

COSEWIC
Assessment and Status Report

on the

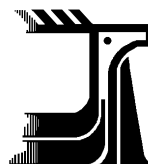
Black-footed Ferret
Mustela nigripes

in Canada



EXTIRPATED
2000

COSEWIC
COMMITTEE ON THE STATUS OF
ENDANGERED WILDLIFE
IN CANADA



COSEPAC
COMITÉ SUR LA SITUATION DES
ESPÈCES EN PÉRIL
AU CANADA

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For additional copies contact:

COSEWIC Secretariat
c/o Canadian Wildlife Service
Environment Canada
Ottawa, ON
K1A 0H3

Tel.: (819) 997-4991 / (819) 953-3215

Fax: (819) 994-3684

E-mail: COSEWIC/COSEPAC@ec.gc.ca

<http://www.cosewic.gc.ca>

Également disponible en français sous le titre Rapport du COSEPAC sur la situation du putois d'Amérique (*Mustela nigripes*) au Canada

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COSEWIC Assessment Summary

Assessment Summary – May 2000

Common name

Black-footed ferret

Scientific name

Mustela nigripes

Status

Extirpated

Reason for designation

This ferret no longer occurs in the wild in Canada. Prairie dogs, the ferret's necessary and preferred prey species, are now limited to a small area of Saskatchewan.

Occurrence

Alberta, Saskatchewan, Manitoba.

Status history

Extirpated by 1974. Designated Extirpated in April 1978. Status confirmed in May 2000. May 2000 assessment based on new quantitative criteria applied to information from the existing 1978 status report.



COSEWIC
Executive Summary

Black-footed Ferret
Mustela nigripes

Description

No description in the status report.

Distribution

The black-footed ferret is restricted to the central portion of North America. In the United States, it is thought to occur from Montana and North Dakota, south through to Arizona, Northern Mexico, Texas and Oklahoma. It is thought to no longer occur in Canada.

Habitat

Black-footed ferret habitat is very localized. The species is largely-dependent on another species as a source of food—the black-tailed prairie dog. The black-footed ferret habitat closely coincides with habitat that is occupied by its prey. Based on the Canadian distribution of black-tailed prairie dogs, the only area presently suitable for the black-footed ferret is an area in southwestern Saskatchewan.

General Biology

The black-footed ferret is completely nocturnal and has a very specialized diet consisting of mainly prairie dogs. The species can use other sources of food (e.g. mice, Richardson's ground squirrels, ground nesting birds) but these sources alone can probably not support a population of black footed ferrets. It has been suggested that the species demonstrates a fall dispersal of family groups. Little else is known about the biology of the black-footed ferret in North America. An Asian species, which is related to the black-footed ferret, mates in late winter and has three to six young in the spring.

Population Size and Trends

The black-footed ferret is considered to be the rarest animal in North America. The sightings of the species in Canada are unconfirmed, so population size and trends data are currently not available.

Limiting Factors and Threats

The lack of necessary and preferred prey species in all but one area of Canada is the main limiting factor for the black-footed ferret. No specific threats are included in the status report.

Existing Protection

The black-footed ferret is given some protection as it is a fur bearer. It therefore has a limited open season. The species is not mentioned directly in the Saskatchewan's Fur Act so its protection is only by implication.

Executive summary prepared by Lisa Twolan,
COSEWIC Secretariat 2002.



COSEWIC MANDATE

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) determines the national status of wild species, subspecies, varieties, and nationally significant populations that are considered to be at risk in Canada. Designations are made on all native species for the following taxonomic groups: mammals, birds, reptiles, amphibians, fish, lepidopterans, molluscs, vascular plants, lichens, and mosses.

COSEWIC MEMBERSHIP

COSEWIC comprises representatives from each provincial and territorial government wildlife agency, four federal agencies (Canadian Wildlife Service, Parks Canada Agency, Department of Fisheries and Oceans, and the Federal Biosystematic Partnership), three nonjurisdictional members and the co-chairs of the species specialist groups. The committee meets to consider status reports on candidate species.

