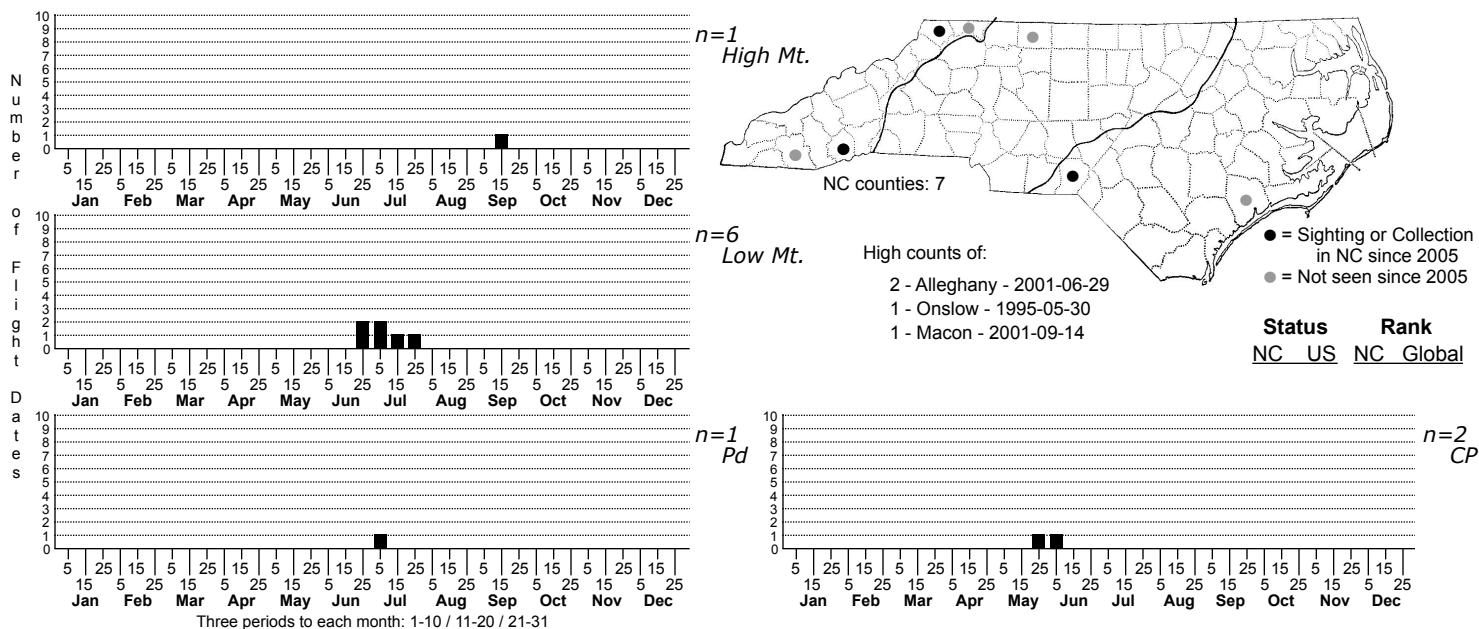


Melanapamea mixta None



FAMILY: Noctuidae SUBFAMILY: Noctuinae TRIBE: Apameini

TAXONOMIC COMMENTS: *Melanapamea mixta* is the sole member of its genus, to which it was moved from *Apamea* by Mikkola et al. (2009) based on significant genitalic differences. The authors further suggest that *Melanapamea* may not, in fact, be closely related to *Apamea* but has at least some traits that link it to *Oligia*. Forbes (1954) had also concluded that *mixta* was not related to other members of *Septis* (= *Apamea*) but linked it more to *Resapamea* (= *Luperina*) passer than *Oligia*.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954; as *Septis mixta*); Mikkola et al. (2009)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A medium-sized Noctuid, with nearly all black forewings and fuscous-brown hindwings (Forbes, 1954). The ground color of the forewings is dull blackish-brown. The lines and outlines of the spots are a darker, more velvety black than the ground color, with the orbicular and claviform spots both large and thickly outlined. The reniform contains a pale filling, the only contrasting mark on the forewings. Both Forbes (1954) and Mikkola et al. (2009) point out several differences from *Apamea impulsula*, which is otherwise very similar, but that species has not been recorded as far south as North Carolina. In our area, both *Zale undularis* and *Pseudanthracia coracias* have similar coloration but have broader wings and a different pattern of wavy lines.

DISTRIBUTION: Found primarily in the Mountains, with possibly disjunct populations in the Coastal Plain. Except for a population at Hanging Rock, there are no records from the Piedmont.

FLIGHT COMMENT: All but one of our records come from late May to late July, but our one record from a high elevation site in Macon County comes from mid September.

HABITAT: Most of our records come from the Mountains, where its habitats have not been recorded in detail but may include mesic hardwood forests and/or dry ridges and/or pastures. In the Coastal Plain, our records come from Wet Pine Savannas and possibly Sandhill Seeps. Schweitzer (NatureServe, 2016) thought that there might be some association with boggy habitats, but only our records from the Coastal Plain appear to match that description.

FOOD: The larval hosts are apparently unknown. The mix of habitats used in North Carolina have no obvious common denominators.

OBSERVATION_METHODS: Comes to blacklights and building lights to some extent, but how well is unknown. We have no records from bait.

NATURAL HERITAGE PROGRAM RANKS: GU 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 rarely collected species appears to be very local in its distribution, with large disjunctions in its overall range -- an apparently isolated population occurs in a restricted area of the Pacific Northwest, with only one or two occurring in the Southwest and all the rest occurring primarily in the Northeast (Mikkola et al., 2009). In North Carolina, the population in the Coastal Plain also appears to be disjunct from those that occur in the Mountains. The reasons for its apparent sparsity, as well as its apparent disappearance from formerly occupied portions of its range (e.g., east Texas and the New Jersey Pine Barrens -- Mikkola et al., 2009; NatureServe Explorer, 2016), are unknown. However, more must be learned about its host plants and habitat associations before an accurate assessment can be made of its conservation needs.