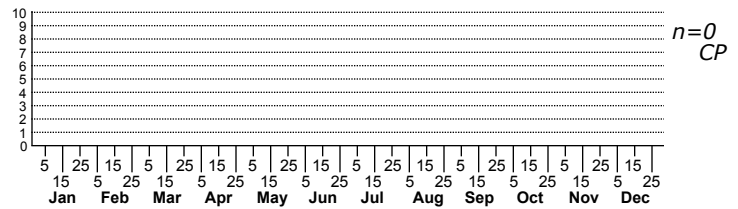
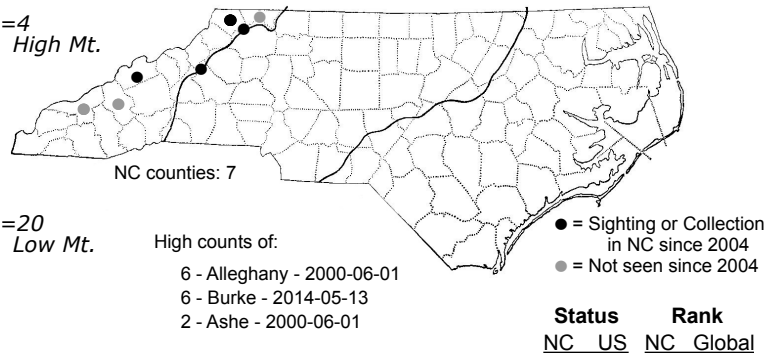
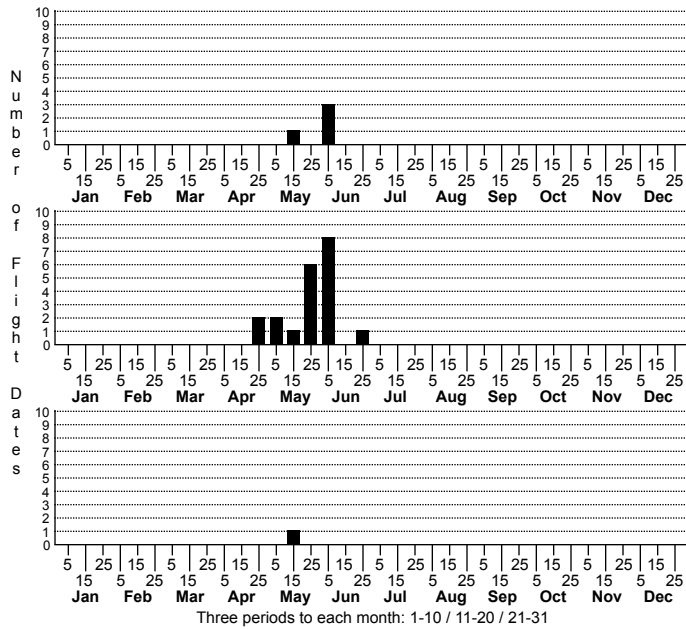


## *Eufidonia notataria* Powder Moth



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Melanolophiini

TAXONOMIC\_COMMENTS: One of three species in this genus that occur in North America, two of which have been recorded in North Carolina.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: McGuffin (1977)

TECHNICAL DESCRIPTION, IMMATURE STAGES: McGuffin (1977); Wagner et al. (2001); Maier et al. (2011)

ID COMMENTS: Both of our species of *Eufidonia* are medium-small Geometrids with a ground color that ranges from powdery white to yellowish overlain with a variable amount of brown dusting. A black discal spot is present on both pairs of wings and fairly diffuse antemedian, median, and postmedian lines are present; a wavy white band is usually present in the subterminal area, followed by a dark brown band extending to the outer margin. The fringe is usually checkered with dark bands interrupted by narrow white streaks. These patterns strongly overlap between the species, who also show the same range of variation. Adults are not safely separated solely on the basis of wing markings.

DISTRIBUTION: Restricted to the Mountains in North Carolina

FLIGHT COMMENT: There appears to be just one late spring flight in North Carolina.

HABITAT: Most of our records come from mesic stands of mixed hemlocks and hardwoods below the Spruce-Fir zone, including cove and riparian forests. This suggests that Hemlocks is being used as the main host in North Carolina.

FOOD: Oligophagous, feeding on a variety of coniferous species. McGuffin (1977) and Maier et al. (2011) list Spruce, Fir, Hemlock, and Larch. Wagner et al. (2001) state that other conifers may be used in addition.

OBSERVATION\_METHODS: Adults fly during the day (McGuffin, 1967) but also come to blacklights.

NATURAL HERITAGE PROGRAM RANKS: G5 S2S3

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands. Due to the threats to two of its most important host plants, we recommend that this species be added to the NHP Watch List.

COMMENTS: There are relatively few records for this species in North Carolina, all from the mountains, and it is likely to be significantly threatened by the decline of both Fraser Fir and Eastern Hemlocks due to the depredations of Woolly Adelgids. Its survival will probably depend on the degree to which populations can be maintained on Spruce alone.