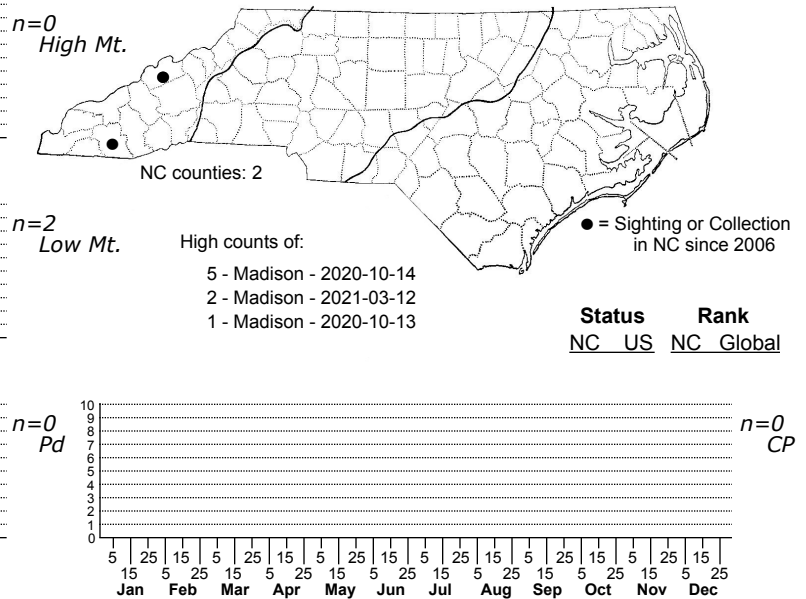
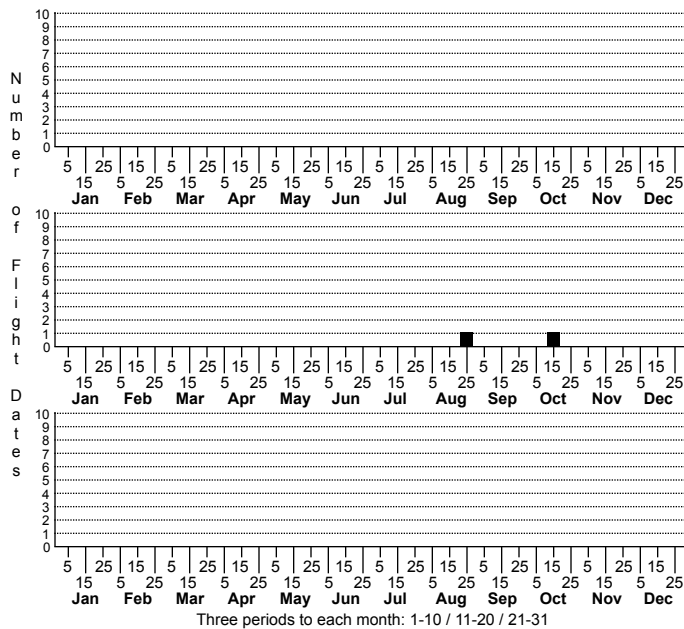


# Phyllonorycter scudderella None



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE:

TAXONOMIC COMMENTS: *Phyllonorycter* is a genus of small and often colorful moths, with 79 described species in North America. The larvae of most form underside tentiform mines on woody plants and pupate within the mines.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: (Davis and Deschka, 2001)

TECHNICAL DESCRIPTION, IMMATURE STAGES: (Davis and Deschka, 2001)

ID COMMENTS: The following is primarily based on the description in Braun (1908) and Davis and Deschka (2001). The ground color of the head, thorax and forewing is light yellowish brown to golden brown. The tuft has reddish brown scales between the antennae, and whitish scales posteriorly. The head and palps are brownish white, and the antenna is brownish white with darker annulations (sometimes entirely white). The thorax is white with a pair of reddish brown spots on either side of the midline, and heavy brownish suffusion anteriorly on the tegula. The markings of the forewings are somewhat indistinct, but the forewing is distinctive in having a large area of black scales in the region of the fold. The basal one-fourth of the dorsal margin is edged with white, and there are a series of whitish streaks as follows. A basal streak extends to about one-third the wing length, where it is margined with blackish scales around the apex. A pair of posteriorly oblique streaks is present at mid-length. The costal streak is shorter and triangular, while the dorsal streak is constricted on the fold. Both are black margined anteriorly, with the dorsal streak having an extensive area of black scales between it and the tip of the basal streak. A second pair of streaks is present at about two-thirds. These streaks are also black margined anteriorly, and the dorsal streak often has extensive dark scaling between it and the first dorsal streak. The costal streak is narrow and almost perpendicular to the costa, while the dorsal streak is more broadly triangular and positioned just before the tornus. A small, third dorsal streak is present beyond the tornus. Toward the apex are two narrow and slightly curved costal streaks that extend to about the middle of the wing. At the apex there is a black dot or a streak that is bordered with white scales toward the base and above. The cilia are somewhat lighter than the forewing ground color and have a blackish marginal line around the apex. The legs are brownish white, and the tibia of the front leg is striped with black. One of the most distinctive features of this species is the region of dark scales between the tip of the white basal streak and the first dorsal streak. A similar region of dark scales is usually present between the first and second dorsal streak.

DISTRIBUTION: *Phyllonorycter scudderella* is found in eastern and western North America. Western populations extend from southeastern Alaska to Oregon. In the East, it occurs from Ontario to Newfoundland, then south and southwest to the northeastern states to Ohio and New Jersey. As of 2023, we have only five records from two sites in the Blue Ridge. These may be part of a southern disjunct population in the southern Appalachians.

FLIGHT COMMENT: Local populations appear to be bivoltine, with the first brood occurring from mid-March to early May, and the second from late June to early October (Davis and Deschka, 2001). Braun (1908) noted that the larvae are abundant in October and November in Ohio, and we have records of mines in mid-August through mid-October with larvae or pupae. The adults overwinter and become active with the spring warm-up.

HABITAT: This species uses a variety of willows as hosts. Our native species are associated with sunny areas of wetlands such as wet thickets, ditches, bogs, and stream edges.

FOOD: *Phyllonorycter scudderella* specializes on willow (*Salix*) species. The documented hosts include Weeping Willow (*S. babylonica*), Bebb's Willow (*S. bebbiana*), Sageleaf Willow (*S. candida*), and Pussy Willow (*S. discolor*) (Davis and Deschka, 2001; Eiseman, 2022). In North Carolina, we have records for Silky Willow (*S. sericea*) and an undetermined *Salix* species.

OBSERVATION\_METHODS: The adults appear to only rarely visit lights and are best obtained by rearing from mines on willows.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

COMMENTS: We have only two site records as of 2023 of this northern species, suggesting that it is uncommon in the state. More information is needed on its distribution and abundance before we have assess its conservation status.