



# Frequently Asked Questions about Proposed Critical Habitat & the Five Carbonate Plants

## *Q. What are the carbonate plants?*

The San Bernardino Mountains support a diversity of specialized natural habitats resulting from their geographic position between desert and coastal environments; and their geological history, elevation, and uncommon geological substrates. Within the northeastern portion of the San Bernardino Mountains in southern California, outcrops of carbonate substrates, primarily limestone and dolomite, occur in a series of bands extending about 35 miles from east to west along the desert-facing slopes. This portion of the mountains is generally referred to as the ‘carbonate belt’. Mining activities do occur within the carbonate belt.

The five carbonate plants are found within the carbonate belt. These plants generally grow in soils that are derived from limestone, dolomite, or other substrates rich in calcium carbonate, hence the name ‘carbonate plants’. The five plants occur in scattered populations within the carbonate belt at elevations ranging from 3,842 to 8,800 feet.

The Service listed four of the carbonate plants as endangered, and one as threatened, under the Endangered Species Act, as amended, on August 24, 1994. The five carbonate plants are:

- ▶ **Cushenbury milk-vetch** (*Astragalus albens*) is a small, short-lived perennial member of the pea family that is typically found on carbonate soils along rocky washes and gentle slopes within pinyon woodland, pinyon-juniper woodland, Joshua tree woodland, and blackbush scrub communities. The plant produces purple flowers that bloom from March to May. Populations of this federally endangered plant are scattered along the carbonate belt from Dry Canyon, southeast to the head of Lone Valley.
- ▶ **Cushenbury buckwheat** (*Eriogonum ovalifolium var. vineum*) is a federally endangered plant that is a member of the buckwheat family. It grows in low, dense mats that are typically 6 to 10 inches in diameter, but can reach 20 inches in diameter. The flowers of this plant are whitish-cream colored, but can darken to a reddish or purple hue with age. Populations of this plant are found within the carbonate belt from White Mountain, east to Rattlesnake Canyon.
- ▶ **San Bernardino Mountains bladderpod** (*Lesquerella kingii ssp. bernardina*) has the most restricted distribution of the carbonate plants and is found only on soils derived from dolomite. A member of the mustard family, bladderpod grows 4 to 8 inches tall and can be seen blooming from May to June. It is listed as endangered.

- ▶ **Cushenbury oxytheca** (*Oxytheca parishii* var. *goodmaniana*) is found in scattered populations from White Mountain, east to Rattlesnake Canyon. A small, wiry member of the buckwheat family, this endangered plant usually grows to 2 to 12 inches tall and has white to rose or greenish-yellow petals.
- ▶ **Parish's daisy** (*Erigeron parishii*) is a small perennial herb that grows 4 to 12 inches tall and flowers from May through June. A member of the aster family, the federally threatened Parish's daisy has the widest geographic distribution of the carbonate plants.

***Q. What is critical habitat?***

Critical habitat is defined as specific areas that have been found to be essential to the conservation of a federally listed species, and which may require special management considerations or protection. Critical habitat is determined using the best available scientific and commercial information about the physical and biological needs of the species. These needs may include one or more of the following:

- ◆ space for individual and population growth, and for normal behavior;
- ◆ food, water, light, air, minerals or other nutritional or physiological needs;
- ◆ cover or shelter;
- ◆ sites for breeding, reproduction, and rearing of offspring; and
- ◆ habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

In order to be proposed as critical habitat, we must first determine if an area is “essential to the conservation of the species.” The proposed critical habitat designation must also identify, to the extent known, habitats that contain the primary constituent elements necessary for the life cycle needs of the species.

***Q. What are the primary constituent elements essential to the conservation of the carbonate plants?***

The primary constituent elements for the carbonate plants are those habitat components essential for the primary biological needs of the species and its dormant seeds. Habitat components essential for the five carbonate plants are found in vegetation communities classified as, but not limited to, pinyon woodland, pinyon-juniper woodland and forests, Joshua tree woodland, white fir forests, subalpine forest, canyon live oak woodlands and forests, and blackbush scrub in the San Bernardino Mountains, San Bernardino County, California. These habitat components provide for: (1) individual and population growth, including sites for germination, pollination, reproduction, pollen and seed dispersal, and seed dormancy; (2) areas that allow for and maintain gene flow between sites through pollinator activity; (3) areas that provide basic requirements for growth such as water, light, and minerals; and (4) areas that support pollinators and seed dispersal organisms.

