

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AD60

Endangered and Threatened Wildlife and Plants; Withdrawal of Proposed Rule to List *Nolina interrata* (Dehesa beargrass) as Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; withdrawal.

SUMMARY: The U. S. Fish and Wildlife Service (Service) withdraws the proposal to list *Nolina interrata* (Dehesa beargrass) as threatened under the Endangered Species Act of 1973, as amended (Act). This plant species is one of four chaparral species that were proposed for listing on October 2, 1995 (60 FR 51433). The Service finds that the information now available, as discussed below, justifies withdrawal of the proposed listing of this species. The California Department of Fish and Game and The Nature Conservancy have management prescriptions that will significantly reduce the threats to the known occurrences of *Nolina interrata*. In addition, provisions of the Multiple Species Conservation Program (MSCP), as implemented by the County of San Diego through the County's Subarea Plan to the MSCP, and the provisions of the County's Biological Mitigation Ordinance adopted on October 22, 1997, require avoidance of "narrow endemic plants" (in the Metro-Lakeside-Jamul segment of the San Diego County Subarea Plan), including *N. interrata*. When complete avoidance is not possible, encroachment is limited and requires mitigation. These measures, many of which have been adopted since the proposal to list, will significantly reduce threats to the remaining populations of this species. Based on this information, the Service concludes that listing *N. interrata* is not warranted. The other plant species, Mexican flannelbush (*Fremontodendron mexicanum*), Nevin's barberry (*Berberis nevinii*), and Vail Lake ceanothus (*Ceanothus ophiochilus*), which were proposed for listing with *N. interrata* (60 FR 51433), are the subjects of a final listing action in this same **Federal Register** part, to be published on the same day as this withdrawal.

ADDRESSES: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Carlsbad Field Office, 2730

Loker Avenue West, Carlsbad, California 92008.

FOR FURTHER INFORMATION CONTACT: Elizabeth Stevens, Deputy Field Supervisor, at the above address (telephone 760/431-9440; facsimile 760/431-9624).

SUPPLEMENTARY INFORMATION:**Background**

On October 2, 1995, the Service published in the **Federal Register** (60 FR 51443) a proposal to list four chaparral plants from southwestern California and northwestern Estado de Baja California, Mexico, as endangered or threatened; that proposed rule included *Nolina interrata* (*Dehesa beargrass*).

Nolina interrata occurs in restricted and localized populations from the interior foothills of San Diego County to northwestern Baja California, Mexico. Most populations of *N. interrata* are situated in relatively rugged terrain dominated by chaparral, which is often associated with nutrient-poor soils and cool wet winters and hot dry summers. *Nolina interrata* is often found in association with specific soil types.

Chaparral occurs on many different soil types, but *Nolina interrata* typically occurs in clay soils derived from gabbro or metavolcanic bedrock (Oberbauer 1991, California Natural Diversity Data Base (CNDDB) 1997). Clay soils have unique physical and chemical properties that contribute to the disproportionately large number of rare plants found on this substrate, as compared to other soil types (Oberbauer 1991). For these reasons, clay soils are an important contributor to plant diversity in the San Diego County region.

Many chaparral species are adapted to periodic wildfires. In some species, only seeds survive fires and may, in fact, require fire to germinate (Keeley 1991). Other plants reproduce vegetatively by sprouting from the burned stumps. Fires that occur too frequently can burn young or resprouting shrubs before they become reproductively mature and, thus, deplete or exhaust the seed bank (Zedler *et al.* 1983). Sustained fire prevention can result in senescent (old) plant communities that may not survive the eventual and unpredictable fires that do occur. Within these senescent (extremely old) chaparral communities, high fuel loads of woody plant material build up in the absence of fire; this often results in unnatural, very hot fires causing reproductive failure for some species through killing of stumps and seed banks. It is likely that senescence of chaparral communities can cause a

reduction in range and number of certain plant species, including *Nolina interrata*. This species may repopulate historically occupied areas if a natural fire regime is restored.

