

Report from the Burrow

Forecast of the Prairie Dog



A Report from WILDEARTH GUARDIANS

By Dr. Lauren McCain

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MISSION STATEMENT

WILDEARTH GUARDIANS protects and restores the wildlife,
wild places and wild rivers of the American West.

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Report from the Burrow 2010: Forecast of the Prairie Dog

Many of us look back on 2009 as a tough year. We faced a rocky economy, record home foreclosures, job losses, and an escalating war in Afghanistan. As many of us struggled to adjust to harder times, one theme came up repeatedly in the news: we strengthened our connections with family, friends, and strangers in need. We renewed our focus on the importance of community as a reservoir of support.



Black-tailed Prairie Dogs. Photo: Rich Reading.

In celebration of Prairie Dog Day—
Groundhog Day for the West 2010

(February 2nd), WildEarth Guardians' annual *Report from the Burrow* focuses on the important connections between prairie dogs and the wildlife, wild landscapes, and the natural systems that create the prairie community. As "keystone" species, prairie dogs build and hold this community together. As we detail in this report, prairie dogs are true grassland architects. Their colony burrow structures provide homes for hundreds if not thousands of wildlife species from badgers and golden eagles to the tiniest of soil nematodes along with native grasses and flowers. See pages 18-21 to learn more about wildlife that needs prairie dogs.

Sadly, the prairie dog community has been unraveling for over a century. Humans began killing off prairie dogs in the late 1800s to make way for farming and domestic livestock grazing in the Great Plains and Rocky Mountain grasslands, where prairie dogs live. All five prairie dog species¹ are scattered across less than 1-10% of the areas that they once inhabited. We destroyed large expanses of connected colonies and reduced prairie dog colonies to tiny pinpricks across the landscape. We almost succeeded in wiping them out. Now plague, an exotic disease accidentally introduced to North America by humans, threatens to finish the job. Plague can kill off whole prairie dog colonies. And, people continue to poison, shoot, and pave over prairie dogs. If human attitudes don't change and deliberate prairie dog killing doesn't stop, we will not only witness the continued disappearance of prairie dogs but the permanent loss of members of the prairie dog community. Some of those members at risk include black-footed ferrets, mountain plovers, burrowing owls, ferruginous hawks, and swift foxes. WildEarth Guardians works to recover and protect prairie dogs because of their imperilment and great importance.

WildEarth Guardians releases our *Report from the Burrow: Forecast of the Prairie Dog*

¹ The five prairie dog species include the black-tailed, Gunnison's, Mexican, Utah, and white-tailed prairie dogs. Their historic ranges can be seen on the map on the back cover of this report.

each year on Prairie Dog Day—also Groundhog Day. We linked these two holidays because both burrowing rodents provide us predictions of the future. Famous groundhog Punxsutawney Phil entertains us, foretelling that we are in for six more weeks of winter if he sees his shadow. The status of our prairie dog populations predicts the health of the western prairie itself. The more prairie dog shadows we see across our grasslands, the better chance we have of keeping the prairie dog community together.

The *Report from the Burrow* assesses the state of the prairie dog community by evaluating the last year's performance of government agencies responsible for prairie dog protection and management. The report is a tool for the public to hold our state and federal government institutions accountable. The collective of state and federal agencies are legally bound to protect our wildlife and habitat.

How did our federal and state governments treat prairie dogs in 2009? The answer is: so-so to horribly. No federal agency or state has yet deserved an A. A few states improved their grades from last year, including Montana (D to D+), Oklahoma (C- to C), and Utah (D to C-). Arizona held the lead among states with a B. This year, we added the U.S. Environmental Protection Agency, giving it an F and the "dubious distinction award." The EPA approved the poison Rozol to kill black-tailed prairie dogs, which causes internal and external bleeding, sometimes for weeks, until death. We are incredibly disappointed in the U.S. Fish and Wildlife Service's decision not to protect black-tailed prairie dogs under the Endangered Species Act (ESA). The Service's grade dropped from a C to a D+.

The government—at all levels—must take action. Actions government agencies should take to protect and recover prairie dogs include:

- Upgrading the Utah prairie dog status from Threatened to Endangered;
- Granting prompt protection of all unlisted species of prairie dogs—the black-tailed, white-tailed, and Gunnison's—under the Endangered Species Act;
- Banning poisoning and shooting of any prairie dogs, especially on public lands;
- Immediately banning Rozol and Kaput prairie dog toxicants;
- Supporting active efforts to prevent sylvatic plague outbreaks;
- Prohibiting destruction of prairie dog habitat on public lands from oil and gas drilling, off-road vehicles, and other harmful land uses;
- Eliminating subsidies that contribute to habitat destruction and prairie dog killing;
- Preventing continued loss of Mexican prairie dog habitat to farming; and
- Carrying out other steps necessary to protect and recover prairie dog populations.

We need our government agencies to make, implement, and enforce policies to help safeguard prairie dogs and the animals that depend on them. Prairie dogs need the help of individual citizens just as much. Contact your members of Congress and state and federal wildlife officials and ask them to develop stronger policies to help save prairie dogs. Hope for the prairie dog community depends on you. Read "Prairie Dog Heroes" on page 25, and you will find some inspiring stories about people who are helping prairie dogs.

The Grading System

We evaluate the U.S. state and federal prairie dog managing agencies on their past year's performance in restoring and protecting prairie dogs and habitat. We use a standard four-point grading system. An "A" or 4.0 points signifies excellent performance; an "F" or 0 is a failing grade. We use seven categories to determine final grades that are modeled on the Endangered Species Act's five criteria used to determine federal protection eligibility.

1. **Conserve:** The extent federal or state agencies are progressing toward final conservation plans and actively working to recover and protect prairie dogs.
2. **Habitat:** The degree to which states or federal agencies are working toward restoring prairie dog habitat or allowing habitat destruction with oil and gas drilling; livestock grazing that promotes weed and woody shrub encroachment; and off-road vehicle use, for example.
3. **Shooting:** Federal and state limits on prairie dog shooting for recreation and control are evaluated as the key problem in this category.
4. **Plague:** Based on agency commitments to plague monitoring and mitigation.
5. **Policies:** An assessment of policies that further prairie dog conservation or contribute to prairie dog decline.
6. **Poison:** Factors include the level of lethal control allowed, existence of poisoning subsidies or direct support, mandatory poisoning policies, and control restrictions.
7. **Monitor:** Based on frequency of population surveys, robustness of survey methods, records kept on threats, and public access to monitoring data.

Adding complexity, sometimes more than one agency within one state develops and implements prairie dog policies. For example, the Colorado Division of Wildlife designates prairie dogs "small game" and species of "greatest conservation need," regulates prairie dog shooting, and co-regulates toxicant use with the Department of Agriculture, which designates prairie dogs as "destructive rodent pests."

Government agencies have committed to monitor and conserve prairie dogs (See box: State Commitments to Prairie Dog Conservation). The Western Association of Fish and Wildlife Agencies (WAFWA) established the *Memorandum of Understanding for Conservation of Species of Conservation Concern Associated with Prairie Ecosystems* that includes obligations to black-tailed, Gunnison's, and white-tailed prairie dogs. Each state with prairie dogs is a signatory. Several states have Comprehensive Wildlife Conservation Strategies (CWCS) that establish conservation guidelines for prairie dogs. States within the black-tailed range also provide an annual report on progress towards the objectives outlined in the *Multi-State Conservation Plan for the Black-tailed Prairie Dog*.

