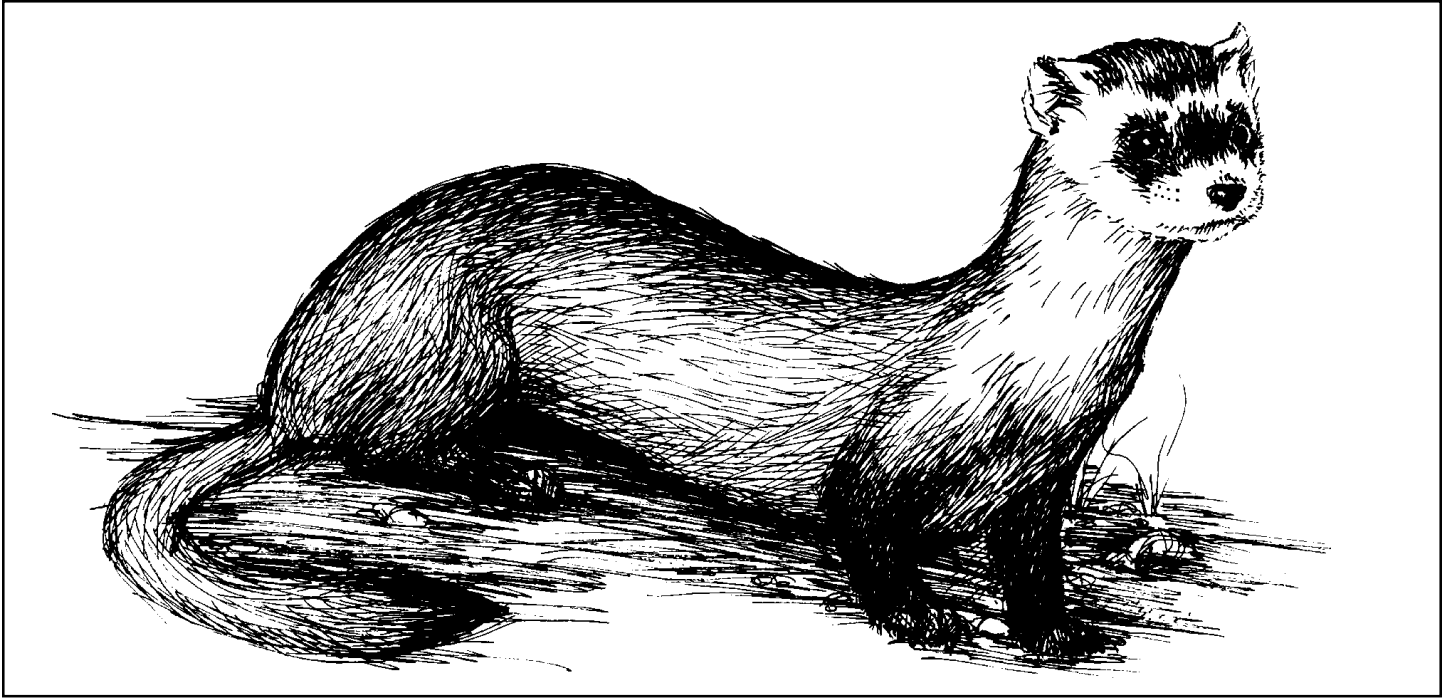


Black-Footed Ferret

(*Mustela nigripes*)



Considered the rarest land mammal in North America, the black-footed ferret (*Mustela nigripes*) is the only ferret native to the North American continent. Fossil evidence and recorded sightings indicate ferrets occurred in twelve states and two Canadian provinces throughout the Great Plains region. Since 1851, the majority of ferret sightings have been in Wyoming and South Dakota. Historically there were several reported ferret sightings in Utah; the only confirmed sighting was near Blanding in San Juan County in the 1950s, but reintroductions are now occurring.

The black-footed ferret is a member of the weasel family, Mustelidae. In Utah, other members of the weasel family include the badger, mink, skunks, pine marten, long- and short-tailed weasels and the river otter.

The demise of the black-footed ferret has been attributed to the eradication of the prairie dog, which is the primary food source for ferrets, and to habitat loss. The U.S. Endangered Species Act now federally protects black-footed ferrets.

Description

The black-footed ferret is a small, land dwelling carnivore (meat eater). Adults weigh from 1 to 2.5 pounds and are 18 to 24 inches long. The tail is roughly 4 to 5 inches long. Male ferrets are generally larger than females.

