

THE URBAN WILDLANDS GROUP, INC.

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VIA FACSIMILE (775) 861-6301

October 20, 2005

Mr. Robert D. Williams
Office Supervisor
U.S. Fish and Wildlife Service
1340 Financial Blvd., Suite 234
Reno, NV 89502

Dear Mr. Williams:

Please accept this letter as a petition to list the Mount Charleston blue butterfly (*Icaricia shasta charlestonensis*) as endangered under the federal Endangered Species Act. We request that the U.S. Fish and Wildlife Service treat the listing as an emergency and respond with necessary dispatch.

The information in this petition has been obtained from published and unpublished literature and interviews with lepidopterists with direct knowledge of the subspecies.

The Mount Charleston blue butterfly is a distinct subspecies of the Shasta blue butterfly, a species widespread across the intermountain west (Emmel and Shields 1978, Austin 1980). Although several other Nevada subspecies of the Shasta blue butterfly have fairly extensive ranges (Emmel and Shields 1978), the Mount Charleston blue butterfly was described from populations found only in the Spring Mountains of Clark County (Austin 1980, Austin and Austin 1980). Threats to those populations from activities carried out or permitted by the U.S. Forest Service now place the entire known distribution of the Mount Charleston blue butterfly at risk of extinction.

Substantial information on the subspecies apparently exists in USFWS files. The butterfly was granted "covered" status under the Clark County Multiple Species Habitat Conservation Plan ("MSHCP"; RECON 2000), and the butterfly was acknowledged as a target for future conservation action in documents supporting the Conservation Agreement for the Spring Mountains National Recreation Area of Clark and Nye Counties (April 13, 1998), in which Section 5.6 commits the Forest Service to work "with Las Vegas Ski and Snowboard Resort to develop protective strategies for sensitive environmental resources. This will include investigating options for erosion control of the Lee Canyon ski slopes with native seed mixes, including *Astragalus calycosus* var. *mancus*, to enhance butterfly habitat, management of herbicides and pesticides and a plan for eventual elimination of non-native seeding, and management of the Three Springs area." Not only has that obligation not been met, environmental conditions critical to the survival of the Mount Charleston blue butterfly have greatly deteriorated.

Habitat supporting the Mount Charleston blue butterfly historically has been limited. The butterfly oviposits exclusively on the milk vetch *Astragalus calycosus* at elevations between 5,900 and 11,150 feet. Austin (pers. comm.) in his draft monograph on the butterflies of Nevada describes the butterfly as inhabiting ephemeral, early successional stage, open areas, and notes that it experiences rather dramatic population fluctuations, having exhibited higher abundances in the 1920s, 1960s, and more recently in the middle 1990s. He suggests that in years of lower abundances the species may retreat to habitat refugia in the very most extensive patches of its larval hostplants. Habitats supporting the butterfly are at risk where natural disturbance events no longer arrest vegetation succession and lead to shading or crowding out of the butterfly's larval hosts. Austin and Austin (1980) further state that the species is "usually rare (may be common in some years)," and recognize records from Kyle and Lee canyons above 8,200 feet and the Willow Creek area between 6,000 and 8,000 feet. Other records include Deer Creek Road, Cathedral Rock, and LC Ski Area. Although a report to the Forest Service by Weiss et al. (1997) indicates that 17 populations existed then, subsequent searches of a number of the putative habitat patches associated with those populations by Bruce Boyd have revealed neither the larval hostplants nor the nectar sources known to be used by the butterfly at sites confirmed to be occupied. Absent definitive proof to support these additional records we conclude that butterflies at these localities were misidentified. The current situation is therefore perilous, with as few as three or four populations still extant, with all at risk of extinction.

The best current information indicates that just seven locations have supported the butterfly during the past decade. Those locations (and others of note) are described below.

1) A site is found in Kyle Canyon 3,000 feet above and four miles from the South Loop trailhead on the ridgeline on the southern approach to the summit of Mount Charleston. The South Loop Trail runs the length of the site and is one of the most popular trails in the National Recreation Area. According to old Forest Service information (1996), around 12,000 visitors use this trail during the summer months. Use is apparently increasing and many unsanctioned trails have been pioneered outside the marked trail. Guided tours to this location are being run, apparently without a Forest Service permit, to promote a historical plane crash site with many visitors off the trail. This site supports one of the larger populations in the range and is the only site in the Kyle Canyon drainage where this species is currently known to occur. The habitat (as determined by the distribution of larval hostplants) is bisected along its length by the South Loop Trail. Approximately five acres of habitat exist.

