U.S. FISH AND WILDLIFE SERVICE 5-YEAR STATUS REVIEW

for

BLACK-FOOTED FERRET (Mustela nigripes)

GENERAL INFORMATION:

Species: Black-footed ferret (*Mustela nigripes*)

Federal Register Notice of Listing Determination:

- March 11, 1967. Endangered Species Preservation Act of 1966; Endangered Status for the Black-footed ferret (32 FR 4001).
- June 2, 1970. Endangered Species Conservation Act of 1969; Revised Listing of the Black-footed ferret as Endangered (35 FR 8491).
- January 4, 1974. Endangered Species Act of 1973; Listing as Endangered (39 FR 1171).

Classification: Endangered

Most recent status review:

• January 21, 2020, 5-year status review for the black-footed ferret (Service 2020, entire)

Federal Register Notice citation announcing this 5-year status review:

• March 13, 2023. Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status Reviews of 27 Listed Species in the Mountain-Prairie Region (88 FR 15448).

Lead Region: U.S. Fish and Wildlife Service (Service), Mountain-Prairie Region, Region 6 **Lead Field Office Contact:** Tina Jackson, National Black-Footed Ferret Recovery Coordinator, Black-Footed Ferret Recovery Program, 970–897–2730, ext. 62224

Current Recovery Priority Number (RPN): 2C

Methodology used to complete this review: In accordance with section 4(c)(2) of the Endangered Species Act of 1973 (16 U.S.C Section 1531 *et seq.*), as amended (Act), the purpose of a 5-year status review is to assess each threatened and endangered species to determine whether its status has changed, and if it should be classified differently or removed from the List of Threatened and Endangered Wildlife. Status reviews are to be completed in accordance with sections 4(a) and 4(b) of the Act (16 U.S.C. Section 1533(c)). The U.S. Fish and Wildlife Service's (Service's) Black-Footed Ferret Recovery Program conducted this 5-year review. Data for this review were solicited from interested parties through a *Federal Register* notice announcing this review on March 13, 2023 (88 FR 154488). Additionally, we conducted a literature search and a review of new information in our files, including updates on management, reintroductions, and threats. We evaluated this new information during this 5-year status review.

ASSESSMENT:

The black-footed ferret (Mustella nigripes) is a medium-sized carnivore historically found in the Great Plains and Intermountain West States of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming, as well as the Canadian province of Saskatchewan and the Mexican State of Chihuahua (Service 2019, pp. 5-6). The black-footed ferret is the only ferret species native to North America, and its historical distribution overlapped with the distributions of three prairie dog species: the black-tailed prairie dog (Cynomys ludovicianus), Gunnison's prairie dog (C. gunnisonii), and the white-tailed prairie dog (C. leucurus). The black-footed ferret depends almost exclusively on prairie dogs for food and on prairie dog burrows for shelter (Service 2019, p. 6). Disease, specifically sylvatic plague, and poisoning historically reduced populations, such that the black-footed ferret was thought to be extinct in 1979, until it was rediscovered in 1981 in Meeteetse, Wyoming. A captive breeding program was established using individuals from this population, and all extant black-footed ferrets are descendants of this captive population. Currently, the black-footed ferret occurs only in reintroduced populations at multiple sites in the States of Arizona, Colorado, Kansas, Montana, New Mexico, South Dakota, Utah, and Wyoming, and a captive population housed at facilities located in Arizona, Colorado, Kentucky, Virginia, and Ontario, Canada (Service 2019, p. 1).

Sylvatic plague continues to be the primary threat to the species (Table 1) and is largely responsible for the loss of extirpated reintroduction sites. Considerable conservation efforts, or management inputs, primarily plague management and population augmentation with captive-reared animals, are required to maintain population resiliency. Additional threats to the species include declining genetic fitness, drought, and the synergistic effects of sylvatic plaque with recreational shooting and poisoning of prairie dogs.

The SSA report provides a detailed summary of the biology, ecology, current condition, and future condition for the black-footed ferret (Service 2019, entire). At present, the species has been reintroduced to a small portion of its historical range, with 34 discrete reintroduction sites established since recovery efforts began in 1991. As of January 30, 2025, 20 of 34 reintroduction sites are active, with an estimated wild population of approximately 496. The captive population is divided between 6 captive breeding facilities and numbers approximately 300 individuals (Service 2019, p. ii). The species' viability continues to depend heavily on the ability of captive breeding programs to release captive-reared individuals into the wild to establish new reintroduction sites and maintain existing reintroduction sites (Service 2019, p. 82).

