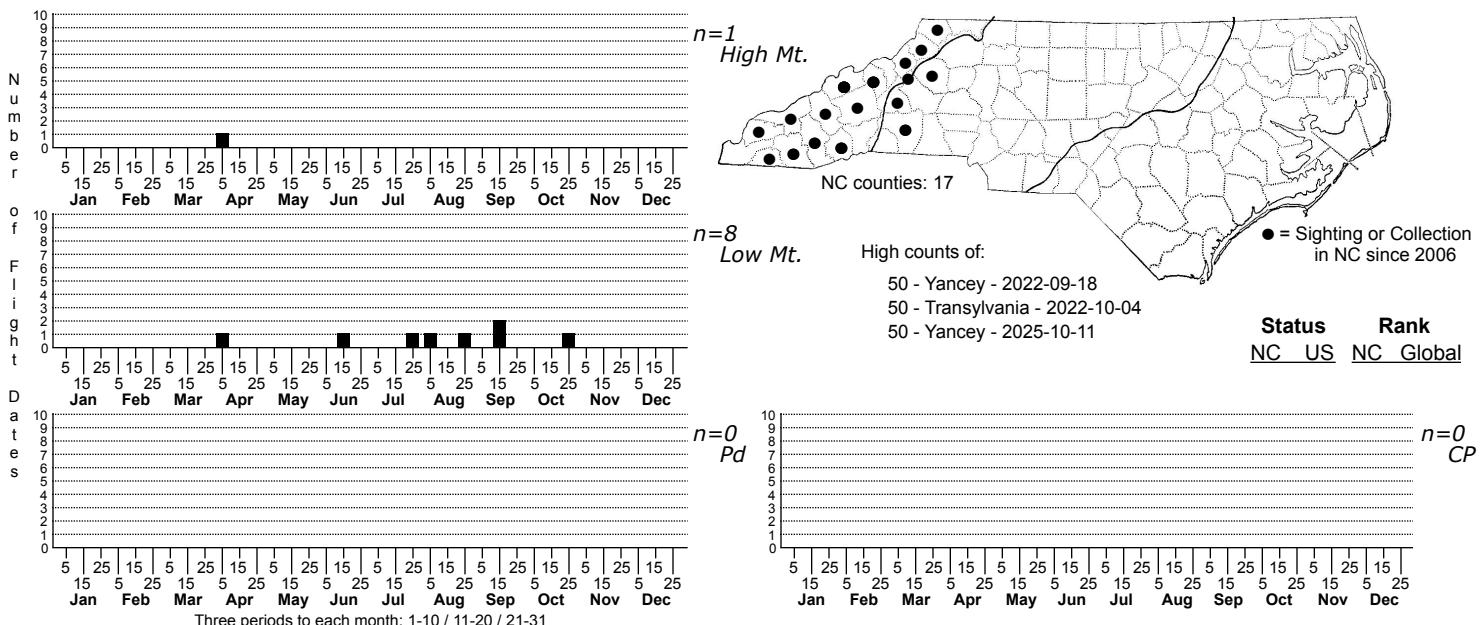


Aspilanta hydrangaeella None



FAMILY: Heliozelidae **SUBFAMILY:** [Heliozelinae] **TRIBE:** [Heliozelini]

TAXONOMIC COMMENTS: The genus *Antispila* has traditionally been a catch-all genus for a large group of similarly patterned species with a fascia before the middle of the forewing and a pair of opposing spots. Nieuwerken and Eiseman (2020) placed a cluster of six species that have reduced wing venation in a separate genus, *Aspilanta*. *Antispila* species in North America never have an apical spot, while *Aspilanta* species do, with the exception of *A. viticordifoliella*.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Nieuwerken and Eiseman (2020)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Nieuwerken and Eiseman (2020)

ID COMMENTS: Chambers (1874) described this species from the leaf mines and host plant, and never observed the adults. There has not been a formal description of the adults since then. This species is largely indistinguishable from other *Aspilanta*, except that *A. hydrangaeella* is the only species that has both a silver apical spot and a relatively large number of white flagellomeres at the antennal tip (3 flagellomeres with 6 scale rings versus one or two). This and host plant specificity is the best way to identify this species. The forewing patterning resembles those of other members of the group in having a dark brown or blackish ground color. There is a silvery basal fascia at about one-fourth that tends to be slightly wider on the inner margin. Just beyond mid-length there are two smaller and somewhat triangularly shaped marks. One occurs on the costal margin. The second is on the inner margin, and is larger and slightly more basal than the first. Near the apex there is a small silvery spot.

DISTRIBUTION: *Aspilanta hydrangaeella* has been found in Illinois, Ohio, Kentucky, and Maryland, then southward to western North Carolina and northern Georgia. As of 2023, our records for North Carolina are all from the Blue Ridge.

FLIGHT COMMENT: Very little is known about the flight season. The larvae overwinter and the adults presumably emerge during the summer months. Nieuwerken and Eiseman (2020) examined adults from June, August, September and October in areas throughout the range. We have found occupied mines and pupal cases as early as mid-June and as late as October. This suggests that there are at least two broods per year in North Carolina.

HABITAT: This species is strongly dependent on *Hydrangea arborescens*, which is found in mesic hardwood forests. Representative habitats include rocky slopes, the edges of streams, and along the banks of old logging roads and secondary roads. It generally prefers rocky substrates.

FOOD: The primary hosts are Smooth Hydrangea (*H. arborescens*) and to a lesser extent Snowy Hydrangea (*H. radiata*). There is also one record from northern Florida for Oakleaf Hydrangea (*H. quercifolia*; iNaturalist). As of 2024, most of our records are for Smooth Hydrangea. Snowy Hydrangea appear to rarely be used, but numerous specimens were recently found using this species at a site in Transylvania County. We also have a record for Climbing Hydrangea (*H. barbara*).

OBSERVATION METHODS: We recommend looking for the mines on *Hydrangea* leaves during the early summer through early fall.

NATURAL HERITAGE PROGRAM RANKS: GNR S3-S4

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

COMMENTS: Local populations are strongly dependent on *H. arborescens* as a host plant and as a result are patchily distributed across the landscape. This species is not common, but can be locally abundant where good stands of hydrangeas are present.