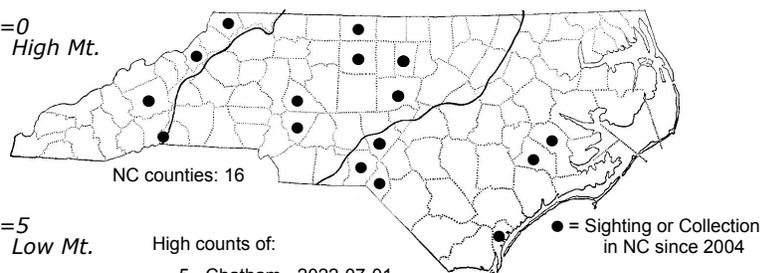
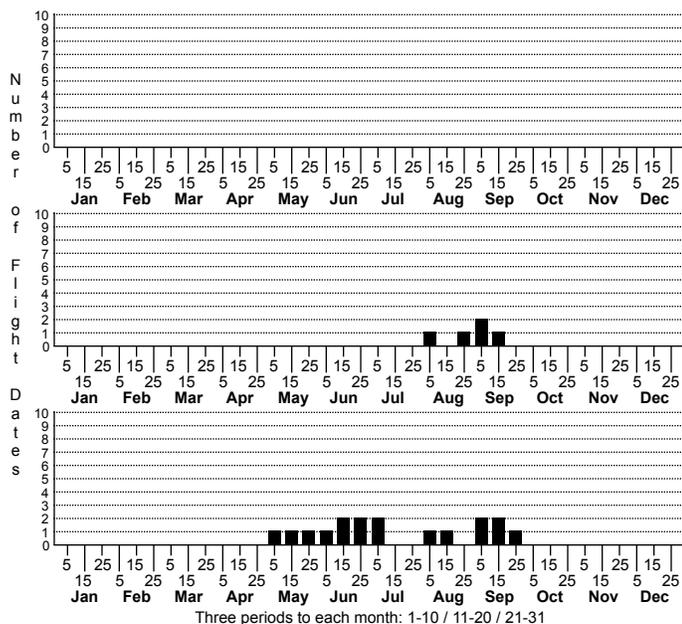
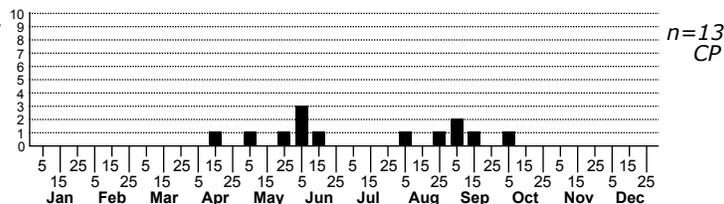


Elophila gyralis Waterlily Borer Moth



High counts of:
 5 - Chatham - 2022-07-01
 2 - Cabarrus - 2017-09-14
 2 - Craven - 2021-04-12

| Status | | Rank | |
|--------|----|------|--------|
| NC | US | NC | Global |



FAMILY: Crambidae SUBFAMILY: Acentropinae TRIBE: Nymphulini

TAXONOMIC COMMENTS: The genus *Elophila* contains nearly 50 described species that occur on most continents worldwide. Nine species occur in North America -- including seven in North Carolina -- and all have aquatic larvae that feed on floating and submerged plants. The larvae live in cases that are constructed from cut-out portions of leaves or leaf fragments, with pupation occurring within the case. The larvae are gill-less and appear to obtain oxygen by storing air in their cases.

FIELD GUIDE DESCRIPTIONS: Covell (1984; as *Munroessa gyralis*); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Munroe (1972)

TECHNICAL DESCRIPTION, IMMATURE STAGES: McGaha (1954); Munroe (1972)

ID COMMENTS: *Elophila gyralis* exhibits pronounced sexual dimorphism, with the males rather boldly patterned and the females drab. The ground color of the male's forewings varies from light brown or grayish to various shade of fuscous. The base has a wavy white antemedial line at around one-fifth that is heavily edged anteriorly with fuscous shading. The median area has a prominent dark, irregular, oval mark along the inner margin that is outlined in white. A small white spot is typically present on the costal end that is surrounded by relatively dark shading. Opposite this, and extending more posteriorly on the costal half of the wing, are three dark marks with white margins that are often joined to form a wavy loop. These include a small triangular mark in the median area of the costa, a small, subcostal, crescent-shaped mark behind this, and a short, oblique black dash in the subapical region of the costa. The final mark is a wavy, white, subterminal line with fuscous edging and teeth-like projections inwardly. The fringe is light brown or gray with darker checkering near the base. The hindwing is paler than the forewing and varies from whitish buff to medium buff. The medial area is often paler, though not contrastingly so. It is outlined by diffuse gray or fuscous lines, but not by sharp black ones as seen in some *Elophila* species (Munroe, 1972).

The females have relatively longer wings and have the maculation inconspicuous or obsolete due to a heavy overlap of orange-buff to brownish fuscous ground color. There are usually faint traces of the darker antemedial and postmedial lines. The hind wings are much paler than the males and range from whitish buff to grayish or yellowish buff. The medial area is somewhat paler in some specimens, and there are generally more or less distinct traces of sinuate fuscous antemedial and postmedial lines (Munroe, 1972).

DISTRIBUTION: *Elophila gyralis* is broadly distributed across the eastern US and adjoining areas of southern Canada from Manitoba to Nova Scotia. In the US the range extends from Maine and other New England states westward through the Great Lakes region to Minnesota, and southward to eastern Texas, southern Louisiana, southern Mississippi, southern Alabama, southern Georgia, and southern Florida. As of 2023 we have scattered records from all three physiographic provinces, with most from the Sandhills and eastern Piedmont.

FLIGHT COMMENT: The adults have been observed year-round in Florida and during all but the coldest months of the year in other southern populations. Those in the northern regions of the range mostly fly from May through October. As of 2023, our records range from mid-April through early October.

HABITAT: Populations are strongly dependent on water-lilies for successful reproduction and typically are found in the immediate vicinity of permanent freshwater habitats that support these.

FOOD: This species appears to specialize on water-lilies (*Nymphaea* spp.), with Fragrant Water-lily (*N. odorata*) being an important host (Forbes, 1910; McGaha, 1952, 1954; Munroe, 1972).

OBSERVATION_METHODS: The adults are attracted to lights and the larvae and their cases can be found on water-lily pads.

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: