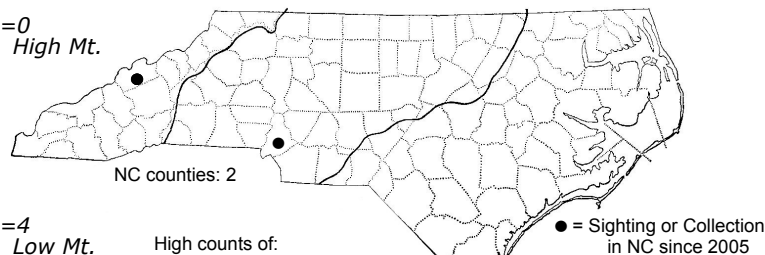
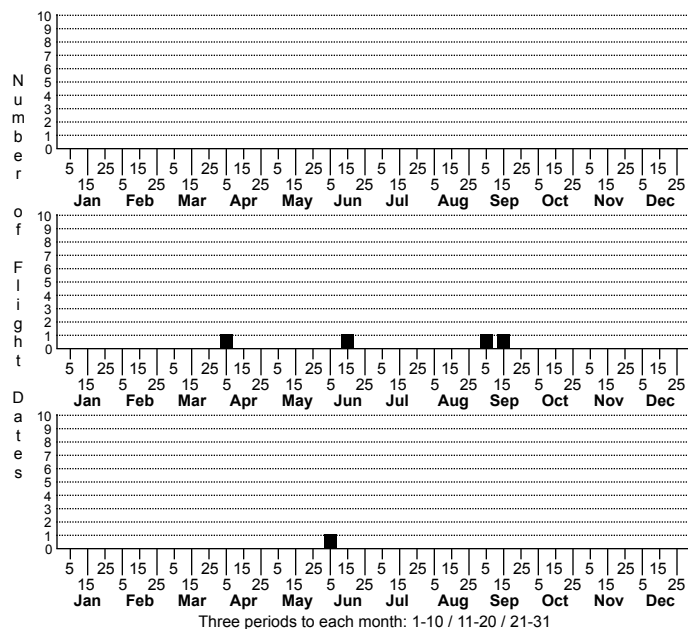


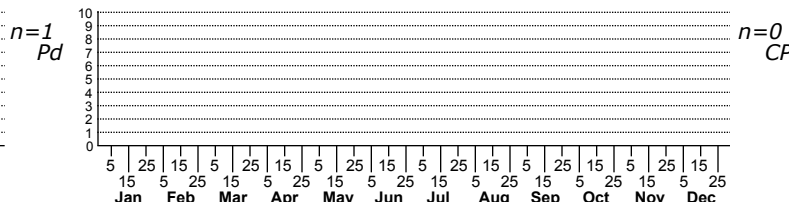
Phyllonorycter propinquella Cherry Blotch Miner Moth



High counts of:

10 - Madison - 2020-11-09
6 - Madison - 2020-09-02
3 - Mecklenburg - 2024-06-03

Status Rank
NC US NC Global



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini]

TAXONOMIC COMMENTS: <i>Phyllonorycter</i> 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: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun, 1908.

TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman, 2019.

ID COMMENTS: The following description is primarily based on Braun's (1908) original description of the species. The antenna is dark gray, and the face and palps are silvery. The tuft is dark brown with a mix of whitish scales. The ground color of the thorax and forewing of the male is brownish golden (more golden in the female), with darker scales near the middle of the wing and in the dorsal half. The dorsal margin is narrowly white towards the base. The thorax has a white line across the anterior margin that passes over the patagia and is continuous with the white basal streak on the forewing. The basal streak is rather broad and pointed at the apex, and ends at about two-fifths of the wing length. It is black margined on the costal side and around its apex. The forewing has four costal and three dorsal white streaks. The first costal is just before the middle, is very oblique, and is dark margined on both sides. The other three costal streaks are nearly perpendicular to the costa and are dark margined on the anterior side only. The first dorsal streak begins much nearer the base than the first costal streak and is dark margined on both sides. It is long and oblique, with its apex reaching to or beyond that of the first costal streak (sometimes almost to the space between the second costal and dorsal streaks). The second dorsal streak is nearly perpendicular to the dorsal margin and opposite the second costal streak. The remaining dorsal and costal streaks are greatly reduced in size and often inconspicuous. A concentration of blackish brown scales between the second pair of streaks extends backward along the middle of the wing to the apex where it may form a dark streak, and is better developed in the male. The marginal line in the cilia is blackish, with a bluish metallic luster. The cilia are grayish ochreous and less gray in the female. The hindwings and cilia are grayish, with a fulvous tinge. The legs are ochreous with gray banding on the tarsi.

<i>Phyllonorycter propinquella</i> is very similar to <i>P. blancardella</i> and <i>P. crataegella</i> and is best identified either by rearing the adults or by using genitalia or molecular markers. Braun (1908) noted that <i>P. propinquella</i> differs from <i>P. crataegella</i> in being larger (wingspan 8-9 mm versus 6.5-7 mm for <i>P. crataegella</i>), and in having a more oblique first dorsal streak that is nearer the base of the wing relative to that of <i>P. crataegella</i>. <i>Phyllonorycter blancardella</i> is a specialist on apples and crabapples and is a more northern form that has not been found in North Carolina as of 2022.

DISTRIBUTION: <i>Phyllonorycter propinquella</i> occurs in southern Canada (Ontario; Quebec; Nova Scotia), and in Illinois, Ohio, and Connecticut southward to at least North Carolina and Tennessee. Some of the reported records are questionable since this species closely resembles <i>P. crataegella</i>. As of 2020, our records for North Carolina are all from Madison Co. in the mountains.

FLIGHT COMMENT: Local populations appear to be multivoltine, with the first brood beginning in March and later broods extending through September or later. As of 2020, our very limited records for occupied mines are from early September to November. Mines that were observed in Madison Co. on 9 November had larvae that presumably were about to overwinter.

HABITAT: <i>Phyllonorycter propinquella</i> appears to only use Black Cherry as a host. Black Cherry is a seral species that germinates poorly in full shade, but is common in many mesic forests and second-growth hardwoods. Seeds often germinate after disturbance from timbering, road construction, or forest gap formation. This species is also common in old fields, and along roadways and fence rows.

FOOD: The only documented host is Black Cherry (<i>Prunus serotina</i>), but other <i>Prunus</i> species could potentially be used (Eiseman, 2022). In North Carolina, all of our records are from Black Cherry.

OBSERVATION_METHODS: The adults appear to rarely visit lights. We recommend searching for the tentiform mines and rearing adults.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S3

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

COMMENTS: