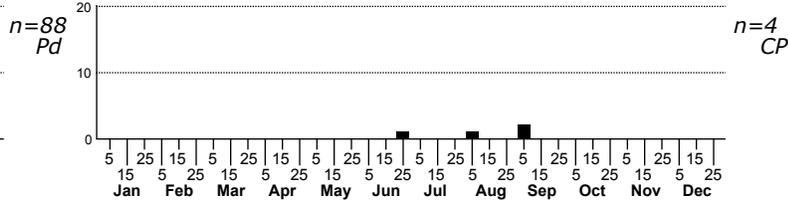
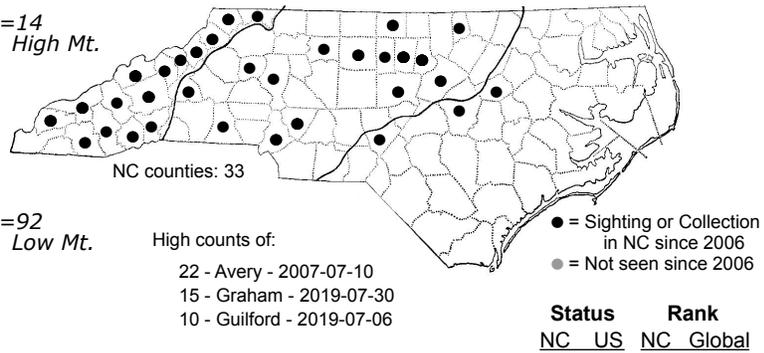
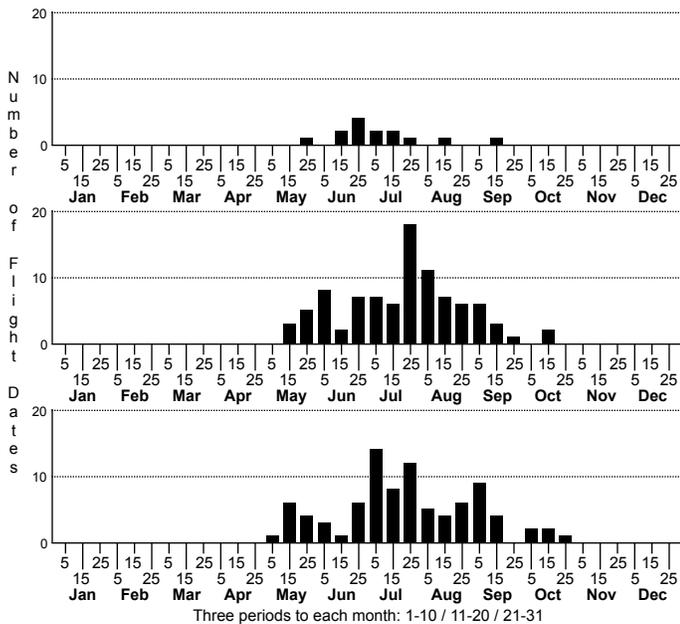


Herpetogramma pertextalis Bold-feathered Grass Moth



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini

TAXONOMIC COMMENTS: Over 20 species of *Herpetogramma* have been described from North America that are based mostly on external morphology. The most recent treatment consolidates these into only nine species (Solis, 2010) and all nine occur in North Carolina.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Solis (2010)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based in part on that of Forbes (1923) and Handfield and Handfield (2021). The head, thorax, and abdomen are typically dull yellowish tan, with the abdomen having a narrow white crossband on the posterior margin of each segment. The ground color of the wings varies from dull white to light yellowish-tan and is overlain with a complex pattern of medium to dark-brown marks that are clean-cut. The costa of the forewing has a medium brownish shading that extends from the base to the postmedial line. The fringe varies from whitish to light brown with darker spotting near the base, and the terminal line is dark brown. A whitish patch is located between both the round orbicular and double-lined reniform spot, and between the reniform spot and postmedial line. A short, longitudinal dash is also usually evident between the orbicular and reniform, but displaced inward towards the middle of the wing.