DEFINITIONS

Species	Any indigenous species, subspecies, variety, or geographically defined population of wild fauna and flora.
Extinct (X)	A species that no longer exists.
Extirpated (XT)	A species no longer existing in the wild in Canada, but occurring elsewhere.
Endangered (E)	A species facing imminent extirpation or extinction.
Threatened (T)	A species likely to become endangered if limiting factors are not reversed.
Special Concern (SC)*	A species of special concern because of characteristics that make it particularly sensitive to human activities or natural events.
Not at Risk (NAR)**	A species that has been evaluated and found to be not at risk.
Data Deficient (DD)***	A species for which there is insufficient scientific information to support status designation.

- * Formerly described as “Vulnerable” from 1990 to 1999, or “Rare” prior to 1990.
- ** Formerly described as “Not In Any Category”, or “No Designation Required.”
- *** Formerly described as “Indeterminate” from 1994 to 1999 or “ISIBD” (insufficient scientific information on which to base a designation) prior to 1994.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was created in 1977 as a result of a recommendation at the Federal-Provincial Wildlife Conference held in 1976. It arose from the need for a single, official, scientifically sound, national listing of wildlife species at risk. In 1978, COSEWIC designated its first species and produced its first list of Canadian species at risk. Species designated at meetings of the full committee are added to the list.



Environment Canada
 Environnement Canada
 Canadian Wildlife Service
 Service canadien de la faune

Canada

The Canadian Wildlife Service, Environment Canada, provides full administrative and financial support to the COSEWIC Secretariat.

COSEWIC Status Report

on the

Black-footed Ferret

Mustela nigripes

in Canada

Saskatchewan Department of Tourism
and Renewable Resources¹

1978

¹Government of Saskatchewan
3211 Albert Street
Regina, SK
S4S 5W6

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ABSTRACT

The Black-footed Ferret (*Mustela nigripes*, Audubon and Bachman) is the rarest mammal in North America and is probably extinct in Canada. It is almost totally dependent for its existence on the Black-tailed Prairie Dog (*Cynomys ludovicianus* Orcl.) The potential for successful reintroduction to Canada is slight.

DISTRIBUTION

The map below depicts the overall range of the Black-footed Ferret according to Henderson *et al.*, 1978. The second map indicates Banfield's (1974) contention that the species no longer exists in Canada.

PROTECTION

The Ferret is afforded some protection since as a mustelid it is a fur bearer. There is, therefore, a limited open season. The species is not mentioned in Saskatchewan's Fur Act directly thus the protection is by implication.

A portion of its possible range in Canada is protected since one colony of Black-tailed Prairie Dogs, in Saskatchewan, exists on a refuge. The entire probable (potential?) Canadian range lies within the boundaries of the proposed Grasslands National Park. If the Park is created complete protection will become automatic.