The head of the black-footed ferret is large with a broad flat area between the eyes. The ears are short and round. The black-footed ferret has dark eyes surrounded by a black mask and a black nose. The name ferret comes from the Old French word "furiet" which means thief and probably refers to the ferret's black mask.

Black-footed ferrets are light tan to cream color. This fur color helps conceal the ferret by closely matching the color of the soil. The throat, face, chest, and belly are lighter in color than the middle of the back and top of the head. Males are generally lighter in color than females, and the young are usually lighter in color than the adults. The black-footed ferret's fur is lighter and shorter in the summer. In addition to the characteristic black feet, the ferret also has a black tipped tail.

Black-footed ferrets, like other members of the weasel family, have musk glands. These glands are located beneath the ferret's tail. Musk produced by these glands gives the ferret a distinctive odor. Extra musk is produced during the mating season or when the animal is frightened. Unlike their relatives the skunks, however, black-footed ferrets are unable to spray their musk. Instead, it is secreted much like sweat.

Black-footed ferrets travel in a series of jumps or a slow gallop. In this manner, the ferrets can travel at a rate of five to seven miles per hour.

The long, slender body of the black-footed ferret allows it to enter the burrows of its prey. The ferret also has short legs and five digits or “fingers” on each paw. Each “finger” has a single non-retractable claw. Ferret tracks and scat are difficult signs to identify. The ground in prairie dog towns is usually too dry and too hard to hold a track imprint. When tracks are seen, they are 12 to 16 inches apart and show a claw mark above each digit. Ferrets may also leave distinctive slide marks on slopes where they have been sliding. They usually defecate below ground so their scat is rarely seen.

Food Habits and Habitat

Prairie dogs make up almost all of the black-footed ferrets’ diet. They may also eat ground squirrels, small rodents, insects, cottontail rabbits and birds. Captive ferrets will eat fresh fish although this has never been documented in the wild.

A black-footed ferret may eat up to 100 prairie dogs in one year. When prey is plentiful, black-footed ferrets may cache their kill in a den and return to it later. The overall health and condition of an adult ferret is ultimately dependent upon the quality and quantity of prey available. It is thought that ferrets get water from their prey.

The black-footed ferrets’ natural habitat coincides with most species of prairie dogs. Prairie dog towns provide the primary source of food and needed cover. Prairie dogs prefer areas of short vegetation and bare ground. Sagebrush shrubs are the largest plants found near preferred habitat.

Suitable habitat for prairie dogs and black-footed ferrets in Utah is found in the eastern portion of the state. It includes San Juan, Daggett, Uintah, Grand, Emery and Duchesne counties. Gunnison prairie dogs are found southeast of the Colorado River, and white-tailed prairie dogs are found northwest of the Colorado River. As such, these counties are potential sites for reintroduction projects. The ferret’s habitat is not believed to have ever coincided with the endangered Utah prairie dog located in southwestern Utah.

Disease can be a significant threat to ferrets, either when it spreads through the prairie dog populations or directly attacks the ferret population. Epidemic diseases like plague may kill an entire prairie dog population, completely eliminating the ferrets’ primary food source, or ferrets may directly contract diseases like canine distemper, pneumonia or



tularemia (a disease of the liver). Black-footed ferrets are also susceptible to a variety of internal nematodes, external ticks and mites.

Black-footed ferrets are preyed upon by a large number of predators, including coyotes, foxes, bobcats, owls, hawks, eagles, rattlesnakes and domestic dogs and cats.

Behavior

Black-footed ferrets are solitary and unsociable animals. The size of the prairie dog complexes necessary for sustaining ferrets seems based more on social distribution than on numbers of prey. Females need roughly 150 acres of prairie dog towns while males need 200 to 250 acres. Except during the breeding season, it is rare to see more than one adult in the same area.

Home ranges are areas where ferrets conduct their daily activities. A male’s home range may overlap several home ranges of females. Generally inside a home range is an area called a territory, which is defended against other members of the same species and sex. Territories are established by marking them by rubbing their musk glands on rocks, vegetation, and soil. Black-footed ferrets may travel up to four miles each night throughout their home range in search of food and during the breeding season.

Approximately 90 percent of a black-footed ferret’s life is spent below ground. They are most active at night (nocturnal) and in the summer and fall. During the winter months, they are considerably less active, but they do not hibernate.



