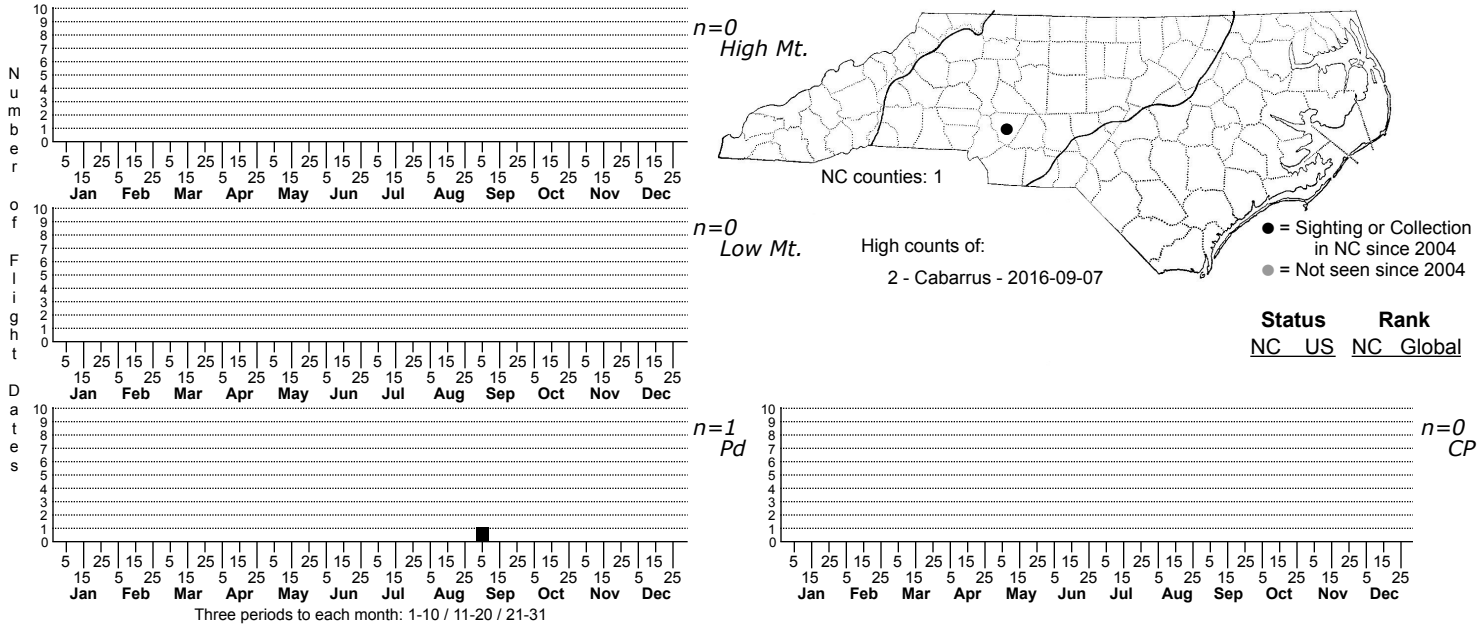
Catocala luctuosa Hulst's Underwing Moth



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 VI (also adopted by Forbes, 1954). This groups comprises 15 species, all of which feed on Hickories or Walnuts (Juglandaciae). In addition to luctuosa, other members of this group that occur in North Carolina include retecta, dejecta, ulalume, insolabilis, myrisitica, vidua, maestosa, lachrymosa, palaeogama, nebulosa, subnata, and neogama.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Sargent (1976)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner et al. (2011)

ID COMMENTS: Very similar in pattern to Catocala retecta but possesses a more yellowish or reddish shading, with the subterminal area sometimes primarily light brown (Forbes, 1954)

DISTRIBUTION: We have only one confirmed record

FLIGHT COMMENT: Please refer to the flight charts.

HABITAT: Rich alluvial forests

FOOD: Stenophagous, feeding on Hickories, with Shagbark, Shellbark, and Pignut being accepted in artficial rearing studies (Wagner et al., 2011). In the Midwest,this species has been found primarily in association with Shellbark Hickory (Carya laciniosa) (Larry Gall, pers. comm.) That species is known from just a handful of sites in North Carolina and has not been documented at the one site where the moth has been found in this state. The habitats present at that site, howoever -- including Basic-Mesic Forest and Rich Alluvial Forest - matches that where the tree has been found elsewhere in the state. So far, only Northern Shagbarks have been documented at that site and may represent the host that is used there. On the other hand, Shagbarks are fairly widespread across the Mountains and Piedmont and habitats where they occur in the state have been fairly well-surveyed. Many species of Catocala known to be associated with Shagbarks have been documented but luctuosa remains elusive.

OBSERVATION_METHODS: Like other Catocala, this species probably comes to blacklights to some extent but may be more reliably sampled using bait

NATURAL HERITAGE PROGRAM RANKS: G4 S1

STATE PROTECTION:

COMMENTS: This species has so far been recorded at only a single site in the state. It may be an extreme habitat and host plant specialist, but this remains to be documented. The few sites in North Carolina known to possess stands of Shellbark Hickory need to be surveyed for his species.