

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Invertebrate Abstract

Element Code: IILEP99020
Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Neophasia terlootii*
COMMON NAME: Chiricahua Pine White, Terloot's White, Mexican Pine White, Chiricahua White
SYNONYMS:
FAMILY: Pieridae

AUTHOR, PLACE OF PUBLICATION: Behr. 1869. Trans. American Ent. Soc., 2:304.

TYPE LOCALITY: "pine forests, Sierra Madre, E of Mazatlan, [Sinaloa], Mexico".

TYPE SPECIMEN: Type destroyed in San Francisco 1906 earthquake and fire.

TAXONOMIC UNIQUENESS: The genus *Neophasia* contains two species, both of which occur in Arizona. *Neophasia terlootii* is the sole representative of this genus in the Coronado National Forest. The other species, *Neophasia menapia* (Pine White), occurs just to the north of the range of *N. terlootii* in Arizona and is also found in most of montane western North America. (Brock and Prchal 2001).

DESCRIPTION: Wingspan (52-60 mm). The sexes are dimorphic.
Upperside male: White with the discal cell black, the apex black, interrupted with white spots and the hindwing unmarked except for black veins.

Upperside female: Deep orange, rarely yellow, with black markings similar to the male on the forewing, the spots at the apex often lighter orange; the hindwing has black veins with more extensive black markings along the outer edge.

Underside male: Similar to the upperside but the black is lighter and there are traces of red along the edge of the hindwing.

Underside female: The forewing is similar to the upperside; the veins of the hindwing have broader black scaling and there are red spots along the outside edge.

AIDS TO IDENTIFICATION: The males are best separated from other white butterflies by the heavy black scaling in the discal cell, flight (see **Behavior**) and food plant association (see **Food Plant**). The females could be mistaken for *Danaus plexippus* (Monarch) but *plexippus* is much larger and lacks the black discal cell. Other orange butterflies also lack the black discal cell and have a much faster flight. (Brock and Prchal 2001).

ILLUSTRATIONS: Color drawing of upper and underside male and female (Opler and Wright, 1999: Plate 7).
Color photo of upperside male and female (Bailowitz and Brock, 1991: Appendix A, Plate IV).
B&W photo of upper and underside male (Bailowitz and Brock, 1991: Page 139).
Color photo of underside male (Scott, 1986: Plate 9).
Color photo of underside female (Scott, 1986: Plate 13).
Color photo of underside male (Pyle, 1981: photo #66).
Color photo of upperside female (Pyle, 1981: photo #598).

Color drawing of upper and underside male (Howe, 1975: Plate 70).
Color drawing of upperside female (Howe, 1975: Plate 70).
Color photos (Brock and Prchal 2001).

TOTAL RANGE: Southeastern Arizona, southward through the Sierra Madre of Mexico to as far south as the state of Jalisco. It is also known from the Animas Mountains of southwestern New Mexico and in the Sierra Madre Oriental in the state of Nuevo Leon in Mexico.

RANGE WITHIN ARIZONA: Presently known from the Pinaleno Mountains (Mt. Graham), the Santa Catalina, Santa Rita, Huachuca and Chiricahua Mountains of southeastern Arizona. (Brock and Prchal 2001). County records include Cochise, Graham, Pima, and Santa Cruz (Bailowitz and Brock 1991).

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Males fly around and over the canopy of tall pine trees searching for females. Females generally fly around the pines. Both sexes have been observed occasionally at flowers and, perhaps more regularly, damp soil or mud. The flight is lazy and erratic. Individuals are often seen floating on fall breezes without flapping their wings for seconds at a time. As a result, they frequently are blown into trees, shrubs or even the ground. (Brock and Prchal 2001).

REPRODUCTION: Mostly undescribed. The mature larva is reported to be green with white lines. Larvae live and pupate communally in a web, feeding at night; they follow one another in "processions." The developmental stages are probably similar to those of *Neophasia menapia*.

FOOD HABITS: Reported to use *Pinus ponderosa* (Ponderosa Pine) and also *Picea engelmannii* (Englemann Spruce). The larvae eat the leaves.

FLIGHT PERIOD: There are two broods, both being rather drawn out. The first brood is usually smaller than the second and occurs in late spring. The second occurs primarily in the fall. Adults have been reported from early June (June 11) to mid-November (Nov. 11). (Bailowitz and Brock 1991; Brock and Prchal 2001).

HABITAT: The colonies are always in pine forests usually above 1900m. One of the lowest colonies is found in Bear Canyon in the Santa Catalina Mountains. (Brock and Prchal 2001).

ELEVATION: Usually above 6,234 ft. (1900 m). Based on records in the Heritage Data Management System (HDMS), elevation ranges from 5,400 to 6,300 ft. (1647 - 1922 m) (AGFD, unpublished data accessed 2001).

PLANT COMMUNITY:

POPULATION TRENDS:

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: Forest Service Sensitive (USDA, FS Region 3 1999)

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: None required (Brock and Prchal 2001).

LAND MANAGEMENT/OWNERSHIP: DOD - Fort Huachuca Military Reservation; USFS - Coronado National Forest; possibly others.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

- Bailowitz, R.A., and J.P. Brock. 1991. Butterflies of Southeastern Arizona. Sonoran Arthropod Studies, Inc., Tucson, AZ. p. 139.
- Brock, J., and S. Prchal. 2001. Sensitive Insect Studies of the Coronado National Forest. A Training Project by Sonoran Arthropod Studies Institute, Tucson, AZ.
- Howe. 1975. The Butterflies of North America. Doubleday.
- Miller and Brown. 1981. A Catalogue/Checklist of the Butterflies of America north of Mexico. The Lepidopterist's Society.
- Opler and Wright. 1999. Western Butterflies. Houghton Mifflin Company.
- Pyle. 1981. The Audubon Society Field Guide to North American Butterflies. Knopf.
- Scott. 1986. Butterflies of North America. Stanford Press.
- Tilden, J.W., and A.C. Smith. 1986. Peterson Field Guides: Western Butterflies. Houghton Mifflin Company, Boston. p. 124.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

This species is common and found in most mountains with extensive ponderosa pine forest. It should not be listed at this time. (Brock and Prchal 2001).

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