

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AD37

Endangered and Threatened Wildlife and Plants; Proposed Rule to List Three Plants From the Channel Islands of Southern California as Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes to list *Cercocarpus traskiae* (Catalina Island mountain-mahogany), *Lithophragma maximum* (San Clemente Island woodland-star), and *Sibara filifolia* (Santa Cruz Island rockcress) as endangered throughout their respective ranges on the Channel Islands of southwestern California, pursuant to the Endangered Species Act of 1973, as amended (Act). *Cercocarpus traskiae* is found primarily in coastal scrub habitats on Santa Catalina Island. *Lithophragma maximum* is found in rock crevices within coastal bluff scrub on San Clemente Island. *Sibara filifolia* is found on talus slopes in coastal scrub on San Clemente Island. These plants are threatened by a variety of factors including grazing, competition from non-native plant species, erosion, hybridization, stochastic events, and the inadequacy of existing regulations. This proposed rule, if made final, would implement the Federal protection and recovery provisions under the Act for these three species.

DATES: Comments from all interested parties must be received by October 9, 1995. Public hearing requests must be received by September 25, 1995.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Field Supervisor, U.S. Fish and Wildlife Service, Carlsbad Field Office, 2730 Loker Avenue West, Carlsbad, California 92008. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Gail Kobetich, Field Supervisor, at the above address (telephone 619/431-9440; facsimile 619/431-9624).

SUPPLEMENTARY INFORMATION:**Background**

Cercocarpus traskiae (Catalina Island mountain-mahogany), *Lithophragma maximum* (San Clemente Island woodland-star), and *Sibara filifolia*

(Santa Cruz Island rockcress) are endemic to the Channel Islands of southern California. These three species are restricted primarily to San Clemente and Santa Catalina Islands. *Cercocarpus traskiae* is currently found only on Santa Catalina Island and a single plant is also known from the Santa Monica Mountains. *Lithophragma maximum* and *Sibara filifolia* occur on San Clemente Island. *Sibara filifolia* was historically found on Santa Cruz and Santa Catalina Islands.

The Channel Islands are composed of igneous and sedimentary rocks that have been uplifted and folded by tectonic activity (Raven 1963, Thorne 1967, Schaffer 1993). The maritime climate of the islands is characterized by hot, dry summers and mild, wet winters with periodic severe droughts and frequent fog (Minnich 1980, Johnson 1980). The archipelago is made up of two chains of islands. The Northern Channel Islands include the islands of San Miguel, Santa Rosa, Santa Cruz and Anacapa. The Southern Channel Islands are San Nicholas, Santa Barbara, Santa Catalina and San Clemente islands (Raven 1967).

The Channel Islands are rich in endemic species as a result of their geographic isolation. A number of species have persisted on the islands, although their mainland counterparts have been extirpated by climatic change and other factors over geologic time (Raven 1963). The decline of endemic species, including the three plants under consideration herein, began before thorough botanical studies on the islands were completed. Their original range and distribution is speculative because their original habitats are now dominated by non-native plants. Although these islands have been occupied by humans for at least 10,000 years, non-native plants have only become naturalized on the islands since their introduction by Euro-Americans during the last 200 years (Dr. Mark Raab, California State University, Northridge, pers. comm. 1994). Overgrazing and trampling of native vegetation by domestic animals facilitated the spread of these non-native plants (Raven 1963, Raven 1967, Thorne 1967, Philbrick 1980). Severe erosion resulting from overgrazing was exacerbated by a series of droughts in the 1860's, the first of several periods of severe vegetation and soil stripping on the islands (Johnson 1980).

Santa Catalina Island is the largest of the southern Channel Islands, measuring 194 square kilometers (sq km) (75 square miles (sq mi)) in area. The terrain is rugged and mountainous, with a maximum elevation of 648

meters (m) (2,125 feet (ft)) (Powers 1980). Due to its proximity to the mainland, the flora of Santa Catalina Island is very similar to the flora of the mainland (Thorne 1967). Habitats on the island include oak woodlands, chaparral, coastal sage scrub, and grasslands (Minnich 1980). Santa Catalina is the home of *Cercocarpus traskiae* and a historical locality for *Sibara filifolia* (Thorne 1967).

San Clemente Island is the southernmost of the Channel Islands in California. Its terrain is marked by a broad, high, plateau surrounded by deeply incised cliffs. The highest elevation on the 145 sq km (56 sq mi) island is 600 m (1,965 ft) (Powers 1980).

Santa Cruz is the largest of the northern Channel Islands (250 sq km (96 sq mi)) with a maximum elevation of 753 m (2,470 ft) (Powers 1980). The island's north shore is mountainous and rugged; the topography of the southern side is gentle and rolling. The Nature Conservancy currently owns approximately 90 percent of Santa Cruz Island. The remainder is owned by the National Park Service (Schuyler 1980).

