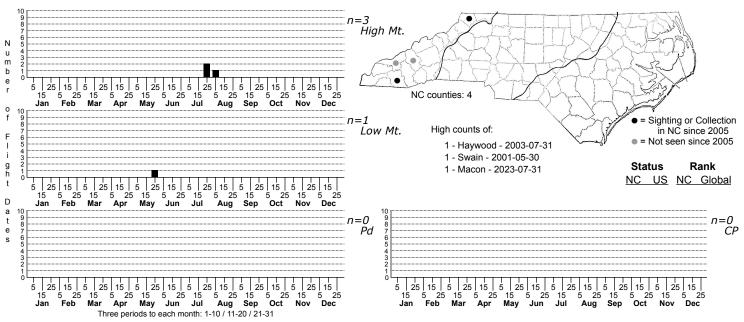
## Hadena ectypa Campion Coronet



FAMILY: Noctuidae SUBFAMILY: Noctuinae TRIBE: Hadenini TAXONOMIC\_COMMENTS: One of fifteen species in this genus that occur in North America north of Mexico (Lafontaine and Schmidt, 2010), only two of which have been recorded in North Carolina.

## FIELD GUIDE DESCRIPTIONS:

## ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Pogue (2009); Schweitzer et al. (2011)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954); Kephart et al. (2009); Schweitzer et al. (2011); Wagner et al. (2011)

ID COMMENTS: A medium-sized Noctuine. Forewings are dark, purplish brown with a large blackish claviform spot and dark shading between the reniform and postmedian and at the anal angle before the subterminal. The orbicular and reniform are pale, as is the subterminal line, which is less zig-zagging than in other Hadenines (Forbes, 1954). The hindwings are dark brown. Forbes noted that Polia goodelli is similar in size and pattern and both Pogue (2009) and Schweitzer et al. (2011) noted the same for Orthodes detracta -- all three species possess a conspicuous dark claviform -- but the other two species lack the contrastingly pale, relatively even subterminal line characteristic of ectypa.

DISTRIBUTION: Records in North Carolina come from three ranges of high mountains: the Nantahala Mountains and Great Smoky Mountains in the south and Bluff Mountain in the north.

FLIGHT COMMENT: Our records come mainly from May and July but a recent record comes from September.

HABITAT: Habitats at the two sites where Hadena ectypa has been collected in North Carolina are unclear but appear to be Montane Alluvial Forest (now converted to development) in one case, and old field habitats in the other.

FOOD: Larvae are stenophagous, feeding on species of  $\langle i \rangle$ Silene $\langle i \rangle$ , including the native Starry Campion ( $\langle i \rangle$ S. stellata $\langle i \rangle$ ) and Fire Pink ( $\langle i \rangle$ S. virginica $\langle i \rangle$ ) (Kephart et al., 2005) as well as the introduced Bladder Campion ( $\langle i \rangle$ S. vulgaris $\langle i \rangle$ ) (Wagner et al., 2011). Adults also nectar on  $\langle i \rangle$ Silene $\langle i \rangle$  and appear to be important pollinators of these plants (Kephart et al. 2005).

OBSERVATION\_METHODS: Comes at least somewhat to blacklights but may be undersampled by this method (Schweitzer et al., 2011); sampling for larvae indicates that it may be more common, at least in some areas, than indicated by adult collections. Adults come to flowers, including <i>Silene</i> species, but we do not know of any records from bait.

## NATURAL HERITAGE PROGRAM RANKS: G3G4 S1S2

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: Ectypa has long been considered uncommon to rare (Forbes, 1954; Schweitzer et al., 2011), perhaps most especially in the extreme southern extension of its range into the mountains of North Carolina and Georgia; currently we have just four records for North Carolina. The reasons for this rarity, however, are unclear, given that its host plants are fairly widespread and it may, in fact, be expanding its distribution by adapting to introduced species of Silene (Schweitzer et al., 2011). Overbrowsing of its host plants by deer appears to be at least one appreciable threat to its populations (Schweitzer et al., 2011), but larval surveys may be needed to resolve its true distribution and conservation status.