

# Black-Tailed Prairie Dogs

National Park Service  
U.S. Department of the Interior



Little Bighorn Battlefield  
National Monument  
Montana



The black-tailed prairie dog has an interesting life history, intricate communication methods, and is a keystone species of the western prairie. Long considered pests by the agricultural community, their populations have been in decline since the early 1900's.

## From Mexico to Canada

All prairie dogs are a type of ground squirrel in the order Rodentia. There are five species of prairie dogs in North America: black-tailed, white-tailed, Gunnison's, Utah, and Mexican.

The black-tailed prairie dog (*Cynomys ludovicianus*) has the widest range and is found throughout the western United States, from Canada to Mexico.

The Little Bighorn Battlefield National Monument is not currently home to any prairie dog species, although there are several colonies nearby. Visitors can view the black-tailed prairie dog "town" on private land along the west side of the entrance road to the battlefield.

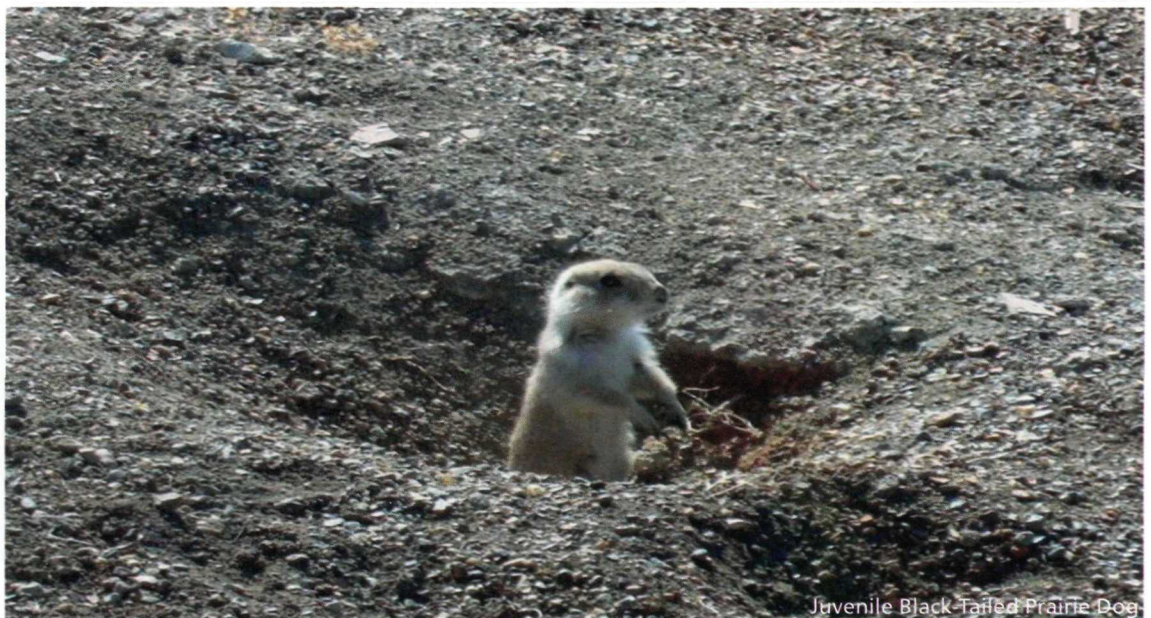
## Life On (and Under) the Prairie

Black-tailed prairie dogs weigh between one and three pounds and are 14 to 17 inches long. Individual color can include shades of brown, black, gray and white. The variations are good camouflage for life on the prairie. With a compact body and large claws for digging, prairie dogs are well adapted for a life underground.

Prairie dog colonies form complex underground burrows that require a lot of time and maintenance. The typical burrow is 3 to 14 feet deep and can range in length from 13 to 109 feet. These underground dens provide protection from weather and predators, making them a relatively safe place to rear young.

Prairie dogs breed in late March and early April. The pups are born after a short gestation period of 35 days, typically three or four young in a litter. The young do not leave the safety of the burrow until they are four to five weeks old, usually in late May and early June.

Colonies are organized into family groups called coterie (*kōt'ə rē*). A coterie usually consists of one adult male, three to five adult females, and their young. Each colony has multiple tight-knit coterie with constant communication between individuals. In early summer, year-old males move away from their original coterie. They may move to the perimeter of their colony or as far as six miles away to join or create another coterie.



Juvenile Black-Tailed Prairie Dog



## Communication is Everything

Prairie dogs are often heard before they are seen. Their distinctive barks and yips are the basis for an intricate communication system that protects entire prairie dog communities from predators.

Each prairie dog coterie is guarded by a sentry. The sentry watches for potential threats and signals that one is approaching with high-pitched barks and tail flicking. The message is passed between coterie until the entire colony is alert and aware of the danger.

Researchers have also found that prairie dogs can communicate what type of threat is approaching. The sounds that signal a hawk flying overhead are different from the

barks and yips that indicate a coyote has been spotted on the perimeter of the colony.



A sentry alerts the coterie of danger

## Ecological Role

Prairie dogs are a keystone species of the western grassland. Many other species depend on them and the ecosystem would change drastically if they were to go extinct. Prairie dogs alter the vegetation around their colonies, create habitat for other animals, and are a preferred prey source for many species.

Black-tailed prairie dogs are herbivores that graze on a variety of plants. They help increase the biodiversity of the grassland by removing some plants while allowing others to thrive. Prairie dogs often trim the plants around their colony. This provides sentries with a wider field of vision and makes it easier for members of the colony to communicate with one another.

Prairie dog colonies inadvertently create habitat for other animals. Abandoned prairie dog dens are often utilized by animals like the burrowing owl, which is a species of concern in Montana. The mountain plover, a ground nesting bird that prefers flat areas for foraging is often associated with prairie dog colonies.

In addition to providing habitat, prairie dogs are a favorite food item for many animals, some of which are threatened or endangered. Rattlesnakes, badgers, golden eagles, prairie falcons, ferruginous hawks, and a variety of other carnivores rely at least partially on the prairie dog as a source of prey.

The federally endangered black-footed ferret is almost entirely reliant upon prairie dog colonies as a source of food. The decline of the prairie dog over the last century has decreased both habitat and food for the ferret. If the prairie dog population continues to shrink, the black-footed ferret will likely go extinct.

Prairie dogs are often viewed as pests. Numerous poisoning campaigns have been undertaken to eradicate them from agricultural lands. Loss of available habitat due to the conversion of grasslands to agricultural and urban land has also impacted populations. Prairie dogs colonies have also been experiencing outbreaks of sylvatic plague, which has decimated some populations.

The Montana prairie dog population is thought to have peaked in the early 1900's when colonies covered over one and a half million acres. In the early 2000's, the statewide population was estimated to occupy 90,000 acres, only six percent of their former range.

As prairie dogs continue to face pressure from plague outbreaks, urbanization, poisoning, and recreational shooting, the population will continue to decline. The potential loss of the prairie dog will undoubtedly impact biodiversity in the Great Plains region.

To find out more about the black-tailed prairie dog, visit <http://www.nps.gov/wica/naturescience/blacktail-prairie-dog-cynomys-ludovicianus.htm>.



All photos by National Park Service