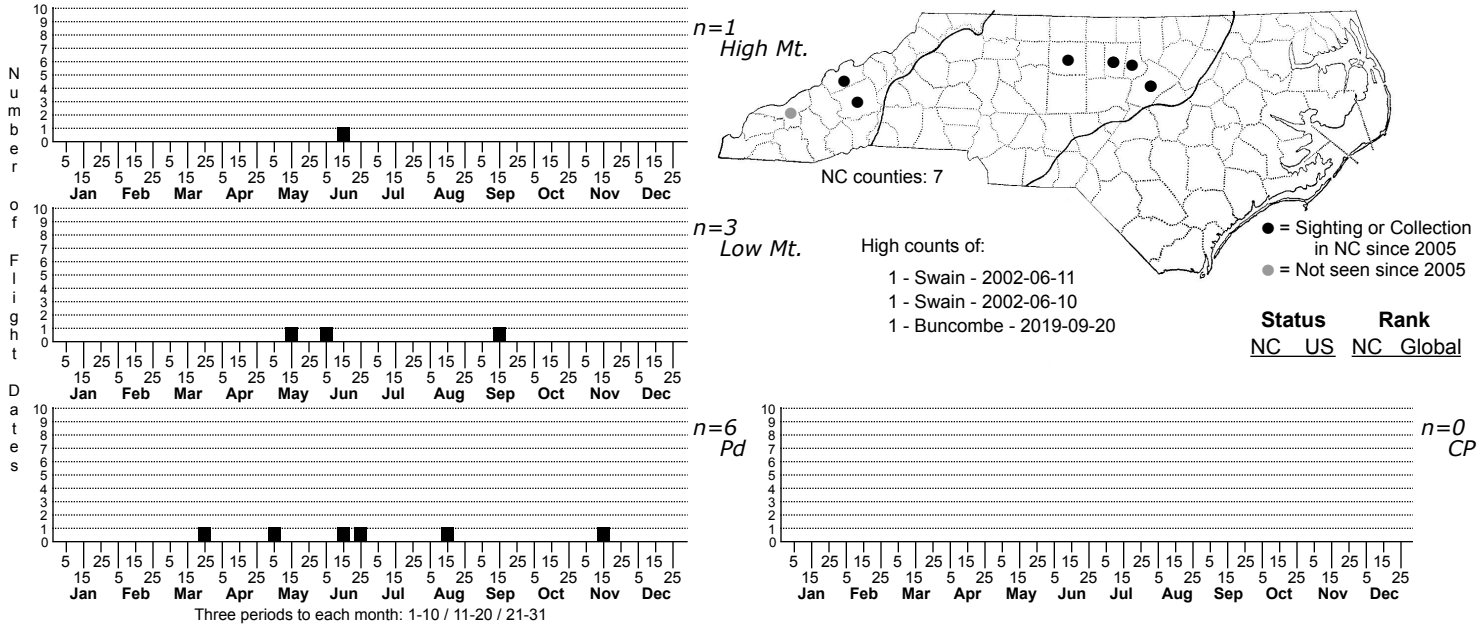
Niditinea fuscella European House Moth



FAMILY: Tineidae SUBFAMILY: Tineinae TRIBE: [Tineini]
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: Dietz (1905); Metz et al. (2018)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based in part on the description by Dietz (1905). The head varies from ocherous russet to brownish. The labial palp is pale ocherous below and fuscous externally. The antenna is brown, and the thorax ocherous brown and darker anterior. The ground color of the forewing is pale ocherous and overlain with varying densities of dark brown scales. The costa is dark fuscous with numerous small pale dots that are sometimes lacking, except towards the apex. The dark scales tends to be concentrated along the central portion of the wing, along the costa, and the wing tip where they are often organized into 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. Some specimens have a dark, posteriorly oblique streak or complete fascia at about one-fourth the wing length. The cilia are lighter than the forewing and usually have a partial or complete dark line just above the base. The hindwings and cilia are grayish to light brown and unicolorous, while the abdomen is ocherous brown. The legs are marked with alternating pale and dark bands. This species tends to be the darkest colored of our Niditinea species.

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 and N. orleansella are dark and resemble those of N. fuscella, so definitive identifications require the examination of genitalia.

DISTRIBUTION: This species appears to be widespread in North America, but many of the older records could be those of either N. orleansella or N. sabroskyi. Specimens that were identified by Metz et al. (2018) based on genitalia were from Washington, Montana, Kansas, Missouri, Georgia and the northeastern states. As of 2020, our records are from the Piedmont and the mountains.

FLIGHT COMMENT: Adults occur throughout the year, particularly in the southernmost populations. As of 2020, our records extend from March through September.

HABITAT: This species is associated with human habitations, where the larvae most commonly feed on stored grains and other organic human products.

FOOD: The larvae do not feed on live plant foliage, but instead consume a variety of grains and dead organic matter. In the US, Metz et al. (2018) reported records of adults that were reared from dried potatoes, a hair "mattress", a dead Isabella Tiger Moth, an American Robin carcass, dry animal feed, wheat seed, bird seed, a chicken coop, a whale bone, grasshopper eggs, and a deer tick carcass. Surprisingly, there was little evidence that this species feeds in bird nests, although this has been reported at locations outside of the US.

OBSERVATION_METHODS: The adults are attracted to lights, and the larvae are occasionally found in stored grain and other organic food resources. Specimens should be collected since positive identification may require the examination of genitalia.

NATURAL HERITAGE PROGRAM RANKS: GNR SNA

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

COMMENTS: This is an exotic species and does not merit protection.