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Offering Texans  
a way to get  
involved in  
conservation  
research



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# Texas Black-tailed Prairie Dog Monitoring Packet

**B**lack-tailed prairie dogs (*Cynomys ludovicianus*) are an icon of the grasslands. These animals were once common in short and mixed grass prairies throughout the western mid-west, including Texas, Oklahoma, Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, South Dakota, North Dakota and Wyoming, as well as Canada and Mexico. Field notes from early explorers, museum specimens, and turn-of-the-century accounts in the literature contain information upon which the historical range of the black-tailed prairie dog in Texas is based (Bailey 1905). Although these accounts provide useful information, they are not scientifically accurate estimates of the total number of acres that were inhabited. Bailey (1905) described the range of the prairie dog in Texas as extending from Henrietta, Fort Belknap, Baird, and Mason west to near the Rio Grande River, north through the Panhandle, and south to Devil's River, to 10 mi (16.2 km) south of Marathon and 25 mi (40.2 km) south of Marfa. This equates roughly the northwest 1/2 of the state and includes all or portions of the High Plains, Rolling Plains, Edwards Plateau, and the Trans-Pecos Ecological Regions. Bailey (1905) estimated there were 800,000,000 prairie dogs covering an area of 90,000 mi<sup>2</sup> or 57,600,000 acres (233,100 km<sup>2</sup>, or 23,310,000 ha). Although these historical numbers are the most reliable early estimates for prairie dogs in Texas, they were based only on rough estimations.

Unfortunately throughout their range there has been a drastic decline in the population. Black-tailed prairie dog colonies currently occupy less than 1% of their historic range (See Map on pg 2). Historically, millions of acres of Texas grassland were covered by prairie dog towns, today they cover less than 150,000 acres. The major factor affecting population decline is loss of habitat due to conversion of native prairies to cropland. Other factors include poisoning, recreational shooting, the pet trade and Sylvatic Plague.

Prairie dogs are an important part of the ecosystem, their digging aerates and promotes soil formation, they clip back brush maintaining the short grass prairie and they are a keystone species providing food and shelter for as many as 170 different animals. A keystone species is a species that other species depend upon for survival. The Burrowing Owl, Mountain Plover, Ferruginous Hawk, Golden Eagle, Horned Lark, swift fox, and pronghorn as well as many others all benefit from prairie dogs.

Now, through participation in the Texas Black-tailed Prairie Dog Watch you can help widen our understanding of black-tailed prairies dogs and what is contributing to their decline. The Texas Parks and Wildlife Department (TPWD) needs your help to monitor prairie dog colonies in your area by observing and collecting data. The data that is collected will help TPWD to monitor population trends and develop more effective conservation and management methods.



## The Texas Black-tailed Prairie Dog Conservation and Management Plan

### The Texas Black-tailed Prairie Dog Conservation and Management Plan

In February 2000 the U.S. Fish and Wildlife Service determined that the black-tailed prairie dog warranted listing under the Endangered Species Act, but declined to list the species at that time because there were other species also waiting to be listed that were in greater need of protection. The Black-tailed prairie dog was then placed on the candidate list of species. On August 12, 2004, the U.S. Fish and Wildlife Service removed the Black-tailed prairie dog from the candidate species list because of new information regarding the range-wide impact of disease, chemical control and other lesser factors, and recent state estimates of occupied habitat. The U.S. Fish and Wildlife Service reviews the prairie dogs status annually. For more information go to: <http://mountain-prairie.fws.gov/species/mammals/btprairiedog/>

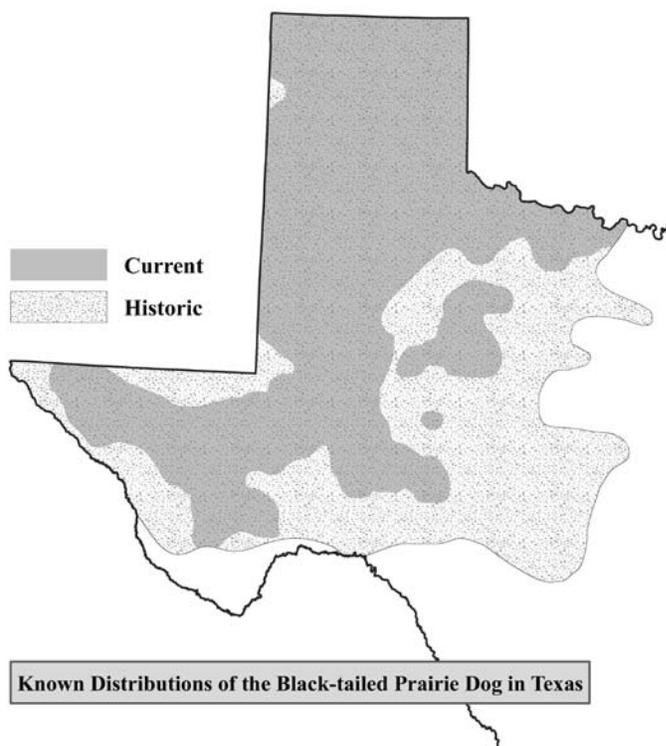
In 1999 representatives from the eleven states that encompass the range of the Black-tailed prairie dog formed the Interstate Prairie Dog Conservation Team. One of the actions of this team was to develop a state conservation and management plan. A Texas Black-tailed Prairie Dog Working Group was formed and they drafted The Texas Black-tailed Prairie Dog Conservation and Management Plan on March 24, 2004. The working group was composed of 3 private landowners, and representatives from commodity, ranching, farming, conservation groups, and state and federal agencies. Goal 2 of the plan is to develop and implement an effective education and outreach program. That is where the Black-tailed Prairie Dog Watch program comes in. For a copy of the Texas Black-tailed Prairie Dog Conservation and Management Plan go to: <http://www.tpwd.state.tx.us/prairiedog>

