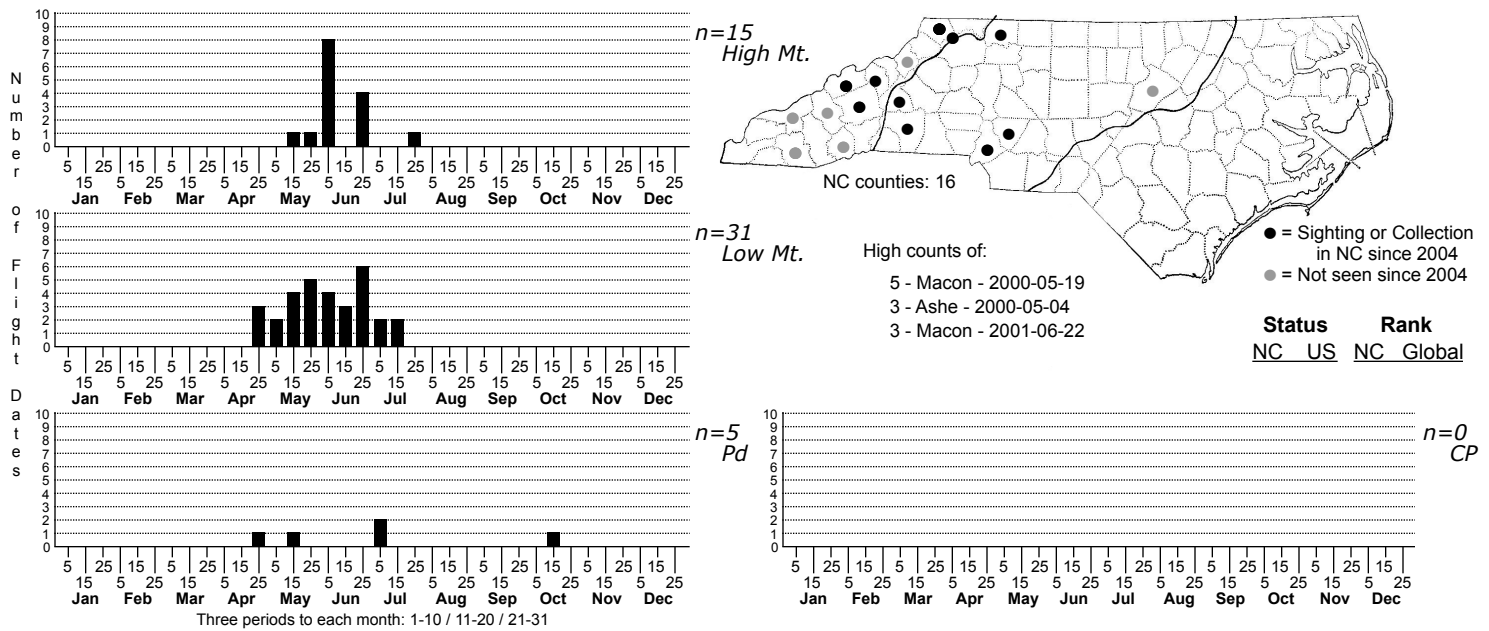


Zale undularis Black Zale



FAMILY: Erebidae SUBFAMILY: Erebinae TRIBE: Ophiusini

TAXONOMIC_COMMENTS: One of 39 species in this genus that occur north of Mexico, 23 of which have been recorded in North Carolina

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

ONLINE PHOTOS: MPG, Bugguide, BAMONA

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954); Wagner et al. (2011)

ID COMMENTS: A dark umber to coal black Zale with a distinctive yellowish-brown patch located on the outside of the postmedian in a bight opposite the cell. Aeruginosa is similar but lacks the pale patch and typically has a frosting of green scales that are missing in undularis. Pseudanthracia coracias is similar but smaller, lacking the pale patch beyond the postmedian but possessing whitish scales -- absent in undularis -- that partially outline the reniform.

DISTRIBUTION: May be found throughout the mountains, where Black Locust is native, but probably occurs at only scattered locations in the Piedmont; and is likely absent from the Coastal Plain

FLIGHT COMMENT: Probably has just a single flight, peaking in June (Wagner et al. (2011) state that there are partial second and third broods in the South)

HABITAT: Our records come from mesic-to-dry sites in the Mountains, where it probably feeds primarily on Black Locust. One historic record exists from Wake County, but the habitat at that site is unrecorded.

FOOD: Stenophagous, feeding on both Black Locust (*Robinia pseudoacacia*) and Honey Locust (*Gleditsia triacanthos*) (Forbes, 1953; Wagner et al., 2011)

OBSERVATION_METHODS: Probably comes only moderately well to blacklights, with only a few being captured in single traps; probably also comes well to bait, as is true for other Zales

NATURAL HERITAGE PROGRAM RANKS: G5 [S4]

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

COMMENTS: The natural habitats used by this species are unclear; both Black Locust and Honey Locust are often associated with rural lands in North Carolina and are often planted well outside of their natural range within the state. Although there is currently little evidence for the presence of undularis in the Piedmont, it could be expanding its range within the state following the increased use of its host plants (Wagner et al., 2011).