

## Schinia septentrionalis Northern Flower Moth

FAMILY: Noctuidae SUBFAMILY: Heliothinae TRIBE:

TAXONOMIC\_COMMENTS: One of 126 species in this genus that occur in North America (Lafontaine and Schmidt, 2010, 2011), the majority of which occur in the West; 25 have been recorded in North Carolina.

FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Hardwick (1996); Schweitzer et al., (2011) TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954)

ID COMMENTS: A medium-sized Flower Moth, with an ochraceous ground color, heavily mottled with red-brown in the basal and subterminal areas of the forewing. Both antemedian and postemedian lines are pale; the antemedian is strongly crenulate and the postmedian sinuous with pale posterior denticles. Hindwings are black with yellow spots or completely black in form <i> brevis</i> (Forbes, 1954).

DISTRIBUTION: We have records only from the Coastal Plain but the species has the potential to occur over the entire state.

FLIGHT COMMENT: Univoltine, flying late in the year; our one record with a specific date is from September.

HABITAT: The only site for which we have habitat data is a dredge-spoil deposition area located in the estuary of the Cape Fear River. Although the Sandhills record provided by Brimley (1938) is consistent with this species being associated with native grasslands, we have too little information to make any firm conclusions. The host plants used by these species occur in a wide range of open woodlands and glades, not just Coastal Plain savannas, flatwoods, and sandhills.

FOOD: Larvae are stenophagous, feeding on blue-flowered asters, including members of the genera  $\langle i \rangle$ Symphyotrichum $\langle i \rangle$ ,  $\langle i \rangle$  Eurybia $\langle i \rangle$ , and  $\langle i \rangle$ Ionactis $\langle i \rangle$  (all formerly  $\langle i \rangle$ Aster $\langle i \rangle$ ), several of which occur within the Coastal Plain of North Carolina. Reported hosts include Eastern Showy Aster ( $\langle i \rangle$ Eurybia spectabilis $\langle i \rangle$ ), Stiff Aster ( $\langle i \rangle$ Ionactis linariifolia $\langle i \rangle$ ), Eastern Silvery Aster ( $\langle i \rangle$ Symphyotrichum concolor $\langle i \rangle$ ), Smooth Blue Aster ( $\langle i \rangle$ S. laeve $\langle i \rangle$ ), New England Aster ( $\langle i \rangle$ S. novae-angliae $\langle i \rangle$ ), and Purplestem Aster ( $\langle i \rangle$ S. puniceum $\langle i \rangle$ ) (Schweitzer et al., 2011; Wagner et al., 2011).

OBSERVATION\_METHODS: We have too few records to determine whether this species comes regularly to blacklights. Searching for larvae and adults resting in flowers is probably the most efficient way of documenting the presence of this species.

## NATURAL HERITAGE PROGRAM RANKS: G3G4 SH

STATE PROTECTION: Listed as Significantly Rare by the Natural Heritage Program. That designation, however, does not confer any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: This species is regarded as a specialist on native grasslands (Metzler et al., 2005; Schweitzer et al., 2011), which may be part of the reason for its apparent scarcity. Schweitzer et al. also state that it has undergone an apparent drastic decline in the eastern part of its range, particularly in the Northeast; it is regarded as historic or possibly extirpated in many states in that region where it was once observed regularly. The reasons for this decline, however, are unclear, although suppression of natural fires may be the most likely factor, leading to alterations of native grasslands throughout the region.