

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

Invertebrate Abstract

Element Code: IILEPE2020

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Callophrys comstocki*
COMMON NAME: Comstock's Hairstreak; Desert Green Hairstreak; Comstock's Green Hairstreak
SYNONYMS:
FAMILY: Lycaenidae

AUTHOR, PLACE OF PUBLICATION: Henne, 1940.

TYPE LOCALITY: Providence Mountains, San Bernardino County, California. April 20, 1938.

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: There are 6-20 species in this genus.

DESCRIPTION: They are usually smaller than other hairstreaks. The fringes of the wings are white. The upper side of the wings is gray with a terminal black line. The underside is apple green with slightly darker veins. The lower half of the forewing is gray. Thecla (pm.) line narrow, irregular, usually complete; it is white, edged inwardly with black. Their wingspan is 13/16 to 1 inch (2.2-2.9cm).

AIDS TO IDENTIFICATION: The fringes of the wings are white. The upper side of the wings is gray with a terminal black line. The underside is apple green with slightly darker veins. The lower half of the forewing is gray. Thecla (pm.) line narrow, irregular, usually complete; it is white, edged inwardly with black.

ILLUSTRATIONS: Color photo (In <http://www.nearctica.com/butter/plate8/Ccomst.htm>).
Color drawing (Tilden, 1986: pl. 31).

TOTAL RANGE: Desert ranges of southern California, largely in Mojave Desert. Also found in parts of Nevada, Arizona, Utah and southwestern Colorado.

RANGE WITHIN ARIZONA: Northern Arizona: Mohave, Coconino, Apache and Navajo counties.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Their annual flight season and number of broods are dependent on rainfall, suggesting pupae may maintain diapause for extended periods. Pyle (1981) states that pupae may overwinter twice in very dry periods. Thus the species could be overlooked if the search is in seasons with insufficient rain. The spring brood is probably the most reliable one. The males perch to watch for females in depressions or gulch bottoms.

REPRODUCTION: The adults have one flight in spring, mainly March to May with an occasional second flight in late summer, August to October. The eggs are laid on the host plant where they hatch about a week later. The caterpillars develop directly to the chrysalid, which is usually presumed to overwinter in litter at the base of the host plant.

FOOD HABITS: The caterpillars eat the leaves of the host plant wild buckwheat. The adults nectar at low flowers such as dandelion.

HABITAT: Largely found in remote undisturbed desert canyons and along ravine bottoms in pinyon-juniper woodlands. They are found in sites with substantial populations of the caterpillar foodplant wild buckwheat, notably *Eriogonum racemosum* and *E.wrightii*.

ELEVATION: Unknown

PLANT COMMUNITY: Shrubland/chaparral, woodland-conifer/pinyon-juniper.

POPULATION TRENDS: Unknown

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS:

STATE STATUS:

OTHER STATUS:

Forest Service Sensitive (USDA, FS Region 3
1999)

MANAGEMENT FACTORS: Their habitats are susceptible to invasion by alien weeds, especially cheat-grass (*Bromus tectorum*) and the resultant higher fire frequencies that accompany cheat-grass stands.

PROTECTIVE MEASURES TAKEN: Unknown

SUGGESTED PROJECTS: The assessment of populations especially on public lands is recommended.

LAND MANAGEMENT/OWNERSHIP:**SOURCES OF FURTHER INFORMATION****REFERENCES:**

- BISON, Biota Information System of New Mexico, Available at http://www.cnr.vt.edu/fishex/nmex_main/species213700.htm
- NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6. Arlington, Virginia, USA:NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: June 6, 2002).
- Nearctica, Available at <http://www.nearctica.com/butter/plate8/Ccomst.htm>.
- Tilden, J.W. 1986. A Field Guide to Western Butterflies, Houghton Mifflin Company, Boston, MA, pp. 167.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
- USGS, Northern Prairie Wildlife Research Center, Available at <http://www.npwr.usgs.gov/resource/dist/lepid/byflyusa/usa/315.htm>.

MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

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