Cercocarpus traskiae was first described by Alice Eastwood (1898) based on a specimen collected by Blanche Trask in 1897. Dunkle (1940) reduced the rank of *C. traskiae* to a variety of *C. betuloides*. Although Martin (1950) subsequently transferred this taxon to a variety of *C. montanus*, Munz (1959) retained it as *C. betuloides* var. *traskiae*. Munz (1968) later elevated *C. betuloides* var. *traskiae* to *C. traskiae*. Murray (1982) changed the rank of this taxon to a subspecies of *C. betuloides*; however, the name *C. traskiae* has been retained by both Munz (1974) and Lis (1993).

Cercocarpus traskiae, a member of the rose family (Rosaceae), is an evergreen shrub or small tree that blooms from March to May. The flowers lack petals and occur in clusters of 4 to 10. The hypanthium (floral structure derived from the fused lower portions of petals, sepals, and stamens) is densely white-woolly, and is approximately 7 to 14 millimeters (mm) (0.5 inch (in.)) long (Lis 1993). The fruit is an achene with a persistent plumose style, which dries in a spiral, typical of the genus. The leathery, clustered leaves are simple, serrate (toothed), and range from 2.5 to 6 centimeters (cm) (1 to 2.5 in.) long. The upper surface of the leaf is glabrous (smooth); the undersurface is densely white-woolly. *Cercocarpus betuloides* var. *blanchaeae*, a relatively common endemic on the island, is considered to be distinct from *C. traskiae* (Eastwood 1898, Cole and Lu 1979). It is differentiated by its strigose (stiff, sharp,

appressed) hairs on the undersides of the leaves and on the floral tube. In addition, the leaves of *C. betuloides* var. *blancheae* are not leathery (Eastwood 1898, Lis 1993).

Cercocarpus traskiae is one of California's rarest trees. It is endemic to a particular soil type, derived from sausserite gabbro parent material (Gaye 1991), and is only found in Wild Boar Gully, a steep-sided, narrow arroyo located on southwestern Santa Catalina Island (Thorne 1967). *Cercocarpus traskiae* occurs in a coastal sage scrub containing *Eriogonum fasciculatum* (California buckwheat), *Salvia mellifera* (black sage), and *Rhus integrifolia* (lemonade berry). All of the habitat occupied by *C. traskiae* on Santa Catalina Island is owned by The Santa Catalina Island Conservancy (a private organization), which manages 86 percent of the land on the island.

About 40 or 50 individuals of *Cercocarpus traskiae* were identified from Wild Boar Gully when this taxon was originally discovered (Eastwood 1898). The population has since been reduced to 11 mature trees (Cole and Lu 1979, Gaye 1991). The Santa Catalina Island Conservancy has planted *C. traskiae* seedlings in Campo Blanco Canyon, Ironwood Grove, and the Santa Catalina Island Nature Center in cooperation with the California Department of Fish and Game (Gaye, pers. comm. 1994).

In 1993, a single individual of *Cercocarpus traskiae* was discovered in the Santa Monica Mountains by David Carroll (Rieseberg and Swensen 1994; Loren Rieseberg, geneticist, Indiana State University, pers. comm. 1993; David Carroll, botanist, Carroll and Associates, Topanga, California, pers. comm. 1994). Although additional individuals may exist in the Santa Monica Mountains, this taxon is not likely to be widespread. It may represent a remnant of an ancestral or sister population of *C. traskiae*, or a hybrid between *C. traskiae* and the mainland variety, *C. betuloides* var. *betuloides* (Rieseberg and Swensen 1994). This individual may indicate a formerly widespread distribution of ancestral stock (Raven 1963). However, it is also possible that this tree was planted (L. Rieseberg, pers. comm. 1993). Additional data or information on this particular occurrence is being solicited.

Lithophragma maximum was first collected by Mrs. Nell Murbarger in 1936 on San Clemente Island. It was originally described as *Lithophragma maxima* by Rimo Bacigalupi (1963). The specific epithet was later changed from *L. maxima* to *L. maximum* (Bacigalupi

1979). Although it was not recognized by Taylor (1965), *L. maximum* was retained by Munz (1968, 1974) and Elvander (1993).

Lithophragma maximum is a member of the saxifrage family (Saxifragaceae) and blooms from April to June. It is a rhizomatous, perennial herb with two or three stout flowering stems from 40 to 60 cm (16 to 24 in.) high. Each flower-bearing stem produces 20 or more white, campanulate (bell-shaped) flowers, each about 1 cm (0.5 in.) in length (Bacigalupi 1963). The leaves are palmately compound and arise from the base on slender petioles 15 cm (6 in.) long. *Lithophragma maximum* is differentiated from other *Lithophragma* by its compound trifoliate leaves (Munz 1968, Elvander 1993).

