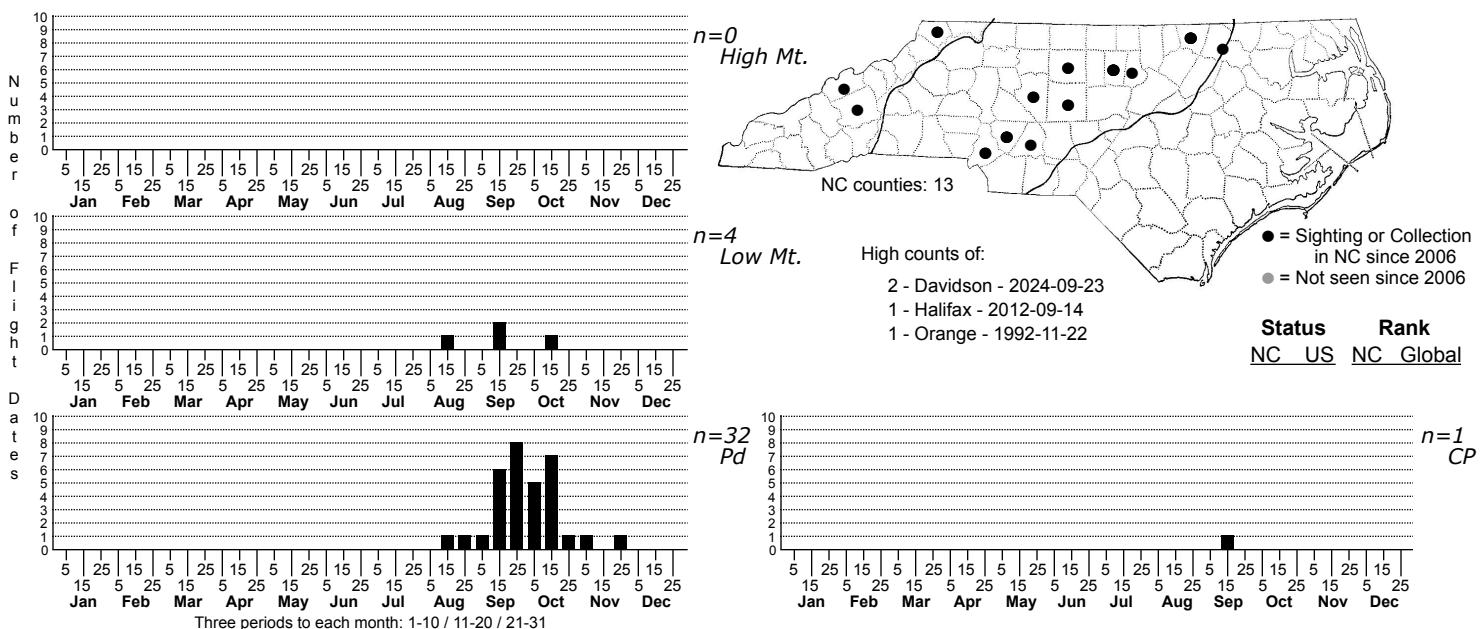


## *Catocala robinsonii* Robinson's Underwing



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. Included by Barnes and McDunnough (1918) in their Group V (also adopted by Forbes, 1954). This group comprises 10 species, all of which feed on Hickories or Walnuts (Juglandaceae). In addition to *Catocala robinsonii*, other members of this group that occur in North Carolina include *habilis*, *serena*, *judith*, *felibilis*, *angusi*, *obscura*, *residua*, and *sappho*.

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Sargent (1976)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954); Wagner et al. (2011)

ID COMMENTS: A large, pale gray, dimorphic Underwing with black hindwings. In the typical form, the forewings are a uniform gray; in form missouriensis, a fairly broad black band runs obliquely from the base of the wing to the outer margin below the apex. The transverse lines are fine and black; a black basal dash is present in females but an anal dash is not well developed in either sex. The reniform is often somewhat reddish brown, followed by a dark stain that extends to the postmedian; the subreniform is usually open. The hindwing is solid black with a contrasting grayish white fringe. The typical form is similar to *habilis*, but that species is smaller and has orange and black hindwings. *Catocala myristica* is similar in size and color, but the ground color of the forewings is more milky or opalescent white; the reniform usually has a larger patch of rusty brown; the dark stain following the reniform is usually absent; and the fringe of the hindwings is a brighter white. Form missouriensis is also similar to the dark streaked form of *myristica* but the other differences hold that distinguish these two species. *Catocala felibilis* is another similar dark streaked species but usually has a darker, bluish gray ground color and has a more contrasting pattern of dark and pale areas along the costa.

DISTRIBUTION: This species is probably widely distributed across the Piedmont and Mountains but may be missing from most of the Coastal Plain except for the floodplains of brownwater rivers, where rich sediments support populations of Shagbark Hickory.

FLIGHT COMMENT: Univoltine, flying late in the season, from September to November.

HABITAT: Our records all come from rich hardwood forests associated with nutrient-rich sediments and slopes along brownwater rivers in the Coastal Plain; mesic to dry stands associated with mafic rock formations, including gabbro and diabase in the Piedmont; and rich cove forests in the mountains.

FOOD: Larvae are stenophagous, feeding on Shagbark Hickories and possibly Shellbark Hickory (*Carya laciniosa*) (Wagner et al., 2011). In North Carolina, we have found populations found in association with both Northern Shagbark (*Carya ovata*) and Southern Shagbark (*C. carolinae-septentrionalis*).

OBSERVATION METHODS: Most of our records come from blacklights but it also comes well to bait.

NATURAL HERITAGE PROGRAM RANKS: G4 SNR [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 across a fairly wide area of the state but in association with fairly uncommon and restricted types of habitat -- most of our records come from sites that have large populations of Shagbark Hickories, which are themselves patchily distributed. Currently, this species is probably somewhat secure but more surveys need to be conducted in the fall to better determine its distribution and population trends.