Nolina interrata, a member of the lily family (Liliaceae), was described by Howard S. Gentry (1946) based on a collection he made in 1945 near Dehesa School in San Diego County, California. Gentry's treatment is followed by Munz (1974) and Dice (1993). The most recent taxonomic treatment of the genus (Dice 1988) also found *Nolina interrata* to be distinctive. Beauchamp (1986), in his flora of San Diego County, listed *Nolina interrata* as *conspecific* (of the same species) with *Nolina parryi*.

Nolina interrata is a dioecious (separate male and female plants) perennial forming clusters of rosettes from underground rhizomatous platforms (rootlike horizontal stems). The glaucous (white powdery) leaves are 10–45 per rosette. The panicle flower stalks are 0.5–1.6 meters (m) (1.6–5 feet (ft)) tall and up to 16 millimeters (mm) (0.6 inch (in)) in diameter at the base. The flowers are 2–4 mm (0.1–0.2 in) wide with whitish perianth parts. *Nolina interrata* is distinguished from the other *Nolina* species that occur in California by its lack of aerial stems, rosettes with 45 or fewer finely serrate leaves, and flower stalks under 1.6 m (5 ft) tall. It can be distinguished from *Yucca* species by its lack of a rigid spinose (spiny) leaf tip and leaves with shredding margins.

Nolina interrata grows in the chaparral community and is commonly associated with *Adenostoma fasciculatum* (chamise), *Helianthemum scoparium* (peak rush-rose), *Salvia clevelandii* (Cleveland sage), and *Tetracoccus dioicus* (San Diego button bush). *Nolina interrata* is often associated with other rare plants such as *Senecio ganderi* (Gander's butterweed), *Acanthomintha ilicifolia* (San Diego thornmint), *Monardella hypoleuca* ssp. *lanata* (felt-leaved monardella), and *Fritillaria biflora* (chocolate lily) (Oberbauer 1979). The association of *N. interrata* with these species reflects the distribution of clay soils formed from gabbro soils in the region (Oberbauer 1979, 1991; Beauchamp 1986). *Nolina interrata* does not flower every year and reproduces primarily asexually, which may compensate for its lack of consistent flowering. This species may require fire or other disturbance to induce flowering.

The known numbers of *Nolina interrata* totals about 9,000 plants. There are nine populations of *N. interrata* in San Diego County, all within a 15.6 square-kilometer (km²) (6-

square-mile (mi²) area in the Dehesa Valley, immediately east of El Cajon, California. There are no records of extirpated populations. About two-thirds of all populations, and 90–100 percent of all major populations, are protected on reserve lands owned and managed by The Nature Conservancy (TNC) at McGinty Mountain and by the California Department of Fish and Game (CDFG) at Sycuan Peak. The protection afforded by the establishment of the Sycuan Ecological Preserve occurred subsequent to the proposal to list *N. interrata*. The remaining few occurrences are small and are on private lands (Oberbauer 1979, CNDDDB 1997).

Nolina interrata is known from three localities in Baja California and ranges as far south as Ensenada (Rancho de la Cruz) in Baja California, Mexico (Jim Dice, California Department of Fish and Game, pers. comm. 1997). One population is about 16 km (10 mi) northeast of La Misión. Both of these disjunct Mexican populations have fewer than 25 individuals each. Another population has recently been discovered in Mexico closer to the United States border, and it appears to be of comparable size (J. Dice, pers. comm. 1997).

Summary of Comments and Recommendations

In the October 2, 1995, proposed rule (60 FR 51443) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. The 45-day comment period closed on November 16, 1995. Appropriate Federal and State agencies, county and city governments, scientific organizations, and other interested parties were contacted and requested to comment. In accordance with Service peer-review policy published on July 1, 1994 (59 FR 34270), three appropriate and independent specialists were solicited to review pertinent scientific or commercial data and assumptions relating to the proposed rule. No responses were received from the solicited peer reviewers. Individual newspaper notices of the proposed rule were published in the San Diego Union-Tribune and the Riverside Press-Enterprise on October 20, 1995. A public hearing was requested but precluded by severe funding constraints between November 1995 and April 1996. The requesting party subsequently submitted written comments to the Service during the comment period. A letter was sent to the party on June 4, 1997, inquiring what their current wishes were relative to their previous

request for a public hearing. No response was received.