During winter they may spend up to a week at a time below ground subsisting on cached food. Sometimes, on warm days, black-footed ferrets can be seen sunning themselves around their burrows. They may also be seen grooming themselves by biting and scratching at their coats.

Black-footed ferrets generally kill their prey by biting its neck with the back being a safer place than the front. Black-footed ferrets do most of their hunting inside prairie dog burrows, likely catching the prairie dogs while they sleep. The close confines of the burrows would make it difficult for their prey to escape. Black-footed ferrets have good eyesight, especially in dark places and excellent hearing. Smell and movement of their prey may also help in the attack.

Black-footed ferrets tend to chatter when they are excited or alarmed. At such times, they will emit six or seven loud chirps interrupted by low hissing sounds.

Being seldom seen in the wild because of their nocturnal, underground habits, the most distinctive sign of black-footed ferrets is a dirt trench left near inhabited burrows. The ferrets make these “trenches” when digging. To remove soil, they hold it against their chest with their front feet and back out of the burrow. As they do this repeatedly, they form a trench. These trenches are typically six inches wide, two to three inches deep and one to ten feet long. These are most often seen in the winter several days after a snowfall.

Another sign indicating the presence of black-footed ferrets may be plugged prairie dog burrows. Prairie dogs typically pile soil over the openings of ferret burrows in an attempt to trap the ferret inside to protect themselves from predation by ferrets.

Reproduction

Breeding occurs between the months of February and March. Black-footed ferrets do not form permanent bonds. Males are polygamous and may mate with several females annually. The males do not help care for the young.

After a 42-day gestation period, three to four young are born in the female’s den. The young stay inside the den until they are about six weeks of age. In mid-August, females may separate the young, by groups, into different dens. At night, as she moves around or hunts, she will gather them up so they can learn their survival skills. By September or October, the young are completely independent. At this time they may disperse to new areas within the prairie dog town or move to different towns.

A black-footed ferret has lived nine years in captivity, but most live around five years in captivity and three or four years in the wild. Fewer than half of the young ever survive to adulthood.

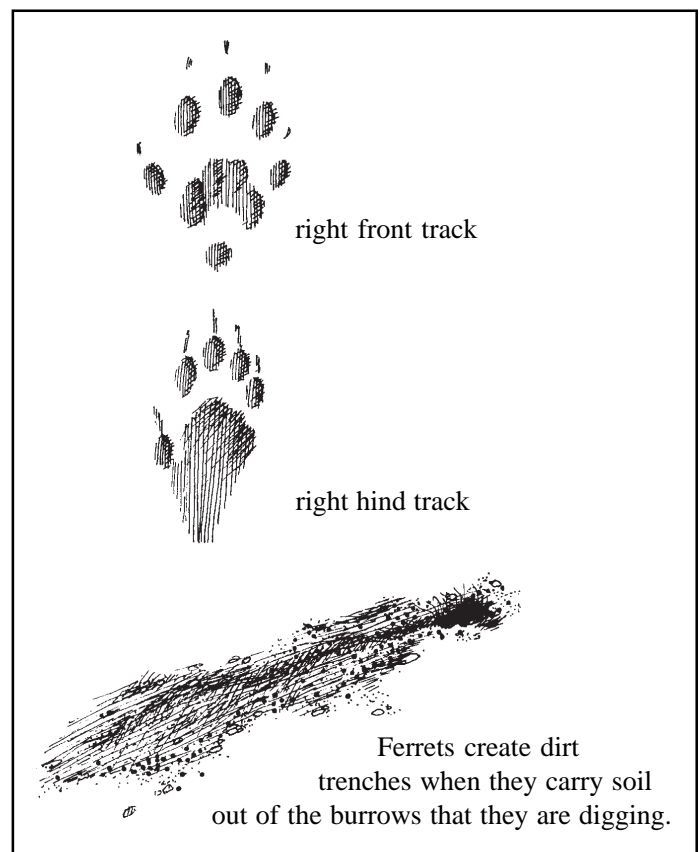
Current Status and Management

The Utah Wildlife Code and the federal Endangered Species Act protect black-footed ferrets. It is illegal to hunt, pursue, harass, catch, capture, possess, trap or kill them.

Following the loss of the only known population of black-footed ferrets, the U.S. Fish and Wildlife Service declared the black-footed ferret extinct in 1978. Then, in 1981, a ranch dog near Meteteetse, Wyoming, killed a black-footed ferret.

