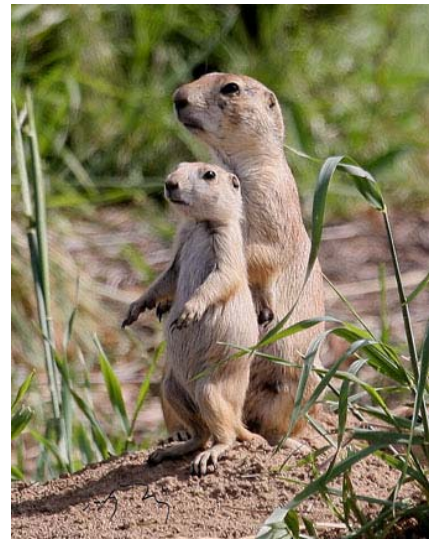


Black Tailed Prairie Dogs in the City

Cynomys ludovicianus

Status: The black tailed prairie dog is listed as a **species of special concern** in the state of Colorado. There have been multiple petitions to add them to the endangered species list, which is a very controversial move. The newest attempt will be in 2009, as the U.S. Fish and Wildlife is taking a deeper look at prairie dog numbers and issues. Prairie dog colonies throughout the Midwest and Front Range have disappeared due to plague and competition with human interests.



Identification:

There are five species of prairie dog, who are members of the squirrel family. The black tip of the tail and the location they are found in distinguishes these from the others. Black tailed are found farther east and in drier habitats than the other four species. They weigh one to three pounds. Prairie dogs live in colonies 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, and gives 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.

Natural history:

Black tailed prairie dog colonies used to occupy 80-100 million acres of prairie, Lewis and Clark wrote about them in their journals as they traveled across the U.S. Today habitat destruction, plague, poisoning and shooting has reduced the numbers significantly; currently they inhabit approximately 2 million acres. Prairie dogs are found no where else in the world, and currently have populations of varying sizes in 11 U.S. states, with segments in Mexico and Canada. Prairie dogs are vulnerable to plague, an introduced bacteria from either Asia or Africa. A plague episode in a prairie dog colony can wipe out hundreds of animals in a matter of days. There is concern over other animal species that live closely associated with prairie dogs. The black footed ferret is one of the most endangered mammals on the planet, and they are dependant on prairie dogs for food and habitat.

Diet:



Over 98% of their diet is leaves, stems, and roots of grasses, and herbaceous plants. They occasionally eat some insects and larvae. 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. 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. Prairie dogs are not prolific breeders compared to most rodent species. But they use a type of “day care” system and communal nursing, where one mother will take care of many pups during the day. Pups receive a lot of maternal care, often being protected from other aggressive mothers trying to care for their own babies. Females will stay in their colony and the males will disperse, or join new colonies at about one year old.

Behavior in an urban environment:

While considered an important part of 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 along with their food sources. They would graze in different areas to allow vegetation to regrow. 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 move to. Most open land in a city is also scheduled for eventual development, so the established colonies cannot remain on a piece of property. 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 landscaping. When prairie dogs are removed from an area, unless the land is completely changed (Ex turned into an asphalt parking lot) the animals will quickly return due to the lack of other areas to go. In areas of high activity, there are concerns about 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 yard and fence to deter prairie dogs from moving in. Urban prairie dogs are a major food source for other urban wildlife, including raptors, coyotes and foxes. When they disappear, predators may turn to less appropriate food sources such as outdoor pets.

Benefits:

Prairie dogs are considered keystone species in the prairie, they are important to the health of the whole ecosystem. At least nine species are considered dependant on prairie dogs, and another 137 species are associated with them. They are an important prey species, being the primary diet in 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, also 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 Denver they are closely associated with the urban coyotes. Prairie dog burrow systems benefit the soil and vegetation in a prairie. They help channel water down to the water table, they aerate and turn the soil, they add organic material, clipping vegetation leads to higher quality grass, and hundreds of other animals use the burrows for shelter.