Lithophragma maximum was thought to be extinct until it was rediscovered in 1979 by Mitchell Beauchamp (Bacigalupi 1979). The number of plants on the island at Bryce Canyon has declined from between 12 and 15 plants (Beauchamp 1980) to 9 plants since its rediscovery (Beauchamp 1987, Mistretta 1992). Three of the 15 plants originally discovered are believed to remain at the bottom of Eagle Canyon (Kellogg and Kellogg 1993). Both locations are deeply incised canyons on the northeast side of the island. Sixteen additional plants were found in Near Death Canyon in 1990. However, less than 30 individuals of the species are known to exist (California Natural Diversity Data Base (CNDDDB) 1993, Mistretta 1992).

Sibara filifolia was first collected by E.L. Greene in 1886 and described under the name *Cardamine filifolia* (Greene 1887a). Greene (1887b) later transferred it to *Arabis filifolia*. He proposed the new genus *Sibara* in 1896 and transferred *A. filifolia* to *Sibara filifolia* (Greene 1896). *Sibara filifolia* has been retained by Munz and Keck (1959), Munz (1968, 1974), and Rollins (1993).

Sibara filifolia is a slender annual herb of the mustard family (Brassicaceae) that blooms from March to April (Hochberg *et al.* 1980b). It is 13 to 38 cm (5 to 15 in.) tall. The flowers are pink to purplish with spoon-shaped petals 3 to 6 mm (1/8 to 1/4 in.) in length. The pinnately compound leaves are 2.5 to 5 cm (1 to 2 in.) long, with narrow linear lobes. The fruit is a slender pod (celiac), 1.5 to 3 cm (3/5 to 1 in.) long, that contains many wingless seeds. *Sibara filifolia* is differentiated from *S. virginica*, which has white to pinkish petals and narrowly winged seeds, and from *S. rosulata* and *S. deserti*, which have white petals. Neither *S. rosulata* nor *S. deserti* occur on the Channel Islands (Munz 1974).

The type location for *Sibara filifolia* is on Santa Cruz Island (Greene 1887a). It was last seen in 1936 and was not relocated during the 1985 survey of Santa Cruz Island (CNDDDB 1993). It is thought to have once been common as well as wide ranging, since it was collected on two distant islands, Santa Catalina and Santa Cruz. Blanche Trask collected *S. filifolia* in 1901 on Santa Catalina Island where she reported it to be common in two locations (Thorne 1967). Its extirpation on Santa Cruz Island was brought about rapidly by intensive browsing of feral goats (Hochberg *et al.* 1980b).

Sibara filifolia had never been known to occur on San Clemente Island (Oberbauer, in litt. 1980) until 1986 when it was discovered in two locations near Pyramid Head by Mitchell Beauchamp (Beauchamp 1987). Previously, it was thought to be extinct. The extent of its original range on San Clemente Island is unknown.

Sibara filifolia presently exists solely on a sea terrace on the southern part of San Clemente Island, near Pyramid Head. It grows on volcanic rock scree (talus) in association with *Opuntia prolifera* (cholla), *Selaginella bigelovii* (spike-moss), and *Lotus argophyllus* (birds-foot trefoil) (CNDDDB 1993, Beauchamp 1987). This area receives the highest amount of solar radiation on the island (Kellogg, pers. comm. 1994), which conflicts with records of historical localities indicating that *S. filifolia* "is to be sought in shady places on the northward slope [on Santa Cruz Island]" (Greene 1887a). There are 400 or 500 of these plants currently located on San Clemente Island. Others are expected to be found on cool, north-facing cliff faces, perhaps at China Canyon (Beauchamp, pers. comm. 1994). However, the presence of *S. filifolia* at this location has yet to be verified.

Previous Federal Action

Federal government action on two of the plant taxa considered in this rule began as a result of section 12 of the Endangered Species Act of 1973, which directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened or extinct. This report, designated as House Document No. 94-51, and presented to Congress on January 9, 1975, recommended *Cercocarpus traskiae* and *Lithophragma maximum* (as *L. maxima*) for endangered status and *Sibara filifolia* as threatened. The Service published a notice in the July 1, 1975, **Federal Register** (40 FR 27823), of its acceptance of the report as a petition within the

context of section 4(c)(2) (now section 4(b)(3)(A)) of the Act, and of the Service's intention to review the status of the plant taxa named therein, including *C. traskiae*, *L. maximum* and *S. filifolia*. The Service published a proposal in the June 16, 1976, **Federal Register** (41 FR 24523) to determine approximately 1,700 vascular plants to be endangered species pursuant to section 4 of the Act. *Cercocarpus traskiae* and *L. maximum* were also included in this **Federal Register** notice. This list contained only proposed endangered species; therefore, *Sibara filifolia* was not included on the list.