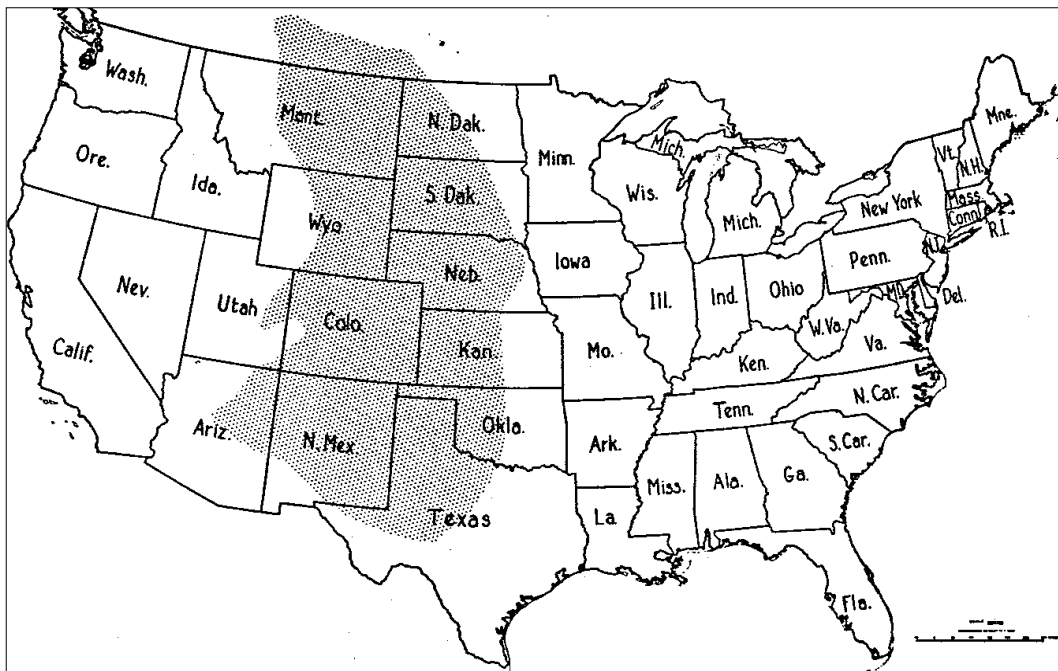


Figure 1. This map depicts the overall range of the Black-footed Ferret according to Henderson *et al.*, 1978.

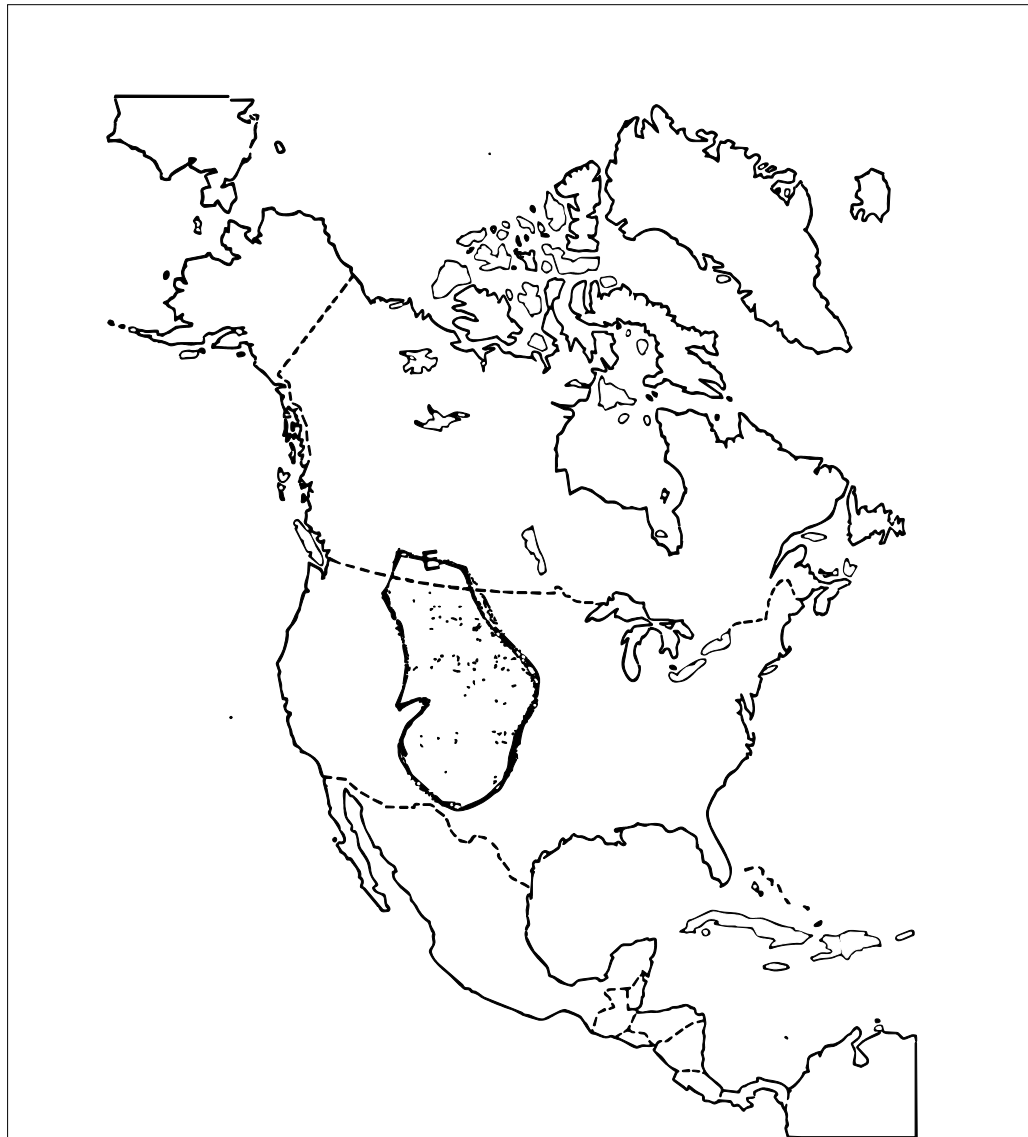


Figure 2. Distribution of the Black-footed Ferret, *Mustela nigripes*: E extinct.