The antemedial line is weakly sinuate and often rather obscure, while the postmedial is well defined. It projects inward from the costa at around three-fourths the wing length where it meets an outwardly bulged section with three teeth. From there it projects basally towards the orbicular spot for a short distance, then sharply angles away after approaching the reniform spot and runs nearly perpendicular to the inner margin. A prominent, toothed, dark-brown subterminal line follows the postmedial line and separates a cream-colored zone between the postmedial and subterminal lines from a brownish-cream zone between the subterminal line and the outer margin. The hindwing is concolorous with the forewing and has similar marks, including the fringe and prominent dark brown terminal line. The females tend to be more boldly marked than the males, with the ground color more yellowish white than creamy white.

Herpetogramma pertextalis is similar to *H. thestealis* in terms of overall patterning, but the latter is darker overall, with a sharp contrast between the dark brown subterminal shade on the forewing and the whitish area between it and the postmedial line. The subterminal shade also noticeably widens as it approaches the costa, with the dark, inward-projecting tooth next to the costa often touching or nearly touching the postmedial line. *Herpetogramma thestealis* also tends to have a whitish ground color, versus a more light yellowish-tan ground in *H. pertextalis*, and often has a violet or bluish iridescent sheen that is lacking in *H. pertextalis*. Finally, the inwardly projecting teeth on the subterminal line are finally tapered and less blunt than those of *H. pertextalis*. Size differences are also very helpful, with *H. thestealis* being significantly larger than *H. pertextalis* (wingspan 30-35 mm versus 21-23 mm). Worn specimens are generally lighter than described above, and can closely resemble *H. pertextalis*.

DISTRIBUTION: *Herpetogramma pertextalis* is found in eastern North America, including extreme southern Canada (Ontario; Quebec). In the U.S. the range extends from Maine southward to South Carolina, northern Georgia and the Florida Panhandle, and as far west as eastern Oklahoma, eastern Kansas, eastern Nebraska, and Minnesota. As of 2023, all of our records are from the Blue Ridge and Piedmont.

FLIGHT COMMENT: The adults have been observed from April through October in different areas of the range. As of 2023, our records extend from early-May through late-October. Populations in North Carolina appear to produce two or three generations each year.

HABITAT: Local populations can be found in a variety of habitats, including mesic deciduous forests, forest edges and openings, and wooded residential neighborhoods.

FOOD: The larvae are polyphagous and feed on both woody and herbaceous plants (Schaffner, 1959; Prentice, 1966; Godfrey et al., 1987; Robinson et al., 2010; Solis, 2010; Beadle and Leckie, 2012; Handfield and Handfield, 2021; BugGuide). The reported hosts include a Bracken Fern (*Pteridium* sp.; BugGuide) and broadleaf species that include Red Maple (*Acer rubrum*), Sugar Maple (*A. saccharum*), Eastern Columbine (*Aquilegia canadensis*), burdock (*Arctium*), Coastal Sweet-pepperbush (*Clethra alnifolia*), dogwoods (*Cornus*), fleabanes (*Erigeron*), Joe-Pye weeds (*Eutrochium*), Wild Strawberry (*Fragaria virginiana*), hollies (*Ilex*), ground cherries (*Physalis*), plantains (*Plantago*), buttercups (*Ranunculus*), brambles (*Rubus*), Canadian Black-snakeroot (*Sanicula canadensis*), Hairy Leafcup (*Smallanthus uvedalia*), goldenrods (*Solidago*), Meadow-rues (*Thalictrum*), American Basswood (*Tilia americana*), Red Clover (*Trifolium pratense*), American Elm (*Ulmus americana*), nettles (*Urtica*), and violets (*Viola*). As of 2024, we have rearing records for Canada Violet (*Viola canadensis*), Eastern Columbine (*Aquilegia canadensis*), Mugwort (*Artemisia vulgaris*), and Hairy Leafcup.

OBSERVATION_METHODS: The adults are attracted to lights and are occasionally found nectaring on wildflowers. More information is needed on the larval life history in North Carolina.

NATURAL HERITAGE PROGRAM RANKS: GNR S4S5

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

COMMENTS: This species is common in North Carolina and uses a wide diversity of host plants; it appears to be secure within the state.