DETERMINING FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES, EMPHASIZING BLOWOUT PENSTEMON

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Abstract. Blowout penstemon (Penstemon haydenii S. Wats.) was federally listed as an endangered species on 1 September 1987. This paper describes the process by which species, emphasizing blowout penstemon, are listed. The five listing factors described in Section 4 of the Endangered Species Act, candidate species, and the listing process are discussed. The blowout penstemon listing process progressed as follows: 1) petition to list; 2) designation as Category 2 Candidate Species; 3) status survey; 4) designation as Category 1 Candidate Species; 5) proposed rule to list; and 6) the final listing rule. The primary reasons for listing were the stabilization of blowout complexes and the low probabilities of seed fertilization, maturation, dispersal, and seedling establishment.

Key Words. blowout penstemon, Penstemon haydenii, endangered, blowouts, Sandhills, Nebraska

INTRODUCTION

The Endangered Species Act of 1973 (Act) (16 U.S.C. 1531 et seq.) is one of the most far-reaching wildlife conservation laws ever enacted by any nation. The U.S. Fish and Wildlife Service (USFWS) shares responsibility for administering the Act with the National Marine Fisheries Service. As a rough index, the National Marine Fisheries Service is responsible for all marine species, except birds, and the USFWS is responsible for all birds and terrestrial species. Approximately 500 native American species of wildlife and plants have been placed on the U.S. List of Endangered and Threatened Wildlife and Plants and now receive protection under the Act. An endangered species is one in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future.

To list a species the USFWS follows a legal process known as a "rulemaking procedure." This procedure is followed by federal agencies to propose and later adopt regulations that have the effect of law and apply to all persons and agencies under the jurisdiction of the United States. All notices throughout the rulemaking process are published in the Federal Register, a daily Federal Government publication (Department of the Interior 1981).

DISCUSSION

Listing Factors

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) of the Act. The factors and their application to blowout penstemon, federally listed as an endangered species on 1 September 1987, are as follows (U.S. Fish and Wildlife Service 1987):

(1) The present or threatened destruction, modification, or curtailment of its habitat or range.

Blowout penstemon habitat has declined due to the control of unstable sand dunes through improved range management practices and wildfire control. The decrease in existing blowout complexes has made dispersal to remaining blowouts difficult.

- (2) Over utilization for commercial, recreational, scientific, or educational purposes.
 - Blowout penstemon is sought after for scientific purposes and private gardens.
- (3) Disease or predation.
 - Insects, small mammals, and man are predators on blowout penstemon. Kangaroo rats are known to dig out seedlings.
- (4) The inadequacy of existing regulatory mechanisms.
 - The Nebraska Nongame and Endangered Species Conservation Act regulates possession, transportation, exportation from the State, processing, sale or offer for sale, or shipment of blowout penstemon within the State. The Act prohibits removal and reduction to possession of listed plants on Federal lands.
- (5) Other natural or manmade facts affecting its continued existence.

Drought may have a detrimental affect on blowout penstemon. It is unknown why there is a large fluctuation in blowout penstemon numbers from year to year and a low rate of seed germination and seedling establishment.

Candidate Species

When biological evidence concerning a species' status is not conclusive enough to justify a listing proposal, the process may begin with publication of a "notice of review" in the Federal Register listing "candidate" species which appear to warrant consideration for addition to the List of Endangered and Threatened Wildlife and Plants (Department of the Interior 1981). Candidate species are assigned one of three categories (U.S. Fish and Wildlife Service 1985). Category 1 comprises taxa for which the USFWS currently has on file substantial information on biological vulnerability and threat(s) to support the appropriateness of proposing to list the species. Category 2 comprises taxa for which information now in possession of the USFWS indicates that proposing to list the species is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not currently known. Category 3 comprises taxa that are no longer being considered for listing.

Listing Process

In most cases, the listing process begins with a petition, which may be submitted by anyone, to have a species placed on the list of endangered and threatened species. The Act requires that substantial information to warrant review must be included with such a petition. Within 90 days following receipt of a petition the USFWS must make a finding on whether the petition presents substantial information that the petitioned action may be warranted. In either case, the finding is published in the Federal Register. If listing may be warranted, a status review of the species is initiated. Within 12 months after a petition is received, depending on the findings

of the status review, the USFWS must make a finding that listing is or is not warranted, and publish the results in the Federal Register. If it is found that listing is warranted, either a proposed rule is published or the action is determined to be precluded by other pending proposals. An action precluded by other pending proposals, means that other proposals to list or remove species from the list of endangered and threatened species are ahead of the subject proposal, and have listing priority. A warranted action, precluded by other listing actions, is treated as a resubmitted petition, and an additional year is allowed for the proposed rule to be published. Once a species is proposed in the Federal Register, the final listing rule should be published within 12 months.

Chronology of the Blowout Penstemon Listing

The chronology of events leading to the final rule to list blowout penstemon as an endangered species occurred as follows:

- 12/15/80 The USFWS published in the Federal Register a list of plant taxa being considered for listing as endangered or threatened. Blowout penstemon was listed as a Category 2 Candidate Species. The list was accepted as a petition from the Smithsonian Institute.
- 09/27/82 The status report was completed which recommended listing as endangered.
- 10/13/82 The 1982 amendments to the Act required all petitions pending on this date be treated as having been newly submitted on 10/13/82.
- 02/15/83 The USFWS published a notice in the Federal Register that the petitioned action on this species may be warranted.
- 10/13/83 Petition finding was made that listing was warranted but precluded by other petition listing actions.
- 11/28/83 The USFWS published a supplement to the 12/15/80 list of plant taxa. Blowout penstemon was listed as a Category 2 Candidate Species.
- 10/12/84 Petition finding was made that listing was warranted but precluded by other petition listing actions.

- 09/27/85 The USFWS published a list of plant taxa considered for listing. Blowout penstemon was listed as a Category 1 Candidate Species.
- 10/11/85 Petition finding was made that listing was warranted but precluded by other petition listing actions.
- 04/29/86 The proposed rule to determine blowout penstemon to be an endangered species was published in the Federal Register.
- 09/01/87 The final rule to determine blowout penstemon to be an endangered species was published in the Federal Register. The final rule was delayed beyond the one year deadline because the USFWS was reorganizing and overloaded with listing packages.

Recovery

The principal goal of the USFWS and National Marine Fisheries Service is to return listed species to a point at which protection under the Act is no longer required. Recovery plans provide a means to combine varied programs of federal, state, local, and private organizations into concentrated efforts, which should result in improvement in the status of the species and, hopefully, ultimately lead to delisting. A recovery plan will be developed for blowout penstemon, which will identify the actions necessary to reduce or resolve the problems or limiting factors which contribute to its endangered status.

LITERATURE CITED

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