Agency Commitments to Prairie Dog Conservation

Multi-State Conservation Plan for the Black-tailed Prairie Dog. In 1998, several conservation organizations petitioned the Fish and Wildlife Service to list the black-tailed prairie dog under the Endangered Species Act. In 2000, the Fish and Wildlife Service made species a candidate for listing. In response, the 11 state wildlife agencies within the species’ range formed the Interstate Black-tailed Prairie Dog Conservation Team to prevent federal listing. With the exception of Colorado and Nebraska, each state pledged to develop targets for prairie dog occupied acreage, contribute to a prairie dog complex greater than 5,000 acres, and have prairie dogs distributed across 75% of the counties in their historic range, among other objectives.

Comprehensive Wildlife Conservation Strategy (CWCS). In 2005, Congress mandated that each state develop Comprehensive Wildlife Conservation Strategies in order to receive federal wildlife grants and funding from the Wildlife Conservation and Restoration Program. Among eight plan requirements, a state’s CWCS must include actions for conserving and monitoring priority species and habitat. Several state Conservation Strategies include prairie dogs as priority species for conservation action. Each state developed its own conservation measures to monitor and protect selected species.

The Western Association of Fish and Wildlife Agencies Memorandum of Understanding. In 2006, all 12 states within the range of the four U.S. prairie dog species and several federal agencies signed the WAFWA *Memorandum of Understanding for the Conservation and Management of Species of Conservation Concern Associated with Prairie Ecosystems*. The MOU directed that the agencies develop prairie dog management plans, maintain and enhance prairie wildlife (including prairie dogs) and habitat, and communicate policy and other changes with WAFWA, among other objectives. A Prairie Dog Conservation Team formed among the agencies that manage prairie dogs. Each agency signatory designated representative staff members to participate in annual meetings to provide prairie dog management progress reports.

The Report Card

| GOV | CONSERVE | HABITAT | SHOOTING | PLAGUE | POLICIES | POISON | MONITOR | 2009 | FINAL |
|------------------------------------|----------|---------|----------|--------|----------|--------|---------|------|-------|
| FEDERAL GOVERNMENT AGENCIES | | | | | | | | | |
| EPA | N/A | N/A | N/A | N/A | F | F | N/A | N/A | F |
| FWS | D | D | F | C | D | C | C | C | D+ |
| BLM | D | D | F | F | F | C | C | D- | D |
| FS | D | D | D | D | D | D | A | D+ | D+ |
| NWR | B | C | C | B | C | C | A | N/A | B- |
| NPS | C | B | B | C | B | C | A | B | B- |
| STATE GOVERNMENTS | | | | | | | | | |
| AZ | B | B | C | B | B | B | B | B | B |
| CO | C | D | C | D | C | D | B | D+ | C- |
| KS | C | F | F | C | F | D | B | D- | D+ |
| MT | B | C | F | F | D | D | B | D | D+ |
| NE | F | F | F | F | F | F | F | F | F |
| NM | F | F | C | F | F | D | D | D | D |
| ND | F | F | F | F | F | F | C | D- | D- |
| OK | B | B | F | D | C | C | B | C- | C |
| SD | D | F | D | D | D | F | D | D- | D- |
| TX | C | C | F | F | C | F | B | D- | D+ |
| UT | C | C | C | D | D | D | C | D | C- |
| WY | C | D | B | F | C | F | C | D+ | D+ |

Grade Explanations

F

U.S. Environmental Protection Agency (EPA)

The EPA is responsible for approving and governing the use of toxicants under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In May, the U.S. Environmental Protection Agency approved the use of the poison Rozol (chemical name: chlorophacinone) to exterminate black-tailed prairie dogs in the 11 states within the species' range. The EPA already had approved zinc phosphide and aluminum phosphate for use on prairie dogs. The EPA approved Rozol in violation of FIFRA; the Endangered Species Act; the Migratory Bird Treat Act; and the Bald and Golden Eagle Protection Act. Defenders of Wildlife and Audubon of Kansas sued the agency in September. The EPA is now considering registration for the toxicant Kaput (chemical name: diphacinone) for the entire black-tailed prairie dog range. Prior to approving Rozol and considering approval for Kaput to kill black-tailed prairie dogs throughout their range, the EPA had been issuing Special Local Needs registrations on a state-by-state basis. The Western Association of Fish and Wildlife Agencies requested that registrations for Rozol and Kaput be suspended until the U.S. Fish and Wildlife Service could consult with the EPA over potential impacts to endangered species. However, WAFWA's letter to the EPA focused on harms to non-target wildlife and not impacts to prairie dogs. Arizona Game and Fish Department, Colorado Division of Wildlife, the Nebraska Game and Parks Commission all wrote similar request letters to the EPA. However, the Colorado and Nebraska Agriculture Departments both wrote the EPA letters in support of Rozol registration.

D

U.S. Fish and Wildlife Service (FWS)

The FWS oversees the Endangered Species Act. It is responsible for preventing wildlife extinctions and has management authority over federally protected species. The Mexican prairie dog is endangered, but the Service has no control over species outside U.S. borders. In 2008, Gunnison's prairie dogs within a higher elevation subsection of their range were designated as "warranted" for listing under the ESA "but precluded" because the FWS believes there are higher priority species waiting to be listed.² Though deserving, the Gunnison's receives no federal protection, and about 60% of prairie dogs living in lower elevation parts of the range have not future hope of protection. Currently, Utah prairie dog are protected as threatened. However, the FWS delegates most of its authority over the species to the Utah Division of Wildlife Resources. The FWS continues delaying a long overdue revised recovery plan for the Utah prairie dog. Though promised, the Service has failed to revise or rescind a special rule that allows up to 6,000 Utah prairie dogs to be shot or trapped annually; the adult population is only about 12,000. The FWS

² However, even the highest priority species are not being listed. For instance, in 2009, only two new U.S. species were added to the ESA list, despite more than 330 species formally awaiting listing (including the Gunnison's prairie dog).

approved the destruction of perhaps the largest remaining Utah prairie dog complex. Prairie dogs are being relocated from their homes on the Cedar Ridge Municipal Golf Course in Cedar City to federal public lands. Unfortunately, past Utah prairie dog relocations have been failures with only a 5-10% survival rate. One of the biggest blows to prairie dogs in 2009 was the FWS's decision not to protect black-tailed prairie dogs under the ESA. Black-tailed prairie dogs have disappeared from up to 99% of their historic range. Protecting the species as threatened or endangered would have stopped the unmitigated poisoning, shooting, bulldozing of prairie dogs and destruction of prairie dog habitat. The FWS has been pushing the EPA to rescind the registration of Rozol and not approve Kaput until the Service has the opportunity to assess its affects on ESA-listed species. ESA listing would have likely forced the Environmental Protection Agency to keep Rozol and Kaput off the list of approved black-tailed prairie dog poisons.

D-

U.S. Bureau of Land Management (BLM)

The BLM manages vast expanses of public land across the West especially in Gunnison's, Utah, and white-tailed prairie dog habitat, though very little in the black-tailed range. The BLM routinely exempts companies from complying with rules that would protect prairie dog colonies and habitat on lands leased for oil and gas drilling. Few BLM lands have shooting restrictions, and the agency normally defers to state shooting regulations. The Bureau even allows shooting on its Montana black-tailed prairie dog 40-Complex, a black-footed ferret reintroduction area. The BLM conducts prairie dog surveys on some of its lands.

