

South Dakota State University

Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

SDSU Extension Special Series

SDSU Extension

9-1979

Swift Fox

Jon C. Sharps

Cooperative Extension Service
South Dakota State University

Follow this and additional works at: https://openprairie.sdstate.edu/extension_ss

Recommended Citation

Sharps, Jon C. and Service, Cooperative Extension, "Swift Fox" (1979). *SDSU Extension Special Series*. 114.

https://openprairie.sdstate.edu/extension_ss/114

This Other is brought to you for free and open access by the SDSU Extension at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in SDSU Extension Special Series by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

ESS 27F



ENDANGERED SPECIES

SDSU LIBRARY - BROOKINGS, SD



3 1574 50150 3681

SWIFT FOX



South Dakota Cooperative Extension Service
U.S. Fish & Wildlife Service
South Dakota Department of Game, Fish, & Parks
and
Department of Wildlife & Fisheries Sciences,
South Dakota State University

SWIFT FOX

Jon C. Sharps
Nongame and Endangered Species
Biologist, South Dakota Department
of Game, Fish & Parks

The swift fox is a small nocturnal fox about the size of a large housecat. An adult male weighs about 5-6 pounds and an adult female 4-5 pounds. Their basic coloration resembles the gray fox with a brownish-grey back, red sides, white undercoat and black-tipped tail and muzzle.

The swift fox used to range throughout the Great Plains from the southern Canadian provinces to the Texas panhandle. In the early 1800's many swift fox were taken by fur traders in the northern prairies. The American Fur Company purchased more than 10,000 pelts in the mid-1830's.

As the Great Plains became settled, swift fox disappeared or became extremely scarce throughout their former range. The decline can be directly associated with changes in land use such as plowing native prairie, predator control, rodent control, trapping, and increased hunting pressures.

Predator and rodent control, using poisons such as strychnine and '1080', was probably the most significant factor in the decline of the swift fox.

In spite of the decline, a few swift fox managed to survive in isolated areas, and an occasional "prairie fox" would be seen and reported in Nebraska, the Dakotas, and elsewhere.

Current status

Remnant populations of swift fox survive in South Dakota, Nebraska, and Wyoming. Colorado has a stable population. The status and population density of the swift fox varies from state to state

(Table 1), but most populations appear to be expanding.

Life history

Field studies in South Dakota in 1977 and 1978 by the Department of Game, Fish and Parks and the U.S. Fish and Wildlife Service recorded habitat requirements for the swift fox.

Results of these studies showed that swift fox are usually found on short to mid-grass prairie and are closely associated with black-tailed prairie dog colonies.

The spring and summer home range of a swift fox is approximately one square mile in size. The home range probably is expanded during the winter months due to decreased food availability.

Swift fox are reported to form life-long pair bonds. Breeding activity usually starts in February or March, and assuming a 50-day gestation period, four to six pups will be born in April or May.

Both parents actively take part in caring for and feeding the pups. For the first few weeks of life, the pups are kept in the natal den (where birth occurred). After that time the adults regularly move the young to

other dens in the territory, probably because of excessive parasite buildups (fleas, ticks, etc.), and later because the pups are too large to all live in one den.

As many as 13 dens have been recorded in one swift fox family's territory.

Foxes may construct their own dens or modify existing badger or prairie dog burrows.

A food habits study showed that swift fox are highly selective for small mammals.

Their diet composition breakdown was 60% mammals (primarily prairie dogs and miscellaneous mice), 4% birds, 21% insects, and 15% miscellaneous. Most of the miscellaneous material was vegetation and was probably eaten by the fox while consuming the mammals, which could bring the mammal consumption up to 75% of their total diet.

Swift foxes may act as a natural control over expanding prairie dog populations. Some ranchers indicate that swift foxes have prevented prairie dog expansion on their land. Future studies will determine the degree of prairie dog control, if any, that might be possible by raising and releasing captive-bred swift fox on selected areas that have

Table 1. Swift fox population and status.

Alabama	Small, expanding	Threatened
Arizona	Unknown	Protected furbearer
California	Unknown	Proposed protected furbearer
Colorado	Expanding	No status
Delaware	Small, stable	Endangered
District of Columbia	Expanding	Fully protected species
Florida	Expanding	Protected furbearer, limited season
Georgia	Small, stable	Protected species

prairie dog problems. Wild swift fox will also be relocated in some cases to help control prairie dogs and to help expand swift fox populations.

Knowledge gained from these studies may permit managers to use the swift fox as a biological control over undesirable rodent

populations. help expand the range of this small fox, and ultimately remove it from the threatened and endangered lists.

Scientific Data and Status

*Common name: swift fox, kit fox, prairie fox

*Scientific name: *Vulpes velox hebes*

*Legal status in South Dakota: Fully

protected by South Dakota's endangered species program, classified as threatened.

Published with U.S. Fish & Wildlife Service funding issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the USDA. Hollis D. Hail, Director of CES, SDSU, Brookings. Educational programs and materials of land without regard to age, race, color, religion, sex handicap, or national origin. An Equal Opportunity Employer. 15M-9-79-6944A

SDSU LIBRARY
JUN 24 1980
STATE DOCUMENT



SWIFT FOX

1574 50150 3681



ENDANGERED SPECIES PROGRAM

South Dakota Cooperative Extension Service
U.S. Fish & Wildlife Service

1574 50150 3681