occupies only about 1 square mile, with much of its former extent now occupied by pine plantations, cultivated fields, a limestone mine, and an interstate highway. Although the moth is locally abundant within the remaining stand, a single catastrophic event -- e.g., a wildfire or aerial spraying for mosquito control -- could potentially extirpate this species from the state.