D+

U.S. Forest Service (FS)

All four U.S. prairie dog species reside on National Forest units across the West. The Forest Service's National Grasslands in the Great Plains provide the best hope for protecting black-tailed prairie dogs due to sparse public lands in the region. The Forest Service allows oil and gas drilling within prairie dog habitat. Nearly all prairie dog habitat is grazed by livestock. The Forest Service defers to state regulations regarding prairie dog shooting, though it could impose bans. The Forest Service has amended land management plans to allow prairie dog poisoning in the Buffalo Gap, Fort Pierre, Little Missouri, Oglala, Pawnee, and Thunder Basin National Grasslands. The agency conducts regular population surveys.

B-

U.S. National Park Service (NPS)

The Park Service manages mostly small colonies at National Parks, Monuments, and other NPS lands. Four NPS units have occupied prairie dog areas over 1,000 acres. These include Badlands, Theodore Roosevelt, and Wind Cave in the black-tailed range in the Northern Great Plains and Dinosaur National Monument, which has white-tailed prairie

dogs. Though National Parks are supposed to fully protect their wildlife, the Park Service has poisoned prairie dogs at Badlands and Devil's Tower National Monument. Lethal prairie dog control is also allowed at Wind Cave if the Park's prairie dog population exceeds 3,000, which is a very small area. The NPS monitors most land units for prairie dog colony changes and plague. The agency also tries to prevent plague by dusting with insecticide to kill fleas at several locations but it has also poisoned prairie dogs to prevent plague occurrence.

B- U.S. National Wildlife Refuges (NWR)

Several national wildlife refuges in the West have prairie dogs. Refuges with prairie dogs must complete prairie dog management plans. Up to 30% of a refuge's prairie dog population may be translocated in coordination with state wildlife agencies. The Sevilleta National Wildlife Refuge in New Mexico has accepted and protected translocated prairie dogs, for example.

B Arizona (black-tailed and Gunnison's prairie dogs)

In Arizona, the black-tailed and Gunnison's prairie dogs are designated as "species of greatest conservation need." Until 2008, black-tailed prairie dogs were extinct in Arizona. For the last two years, the Arizona Game and Fish Department has translocated the species to areas in Las Cienegas National Conservation Area. In October 2008, the Game and Fish Department released 74 prairie dogs and had a survival rate of 19%, with at least two litters being born the following spring. The state reintroduced 107 animals to two sites in 2009, one on Bureau of Land Management Land. The state has made habitat improvements with cooperation from BLM, taken measures to prevent plague, and prohibited shooting on the site. The state's goal is to have 7,100 acres of black-tailed prairie dogs. Regarding the Gunnison's prairie dog, Arizona Game and Fish Department's goal is to recover 75% of the area occupied by Gunnison's prairie dogs that existed before major poisoning campaigns began in the early 1900s. Arizona once had approximately 6,600,000 million acres of prairie dogs, including tribal lands, and currently has about 108,353 acres, excluding tribal lands. Shooting Gunnison's prairie dogs is allowed with the exception of a spring seasonal closure during the breeding time from April 1 – June 15. It is currently evaluating the request to extend the seasonal shooting closure to June 30. The state does not limit Gunnison's poisoning. The state monitors for plague and treated its black-footed ferret reintroduction on the Espee Ranch to reduce the impacts of plague.

C- Colorado (black-tailed, Gunnison's, and white-tailed prairie dogs)

Colorado's three prairie dog species are all designated as "small game." Under the state's CWCS all prairie dogs are listed as "species of greatest conservation need." The Colorado Department of Agriculture designates prairie dogs as "destructive rodent pests." Colorado

once had between 3,000,000 – 7,000,000 acres of black-tailed prairie dogs. The Colorado Division of Wildlife reported the state had 788,657³ acres in 2006. The Division puts significant effort and resources into monitoring areas occupied by prairie dogs and assisting other states with surveys and planning. The Division of Wildlife instituted a Grasslands Conservation Plan that includes provisions for conserving black-tailed prairie dogs and associate species. Because Colorado’s black-tailed prairie dog estimate exceeds the Division’s acreage objectives, the agency is not undertaking active conservation measures. However, the state holds some conservation easements intended to protect prairie dogs. Most of the Gunnison’s prairie dog population in Colorado is part of the federal “warranted but precluded” designation under the Endangered Species Act. The Division issued a revised draft “Gunnison’s and White-tailed Prairie Dog Conservation Strategy” in July 2009. The state’s unique relocation law, SB111, continues to inhibit prairie dog relocation from areas slated for development to other areas, even public lands. Colorado has a spring seasonal shooting closure for all three species that applies to public lands. The Division of Wildlife conducts a variety of prairie dog education programs targeted to landowners and K-12 students.

D+ **Kansas** *(black-tailed prairie dog)*

Little changed in Kansas regarding prairie dogs in 2009. The black-tailed prairie dog is listed as a species of “greatest conservation need” in Kansas’ Comprehensive Wildlife Conservation Strategy, which provides some management guidance but no regulated protection. The Kansas Department of Wildlife and Parks classifies black-tailed prairie dogs as a “wildlife” species and has a prairie dog conservation plan. Kansas Wildlife and Parks’ goal is to maintain 150,000 occupied acres of prairie dogs. Kansas’ most recent prairie dog survey from 2008 found 148,000 acres of prairie dogs. Kansas historically had 2,000,000 – 7,503,000 acres of prairie dogs. The Kansas Department of Wildlife and Parks signed onto a letter to the Environmental Protection Agency, written by the Western Association of Fish and Wildlife Agencies, to suspend the use of Rozol and Kaput until further evaluations can be conducted. However, the Department does not have authority over the use of the toxicants, and poisons are widely used in the state to exterminate prairie dogs. State laws give poisoning control to counties. Kansas maintains no bag limit or seasonal closure for prairie dog shooting. Non-residents need a license to shoot; residents do not. The Wildlife and Parks Department monitors about 2,000 acres to detect plague but does not take actions to prevent or mitigate for disease outbreaks. Kansas offers Landowner Incentive Program grants for landowners who protect prairie dogs.

³ The Colorado black-tailed prairie dog estimate is controversial. Some scientists are concerned that the method used by Colorado and other states to estimate prairie dog acreage may overestimate numbers because segments of colonies that are not active, do not have prairie dogs, can be counted with active segments of prairie dog colonies.

D+**Montana*****(black-tailed prairie dogs, white-tailed prairie dogs)***

The Montana Fish, Wildlife and Parks Department has little authority over the state's two prairie dog species. In 2007, the Montana legislature vested most control over prairie dog management to the Department of Agriculture. Both black- and white-tailed prairie dogs are designated as "vertebrate pests." Montana's Comprehensive Wildlife Conservation Strategy lists both as high priority "species of concern," but this provides no conservation mandate. The state once had 1,471,000 – 10,667,000 acres of black-tailed prairie dogs. The state's 2008 survey found 193,862 acres. Montana only has about 111 acres of white-tailed prairie dogs among 11 colonies but over 40 million acres of potentially suitable habitat. The Montana Fish, Wildlife and Parks Department captured over 40 animals that were in the path of a highway project and relocated them to other colonies. The wildlife department is working with Wyoming to relocate white-tailed prairie dogs to expand Montana's population. Shooting is unlimited in Montana. The state does not monitor or mitigate for plague. The state holds some conservation easements on private property to protect a variety of wildlife species but does not quantify the program's results.

