

5-Year Review: Summary and Evaluation

Black-footed Ferret (*Mustela nigripes*)
Current Classification: Endangered

U.S. Fish & Wildlife Service
National Black-footed Ferret Conservation Center
Carr, Colorado



1.0 GENERAL INFORMATION

1.1 Reviewers

Lead Field Office:

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Cooperating Field Offices:

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1.2 Methodology used to complete the review:

Review of the science assessing the current status of the black-footed ferret (*Mustela nigripes*) (BFF) was conducted in conjunction with development of the 2013 Revised Recovery Plan for the Black-footed Ferret. Development of the Revised Recovery Plan involved Fish and Wildlife Service staff reviewing BFF science, consultation with BFF experts including the Recovery Implementation Team (BFFRIT), scientific peer review, and a public comment period. The Revised Recovery Plan addresses current status, population trends, threats (including the five listing factors), recovery objectives, recovery criteria, and recovery actions needed for this species.

1.3 FR Notice citation announcing initiation of this review:

We initiated a 5-year review of the black-footed ferret on May 6, 2014 (79 FR 25883). This 5-year review summarizes and evaluates information provided in the Recovery Plan for the Black-footed Ferret (*Mustela nigripes*) (hereafter referred to as the Revised Recovery Plan) (Appendix A; FWS 2013) and current scientific research and surveys related to the species.

We received two public comments on this 5-year review. The Arizona Game and Fish Department expressed support and provided data. The Texas Comptroller of Public Accounts expressed concern that reintroducing endangered species can harm private landowners and recovery takes too long. All pertinent literature and documents used in this review are on file at the National Black-footed Ferret Conservation Center.

2.0 REVIEW ANALYSIS

2.1 Application of the 1996 Distinct Population Segment (DPS) Policy:

The DPS policy is not applicable to the black-footed ferret as it is not listed as a DPS.

2.2 Review Summary:

Please refer to the Revised Recovery Plan (FWS 2013) for a complete review of the species' status (including biology, population trends, and habitat), threats, and recovery actions. The following is a summary of findings and recommendations from the Revised Recovery Plan (FWS 2013).

The black-footed ferret (*Mustela nigripes*) was listed as endangered in 1967 pursuant to early endangered species legislation in the United States (U.S.) and was “grandfathered” into the Endangered Species Act of 1973 (ESA).

Black-footed ferrets once numbered in the tens of thousands, but a combination of human-induced threats brought them to the brink of extinction in the 20th century. In fact, the species was twice believed to be extinct. In 1987, only eighteen individuals were known to exist at one site. Scientists captured these ferrets, which provided the foundation for a successful breeding and reintroduction program.

The species depends on prairie dogs for food and on their burrows for shelter. The historical range of the ferret coincided with the ranges of the black-tailed prairie dog (*Cynomys ludovicianus*), Gunnison's prairie dog (*C. gunnisoni*), and white-tailed prairie dog (*C. leucurus*). The ferret's close association with prairie dogs was an important factor in the ferret's decline. From the late 1800s to approximately the 1960s, prairie dog occupied habitat and prairie dog numbers were dramatically reduced by conversion of native grasslands to cropland, poisoning, and disease. The ferret population declined precipitously as a result.

We estimate that the average minimum number of breeding adult black-footed ferrets in the wild is 418 animals (FWS 2013, Table 2), with a minimum of 313 of those animals at four of the most successful reintroduction sites to date (Aubrey Valley, Arizona; Cheyenne River Indian Reservation, South Dakota; Conata Basin, South Dakota; and Shirley Basin, Wyoming). Approximately 280 additional animals are managed in captive breeding facilities.

Recovery will be achieved by establishing a number of ferret populations where appropriate habitat and diminished threats exist to allow the ferret's persistence. Although ferret habitat has been dramatically reduced from historical times, a sufficient amount remains if its quality and configuration are appropriately managed (FWS 2013).

Black-footed ferret recovery is biologically possible; however, the restoration of adequate prairie dog habitats will take more time, patience, and commitment by Federal, State, local, Tribal, and private land managers than has occurred to date. Black-footed ferrets have been reintroduced on five Indian reservations and on deeded land associated with a sixth tribe. Tribal lands represent some of the best remaining potential habitat for ferrets. Partnerships between Federal agencies and Tribes need to reflect our unique relationship with and trust responsibility to Tribes.

