

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Invertebrate Abstract

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Heterocampa amanda*

COMMON NAME: A Notodontid Moth

SYNONYMS:

FAMILY: Notodontidae

AUTHOR, PLACE OF PUBLICATION: Barnes, W. & A.W. Lindsey, 1921. A new species of *Heterocampa* (Lep., Notodontidae). *Psyche: A Journal of Entomology*, 28: 130.

TYPE LOCALITY: Hualapai Mountains, Mohave County, Arizona, United States.

TYPE SPECIMEN: Male, pinned, Smithsonian Institution – National Museum of Natural History USNMMENT 00991346.

TAXONOMIC UNIQUENESS: 21 species of the genus *Heterocampa* in America north of Mexico (Schmidt and Lafontaine 2010).

DESCRIPTION: “Head, thorax and abdomen light gray or brownish gray to dark gray. Tufts and tips of patagia darker. Pectinations of 3 antennae long, gray-brown; shaft with some light gray scales. Primaries gray, the costa powdered with whitish scales and the veins in part somewhat darker than the ground color. Within the basal area, below Cua, and beyond the cell there are sometimes paler, somewhat brownish areas. Basal line geminate, the outer black, the inner gray, and the included space buff. T. a. line geminate, faint, outwardly convex between the veins. This line is oblique, almost reaching the middle of the inner margin, and is slightly curved. T. p. line similar but with scallops reversed and much slighter. This line is almost upright, but is slightly concave outwardly beyond cell and inside of Guy leaving the usual square projection between Cui and Ma. The s. t. line is made up of two blackish shades, one almost straight from near apex to M., the other beginning outside of the first on Mg, running thence to Cue, and then curving outward toward the anal angle. Both are followed by vague slender whitish lines. There is a blackish terminal line, sometimes cut by white on the veins, and the fringes are concolorous with the wing, but with blackish at the veins. Cell terminated by a curved blackish line. Secondaries white in male, the costa, outer margin (very slenderly), terminal quarter and sometimes a short median portion of veins marked with gray-brown.

“Fringes more or less grayish, darker at the veins. In the female the secondaries are more gray-brown with a variably definite band filling the terminal third and a less strongly marked median shade and discal spot. Fringes white, dark at the veins. Under surface white in the male, the

secondaries marked much as above and the primaries darker toward costa and apex, with only the markings of the fringes, a discal bar, and sometimes a paler terminal area visible. In the female this surface is much darker, as would be expected. The primaries are otherwise similar.” (Barnes and Lindsey 1921).

Wingspan 35-45 mm (1.38-1.77 inches) (Barnes and Lindsey 1921).

AIDS TO IDENTIFICATION:

ILLUSTRATIONS:

TOTAL RANGE: Known from La Paz, Mojave, Pima, Santa Cruz, and Yavapai Counties, Arizona, and historically from Dona Ana and Otero Counties, New Mexico (Barnes and Lindsey 1921, Opler 2000, SCAN 2021).

RANGE WITHIN ARIZONA: Known from La Paz, Mojave, Pima, Santa Cruz, and Yavapai Counties (Barnes and Lindsey 1921, Opler 2000, SCAN 2021).

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Most Notodontidae moths are woodland or forest moths, typically widespread within habitat, unless the foodplant is localized. Adult males of the family are powerful fliers, but heavily laden females are probably not. Very few species in the family feed as adults. Many species are heavily egg laden and deposit eggs in rather large masses rather quickly after mating (NatureServe 2021).

REPRODUCTION: For the family, eggs are laid on the leaves of host plants, probably in masses (NatureServe 2021).

FOOD HABITS: All *Heterocampa* larvae feed on trees or shrubs. It is suggested that larvae are likely specialist on one or more of the scrubby desert oaks. Several similar species are oak specialists (NatureServe 2021).

HABITAT: Likely desert oak scrub in canyons (NatureServe 2021).

ELEVATION:

PLANT COMMUNITY: Oak scrub, chaparral, mixed shrubland/woodland.

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: None

MANAGEMENT FACTORS: The habitat of this species is susceptible to stochastic perturbations such as invasive exotic weeds, intense fires, and overgrazing (NatureServe 2021).

PROTECTIVE MEASURES TAKEN: Much of the range is under the jurisdiction of the Bureau of Land Management, but it is unclear if management actions provide any specific protection for the species. As of May 11, 2021, this species is Under Review for listing consideration by the US Fish and Wildlife Service (USFWS 2021).

SUGGESTED PROJECTS: Life history, population status, and population range studies need to be performed. Most collection records are from 1921-1995, and more current information is needed (SCAN 2021).

LAND MANAGEMENT/OWNERSHIP: DOD - Fort Huachuca; USFS - Coronado National Forest; BLM – Colorado River District.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

- Barnes, W. & A.W. Lindsey, 1921. A new species of *Heterocampa* (Lep., Notodontidae). *Psyche: A Journal of Entomology*, 28: 130.
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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

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