F**Nebraska*****(black-tailed prairie dogs)***

Nebraska once had 6,000,000 – 9,021,000 acres of black-tailed prairie dogs. The state estimated it had 136,862 prairie dogs in 2003. The Nebraska Game and Parks Board of Commissioners ordered the state's Game and Parks Department to stop all prairie dog conservation activities. Nebraska has no limits on shooting prairie dogs, except that non-residents need a license.

D**New Mexico*****(Gunnison's prairie dogs, black-tailed prairie dogs)***

Both prairie dog species are listed as "species of greatest conservation need" in New Mexico's Comprehensive Wildlife Conservation Strategy. New Mexico's Natural Heritage program undertook a survey of black-tailed prairie dogs and reported approximately 40,000 occupied acres in the state in 2004. Historically, between 6,640,000 and 8,950,000 occupied acres existed in New Mexico. There are no reliable estimates of the Gunnison's prairie dog population in New Mexico. The New Mexico Game and Fish Department attempted an estimate in 2004, but the FWS rejected it. Shooting is banned on state trust lands but is otherwise unrestricted. The state does not monitor or mitigate for plague. The state has no policies aimed at safeguarding either of its prairie dog species. The state has an incentive program for landowners to protect prairie dogs, but no landowners have enrolled.

D-

North Dakota *(black-tailed prairie dog)*

The North Dakota Department of Agriculture designates prairie dogs as a “pest species.” The state’s Comprehensive Wildlife Conservation Strategy lists the black-tailed prairie dog as a “species of concern.” Prairie dogs once inhabited an area of about 2,000,000 acres. Based on the state’s last survey in 2006, that’s down to 22,597 acres. Except for requiring non-residents obtain a license, North Dakota has no limits on prairie dog shooting.

C

Oklahoma *(black-tailed prairie dog)*

The Oklahoma Department of Wildlife Conservation classifies prairie dogs as wildlife-nongame and they are listed as “species of concern” in the state’s Comprehensive Wildlife Conservation Strategy. Oklahoma once had 950,000 – 4,625,000 acres of prairie dogs. The latest survey, conducted in 2006, estimated 57,677 acres. The state prohibits poisoning in counties where prairie dog acreage could be reduced below 500 acres. A permit is required for any poisoning. The Oklahoma Department of Wildlife Conservation pays landowners \$10 an acre not to poison prairie dogs. The Department also pays landowners who allow prairie dogs to expand on their lands \$10 per expansion acre. Over 16,000 acres are enrolled in the program. A license is required, but shooting is unlimited.

D-

South Dakota *(black-tailed prairie dog)*

South Dakota classifies the black-tailed prairie dog as a “pest” species. Between 1,757,000 – 6,411,000 acres of prairie dogs once existed in South Dakota. The state Game, Fish and Parks Department estimated that it had 630,849 acres in its 2008 survey. The Department of Game, Fish and Parks underwrites poisoning costs on private and state lands. South Dakota’s Agriculture Department sells prairie dog poison to landowners. There is a spring shooting closure on public lands. An incentive program pays \$18 an acre to landowners who agree to not poison or shoot prairie dogs within black-footed ferret recovery areas, and \$10 in other areas. South Dakota does some plague monitoring but not mitigation.

D+

Texas *(black-tailed prairie dog)*

The Texas Parks and Wildlife Department designated the black-tailed prairie dogs a nongame and priority “species of concern.” At one time, Texas had 16,703,000 – 57,600,000 acres of black-tailed prairie dogs. The state wildlife department estimated 115,000 acres in its 2006 survey and plans to conduct another survey in 2010. Two landowners are enrolled in an incentive program that protects almost 3,600 of prairie dogs and their habitat. Texas allows unlimited shooting of prairie dogs with a license. The

state maintains a voluntary prairie dog colony-monitoring program meant to promote conservation. The state agriculture department distributes poison but requests are decreasing.

C- **Utah** *(Gunnison’s, Utah, and white-tailed prairie dogs)*

Gunnison’s and white-tailed prairie dogs are considered “species of concern” under Utah’s Comprehensive Wildlife Strategy. The Fish and Wildlife Service did not include Utah’s Gunnison’s prairie dogs in its 2008 “warranted but precluded” decision, which means they are not candidates for federal protection. Utah prairie dogs are protected under the federal Endangered Species Act as threatened. Utah bans Gunnison’s and white-tailed prairie dog shooting during breeding season, April 1 – June 15. Shooting of white-tailed prairie dogs is not permitted in the Coyote Basin black-footed ferret recovery area. As a federally listed species, the U.S. Fish and Wildlife Service has authority over the Utah prairie dog. However, the Service delegates much of its responsibility to the state. The Utah Division of Wildlife Resources conducts a census of Utah prairie dogs each year. In 2009, the state reported it found 12,000⁴ adult prairie dogs across the remaining range. The Division of Wildlife Resources also relocates Utah prairie dogs from private lands and the Cedar Ridge Municipal Golf Course to federal public lands. Utah prairie dog relocation historically has had an abysmal success rate, with less than 10% survival rate of relocated prairie dogs. However, the state has made some improvements in its relocation methods in the last few years.

D+ **Wyoming** *(black-tailed and white-tailed prairie dogs)*

As with several states, prairie dogs are designated as a “nongame” species by Wyoming’s wildlife agency and a “pest” the agriculture department. Both white- and black-tailed prairie dogs are “species of concern” under the Wyoming’s Comprehensive Wildlife Conservation Strategy, but this has no management implications. The Wyoming Game and Fish Department surveyed its black-tailed prairie dog populations in 2006 and found 229,607 acres. The state once had 5,786,000 – 16,000,000 occupied acres. The department has not conducted a statewide white-tailed prairie dog survey since 1995 but believes the population is secure. The state establishes private land conservation easements to protect a variety of species and has an incentive program to pay landowners to allow prairie dogs on their lands. One conservation easement protects white-tailed prairie dogs. Around Thunder Basin National Grassland, the state is paying four landowners \$3 per acre to protect 487 acres of black-tailed prairie dogs. A non-profit provides an equal dollar match. Wyoming has no limits on shooting. The state does not monitor or mitigate for plague. Wyoming law puts prairie dog poisoning in county hands.

⁴ This figure is based on an actual count of approximately 6,000 adult prairie dogs. The Utah Division of Wildlife Resources doubles this count to provide a population estimate.

Status of the Five Prairie Dog Species

Prairie dogs are far from receiving the policy safeguards they deserve. Despite the dramatic losses of prairie dogs within the last 150 years, despite the imperilment of species that depend on prairie dogs, many of our government agencies in charge of conserving wildlife refuse to take this crisis seriously. One problem is that state wildlife agencies continue to use methods that may be overestimating the areas occupied by prairie dogs. The states have not developed standard methods that would provide accurate approximations of the extent of active, occupied prairie dog colonies across the four U.S. species' ranges. The various methods the states use now cannot sufficiently detect when and to what extent prairie dog populations are in decline. Moreover, most states have set very low targets for how many acres of prairie dogs they want to maintain.

