

## Lapara coniferarum Southern Pine Sphinx

FAMILY: Sphingidae SUBFAMILY: Sphinginae TRIBE: Sphingini TAXONOMIC\_COMMENTS: <i>Lapara</i> currently contains three species, all occurring in the United States. The interrelationships between the species are complex and the last word has yet to be written. This common species is a taxonomic puzzle.

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Hodges (1971); Tuttle (2007) TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948); Wagner (2005); Tuttle (2007)

ID COMMENTS: A medium sized sphinx moth with a gray ground color shaded with brown and streaked with black; has a jagged, pale gray postmedian. Sexes are similar.

DISTRIBUTION: Occurs statewide, from the Outer Banks to the High Mountains (as bombycoides).

FLIGHT COMMENT: The species is on the wing from April to September but evidence for discrete broods is not found. Likely there are usually three to four broods which overlap and blur specific flight periods.

HABITAT: Appears to make use of all pine-containing habitats -- nearly all habitats in general -- in North Carolina. In the Coastal Plain, it occurs in Maritime Forests, Coastal Fringe Evergreen Forests, and both bottomlands and Non-riverine Swamp Forests, all where Loblolly is the principal pine. In the Piedmont, most records come from upland habitats, including Xeric Hardpan Barrens where Shortleaf and Scrub Pines are prominent. Records from the Mountains (including for <i>L. bombycoides</i>) come from both mesic habitats and dry ridges, where a number of hard pine species are present.

FOOD: Larvae are stenophagous -  $\langle i \rangle$ Pinus $\langle i \rangle$  is the preferred foodplant genus (Wagner, 2005) although cypress ( $\langle i \rangle$ Taxodium $\langle i \rangle$ ) has also been reported. However, in our state the species is absent in cypress swamps unless pines are present. We have found larvae on Loblolly Pine ( $\langle i \rangle$ P. taeda $\langle i \rangle$ ) but we have records for this species from many areas where Loblolly Pine is absent and other pines are dominant. It also occurs in Pond Pine Woodlands and other peatlands, where only Pond Pine ( $\langle i \rangle$ P. serotina $\langle i \rangle$ ) is present. It is virtually universal in Longleaf Pine-dominated savannas, flatwoods, and sandhills. There is also an iNaturalist record (Nick Perfetuo, 2021) for a larva on Longleaf Pine ( $\langle i \rangle$ P. palustris $\langle i \rangle$ ).

OBSERVATION\_METHODS: Adults come readily to 15 watt blacklights (females are less common at lights) but no records for nectaring exist nor do they come to baits.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S5]

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

COMMENTS: Confusion exists regarding the true number of species and their ranges and maculation patterns. We need additional barcodes for specimens from Virginia to the Canadian border and from across the Gulf States and Florida. Tuttle (2007) discusses other problems with our current classification of this complex. Although <i>Lapara</i> appears to be less common in the Piedmont and Mountains, it is abundant, widespread, and occupying a wide range of habitats in the Coastal Plain. Over the state as whole, it appears to be secure.