

Update On The Endangered Black-Footed Ferret

Get the latest information on the reintroduction and breeding efforts aimed at saving the endangered black-footed ferret.

By Renee Downs

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If reintroduction of black-footed ferrets in the wild is a success, it will indicate that the ecosystem is healthy.

Black-footed ferrets (*Mustela nigripes*), wild cousin to the domesticated ferret (*M. putorius*), once inhabited at least 12 western states, southern Canada and northern Mexico. A hundred and thirty years after John James Audubon reported and described the black-footed ferret and the mammal was thought to be extinct, a dog named Shep found a ferret in Meeteetse, Wyo., in 1981, which was 10 years after the most recent ferret sighting.

By the mid-1980s the population of black-footed ferrets located because of Shep had dwindled to fewer than 20 ferrets, with only seven capable of breeding. Thanks to a prodigious male named Scarface, the captive-breeding program began to show promise. "Scarface would breed with anything that walked past him," said Paul Marinari, manager of the Fish & Wildlife Service's black-footed ferret captive breeding program, located near Lakewood, Colo. A total of nearly 6,000 ferrets have been bred from the seven founders.

A Plan To Save A Species

In 1991, a Species Survival Plan was developed in cooperation with the American Zoo and Aquarium Association to manage the genetic and demographic needs of the captive black-footed ferret population. This plan called for the ferrets to be dispersed to various locations to help preserve the existing population.

Artificial insemination procedures were developed and continue to be used today to help guarantee the genetic diversity of the offspring. This continues to be monitored by scientists like veterinarian JoGayle Howard and geneticist Samantha Wisely at the National Zoo in Washington, D.C. In 2003 they showed that the sperm of wild-born males, unlike that of the captive-breeding males, does not show signs of genetic mutations, which can be caused by inbreeding, reported Brian Kenner, chief of resource management, Badlands National Park. This is a significant finding as it makes this particular wild population of black-footed ferrets in the Badlands very important to the continued genetic viability of the species.

The black-footed ferret recovery plan, implemented in 1988 by the U.S. Fish & Wildlife Service, grew in 1998 to include representatives from federal and state governments, Native American tribes, zoos and conservation organizations. This Black-Footed Ferret Recovery Implementation Team (BFFRIT) helps guide recovery efforts and establishes a plan for the repopulation of the original habitat with ferrets.

An important milestone occurred in 1998, as that was the first year since the program began that there were more ferrets in the wild than in captivity. The goal is to increase the captive population to 250 breeding adults and to establish a wild pre-breeding population of 1,500 adults in 10 or more locations by 2010.

More, More More!

Videos, breeding programs, websites — you've gotta check out these black-footed ferret resources. [Click Here>>](#)

Where The Black-Footed Ferrets Are

Reintroductions into the wild started in 1991 in Shirley Basin, Wyo. Since that time, ferrets have been released in 13 additional locations. Those areas with more than 30 breeding adults are Shirley Basin, Wyo. (1991); Conata Basin/Badlands, S.D. (1994); and the Cheyenne River Reservation, S.D. (2000). The year indicates when black-footed ferrets were first reintroduced in the area.

Those sites with fewer than 30 breeding adults include UL Bend Refuge, Mont. (1996); Aubrey Valley, Ariz. (1996); Fort Belknap Reservation, Mont. (1996); Coyote Basin, Utah (2000); Wolf Creek, Colo. (2000); 40-Complex, Mont. (2000); Janos, Chihuahua, Mexico (2000); Rosebud Sioux Reservation, S.D. (2000); Lower Brule Reservation, S.D. (2006); Wind Cave National Park, S.D. (2007); and Logan County, Kan. (2007).

Currently there are approximately 700 ferrets living in the wild, with the most successful population reintroduction in the Conata Basin of the South Dakota Badlands. Approximately 300 ferrets have been wild-born at this site. It has been

threatened by a recent outbreak of sylvatic plague in the area, however. According to Travis Livieri of Prairie Wildlife Research, approximately 3,000 acres of prairie dog towns have fallen victim to the disease. The plague, also known as the bubonic plague in humans, is deadly to both the black-footed ferret and its primary food source, the prairie dog.

Approximately 200 wild ferrets now reside in Shirley Basin, Wyo. Smaller populations in Montana are mainly centered around Fort Belknap and Phillips County. In Montana, the goal is to reestablish two viable populations with a minimum of 50 breeding adults in each, according to Randy Matchett, wildlife biologist at the Charles M. Russell NWR, Lewistown, Mont.

Ferrets were released in Aubrey Valley in northwest Arizona beginning in March 1996. The 2007 spotlighting effort resulted in 66 ferrets captured and processed. In 2008, this effort was conducted from March 20 to 24. Although exact figures are not available at this time, reproduction in the wild is expected to continue climbing.

Recent Reintroductions

In December 2007, 10 black-footed ferrets were released near Vernal, Utah, in the Snake John Reef, bringing the total number released in the Coyote Basin area to 313. This area shares prairie dog towns with Colorado. This most recent group of ferrets is part of a study on a new vaccine that may protect the animals from sylvatic plague.

Also in December, 24 ferrets were released on privately owned ranches in Logan County, Kan. Another 10 were released on The Nature Conservancy's Smoky Valley Ranch, also in Logan County.

December was also busy at Wind Cave National Park, S.D., where 49 ferrets from the Conata Basin and the Colorado FCC were introduced over a five-month period. In late 2007, three of the four prairie dog colonies where 45 of the 49 black-footed ferrets had been released were surveyed over a five-day period. Of the 49 ferrets released, volunteers observed 18 to 20 of the 45 ferrets. Observers were able to get readings on 10 of the ferrets.

Future reintroduction programs are planned for Wyoming's Thunder Basin National Grassland (2008) and Ontario, Canada (2009). The Canadian reintroduction, originally scheduled for 2007, has been delayed to provide the ferrets with the greatest chance of success.

More Than A Species Is At Stake

As encouraging as news of the recovery may be, biologists and conservationists alike agree that the most exciting part of a successful reintroduction program is that it is the sign of a healthy ecosystem. Black-tailed prairie dogs are a significant species in the Great Plains on which many other animals depend. They create an extensive network of tunnels that provide homes to numerous species, including long-billed curlews, mountain plovers, burrowing owls, and other prairie birds, as well as prairie rattlesnakes. They are a critical source of food for many predators, including ferruginous hawks, swift foxes and golden eagles. All of the species benefit from a functioning prairie ecosystem with a healthy predator-prey system. "A lot of people have trouble grasping why we should care about wildlife, but this is our legacy for the future," Marinari said. "It's a sign of a healthy environment and healthy ecosystem."

Renee Downs currently resides in the Connecticut woods, where she is studying bioacoustics. The Poop-In-The-Corner Gang has moved on to the Rainbow Bridge without her. She is kept on her toes, however, by the Wayfaring Weasels: Rocky Bobbles (Virginia), Sammy (Texas), Jersey (New Jersey) and Odie (New York). Have you had your ferret's hearing tested?