During the comment period, the Service received four letters concerning the proposed rule, including one from a Federal agency, one from a State agency, and two from individuals or groups. One respondent expressed support for the listing proposal, one opposed it, and two were neutral. Because the proposed rule included four plant species, only the one comment specific to *Nolina interrata* is discussed here. Comments not specific to this species and general comments pertaining to the proposed rule are discussed in a separate final rule to list *Fremontodendron mexicanum*, *Berberis nevii* and *Ceanothus ophiocylus* published in this same **Federal Register** part (see **SUMMARY** above). One comment relevant to the proposed listing of *Nolina interrata* and the Service's response is summarized below:

Issue 1: One commenter requested that the Service use the protections afforded by the Multiple Species Conservation Plan (MSCP) to minimize habitat fragmentation.

Service Response: The County of San Diego received an incidental take permit from the Service in March 1998, based on the MSCP as implemented through the County's Subarea Plan, including the Biological Mitigation Ordinance. The County adopted the Biological Mitigation Ordinance on October 22, 1997, subsequent to the proposal to list *Nolina interrata*. The conservation measures described in the MSCP and the recently adopted Biological Mitigation Ordinance are expected to minimize habitat fragmentation of areas occupied and potentially occupied by *N. interrata*. This species is covered by the MSCP and 100 percent of the McGinty Mountain population, 90–100 percent of the Sycuan Peak, and 80–100 percent of the Dehesa Peak population will be conserved. This represents 90–100 percent of all major populations. Protection on the Sycuan Ecological Preserve was guaranteed subsequent to the proposal to list *N. interrata*. These protections on public and private lands are the primary reasons for the Service's decision to withdraw the proposal to list *N. interrata* as an endangered species.

Summary of Factors Affecting the Species

The Service must consider five factors described in section 4(a)(1) of the Act when determining whether to list a species. These factors and their application to the Service's decision to withdraw the proposal to list *Nolina interrata* H. Gentry (Dehesa beargrass) are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of Their Habitat or Range

Urbanization and associated habitat loss and further habitat fragmentation are no longer significant threats to *Nolina interrata*. Sixty-seven percent (35 records) of the MSCP point occurrences of *N. interrata* are on reserve lands owned and managed by the California Department of Fish and Game at Sycuan Peak and on lands owned and managed by The Nature Conservancy at McGinty Mountain. A point occurrence is defined as a single record in the MSCP database contained at the Carlsbad Field Office. The broader protection afforded to this species by the increased size of the Sycuan Ecological Preserve occurred after *N. interrata* was proposed for listing. Since the proposed rule was published, the California Department of Fish and Game has acquired nearly all of the necessary parcels to complete this preserve (J. Dice, pers. comm. 1997). The remaining 33 percent (17 records) will be protected under provisions of the MSCP that require avoidance of narrow endemic species to the maximum extent possible. The County's Biological Mitigation Ordinance requires encroachment to be limited to 20 percent of the population on site for impacts that cannot be avoided. *Nolina interrata* is covered by the MSCP based on conservation of 100 percent of the McGinty Mountain population, 90–100 percent of the Sycuan Peak, and 80–100 percent of the Dehesa Peak population under this plan (City of San Diego 1997).

B. Overutilization for Commercial, Recreational, Scientific or Educational Purposes

Access to many *Nolina interrata* populations is limited by private property boundaries or rugged terrain. *Nolina interrata* has been collected for specimens, but this activity has mainly involved plants salvaged from road cuts, eroded cuts, or bulldozed areas (Oberbauer 1979).

C. Disease or Predation

Disease and predation are not known to be factors adversely affecting *Nolina interrata*.

D. The Inadequacy of Existing Regulatory Mechanisms

The Service evaluated existing Federal, State, and local regulations prior to preparing the proposed rule that included *Nolina interrata*. The Service found evidence the existing regulatory mechanisms were, overall, inadequate at that time. These regulatory mechanisms included: (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 and Section 1603 of the California Fish and Game Code; (4) occurrence with other species protected by the Federal Endangered Species Act; (5) local laws and regulations; (6) land acquisition and management by Federal, State, or local agencies, or by private groups and organizations; and (7) adequate consideration in State or regional conservation planning efforts such as the Multiple Species Conservation Plan (MSCP) of the Natural Community Conservation Planning (NCCP) Program, and other multispecies efforts.

