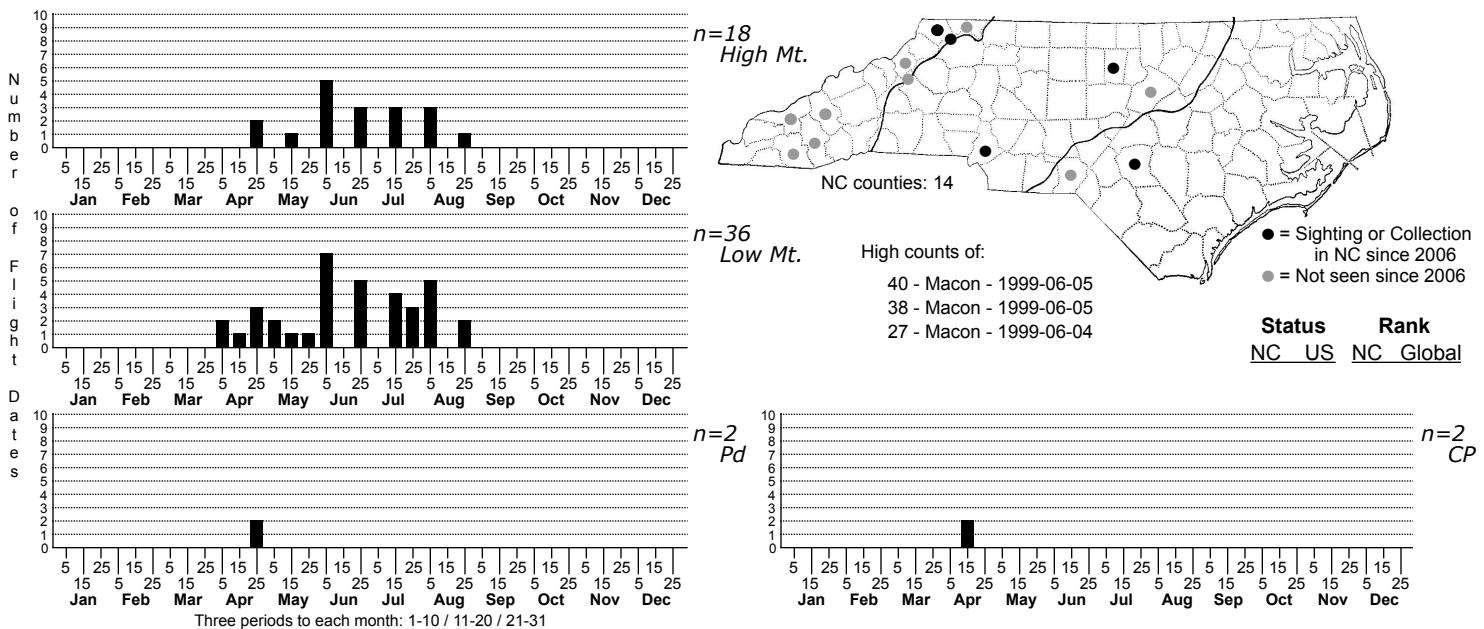


## *Pero honestaria* Honest Pero



**FAMILY:** Geometridae **SUBFAMILY:** Ennominae **TRIBE:** Azelinini

**TAXONOMIC COMMENTS:** One of nineteen species in this genus that occur in North America north of Mexico (Poole, 1987; Pohl et al., 2016), four of which have been recorded in North Carolina

**FIELD GUIDE DESCRIPTIONS:** Covell (1984); Beadle and Leckie (2012)

**ONLINE PHOTOS:**

**TECHNICAL DESCRIPTION, ADULTS:**

**TECHNICAL DESCRIPTION, IMMATURE STAGES:**

**ID COMMENTS:** Partially sexually dimorphic. Most males have a coal-black to blackish-gray ground color, which sets them apart from our other species of *Pero* (Grossbeck, 1910; Forbes, 1948; Poole, 1987). Females and a small number of males are light brown (see photo on MPG from Jim Vargo) rather than blackish gray and are more difficult to distinguish particularly from *P. ancetaria*. In all forms, the subterminal area is contrastingly pale and lacks the mottling that is often found in the two other species. *P. honestaria* also lacks the pale, strongly mottled costal margin that usually found in *P. morrisonaria* and at least occasionally in *P. ancetaria*. Some forms of *P. ancetaria* that have a pale, non-mottled subterminal area are probably best distinguished by structural differences (see below). However, the course of the postmedian line (the outer edge of the dark median area) may help separate these two species, although that needs to be confirmed based on specimens confirmed through their structural features. In our dark gray males, at least, the postmedian line has a strong inward bend at the middle, with the upper and lower sections of the line nearly straight; a female collected by Jim Vargo shown on MPG has this same pattern. In *P. ancetaria*, the postmedian is much more undulating, often with two large, outwardly bulging curves. More females and males of the brown form need to be examined to see if the same pattern exists.

**DISTRIBUTION:** Most of our records come from the Mountains but we also have good records (blackish males) from as far east as Orange County (Brimley, 1938 also listed records from Wake and Richmond Counties).

**FLIGHT COMMENT:** Please refer to the flight charts.

**HABITAT:** Records from the mountains come primarily from high elevation hardwood forests, cove forests, and montane riparian forests. The record from Orange County comes from a mature stand of bottomland hardwoods and records from Cumberland County come from streamhead peatlands.

**FOOD:** Grossbeck (1911, and repeated by Forbes) listed Black Cherry as the host, based on one rearing that produced an adult. However, he also lumped *P. ancetaria* together with *P. honestaria*, so its unclear what species the reared specimen actually represented as currently defined. According to Wagner (2005) larval records are probably confused with those for *P. morrisonaria* and *P. ancetaria*, and this species is likely to feed on a variety of hardwood trees and shrubs.

**OBSERVATION METHODS:**

**NATURAL HERITAGE PROGRAM RANKS:** G5 SNR [S2S4]

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

**COMMENTS:**