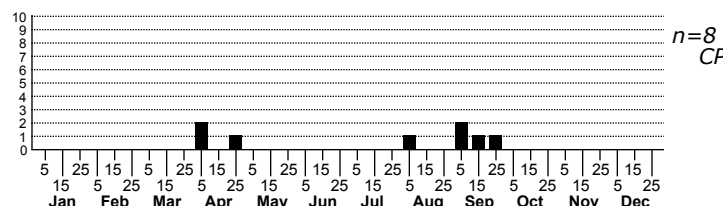
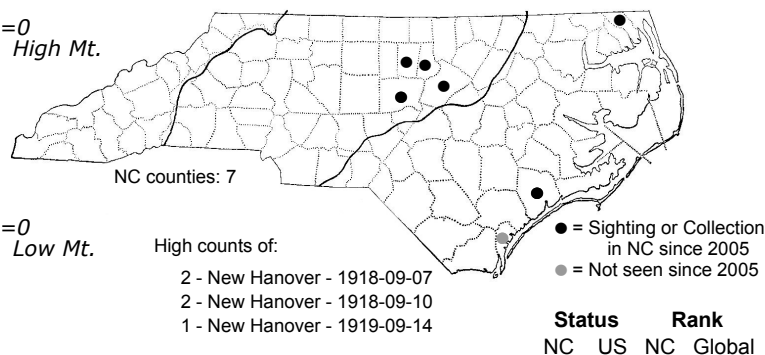
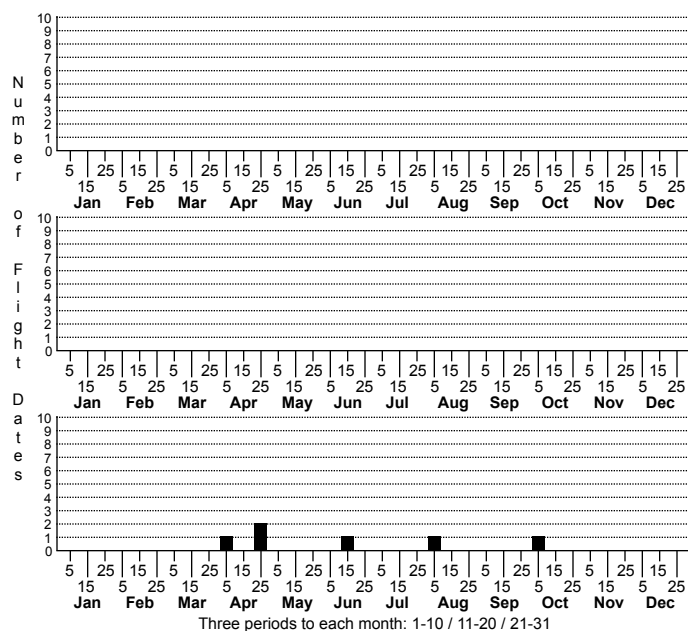


# Niditinea sabroskyi Sabrosky's Niditinea



FAMILY: Tineidae SUBFAMILY: Tineinae TRIBE:

TAXONOMIC COMMENTS: The genus *Niditinea* has 14 described species that are thought to have originally had a Holarctic distribution (Robinson, 2009). Certain members of this genus (e.g., *N. fuscella*) have since been spread around the world by humans. We currently have three described species in the US and at least three undescribed species (Metz et al., 2018).

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Metz et al. (2018)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based primarily on the description by Metz et al. (2018). The head is mostly reddish orange. The antenna is about seven tenths as long as the forewing and dark brown with a copper luster. The scape has a distinct pecten of dark brown scales. The labial palp is 20% longer than the maxillary palp, with reddish beige medially, and dark brown laterally. The maxillary palp is upturned with silvery white scales. The dorsum of the thorax has reddish beige scales that are mixed with dark brown scales throughout, along with a patch of dark brown scales anteriorly on the tegula. The legs are banded with dark brown and white patterning. The forewing has a reddish beige ground color with scattered dark brown to blackish scales. These tend to be more concentrated through the center of wing from the base to the tip, along the base of the costal margin, and around the apical circumference where they produce a checkered pattern. There are three large, dark brown spots. These include a matched pair of sub-costal and sub-dorsal spots at about one-half the wing length, and a single median spot at about two-thirds. The fringe is reddish beige with a dark brown line near the middle that parallels the checkered line on the wing tip. The hindwing is brown with a copper luster, and has a frenulum with a single bristle in the male, and two bristles in the female. The fringe is slightly lighter. The abdomen is brown above with a coppery luster.

Metz et al. (2018) noted that fresh specimens of *Niditinea* usually can be identified to species by color alone. The scales of the head and dorsum of the thorax of *N. sabroskyi* tend towards reddish-orange, and the anal area of the forewing is less tinged with brown. The head and thoracic scales of *N. orleansella* tend to creamy-white, with dark gray to black scales, and the anal area of the forewing is usually tinged with dark gray scales. The head and thoracic scales of *N. fuscella* are darker, and tend towards brown, with dark brown scales. The anal area of the forewing is less differentiated, usually with a broad band or spot adjacent to the hind margin. Some specimens of *N. sabroskyi* are dark and resemble those of *N. fuscella*, so definitive identifications require the examination of genitalia.

DISTRIBUTION: The distribution of *N. sabroskyi* is obfuscated by the fact that many museum specimens that were labelled as either *N. fuscella* or *N. orleansella* are actually this recently described species. Metz et al. (2018) identified specimens based on genitalia from throughout much of the eastern US, including from New Hampshire, Massachusetts, the District of Columbia, New Jersey, New York, Maryland, North Carolina, Florida, West Virginia, Illinois, Missouri, Ohio, Oklahoma, and Texas. As of 2020, we have records from the Coastal Plain and eastern Piedmont.

FLIGHT COMMENT: Adults have been found from February through September in areas outside of North Carolina, with southern populations active in late winter or early spring, and northern ones later. As of 2020, our limited records are from April and June, excluding specimens that were reared from human waste (Metz et al., 2018).

HABITAT: The larvae of this species are associated with bird nests. They have been found in avian species that inhabit urban environments, as well as more natural systems such as bottomland forests and wetlands.

FOOD: Metz et al. (2018) found that this species tends to specialize on bird nests, where the larvae presumably feed on organic debris such as feathers or droppings. There is one instance of the larvae being taken from a wasp nest, one from chicken feathers, and another where they were raised on human waste. Bird nests that were used include those of the Prothonotary Warbler, Crested Caracara, Song Sparrow, American Robin, European House Sparrow, European Starling and Osprey.

OBSERVATION\_METHODS: The adults are attracted to lights, and the larvae have been reared from bird nests and chicken feathers. We encourage naturalists to attempt to raise these from abandoned bird nests to better document the moth fauna in North Carolina that uses this food resource.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

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