### Current Conservation Guidelines in Texas

Financial incentives exist to help defer the costs of black-tailed prairie dog conservation on private lands. Some of these incentives exist through the following organizations and programs:

- Land Incentive Program (TPWD) <http://www.tpwd.state.tx.us/landwater/land/private/lip/>
- Grassland Reserve Program (NRCS) <http://www.nrcs.usda.gov/programs/GRP/>
- Environmental Quality Incentives Program (NRCS) <http://www.nrcs.usda.gov/programs/eqip/>
- Wildlife Habitat Incentives Program (NRCS) <http://www.nrcs.usda.gov/programs/whip/>
- Partners for Fish and Wildlife (USFWS) <http://www.fws.gov/partners/>
- Cooperative Endangered Species Conservation Fund (Section 6) Grants to States & Territories (USFWS) <http://www.fws.gov/endangered/grants/section6/>
- Habitat Conservation Plan (USFWS) <http://endangered.fws.gov/hcp/#about>
- National Fish and Wildlife Foundation <http://www.nfwf.org/>
- Playa Lakes Joint Venture <http://www.pljv.org/>

Ways in which to conserve or enhance prairie dog populations include: manipulating livestock grazing pressure through placement of salt and water, controlled burning used to increase potential habitat for prairie dog expansion, allow prairie dogs to expand naturally, or restriction on shooting seasons to prevent over-reduction in the density of prairie dogs.



## Myths About Prairie Dogs



### Myths

**Myth #1:** Prairie dogs compete with domestic animals for forage.

**Truth:** About 300 prairie dogs will eat as much as a cow and a calf.

**Myth #2:** Prairie dog activity causes erosion.

**Truth:** Digging activities of prairie dogs aerate the soil which increases soil absorption of water and promotes the formation of soil. This activity increases plant diversity by improving soil conditions and therefore decreases erosion.

**Myth #3:** Prairie dogs carry many diseases harmful to humans and livestock.

**Truth:** Prairie dogs, like many other rodent species can be infected with diseases that are transmitted by fleas such as plague. The likelihood of human infection from prairie dogs is no greater than infection from other common urban rodents such as tree squirrels.

**Myth #4:** Prairie dogs are everywhere.

**Truth:** It is often thought that prairie dogs are very abundant. Local abundances can give the impression that they are everywhere. However, they actually occupy less than 1% of the Great Plains.



Pioneers settling in the Panhandle and Rolling Plains of Texas recognized the value of abundant grasslands, a plentiful water supply as well as other available resources in a time when the region was considered by many to be a vast desert wasteland. Today, the myth of wasteland persists in spite of an abundance of wildlife and dramatic topography. The Land and Water Conservation and Recreation Plan, the strategic plan guiding Texas Parks and Wildlife Department (TPWD) for the next 10 years, designates the

High Plains/Short grass Prairie as a priority area for conservation. Prairie lands are one of the least appreciated and most quickly disappearing ecosystems in the Western Hemisphere. Presently, most populations of prairie wildlife exist in scattered, isolated remnants of prairie landscape. The broad scale loss of grasslands has produced dramatic declines in the diversity of plant and animal species. As many as 55 species of prairie wildlife are currently listed under the Endangered Species Act as endangered or threatened.



## About Black-tailed Prairie Dogs

*“Just above the entrance of Teapot creek on the star’d sid there is a large assemblage of the burrows of the Barking Squirrel.”* — Meriwether Lewis, 1804

In the exploration of the newly acquired Louisiana Purchase, Lewis and Clark crossed vast prairies spanning the Mississippi River valley west to the Pacific coast during 1804 to 1806. Meriwether Lewis described huge colonies of large, ground-dwelling rodents and named them “prairie dogs” for their barking vocalizations.

