

**1. Species:** Black-footed Ferret (*Mustela nigripes*)

**2. Status:** Table 1 summarizes the current status of this species or subspecies by various ranking entity and defines the meaning of the status.

<b>Table 1.</b> Current status of <i>Mustela nigripes</i>		
<b>Entity</b>	<b>Status</b>	<b>Status Definition</b>
NatureServe	G1	<i>Species is Critically Imperiled</i> At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
CNHP	S1	<i>Species is Critically Imperiled</i> At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
Colorado State List Status	State Endangered; Tier 1	Colorado State Endangered and Threatened Species List
USDA Forest Service	ESA Section 7	ESA Section 7 consultation requirement for activities that may affect the species.
USDI FWS <sup>b</sup>	FE	Federally listed as Threatened
USDI FWS Critical Habitat	None	No occurrence of proposed critical habitat within the planning area.
<sup>a</sup> Colorado Natural Heritage Program. <sup>b</sup> US Department of Interior Fish and Wildlife Service.		

The 2012 U.S. Forest Service Planning Rule defines Species of Conservation Concern (SCC) as “a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species’ capability to persist over the long-term in the plan area” (36 CFR 219.9). This overview was developed to summarize information relating to this species’ consideration to be listed as a SCC on the Rio Grande National Forest, and to aid in the development of plan components and monitoring objectives.

**3. Taxonomy**

Genus/species *Mustela nigripes* is accepted as valid (ITIS 2015).

**4. Distribution, abundance, and population trend on the planning unit [12.53.2,3,4]:**

Historical range covered much of western North America’s intermountain and prairie grasslands coinciding with black-tailed, white-tailed, and Gunnison’s prairie dog distributions, including the San Luis Valley (USDI Fish and Wildlife Service 2013). Current distribution consists of 16 sites in 8 states, Canada, and Mexico (USDI Fish and Wildlife Service 2010). Only one reintroduction site currently exists within Colorado (Wolf Creek, northwestern Colorado).

Two historical observations, dated 1900 and 1930, are located within the planning area (Table 2, NRIS database; Figure 1); however, the RGNF contains no known occurrences of the species in the last 20 years and no existing or proposed reintroduction sites. The nearest known population is located at Vermejo Park Ranch, northern New Mexico, approximately 43 miles from the planning area (USDI Fish and Wildlife Service 2013).

**Table 2. Known Occurrence Frequency within the Planning Area (NRIS database)**

<b>Known Occurrences within the last 20 years</b>	0
<b>Year Last Observed</b>	1930

**5. Brief description of natural history and key ecological functions [basis for other 12.53 components]:**

Suitable habitat consists of grasslands and prairies containing prairie dog towns. Ferrets utilize existing prairie dog burrows for shelter and feed predominately on prairie dogs.

Mating season occurs from March – April. Gestation lasts about 41 – 43 days with kits born May – June. Kits stay below ground until approximately 2 months old, after which the mother moves them to different burrows within the home range (USDI Fish and Wildlife Service 2010).

Home range of females occupying high-density prairie dog habitat averages approximately 148 ac whereas males average about 321 acres. Female and male territories average 32 acres and 89 acres, respectively (USDI Fish and Wildlife Service 2013).

**6. Overview of ecological conditions for recovery, conservation, and viability [12.53 7, 9?, 10, 11, 12]:**

The following actions are identified to address threats to black-footed ferret and promote recovery of the species (USDI Fish and Wildlife Service 2013):

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 criteria.
4. Ensure sufficient 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.

## **7. Threats and Risk Factors**

Black-footed ferret population declines are attributed primarily to three factors: conversion of native grassland to cropland, poisoning of prairie dogs to reduce competition with domestic livestock, and introduction of the exotic disease sylvatic plague. Each of these factors resulted in substantial loss of prairie dogs, which led to an even greater decline in ferret populations due to the species' dependency on large expanses of habitat occupied by prairie dogs (Lockhart et al. 2006 cited in USDI Fish and Wildlife Service 2013).

Currently, primary threat is disease (i.e. sylvatic plague and canine distemper). Other risk factors include ongoing habitat loss due to conversion, recreational shooting, predation, poisoning of prairie dogs, and climate change (USDI Fish and Wildlife Service 2013).

## **8. Key literature**

USDI Fish and Wildlife Service. 2010. Black-footed ferret (*Mustela nigripes*): fact sheet. Region 6, Denver, Colorado. 2 pp.

USDI Fish and Wildlife Service. 2013. Recovery plan for the black-footed ferret (*Mustela nigripes*). Region 6, Denver, Colorado. 157 pp.