General comments received in response to the 1976 proposal were summarized in an April 26, 1978, **Federal Register** (43 FR 17909) notice. The Endangered Species Act amendments of 1978 required all proposals over 2 years old to be withdrawn, although a 1-year grace period was given to those proposals. In the December 10, 1979, **Federal Register** (44 FR 70796), the Service published a notice of withdrawal for that portion of the June 16, 1976, proposal that had not been made final, along with four other proposals that had expired.

The Service published a Notice of Review for plants in the **Federal Register** on December 15, 1980 (45 FR 82480). This notice listed the status of *Cercocarpus traskiae* and *Lithophragma maximum* as Category 1 candidate taxa (species for which data in the Service's possession are sufficient to support a proposal for listing) and also added *Sibara filifolia* to the list as a Category 1* candidate taxon (species for which Service data indicate likely extinction). The status of the three species remained unchanged until the Notice of Review for plants published in the **Federal Register** on February 21, 1990, when *Sibara filifolia* was changed to Category 1 status following its rediscovery on San Clemente Island.

Section 4(b)(3)(B) of the Endangered Species Act of 1973, as amended in 1982, requires the Secretary to make findings on pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments further requires that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. This was the case for *Cercocarpus traskiae* and *Lithophragma maximum* because the 1975 Smithsonian report had been accepted as a petition. On October 13, 1983, the Service found that the petitioned listing of these species was warranted, but precluded by other pending listing proposals of higher priority, pursuant to section 4(b)(3)(B)(iii) of the Act. Notification of

this finding was published in the **Federal Register** on January 20, 1984 (49 FR 2485). Such a finding requires the petition to be recycled, pursuant to section 4(b)(3)(C)(i) of the Act. The petition was reviewed in October of 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, and 1993. Publication of this proposal constitutes the final finding for these three plant taxa.

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act (16 U.S.C. 1533 *et seq.*) and regulations (50 CFR 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Cercocarpus traskiae* Eastwood (Catalina Island mountain-mahogany), *Lithophragma maximum* Bacigalupi (San Clemente Island woodland-star), and *Sibara filifolia* Greene (Santa Cruz Island rockcress) are as follows:

A. *The present or threatened destruction, modification, or curtailment of their habitat or range.* Destruction of habitat by feral animals has caused long-term impacts to the structure of the habitat on all the Channel Islands. Loss of habitat for endemic species was precipitated by defoliation from overgrazing, the loss of topsoil, and formation of incised canyons due to increased erosion (Kellogg and Kellogg 1994). The loss of soil organic matter and reduction of soil nutrient cycling and water-holding capacity promoted the invasion of non-native plants.

The decline of the native flora of Santa Catalina Island began with the proliferation of introduced herbivores (Thorne 1969). Goats were introduced to the island as early as 1807 (Misty Gaye, naturalist, Catalina Island Conservancy, pers. comm. 1994). Goats are known to consume coarse vegetation such as shrubs and trees, including *Cercocarpus traskiae* (Coblentz 1980). Sheep ranching became important on the island in the 1850's (Minnich 1980). Sheep eat herbaceous vegetation that would have included *Sibara filifolia*. Other non-native herbivores introduced to Santa Catalina Island included pigs, bison, and deer. Pigs uprooted seedlings and impacted both *S. filifolia* and *C. traskiae* (Thorne 1969; Gaye, pers. comm. 1994). Although the Santa Catalina Island Company eliminated sheep grazing in the 1950's (Thorne 1969), the population of feral goats and

pigs continued to increase. A goat and pig management program has reduced the number of feral herbivores that threaten native plant species but the threat still remains (see Factor C) (Dave Garcelon, depredation control biologist, Institute For Wildlife, Santa Catalina Island, pers. comm. 1994; Gaye, pers. comm. 1994).

Pigs continue to degrade the habitat of *Cercocarpus traskiae* on Santa Catalina Island by preventing surface litter from accumulating. Surface litter holds moisture and seeds on the steep slopes. Pigs also create a network of bare trails with compacted soils. The vegetation loses its tiered, overlapping structure because shrubs become isolated by surrounding trails (Gaye, pers. comm. 1994). A noticeable increase in surface litter and a corresponding increase in seedlings of all types have been observed since the numbers of pigs and goats have declined, but trails and bare soil are still common (Gaye, pers. comm. 1994).

The San Clemente Island Sheep and Wool Company leased that island from the U.S. Government from 1877 to 1934 (Raven 1963). The island's ownership was subsequently transferred to the Department of Defense (Navy). The island is currently used as an artillery practice range and as a ship-to-shore bombing area (Kellogg and Kellogg 1994). Goats were present on San Clemente Island prior to 1827 (Dunkle 1950). Although the Navy eliminated sheep grazing in 1934, the goat population proliferated (Kellogg and Kellogg 1994). In addition, the California Department of Fish and Game introduced pigs to the island in 1951 and mule deer in 1962. Populations of feral pigs and goats ranged between 15,000 and 25,000. The Navy removed all feral goats and pigs by 1991, in an effort to preserve endemic flora and fauna (Clark Winchell, biologist, Navy, Department of Natural Resources, pers. comm. 1994).

