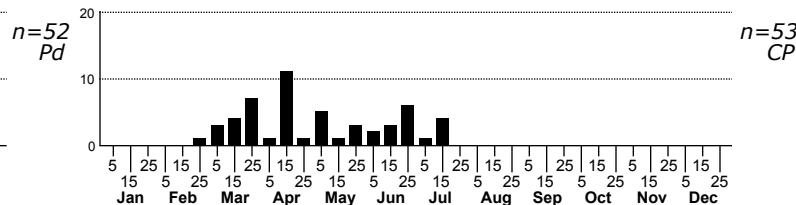
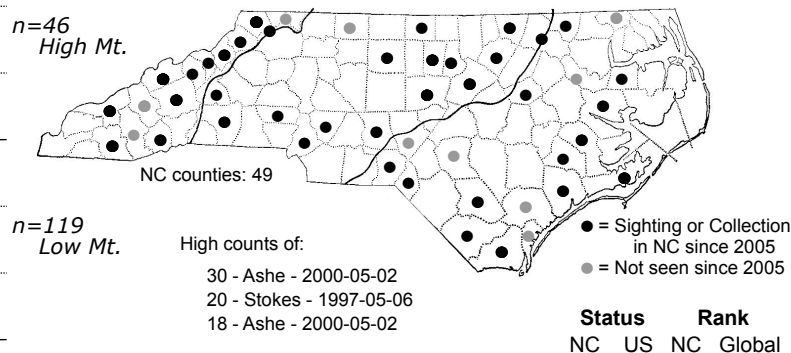
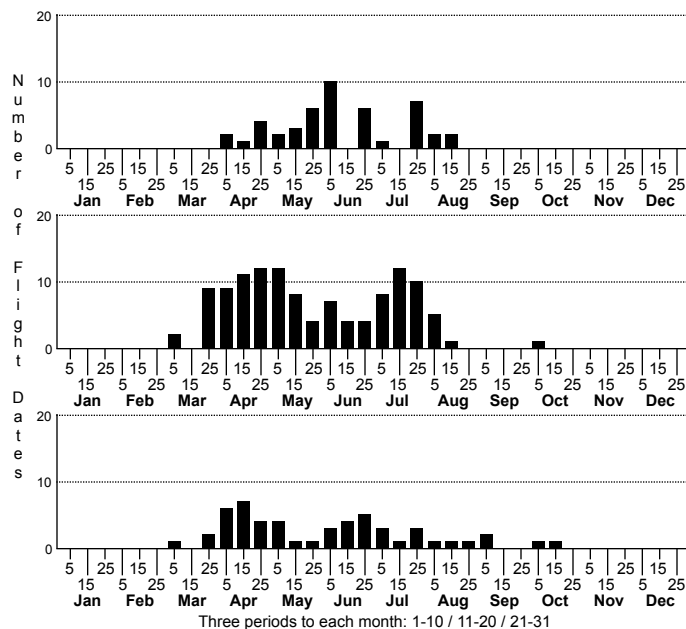


## Zale minerea Colorful Zale



FAMILY: Erebiidae SUBFAMILY: Erebinae TRIBE: Ophiuini

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:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954), Wagner (2005); Wagner et al. (2011)

ID COMMENTS: One of our largest Zales but slightly smaller than Zale lunata. Like lunata, it shows a range of coloration and patterning, most of which overlap those of lunata. The degree of waviness of the postmedian line on the forewing -- usually visible in a good photograph -- is the key character used by Forbes (1953) to distinguish these two species: in minerea (as well as galbanata and phaeocapna) the postmedian shows only a couple of broad waves from the end of the cell to the costa, with a large concave bend located at the end of the cell (roughly paralleling the concavity of the reniform spot). In lunata, the postmedian is much more undulating along this portion of the wing, showing a series of smaller bends but no major concavity at the end of the cell. Compared to galbanata and phaeocapna, which possess similar postmedian lines, minerea usually possess a strongly contrasting sub-apical blotch that is typically triangular or trapezoidal in shape. Like galbanata, but not phaeocapna, there is also usually a medial dash that runs from the subterminal line to the outer margin.

DISTRIBUTION: We have records from most parts of the state (although at least some sight records probably represent confusion with lunata); records are missing, however, from the Outer Banks and other barrier islands

FLIGHT COMMENT: Probably flies more-or-less continuously throughout the growing season

HABITAT: Occurs primarily in bottomlands in the Coastal Plain with almost no records from peatland or Longleaf Pine habitats; it also appears to be missing from maritime forests. Occurs in both upland and bottomland habitats across the Piedmont and Mountains, although with most records coming from wet-to-mesic stands.

FOOD: Larvae are polyphagous, feeding on a wide range of woody plants, including at least some conifers in addition to broad-leaved species. Wagner et al. (2011) specifically list maple (<i>Acer</i>), alder (<i>Alnus</i>), birch (<i>Betula</i>), American Hornbeam (<i>Carpinus caroliniana</i>), hickory (<i>Carya</i>), hazelnut (<i>Corylus</i>), American Hop-hornbeam (<i>Ostrya virginiana</i>), spruce (<i>Picea</i>), poplar (<i>Populus</i>), oak (<i>Quercus</i>), willow (<i>Salix</i>), American Basswood (<i>Tilia americana</i>), and elm (<i>Ulmus</i>). In North Carolina, J.B. Sullivan reared a larva from Turkey Oak (<i>Q. laevis</i>).

OBSERVATION\_METHODS: Comes to blacklights but usually in small numbers, with up to 5 collected in a single trap. Baiting is a much more productive sampling method, as is true for most <i>Zale</i> species.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S5]

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

COMMENTS: Given its wide range of larval host plants, broad habitat associations, and extensive occurrence across the state, this species appears to be secure.