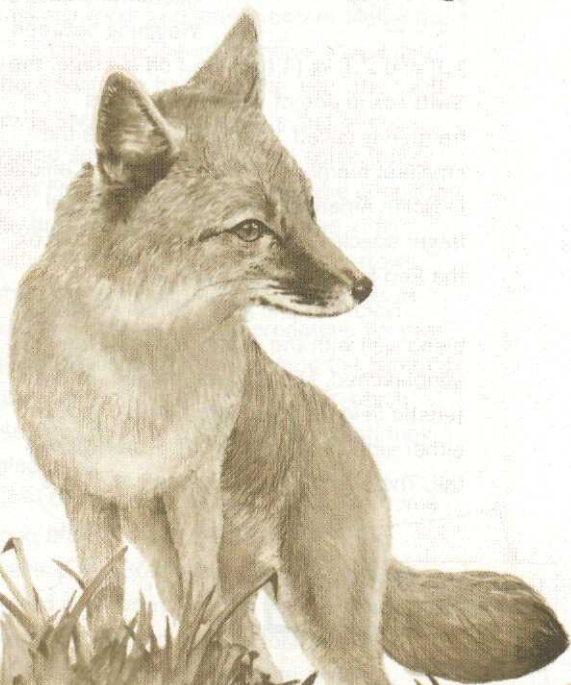


Return of the Swift Fox

A new beginning on the short grass prairie



STUDY GUIDE



National
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Introduction



The name Swift Fox (*Vulpes velox*) describes the speed and agility of this shy, small and nocturnal creature. Weighing between

1.8 and 2.7 kg (4 to 6 lbs.) on average, the Swift Fox is one of the smaller foxes frequently called "lesser foxes." It is the smallest member of the dog family (Canidae) in North America. It is related to several larger species, the Arctic Fox, the Blue Fox, the Red Fox, and the Grey Fox.

Gold, tan and grey colours of its coat blend well with the earthy tones of the arid, sunbleached, short grass prairies. Characteristic field markings are a black spot on either side of the snout and a blacktipped tail. The size of a large house cat, it has



been observed running rapidly in one direction – to jump up in the air – turn around – and land running, seemingly as fast in the other direction.

The Swift Fox inhabits grasslands, plains and dry foothills. The traditional range of the animal in Canada extends from southeastern Alberta through southern Saskatchewan and southwestern Manitoba.

Little precise information is available about Swift Fox habits in the wild. The Swift Fox is known to subsist on a diet of mice, ground squirrels, insects and some fruits. Swift Fox spend most of their time during the day beneath the ground. They live in an elaborate series of underground burrows which protect them from the extremes of cold and heat as well as predators. Its year round attachment to a den sets the Swift Fox apart from other Canadian canids which use dens only for a few months when they raise pups.

Disappearance of the Swift Fox came soon after European settlement of the prairies. In 1867, the Palliser Expedition forged west from the Red River in southern Manitoba. Explorers were followed by settlers, who poured onto the prairies, secure in the belief that the land was theirs. Conquest was rapid as they poisoned, trapped and plowed away the native creatures. Within 30 years, the plains grizzly was gone and so were most of the wolves and bison. When the large animals had disappeared, smaller animals became

targets. Coyotes, ground squirrels, prairie dogs and the little Swift Fox were among the innocent victims. Because of this, the Swift Fox has been extirpated in Canada since the 1930's. The last Canadian sighting of this diminutive fox was in southern Alberta in 1938. A few remaining populations survived in areas of Colorado, South Dakota and Texas where, along with the Kit Fox (*Vulpes macrotis*), they struggled to survive on an ever-dwindling range.

Swift Fox populations surviving in Texas, Kansas and Colorado have been used to provide the first captive breeding pairs for a reintroduction program in Canada. In 1973, four Swift Fox: Napoleon and Josephine, Nelson and Emma, were brought to the Smeeton ranch near Calgary. Ten years later, in 1983, the first release of their descendants occurred near Manyberries in southeastern Alberta.

From the beginning, a "slow release" method has been the reintroduction method. Rather than just dump foxes into a completely foreign environment and force them to fend for themselves (referred to as a "hard release"), the animals are transferred in pairs to pens located on the reintroduction site about a year before their scheduled release. They are fed for the whole year, this allows the foxes to become familiar with their new environment, and the animals are less likely to stray when they are finally released.