Black-tailed Prairie Dogs

Of the five prairie dog species, black-tailed prairie dogs suffered the most in 2009. Poisoning is increasing. Plague is spreading east. Even the perceived "liberal" town of Boulder, Colorado is revising its prairie dog management plan to allow more poisoning. Black-tailed prairie dogs experienced a major setback on the path toward receiving federal protection under the Endangered Species Act.



Prairie Dog killed by Rozol and chewed by a carnivore. Photo: U.S. Fish and Wildlife Service.

As discussed above, the U.S. Environmental Protection Agency approved Rozol to kill black-tailed prairie dogs across their range in May 2009. The toxicant's manufacturer, Lifatech, Inc., applied for the new EPA registration. The EPA may also approve the toxicant Kaput, requested by the manufacturer Scimetrics. Defenders of Wildlife and Audubon of Kansas sued the agency in September over violations of several federal environmental laws. Both Rozol and Kaput are "anti-coagulant" poisons. Animals that ingest the poisons experience internal hemorrhaging. Internal bleeding can last from three days to two weeks prior to death. Rozol and Kaput not only kill prairie dogs but animals, such as birds or other rodents, that eat the poison-laced bait scattered across prairie dog colonies. Wildlife that feeds on prairie dogs and other animals that have been killed by the poisons are also at risk.

In December, the Fish and Wildlife Service declared black-tailed prairie dogs "not warranted" for listing under the Endangered Species Act. In 2007, WildEarth Guardians and partners petitioned the Service to protect the species as threatened or endangered. Black-tailed prairie dogs will continue to be poisoned and shot across their range. Federal protection would have safeguarded black-tailed prairie dogs against threats such as Rozol and Kaput. The failure to provide federal protection for the black-tailed prairie dog, removes a strong incentive for states to take actions to recover and protect the species.

The black-tailed prairie dog population once numbered in the billions and ranged across 11 U.S. states and portions of Mexico and Canada. The animals disappeared from up to 99% of their historic range in the last 150 years. Plowing up native grasslands for agriculture, particularly in the eastern portions of the species' range, resulted in the permanent loss of approximately 40% of the rodent's original habitat.

Gunnison's Prairie Dogs

Little changed with the status of Gunnison's prairie dogs in 2009. Part of the Gunnison's population, about 40% of the species' range, remains in the Endangered Species Act policy purgatory the "warranted but precluded" designation. In 2008, the Fish and Wildlife Service determined that "montane" populations of the species in southwestern Colorado and southcentral and northcentral New Mexico warrant federal listing, but the population cannot be listed because the Service says it is too busy. The Service deemed that lower elevation "prairie" populations in Arizona, Colorado, New Mexico, and Utah do not deserve federal protection. Prairie dogs in the "montane" region will not benefit from Endangered Species Act safeguards until they are listed as threatened or Endangered.

In March, WildEarth Guardians sued the Fish and Wildlife Service over its Gunnison's prairie dog ruling. We charged that the agency violated the Endangered Species Act by splitting the Gunnison's population into arbitrary categories. The entire Gunnison's prairie dog population in its original range in Arizona, Colorado, New Mexico, and Utah should be granted federal protection. Additionally, the agency is abusing the warranted but precluded loophole. The case is now making its way through the ninth district court in Arizona.

The Gunnison's prairie dog population has declined by 98-99% across its historic range. Habitat occupied by prairie dogs has declined from 24 million acres in 1916 to 340-500 thousand acres as of 2008. Land development and oil and gas operations are particular threats. For example, the Fish and Wildlife Service predicts that urban and suburban sprawl and commercial development will impact 49% of Colorado's habitat by 2020.

Mexican Prairie Dogs

Mexican biologists just informed us that the largest colony of Mexican prairie dogs is being destroyed for an ill-conceived soil conservation project. As of this date, over 300 acres of the colony has been plowed.

The biggest threat to Mexican prairie dogs is the loss of habitat to potato farming for the junk food industry. The primary buyer of the potatoes is



Plowed up land on one of the largest Mexican prairie dog colonies. Photo: Elisa Zaragoza.

U.S.-based Frito Lay, Inc., a subsidiary of PepsiCo, Inc. Concerned Mexicans are also asking U.S. citizens to contact PepsiCo and ask the company to stop buying potatoes from farms within Mexican prairie dog habitat.

The Mexican government outlawed killing Mexican prairie dogs in 2004. The species is protected under the U.S. Endangered Species Act as Endangered. The Mexican prairie dog is critically endangered. Agriculture in the state of Nuevo Leon remains the biggest threat to Mexican prairie dogs. Conservation organizations, including Pronatura Noreste and Profauna, are working to protect the animals and their habitat.

Only 2% of the species' population still exists. Colonies have shrunk and disappeared. Mexican prairie dogs in the northern-most areas of Coahuila State and southern-most areas of San Luis Potosí State had been experiencing some population stability within the last three years. Now with the latest threat of potato farming in Coahuila, their future is more uncertain than ever.

Utah Prairie Dogs

Utah prairie dogs are listed as threatened under the Endangered Species Act. Despite this listing, Utah prairie dogs still face considerable threats including habitat loss, plague, livestock grazing, and a relocation that moves prairie dogs to federal lands. Relocation results in very low survival rates of 10% or less. The Utah prairie dog population has declined from about 100,000 to around 12,000 adults. The Fish and Wildlife Service maintains a special rule that allows people with a permit to shoot or trap up to 6,000 prairie dogs per year—at least half the adult population! In 2007, the agency acknowledged that the special rule is biologically indefensible but has yet to withdraw or revise the rule. The Service is long overdue in revising its recovery plan for the Utah prairie dog.

In 2003, WildEarth Guardians submitted the petition to up-list Utah prairie dogs from threatened to endangered in collaboration with other groups and individuals. In 2007, the Fish and Wildlife Service refused to upgrade the species. Reclassification would have halted permitted shooting, relocation and other threats. WildEarth Guardians sued the Fish and Wildlife Service for rejecting this petition. The case is currently in litigation.

Under a Habitat Conservation Plan with the Cedar Ridge Municipal Golf Course and the Paiute Tribe, both located in Cedar City, Utah, the Fish and Wildlife Service provides permits for hundreds of Utah prairie dogs to be relocated from the golf course and Paiute lands. The Utah Division of Wildlife Resources is in charge of relocating prairie dogs to a federal land receiving sites. Unfortunately, the golf course hosts what is likely the largest Utah prairie dog complex within the entire species' range.

In 2008, WildEarth Guardians sued the Fish and Wildlife Service for approving this plan that we believe risks the lives of too many Utah prairie dogs. We charged that the Fish

and Wildlife Service did not consider other alternatives besides relocation. The Habitat Conservation Plan did not include sufficient measures to mitigate the negative impacts of relocating hundreds of prairie dogs from their homes or mandate the most successful techniques be used for the relocation. The proposed relocation site had very little habitat suitable for Utah prairie dogs; and alternative site called Berry Springs had to be used instead. In March 2009, WildEarth Guardians lost its case in the Tenth District Court in Utah. WildEarth Guardians has been trying to mediate a better outcome for the prairie dogs with the Fish and Wildlife Service.

