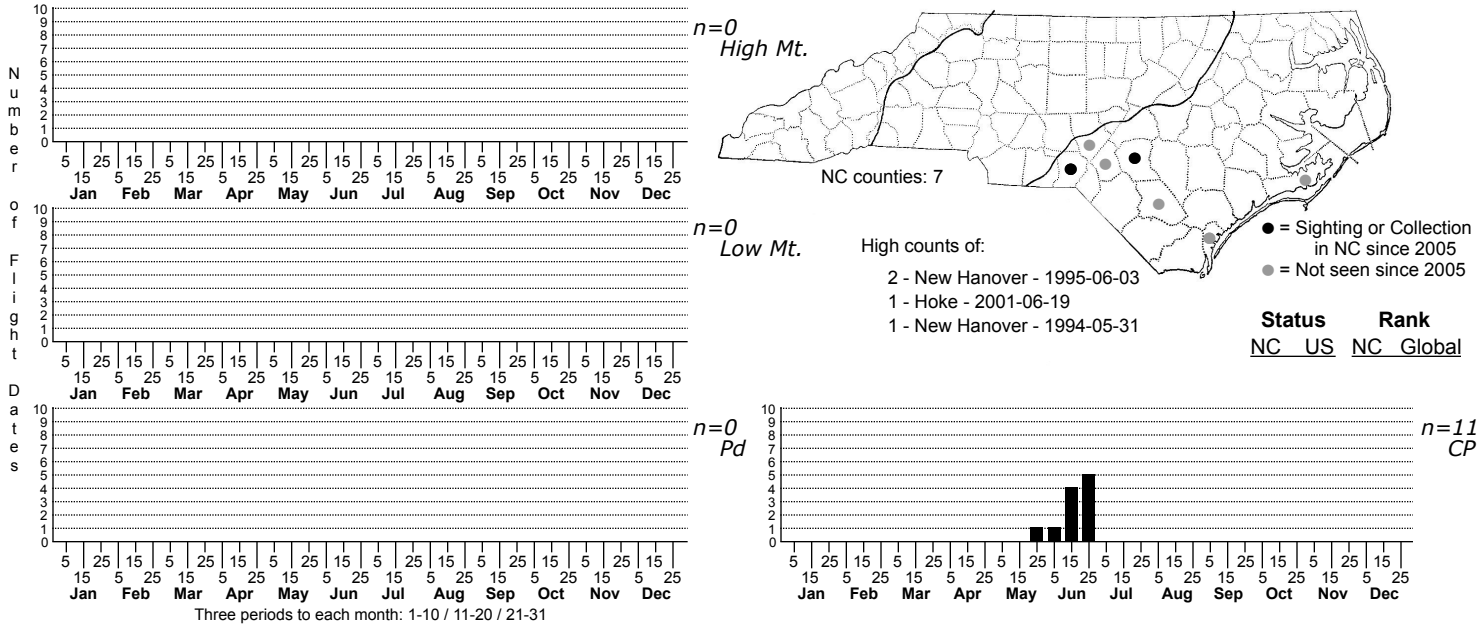
Catocala jair Jair Underwing



FAMILY: Erebidae SUBFAMILY: Erebinae TRIBE: Catocalini
TAXONOMIC_COMMENTS: One of 103 species in this genus that occurs in North America (Lafontaine and Schmidt, 2010, 2015), 67 of which have been recorded in North Carolina. Jair belongs to the amica group, which is characterized by having yellow-orange hindwings that lack the dark postmedian band and have a partial black band and a separate spot on the outer margin. In addition to jair, other members of this group include amica, lineella, and at least one undescribed species.

FIELD GUIDE DESCRIPTIONS: Covell (1984)
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Barnes and McDunnough (1918); Sargent (1976); Schweitzer et al. (2011)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner et al. (2011)

ID COMMENTS: Catocala jair is very similar to C. amica, with no differences in the hindwing pattern or on the undersides. The most noteworthy differences are that the postmedian is straighter and less dentate in jair than in amica (or lineella) and there is a more extensive area of brown between the postmedian and subterminal lines (Barnes and McDunnough, 1918; Sargent, 1976). The brownish coloration in the subterminal area, however, appears to apply primarily to the population in the Florida Peninsula (including the type specimens). Over most of the range of this species, including North Carolina, a more blackish form dominates that has a slightly more dentate postmedian and a lesser amount of brown in the subterminal space (Schweitzer et al., 2011). Our populations of jair are more blackish than the mostly blue-gray lineella and less mottled. Sexes are similar.

DISTRIBUTION: Appears to be confined to the southern half of the Coastal Plain in North Carolina, including the Fall-line Sandhills

FLIGHT COMMENT: Univoltine, flying from May to June

HABITAT: All of our records come from dry-to-xeric sandhill habitats that possess populations of Turkey Oak or other xerophytic species of oaks. We have no records from other areas where Blackjack or Post Oaks are common, nor from the few areas in North Carolina where Bear Oak is present.

FOOD: Larvae are stenophagous, feeding on xerophytic oaks. Bear Oak (Quercus ilicifolia) and Blackjack Oak (Q. marilandica) are used in New Jersey (Schweitzer et al., 2011), but our population appears to be associated primarily with Turkey Oak (Q. laevis). J.B. Sullivan has found larvae on that species and has successfully reared them on it. Use of other oaks in our state is possible but needs confirmation.

OBSERVATION_METHODS: Comes to both blacklights and bait, but the level of its attraction to either needs to be determined. It is unlikely to visit flowers.

NATURAL HERITAGE PROGRAM RANKS: G3G4 S2

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 appears to be a strong habitat specialist, associated with some of the most xeric woodlands that occur in the state. Although the sandhills habitats have suffered drastic losses and fragmentation over the past several centuries, stands of Turkey Oak are increasing at least in some areas due to the effects of fire suppression. In other areas, however -- including many areas that are managed for biodiversity conservation -- Turkey Oaks are targeted for reduction or elimination in order to restore Longleaf Pines, Wiregrass, and other lost members of these communities. If done too vigorously, however, there are likely to be impacts to Catocala jair, as well as other rare moths associated with the xerophytic oaks, e.g., Acronicta albarufa, Heterocampa jair, and Hypomecis buchholzaria. Such impacts need to be given more consideration in management decisions: restoration of Longleaf communities should aim for achieving the most natural composition possible, which will include a certain component of xerophytic oaks and their associated species.