Adela ridingsella Ridings' Fairy Moth



FAMILY: Adelidae SUBFAMILY: Adelinae TRIBE: [Adelini] TAXONOMIC_COMMENTS: <i>Adela</i> is a small genus of moths, and most are noteworthy for having exceptionally long antennae. There are 11 described species in North America.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Clemens (1864), Powell (1969) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a very distinctively patterned <i>Adela</i> that is difficult to confuse with other species. The forewing has a coppery brown ground color that is lighter on the apical half. At the anal angle there is a cluster of four or five relatively large black spots, each with an embossed silvery violet spot. A series of smaller spots occur along the apical margin. A silvery fascia is present at the middle of the wing. Just beyond this is an oblique, silvery costal streak that extends almost to the most interior and basal of the black spots. Beyond this streak is a second and much smaller streak that extends from the costa towards the outer margin. Between the two silvery streaks there are typically three or four rows of fine black patches or spots that radiate from near the tip of the first streak towards the outer margin. The hindwing is brownish-orange with a wide fringe. The males have extremely elongated antennae that are three times or more as long as the forewings, while females have antennae that are about one-half as long as those of the males (Powell, 1969).

DISTRIBUTION: <i>Adela ridingsella</i> is widespread in eastern North America. Populations have been documented from southern Canada (Nova Scotia; Ontario; Quebec) and the New England states westward to Illinois and Iowa, and southwestward to western North Carolina, northern Georgia, and Mississippi. This species appears to be rare or missing in most of the southeastern Piedmont and Coastal Plain. As of 2019, all of our records are from the low mountains.

FLIGHT COMMENT: Most adults are on the wing from late May through July (Powell, 1969). As of 2019, our records are from 30 May to 19 June.

HABITAT: The specific habitat requirements are unknown, but specimens have been collected in both hardwood forests and in suburban settings.

FOOD: The host plants are unknown. The fact that this species is restricted to the mountains in North Carolina might be related to it exploiting one or more plant species that also have mountain affinities.

 $OBSERVATION_METHODS: Most records are based on adults that were attracted to lights. Adults have occasionally been spotted resting on vegetation, but seem to visit flowers far less frequently than <i>Adela caeruleella</i>.$

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S3S4]

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

COMMENTS: Although widespread in the eastern US, this species appears to be uncommon in North Carolina where it apparently is restricted to the mountains.