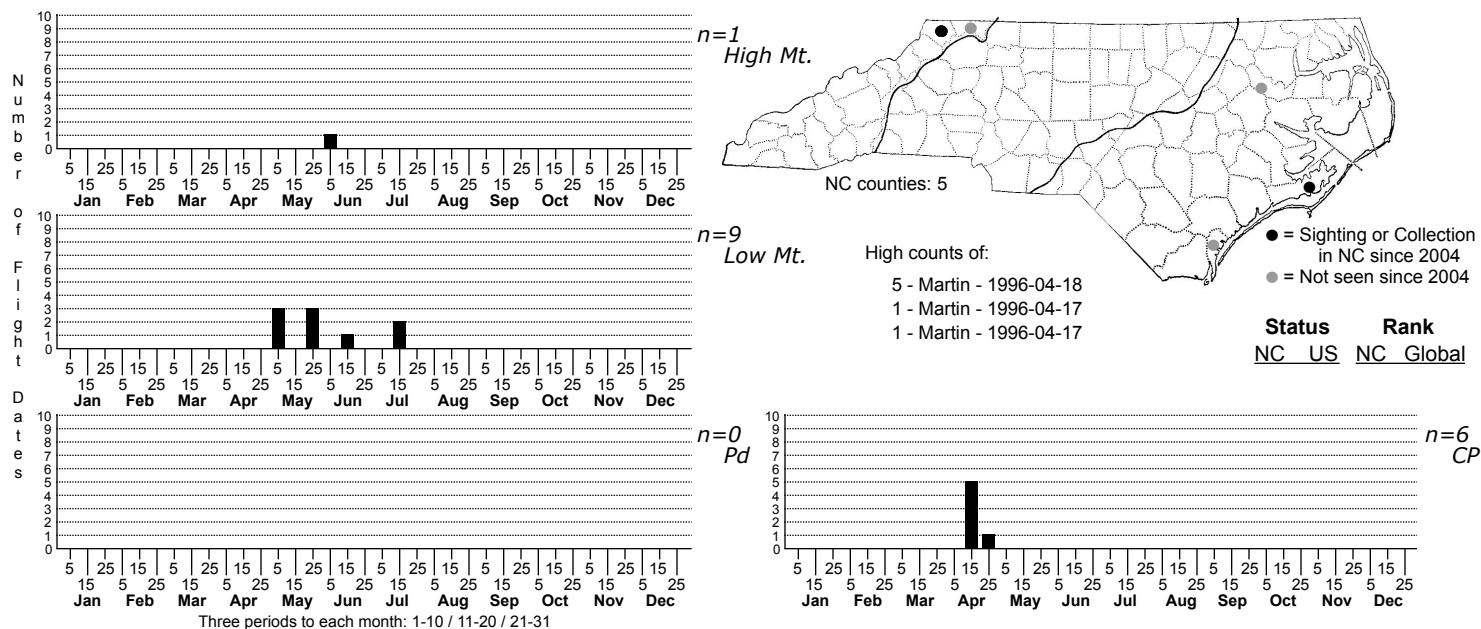


## *Cerma cora* Owl-eyed Bird-dropping Moth



FAMILY: Noctuidae SUBFAMILY: Acronictinae TRIBE:

TAXONOMIC\_COMMENTS: One of three members of this genus that occurs in North America (Lafontaine and Schmidt, 2010), two of which are found in North Carolina. This genus had previously been included in the Acontinae but has now been moved to the Acronictinae (Wagner, 2007a, 2007b).

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Schweitzer et al. (2011)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner, 2007a,b; Schweitzer et al. (2011); Wagner et al. (2011)

ID COMMENTS: A medium-sized Noctuid with a striking pattern of brownish or sage-green patches in the antemedian and subterminal areas, and a white patch in the median; the median area is also overlain by a set of undulating black lines similar in complexity to those of *Polygrammate hebraicum* and *Harrismemna trisignata*, both of which are closely related to *Cerma* (Wagner, 2007b). The reniform is a conspicuous white circle with a black outline and the terminal area is marked with a series of white and greenish crescents. *Cerma cerintha* has a similar pattern but the greenish shade is largely replaced by brown and the median area has a more restricted series of paler gray lines crossing the white ground.

DISTRIBUTION: Found in the Mountains and Outer Coastal Plain, but given the range of habitats it uses is likely to turn up in additional areas

FLIGHT COMMENT: Appears to be univoltine in the Coastal Plain with adults flying in the early spring. Adults emerge somewhat later in the Mountains and may have at least a partial brood during the summer.

HABITAT: Our records come from three widely separated and widely disparate habitat types. In the northern Mountains, this species has been recorded in Northern Hardwoods or Rich Cove communities, where Pin Oak is present (but also *Crataegus* and other possible host plants). In the northern Coastal Plain, our records come from levee and swamp forest habitats along the Roanoke River, a brownwater stream system. At those sites, the only members of the Rosaceae that are common are alluvial species of Hawthorns, including *C. marshallii*, which is the presumed host of several other rare Hawthorn-feeders found in that area. At the mouth of the Cape Fear River, *cora* has been collected in xeric sand barrens and maritime forest where Carolina Laurel Cherry is a prominent species. Except for the species of *Prunus* possibly used at that site, the habitat there appears somewhat similar to the sandy pine barrens habitats used in the Northeast (Schweitzer et al., 2011).

FOOD: Oligophagous, specializing on shrubby members of the Rosaceae. Pin Cherry (*Prunus pensylvanica*) is the main host used in the North (Forbes, 1954; Schweitzer et al., 2011), but does not occur in the Coastal Plain where most of our records come from. Instead, hawthorns (*Crataegus* spp.) appear to be the main host used in southeastern bottomlands (Schweitzer, et al.) and Carolina Laurel Cherry (*Prunus caroliniana*) may be used at a much more xeric site.

OBSERVATION\_METHODS: Appears to come well to blacklights. None of our records come from bait, nor are we aware of any others.

NATURAL HERITAGE PROGRAM RANKS: G3G4 S2S3

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 is considered rare throughout its range and has apparently undergone significant reductions in some areas (Schweitzer et al., 2011). It also appears to be genuinely rare in North Carolina, with records coming from only three areas, despite extensive sampling conducted elsewhere across the state. It is difficult, however, to explain its rarity based either on host plant or habitat restrictions. In North Carolina alone, the three areas where we have records suggest that it can make use of a very wide range of habitats and at least several different host plants belonging to at least two different genera of the Rosaceae. Based on similar evidence from Florida, Kohn and Borth (2006) categorize *Cerma cora* as a habitat generalist. While that is a reasonable inference, we have no evidence in North Carolina that it uses the much more common types of habitats located in the middle of the spectrum, only that it makes use of several different types located at the extremes. As noted by Schweitzer et al., it appears to be much more restricted in its distribution than its relatively common and widespread host plant (Pin Cherry). All this suggests that there are other factors than habitat that need to be understood before the conservation status of this species can be fully assessed.