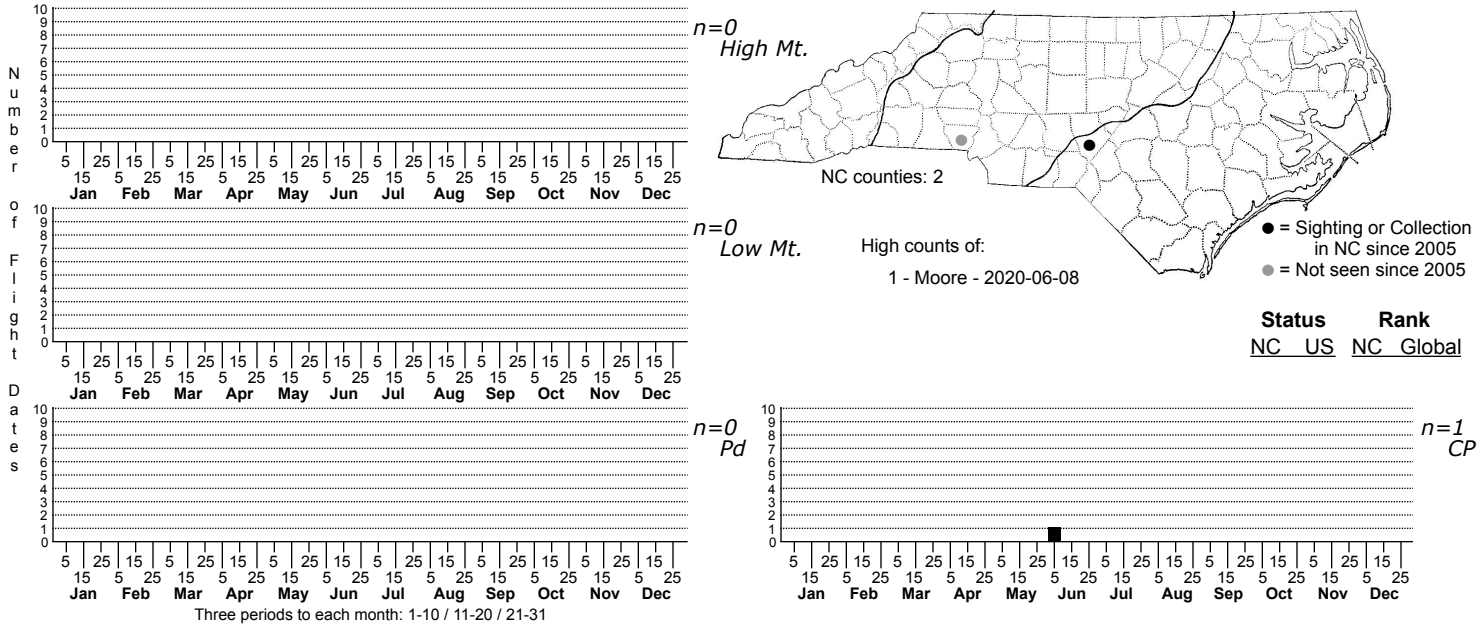
Catocala consors Consort Underwing



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. Consors was included by Barnes and McDunnough (1918) in their Group III (also adopted by Forbes, 1954), which also contains Catocala epione.

FIELD GUIDE DESCRIPTIONS: Covell (1984)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Sargent (1976); Schweitzer et al. (2011)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954); Schweitzer et al. (2011); Wagner et al. (2011)

ID COMMENTS: A large Catocala with grayish forewings and yellow to orange hindwings. The postmedian of the forewing has a single strong tooth located in cell M1; the teeth below it are much smaller (Forbes, 1954). The subterminal space (between the postmedian and subterminal lines) is much narrower and darker than the terminal space (beyond the diffuse, pale subterminal line) (Forbes, 1954). The postmedian line on the hindwings is strongly irregular or zig-zagged, which distinguishes this species from others, such as epione, that have a similar forewing pattern (Forbes, 1954; Sargent, 1976).

DISTRIBUTION: Historically, this species occurred in the western Piedmont but there are no records from that region since the 1960s. Our only recent record comes from the Fall-line Sandhills.

FLIGHT COMMENT: Adults are present in June but we do not have enough information to determine their phenology in North Carolina

HABITAT: The habitat is unknown at the site where this species was recorded in the western Piedmont. Schweitzer et al. (2011) report that it occurs primarily in dry, open, sandy woodlands that support populations of small hickories, including Sand Hickory (Carya pallida). Our recent record from the Fall-line Sandhills supports that description, but this species was not recorded in the intensive moth surveys that were conducted at Weymouth Woods, Fort Bragg, Camp Mackall, and other sites within that region.

FOOD: Larvae are stenophagous, feeding on hickories (Carya spp.) (Forbes, 1954; Sargent, 1976; Wagner et al., 2011). Schweitzer et al. (2011) state that C. consors appears to be a specialist on small hickories, with saplings and sprouts of Sand Hickory (C. pallida) and Mockernut Hickory (C. tomentosa) being the likely hosts in southern New Jersey. We do not have any feeding records in North Carolina.

OBSERVATION_METHODS: Like other Catocalas, consors probably comes somewhat to blacklights but much more strongly to bait. Tapping for adults during the day -- especially targeting small hickories -- is also likely to be productive.

NATURAL HERITAGE PROGRAM RANKS: G3? S1

STATE PROTECTION: Listed as Significantly Rare by the Natural Heritage Program. That designation, however, does not confer any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: This species once ranged from New England to Florida, although it appears to have always been rare in the northern part of its range (Forbes, 1954; Sargent, 1976). It has now, however, apparently disappeared from the northern two-thirds of its range, and is possibly now restricted to Georgia and areas further south (Schweitzer et al., 2011). No clear explanation exists for this retraction, although Schweitzer et al. speculate that spraying for Gypsy Moths might be a culprit, or the maturation of hardwood forests from their former condition earlier in the 20th Century when sapling hickories were common in cleared areas or former farm lands. In North Carolina, where spraying for Gypsy Moths has been much more restricted, loss of habitat seems a more likely explanation, although there are still large tracts of apparently suitable habitat in the Fall-line Sandhills, particularly on Fort Bragg. More intensive surveys need to be conducted, especially using bait sampling or direct search during the daytime using "tapping". Currently, this species should be regarded as having a high priority for conservation, similar to that given to Acronicta albarufa, Catocala jair, and other species associated with xeric oak barrens.