© Daniel J. Cox, naturalexposures.com

Carrying black-footed ferrets in backpacks, *resource managers hike into the Badlands wilderness, the release site for the restoration program. In just five years the program has succeeded in establishing a wild population of the black-footed ferret in the South Dakota park.*

Curious and alert, *a nocturnal black-footed ferret pops out of its burrow in a prairie dog town. The ferret relies on the prairie dog as both its principal food source and its landlord.*

Threatened and Endangered Species

GREAT EXPECTATIONS FOR THE BLACK-FOOTED FERRET AT BADLANDS GPRA

by Glenn E. Plumb, Ph.D., and Bruce Bessken

+ glenn_plumb@nps.gov
Wildlife Biologist, Badlands National Park, South Dakota

+ bruce_bessken@nps.gov
Chief of Resource Management, Badlands National Park, South Dakota

During summer and fall 1998, members of the interagency South Dakota Black-footed Ferret Implementation Team were among the happiest people you may ever encounter in a prairie dog colony at midnight. Not since 1985, when the last known thriving, wild, free-ranging population of the nocturnal black-footed ferret was observed at Meeteetse, Wyoming, have 24 wild-born litters with more than 50 kits and a minimum count of 65 adults been witnessed in one population. The black-footed ferret habitat provided by the black-tailed prairie dog colony complex of Badlands National Park and Buffalo Gap National Grassland in southwestern South Dakota now supports the largest wild black-footed ferret population in the world.

Since 1994, captive-bred black-footed ferrets have been regularly reintroduced into Badlands National Park in order to acquire new and reliable information about how to conduct cost-efficient black-footed ferret reintroduction operations. Five years of restoration efforts have resulted in a high degree of captive-bred black-footed ferret survivorship and the establishment of a wild population. In order to achieve these goals, the recovery team invoked a broad recovery program philosophy of adaptive management.

Adaptive management involves regular assessment and revision of management techniques based on field observations. In the black-footed ferret recovery program, biologists conducted annual testing of field techniques and, based on what was working, adopted or abandoned certain reintroduction techniques. Through this adaptive management system, the team developed a reintroduction program that increased short-term survivorship of captive-bred black-footed ferrets at 30–60 days after release from 25% in 1994 to approximately 80% by 1997. Indeed, the program has been so successful that black-footed ferret reintroduction programs in Montana, Arizona, and Colorado are using techniques developed in South Dakota.

The current level of success enjoyed by the South Dakota black-footed ferret project clearly demonstrates the utility of NPS Natural Resource Preservation Program (NRPP) funding. With two cycles of NRPP project funding (1993–98) and an adaptive management framework, captive-bred black-footed ferret survivorship greatly increased while the per capita cost of black-footed ferret release and population monitoring decreased. Thus, the park is now poised to shift into a long-term black-footed ferret population recovery program with base funding.

SEA TURTLE NUMBERS UP

For the fourth consecutive year, Kemp's ridley sea turtles nested in greater numbers than before along the south Texas coast on or near Padre Island National Seashore. Altogether, 13 nests were documented in 1998, with 4 belonging to individuals from the turtle recovery project, which was launched in 1978 to help the endangered species establish new nesting colonies. In addition to Kemp's ridley nests, 5 nests belonging to green sea turtles, 2 to loggerheads, and 1 to a hawksbill turtle were documented by staff of the Biological Resources Division and the park.