The decline of Santa Cruz Island's flora, including extirpated populations of *Sibara filifolia*, is primarily due to overgrazing by sheep and other non-native herbivores. Sheep, cattle, horses, and pigs were introduced to Santa Cruz Island (Steve Junak, herbarium curator, Santa Barbara Botanic Gardens, pers. comm. 1994). The population of sheep has ranged from between 20,000 and 50,000 or more (Schuyler 1980, Brumbaugh 1980). Cycles of defoliation and erosion are evident in the stratigraphic studies of deposits from debris slides and correlate with the introduction of sheep to the island and periods of drought (Brumbaugh 1980).

Most feral herbivores have been removed but pigs remain (see Factor C).

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Due to its extreme rarity, *Cercocarpus traskiae* may become vulnerable to collecting by curiosity seekers as a result of increased publicity following the publication of a listing proposal. Overutilization is not known to be applicable for *Lithophragma maximum* and *Sibara filifolia*. Both species occur on San Clemente Island, where public access is restricted by the Navy.

C. *Disease or predation.* Feral herbivores continue to threaten the survival of *Cercocarpus traskiae* on Santa Catalina Island and the possible reappearance of *Sibara filifolia* on Santa Catalina and Santa Cruz Islands. Non-native mule deer (*Odocoileus hemionus*) and goats (*Capra hircus*) consume endemic plants including *Cercocarpus traskiae*. Severe browsing may kill plants directly and prevent successful reproduction of surviving individuals (Thorne 1969; Gaye, pers. comm. 1994).

The decline of *Cercocarpus traskiae* is primarily due to grazing by feral goats and pigs (*Sus scrofa*). They nearly extirpated this taxon by the early 1970's (Gaye, pers. comm. 1994). Fencing was installed around the last two individuals known to exist at that time (Rieseberg 1991). This fencing was improved to exclude pigs in 1985, and perimeter fencing was added to limit access by other non-native animals (Gaye 1991). As a result, seedling counts increased from 1 in 1984 to 55 in 1986 and 74 seedlings in 1987 (CNDDDB 1993, Gaye 1988). In 1994, however, a total of only 54 seedlings was found (Gaye, pers. comm. 1994). Most of the *C. traskiae* trees do not have individual pig-proof fencing around them and the perimeter fencing does not exclude pigs (Gaye, pers. comm. 1994). Pigs are limiting the recovery of *C. traskiae* seedlings because they uproot new seedlings while searching for bulbs. Approximately 2,000 pigs remain on Santa Catalina Island. The Santa Catalina Island Conservancy pig removal program is keeping the populations from increasing (Dave Garcelon, pers. comm. 1994).

Although managers for the Santa Catalina Island Conservancy have removed more than 8,000 goats from the island, 300 to 400 goats remain on the island. Populations of introduced mule deer are increasing, now that goat populations have been reduced (Garcelon, pers. comm. 1994). Reduced predation by goats has resulted in successful basal sprouting of *Cercocarpus traskiae*, but a continued

increase in deer populations might reverse this trend. Although the perimeter fencing along Wild Boar Gully limits the access of deer and goats to *Cercocarpus*, it does not entirely exclude them (Gaye 1988).

Sibara filifolia was apparently extirpated from Santa Cruz Island by overgrazing (Hochberg *et al.* 1980b). Although some areas have been fenced, sheep and pigs continue to re-invade these areas and their numbers appear to be increasing. It is possible that *Sibara filifolia* could be rediscovered on Santa Cruz Island; however, grazing by non-native animals may prevent its re-establishment (Steve Junak, pers. comm. 1994).

D. *The inadequacy of existing regulatory mechanisms.* Existing regulatory mechanisms that could provide some protection for these species include: (1) Listing under the California Endangered Species Act (CESA); (2) the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA); (3) conservation provisions under section 404 of the Federal Clean Water Act (CWA) and section 1603 of the California Fish and Game Code; (4) occurrence with other species protected by the Federal Endangered Species Act or other Federal laws; and (5) local laws and regulations.

