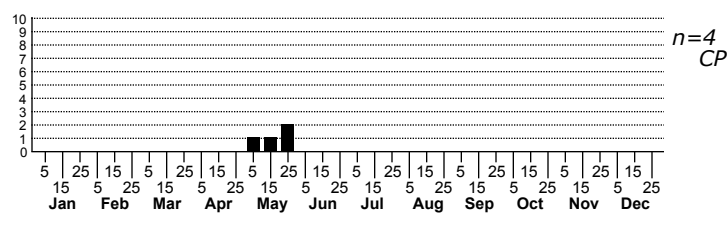
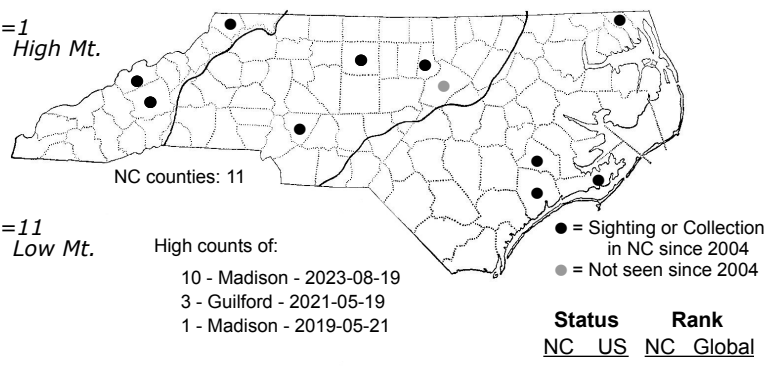
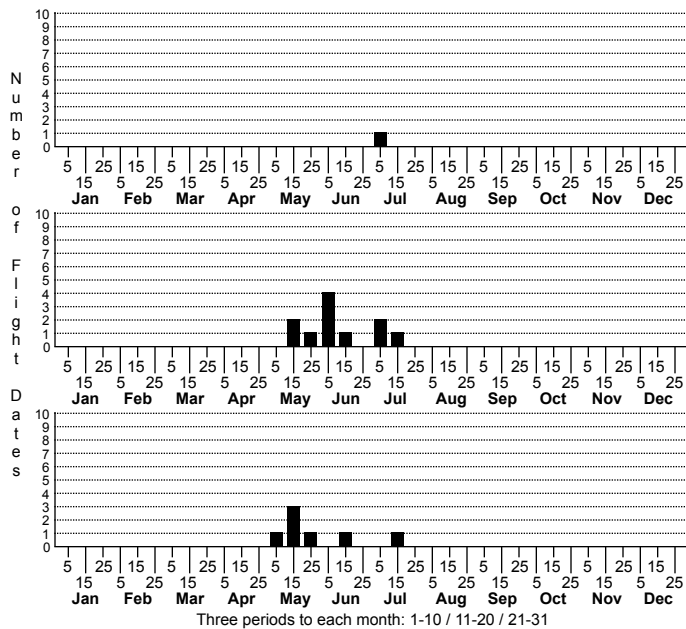


# *Mompha eloisella* Red-streaked Mompha Moth



FAMILY: Momphidae SUBFAMILY: Momphinae TRIBE: [Momphini]

TAXONOMIC\_COMMENTS: The genus *Mompha* consists of around 46 described species in North America. In addition, numerous species remain to be described that are centered in the southwestern US (Bruzese et al., 2019). The adults are small moths that have two or more tufts of raised scales on each forewing. The larvae either mine leaves, or bore into the stems, flower buds, flowers, or fruits of their hosts. The majority of species feed on members of the Onagraceae, but others feed on species in the Cistaceae, Lythraceae, Melastomataceae, and Rubiaceae.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Clemens (1860); Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Dickerson and Weiss (1920)

ID COMMENTS: This is an easily recognizable species that has bold black spotting on the distal half of an otherwise silvery white body, tawny coloration and streaking on the apical third, and a black, tail-like structure (pencil) on the wing tip. The following detailed description is mostly based on that of Clemens (1860). The head, face and thorax are silvery white. There is a cluster of around 10 black spots on the thorax and the base of the forewing that immediately adjoin the thorax. The labial palp is white with a dark brown spot on the middle of second joint, and two dark brown rings at the base and tip of the third joint. The antenna has a white base and a tawny yellow stalk that has faint darker annulations. The ground color of the forewing is silvery white and overlain with blackish spots and tawny to blackish streaks. Two blackish spots are present just inside the inner margin at about one-third and just beyond one-half the wing length. The latter has a tuft of raised scales. A second larger and lighter tuft of raised scales is present at about three-fourths. The costa has a series of posteriorly oblique streaks. These include two blackish ones at about one-third and two-thirds, along with several tawny streaks or striae on the apical third. All but the first tend to merge with a streak or broader region of tawny brown to brownish-black coloration that extends from the inner margin behind the first scale tuft inward. From there, a dark line extends to the tail-like tip of the apex. The hindwing is tawny grayish and the cilia ochreous. The legs are white and boldly marked with black blotches.

DISTRIBUTION: *Mompha eloisella* is found in eastern North America and in the West in Colorado, and from British Columbia southward to California. In the East, populations occur in southern Canada (Ontario eastward to Prince Edward Island and vicinity) and throughout most of the eastern US from Maine southward to southern Florida, then westward to western Texas, Oklahoma, Kansas and Iowa. We have scattered records from the coast to the lower elevations in the Blue Ridge.

FLIGHT COMMENT: Adults have been collected during almost all months of the year in areas outside of North Carolina, with most records from May through August. As of 2023, our records are from early May through mid-July.

HABITAT: Common Evening-primrose is presumed to be the primary host in North Carolina. This species is found in sunny to partially sunny habitats such as infrequently mowed roadsides, abandoned fields, powerline corridors, meadows, the edges of agricultural fields, and other open and often disturbed habitats.

FOOD: The two known hosts are Common Evening-primrose (*Oenothera biennis*) and Bigfruit Evening-primrose (*O. macrocarpa*).

OBSERVATION\_METHODS: The adults are attracted to lights. The larvae can be found in the overwintering stalks of evening-primroses, and the adults easily reared from the overwintering stalks. The larvae can also be found by splitting open living Evening-primrose stalks during the late-summer or fall.

NATURAL HERITAGE PROGRAM RANKS: GNR [SU]

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

COMMENTS: As of 2023, we have only a few scattered records from across the state. This species is probably more common than our records suggest.