

## FAMILY: Heliozelidae SUBFAMILY: TRIBE:

TAXONOMIC\_COMMENTS: <i>Coptodisca matheri</i> is a species that was described from material from Mississippi (LaFontaine, 1974) that may be synonymous with <i>C. magnella</i>. The two species are nearly identical based on coloration and patterning, and a partial barcode of the holotype of <i>C. matheri</i> that was obtained by Erik van Nieukerken matches that of a specimen of <i>C. magnella</i>. More work needs to be done on the taxonomic relationships of the ericaceous-feeding <i>Coptodisca</i>, but until these are resolved we are currently treating all of the North Carolina specimens as <i>C. magnella</i>, with <i>C. matheri</i> a synonym of <i>C. magnella</i>.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Braun (1916) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based on the original description by Braun (1916) for specimens from Ohio. The palps and lower part of the face are silvery white, while the head has a pale golden luster. The antenna is fuscous, and the thorax and basal half of the forewing is pale silvery gray. The extreme costa on the basal half of the wing is black and fades away near the middle. The apical half of the forewing is golden yellow with a triangular, silvery-white spot at the apical third of the costa that is edged with black on both sides. A similar but narrower silvery triangular spot with black edging is present on the inner margin just slightly anterior to the first. The outer edge of the triangular spot on the inner margin forms part of a dark patch of scales that extends from it to the inner margin and termen. This patch is often pale gray and ill-defined, except at its outer edge, which is marked by a row of dark scales along the termen. It is separated from the dark margins of the costal silvery spot by the golden ground color. Beyond the costal spot and almost parallel to its outer margin is a streak of black scales that is followed by a prominent, wedge-shaped apical patch. The patch is formed from a circular velvety black spot and the terminal row of black scales immediately beyond it. It is preceded and edged on either side with one or two silvery white scales, and is well separated from the dark dorsal patch by the golden yellow ground color. The cilia are whitish yellow, with an apical black pencil extending outward from the apical black patch. The hindwing is gray, and the legs yellow, except for the fore tibia and all of the tarsi, which are fuscous. The abdomen is fuscous above and yellow beneath.

DISTRIBUTION: <i>Coptodisca magnella</i> is known from southern Ohio, eastern Kentucky and eastern North Carolina. As of 2023, all of our records are from the southern Coastal Plain, except for one eastern Piedmont record.

FLIGHT COMMENT: The flight season is poorly documented, with records from May through September in Ohio, Kentucky and North Carolina. Tracy Feldman reared two adults that emerged on July 12 and September 10, and we have occupied mine records from late-May through mid-August as of 2023.

HABITAT: Local populations are generally restricted to acidic habitats where the ericaceous host plants are present.

FOOD: Braun (1916) reared specimens from Black Huckleberry ( $\langle i \rangle$ Gaylussacia baccata $\langle i \rangle$ ) in Ohio, while Tracy Feldman has reared adults in North Carolina from both Sparkleberry ( $\langle i \rangle$ Vaccinium arboreum $\langle i \rangle$ ) and Dangleberry ( $\langle i \rangle$ Gaylussacia frondosa $\langle i \rangle$ ).

 $OBSERVATION\_METHODS: We recommend looking for mines on species of <i>Vaccinium </i> and <i>Gaylussacia </i> and rearing the adults.$ 

NATURAL HERITAGE PROGRAM RANKS: GNR [S2-S3]

## STATE PROTECTION:

COMMENTS: This species appears to be uncommon throughout its restricted range, including in North Carolina. More information is needed on host specificity and the taxonomic status of populations in North Carolina (see above) before we can accurately assess the conservation status of this species within the state.

March 2025