Glossary



Endangered: Any indigenous flora or fauna whose existence is threatened with immediate extinction due to the actions of people.

Extinct: Any species of flora or fauna formerly indigenous to Canada no longer existing elsewhere.

Extirpated: Any indigenous species of flora and fauna no longer existing in an area in the wild but existing elsewhere.

I.U.C.N.: International Union for the Conservation of Nature and Natural Resources. The Organization monitors programs world-wide.

Rare: When used to describe wild species means that small world populations have been noted over a scattered territory. When used to describe endangered domestic breeds means that fewer than 200 registrations are recorded.

Threatened: Any indigenous species of fauna or flora that is likely to become endangered if factors affecting its vulnerability are not reversed.

Endangered Species In Canada

(Partial list, based on information produced by The Committee on the Status of Endangered Wildlife in Canada (COSEWIC), June 1988)

MAMMALS

Extinct

Dawson Caribou
Sea Mink

Extirpated

Atlantic Gray Whale
Black Footed Ferret
Swift Fox

Endangered

Eastern Cougar
Right Whale
Otter

Threatened

Peary Caribou
Wood Bison
Prairie Long-tailed Weasel
Beluga Whale

Rare

Black-tailed Prairie Dog
Blue Whale
Grey Fox
Plains Pocket Gopher
Spotted Bat
Western Woodland Caribou
Wolverine

BIRDS

Extinct

Great Auk
Passenger Pigeon

Endangered

Eskimo Curlew
Piping Plover
Whooping Crane
Greater Prairie Chicken

Threatened

Burrowing Owl
Ferruginous Hawk
Loggerhead
Roseate Tern

Rare

Barn Owl
Caspian Tern
Great Grey Owl
Eastern Bluebird
Ivory Gull
Ross's Gull
Trumpeter Swan

FISH/REPTILES

Extinct

Blue Walleye

Extirpated

Gravel Chub
Paddlefish

Endangered

Aurora Trout
Leatherback Turtle

Threatened

Copper Redhorse
Shorthead Sculpin
Shortjaw Cisco

Rare

Bigmouth Shiner
Silver Chub
Pacific Sardine
Fowler's Toad

PLANTS

Extirpated

Blue-Eyed Mary

Endangered

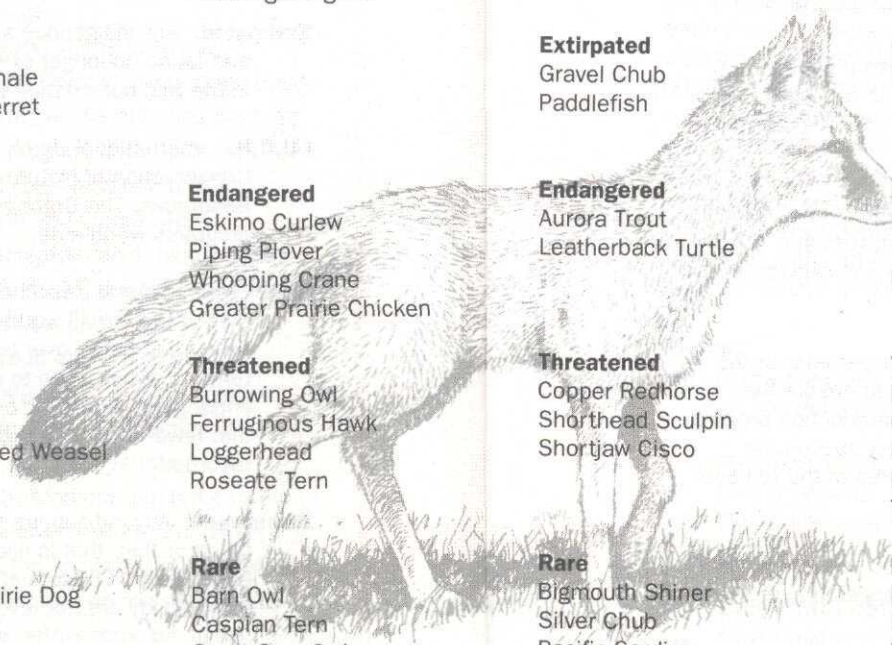
Small White Lady's
Sea Slipper
Pink Milkwort

Threatened

Blue Ash
Ginseng
Mosquito Fern
Red Mulberry
Tyrell's Willow

Rare

Prairie Rose
Soapweed
White-fringed Orchid
Hop Tree





Questions for Discussion

The following questions are provided to stimulate discussion. These questions are answered in part by the film, although further research may be required.