Primary constituent elements can exist in undeveloped areas that support various types of soils derived from carbonate substrates and similar plant communities that provide habitat for the carbonate plants. Each of the carbonate plants has a separate set of primary constituent elements, as follows:

**Cushenbury milk-vetch:** (1) soils derived primarily from Bird Spring Formation, upper and middle

members, and Undivided Cambrian parent materials that occur on hillsides or along rocky washes with limestone outwash between 1,171 and 2,013 m (3,864 and 6,604 ft); (2) soils with intact, natural surfaces that have not been substantially altered by land use activities; and (3) plant communities that have areas with an open canopy cover and little accumulation of organic material on the surface of the soil (e.g., leaf litter);

\_\_\_\_\_ **Cushenbury buckwheat:** (1) soils derived primarily from Bird Spring Formation, upper and middle members, and Bonanza King Formation parent materials that occur on hillsides between 1,400 and 2,400 m (4,600 and 7,900 ft); (2) soils with intact, natural surfaces that have not been substantially altered by land use activities; and (3) plant communities that have areas with an open canopy cover (generally less than 15 percent cover) and little accumulation of organic material on the surface of the soil (e.g., leaf litter);

\_\_\_\_\_ **San Bernardino Mountains bladderpod:** (1) soils derived primarily from Bonanza King Formation and Undivided Cambrian parent materials that occur on hillsides or on large rock outcrops between 2,098 and 2,700 m (6,883 and 8,800 ft); (2) soils with intact, natural surfaces that have not been substantially altered by land use activities; and (3) plant communities that have areas with an open canopy cover and little accumulation of organic material on the surface of the soil (e.g., leaf litter);

**Cushenbury Oxytheca:** (1) soils derived primarily from upslope limestone, a mixture of limestone and dolomite, or limestone talus substrates with parent materials that include Bird Spring Formation, all members; Bonanza King Formation; Monte Cristo Limestone, middle and lower members; and Sultan Limestone, Crystal Pass member between 1,440 and 2,372 m (4,724 and 7,782 ft); (2) soils with intact, natural surfaces that have not been substantially altered by land use activities; and (3) plant communities that have areas with an moderately open canopy cover (generally between 25 and 53 percent; Neel 2000);

**Parish's daisy:** (1) soils derived primarily from upstream or upslope limestone, dolomite, or quartz monzonite parent materials that occur on dry, rocky hillsides, shallow drainages, or outwash plains between 1,171 and 1,950 m (3,842 and 6,400 ft); (2) soils with intact, natural surfaces that have not been substantially altered by land use activities; and (3) plant communities that have areas with an open canopy cover.

***Q. What areas have been proposed as critical habitat?***

We are proposing to designate a total of 13,180 acres of land as critical habitat for the five carbonate plants. Proposed critical habitat for each of the plants is as follows:

Cushenbury milk-vetch:	4,365 acres
Cushenbury buckwheat:	6,955 acres
San Bernardino Mountains bladderpod:	1,025 acres
Cushenbury Oxytheca:	3,150 acres
Parish's daisy:	4,420 acres

Due to the considerable overlap in the habitats for each of the plants, the total proposed critical habitat for the five carbonate plants is 13,180 acres. Approximately 86 percent (11,280 acres) of the proposed critical habitat is on Federal land, most of which is managed by the San Bernardino National Forest (SBNF). A small portion of the proposed critical habitat is on land managed by the Bureau of Land Management (BLM). Areas proposed as critical habitat are identified in three separate units:

- ◆ **Unit 1:** The Northeastern Slope Unit includes approximately 11,980 acres extending from the western edge of White Mountain to the eastern edge of Rattlesnake Canyon, San Bernardino County, California. This unit contains four of the five carbonate plants: Cushenbury milk-vetch, Parish's daisy, Cushenbury buckwheat, and Cushenbury oxytheca.
- ◆ **Unit 2:** The Bertha Ridge Unit is located on the north side of Big Bear Lake, adjacent to Big Bear City, California. Covering approximately 685 acres, this unit contains two of the five carbonate plants: Cushenbury buckwheat and the San Bernardino Mountains bladderpod.
- ◆ **Unit 3:** The Sugarlump Ridge Unit is the smallest of three units, covering only 515 acres of land managed by the San Bernardino National Forest. This unit is centered on the north-facing slope of Sugarlump Ridge, south of Bear Valley, California. The San Bernardino Mountains bladderpod is the only carbonate plant in this unit.

All lands proposed as critical habitat support known populations of the plants and/or contain one or more of the primary constituent elements that provide for the life cycle needs of these plants.

***Q. Why is the Service proposing to designate approximately 13,180 acres as critical habitat for the carbonate plants?***

When we listed the carbonate plants, we believed that designating critical habitat was not prudent because such designation would likely increase the degree of threat from vandalism, collection, or other human activities. On June 15, 2000, the California Native Plant Society filed a lawsuit in Federal District Court for the Southern District of California for our failure to designate critical habitat for the five carbonate plants.

On April 27, 2001, the Court vacated the Service's "not prudent" determination and ordered us to reevaluate the prudence of designating critical habitat, and if prudent, to propose critical habitat by January 31, 2002.

Following the listing of these plants under the Act, a broad, cooperative effort was initiated to develop a Carbonate Habitat Management Strategy (CHMS) to address the conservation of carbonate habitat in the San Bernardino Mountains. Participants in the CHMS include the SBNF, the Service, BLM, and mining interests. Detailed maps indicating site-specific locations of the carbonate plants have been used during meetings for the CHMS, but the Service has no indication that publication of these maps has led to instances of habitat vandalism or collection. Additionally, the proposed designation of critical habitat may provide further support the development of the CHMS by helping to focus attention on areas that are essential to the conservation of the plants.

***Q. What about lands already covered by a habitat conservation plan (HCP)?***

Currently, only one HCP has been completed within the area where the carbonate plants occur. The Habitat Conservation Plan for the Federally Threatened Desert Tortoise Cushenbury Sand and Gravel Quarry, San Bernardino County, California, was completed in 1994, but this HCP only addresses impacts to the threatened the desert tortoise (*Gopherus agassizii*). None of the carbonate plants addressed in the critical habitat proposal are covered under this HCP. In the event that future HCPs are developed within the boundaries of critical habitat for the carbonate plants, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for the conservation of the plants and their habitat.

Approved and permitted HCPs are designed to ensure the long-term survival of covered species within the conservation plan area. Lands within an approved HCP that we would ordinarily define as critical habitat will normally be protected in reserves or other conservation lands under the terms of a HCP and its implementing agreement.

***Q. What about lands where regional HCPs are being developed or will be developed in the future?***

The BLM and 27 other Federal and State agencies, cities, and counties are planning to address the management of plants and animals found within the planning area for the West Mojave HCP. The goal of the West Mojave HCP is to provide conservation solutions for the 96 plants and animals in a single plan, while allowing development to occur. The proposed designation of critical habitat for the carbonate plants should not impede ongoing efforts to develop and implement new HCPs in southern California, including the West Mojave HCP. We will continue to work closely with the local jurisdictions and private landowners to ensure the long term survival of the carbonate plants

***Q. Will the Forest Plan provide adequate protection for the carbonate plants?***

The long-term survival and conservation of the carbonate plants is dependent upon a number of factors, including the protection and management of existing populations and habitat. The U.S. Forest Service (USFS) is currently revising its Land and Resource Management Plans (Forest Plans) for the Angeles, Cleveland, Los Padres, and San Bernardino National Forests in southern California. The Service is working closely with the USFS to ensure that all federally listed species that occur on USFS lands are adequately protected.

***Q. What other conservation or management plans are being developed for the carbonate plants?***

In September 1997, we published a Draft San Bernardino Mountains Carbonate Endemic Plants Recovery Plan. The Draft Recovery Plan identifies actions needed to conserve and recover the carbonate plants including protecting significant existing populations, restoring habitat, reintroducing plants, and implementing appropriate management measures such as monitoring and surveying. We are currently working on revising the Draft Recovery Plan.