In 2007 and 2008 the Utah Division of Wildlife Resources moved a total of 1,004 prairie dogs, including adults and young, from the golf course to Berry Springs. In the spring of 2009, the state counted 89 adult prairie dogs at the receiving site. The agency has been trying to improve its translocation success by moving family groups together and using nest boxes inside artificially constructed burrows. However, it is apparent that the site is losing significant numbers of prairie dogs due to abandonment, migration to other nearby colonies, and/or mortality. The extent of mortality from the relocation is unknown. In summer of 2009, the Division of Wildlife Resources translocated another 506 prairie dogs from the golf course to Berry Springs and a site called Alan Henrie Safe Harbor site.

In 2009, the Fish and Wildlife Service finalized a Programmatic Safe Harbor Agreement that pertains to all Utah prairie dogs on private lands—about 75% of the entire population. Private landowners can choose to enter into an agreement with a non-governmental entity called the Panoramaland Resource Conservation and Development Council, Inc. Enrolled landowners agree to carry out some conservation measures for Utah prairie dogs in exchange for protection against prosecution if the landowner unintentionally kills prairie dogs or destroys prairie dog habitat while undertaking land use activities, such as farming. WildEarth Guardians has several concerns about the Safe Harbor Agreement. We are concerned that the Fish and Wildlife Service is ceding too much authority over a threatened species to a non-governmental entity, that landowners need only maintain the baseline number of prairie dogs on their properties and are not required to help increase their populations, and that enrolled landowners may gain permission to lethally control prairie dogs under some circumstances as long as prairie dog numbers do not dip below baseline numbers when the agreement was developed, among other concerns. We hope that agreements with landowners will lead to conservation benefits for prairie dogs and increase prairie dog populations on private land. We also hope that the program leads to less relocation from private lands and allow more prairie dogs to remain on private lands. We will be watching this program very carefully.

White-tailed Prairie Dogs

This June, the Fish and Wildlife Service will complete its status review for the white-tailed prairie dog and issue its finding on whether or not the species is warranted for protection under the ESA. In 2008, the agency agreed that substantial information indicated that protection under the Act might be necessary. While white-tailed prairie dogs await the

Fish and Wildlife Service's decision on Endangered Species Act status, the animals and their habitat are still suffering. So far, federal and state agencies have ignored their opportunity improve prairie dog management before the Service makes its 2010 decision. The white-tailed prairie dog once occupied 10-44 million acres across sagebrush areas of Montana, Colorado, Utah, and Wyoming. Since the late 1800s that area has dropped to just 805,000 acres. That is a decline of 92% to 98%.

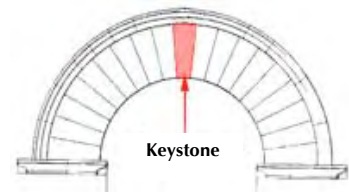
Prairie Dogs: The Ultimate Architects

Why do scientists call prairie dogs "keystone species"? Merriam-Webster's dictionary defines keystone in three ways:

1: *the wedge-shaped piece at the crown of an arch that locks the other pieces in place*

2: *something on which associated things depend for support*

3: *a species of plant or animal that produces a major impact (as by predation) on its ecosystem and is considered essential to maintaining optimum ecosystem function or structure*



Prairie dogs clearly fit this definition. Prairie dogs engineer their unique biological communities in many ways. Through their activities, they build and maintain a support system upon which over 100 animals benefit. And, that's just referring to the vertebrate species and does not include the plants, insects, spiders, worms, and other soil macro- and microorganisms.

Prairie dogs dig. Prairie dog digging does more than put holes in the ground. When prairie dogs excavate their burrows, they loosen and mix the soil. The soil gets mixed with the nutrient-rich natural fertilizer of plant material and animal waste. The digging and mixing aerates the soil to help increase moisture content, which is very important in the arid western grasslands. The increased soil moisture and nutrients provides a base for healthier, more nutritious plants that grow on prairie dog colonies.

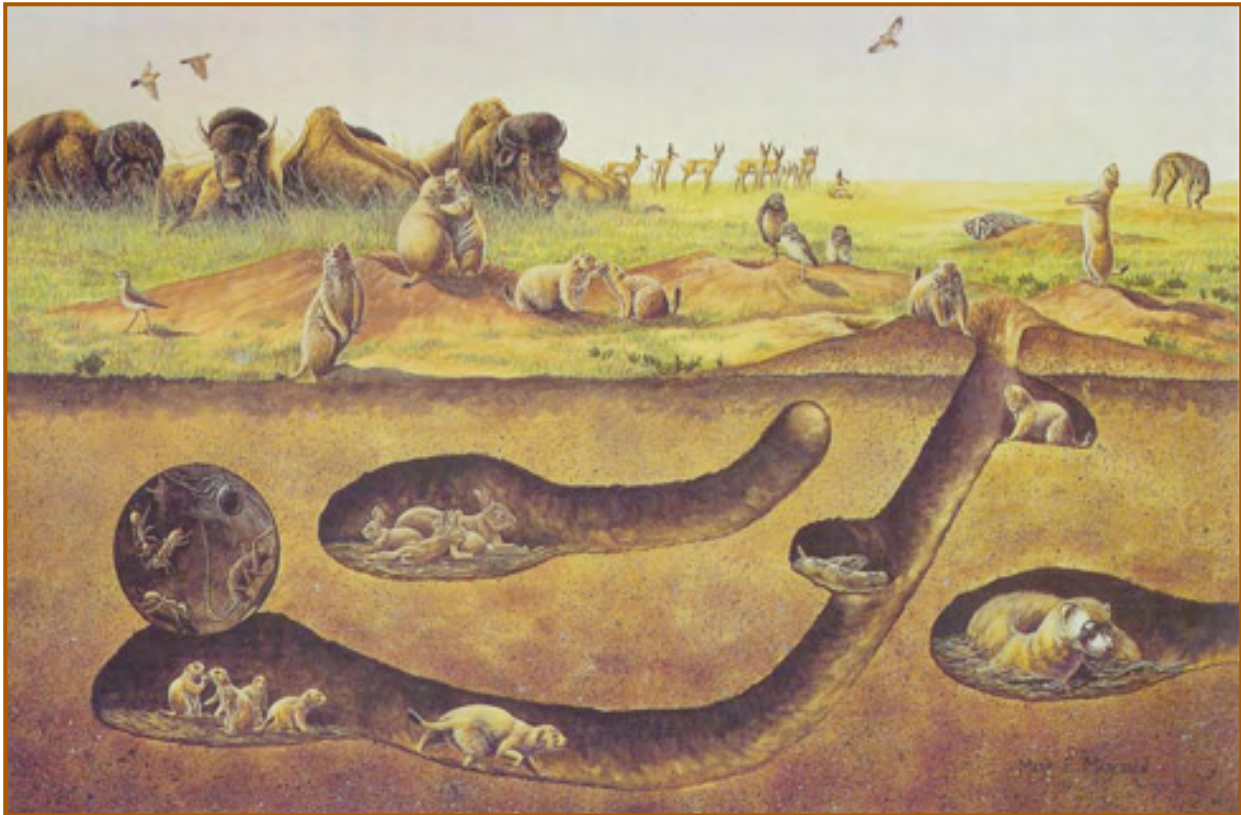
Prairie dogs maintain their burrows. Prairie dog burrows provide homes and temporary shelter for an unknown number of vertebrate and invertebrate critters. But the number is high and includes: other rodents, badgers, coyotes, foxes, cottontail rabbits, burrowing owls, snakes, lizards, frogs, salamanders, spiders, beetles, and more. Some animals enlarge or otherwise customize prairie dog burrows for their own purposes, though most animals leave them as is. For many animals, burrows can provide a cool refuge in the summer, warmth in cool weather, shelter during storms, an escape hatch to elude would-be predators, a protected nesting or denning site, and/or a place to hibernate for the winter. Prairie dog burrows can reach deep underground, some over 30 feet down. When it rains, prairie dog burrows channel the water back to increase the water table and recharge underground aquifers. This includes the Ogallala Aquifer that lies under the Great Plains and is quickly being depleted by humans.

