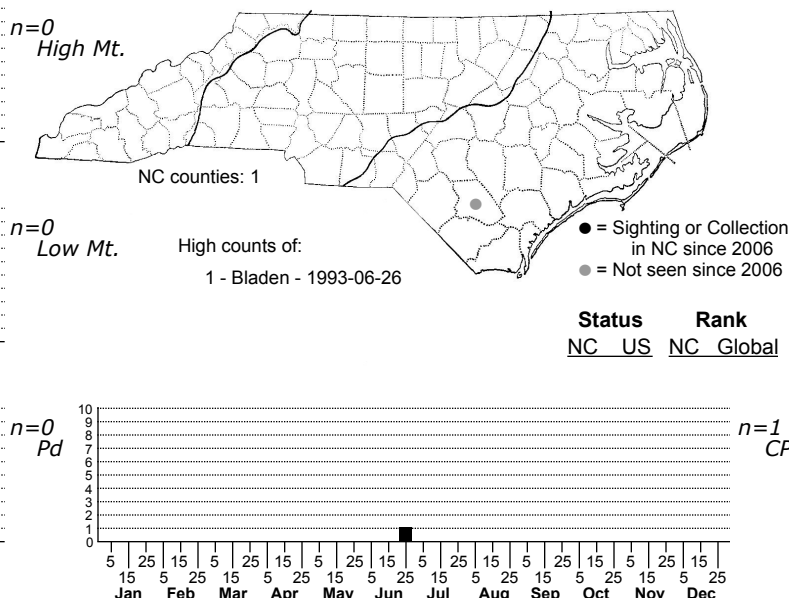


## *Catocala louisiae* Louise's Underwing



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. *Catocala louisiae* appears to be closely related to other species that feed primarily on heaths, including *C. andromedae*, *gracilis*, and *sordida* (Group XV of Barnes and MacDunnough, 1918 and Forbes, 1954).

FIELD GUIDE DESCRIPTIONS: Covell (1984)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Sargent (1976)

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

ID COMMENTS: A small *Catocala*, with a forewing pattern very similar to *C. andromeda* but with yellow-orange and black-banded hindwings rather than the all black found in *andromeda* (Sargent, 1976). Like *andromeda*, there is a black spot located before the white subreniform spot; the reniform is a dark oval; and the postmedian is bordered outwardly by a white line or shade; overall, the white shading is more contrasting than in *gracilis* (Sargent, 1976). As in the other members of this group, the inner margin is shaded with black and there is also an area of black in the subterminal area below the apex. The inner black band on the hindwing ends abruptly before the inner margin.

DISTRIBUTION: Known in North Carolina from only a single site in the Inner Coastal Plain

FLIGHT COMMENT: Our sole specimen was collected in late June

HABITAT: The single site where this species has been recorded in North Carolina is located within a complex of Carolina Bays, with deep sands forming ridges around their margins. These sandridges are very xeric, supporting populations of Turkey Oak and Longleaf Pine in the sparse overstory, and with heaths common in the shrub layer. Sparkleberry, the presumed host plant for *Catocala louisiae*, was common at this site (S. Hall, pers. obs.).

FOOD: Larvae are stenophagous, feeding on *Vaccinium*, including Sparkleberry (*V. arboreum*), and possibly other heaths (Wagner et al., 2011). We do not have any feeding records in North Carolina.

OBSERVATION METHODS: Our sole record comes from a blacklight trap, but we do not have any information regarding how well it comes to lights in general. Probably also comes to bait, like most other *Catocalas*.

NATURAL HERITAGE PROGRAM RANKS: G4 SH

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: Considered rare or local by Sargent (1976) but reported to be locally common in parts of Florida (Wagner et al., 2011). Despite extensive surveys conducted in North Carolina in sandridge habitats -- including several during the flight period in Bladen County -- no additional specimens have been found. Habitat would not seem to be a limiting factor, however. Surveys -- including larval searches -- need to be conducted at the original site to determine whether it is still present.