Table 1. Summary of threats affecting the black-footed ferret and the associated listing factors

Listing Factor under section 4(a)(1) of the Endangered Species Act	Threat Analysis for the Black-footed Ferret
Factor A: The present or threatened destruction, modification, or curtailment of its habitat or range	Not a threat currently, but increased drought could reduce habitat in the future.
Factor B: Overutilization for commercial, recreational, scientific, or educational purposes	The synergistic effects of recreational shooting and sylvatic plague (Factor C) are an imminent, low magnitude threat to black-footed ferret populations found in prairie dog habitat.
Factor C: Disease or predation	Sylvatic plague is an imminent threat of high magnitude. Effects include direct mortality of black-footed ferrets and indirect effects through the loss of prairie dogs that provide food and shelter. Additionally, the effects of other sources of prairie dog mortality (Factors B and E) may exacerbate the effects of sylvatic plague.
Factor D: Inadequacy of existing regulatory mechanisms	The lack of purposeful management of prairie dog populations to provide sufficient habitat for black-footed ferrets is an imminent threat of high magnitude (Service 2013, entire). The SSA report (Service 2019, entire) notes the need for ongoing management of prairie dog populations to maintain and increase black-footed ferret resiliency, redundancy, and representation.
Factor E: Other natural or manmade factors	Poisoning of prairie dogs at black-footed ferret reintroduction sites is a high magnitude, imminent threat, especially in conjunction with sylvatic plague (Factor C). Climate change is an imminent threat of moderate magnitude by increasing the frequency and severity of droughts, which reduces suitable black-footed ferret habitat. Declining genetic fitness represents an imminent threat of moderate magnitude due to observed effects on captive population performance.

Conclusion:

The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species that is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." After evaluating threats to the species and assessing the cumulative effects of the threats under the Act's section 4(a)(1) factors, we conclude that the black-footed ferret is in danger of extinction throughout all of its range. The overall range of this formerly widespread species has been severely reduced, currently existing in the wild at only 20 reintroduction sites and approximately 496 individuals. The species still faces threats, such as sylvatic plague, that

are largely unabated and have significant and direct effects to population resiliency. Currently, substantial conservation efforts, primarily sylvatic plague mitigation and the maintenance of a captive breeding program, are required to maintain black-footed ferret populations in the wild, and cessation of these efforts would likely result in the species' extinction. Additionally, low numbers in the reintroduced population, declining reproductive performance in the captive population, the continued risk of reintroduction site extirpations due to sylvatic plague, and the lack of suitable habitat result in low resiliency for many populations, reduced redundancy and representation for the species, such that the species is at risk of extinction. Therefore, the black-footed ferret continues to meet the definition of an endangered species under the Act.

In conclusion, our review of the best available information, as documented in our SSA report (Service 2019, entire) and summarized in this 5-year review, does not change our evaluation of species status and the threats affecting the species under the factors in section 4(a)(l) of the Act. Therefore, at this time we recommend no change in status for the black-footed ferret.

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Black-Footed Ferret (Mustela nigripes)

CURRENT CLASSIFICATION: Endangered

RECOMMENDATION RESULTING FROM THE 5-YEAR STATUS REVIEW:

Downlist to Threatened
Uplist to Endangered
Delist (Indicate reasons for delisting per 50 CFR 424.11):
Extinction
Recovery
Original data for classification in error
X No change is needed

APPROPRIATE LISTING/RECLASSIFICATION PRIORITY NUMBER, IF APPLICABLE: No change

LEAD FIELD OFFICE APPROVAL:

Signature:
Tina Jackson

U.S. Fish and Wildlife Service

Black-Footed Ferret Recovery Coordinator

Literature Cited:

- U.S. Fish and Wildlife Service (Service). 2013. Recovery plan for the black-footed ferret (Mustela nigripes). U.S. Fish and Wildlife Service, Denver, Colorado. 157 pp. Available online at: https://ecos.fws.gov/ecp/species/6953.
- U.S. Fish and Wildlife Service (Service). 2019. Species Status Assessment Report for the Black-footed Ferret (*Mustela nigripes*). 134 pp. Available online at: https://ecos.fws.gov/ecp/species/6953.
- U.S. Fish and Wildlife Service (Service). 2020. Five-year status review for the black-footed ferret. January 21, 2020. Available online at: https://ecos.fws.gov/ecp/species/6953.