The California Fish and Game Commission has listed *Cercocarpus traskiae* and *Lithophragma maximum* as endangered under the Native Plant Protection Act (NPPA) (Division 2, chapter 10, section 1900 *et seq.* of the California Fish and Game Code) and the California Endangered Species Act (CESA) (Division 3, chapter 1.5, section 2050 *et seq.*). Listing by the State of California requires individuals to obtain a memorandum of understanding with the California Department of Fish and Game (CDFG) to possess or "take" a listed species. Although both statutes prohibit the "take" of State-listed plants (chapter 10, section 1908 and chapter 1.5, section 2080, California Fish and Game Code), State law appears to exempt the taking of such plants via habitat modification or land use change by the landowner. After the CDFG notifies a landowner that a State listed plant occurs on his or her property, State law requires only that the landowner notify the agency "at least 10 days in advance of changing the land use to allow salvage of such plant" (Chapter 10, section 1913, California Fish and Game Code). *Sibara filifolia* is not State-listed and has no protection under these laws.

The California Environmental Quality Act (CEQA) (Public Resources Code,

section 21000 *et seq.*) requires that the potential environmental impacts of proposed projects be disclosed to the public. The public agency with primary authority or jurisdiction over the project is designated as the lead agency, and is responsible for conducting a review of the project and consulting with the other agencies concerned with the resources affected by the project. Section 15065 of the CEQA Guidelines requires a finding of significance if a project has the potential to "reduce the number or restrict the range of a rare or endangered plant or animal." Once significant effects are identified, the lead agency may either require mitigation or determine that "overriding social and economic considerations" make mitigation infeasible (California Public Resources Code, Guidelines, section 15093). In the latter case, projects may be approved that cause significant environmental damage, such as destruction of endangered plant species or their habitat. Small projects on private lands, such as road building or fence installation, often qualify for an exemption under CEQA known as a "negative declaration." These projects do not require a full environmental assessment. Consequently, take of endangered species could result because the existence of the plant at the project site may have been overlooked.

Like CEQA, the National Environmental Policy Act (NEPA) requires disclosure of the environmental effects of projects under Federal jurisdiction. *Sibara filifolia* and *Lithophragma maximum* are found on San Clemente Island, which is federally owned. However, the Service's comments through NEPA's environmental review processes are only advisory. Project proponents are not required to avoid impacts to these species, and proposed mitigation measures are frequently not adequately implemented.

Section 1603 of the California Fish and Game Code authorizes the Department of Fish and Game to regulate streambed alteration. The Department must be notified and approve any work that substantially diverts, alters, or obstructs the natural flow or substantially changes the bed, channel, or banks of any river, stream, or lake. If an existing fish or wildlife resource may be substantially adversely affected by a project, CDFG must submit proposals to protect the species within 30 days. However, if the Department does not respond within 30 days of notification, the applicant may proceed with the work.

Section 404 of the Clean Water Act authorizes the U.S. Army Corps of

Engineers (Corps) to regulate the discharge of dredged or fill materials into waters of the United States (33 CFR parts 230–330). Waters of the United States include navigable and other waters, their headwaters (streams with an average annual flow of less than 5 cubic feet per second), and wetlands (either adjacent to other waters or isolated). Section 404 regulations require that applicants obtain an individual permit for projects that do not meet the terms and conditions of any available Nationwide permits (33 CFR part 330). Projects that qualify for authorization under Nationwide Permit 26 (NWP 26) will adversely impact 0.40 to 4.0 hectares (1 to 10 acres) of isolated or headwater wetlands, and cause only minimal environmental impacts. These projects can usually be permitted with minimal environmental review by the Corps. Projects that qualify for authorization under NWP 26 and that affect less than 0.41 hectares (1 acre) of isolated waters or headwaters may proceed without notifying the Corps. Evaluation of impacts of such projects is thus precluded under the section 404 permit process, although an individual permit may be required by the Corps if projects otherwise qualifying under NWP 26 would have greater than minimal environmental impacts. The Corps, however, is generally reluctant to withhold authorization under NWP 26 unless the existence of a federally listed threatened or endangered species would be jeopardized. Candidate species receive no special consideration under section 404, regardless of the type of permit deemed necessary. Thus, these three taxa currently receive insufficient protection under section 404. *Cercocarpus traskiae* and *Lithophragma maximum* may grow in gullies and canyons that may be regulated as jurisdictional waterways under section 404 of the CWA or section 1603 of the California Fish and Game Code. These waterways do not have running water most of the year and plants could be damaged when project planners fail to recognize that a section 404 or section 1603 permit is required for the intended action.

The location of extant populations of these three species does not coincide with that of federally listed plant species on the islands. Therefore, Federal protection under the Act does not currently extend to the species being proposed (Kellogg and Kellogg 1994; Gaye, pers. comm. 1994). Local laws and regulations are currently providing inadequate protection for these species. Laws prohibiting “take” of native plants do not protect them from feral

herbivores. Although managers of San Clemente Island have removed herbivores from the island, natural threats and impacts from activities such as fires, bombing, and bulldozing continue (Kellogg, pers. comm. 1994).