Prairie dogs eat and clip tall vegetation. Prairie dogs eat grasses and other plants, which keeps vegetation lower than on off-colony areas. Prairie dogs also clip down vegetation intentionally to maintain open areas across their colonies. This allows them to see better and avoid approaching predators such as coyotes, badgers, foxes, birds of prey, and snakes. Other potential prey animals benefit from and are attracted to prairie dog colonies for this reason and also because they find it easier to move through lower vegetation. Prairie dog eating and clipping also “prunes” grasses and forbs, which any gardener knows makes plants grow stronger and healthier. The higher moisture and nutrient content in prairie dog colony plants attracts grazers such as pronghorn. Before humans nearly hunted American bison to extinction in the mid-1800s, bison and prairie dogs maintained a mutually beneficial relationship that included bison preferentially grazing on prairie dog colonies. The non-native, domestic cattle that have replaced bison across the prairie are also attracted to the forage on colonies.

Prairie dogs are food. While prairie dogs provide all of these beneficial “architectural” services, they also have to keep an eye out for predators. The rodents are a key link in the prairie food chain and an important food source for animals such as black-footed ferrets, badgers, bobcats, coyotes, golden eagles, ferruginous hawks, snakes, and others. Not only are prairie dogs on the menu, but their colonies attract other prey species as well. The greater diversity and abundance of insects, spiders, salamanders, lizards, snakes, small birds, mice and other rodents, rabbits and other prey species attracts a host of other carnivorous animals to prairie dog towns.

Prairie dogs are the keystones that hold the biologically diverse communities together in the Great Plains and Rocky Mountain grasslands. Below, we get to know a few of the members of this community who are among the most strongly connected to prairie.

Prairie Dog Colony Life



Drawing by Mark E. Marcuson; University of Nebraska-Lincoln, Dept. of Forestry, Fisheries, and Wildlife.

Each phylum (group) within the animal kingdom, with the exception of fishes, has representative members who are strongly associated with prairie dogs. Many plants benefit from prairie dogs too. The following animals are tightly connected to prairie dogs and their colonies.

Invertebrates. Studies have demonstrated that insect diversity is greater on prairie dog colonies than off colonies. Though flies, ants, beetles, spiders, worms, and other “creepy-crawlies” aren’t everyone’s favorite animals, invertebrates offer an array of ecosystem services that contribute to a healthy habitat for other animals. Some speed up the decomposition of dead plant and animal matter and waste, which is greater on prairie dog colonies, to increase soil nutrients. They are prey for a variety of animals large and small.



Beetle. Photo: Rich Reading.

Barred Tiger Salamanders. Tiger salamanders are born in the water but move to dry land once they develop. The barred tiger salamander subspecies seeks out prairie dog burrows to escape the sun’s heat and predators. The amphibians also need the additional moisture provided by burrows. They eat worms and insects, which are found in higher concentrations on prairie dog colonies.

Lesser Earless Lizards. These lizards hide in prairie dog burrows to escape predators. The reptiles keep cool in burrows during hot days and hibernate in burrows during winter. Scientists also believe lesser earless lizards benefit from the low vegetation and patches of bare ground the prairie dogs create and insect prey abundance and diversity. They bask in the sun on mounds around burrow openings.



Lesser Earless Lizard. Photo: National Park Service.

Rattlesnakes. Rattlesnakes take refuge in abandoned prairie dog burrows and hibernate in them during winter. They eat prairie dogs. Prairie dogs try to fight them off by kicking dirt into the snakes' faces and even biting them. When a rattlesnake slides into a burrow, prairie dogs will also try to keep them underground by plugging the burrows by pushing and tamping down dirt into the hole.



Mountain Plover. Photo: USGS.

Mountain Plovers. Mountain plovers are migratory birds that breed, nest, and rear their chicks primarily in prairie dog colonies in the summer. They head to California, Arizona, and Mexico for the winter. Mountain plovers prefer the open areas of low vegetation clipped and eaten by prairie dogs. The birds eat insects and benefit from higher numbers of insects on prairie dog colonies. Mountain plovers are in trouble due to the decline of prairie dogs.

Killdeer. These birds are closely related to mountain plovers. Thus, killdeers like prairie dog colonies for the same reasons that mountain plovers do. Killdeers have a larger range that spans outside of the prairie dog range, and the birds are not as imperiled as mountain plovers. However, their numbers are declining. Mountain plovers and killdeer may prefer nesting and foraging on prairie dog colonies so they can see approaching predators. Yet, this also makes them vulnerable to predations. To protect their eggs and chicks, mountain plovers and killdeer will fake an injury to lure away potential predators.

Horned Larks. Distinguished by their black-feathered "horns," horned larks are among the most commonly seen birds on prairie dog colonies. Like mountain plovers and killdeer, horned larks are attracted to the shorter vegetation on prairie dog colonies. Unlike mountain plovers, horned larks are year-round residents to prairie dog country. They eat grass and other plant seeds found in and around prairie dog colonies. They also capture insects to feed their young.



Horned Lark. Photo: Jess Alford.

Golden Eagles. Though their range spans most of the United States and Canada, golden eagles zone in on prairie dog colonies in the Great Plains and Rocky Mountain grasslands. Prairie dogs are an important food source for the eagles. Researchers have found that golden eagle populations decline when prairie dog populations decline at the local level. For example, when plague kills off the prairie dogs in a colony, golden eagles that relied on the colony may never come back.



Burrowing Owl.
Photo: Rich Reading.

Burrowing Owls. As their name suggests, burrowing owls live in burrows, and they are the only owls that do so. In some regions where they live and migrate, such as Florida and South America, the owls dig their own burrows for shelter. But in their western breeding range, burrowing owls nest almost exclusively in prairie dog burrows. The small owls use bison or cattle dung as a tool to attract insect prey, particularly dung beetles, to their burrows. They place dung in and outside of their burrows. The dung may also mask the smell of burrowing owl chicks in the nest to deter predators.

Ferruginous Hawks. Ferruginous hawks are the largest hawks on the prairie and one of the few birds of prey that can kill and carry off an adult prairie dog. Though they eat other animals, mostly small mammals, ferruginous hawks specialize on prairie dogs. They can be seen flying above colonies selecting their targets or on the ground between the burrows feasting on a prairie dog meal. Ferruginous hawks get their name from their rusty iron-colored (ferrous) legs.



Ferruginous Hawk. Photo: Gov. Stock.

