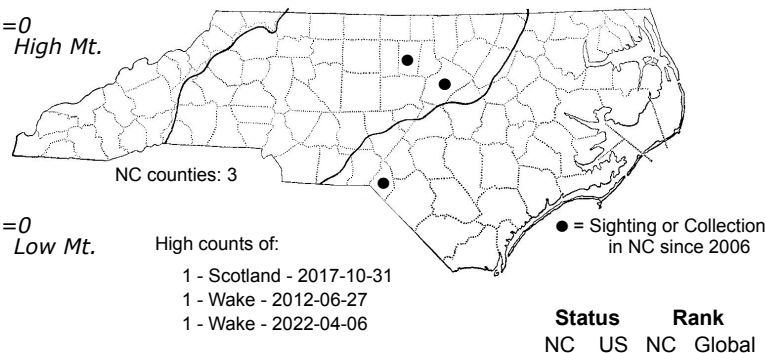
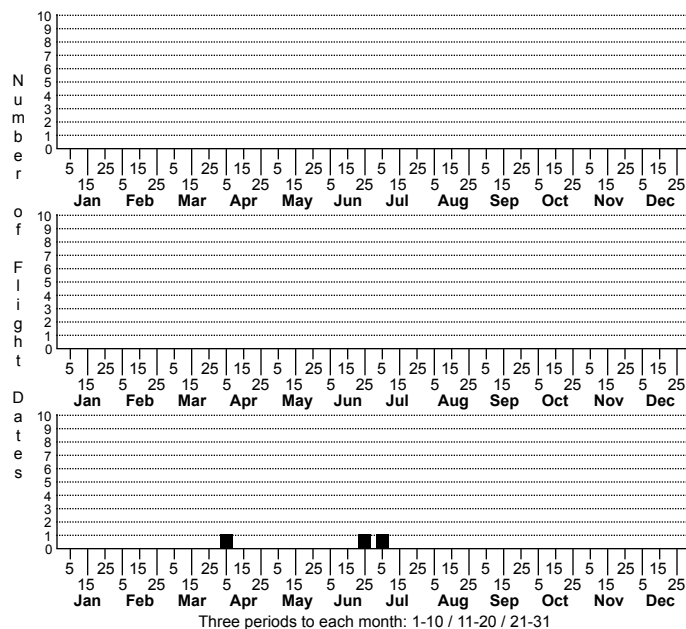


# Phyllonorycter fitchella None



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE: [Lithocolletini]

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: Braun, 1908

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is primarily based on Clemens' original description (in Braun, 1908). The face, head, tuft, and thorax are silvery white, while the antenna is pale saffron with a silvery white basal joint. The ground color of the forewings is pale reddish saffron. There are five silvery white costal streaks, and all except the first have a dark margin on the anterior edge. The first streak is very oblique and continued along the costa from the base of the wing to one-third or more of the length. The remaining four costal streaks are short and do not reach the mid-point of the wing. The forewing also has two conspicuous silvery dorsal streaks that have dark margins on the anterior edge (sometimes faint or missing on the first streak). The first streak is very large, near the middle of the wing, and tapers to a tip that is opposite the tip on the second costal streak. The second dorsal streak is opposite the third costal streak. A small round black spot is present at the wing tip, and there often is a black hook in the cilia above the spot. The cilia is silvery gray and tinted with saffron. The hindwing is grayish fuscous with paler cilia. *Phyllonorycter fitchella* is easy to identify based on the white head and thorax, the first costal streak that runs along the costa, and the very broad dorsal streak that tapers to a tip that is opposite the tip on the second costal streak.

DISTRIBUTION: *Phyllonorycter fitchella* is widely distributed in North America. In Canada it occurs from British Columbia to Quebec. It also occurs throughout much of the eastern US and as far west as Colorado. As of 2020, our only North Carolina records are from Scotland and Wake counties.

FLIGHT COMMENT: At least bivoltine

HABITAT: *Phyllonorycter fitchella* specializes on oaks, and prefers members of the white oak group. It occurs in a variety of hardwood and mixed hardwood-pine forests, as well as urban settings.

FOOD: The known hosts are White Oak (*Quercus alba*), Swamp White Oak (*Q. bicolor*), Bear Oak (*Q. ilicifolia*), Burr Oak (*Q. macrocarpa*), Sand Post Oak (*Q. margaretiae*), Chestnut Oak (*Q. montana*), Dwarf Chinquapin Oak (*Q. prinoides*), and Post Oak (*Q. stellata*). In North Carolina, Tracy Feldman has reared larvae from Sand Post Oak, Post Oak, and White Oak.

OBSERVATION\_METHODS: The adults are attracted to UV-lights, and can be reared from the tentiform mines on oak leaves.

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: We currently do not have sufficient information on the distribution and abundance of this species to accurately assess its conservation status within the state.