



Questions and Answers: Sentry Milk-vetch Recovery Plan

Arizona Ecological Services Field Office

<http://www.fws.gov/arizonaes/>

Q: What are recovery plans and how are they enforced?

A: The Endangered Species Act mandates that recovery plans be completed and implemented for listed species unless such a plan will not promote the conservation of the species. The ESA authorizes the Secretary of the Interior to appoint recovery teams for development of recovery plans. Recovery Plans are to include: (i) a description of site-specific management necessary to achieve the plan's goal for the conservation and survival of the species; (ii) objective, measurable criteria which, when met, would ultimately recover the species so it can be removed from the list; and (iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goals and to achieve intermediate steps toward those goals. A recovery plan is not a legal binding document, but a blueprint for actions needed to improve the status of a listed species to the point where it no longer needs the protection of the ESA. Recovery is a process by which the decline of an endangered or threatened species is arrested or reversed, and threats to its survival are neutralized, so that the long-term survival in nature can be ensured.

Q: How was the Draft Sentry Milk-vetch Recovery Plan assembled?

A: To develop a scientifically based, yet attainable recovery plan, the U.S. Fish and Wildlife Service (Service) contracted with Joyce Maschinski, a botanist and species specialist from The Arboretum in Flagstaff, Arizona, to craft an original draft of the recovery plan. The Service then sought review, suggestions, and edits from a team of botanists, soil scientists, naturalists and Park Service land managers that had a history of researching and/or managing the plant and its environs. We then published a draft recovery plan and sought public comment on the draft plan. We updated information on the plant's status and threats to the plant and addressed or incorporated public comments and those of an additional peer review into the final recovery plan.

Q: What is the Sentry milk-vetch?

A: The Sentry milk-vetch is a member of the pea family. It grows in short (1 inch), ground-hugging mats up to 10 inches in diameter. It produces small pale purple flowers in late April through early May.

Q: Where is the Sentry milk-vetch found?

A: The Sentry milk-vetch occurs in isolated (endemic) populations in unshaded openings in the piñon-juniper-cliffrose plant community along a very specific, narrow layer of Kaibab limestone on the south rim of the Grand Canyon. The recovery plan calls for continued surveys for Sentry milk-vetch populations in potential habitat and research into the biology and ecology of the plant to better understand the species' habitat requirements.

Q: What is the historical and present distribution and status of the species?

A: The Sentry milk-vetch was listed as endangered in 1990 following 1947 and 1988 population census/monitoring indicated that the species had declined from “common” (1903) to “rare” (1947) and reduced to a 50-yard long habitat at Maricopa Point (1964). Reduction of the species’ range, population size, and perhaps the loss of populations on the South Rim had occurred as a result of trampling by park visitors. In 1990, the National Park Service closed public access to the Maricopa Point population and plant numbers on monitoring plots began a modest upwards trend to approximately 332 plants today.

Following listing, two additional populations were discovered and confirmed on the South Rim; a three-plant population near Grand View Point and 220 plants at Lollipop Point. A North Rim population was thought to have been identified, but recent genetic research suggests it is not the listed Sentry milk-vetch variety.

Q: What are the threats to the Sentry milk-vetch?

A: The main threats to the species are its low density, reproductive potential and genetic variability; limited distribution; the on-going drought; and decades of park visitor disturbance at Maricopa Point. In 1990, the Park Service built a fence that diverted foot traffic around the Maricopa Point population.

Q: What are the objectives of the Sentry Milk-vetch Recovery Plan?

A: The draft plan outlines the steps necessary to achieve, maintain, and document long-term stability of sentry milk-vetch by removing threats, and enhancing population growth and occurrence. Attaining these goals will lead to the reclassification of the species from endangered to threatened status and eventual removal from the Federal list.

Major Actions Needed:

1. Protect all populations from threats.
2. Survey potential habitat to determine if other populations exist.
3. Maintain and manage natural populations to their maximum potential.
4. Maintain the yearly monitoring on the Maricopa Point population, according to established monitoring methods.
5. Conduct research on biology and ecology to determine the species' requirements.
6. Establish and maintain a botanical garden/greenhouse population program.
7. Establish new populations as necessary to meet recovery criteria
8. Provide assistance to protect and recover the species and its habitat.
9. Develop public awareness and support for preservation of the species.
10. Exchange information among partners.

Q: How many Sentry milk-vetch plants or populations will be required to determine that the species is no longer endangered?

A: Once four viable populations are secured in the wild (each with at least 1000 individuals), the sentry milk-vetch can be downlisted from endangered to threatened status. Additionally, the plan calls for establishing a botanical garden/greenhouse population.

Q: How many Sentry milk-vetch plants or populations will be required to delist the plant?

A: Once eight viable 1000-plant populations are secured in the wild (with newly established populations demonstrating that they can persist over a 30-year period), the sentry milk-vetch can be eligible for removal from the Federal list of endangered and threatened species.

Q: Who will fund and perform the tasks suggested in the Final Sentry Milk-vetch Recovery Plan?

A: Grand Canyon National Park, the U.S. Fish and Wildlife Service, and contracted studies/arboretum services (e.g. The Arboretum at Flagstaff, Northern Arizona University) will perform the bulk of recovery tasks. Non-government organizations' supportive of the Grand Canyon National Park and the Arizona State Department of Agriculture's Native Plants Division may also participate.

Q: How much will the recovery of the Sentry milk-vetch cost and who will pay for it?

A: The Recovery Team developed a 5-year implementation schedule that estimate recovery activity costs at \$913,000.

Q: Where can I find additional information regarding the Sentry milk-vetch, its habitat and its management?

A: The full recovery plan and other documents pertaining to sentry milk-vetch biology and management are available on the Internet at <http://www.fws.gov/arizonaes/> or by contacting the Fish and Wildlife Service at the above address or by calling (602) 242-0210 or (520) 670-6150 ext 225.