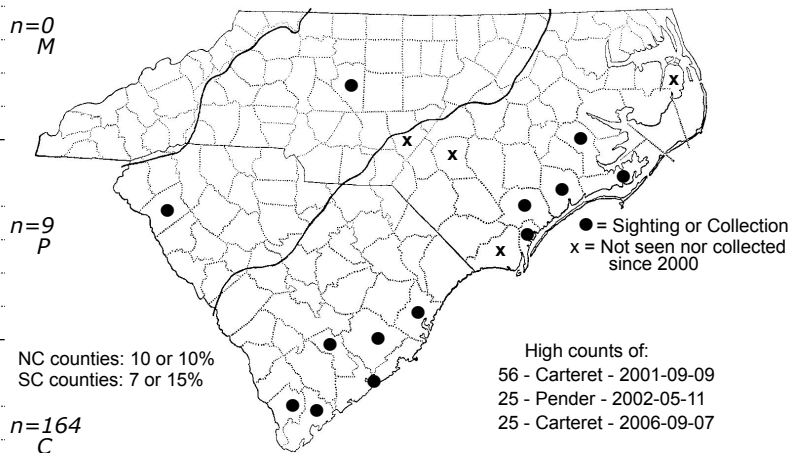
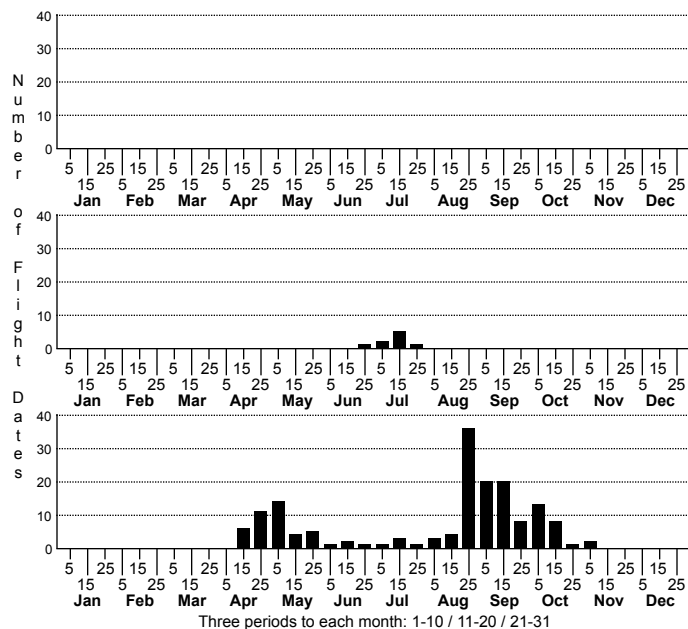


Little Metalmark *Calephelis virginienis*



Earliest date: Pender 11 Apr 2023
Latest date: Onslow 10 Nov 2021

Status and Rank
State Global
SR - S2 G4

DISTRIBUTION: Scattered over the southern half of the Coastal Plain, but now apparently restricted to the lower Coastal Plain; formerly occurred in the Sandhills region and in mainland Dare County. Probably absent from the inner Coastal Plain north of Cumberland County, and might now be absent north of Croatan National Forest (Craven County). Accidental in the central Piedmont, where a shocking discovery was made in 2022 in Davidson County; in fact, a few individuals were again seen and photographed at that site in 2024. Certainly, a small colony there has survived the harsh winters for several years.

ABUNDANCE: Uncommon, and restricted in habitat; may be locally common. Very rare to absent over Coastal Plain locales away from Longleaf Pine (*Pinus palustris*) habitats. Certainly has declined in the Sandhills, as there are no recent records. Accidental in the Piedmont.

FLIGHT PERIOD: Seemingly three broods -- mid- or late April to early June, late June to late July, and mid-August to mid-October, rarely into November. The last brood is clearly the most numerous; highest numbers occur in early to mid-September. The second brood in early to mid-summer is quite small, but fresh individuals are seen then, and it does seem to be a small second brood and not a delayed first brood. It is not simply early individuals of the large late summer/fall brood, as observers see a clear emergence of fresh individuals starting in the latter half of August. The Piedmont records are from late June to late July.

HABITAT: The species seems to require, or at least be found primarily in, high-quality Longleaf Pine communities. It is most numerous in pine savannas and flatwoods, which have mostly been destroyed by timber plantations, development, etc. It probably occurs (or formerly occurred) in similar habitat in the Sandhills. It is rare or absent in the drier pine/scrub oak habitats.

FOOD AND NECTAR PLANTS: The primary foodplant has been reported to be Yellow Thistle (*Cirsium horridulum*). However, Bo Sullivan (pers. comm.) has found that Vanilla-leaf (*Trilisa odoratissima*), a tall purple-flowered composite, is a (and probably sole) foodplant in NC. This plant is common in the savannas and flatwoods where the metalmark is present, and thus seems to be the correct solution to the mystery (i.e., there seems to be no correlation in NC between the thistle and the butterfly). Whether any species of thistle is a foodplant in NC is open to question, but perhaps the small colony in Davidson County uses thistle as a foodplant. The species nectars on many flowers, but it is often seen resting on leaves and stems.

COMMENTS: This small and moth-like species can be numerous in a few high-quality flatwoods and savannas. There is still much to be learned about it in NC. How often does it occur away from flatwoods and savannas? Is it found at all in dry pine/scrub oak habitats, such as those common in the Sandhills? At any rate, it has been found at alarmingly few new sites in the last 25 years.

Completely unexpected was the photographing of several individuals in far inland Davidson County in 2022. An unnamed observer posted photos on iNaturalist, first of an adult in an overgrown field on July 1. On July 3, this person photographed a remarkable four individuals at two sites in this vicinity. Several were again photographed there in 2024. Obviously, these several adults eclosed from some foodplant, whatever that might have been, very close to this area, as metalmarks are very poor fliers and have no history of straying in the state.