- ▼1. What factors contributed to the disappearance of the Swift Fox from the Canadian Prairies by the 1940's?
- ▼2. What other endangered species are shown in the film? In what way might preserving the Swift Fox benefit those species?
- ▼3. Explain what is meant by a soft release. Compare the advantages and disadvantages of a soft release and a hard release.
- ▼4. What was the major predator of the Swift Fox? In order to ensure the success of the reintroduction program, should the predatory species be eliminated in the area of the release program?
- ▼5. Should zoos be used to protect the gene pools of endangered species?



Discussion Project- Role Modelling

A piece of short grass prairie farmland has become the source of discussion, different groups would like to see the area used for different purposes. The land, which has a good population of sharp-tailed grouse, could be used as a community pasture for cattle. An unused road allowance running through it could be developed to provide a shorter route between two small towns. This property has been identified by a dirt bike riders' association as a desirable location to construct a trail system. A local conservation group has asked that it be kept in its natural state and possibly used to establish extirpated species native to the short grass prairie. An environmental assessment of the area by scientists revealed that it would be an ideal habitat for Swift Fox.

Method:

- ▼1. Divide the class into six groups, each group taking a different role.

Farmers: you are trying to make the best economic use of land and would like to see it used to pasture your cattle.

Conservationists: private citizens, concerned and committed to preserving the environment, you would like to see the Swift Fox returned to this habitat.

Hunters: you have been using this area for grouse and rabbit hunting for years and would like to see it continue.



Dirt Bike Riders: you want an extended trail system for riding.

Town Councillors: you want the road to be built as it will provide better access to your town.

Politicians: party in power, (Minister of Natural Resources or Environment and advisors), you are being pressured by farmers, conservationists, hunter groups to direct limited resources in their respective directions.

- ▼2. Each group brainstorms to determine its position.
- ▼3. Select a spokesperson for each group.
- ▼4. Farmers, Conservationists, Hunters, Bike Riders, and Town Councillors each make a presentation to the Politicians requesting the use they would like to see for the land using arguments supporting their point of view.
- ▼5. Politicians make a decision, and allocate resources to support the project. Justify the position taken.
- ▼6. Have a class discussion regarding this process and the reaction of individuals to positions stated.



Topics for Research

- ▼1. Identify factors of climate and geology associated with the grassland ecosystem. Draw a food chain for the shortgrass prairie, including the Swift Fox. Do the same thing for the area in which you live. Draw a food chain including an endangered species that could live in your area.
- ▼2. List the special adaptations of the Swift Fox to its ecosystem. Research and list the special adaptations of other fox species, such as the Arctic Fox and Red Fox, to different ecosystems.
- ▼3. Determine what efforts are being made to protect endangered habitats and species in your province or state; in your country; in the world.
- ▼4. List the potential uses of wild flora and wild fauna for agriculture, biotechnology, and recreation.
- ▼5. Compare the economic value of native ecosystems to converted systems.
- ▼6. Describe the philosophy of conservation and animal rights evident in your community or province, compare it to your own personal philosophy.
- ▼7. Suggest types of wildlife and wild habitat that would be best suited for reclamation purposes. List factors that must be considered when attempting to establish parts of an ecosystem.



Suggestions for Action

- ▼1. Find out about conservation projects in your area. Read about environmental issues. Subscribe to periodicals that feature wildlife or nature.
- ▼2. Visit a sanctuary, natural park, or other place where you may observe wildlife.
- ▼3. Set up a bird feeder. Keep records of the birds that visit it.
- ▼4. Join a naturalist or conservation group.
- ▼5. Donate money to help in wildlife conservation.
- ▼6. Participate in a river bank clean up, organize or participate in cleaning up your neighbourhood or school yard.
- ▼7. Volunteer your time to help in a nature centre.
- ▼8. Participate in a bird count. Christmas bird counts take place at many centres in North America. Records are used to monitor the status of species locally, nationally and internationally.

