Ethmia trifurcella Bold-streaked Ethmia



FAMILY: Depressariidae SUBFAMILY: Ethmiinae TRIBE: [Ethmiini] TAXONOMIC_COMMENTS: <i>Ethmia</i> is a large genus of small moths, with over 125 species occurring in the New World, and around 240 species worldwide. North America has 52 species, but only five occur east of the Mississippi River (Powell, 1973).

FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Powell, 1973 TECHNICAL DESCRIPTION, IMMATURE STAGES: Powell, 1973

ID COMMENTS: The following description is based primarily on Powell (1973). The labial palps barely extend beyond the base of the antenna and are white with three dark bands or rings; one at the base, one about mid-way, and one at the tip. The antenna is dark gray except for the white base of the scape. The front of the face and crown are white, while the occipital tufts are narrowly to broadly dark. The thorax is white with five dark brown to blackish spots in the median and posterior portions. The forewing has a wavy longitudinal white band that extends the entire length of the wing, and has a single dark spot at about the basal one-third of the wing length. The costal half of the forewing is dark brown or blackish and becomes paler towards the costa. The light region near the costa becomes more extensive posteriorly. There is a row of dark dots that extends around the margin from before the apex to the tornus. The fringe is white except for brownish coloration that adjoins the dark median streak of the terminal area. The hindwing is narrower than the forewing, with a pale brownish ground color that slightly darkens distally. The legs are heavily blotched with brownish black, particularly on the front and middle legs. This is a distinctive species that is easily recognized by the spot pattern on the thorax and wings, and the wavy, two-toned patterning.

DISTRIBUTION: <i>Ethmia trifurcella</i> is primarily found in the eastern US, but a few scattered populations have been found as far west as Wyoming, and as far south as Arizona, southern Texas, and Mexico. The southwestern records could potentially represent an undescribed species. In the eastern US, the range extends from Ohio and Pennsylvania westward to Missouri, Kansas and Arkansas, and south and southwestward to Kentucky, Tennessee, Mississippi, Alabama, and northern Florida. As of 2024, we only have a few scattered records, mostly from the mountains but also a record from the Piedmont and the Coastal Plain. Powell (1973) reported an historical record from Maxton in the Coastal Plain, but it is uncertain where the specimen is located.

FLIGHT COMMENT: Most local populations are probably univoltine, with the adults on the wing between April and July. As of 2024, our records range from mid-May to early August.

HABITAT: The only known host is Wild Comfrey, which is found in mesic hardwood or mixed hardwood forests. As of 2024, the majority of our records are from mixed hardwood forest at a lower elevation site in the mountains that supports Wild Comfrey.

FOOD: The only known host is Wild Comfrey (<i>Andersonglossum virginianum</i>), which was previously placed in the genus <i>Cynoglossum</i> (Eiseman, 2022).

OBSERVATION_METHODS: The adults occasionally visit lights. Data on the larval ecology is sorely needed, so we encourage nature enthusiasts to search for the larvae.

NATURAL HERITAGE PROGRAM RANKS: GNR S2S3

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

COMMENTS: This species appears to be rare in North Carolina, with only a handful of scattered records. Additional data are needed before we can fully assess its conservation status.