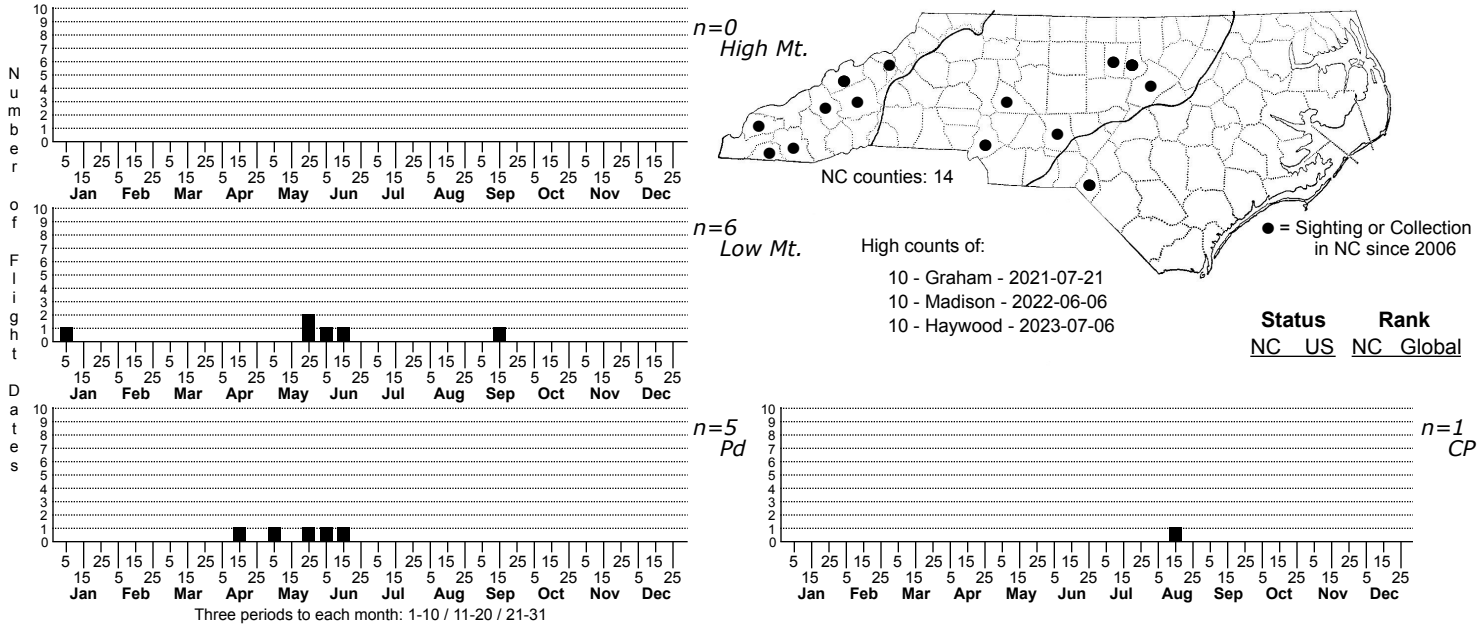
Parectopa plantaginisella None



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini]
TAXONOMIC_COMMENTS: The genus Parectopa contains around 40 species that are found worldwide, including nine species in North America. All are very small moths that are specialized leafminers.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Chambers (1872); Forbes (1923)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman, 2019.

ID COMMENTS: The following is primarily based on descriptions by Chambers (1872) and Forbes (1923). The labial palps are bronze on the outer side and mostly white within, while the maxillary palps are white with brownish tips. The antenna is pale brown. The vertex, thorax, and forewing have a brownish golden ground color. The vertex has a silvery white stripe on each side that continues back onto the sides of the brownish golden thorax. From there, the white stripe connects or nearly connects with a longitudinal basal streak on the forewing. There are four costal and three dorsal silvery white streaks that are roughly equally spaced and extend almost to the center of the wing. All have dark margins on both the sides and around the apex. The streaks are posteriorly oblique, except for the fourth costal (anteriorly oblique) and the third dorsal (approximately perpendicular or slightly anteriorly oblique). A strong silver subterminal spot is present opposite the tip of the third costal streak that is continued by a white bar in the fringe. The apical spot has a large silver center. The fringe is black with a white triangle below the apex, and is strongly caudate. The legs are banded with white and black. Parectopa pennsylvaniella has very similar markings, This species is darker, has streaks that are less heavily black-edged, has a white head other than the light brown vertex, and specializes on asters (Symphyotrichum) rather than fleabanes as seen in P. plantaginisella. It has a more northern range and has not been recorded in North Carolina as of 2020.

DISTRIBUTION: Parectopa plantaginisella is rather widely distributed in North America. Populations occur in Ontario, Quebec, and the eastern US, as well as Oregon and Washington. In the eastern US, the range extends from the northeastern states to Minnesota, and southward to the Gulf Coast regions of Louisiana and Florida. As of 2020, we have records from the lower elevations in the mountains to the western Coastal Plain.

FLIGHT COMMENT: Adults are on the wing from May through September. Some local populations may be bivoltine, with a peak in the first brood in late spring or early summer, followed by a second brood in late summer. In North Carolina the first brood peaks in May, with some populations possibly producing a second brood in July-August.

HABITAT: Local populations use several species of fleabanes as hosts. These tend to favor open, sunny habitats that often show evidence of disturbance, but some species do well in woodland settings. Representative habitats include infrequently mowed fields, roadsides and waste places, gardens, and woodland roadways and trails.

FOOD: Parectopa plantaginisella appears to specialize on Erigeron species (Eiseman, 2022). The known hosts include Annual Fleabane (E. annuus), Common Horseweed (E. canadensis), Philadelphia Fleabane (E. philadelphicus), and Prairie Fleabane (E. strigosus). In North Carolina, we have records for all of these species as well as Hairy Fleabane (E. bonariensis), Robin's-plantain (E. pulchellus), and White Wood-aster (Eurybia divaricata).

OBSERVATION_METHODS: The adults occasionally visit lights, but many records are based on either leaf mines, or adults that were reared from leaf mines.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: This species is probably more common than our limited records suggest due to the lack of a statewide effort to document leaf-mining species in North Carolina.