

Theodore Roosevelt

National Park Service
U.S. Department of the Interior

Theodore Roosevelt National Park



Prairie Dogs



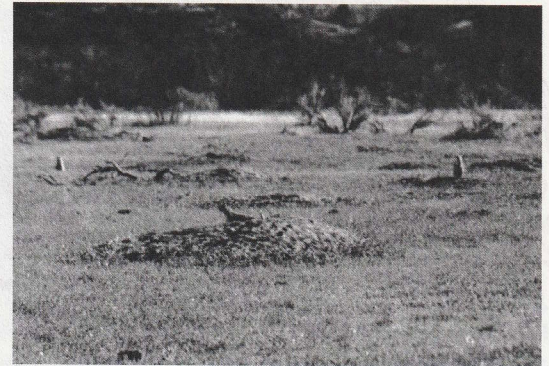
“Prairie-dogs are abundant...; they are in shape like little woodchucks, and are the most noisy and inquisitive animals imaginable. They are never found singly, but always in towns of several hundred inhabitants; and these towns are found in all kinds of places where the country is flat and treeless.” ~ Theodore Roosevelt

Pest or Protector?

A common misconception is that prairie dogs destroy the landscape. The truth is prairie dogs play a vital role in keeping the prairie ecosystem healthy and balanced. Without prairie dogs, the prairie would change dramatically. More than 180 plant and animal species have been linked to the prairie dog. Nine species, including hawks, eagles, foxes and ferrets directly depend on them for survival.

In the 1700s, the prairie was an abundant ecosystem. Bison numbered over 60 million, grizzly bears and wolves roamed the prairies, and prairie dog towns covered the landscape. Historically, prairie dog towns were huge. One town recorded in Texas in 1901 was 24,000 square miles in size and was home to an estimated 400 million prairie dogs. Negative ideas towards prairie dogs began in the 1800s as pioneers started to develop farms and ranches and domestic cattle were introduced to the plains. Prairie dog towns began expanding not only onto land cleared for agriculture, but also into disturbed areas where buildings and roads were being constructed. Development of farmlands and cities has greatly depleted the natural diversity of the Great Plains.

Concerned that prairie dogs would eat grasses needed for cattle and that domestic animals would break their legs in the burrows, ranchers began aggressively killing prairie dogs in the early 1900s. Entire colonies could be destroyed in just weeks or months. The accidental introduction of sylvatic plague in the late 1800s also contributed to the decline of the prairie dog. Since 1900, prairie dog populations have been reduced up to 98% in some areas and eliminated in others. Today, prairie dogs continue to be shot and poisoned through government sanctioned programs and many states encourage hunting of prairie dogs as a popular sport. Lack of immunity to sylvatic plague continues to wipe out entire populations. And, urban sprawl often dooms entire colonies. Of the 5 species of prairie dogs, two are now on federally protected lists and the remaining species may not be far behind.



Life in a Prairie Dog Town



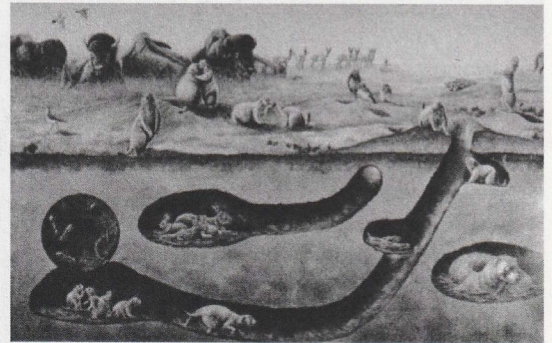
Theodore Roosevelt National Park is home to Black-tailed prairie dogs. They are the largest and most abundant of the five prairie dog species and typically live in short or mixed grass prairies. They occupy about 1,545 acres of the park or about 2.2% of the total park acreage. Living in a protected area, the colonies in the park are doing well.

A prairie dog town consists of a large number of closely spaced burrows comprising an elaborate network of tunnels and entrance holes that provide escape routes from predators. The prairie dog family unit is called a coterie and consists of one adult male, several adult females, and their offspring. Members of a coterie are a closely-knit group, recognizing each other by an identifying kiss or sniff. Their cohesiveness is maintained by the cooperative activities of raising young, constructing burrows, grooming, playing, and defending their coterie territory. Many coterie make up a prairie dog town.

Prairie dogs feed primarily on plants, selecting forbs and grasses high in moisture content and nutritional value to supply their needs for water and energy. With reduced competition from grass species, forbs increase in abundance. Varying its diet, the prairie dog practices its own brand of crop rotation by eating what is plentiful at the time. Constant clipping of grasses and other plants encourages new

shoots to sprout, providing a continuous supply of nutritious food for large herbivores such as bison, elk, pronghorn, and deer while their trampling and wallowing compact the soil and further encourage forb growth. Prairie dogs also aerate the soil with their burrows, and fertilize the land with their scat.

Although the open, closely-cropped terrain enables the collective eyes of the town to spot approaching danger, prairie dogs are an important food source for carnivores like badgers, coyotes, foxes, hawks, and eagles. Their burrows also provide homes and protection for many creatures including burrowing owls, rabbits, snakes, turtles, toads, and black widow spiders.



The number of prairie dogs a given area can support at any one time is based on a number of interacting environmental factors, one of which is predation. Other environmental pressures such as weather, availability of edible plants and disease also affect the size and health of prairie dog populations. Even though prairie dog towns in the park may appear large they are actually very small when compared to the typical size of prairie dog towns prior to westward expansion and settling of the frontier.

A Keystone Species

As prairie dog numbers continue to decline throughout North America, so do the animals that depend on them. For example, Mountain plovers historically lived in this area and relied on prairie dog towns for breeding, nesting, and feeding. As prairie dog towns declined, Mountain plovers eventually disappeared. Similarly, Ferruginous hawks migrate to Mexico in the winter where the Mexican prairie dog is one of their primary food sources. Mexican prairie dogs are now endangered and their decline has contributed to the hawk's endangerment.

The species most affected by the declining prairie dog population is the Black footed ferret, which feeds almost entirely on prairie dogs. A single adult ferret requires a prairie dog town of at least 100 acres to provide an adequate food source. The Black footed ferret is one of the most endangered animals in the world with only 18 animals known to exist in 1986. Captive breeding and reintroduction of the ferret to protected areas such as Wind Cave and Badlands National Parks is slowly restoring this species.

While development of farmlands and cities has greatly depleted the natural diversity of the Great Plains, Theodore Roosevelt National Park offers visitors the chance to experience a small piece of the natural prairie environment. As we face the future and its uncertainties, careful management of the land and the species that live here, including the prairie dog is something park managers do not take lightly. If those we are charged to protect disappear, much may be lost or irreparably changed forever.