E. *Other natural or manmade factors affecting their continued existence.* As a consequence of habitat degradation on the islands, the proportion of invasive exotic plant species to native and endemic species has increased. On San Clemente Island, 98 species are exotic (Kellogg and Kellogg 1994), compared to 1886 when Lyon’s “Flora of our southwestern archipelago” listed only 10 exotic plant species (Lyon 1886). Naturalized exotics have permanently altered the species composition of natural communities and increased competition with native species. Non-native plants have invaded native habitat and removed niches for rare and sensitive species (Hochberg *et al.* 1980a). The abundance of exotic plants continues to adversely affect the island’s endemic plant species and contributes to their slow recovery from predation by feral animals prior to their removal in 1991 (Kellogg and Kellogg, 1993). The disparity between the reported habitat of *Sibara filifolia* on shady north-facing slopes and its present habitat on grass-free, south-facing slopes suggests that grasses may prevent the expansion of *S. filifolia* into otherwise suitable habitat (Green 1887a; Kellogg, pers. comm. 1994).

Lithophragma maximum is thought to have existed on the plateau area of San Clemente Island before the invasion of non-native grasses (Kellogg, pers. comm. 1994). The remaining habitat of *L. maximum* persists only within steep canyons. Erosion threatens not only the individual plants but the entire habitat that supports them. During the winter of 1979–1980, “large portions of canyon walls were observed to have sloughed off taking large numbers of endemic plants with them” (Beauchamp and Ferguson 1980).

Fires related to military activities, drought, and erosion have contributed to the decline of *Lithophragma maximum*, *Sibara filifolia*, and other species endemic to San Clemente Island (Kellogg and Kellogg 1994).

Cercocarpus traskiae is threatened by hybridization with the locally common *C. betuloides* var. *betuloides*. Because only 12 mature individuals of *C. traskiae* are known to exist, genetic swamping of the species would be the probable outcome of hybridization. The uniqueness of the species would be compromised or lost due to the influx of variability from the larger population. Rieseberg has recommended elimination

of mature hybrids as a means of preserving the species (Rieseberg *et al.* 1989).

Stochastic (random) events threaten the continued existence of *Cercocarpus traskiae*, *Lithophragma maximum*, and *Sibara filifolia* by virtue of their small population sizes and limited distribution. The limited gene pool may depress reproductive vigor, or a single human-caused or natural environmental disturbance could destroy a significant percentage of the remaining individuals. *Cercocarpus traskiae* is known from only 2 populations with 12 mature individuals. Two populations comprising fewer than 30 individuals of *L. maximum* are known to exist. *Sibara filifolia* is known from only 1 population of 400 to 500 individuals.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to propose this rule. Based on this evaluation, the preferred action is to list *Cercocarpus traskiae*, *Sibara filifolia*, and *Lithophragma maximum* as endangered. Two of the species are known from fewer than 30 individuals. All three species are known from no more than two populations. The three species are threatened by one or more of the following: degradation of habitat and predation by feral animals, competition with exotic plant species, erosion, hybridization, and inadequacy of existing regulatory mechanisms. Small population size and limited distribution make these species particularly vulnerable to extinction and/or reduced reproductive vigor from stochastic events. Because these species are in danger of extinction throughout all or a significant portion of their ranges, they fit the definition of endangered as defined in the Act. Critical habitat is not being proposed for these species at this time for reasons discussed below.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. “Conservation” means the use of all methods and procedures needed to bring the species to the point at

which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. Service regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of such threat to the species; or (2) such designation of critical habitat would not be beneficial to the species.

The Service finds that designation of critical habitat is not prudent at this time for *Cercocarpus traskiae*. All known populations of this species are on privately owned lands with little or no Federal involvement. The additional protection of critical habitat is achieved through Federal agency consultation under section 7 of the Act. The Santa Catalina Island Conservancy is aware of the presence of the species, supports the proposal to list the species, and is currently working to protect the population. Therefore the designation of critical habitat for *C. traskiae* would not appreciably benefit the species. Additionally, maps published in the **Federal Register** giving precise locations of populations of *C. traskiae*, as required for designation of critical habitat, may increase incidents of vandalism or collection of this species by collectors or curiosity seekers.

The Service also determines that designation of critical habitat is not prudent for *Sibara filifolia* or *Lithophragma maximum*. Extant populations of these two species occur on Federal lands managed by the Navy and are subject to section 7 consultation and recovery planning under the Act. San Clemente Island is owned by the Navy and contains the only known populations of these two species (with the exception of one mainland individual of *Lithophragma maximum*). The present range of *Sibara filifolia* is within the ship to shore bombing area on San Clemente Island. Section 7 consultation (50 CFR 402 subpart B) requires that Federal agencies confer with the Service to evaluate the potential impacts of any federally executed, funded, or authorized actions on listed and proposed species or critical habitat. Listing of these two species as endangered would ensure that consultation occurs and potential impacts to the species are considered.