Since the listing of the carbonate plants pursuant to the Act, the SBNF, the Service, BLM, and mining interests have been engaged in a broad, cooperative effort to develop the CHMS. The CHMS will address the conservation of carbonate habitat within a 160,300 acre portion of the San Bernardino Mountains. The goals of the CHMS are to protect the carbonate plants and their habitats; minimize impacts or mitigate for

unavoidable impacts from projects within the CHMS area; provide for streamlined project reviews within the planning area; and to guide habitat restoration activities.

***Q. What happens if my private property is designated as critical habitat for the carbonate plants?***

The designation of critical habitat will not affect private landowners unless they are undertaking an activity that requires Federal funding, permitting, or authorization. If a project on private land does require Federal permitting, funding, or authorization, and the project may affect designated critical habitat for the carbonate plants, the Federal agency would be required to consult with the Service.

***Q. Does the designation of critical habitat create preserves?***

No. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve or preserve. It does not allow government or public access to private lands and will not result in closure of the area to all access or use.

***Q. How will any final designation of critical habitat affect activities for which a party has already consulted with the Service under section 7 of the Act?***

Regulations require Federal agencies to reinitiate consultation with the Service on previously reviewed actions if critical habitat is designated after the initial consultation, and if those actions may adversely affect critical habitat. This applies only to Federal agencies which have retained some type of involvement or control over the action, or if such involvement is authorized by law. Federal agencies may request to reinitiate consultation with the Service if a project may affect critical habitat.

***Q. What happens if a project is reviewed as part of a reinitiation of consultation and the Service determines it will adversely modify critical habitat?***

It is highly unlikely that an activity that was reviewed and permitted by the Service under section 7 of the Act, prior to the designation of critical habitat, will be changed. During a consultation, we must determine if the proposed action will “jeopardize the continued existence” of a species by asking the question “*will the project appreciably reduce the likelihood of the species’ survival and recovery?*” A project that will “destroy or adversely modify” critical habitat is one that will appreciably reduce the value of habitat for the survival and recovery of the species. Regardless of whether critical habitat has been designated, we must still consider the effect a project may have on the continued existence and recovery of a listed species.

***Q. Is an economic analysis required as part of designating critical habitat?***

Yes. The Service must take into account the economic and any other relevant impact of identifying any particular area as critical habitat. Unless the designation of an area as critical habitat would result in the extinction of the species, we may exclude an area from critical habitat if we determine that the benefits (economic and otherwise) of excluding it outweigh the benefits of including it. This determination is based on the best scientific, economic, and commercial information available.

***Q. Will the public be given an opportunity to comment on proposed critical habitat for the***

*carbonate plants?*

Yes. The Service wants to ensure that any final action resulting from this proposal will be as accurate and as effective as possible. We are actively soliciting comments or suggestions from the public, other government agencies, the scientific community, industry representatives, and other interested parties. In particular, we are seeking comments and information regarding:

- ◆ The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to these species due to designation;
- ◆ Specific information on the amount and distribution of the carbonate plants habitat, and what habitat is essential to the conservation of these species; and why;
- ◆ Land use practices and current or planned activities in the subject areas and their possible impacts on proposed critical habitat;
- ◆ Any foreseeable economic or other impacts resulting from the proposed designation of these areas as critical habitat and, in particular, any impacts to small entities or families;
- ◆ Economic and other values associated with designating critical habitat for the carbonate plants such as those derived from non-consumptive uses (e.g., hiking, camping, bird-watching, enhanced watershed protection, improved air quality, increased soil retention, “existence values,” and reductions in administrative costs); and
- ◆ Whether our approach to critical habitat designation could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments.

Written comments, data, and information about the proposed designation of critical habitat for the carbonate plants received by 5:00p.m. on April 15, 2002, will be considered in any final determination of critical habitat. All comments and materials should be sent to Field Supervisor, Carlsbad Fish and Wildlife Office, 2730 Loker Avenue West, Carlsbad, California 92008.

All comments and materials received will be available for public inspection, by appointment, during normal business hours, at the Carlsbad Fish and Wildlife Office.

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