POPULATION SIZE AND TREND

Banfield (1974) considers the Black-footed Ferret “the rarest animal in North America” and as being extinct in Canada. Palmer (1957) expects the species to “become extinct in our time”.

There are a few unconfirmed sightings in Saskatchewan but lack of any properly documented records suggests the species is extremely rare and more probably extinct.

HABITAT

Distribution

Habitat for the Black-footed Ferret is extremely localized. The species is largely dependent on Black-tailed Prairie Dogs as a food source. Thus the usable habitat for ferrets coincides very closely with the occupied habitat of the prairie dog.

Based on the Canadian distribution of the prairie dog the only area presently available to the ferret is the small area in the Frenchman River Valley of southwestern Saskatchewan where 16 active colonies of prairie dogs exist.

Trend in Quality of Critical Habitat

The quality of critical habitat for this species is like that of the Prairie Dog, relatively constant and remains very limited.

The trend in quality of the habitat for Prairie Dogs does not appear to have deteriorated, thus the same should be true for the Ferret.

Protection of Habitats

Of the present potential habitat for the Ferret of approximately 1,244 acres (area occupied by Prairie Dogs) 160 acres or one quarter section (NE 23-2-13-W3) is protected as a wildlife refuge. The whole potentially habitable range is within the boundaries of the proposed Grasslands National Park.

Degree of Specialization

Black-footed Ferrets are highly dependent on Prairie Dogs for food. Ferrets can utilize other food sources such as mice, Richardson's Ground Squirrels and ground nesting birds but as stated by Henderson *et al.* (1968) these sources probably cannot sustain a Ferret population indefinitely.

GENERAL BIOLOGY

Reproductive Capability

Nothing is known about the basic biology of the species in Canada.

Even in its occupied range in the United States little is known. Banfield (1974) states that an Asian relative "mates in late winter and bears three to six young in early spring."

Species Movement

Henderson *et al.* (1968) suggest a fall dispersal of family groups but little else is known.

Behaviour/Adaptability

Ferrets are rather unwary of humans and appear to tolerate human presence at least to a limited degree. The species is almost completely nocturnal so direct interactions with humans would be rare.

The specialized food requirements (Prairie Dogs) of this species indicate a low degree of adaptability as regards food requirements. A disease caused die-off in their prey species would greatly affect the Ferrets.

LIMITING FACTORS

The lack of the necessary and preferred prey species in all but one small area in Canada effectively limits the range and numbers of Black-footed Ferrets in Canada.

SPECIAL SIGNIFICANCE OF THE SPECIES

This species is restricted to the central portion of North America. As stated previously it is considered the rarest mammal in North America. As such it deserves particular consideration.

RECOMMENDATIONS/MANAGEMENT OPTIONS

The only feasible method to increase the species is to re-establish Black-tailed Prairie Dogs in suitable habitat and subsequently reintroduce the Ferret (assuming stock could be obtained). Careful management and considerable protection would be required.

If the Grasslands National Park becomes a reality perhaps one or two pairs of Ferrets could be released on the existing Prairie Dog colonies.

EVALUATION

Black-footed Ferrets declined along with their principal prey. As colonies of Prairie Dogs become fewer in number, the number of Ferrets which can be supported must decline.

Based on the extremely close interrelationship between Ferrets and Prairie Dogs, an increase in the number of Prairie Dog colonies would increase the potential for the Ferret.

The scarcity of the Ferrets means that stock for reintroduction will be difficult if not impossible to obtain. Thus the long-term hope for the Black-footed Ferret in Canada is remote in the extreme.

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