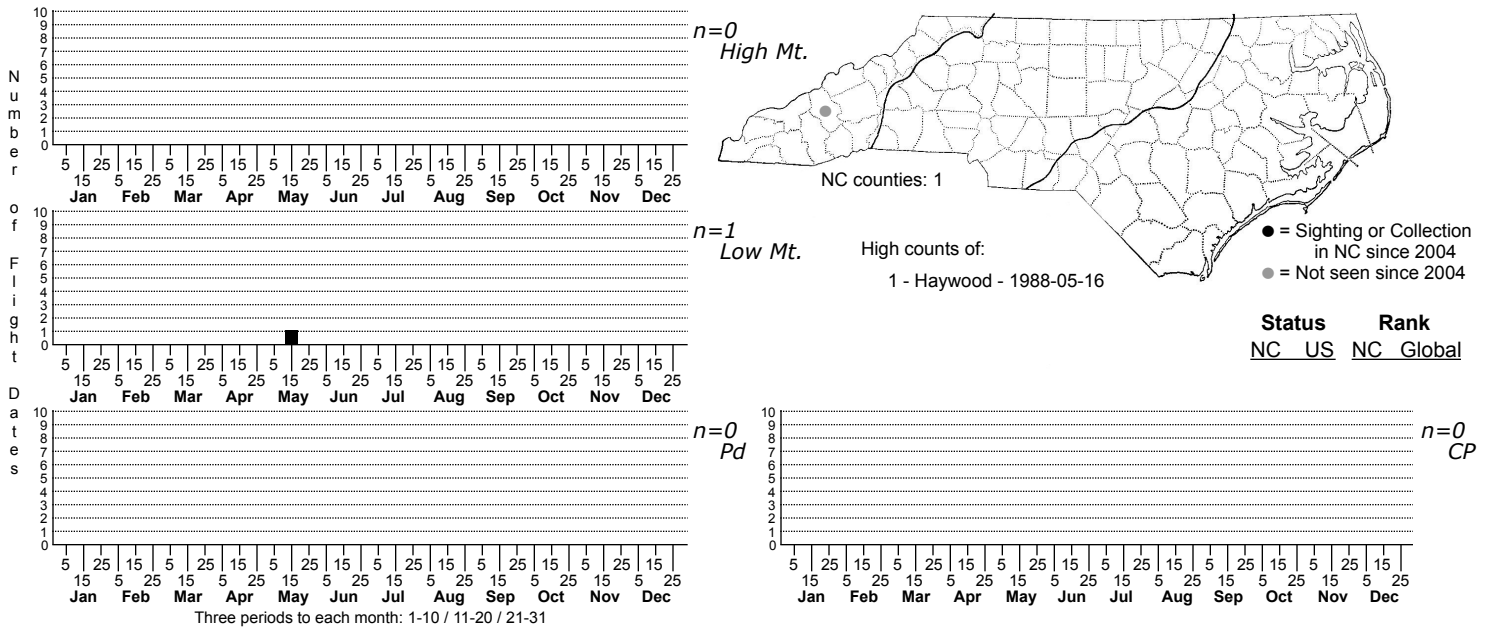


*Petrophora subaequaria* Northern Petrophora Moth



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Lithinini

TAXONOMIC COMMENTS: One of two species in this genus that occur in North America (Hodges et al., 1984), both of which have been recorded in North Carolina

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1948)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948); Wagner et al. (2002)

ID COMMENTS: A medium-sized Geometrid, with pointed, light gray forewings (Forbes, 1948). The antemedian and postmedian are both pale gray -- lighter than the ground color -- and edged inwardly with brown; the subterminal is also bounded outwardly by a darker shade that fills the subterminal area. Both lines are fairly straight or slightly curved. In *P. subaequaria*, the postmedian intersects the costa at about 4/5 of the way out from the base, whereas in *P. divisata*, the postmedian reaches 5/6 of the distance; the ground color of *divisata* also has a pink tinge that is not present in *subaequaria* (Forbes, 1954). Species in the Erebid genus *Ptichodis* are also similar in wing shape and in the configuration of their lines. However, those species have large reniform spots, not just the small discal spots present in *P. subaequaria*; their lines are also yellowish rather than pale gray.

DISTRIBUTION: This is primarily a northern species with only a single record in the southern mountains of North Carolina

FLIGHT COMMENT: Flies in May and June in the North (Forbes, 1948), which is consistent with our one record from May

HABITAT: The habitat was not recorded at its one North Carolina location.

FOOD: Oligophagous, feeding a several species of ferns (Forbes, 1948) including Bracken (Wagner et al., 2002)

OBSERVATION METHODS: Comes to some extent to lights; larvae can be searched for by beating or sweep-netting ferns

NATURAL HERITAGE PROGRAM RANKS: G4G5 SH

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: The presence of this species in the Southern Appalachians rests on a single historic specimen. It was not collected in the Great Smoky Mountains National Park All Taxa Biological Survey, nor has it been found in other surveys conducted in the mountains of North Carolina. As a fern-feeding species -- especially if it feeds on Bracken -- we would expect it to be fairly common in our area, or at least as common as a number of other northern disjuncts that have been documented in our mountains. More surveys are needed to give it a firmer place in our moth fauna and to better determine its conservation status.