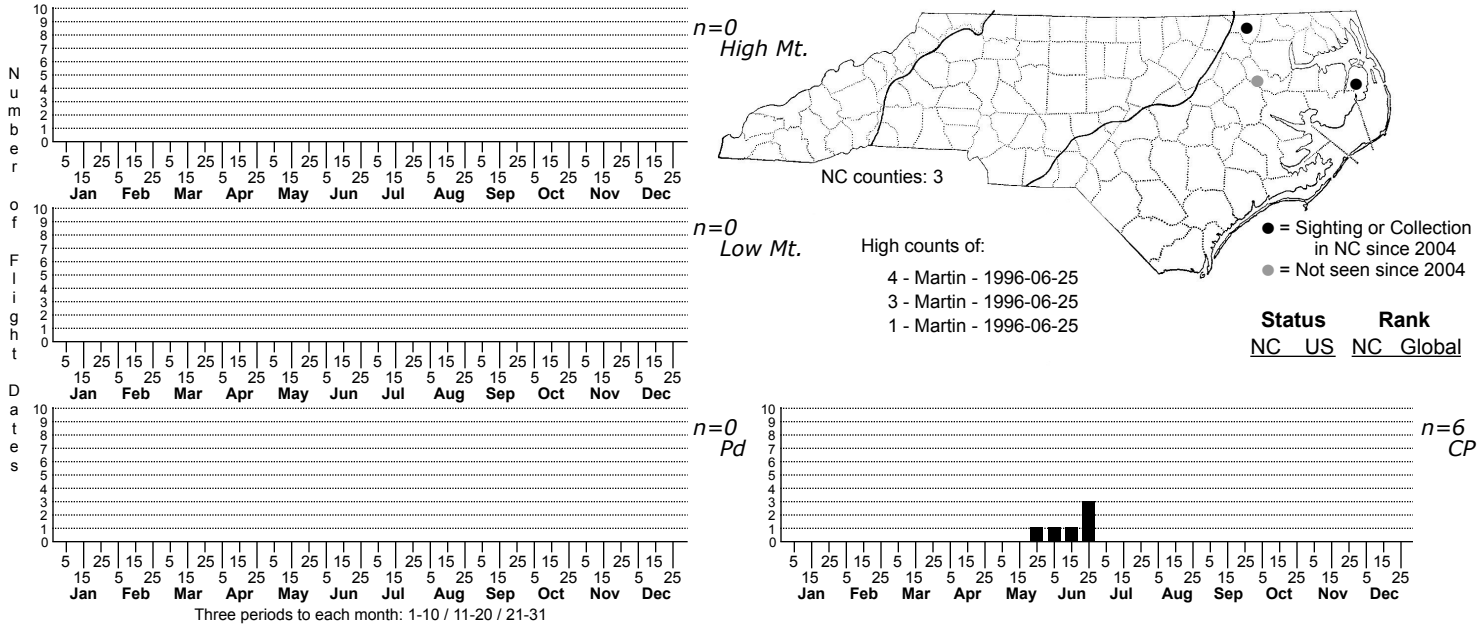
Catocala aestivalia No common name



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. As redefined by Kons and Borth (2015b), aestivlia belongs to a Rosaceae-feeding group that was originally defined by Barnes and McDunnough (1918) as their Group XVII (also adopted by Forbes, 1954). Twelve other members of this group also occur in North Carolina.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS: BOLD
TECHNICAL DESCRIPTION, ADULTS: Kons and Borth (1915b)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A medium-sized Underwing, with mottled gray, white, and brown forewings and yellow- and black-banded hindwings. The forewing pattern is highly variable, with both melanic and pale forms occurring in addition to the typical form. The normal pattern is similar to several other Crataegus-feeding members of this species group, particularly C. crataegi and blandula, and especially to a southern clade of crataegi identified based on barcoding by Kons and Borth (2015b). As in other members of this group, there is a black basal dash; the basal area is usually darkened; the median area is paler, with a whitish ring around the reniform; the postmedian is usually followed by a brown shade. However, the basal area is usually less intensely black as in crataegi, blandula, and pretiosa and usually lacks the black band along the inner margin between the antemedian and postmedian lines. The median area is usually not as pale as in pretiosa and the pale band around the reniform is not as bright white. Compared to mira -- another member of this group that co-occurs with aestivalia along the lower Roanoke -- the brown shade beyond the postmedian is not as rich and the pale bands on the hindwing are not as orange and the black bands not as wide. Currently, we do not have records for crataegi or blandula from the Coastal Plain, but there is at least a possibility that representatives of the southern clade of crataegi could be discovered in this area. Until that form is definitely shown to occur here -- requiring barcoding or detailed dissections -- crataegi-like specimens captured in our Coastal Plain will be presumed to represent aestivalia.

DISTRIBUTION: Currently known in North Carolina only from the Roanoke River flooplain, from Northampton to Martin Counties

FLIGHT COMMENT: Univoltine. Our records all come from late May to late June.

HABITAT: Our records come from Levee Forest and Cypress-Gum Swamp Forests (Brownwater River subtypes). Alluvial species of hawthorns are common at the collection sites, with the following species having been recorded in botanical surveys: Crataegus marshallii, C. macrosperma, C. phaenopyrum, C. viridis, and C. laevigata (see Hall, 1999b). However, Crataegus aestivalis -- the host plant used predominately or exclusively in Florida (Kons and Borth, 2015b) -- has not been recorded in the Roanoke floodplain, with the nearest documented population located in Craven County (LeGrand and Howard, 2018). The habitat otherwise closely corresponds to the descriptions given in Kons and Borth.

FOOD: Stenophagous, feeding on swamp and levee species of hawthorns (Crataegus sp.). Kons and Borth (2015b) believed Crataegus aestivalis to be the main or possibly exclusive host plant but that species has yet to be documented at the locations where the moth has been recorded in North Carolina.

OBSERVATION_METHODS: Appears to come well to lights and we have also collected it at bait

NATURAL HERITAGE PROGRAM RANKS: [GNR] [S2S4]

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: The presence of this species in North Carolina has only recently been determined and records exist from only the Roanoke River floodplain. This species appears to be a strong habitat specialist throughout its range, appearing to be restricted to swamp and levee forests. An effort needs to be made to find if it occurs in other river floodplains along the coast, including both blackwater and brownwater. The specific species of hawthorns used as larval hosts also needs to be determined, which should help narrow down its habitat requirements. Until such surveys are done, however, it is difficult to determine the conservation status of this species in North Carolina.