The adverse impacts of various development projects on *Nolina interrata*, because of its rare and localized nature, will be considered by Federal, State, and local planning agencies under CEQA and NEPA. The management activities implemented or proposed by the California Department of Fish and Game on the Sycuan Ecological Preserve and The Nature Conservancy at McGinty Mountain, as well as measures included in the MSCP and the County's Biological Mitigation Ordinance relating to narrow endemic plants (County of San Diego 1997), should assure adequate protection of *Nolina interrata*.

E. Other Natural or Manmade Factors Affecting Their Continued Existence

Nolina interrata depends on natural fire patterns; alteration of natural fire periodicity, season, and intensity may have various adverse effects on this species. Fire suppression measures are intensified in undeveloped areas near population centers. The natural period between fires in these areas may be altered. Fire suppression activities may also affect the vegetation. High fire frequencies prevent young plants from reaching reproductive maturity and will

result in population declines or extirpation once the underground seed bank has been depleted (Zedler *et al.* 1983). In other cases, the reduced frequency of fire due to fire suppression programs can adversely affect the viability of plant populations by reducing genetic diversity.

Nolina interrata flowers profusely after fires. Plants also reproduce vegetatively from underground stems. Occurrences that are entirely female require pollen from disjunct male plants to fertilize the flowers and produce viable seeds. Plants in disjunct populations may not flower simultaneously, because flowering is, in part, dependent upon site-specific fire history (Dice 1988). Appropriately timed controlled burns may be necessary to maintain population vigor. The threats to this species from changes in natural fire frequencies will be reduced due to the development and implementation of management plans. Management plans, which include considerations for the fire ecology of this species, are being developed for the lands inhabited by *N. interrata* on Sycuan Ecological Reserve and McGinty Peak (J. Dice, pers. comm. 1997).

Because *Nolina interrata* is known from small populations with relatively few individuals, it is vulnerable to extinction due to random events, such as hot, slow-burning fires. Genetic variability also may be reduced in small populations of limited distribution (Barrett and Kohn 1991). One of the Dehesa Valley populations of *Nolina interrata* is considered to be a single female clone (J. Dice, pers. comm. 1997). A single event or series of events can reduce a species below recoverable numbers. Proactive recovery efforts to lessen the threat of such random events typically involve the establishment of reserves that permanently protect and manage populations of the species of concern. The management and protection of public and private lands inhabited by *N. interrata* on Sycuan Ecological Preserve and McGinty

Mountain will significantly reduce the threats to this species from random events.

The Service has carefully assessed the best scientific and commercial information available and has determined that listing *Nolina interrata* as threatened is no longer warranted. Since the proposed rule for listing *N. interrata* was published, the California Department of Fish and Game acquired the majority of the lands inhabited by *N. interrata* on Sycuan Peak Ecological Preserve. The Nature Conservancy owns and manages lands at McGinty Mountain supporting this species. Provisions set forth in the MSCP and the County's Biological Mitigation Ordinance relating to narrow endemic plants will afford significant protection to the locations known to contain *Nolina interrata*. Other factors cited in the proposed rule, including fire management practices, over collection, and random natural events, are now of insufficient magnitude to warrant listing of the species in the absence of any significant threat from other factors.

References Cited

A complete list of all references cited in this withdrawal notice are available upon request from the U.S. Fish and Wildlife Service, Carlsbad Field Office (see ADDRESSES above).

Authors: The primary authors of this withdrawal notice are Dr. Gary D. Wallace and Christopher D. Nagano, Carlsbad Field Office (see ADDRESSES section).

Authority

The authority for this action is section 4(b)(6)(B)(ii) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: September 29, 1998.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

[FR Doc. 98-26860 Filed 10-9-98; 8:45 am]

BILLING CODE 4310-55-P