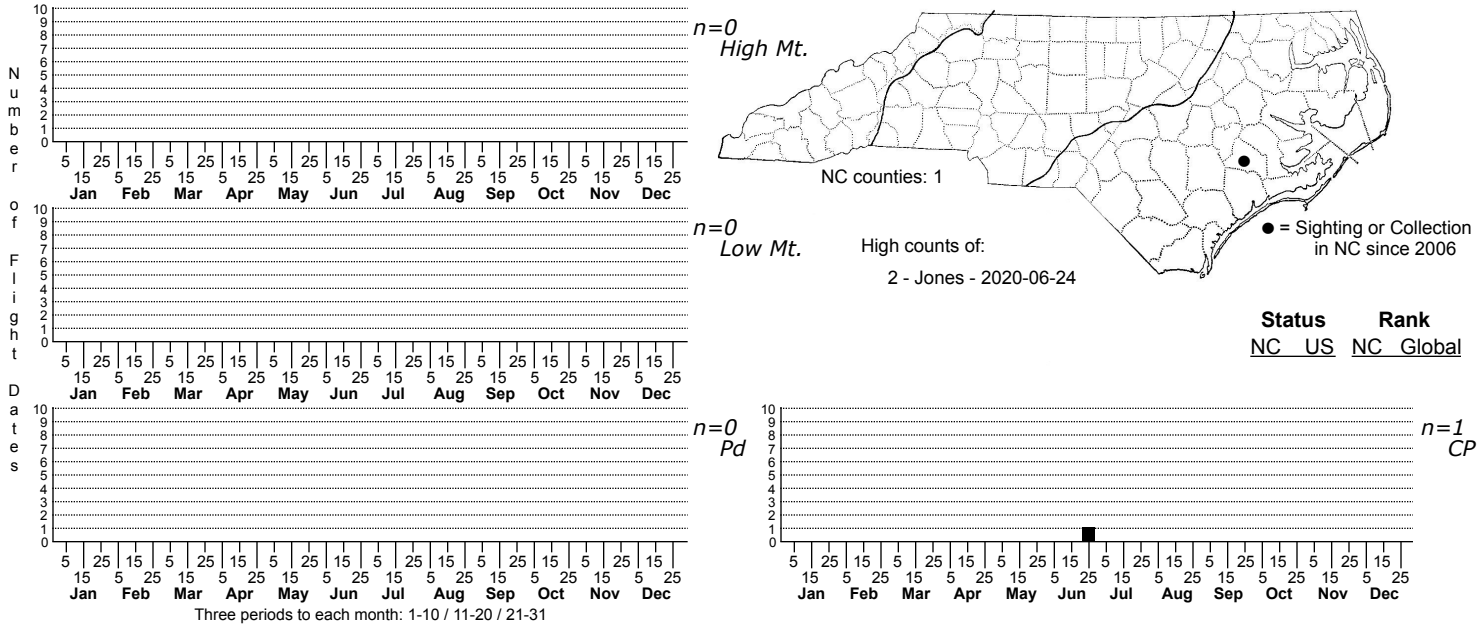
Mompha bottimeri Bottimer's Mompha



FAMILY: Momphidae SUBFAMILY: Momphinae TRIBE:
TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Busck (1940)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a rather distinctive species, with a pure white basal half of the wing that contrasts sharply with fawn-brown markings on the posterior half. The following detailed description is based on that by Busck (1940). The labial palp is white, but strongly marked with black on the outer sides. The antenna is dark fuscous, with very narrow white annulations and a white basal joint. The head and thorax are silvery white and smooth, and the thorax has two black spots on the posterior edge. The ground color of the forewing is also silvery white, with fawn-brown and black markings. The basal half is pure white, except for the costal edge which is black, and has two slight triangular black projections. The first is near the base, and the other at about one-fourth the wing length. A small black spot is often present just interior to the second costal triangle. The outer half of the wing is heavily overlaid with fawn-color, along with slightly raised black scales that form narrow lines and streaks. The darker apical half of the wing is partially edged by an outwardly curved streak of raised black scales. These help to delineate a somewhat curved, triangular-shaped projection of the white ground on the costal half that extends beyond the middle to about two-thirds the wing length. The only other conspicuously white areas are a small costal streak at the apical third, and a somewhat larger area on the terminal edge. At the boundary between the fawn-colored patch and the white area at the wing tip there is a longitudinal black streak that converges with a shorter oblique costal streak. The streak continues past the convergence point towards the apex as a sharp point. The fringe has a mixture of black, brown, and whitish regions, with the area below the apex often whitish. The hindwing and cilia are fuscous. The legs are black on outer sides and whitish on inner sides. The tarsi are black with narrow white annulations, and the tuft on the posterior tibia is yellowish. This is a distinctive species that resembles Mompha eloisella and M. passerella. The former is most easily distinguished by the complex pattern of black spots on the head, thorax, and basal half of the wing. Mompha passerella is slightly smaller and the curved, triangular-shaped projection of the white ground that extends beyond the middle to about two-thirds the wing length is either missing or poorly developed.

DISTRIBUTION: Mompha bottimeri is found in extreme southern Mississippi and Alabama, throughout much of Florida, and in coastal South Carolina and extreme southeastern North Carolina. As of 2021, we have a single record from Jones County.

FLIGHT COMMENT: Adults are active from February through November in Florida, and from May through October elsewhere. As of 2021, our one record is from 24 June.

HABITAT: The larvae feed on frostweeds. The two known hosts are found in sandy soils and dry habitats. They can be found in openings in maritime forests, and in pine forest habitats such as dry pine flatwoods and pine/scrub oak sandhills.

FOOD: This species is a specialist on frostweeds (Crocanthemum spp.), where it exploits the seed pods (Busck, 1940; Bottimer, 1942). The known hosts include Coastal Sand Frostweed (C. arenicola), Carolina Frostweed (C. carolinianum), and Pinebarren Frostweed (C. corymbosum). The former does not occur in the state, and the latter two are rare. It is possible that other Crocanthemum species are also used.

OBSERVATION_METHODS: The adults are attracted to lights and have been reared from Crocanthemum.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1S2]

STATE PROTECTION:

COMMENTS: As of 2021, we have only one record for the state. This species is likely rare due to the fact that its known host plants are also rare in North Carolina.