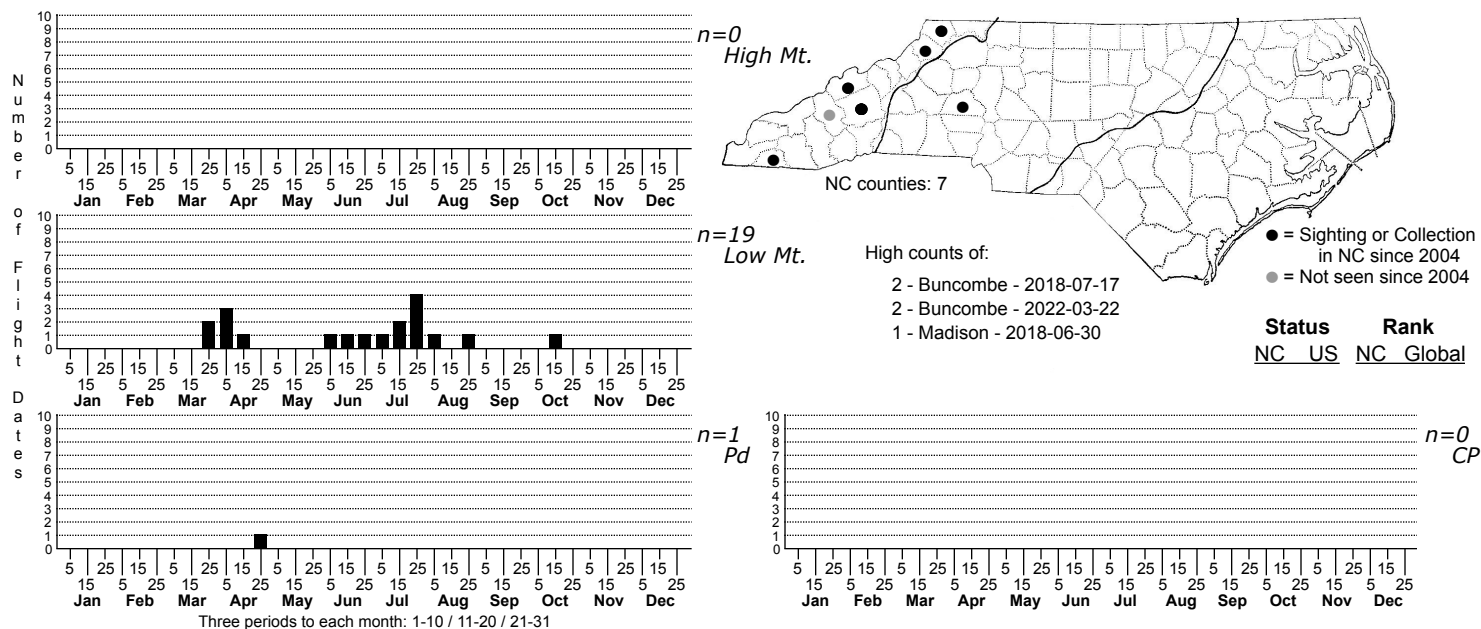


Acleris nivisellana Snowy-shouldered Acleris Moth



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Tortricini
 TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES: Chapman and Lienk (1971)

ID COMMENTS: This is one of our most distinctly marked *Acleris*. The palps are yellowish-brown and the head dark-brown to black. The thorax and apical half of the forewing are contrastingly snowy-white, with the latter having the white ground overlain with grayish mottling and vermiculations. A conspicuous chestnut-brown scale tuft that is followed by patches of black scales is present below the inner margin at around one-third the wing length, while a line of dark, raised scales is present on the distal third of the wing. A dark-brown triangular patch that terminates near the center of the wing is present just beyond the midwing. The triangular mark has patches of dark brown and silvery-blue scales on the posterior margin, and the region between it and the inner margin is filled with varying amounts of a creamy-coffee wash and similar-colored raised scale patches on a white background. Beyond the triangular patch and coffee wash is a region with a mottled mix of white, chestnut-brown and darker-brown scales that extends to the outer margin. The fringe is dark-brown with a slightly darker basal line, while the hindwing is light brown with a slightly lighter fringe.

DISTRIBUTION: *Acleris nivisellana* is widely distributed across southern Canada (British Columbia eastward to Nova Scotia and Prince Edward Island), and in the cooler climatic regions of the U.S., including Washington, Oregon, central and northern California, Colorado, Wyoming, western Nebraska and portions of the eastern U.S. In the East the range extends from Maine southwestward to western North Carolina and eastern Tennessee, and westward to eastern Kentucky, Illinois, eastern Nebraska, Iowa, Minnesota and northeastern North Dakota. As of 2024, most of our records are from lower-elevation sites in the Blue Ridge, with one record from the Piedmont.

FLIGHT COMMENT: The adults of this wide-ranging species have been found during every month of the year except December, with most populations probably having one or two broods per year depending on the latitude and length of the growing season. Populations in North Carolina have a seasonal peak in March and April that is followed by a second adult emergence in June and July. Larvae from the second brood presumably overwinter and resume growth in late-winter as suggested by Chapman and Lienk (1971), with the adults emerging in March and April.

HABITAT: This species occurs in apple orchards and often in partially sunny, mesic habitats that support the host species.

FOOD: Larvae feed on members of the Rosaceae (Forbes, 1923; McDunnough, 1934; Schaffner, 1959; Powell, 1964; Prentice, 1966; Chapman and Lienk, 1971; Ferguson, 1975; Brown et al., 2008; Gilligan and Epstein, 2014). The reported hosts include hawthorns (*Crataegus*), Common Apple (*Malus domestica*), Mallow Ninebark (*Physocarpus malvaceus*), Fire Cherry (*Prunus pensylvanica*) and Greene's Mountain-Ash (*Sorbus scopulina*). As of 2024, we do not have any feeding records for North Carolina.

OBSERVATION_METHODS: The adults are attracted to lights.

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: This species appears to be uncommon in North Carolina, with fewer than 10 site records as of 2024. More information is needed on host use and habitat requirements within the state before we can accurately assess its conservation status.