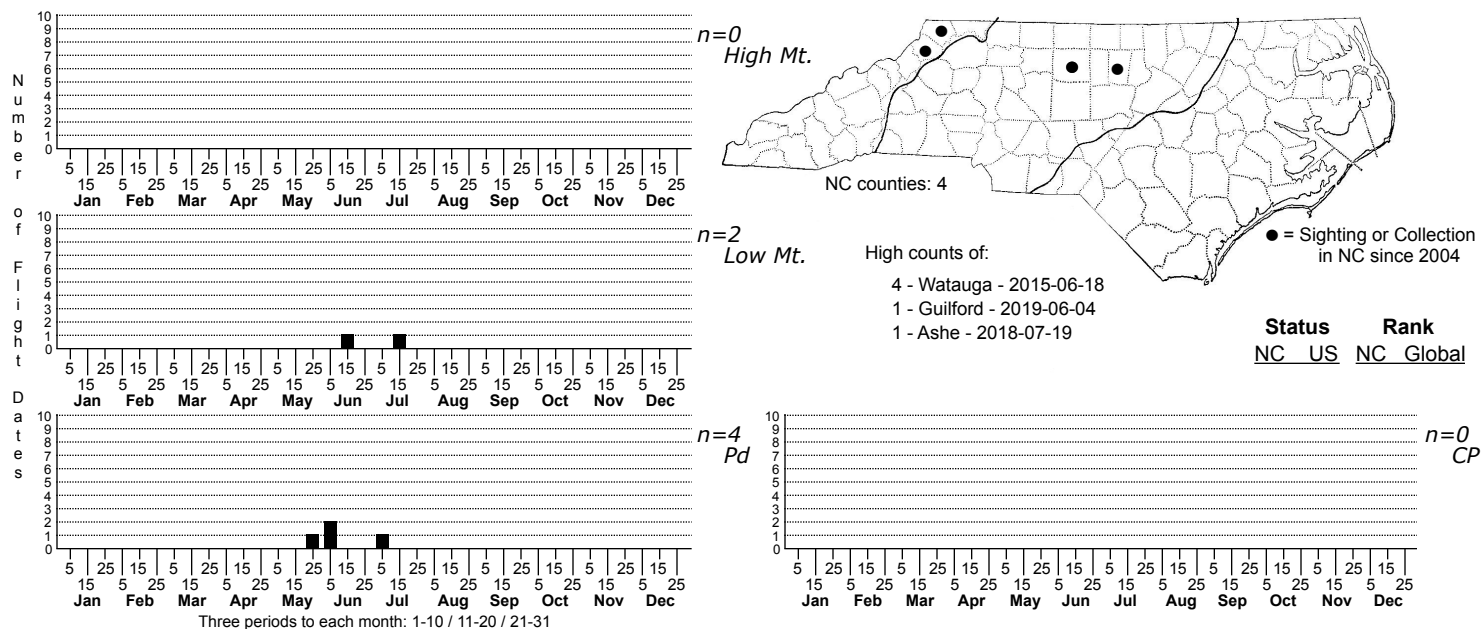


Coleophora trifolii Large Clover Casebearer Moth



FAMILY: Coleophoridae SUBFAMILY: Coleophorinae TRIBE: [Coleophorini]

TAXONOMIC_COMMENTS: The genus *Coleophora* is one of the most taxonomically challenging groups in North America. With only a few exceptions, most species cannot be identified based on photographs or external characters. The shape of the larval cases and host plants are very useful in identifying species, and high-quality dissections of genitalia are essential to recognize the majority of species. There are numerous species complexes with many undescribed species, and the taxonomy of Nearctic species remains largely unresolved.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS:

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Adults of *C. trifolii* are the largest of the metallic-green group, and are among the largest North American coleophorids. The following is based on the description by Landry and Wright (1993). The frons is pale yellow or silvery yellow with a brassy sheen, and the vertex and collar brilliant metallic brassy green. The post-ocular scales, which are hair-like scales immediately behind the eye, are pale yellow. The labial palp is olive gray with a brassy or silvery sheen. The scape of the antenna is metallic brassy green with a purplish tinge. The flagellum is uniformly olive brown, except for the white tip on the apical one-fifth. The thickened semi-erect scales of the antenna are rather inconspicuous, and are only present on the scape and base of the flagellum in the female, and only on the scape in the male. The thorax is brilliant brassy green above. The forewing is a brilliant metallic brassy green, and the apical portion has a reddish purplish sheen. The hindwing surface is shiny olive gray or olive brown, and the cilia are dark olive brown. The legs are brassy silvery, and the outer surface of the hind leg has a reddish sheen in females. This species is externally similar to *C. deauratella*, but is larger on average, has pale yellow post-ocular scales (dark brown in *C. deauratella*), and has brighter and lighter green forewings. In addition, the thickened base of the antenna is shorter relative to that of *C. deauratella*.

DISTRIBUTION: *Coleophora trifolii* is native to Europe, northern Africa, and in the Middle East to Afghanistan. It was first documented in North America in the mid-1960's (Landry and Wright 1993), and is now widespread in much of southern Canada and the US east of the Rockies. As of 2021, all of our records are from the Piedmont and lower elevations in the mountains.

FLIGHT COMMENT: Local populations are univoltine. The adults are active from May through September in areas outside of North Carolina, with a strong seasonal peak in June and July. As of 2021, our records are from June and July.

HABITAT: The moths require sweetclover as a food source. These introduced species are common in open habitats such as along roadsides, in old fields, along the edges of agricultural fields, and in waste places.

FOOD: The larvae feed on species of sweetclover (*Melilotus* spp.), including Yellow Sweetclover (*M. officinalis*).

OBSERVATION_METHODS: The adults are attracted to lights, and are active during the day around the host plants. They are commonly seen perched on flowers of the host plant, but they are very skittish and will take to the wing at the slightest disturbance.

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 introduced species that does not merit protection.