Filmography

Related films available through the National Film Board

Contributing:
Atonement (Title)
0170 600 (Film Number)

A Great White Bird
0176 615

Herbicide Trials
0184 051

The Intertidal Zone
0185 040

Land Above the Trees
0188 013

Rivers to the Sea
0189 017

Trouble in the Forest
0188 078

Wild in the City
0185 039

Supporting:
Acid Rain:
A North American Challenge
0188 058

Acid Rain: Requiem or Recovery
0181 527

Below the Ramparts
0179 311

The Biosphere
0179 085

A Crowded Wilderness
0172 090

Estuary
0179 174

The Fragile Mountain
0182 123

Freshwater World
0174 615

The Great Buffalo Saga
0185 560

High Arctic: Life on the Land
0158 035

The Temperature Rain Forest
0183 002

Tomorrow's Salmon
0176 563

The Underlying Threat
0189 028

World in a Marsh
0156 004

See the Film and Video Catalogue published by the National Film Board of Canada for a complete listing of films. Contact your local office.

Contacts

American Assoc. of Zoological Parks and Aquariums, Ogle Bay Park, Wheeling, West Virginia, USA 26003

Alberta Dept. of Energy and Natural Resources, Fish and Wildlife Division
Main Floor, North Tower,
Petroleum Plaza
9945-108th Street
Edmonton, Alberta T5K 2C6

British Columbia Ministry of Environment, Wildlife Branch
Parliament Buildings
Victoria, British Columbia V8V 1X5

Canadian Nature Federation
453 Sussex Drive
Ottawa, Ontario K1N 9Z9

Canadian Wildlife Federation
1673 Carling Avenue
Ottawa, Ontario K2A 3Z1

Canadian Wildlife Service
Environment Canada
Ottawa, Ontario K1A 0E7

Govt. of Northwest Territories
Conservation Education,
Scotia Centre, Yellowknife,
Northwest Territories X1A 2L9

IUCN Secretariat
World Conservation Centre
Avenue du Mont Blanc, CH1196
Gland, Switzerland

Joywind Farm Rare Breeds
Conservancy Inc., R.R. # 4
Marmora, Ontario K0K 2M0

Manitoba Dept. of Natural Resources
Box 24, 1495 St. James Street
Winnipeg, Manitoba R3H 0W9

New Brunswick Dept. of Natural
Resources, Fish and Wildlife Branch
P.O. Box 6000
Fredericton, New Brunswick E3B 5H1

Newfoundland-Labrador Dept. of
Culture, Recreation, and Youth
Wildlife Division
Building 810, P.O. Box 4750
Pleasantville St. John's,
Newfoundland A1C 5T7

Nova Scotia Dept. of Lands and
Forests, P.O. Box 68
Truro, Nova Scotia B2N 5B8

Ontario Ministry of Natural
Resources, Whitney Block
Queen's Park,
Toronto, Ontario M7A 1W3

Prince Edward Island Dept. of
Community and Cultural Affairs
P.O. Box 2703, Charlottetown,
Prince Edward Island C1A 7N8

Quebec Dept. of Recreation,
Hunting and Fishing
150 Saint-Cyrille Boulevard East
Quebec City, Quebec G1R 4Y1

Saskatchewan Dept. of Parks and
Renewable Resources
Wildlife Branch, 3211 Albert Street
Regina, Saskatchewan S4S 5W6

World Wildlife Fund Canada
60 St. Clair Avenue East, Suite 201
Toronto, Ontario M4T 1N5

Yukon Dept. of Renewable Resources
P.O. Box 2703, Whitehorse,
Yukon Y1A 2C6

References

Resources for Schools:

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Submission by the People of Canada
to the World Commission on
Environment and Development*,
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Canada: Problems, Issues and
Opportunities*, Wildlife Habitat
Canada, 1986.

World Commission on Environment
and Development, Gro Bruntland,
chairperson, *Our Common Future*,
Oxford University Press, 1987.

Magazine Resources:

Canadian Geographic
Canadian Heritage
Equinox
Harrowsmith
Nature Canada
Owl
Probe Post

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