

Satyrium dryope (Dryope Hairstreak)

No Photo Available

Taxonomy

- **Class:** INSECTA
- **Order:** LEPIDOPTERA
- **Family:** LYCAENIDAE
- **Genus:** Satyrium
- **Scientific Name:** *Satyrium dryope* (W. H. Edwards, 1870)
- **Common Name:** Dryope Hairstreak
- **Synonyms:**
- **Taxonomic Name Source:** Zhang, J., Q. Cong, J. Shen, L. Song, R. J. Gott, P. Boyer, C. S. Guppy, S. Kohler, G. Lamas, P. A. Opler, and N. V. Grishin. 2022. Taxonomic discoveries enabled by genomic analysis of butterflies. The Taxonomic Report of the International Lepidoptera Survey 10(7):1-60.

Agency Status

- **NMDGF:**
- **Federal Status:**
- **BLM Sensitive:**
- **USFS:**
- **IUCN Red List:** [Not Evaluated](#)
- **Nature Serve Global:** [G4](#)
- **NHNM State:** SNR
- **NM Endemic:** NO

Description

Pale silver-gray below with a postmedian row of small black spots. A false head at the anal angle has orange and blue spots and a stubby tail. Above, males are dark brown and females are tawny.

Description courtesy of Steven J. Cary, [Butterflies of New Mexico](#), 2024

Habitat and Ecology

This species can be found in riparian areas and marshes in foothills, canyons, and valleys across Western North America (Opler and Wright 1999). The larvae feed on various willow species (*Salix* spp.). The adult flight season lasts from May to August, and the species is univoltine (Lotts and Naberhaus 2022). Adults nectar from a variety of flowers, including milkweed (*Asclepias* spp.) and Indian hemp (*Apocynum* spp.).

Geographic Range:

This species is found in western North America from British Columbia and Alberta, Canada in the north, to Baja California, Mexico and New Mexico, United States in the south (Lotts and Naberhaus 2021, GBIF.org 2024). Recently, the subspecies found in New Mexico, *Satyrium sylvinus dryope* has been elevated to species. Therefore, it seems all New Mexico populations are now considered *Satyrium dryope* (Cary and Toliver 2024).

Conservation Considerations:

Currently there are no conservation measures in place for this species. Research to better understand the drivers of population declines is urgently needed. Continued monitoring of population size and habitat trends is also needed.

Threats:

The threats causing widespread declines in this species are not well understood, though loss of riparian habitats in western North America is likely a major threat. Riparian habitats are threatened by drought, riparian corridor severance, damage due to cattle grazing, and hydrological modification for farming, ranching, and industry. Many of the major rivers have been dammed, diverted, or otherwise modified and many perennial streams and wetlands have been lost due to groundwater drawdown of aquifers and altered hydrology of drainages (Fretwell *et al.* 1996). These threats are pervasive in riparian areas across western North America (Poff *et al.* 2011). Willows, the host plant of this species, are the dominant overstory plants in many riparian ecosystems. Dieback and decline of willow stands has been documented across much of the region, due to disease, browsing by wildlife, invasive species, and drought (Kaczynski 2013, Busch and Smith 1995).

Grazing by cattle in riparian areas may also cause slow declines in habitat quality for this species. Overgrazing is associated with changes to riparian plant communities, which are crucial for maintaining water quality, soil health, channel morphology, and biotic diversity (Kauffman *et al.* 1983, Kondolf *et al.* 1996). Loss of riparian vegetation creates bank erosion and contributes to higher sedimentation rates; over time, stream channels can become incised or widened. Incised rivers are disconnected from their floodplains, which reduces the exchange of water, nutrients, sediments, and organisms, and eliminates wetland habitats along the riparian corridor (Loos & Shader 2016). Cattle may also reduce stream flows due to the diversions and water development projects that support livestock operations.

Voltinism may also play a role in the declines experienced by this species. Species that are univoltine, like this one, are thought to have decreased dispersal abilities, which limits the area they can utilize, in turn making them less resilient to stressors (Eskildsen *et al.* 2015).

Population:

The population size is not known for this species. There are some indications it may be facing widespread declines, particularly in California. Forster *et al.* (2021) analysed count data collected at ten sites over the last few decades by the North American Butterfly Association (NABA). Based on this data, a population reduction of 63% is estimated over the last 10 years. Whether the species is showing a similar decline across its range is unclear, though it is likely the species is facing similar threat pressures across the range. More information is needed.

References:

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More Information

