



The Key to Restoring the Prairie Ecosystem

Five species of prairie dogs live in North America (see map), are keystone species *and* ecosystem engineers. **Keystone species** play a profound role in the structure of their ecosystem, and their removal causes substantial changes in species composition -- or even ecosystem collapse. It is estimated that over 150 species benefit from prairie dog colonies! They also act as **ecosystem engineers** by creating unique habitats above and below ground for animals such as American badgers, bison, black-footed ferrets, prairie falcons, Swainson's hawks, golden eagles, burrowing owls, mountain plovers, and scores of insects and spiders.

Prairie dogs help restore the prairie by:

- Constructing a unique underground ecosystem
- Feeding animals above and below ground
- Improving plant diversity to benefit pollinators
- Increasing soil quality and water availability



About the Prairie Dog Coalition

The Prairie Dog Coalition's mission is to empower organizations and individuals with conservation tools that protect prairie dogs, restore their ecosystems, and reduce human-wildlife conflict.

How You Can Help Prairie Dogs

You can impact wildlife conservation by using the information here and on our website to elevate the positive perception of the prairie dog! For starters, pass this brochure along to a friend who you think would like to learn more about them.

Sign up for prairie dog news, find involvement opportunities, explore tools, resources, and more at:

PrairieDogCoalition.org



Scan this QR code with your smartphone to follow us on social media and find resources on our website!



Photo credit: Kaitie Schneider, Rich Reading, Mariana Rivera Rodriguez, and Carlos G. Velazco-Macias

A Quick Guide to Prairie Dogs and Their Ecosystems



Prairie Dog Biology

Appearance: Adult prairie dogs stand about 12-17 inches tall and weigh 1-2 pounds, with males generally larger than females. Their fur is tan with tail color and other markings varying across species.

Lifespan: For prairie dogs that survive their first year after weaning in May or June, males can live as long as 5 years, and females can live as long as 7 years.

Diet: Prairie dogs are herbivores. They mostly graze on grasses, forbs, seeds, shrubs, and sometimes insects.

Habitat: Prairie dogs are non-migratory and live in grasslands, prairies, and meadows where they construct elaborate burrow systems. Their long-term persistence provides habitat for a wide range of wildlife.

Social Structure: Prairie dogs live in territorial family groups called coteries or clans, consisting of several related females, one unrelated male, and their young. Several coteries make up a colony or prairie dog town.

Reproduction: Prairie dogs reproduce much slower than other rodents. Breeding times vary geographically, but the females are receptive to mate for one day per year. If successful, the average litter size is 3-4 pups, but only half of the litter will likely survive to adulthood due to predation, infanticide, and winter conditions.

Communication: Vocal communication among prairie dogs is loud and frequent, including special male mating calls, and territorial and alarm calls by both sexes to warn offspring and other kin. Researchers believe they can describe novel objects, locations, differentiate predators, and even have regional and local dialects.



5 Species of Prairie Dogs

Prairie dogs are rodents in the squirrel family, and the geographic ranges of the five species do not overlap. The species are all similar in some ways (e.g. body size, color), but differ in other ways (e.g. lifespan, mating system). All prairie dogs are considered rare, compared to historical numbers.



BLACK-TAILED

(*Cynomys ludovicianus*)

Federal status: Not listed



WHITE-TAILED

(*Cynomys leucurus*)

Federal status: Not listed



GUNNISON'S

(*Cynomys gunnisoni*)

Federal status: Not Listed



MEXICAN

(*Cynomys mexicanus*)

Federal status: **Endangered**



UTAH

(*Cynomys parvidens*)

Federal status: **Threatened**

Where are They Found?

Wild prairie dogs are native to North America and cannot be found anywhere else in the world! The map below illustrates the **historical** range of each species; however, only 5% of this distribution remains today, and suitable habitat will likely continue to shrink with human expansion and changing climate.



Map: Conservation of the Black-Tailed Prairie Dog by John Hoogland

In the past 150 years we have lost 95-98% of prairie dogs throughout this historical range due to:

LETHAL CONTROL

About 150 years ago, approximately 90% of prairie dog colonies were poisoned. Shooting and poisoning of their colonies still occurs today.

INTRODUCED DISEASES

Prairie dogs are highly susceptible to sylvatic plague, an exotic bacterial disease transmitted by fleas. Prairie dog mortality can be as high as 95% after plague arrives in a colony. Prairie dogs are not known to carry hantavirus or rabies.

PEST CLASSIFICATION

Prairie dogs are often labeled as both an agricultural pest and species of conservation need, making management difficult to maintain across public and private land.

HABITAT LOSS

Across their former geographic ranges, most prairie dog colonies today are small and isolated. Collaborative efforts to protect and restore large conservation areas are essential for sustainable populations and the future of the prairie.