



U. S. Fish & Wildlife Service

Nevada Fish and Wildlife Office

Conserving the Biological Diversity of the Great Basin, Eastern Sierra, and Mojave Desert

Service Proposes Critical Habitat for Mount Charleston blue butterfly

Questions and Answers

July 14, 2014

What is the U.S. Fish and Wildlife Service (Service) announcing regarding the Mount Charleston blue butterfly?

The Service is proposing to designate critical habitat for the endangered Mount Charleston blue butterfly. The subspecies is in danger of extinction and has been protected under the Endangered Species Act (ESA) since October 2013. The Service is now proposing to protect the butterfly's habitat — approximately 5,561 acres in the Spring Mountains. The land comprising the proposed critical habitat is 99 percent federally owned and mostly within designated wilderness.

What does the term “critical habitat” mean?

Critical habitat is defined in Section 3 of the ESA as:

- The specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features
 - Essential to the conservation of the species, and
 - Which may require special management considerations or protection; and
 - Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Where does the Mount Charleston blue butterfly live?

The Mount Charleston blue butterfly is known only to occur at the high elevations of the Spring Mountains (approximately 8,200 – 11,500 feet above sea level), in the Spring Mountains National Recreation Area of the Humboldt-Toiyabe National Forest, approximately 25 miles northwest of Las Vegas in Clark County, Nevada. The butterfly requires open forest habitats that support its larval host and nectar plants, Torrey's milkvetch (*Astragalus calycosus* var. *calycosus*), Mountain oxytrope (*Oxytropis oreophila* var. *oreophila*), and Broad keeled milkvetch (*Astragalus platytropis*).



Mount Charleston blue butterfly

Corey Kallstrom/USFWS

What is the Mount Charleston blue butterfly?

The Mount Charleston blue butterfly (*Plebejus shasta charlestonensis*) is a distinct subspecies of the wider ranging Shasta blue butterfly (*Plebejus shasta*), a member of the family Lycaenidae. The wingspan of the Mount Charleston blue ranges from $\frac{3}{4}$ to 1 inch. The wings of the males are dark to dull iridescent blue and females' wings are brown with a blue overlay. The undersides of their wings are gray, with a pattern of black spots, brown blotches and pale wing veins to give it a mottled appearance.

Has the population of Mount Charleston Blue butterfly declined?

Yes. Based on monitoring surveys, the petition seeking ESA protection for the subspecies, and discussions with Mount Charleston blue butterfly experts, it appears the population has been declining since 1995. Based on the best available information, the Service determined these declines in distribution and abundance are a result of natural and human-caused factors. Currently, the butterfly is known to occupy only three of its 17 historical locations, while it is presumed the butterfly occupies another eight of those historical locations. The butterfly is assumed extirpated from the remaining six locations, which means none have been seen in those areas in 20 years or more. A location is presumed occupied when there are sightings of the butterfly and, therefore, there is a potential for diapausing larvae to exist. Diapause is a period of suspended growth or development similar to hibernation.

What are the main threats to the Mount Charleston blue butterfly?

Threats contributing to the Mount Charleston blue butterfly's decline include the loss and degradation of habitat due to changes in natural fire regimes and succession, implementation of recreation development projects, increases in nonnative plants, and extreme precipitation events and drought, which are likely to become more frequent under climate change.

Collection of the butterfly was also considered a threat at the time of listing. In order to help minimize this threat, the Service worked cooperatively with the U.S. Forest Service to develop and issue a closure order that prohibits possessing, storing, or transporting Mount Charleston blue butterflies and other blue butterfly species without a permit.

If the U.S. Forest Service has prohibited possession, storing and transporting the Mount Charleston blue butterfly through a closure order, why does the Service find it necessary to designate critical habitat for the subspecies?

The U.S. Forest Service's closure order only pertains to butterfly collection activities. It prohibits possessing, storing, or transporting Mount Charleston blue butterflies and other blue butterfly species without a permit. It does not address continued threats from other natural and human-caused factors.

Designating critical habitat offers additional potential benefits for the butterfly that include: (1) a heightened awareness by the public and governments (federal, state, county, or local) that promotes education, planning, or activities that promote conservation and reduce negative impacts leading to recovery of the butterfly; (2) conservation activities that are focused on the most essential features and areas; and (3) measures that prevent people from causing inadvertent harm to the species.

What impact did the Carpenter 1 Fire have on the Mount Charleston blue butterfly and its habitat?

The July 2013 Carpenter 1 Fire burned through some Mount Charleston blue butterfly habitat near the South Loop trail along the ridgeline between Griffith Peak and Charleston Peak. The soil burn severity was considered low in the majority of the butterfly's moderate or high quality habitat.

Adult butterflies in the burn area may have been able to escape the fire. However, Mount Charleston blue butterflies in egg, larva, or pupae life stages in the burn area may have been exposed to lethal levels of smoke, gases, and heat from the fire. While areas with moderate and high quality habitat did not burn, it

could be difficult to determine whether any butterflies in those spots were exposed to lethal levels of smoke, gases, or heat.

Biologists won't know the extent of damage to larval host and adult nectar plants until surveys are performed on the ground. Surveys of the Mount Charleston blue butterfly and its habitat are planned for this summer.

Where can the public obtain the documents associated with the proposed critical habitat for the Mount Charleston blue butterfly?

The proposal and associated documents are available on the Internet at www.regulations.gov (FWS–R8–ES–2013–0105) and at www.fws.gov/nevada/. Supporting documents used in preparing the proposal are available for inspection, by appointment, during normal business hours at the Nevada Fish and Wildlife Office in Las Vegas at 4701 North Torrey Pines Drive, telephone 702-515-5230, facsimile 702-515-5231.

The Service will hold a public information open house on the proposed critical habitat. The open house is scheduled for Tuesday, August 19, 2014, from 6 to 8 p.m. (PDT), at the Interagency Building located at 4701 N. Torrey Pines Drive, Las Vegas, Nevada, 89130. People needing reasonable accommodations in order to attend and participate in the meeting are asked to contact Dan Balduini, Nevada Fish and Wildlife Office, as soon as possible via email to daniel_balduini@fws.gov or by telephone at 702-515-5480.

How can I provide comments on the proposals?

The comment period for the proposed critical habitat closes at 11:59 p.m. (EDT) on September 15, 2014.

Scientific information regarding the proposal may be submitted by one of the following methods:

- Electronically, via the Federal eRulemaking Portal, at www.regulations.gov. In the Search box, enter FWS–R8–ES–2013–0105, which is the docket number for these rulemakings. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. Submit comments by clicking on “Comment Now!”
- Hard copy, via U.S. mail or hand delivery, to: Public Comments Processing, Attn: FWS–R8–ES–2013–0105; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; Arlington, VA 22203.

For more information, contact Edward D. Koch, State Supervisor, Nevada Fish and Wildlife Office, by mail to 4701 N. Torrey Pines Drive, Las Vegas, NV 89130; by telephone at 775–861–6300; or by facsimile at 775–861–6301. Those using a telecommunications device for the deaf (TDD) can call the Federal Information Relay Service (FIRS) at 800–877–8339.

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