2) A small population existed in Kyle Canyon on less than an acre near Old Town roughly 325 feet below the elementary school and immediately south of State Route 157. The last butterflies were seen in the early 1970s. The area, now overgrown with *Medicago*, has undergone succession, shading out the hostplant (G. Austin, pers. comm.). It has been searched frequently since 1995 with negative results and the butterfly can be assumed to be extirpated (B. Boyd, pers. comm.).

In Lee Canyon two populations occur on Forest Service land that is leased to the Las Vegas Ski and Snowboard Resort. These are the largest populations in the Lee Canyon complex.

3) Horses are nearly always present at Lee Canyon Site One, and *Medicago* has become estab-

lished on significant portions of the site. Improvements approved by the Forest Service have disturbed much of the periphery of apparent habitat. Required butterfly surveys were not conducted before and during site disturbance in 2005. Although this site is the best known among Lee Canyon locations, the total habitat area appears to be less than five acres in extent, with as little as a half of one acre supporting the core of the butterfly population. The base of the habitat is about 650 feet above the Las Vegas Ski and Snowboard Resort lodge; it extends into the northwest-most ski run and parallels it 130 feet to the south.

4) Much of the core of the population at Lee Canyon Site Two exists as a split site on the two southeasternmost ski runs about 820 feet above the lodge; it appears to have been recently destroyed when construction equipment scraped soils supporting hostplant to form a berm in an apparent attempt to stabilize a ski run. Peripheral habitat areas previously believed to be of lower quality for the species were disturbed in 2005 during the installation and expansion of snow making apparatus. This site may cover as many as five acres, of which less than one acre may support the core of the demographic unit.

5) In Lee Canyon at the Foxtail Girl Scout Camp open areas adjacent to developed portions of the site contain marginal habitat that supports a small population of the butterfly. Tree painting and small construction activities threaten some portions of the site. As many as eight acres of habitat may exist there. The site is on an elevated flat south of Lee Meadow, west of Foxtail Snow Play and Picnic Area on the south side of State Route 156.

6) Lee Meadow with less than 10 acres of suspected habitat is the type locality for this species; however, the last observation at the site was in the 1980s (G. Austin, pers. comm.).

7) Lee Canyon Youth Camp includes a small site (less than one-half acre) that supported the butterfly. The site was disturbed during the installation of an expanded water system for the camp. The site is found south of State Route 156 about a quarter mile above the Foxtail area. Current status of the population is unknown.

8) An unimproved camp area known as Gary Allen supported a small population. The area was “restored” by the Forest Service a few years ago; the status of the resident population is unknown. The site is on the Bristlecone Trail about 650 feet northwest of Lee Canyon Site One.

9) A small flat, dry meadow has become a parking lot as part of the expansion of the ski area. There, less than two acres once supported a large number of larval hostplants and the butterfly was recorded there. The site is located about 250 feet below the ski resort parking lots near the end of State Route 156.

While the Mount Charleston blue butterfly is “covered” under the Clark County MSHCP (RECON 2000), that plan maintains that all populations are protected and no net unmitigated loss of habitat would occur. To the contrary, there has been no mitigation (beginning with avoidance) for the destruction of the habitat described above. These Forest Service actions illustrate that the MSHCP is not effective in protecting the Mount Charleston blue butterfly.

This summary of locations and apparent status of the Mount Charleston blue butterflies strongly supports the contention that the butterfly is at risk of imminent extinction across the entirety of

its range. It is our expectation that the USFWS will act immediately under its authorities to stop all activities that put the Mount Charleston blue butterfly at risk in the Spring Mountains National Recreation Area. Because all known habitat for the butterfly is on public land managed by the U.S. Forest Service, the potential exists to reverse the apparent decline of the species, restore its disturbed habitats, and fulfill standing commitments to its conservation.

We furthermore intend to submit petitions to list two to four other endemic butterfly taxa from the Spring Mountains absent prompt action by the Forest Service to protect “covered” endemic butterflies as required under the Clark County MSHCP.

Please feel free to contact Dr. Travis Longcore at 310-247-9719 if you have questions regarding this petition.

Sincerely,

Travis Longcore, Ph.D.
Science Director

Catherine Rich, J.D., M.A.
Executive Officer

Literature Cited

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- RECON. 2000. Final Clark County Multiple Species Habitat Conservation Plan and Environmental Impact Statement for issuance of a permit to allow incidental take of 79 species in Clark County, Nevada. Clark County Department of Comprehensive Planning, Las Vegas, Nevada.
- Weiss, S.B., A.D. Weiss, D.D. Murphy, and G.T. Austin. 1997. Final report on endemic butterflies of the Spring Mountains. Report to the U.S. Fish and Wildlife Service, Reno.

cc: Director H. Dale Hale, FWS, (202) 208-6965
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