Due to the limited, insular range of *Sibara filifolia* and *Lithophragma maximum*, designation of critical habitat would not provide any additional benefit to them.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation actions by Federal, State, and local agencies, private organizations, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery plans be developed for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

The U.S. Army Corps of Engineers would be involved through their permitting authority under section 404 of the CWA. The Navy owns San Clemente Island and administers lands containing *Sibara filifolia* and *Lithophragma maximum* and authorizes, funds, or otherwise conducts activities that may affect these species.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered plants. All prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to

import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale in interstate or foreign commerce, or remove and reduce the species to possession from areas under Federal jurisdiction. In addition, for plants listed as endangered, the Act prohibits the malicious damage or destruction on areas under Federal jurisdiction and the removal, cutting, digging up, or damaging or destroying of such plants in knowing violation of any State law or regulation, including State criminal trespass law. Certain exceptions to the prohibitions apply to agents of the Service and State conservation agencies.

The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered plants under certain circumstances. Such permits are available for scientific purposes and to enhance the propagation or survival of the species. It is anticipated that few trade permits would ever be sought or issued for these species since they are not in cultivation or common in the wild.

It is the policy of the Service, published in the **Federal Register** (59 FR 34272) on July 1, 1994, to identify to the maximum extent practicable at the time a species is listed those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. *Sibara filifolia* and *Lithophragma maximum* are known to occur on lands under the jurisdiction of the Navy. Collection, damage, or destruction of listed species on these lands is prohibited, although in appropriate cases a Federal endangered species permit may be issued to allow collection. Such activities on non-Federal lands, as would be the case for *Cercocarpus traskiae*, would constitute a violation of section 9, if activities were conducted in knowing violation of State law or regulations or in violation of State criminal trespass law. The Service is not aware of any otherwise lawful activities currently being conducted or proposed by the public that would be affected by this listing and result in a violation of section 9.

Questions regarding whether specific activities would constitute a violation of section 9 should be directed to the Field Supervisor of the Service's Carlsbad Field Office (see **ADDRESSES** section). Requests for copies of the regulations concerning listed plants and general inquiries regarding prohibitions and permits may be addressed to the U.S.

Fish and Wildlife Service, Ecological Services, Endangered Species Permits, 911 N.E. 11th Avenue, Portland, Oregon 97232-4181 (telephone 503/231-2063; facsimile 503/231-6243).

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *Sibara filifolia*, *Lithophragma maximum*, and *Cercocarpus traskiae*;
- (2) The location of any additional populations of these species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;
- (3) Additional information concerning the range, distribution, and population size of these species; and
- (4) Current or planned activities in the subject area and their possible impacts on these species.

Final promulgation of the regulations on these species will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for one or more public hearings on this proposal, if requested. Requests must be received by September 25, 1995. Such requests must be made in writing and addressed to the Field Supervisor of the Carlsbad Field Office (see ADDRESSES section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that Environmental Assessments or Environmental Impact Statements, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited herein is available upon request from the U.S. Fish and Wildlife Service,

Carlsbad Field Office (see ADDRESSES section).

Author. The primary author of this document is Debra Kinsinger, Carlsbad Field Office (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Proposed Regulation Promulgation

Accordingly, the Service hereby proposes to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

2. Section 17.12(h) is amended by adding the following, in alphabetical order under FLOWERING PLANTS, to the List of Endangered and Threatened Plants, to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *
(h) * * *

Species		Historic range	Family name	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
* <i>Cercocarpus traskiae</i> .	* Catalina Island mountain-mahogany.	* U.S.A. (CA)	* Rosaceae	* E	*	* NA	* NA
* <i>Lithophragma maximum</i> .	* San Clemente Island woodland-star.	* U.S.A. (CA)	* Saxifragaceae	* E	*	* NA	* NA
* <i>Sibara filifolia</i>	* Santa Cruz Island rock-ress.	* U.S.A. (CA)	* Brassicaceae	* E	*	* NA	* NA
*	*	*	*	*	*	*	*

Dated: July 5, 1995.
Mollie H. Beattie,
Director, Fish and Wildlife Service.
[FR Doc. 95-18241 Filed 7-24-95; 8:45 am]
BILLING CODE 4310-55-P

50 CFR Part 17
RIN 1018-AD39
Endangered and Threatened Wildlife and Plants; Proposed Rule for 16 Plant Taxa From the Northern Channel Islands, California
AGENCY: Fish and Wildlife Service, Interior.
ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) proposes endangered status pursuant to the Endangered Species Act of 1973, as amended (Act), for 16 plant taxa from the northern Channel Islands, California: *Arabis hoffmannii* (Hoffmann's rock-ress), *Arctostaphylos confertiflora* (Santa Rosa Island manzanita), *Berberis pinnata* ssp. *insularis* (island barberry), *Castilleja mollis* (soft-leaved paintbrush), *Dudleya*