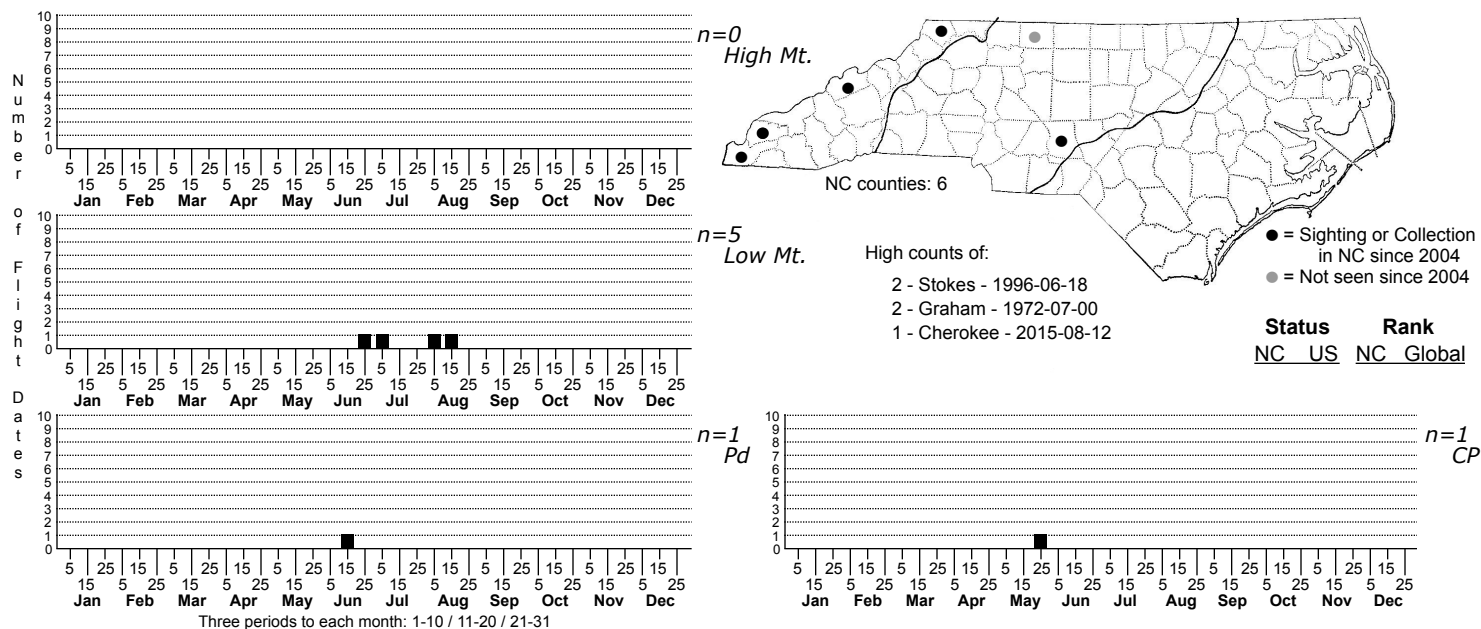


## *Idia majoralis* Greater Idia Moth



FAMILY: Erebidae SUBFAMILY: Herminiinae TRIBE:

TAXONOMIC\_COMMENTS: One of eighteen species recorded in North America (Lafontaine and Schmidt, 2010), twelve of which are found in North Carolina.

FIELD GUIDE DESCRIPTIONS: Not in either field guide

ONLINE PHOTOS:

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

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A medium-sized deltoid but the largest of the *Idias*. Similar in pattern to *I. americalis*, with a gray costal margin, costally widened black lines, and a yellowish wash running through the middle of the wing towards the outer margin. The basal area, however, is not paler than the rest of the wing and the terminal line is broken into a series of spots rather than being continuous as seen in *I. americalis*; the portion of the terminal line below the apex is often wider. Not mentioned by Forbes but consistent in our specimens, the subapical spot has a longer lobe pointed towards the outer margin than is true for *I. americalis* (J. Petranka, pers. obs.) The hindwing is heavily fuscous and nearly concolorous with the forewing, whereas it can be somewhat paler in *I. americalis*.

DISTRIBUTION: All of our records come from the Low Mountains or isolated monadnocks in the western Piedmont. However, *majoralis* has also been recorded in Charleston County, SC, suggesting they may be associated with coastal populations of Eastern Woodrats, which are associated in that region with Maritime and Coastal Fringe Evergreen Forests.

FLIGHT COMMENT: Our records come from June, July, and August, but there are not enough data to determine any real pattern.

HABITAT: All of our records come from moderately low mountains, including the monadnocks at Hanging Rock State Park in the Piedmont. Habitat at both Hanging Rock and the site in Cherokee County consist of dry uplands dominated by a mixture of hard pines -- Shortleaf and Scrub -- and various oaks and hickories. Eastern Woodrats (*Neotoma floridana*) have been documented in the general vicinity and same habitat types as where the specimen of *majoralis* was found in Cherokee County. However, there are no records for either species of Woodrats from Graham and Stokes Counties, where two of the other records were obtained, although the presence of Woodrats in those areas cannot be completely ruled out.

FOOD: Most, if not all species of *Idia*, are detritivores and at least some evidence suggests that *majoralis* may be associated with the detritus found in Woodrat nests -- Rings et al. (1992) reported that pupae were found in Woodrat nests on at least one occasion in Ohio. Whether or not they are obligate associates with Woodrats still needs more confirmation, and at least some populations occur in areas without *Neotoma*.

OBSERVATION\_METHODS: Adults come to lights and apparently at least occasionally to bait (Schweitzer et al., 2011).

NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

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 has long been considered rare, although somewhat more common in the upper Mid-West (Forbes, 1954; Rings et al., 1992). Recent records have apparently become more scarce, particularly in areas where the Alleghany Woodrat (*Neotoma magister*) has suffered major declines due to a parasite and declines in mast-producing oaks (see Schweitzer et al., 2011, for a discussion). This species appears to be especially rare in North Carolina, with specimens found at only five sites, spanning a period of over forty years. Finding a definite tie to Woodrats would help clarify its conservation status, as well as indicate possible management actions. Even without complete verification of that link, there appears to be at least enough evidence to suggest that it is of legitimate conservation concern. Given its link to fire-maintained pine-oak woodlands, we recommend that the same sort of precautions be taken when burning its habitat for restoration purposes as we have made with respect to the moth faunas associated with Longleaf Pine habitats.