

Black Tailed Prairie Dogs in the City

Cynomys ludovicianus

Status: The black tailed prairie dog has been identified as a species of special concern by the U.S. Fish & Wildlife Service, therefore requiring all states to evaluate the status of prairie dog populations within their respective states to develop and pursue an interstate effort and approach for black-tailed prairie dog management. Prairie dog colonies throughout the Midwest and Front Range have disappeared due to widespread occurrence of plague, habitat fragmentation and loss, and competition with human interests.



Habitat and Identification:

The black-tailed prairie dog inhabits the eastern third of Colorado. Prairie dogs occupy an estimated two million acres in North America and the majority of the Colorado population resides in areas below 6,000 feet, east of Colorado's foothills. The largest areas of active colonies are located along the Front Range and in the south-central/southeastern portions of the state.

There are three species of prairie dogs that reside in Colorado. The black-tailed prairie dog lives on the eastern plains and Denver metro/front range, the Gunnison prairie dog in the southwest third of the state, and the white-tailed prairie dog in the northwest third of the state.

The black-tailed prairie dog is identified by the black tip of its tail and the locations they are found that distinguishes them from the other species. They weigh one to three pounds and are 14 to 17 inches long. They are reddish in color, have large eyes, short ears and broad round heads. Prairie dogs are highly social and live in large colonies or "towns" in grasslands where they clip down tall grasses to better watch for predators. A characteristic feature of a colony includes the mounds of dirt they have excavated from the extensive burrow systems. These mounds give them a higher perch to keep watch from. Prairie dogs lose and regrow their fur (molt) twice a year, giving them a raggedy appearance at times.

Ecology and Behavior:



Diet:

Prairie dogs are herbivorous. Over 98% of their diet consists of grasses, leaves, stems, and seeds. They occasionally eat insects and larvae, roots, fruit and buds. They forage close to their burrows unless forced to look farther due to shortage of grass nearby.

Breeding:

Females can breed at two years old and have one litter a year averaging three to four pups per litter. Lifespan is approximately three or four years; so a single female can have at most 20 offspring in her lifetime. Pups are born in the mid to late spring, and unlike most rodent species, prairie dogs are not prolific breeders. Prairie dogs use a type of "day care" system and

communal nursing system where one mother will take care of many pups during the day. Females will stay in their colony and the males will disperse at about one-year old.

Behavior in an urban environment:

While considered an important part of the prairie ecosystems, prairie dogs often are a source of conflict in a city. In a natural habitat, they would have plenty of room to expand and move around. They would graze in different areas to allow vegetation to regrow. But in a city, they are confined to small and fragmented open spaces, putting more pressure on the vegetation and with limited places for young males to disperse in these areas. Most open land in a city is scheduled for eventual development. Therefore, prairie dogs are forced into groomed parks and into people's yards looking for food and space. Due to their habitat of trimming down and eating plants, they can be destructive to the landscape. When prairie dogs are removed from an area, unless the land is completely changed (i.e., turned into an asphalt parking lot), the animals are more likely to return, due to the lack of appropriate habitat nearby. In areas of high human activity, there are concerns about diseases and people tripping on burrow mounds. City prairie dogs require intensive and long term management to successfully survive and coexist in neighborhoods and open spaces. People living along open spaces need to actively design their yards and fences to deter prairie dogs. Urban prairie dogs are a major food source for other urban wildlife including raptors, coyote and fox. When this natural food source disappears, predators may turn to less appropriate food sources such as domestic pets.

Benefits:

Prairie dogs are considered a keystone species in the prairie and are important to the health of the whole ecosystem. At least nine wildlife species are considered dependant on prairie dogs and another 137 species are associated with them. They are an important prey species. They are the primary diet for prairie species such as the black-footed ferret, the swift fox, the golden eagle, the badger, and the ferruginous hawk. Other species, such as the mountain plover and the burrowing owl rely on prairie dog burrows for nesting areas. Animals such as bison, pronghorn and mule deer prefer to graze on the same land used by prairie dogs. In the Denver area, they are closely associated with coyotes, foxes and owls.

Prairie dog burrow systems benefit the soil and vegetation. They help channel water down to the water table; they aerate and turn the soil; they add organic material to the soil, and the clipping of the vegetation leads to higher quality grasses.

Urban prairie dog colonies provide a great educational experience for children and adult alike to learn about the historical habitat of Denver, and about the native ecosystems and animals that have been found in this part of the world. Prairie dogs are active, social, playful and active during the day, providing entertaining and interesting wildlife watching opportunities right in the city.

