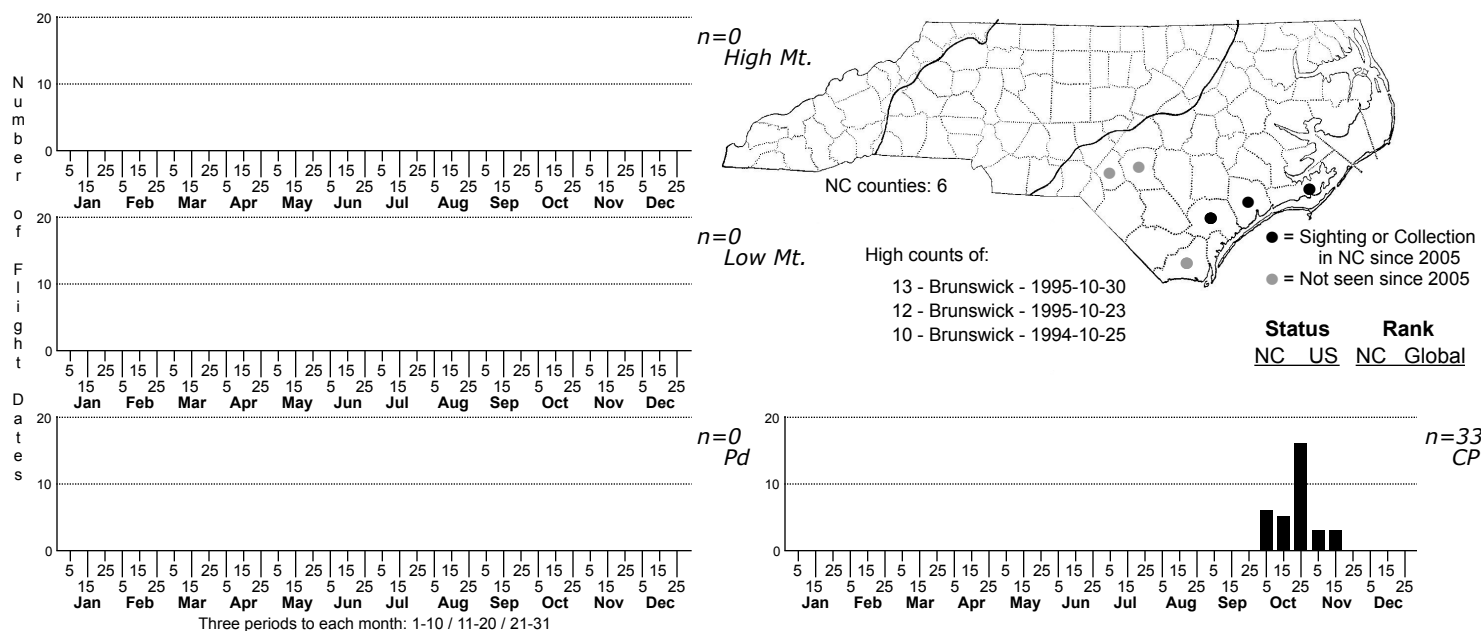


## *Photodes carterae* Reedgrass Borer Moth



FAMILY: Noctuidae SUBFAMILY: Noctuinae TRIBE: Apameini

TAXONOMIC COMMENTS: One of seven species in this genus (three included provisionally) that occur in North America (Lafontaine and Schmidt, 2010), two of which have been recorded in North Carolina. *P. carterae* was originally included in the genus *Spartiniphaga* by Schweitzer (1983), which was later synonymized with *Photodes* by Lafontaine and Schmidt (2010), who also added *Xylomoia didonea* and provisionally three species previously placed in *Chortodes*.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Schweitzer (1984); Schweitzer et al. (2011)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: *Photodes carterae* is a medium-small Noctuid. The ground color of the forewings is light ochraceous to reddish. Markings are essentially absent in the females and only faint in the males: the postmedian is represented by a series of small dots on the veins, the antemedian by only a single dot, and the reniform and orbicular by pale outlines, with a darker spot in the lower half of the reniform. The hindwings are white in the females and have a slight ochraceous tinge in the males (Schweitzer, 1984).

DISTRIBUTION: Our records all come from the southern half of the Coastal Plain, including the Fall-line Sandhills

FLIGHT COMMENT: Univoltine, flying in October and November

HABITAT: All of our records come from Longleaf Pine savannas and Sandhill Seeps where Pinebarrens Reedgrass is present.

FOOD: Larvae are probably monophagous, feeding on Pinebarren Sandreed (*Calamovilfa brevipilis*) (Schweitzer et al., 2011).

OBSERVATION\_METHODS: Comes well to blacklights but we have no records from bait or flowers.

NATURAL HERITAGE PROGRAM RANKS: G2G3 S2S3

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 host plant of this moth is highly dependent on fire, flowering and extensively sprouting only after a burn and becoming completely extirpated from a site following periods of fire suppression of only about 10 years (Schweitzer et al., 2011). Unlike the Arogos Skipper, another species associated with Pinebarrens Reedgrass in North Carolina, *P. carterae* appears to survive fires on site, probably due to its larvae being located in the dense, fire-resistant root-stock of its host plant rather than up in the leaf-blades, as in Arogos. It may be no coincidence, therefore, that *P. carterae* appears to have its most vigorous populations in very frequently burned areas, such as military bases where artillery shells ignite fires throughout the year.