Northern Grasshopper Mice. Several mice species can be found in prairie dog colonies and living in prairie dog burrows. Of them, the northern grasshopper mouse is the most strongly connected to prairie dogs. This species is unique in that it is more carnivorous than other mice. Northern grasshopper mice aggressively stalk insects, spiders, lizards, and other mice. They are likely attracted to prairie dog towns because they can find higher concentrations of their preferred food on colonies.



Cottontail. Photo: Rich Reading.

Eastern and Desert Cottontails. Cottontails make their homes in prairie dog colonies, where burrows make nesting spaces and escape routes from predators. They have their young in burrows. At least 90% of their diet is grass, which they can find in abundance on prairie dog colonies. Eastern and desert cottontails are a favorite food of many carnivores.

Pronghorn. Pronghorn graze on and off prairie dog colonies. Like bison and cattle, pronghorn are attracted to the higher moisture and nutrient content of grasses and forbs within prairie dog colonies.

Bison. Before humans hunted bison to near extinction in the 1800s, the native ungulates and prairie dogs had a special, mutually beneficial relationship. Bison grazed down the grasses and forbs, by keeping vegetation low to allowing prairie dogs a better view of approaching predators. Bison prevented the spread of weeds and woody shrubs that impede prairie dog colony expansion. Though cattle have largely replaced bison as the primary grazer on the plains, they do not graze the same way. Cattle cause tremendous ecological damage. Prairie dogs benefited bison by maintaining nutritious vegetation. Researchers believe bison hung out in prairie dog colonies to see their main predator: the plains wolf that humans shot to extinction.



Bison. Photo: Rich Reading.

Swift Foxes. Swift foxes have also declined across the Great Plains because of prairie dog losses. The house cat sized canids dig out prairie dog burrows for their dens. They give birth to their pups in former prairie dog burrows. An adult prairie dog is a big meal, so swift foxes more often eat young prairie dog pups, other rodents, and insects within prairie dog colonies.

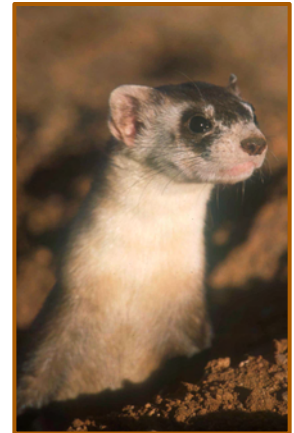


American badger. Photo: National Park Service.

Badgers. Badgers eat prairie dogs and other rodents that congregate in prairie dog colonies. Badgers dig through burrows to catch prairie dogs. The predators plow down quickly launching heaps of dirt several feet in the air. They can significantly reduce prairie dog populations on small colonies. Badgers ream out prairie dog burrows to enlarge them to make their own homes. You can distinguish badger dens by their half moon shaped and larger burrow opening.

Coyotes. The coyote ranges across North America. Though they do not need prairie dogs to survive, in prairie dog country coyotes are commonly seen hunting prairie dogs and other animals that live within dog towns. Coyotes will opportunistically follow badgers to improve their chances. When badgers dig up a burrow to catch a prairie dog, the prairie dogs may pop out of connected burrows to escape. Coyotes may sit patiently at a burrow opening waiting to nab an unwitting prairie dog fleeing the badger's grasp.

Black-footed Ferrets. It is hard to overstate the importance of prairie dogs to black-footed ferrets. The ferrets eat prairie dogs almost exclusively, use prairie dog burrow for shelter, and birth their kits in burrows. The nocturnal members of the weasel family capture prairie dogs at night while the rodents are asleep. Black-footed ferrets went extinct in the wild in the 1980s due to the loss of large, connected prairie dog colonies called complexes. Government wildlife officials captured the last known wild ferrets for a captive-breeding program to recover the animals. Today, 18 sites in the wild host black-footed ferrets. Though this is good news, the ferrets remain on life-support. Most recovery sites need regular augmentation with captive ferrets. Unfortunately, their habitat—prairie dog colonies—are not protected where this endangered species is trying to survive. Without more protection for their habitat, black-footed ferrets will continue to be one of the world's most endangered mammals.



*Black-footed ferret.
Photo: Rich Reading.*

Humans. As prairie dog colonies disappear, we continue losing the heart and soul of our Great Plains and Rocky Mountain grassland wildlife communities. Some people don't like prairie dogs. Many of these people may not understand that without prairie dogs they will miss much of the iconic wildlife of our prairies. Without prairie dogs, we will simply not have mountain plovers, burrowing owls, swift foxes, and black-footed ferrets on our western grasslands. Without prairie dogs, we will see fewer golden eagles, badgers, pronghorn, and tiger salamanders. If we continue killing prairie dogs, we will lose the vibrant, biodiverse communities that are prairie dog colonies and be left with a landscape mostly barren of wildlife.

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Black-tailed Prairie Dogs. Photo: Rich Reading.

Prairie Dog Heroes



Luke and Paul Zitting. Luke, a student from Murray, Utah, believes so strongly in protecting prairie dogs, he took the cause to the Utah State Legislature. Luke authored the legislative resolution, “Keystone Species Recognition—to study and consider naming Groundhog Day “Prairie Dog Day” in recognition, and for protection, of a keystone species.” Luke and his younger brother Paul convinced their state legislator, Representative Tim Cosgrove, to introduce the resolution; lobbied members of Utah’s Natural Resources, Agriculture, and Environment Committee to support the measure; and collected

petition signatures from Utah citizens who support the resolution. We all hope the Prairie Dog Day resolution passes in 2010. Luke first learned about the importance of prairie dogs as a member of the Jane Goodall Institute's Roots & Shoots program. He immediately wanted to help stop prairie dog killing and teach people about the importance of these keystone species.

Terry Tempest Williams. The renowned author and passionate environmentalist was the brains behind Prairie Dog Day. While supporting groups like WildEarth Guardians with our efforts to gain federal protection for prairie dogs, Terry suggested that we bring attention to the plight of prairie dogs on Groundhog Day. That was seven years ago. Prairie Dog Day has evolved into a multi-day, multi-state occasion for celebration, education, and action to promote support for prairie dogs. Terry’s latest book, *Finding Beauty in a Broken World*, in part chronicles her experiences learning about prairie dogs and the tragedies that too often befall the animals and their colonies. Terry is currently a Montgomery Fellow at Dartmouth College. Her writing has earned numerous awards. Other books include *Refuge: An Unnatural History of Family and Place*; *An Unspoken Hunger: Stories from the Field*; *Desert Quartet*; *Leap*; *Red: Passion and Patience in the Desert*; and *The Open Space of Democracy*.



Con Slobodchikoff. When prairie dogs bark and chatter, are they really talking to each other or just making noise? Con knows. This dedicated scientist has been studying prairie dog communication since the 1980s. The Northern Arizona University professor recently confirmed a hunch he’s had all along: prairie dogs have a true language. They vocalize distinctive alarm calls for different types of predators, such as a badger or hawk, and respond in distinctive ways to different calls. Con found that prairie dogs have a large collection of “words”. And, Con is a true advocate for his study subjects. He

never hesitates to lend his famous name to a campaign to save prairie dogs. His 2009 book, *Prairie Dogs: Communication and Community in an Animal Society*, reveals Con’s sophisticated research and great concern about the fate of these animals. The BBC filmed Con at work, and we will be able to see him and his prairie dog friends on Animal Planet in a few months.

Prairie Dog Ranges

