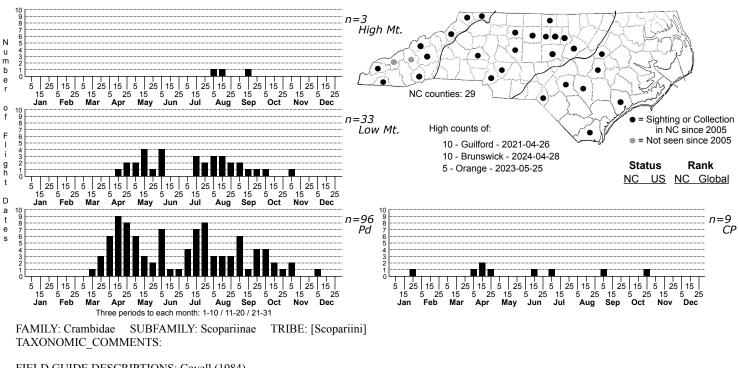


## Eudonia heterosalis McDunnough's Eudonia



FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Munroe (1972) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: In this species the ground color of the forewing varies from medium gray to grayish white and is dusted and mottled with fuscous to blackish scales. The general effect is a somewhat variegated dull gray wing (Munroe, 1972). The antemedial line is weak but evident, and is light gray with fuscous to blackish scales on the distal edge that expand into a small triangular mark at the costa. It follows a distinctive course, running obliquely rearward from the costa, but taking a right angle or even acute bend at the posterior margin of the cell. It then runs perpendicular to or obliquely forward to the inner margin. The postmedial line is fine, weakly denticulate, and runs obliquely rearward from the costa to the obtusely angled median flexure near the middle of the wing, then obliquely forward to the inner margin. The orbicular and claviform are short, black dashes, with the latter rather obscured by the dark suffusion on the inner half of the median area. The reniform is obscurely X-shaped, black, and connected with a diffuse black spot on the costa at about two-thirds. Three dark, diffuse, and more-or-less triangular spots are present on the apical third of the wing. These consists of one along the costa just before the apex, one in the subtornal region along the inner margin, and the third near the middle of the outer margin. The fringe is gray and checkered with fuscous to grayish black, while the hindwing is light gray to grayish-brown with a lighter fringe that has a sub-basal dark line.

<i>Scoparia basalis</i> is often confused with <i>Eudonia heterosalis</i>. In the former, the whitish AM and PM lines tend to be wider and better defined, and the outer margin has a row of 2-5 black dots. In <i>E. heterosalis</i> the outer margin typically has a dark and somewhat triangular-shaped mark near the middle, along with an adjoining dark subapical patch. It lacks a distinct row of black dots as seen in <i>S. basalis</i>, and the two patches are often separated by a pale bar or bloch. The fringe of <i>E. heterosalis</i> also tends to be more heavily checkered than that of <i>S. basalis</i> Worn specimens of the two species are often difficult to distinguish, and specimens of these and other similar forms may require dissection based on the degree of wear and phenotypic overlap.

DISTRIBUTION: <i>Eudonia heterosalis</i> is found in the eastern US and adjoining areas of southern Canada from Ontario eastward to Nova Scotia. In the US the range extends from Maine southward to central Florida, and westward to eastern Texas, eastern Oklahoma, Missouri, Illinois and Wisconsin. This species occurs essentially statewide in North Carolina, although as of 2023 we lack records for the northern Coastal Plain.

FLIGHT COMMENT: The adults have been observed during every month of the year in different areas of the range, but most fly from May through October. As of 2023, our records are from late-January through early December, with a much more restricted flight season in the Blue Ridge relative to the Piedmont and Coastal Plain.

HABITAT: Many of our records come from semi-wooded residential areas, while most records from natural habitats are from bottomland and mesic hardwood forests.

FOOD: The food resources that are used by this species are undocumented (Munroe,1972). The larvae presumably do not feed on the leaves of vascular plants and may possibly feed on mosses as seen in <i>E. strigalis</i>.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: <i>>Eudonia heterosalis</i>> is fairly common in the Piedmont and Blue Ridge, but more information is needed on its food resources and local abundance before we can fully assess its conservation status.