## **9. Map of Known Occurrences and Suitable Habitat**

Black-footed ferret habitat modeled for the RGNF (Figure 1) coincides with habitats modeled as suitable for Gunnison's prairie dog. Gunnison's prairie dog habitat was modeled for the planning area using elevation, slope, soils, and vegetation characteristics. Areas below 10,500 feet on slopes less than 15%, with suitable soils for excavating (e.g. loamy, outwash, limy, and sandy) that coincide with grass or riparian cover types generally lacking tree cover (<10%) were selected. A total of 90,320 acres is modeled as suitable within the planning area (Figure 1).

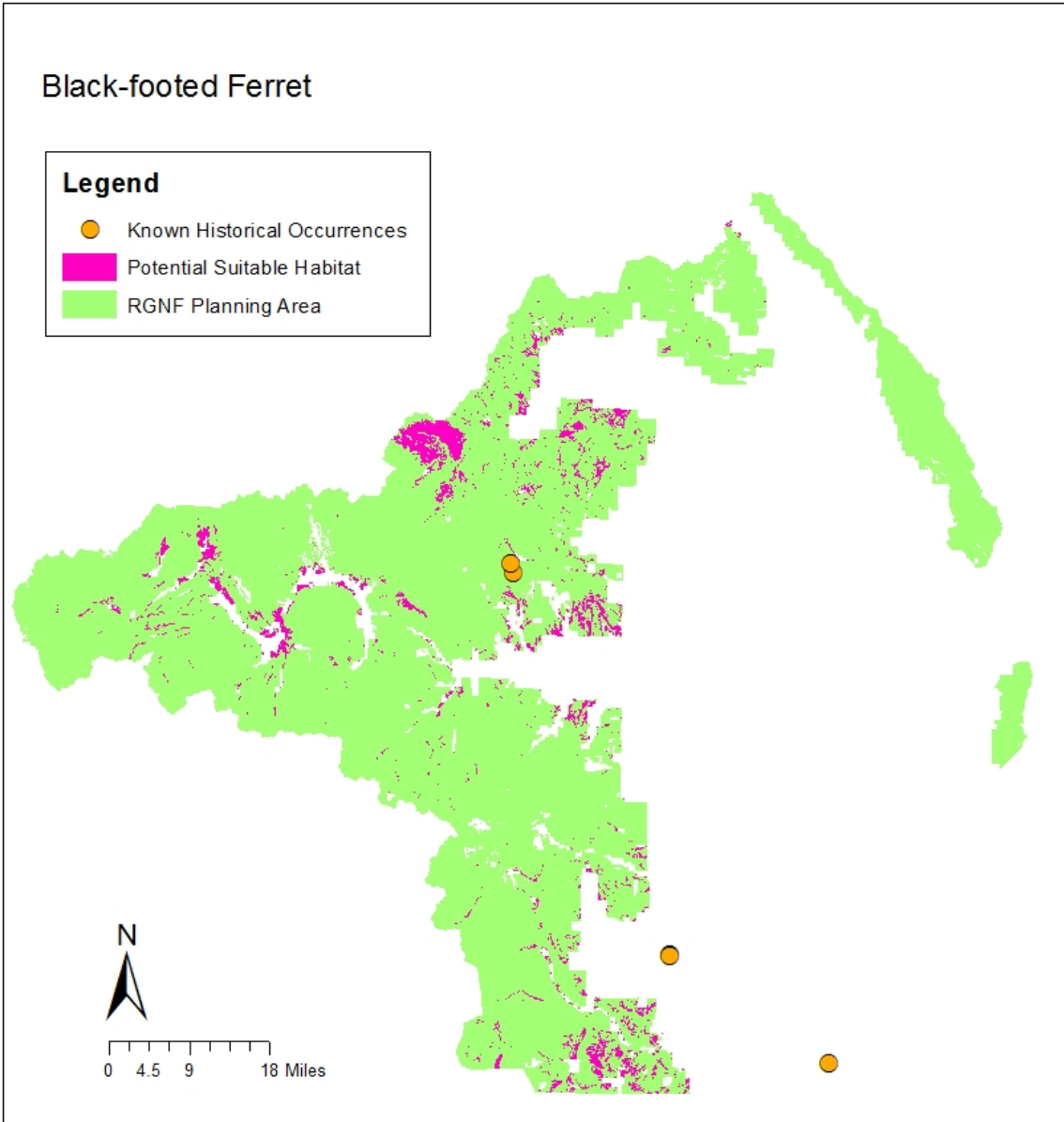


Figure 1. Black-footed Ferret Modeled Habitat and Known Historical Occurrences.