The Wyoming population of black-footed ferrets was carefully monitored and managed, and in 1984, the Meteteetse population reached a high of 129 individuals. Shortly thereafter, an epidemic of plague and an outbreak of canine distemper nearly eradicated the population. Biologists, in an attempt to save the ferret, decided to capture the remaining population. By this time only 18 animals remained.

Today, six main captive breeding facilities in the United States and Canada maintain a core of at least 240 adults to retain as much genetic integrity as possible. Most of the young and adults used in the reintroduction efforts are bred at these six sites. Roughly another 60 adult ferrets are kept in four breeding and conditioning pen complexes developed near release sites. These sites are built on prairie dog towns and are used to help expose ferrets destined for reintroduction to some of the conditions they will face in the wild, including living in the burrows and killing their own food.



Reintroduction efforts began in Shirley Basin, Wyoming, in 1991 when forty-nine juvenile ferrets were released into a white-tailed prairie dog colony. After some initial problems associated with inexperienced captive raised ferrets being thrust into an unfamiliar existence, the reintroduction effort seemed promising. Unfortunately, this site then experienced disease problems that decimated the prey base. While reintroduction efforts have been stopped, biologists still monitor a small population of ferrets that managed to survive in outlying colonies of prairie dogs that somehow escaped the plague.

Similar stories exist for the Montana releases into blacktailed prairie dog colonies at the Central Phillips County/ Charles M. Russell National Wildlife Refuge (1994) and at the Fort Belknap Indian Reservation (1997).

Success stories exist from reintroductions into black-tailed prairie dog colonies in Conata Basin/Badlands National Park in South Dakota (1994) and the Cheyenne River Sioux Tribe in South Dakota (1997). Both of these efforts produced wild born young within a couple of years of reintroduction and many now consider the Conata Basin population as “self-sustaining.”

Aubrey Valley, Arizona, made their first release in 1996 into a Gunnison Prairie dog colony. For the first time, ferrets were released into conditioning pens before being released into the wild. The conditioning helped increase the ferrets’ survival rates during the first few weeks after release so now most releases use animals that have experienced at least some time in a preconditioning pen. The Aubrey Valley site is still active but monitoring efforts at this site are difficult so the results are unclear.

With promising white-tailed prairie dog colonies found on both sides of the Utah/Colorado Stateline, it was a natural partnership for state and federal agencies and local universities to band together for developing release sites. When plague crashed the prairie dog colony in Colorado, the ferret transplant working group scrambled to authorize transplants into Coyote Basin in Utah. Efforts between 1999 and 2002 were successful.

In October and November of 1999, biologists released 72 ferrets into Utah, and the first wild born kits were seen the following summer. While monitoring efforts are difficult at

this site, biologists are confident the ferrets are becoming self-sustaining in Coyote Basin and are now concentrating their reintroduction efforts with releases in the nearby Wolf Creek site in Colorado. Reintroduction efforts may also expand into the Snake John area in Utah. While evidence of plague has been detected in the area, the white-tailed prairie dog population in Coyote Basin has remained healthy.

In 2001, the recovery efforts went international with a release in northern Chihuahua Mexico. While its too early to tell, reports of wild born young indicate this reintroduction into one of the largest known black-tailed prairie dog colonies will be successful.

Further recovery efforts are being planned with likely releases in 2003 or 2004 onto lands owned by the Rosebud Sioux Tribe, and other plans are underway to return the black-footed ferret to Canada.

What You Can Do

- If you are reasonably certain that you have seen a black-footed ferret, contact the Utah Division of Wildlife Resources. Biologists from the Utah Division of Wildlife Resources investigate reported sightings of black-footed ferrets.
- If a black-footed ferret is found dead or wounded, do not handle it. Wounded ferrets will bite. A dead ferret may have disease-bearing fleas on its body. Contact your local Division of Wildlife Resources office and inform them of the discovery. Try to keep domestic pets away from the animal and caution other people not to handle the ferret. A Conservation Officer or biologist will arrive to take care of the animal.
- You can contribute to wildlife through the Wildlife Tax Check-off on your Utah State Income Tax form or by making a direct contribution to the Black-footed Ferret Recovery Program through the Utah Division of Wildlife Resources, 1594 West North Temple, Suite 2110, Salt Lake City, UT 84116.

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