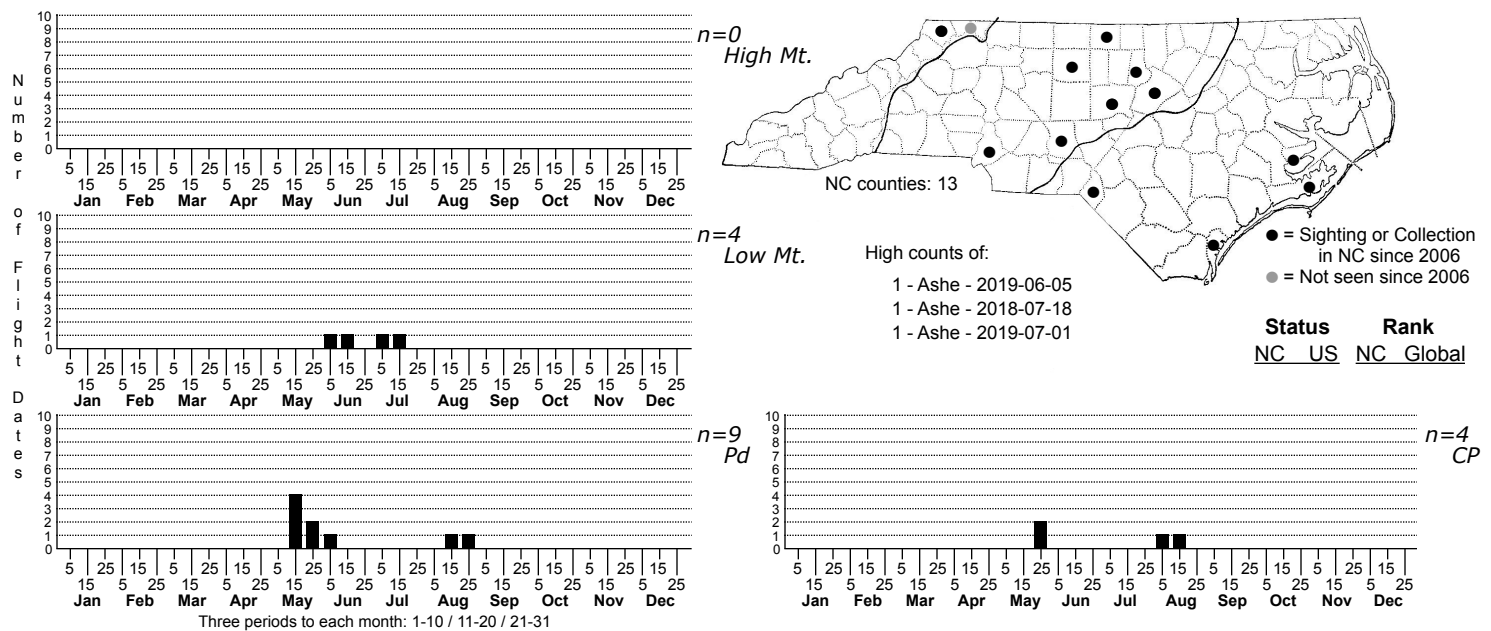


Donacula longirostrallus Long-beaked Donacula



FAMILY: Crambidae SUBFAMILY: Schoenobiinae TRIBE: [Schoenobiini]

TAXONOMIC_COMMENTS: Members of the genus *Donacaulis* are found worldwide, but reach their greatest diversity in the Nearctic region. The group has proven to be taxonomically challenging due to the fact that most of the species are sexually dimorphic, are very similar externally, and exhibit substantial variation within species. Genitalia have proven to be the most useful diagnostic characters for delineating species, but almost all of the species were originally described based on external coloration and patterning. Descriptions and illustrations of genitalia were also lacking for most species until Martinez (2010) undertook a major revision of the Nearctic species. Her work revealed that there were at least 10 undescribed species in addition to the 11 described species in the New World. Additional studies of DNA barcoding and genitalia, including for North Carolina material, indicate that additional undescribed species remain to be formally described. "Some of these are probably identifiable, but, even with the Martinez thesis, there is a great deal of variation, and especially sexual dimorphism that makes these difficult" (Scholtens, 2017).

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Martinez (2010)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based on the description by Martinez (2010). The frons, labial palps, antennae and thorax have a mixture of yellowish-white and pale-yellow scales. The forewing ground color is yellowish-white and irrorated with light brown scales, but some specimens have a whitish appearance. The costa is light brown from the base to near the apex, and the discal cell has a brown spot near the distal end. The apex has a brown oblique line that projects toward the outer two-thirds of the inner margin. It ends or becomes indistinct shortly before reaching the inner margin and sometimes ends in a brown spot. Some specimens may have a second, weakly angled line near the middle of the wing that roughly parallels the first line and ends in a brown spot. The hindwing is yellowish-white, and both the forewing and hindwing have a line of terminal spots on the outer margin, with those of the latter often being faint.

DISTRIBUTION: This species is widely distributed in the eastern U.S. and adjoining areas of southern Canada. Martinez (2010) identified specimens from Ontario, Quebec, Nova Scotia, Maine, Vermont, Connecticut, Massachusetts, New York, New Jersey, Pennsylvania, Virginia, North Carolina, South Carolina, Florida, Alabama, Mississippi, Louisiana, Texas, Arkansas, Nebraska, Michigan and Ohio. This species occurs in all three physiographic provinces in North Carolina, but is relatively rare in the Blue Ridge and Coastal Plain.

FLIGHT COMMENT: The adults have been observed from May through September in different areas of the range, but typically fly for only a month or two locally, with June and July being the peak months in most states and provinces. As of 2023, our records are from mid-May to early August.

HABITAT: We have records from a variety of habitats, including xeric habitats in the Sandhills, a mountain meadow, mesic woodlands, and residential neighborhoods.

FOOD: The hosts are undocumented.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2-S3]

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

COMMENTS: This species is uncommon but widespread in North Carolina. More information is needed on its host plants and habitat requirements before we can assess its conservation status within the state.