Human health concerns of prairie dogs:

A common misconception is that all prairie dogs carry the plague. In actuality, plague is a bacterium transmitted by fleas and is lethal to prairie dogs. A prairie dog usually dies within 2 days of becoming infected. They typically die too quickly to be able to transmit the disease to other animals. But that does not mean that precautions should not be made when in an area that is suspected of plague. Plague can be lethal to cats, domestic and wild, and the endangered black footed ferret. Canids (dogs, foxes and coyotes) can get infected by eating dead, infected prey and can live with the disease for some time.

Although plague can be transmitted to humans via flea bites, human cases of plague are rare. Early symptoms of plague include swollen and tender lymph nodes, chills and fever. Early diagnosis and treatment is imperative! When walking through suspected plague areas, apply an insect repellent to socks and pant cuffs before tucking pants inside boots.

Fun Facts:

1. Prairie dogs are considered to be the only other mammal with a complicated verbal language. They make over 300 different vocalizations with specific meanings. Studies have analyzed calls that even describe the people watching them, for example “There’s a tall male in a green shirt on the north side of the colony.” Wow!
2. Prairie dog burrows include nurseries, bathrooms, storage areas, kitchens and even guest rooms.
3. Prairie dogs have jobs. Jobs include lookout, day care provider, and burrow maintenance worker.
4. Prairie dogs greet each other by rubbing front teeth or “kissing.”
5. Prairie dogs don’t drink water; they get moisture from the plants they eat, rain and snow.

Living with prairie dogs

Keeping prairie dogs out of personal yards and landscaping.

Prairie dogs are visually motivated. If they see good potential foraging sites, they are more likely to move there. If they can’t see an area, they are less likely to go there. Prairie dogs are naturally wary, and tend to avoid places where predators and other animals can hide.

1. Create a visual barrier. Create a solid fence at least 3 feet high.
 - a. Build fences flush with the ground so they can’t peek through.
 - b. Add tall plants and shrubs to create an image of potential predator hiding places on either side of the fence.
 - c. Plant hardy (low water use) native plants:
 - i. Rabbit brush *Chrysothamnus nauseosus*
 - ii. Big sage *Artemisia tridentate*
 - iii. Salt bush *Atriplex canescens*
 - iv. Fern bush *Chamaebatiaria millefolium*
 - v. Apache plume *Fallugia paradonca*
 - vi. Native switch grass *Panicum virgatum*
2. Create a barrier underneath fence.
 - a. Dig down at least 12 - 24 inches. Install metal sheeting or strong hardware cloth and recover with soil.



Native plant barrier-switch grass



3. Keep fences in good repair.
4. Pour concrete pad underneath gate, or lay a layer of hardware cloth and cover with soil.
5. Spend time in your yard; prairie dogs don't want to spend time with you or your dog.
6. Don't damage or stuff debris into burrow entrances, they will dig out making entrance larger.
7. Work on fence early in the morning, when prairie dogs are out of your yard and foraging.
8. Be aware that pups may be in the dens in the early spring.

Relocation of Prairie dogs:

Relocation is a last option when damage is occurring to property, and exclusion techniques have been unsuccessful.

In Colorado, it is lawful to capture, transport, and relocate black-tailed prairie dogs from one site to another suitable site, ***with and only with***, a [permit from Colorado Parks and Wildlife](#) (CPW).

1. Relocating any animal is a complicated process, and a professional should be hired or consulted before attempting to remove an animal(s).
2. You must have an approved relocation site and permission from the releasing land owner.
3. County Commission approval is required if attempting to relocate from one county to another.

Why don't we remove all the prairie dogs from the city?

1. Prairie dogs are important parts of the natural urban and prairie ecosystem, and other animals depend on them for food and shelter.
2. Removing animals without completely changing the habitat means new individuals will quickly move in and repopulate the area.
3. Because prairie dogs have been identified as a **species of special concern** in Colorado, it is important that private property owners take responsibility to make educated decisions on how to manage prairie dogs on their property.

Resources

U.S. Fish and Wildlife Service, <http://www.fws.gov/mountain-prairie/species/mammals/btprairiedog/>

Wikipedia.org, http://en.wikipedia.org/wiki/Prairie_dogs

Animal Diversity Web, http://animaldiversity.ummz.umich.edu/site/accounts/information/Cynomys_ludovicianus.html

Colorado Parks and Wildlife, <http://cpw.state.co.us/learn/Pages/SOC-Black-tailedPrairieDog.aspx>

Denver Parks & Recreation
Natural Resource Operations
Wildlife Hotline: 720.913.0630