The Revised Recovery Plan provides reasonable biological and logistically achievable criteria that may be used to realize downlisting (endangered to threatened status) and delisting objectives (FWS 2013).

These are the downlisting criteria:

- Conserve and manage a captive breeding population of black-footed ferrets with a minimum of 280 adults (105 males, 175 females) distributed among at least three facilities.
- Establish free-ranging black-footed ferrets totaling at least 1,500 breeding adults, in 10 or more populations, in at least 6 of 12 States within the historical range of the species, with no fewer than 30 breeding adults in any population, and at least 3 populations within colonies of Gunnison's and white-tailed prairie dogs.
- Maintain these population objectives for at least three years prior to downlisting.
- Maintain approximately 247,000 acres (ac) (100,000 hectares (ha)) of prairie dog occupied habitat at reintroduction sites by planning and implementing actions to manage plague and conserve prairie dog populations.

At this time, the downlisting criteria may be 40 percent complete with regard to establishing 10 successful populations and approximately 24 percent complete with regard to the goal of 1,500 breeding adults at successful sites. The species remains vulnerable to several threats, including sylvatic plague and inadequate regulatory mechanisms (FWS 2013).

3.0 RESULTS

3.1. Recommended Classification:

- Downlist to Threatened
- Uplist to Endangered
- Delist
- No change is needed

3.2. Recovery Priority Number: 2C

Brief Rationale: No change.

4.0. RECOMMENDATIONS FOR FUTURE ACTIONS

We recommend that the following actions be undertaken:

1. Conserve and manage a captive ferret population of sufficient size and structure to support genetic management and reintroduction efforts.
2. Identify prairie dog habitats with the highest biological potential for supporting future free-ranging populations of ferrets.
3. Establish free-ranging populations of ferrets to meet downlisting and delisting goals.
4. Ensure sufficient prairie dog habitat to support a wide distribution of ferret populations over the long term considering social, political, and economic concerns of local residents.
5. Reduce disease-related threats in wild populations of ferrets and associated species.
6. Support partner involvement and conduct adaptive management through cooperative interchange.

These actions are not listed in order of priority, but all tasks and subtasks are prioritized in the Revised Recovery Plan (FWS 2013, Table 9).

The single, most feasible action that would benefit black-footed ferret recovery is to improve prairie dog conservation. If efforts were undertaken to more proactively manage existing prairie dog habitat for ferret recovery, especially prophylactically treating colonies for plague, all other threats to the species would be substantially less difficult to address. Several States within the historical range of the species do not manage prairie dogs in a manner that supports ferret recovery. Some of these States have disease-free areas that would be especially valuable to ferret recovery.

**U.S. FISH AND WILDLIFE SERVICE
5-YEAR REVIEW of *Black-footed ferret***

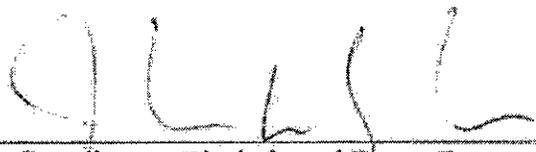
Current Classification: 2C

Recommendation resulting from the 5-Year Review:

- Downlist to Threatened
- Uplist to Endangered
- Delist
- No change needed

Appropriate Listing/Reclassification Priority Number, if applicable: N/A

Review Conducted By: Julie Lyke, Deputy Black-footed Ferret Recovery Coordinator, Carr, CO.

Approved: 
Acting Recovery Coordinator, Black-footed Ferret Conservation Center

Date: 8/12/14

Approved: 
Assistant Regional Director, Region 6, U.S. Fish and Wildlife Service

Date: 8/13/14

Concurred:  8/20/14
Assistant Regional Director, Region 2, U.S. Fish and Wildlife Service

Date: _____

Appendix A

[U.S. Fish and Wildlife Service. 2013. Recovery plan for the black-footed ferret \(*Mustela nigripes*\). U.S. Fish and Wildlife Service, Denver, Colorado. 157 pp.](#)

http://ecos.fws.gov/docs/recovery_plan/20131108%20BFF%202nd%20Rev.%20Final%20Recovery%20Plan.pdf