Urban prairie dog colonies provide a great educational experience for local children 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 also active, social, playful and out during the day, providing entertaining and always interesting wildlife watching right in the city.

Danger from prairie dogs:

A common misconception is that all prairie dogs carry the sylvatic 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 die too quickly to be able to transmit the disease to other animals. It is currently unknown which animals can carry the plague and survive long enough to transmit the disease. Plague is also lethal to cats, domestic and wild, and the endangered black footed ferret. Canids (dogs, foxes and wolves) can get the disease but often live with it for some time. They usually are infected by eating dead, infected prey. Human cases of plague are rare, often resulting from hunters skinning infected animals without proper protection. Plague is easily treated with antibiotics. (For more information see plague page)

Prairie dogs are not considered a danger to pets, but will bite if caught by a dog or cat.

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.

What to do when living with prairie dogs

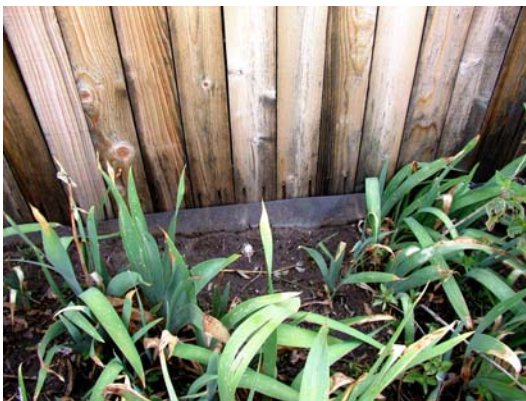
Keeping prairie dogs out of personal yards and landscaping.

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 won’t go there. They are very wary of potential predator hiding spots and will avoid places other animals can hide.

1. Create a visual barrier. Create a solid fence at least 3 feet high.
 - a. Maintain bottom so they can’t peek through.
 - b. Add tall plants and shrubs to create an image of potential predator hiding places in front of or on both sides of fence.
 - c. 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 6 (2 ft is best) inches, install metal sheeting or strong hardware cloth and recover with soil.



Native plant barrier-switch grass



3. Keep fences in good repair
4. Build fences flush with the ground.
5. Pour concrete pad underneath gate, or lay a layer of hardware cloth and cover with soil
6. Spend time in your yard; prairie dogs don’t want to spend time with you or your dog.
7. Don’t damage or stuff debris into burrow entrances, they will dig out making entrance larger.

8. Work on fence early in the morning, when prairie dogs are out of yard and foraging.
9. Be aware that pups may be in the dens in the early spring. **Prairie dogs must be left alone from February to May when the pups are too young to be moved.**

If a prairie dog gets trapped in your yard after you have reinforced your fence call the Natural Areas Program and they can help you get in touch a person to relocate it.

Relocation of Prairie dogs:

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

To relocate prairie dogs you must have a permit from the Colorado Division of Wildlife.

1. Relocating any animal is a complicated process, and a professional should be hired or consulted before attempting to remove an animal(s).
2. The most humane technique in prairie dog relocation is live trapping, there are little to no animal injuries or deaths during the process. Other techniques include flushing with soapy water or sucking animals out with a large vacuum. Both of these techniques have higher chances of killing or injuring the animal in the process and should be done only by professionals.
3. You must have an approved relocation site and permission from the land owner. (See the list of wildlife rehabilitators for some sources of prairie dog relocators)

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

1. Prairie dogs are important parts of the natural urban 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. Prairie dogs have been considered for the Endangered Species list four times in since the year 2000 and are listed as a species of special concern in the state of Colorado. We need to make educated decisions so we do not drive a native animal to extinction.

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

Barbalace, Barbara, Environmental Consultant, "Prairie dog control part I", <http://environmentalchemistry.com/yogi/environmental/200704prairiedogcontrolnonlethal.html>

National Zoo Website, <http://nationalzoo.si.edu/Animals/NorthAmerica/Facts/fact-pdog.cfm>



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