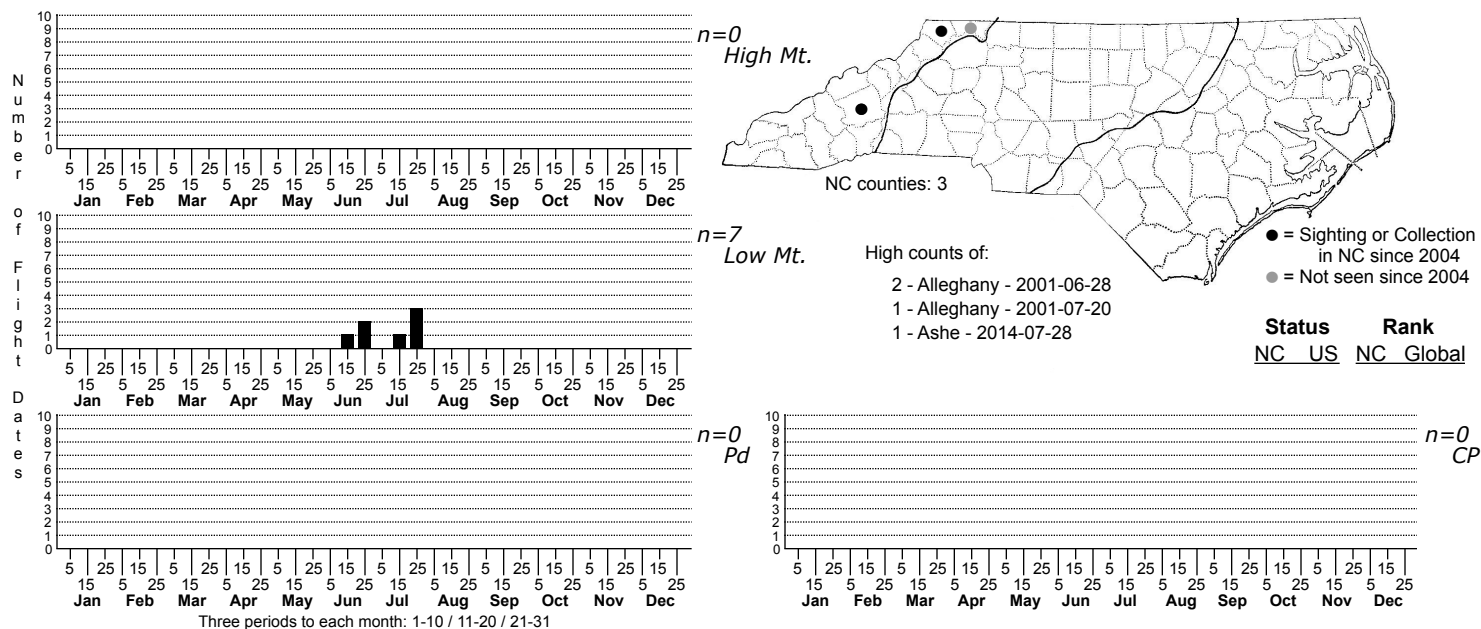


## *Catocala dulciola* Sweet Underwing



FAMILY: Erebidae SUBFAMILY: Erebinae TRIBE: Catocalini

TAXONOMIC COMMENTS: One of 103 species in this genus that occur in North America (Lafontaine and Schmidt, 2010, 2015), 67 of which have been recorded in North Carolina. Included by Barnes and McDunnough (1918) in their Group XVII (also adopted by Forbes, 1954), which feed mainly on members of the Rosaceae; 12 other members of this group (as redefined by Kons and Borth, 2015b) also occur in North Carolina.

FIELD GUIDE DESCRIPTIONS: Covell (1984)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Sargent (1976); Schweitzer et al. (2011)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Schweitzer et al. (2011); Wagner et al. (2011)

ID COMMENTS: A medium-sized, pale gray Underwing with a dark, evenly rounded, double antemedial line on the forewing that strongly contrasts with the pale gray median area. As in *C. praeclara*, a short but strong basal dash is also present but extends primarily along the anal vein and lacks a well-developed upper fork. The postmedian is less well developed, similar to *alabamae*, and the terminal area is evenly shaded but not strongly contrasting with the median area. Hindwings are yellow-and-black banded, with a complete postmedian loop similar to other members of this species group (Forbes, 1954; Sargent, 1976).

DISTRIBUTION: This species is found primarily in the upper Mid-West but extends eastward to the Ridge-and-Valley Province in West Virginia and Virginia. The sole known North Carolina populations are located in the New River valley, which extends northward to the Ridge-and-Valley Province before turning westward towards the Ohio.

FLIGHT COMMENT: Our two records were made in June and July, which is consistent with dates elsewhere within its range (Schweitzer et al., 2011).

HABITAT: Our records come from sites that have a mixture of pastures, old fields and regenerating hardwoods.

FOOD: Stenophagous, feeding primarily or exclusively on hawthorns (*Crataegus* spp.), although the exact species used in North Carolina have not yet been determined.

OBSERVATION\_METHODS: Comes somewhat to lights but much more to bait (Schweitzer et al., 2011).

NATURAL HERITAGE PROGRAM RANKS: G3 S2S3

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: Despite its association with what appears to be fairly common habitat, this species is considered Globally Rare by NatureServe. While it is currently known from just a few sites in the northwest corner of North Carolina, we expect more sites to be occupied based on the widespread presence of apparently suitable habitat. More surveys need to be conducted, however, to determine whether it is using only particular species of Hawthorns that themselves may be rare or patchily distributed. The main threat to this species is likely to be spraying campaigns used to combat Gypsy Moths, particularly where broad-spectrum control agents are used, such as Btk. In any areas known to possess populations of *dulciola*, we recommend that only Gypsy-moth specific control measures be used.