Prairie dogs are members of the squirrel family Sciuridae which includes flying, tree, and ground squirrels, chipmunks, marmots, and woodchucks. Five species of prairie dogs occur in North America. The Utah

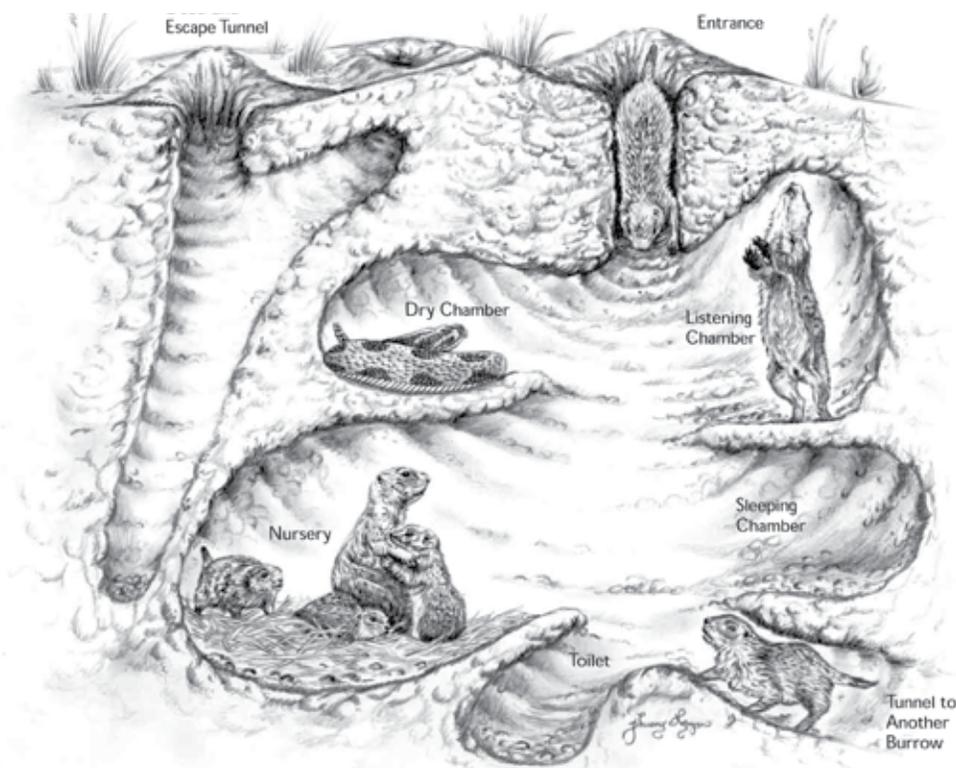
prairie dog (*Cynomys parvidens*) is listed as threatened and the Mexican prairie dog (*C. mexicanus*) is listed as endangered. Others include the white-tailed prairie dog (*C. leucurus*), Gunnison’s prairie dog (*C. gunnisoni*), and Black-tailed prairie dog (*C. ludovicianus*). The Black-tailed prairie dog is the only prairie dog found in Texas.

The black-tailed prairie dog is named for its black tipped tail. It weighs one to three pounds and is generally 10-16 inches long. These rodents inhabit short to mid-grass prairies in the Panhandle and West Texas avoiding areas of dense brush and tall grasses. The social structure is divided into coteries of one male and two to eight females and their young. These coteries are then organized into colonies or towns ranging in size from a few acres to several thousand. Prairie dogs are very sociable animals.

Prairie dogs live in deep burrows 3-4 in (7-10 cm) in diameter with funnel-shaped entrances. Burrows typically descend at a steep angle for 7-16 ft (2-5 m) before leveling off. From the lower portion of the burrow, which itself may be 13 ft (4 m) long, extends blind side tunnels and nest chambers. The main burrow entrances are marked by mounds with parapets constructed around them. These mounds are often 12 in (30 cm) high and serve as dikes to keep flash floods from inundating the burrows. They also serve as lookout points (*Davis and Schmidly 1994*).

Prairie dogs are diurnal, which means that they are active outside their burrows during the day. In Texas they are most active during the morning and evening, when they are socializing with each other and foraging on grasses, roots, weeds, forbs, and blossoms with the occasional insect. Prairie dogs are famous for their “bark-like” call, which is sounded at the sighting of predators. When a predator approaches, the sentinel or first alert prairie dog gives a sharp warning call, bobs up and down in excitement, calls again, then plunges into a burrow. Other sentinels farther from danger take up the watch, monitoring the course of the predator. Predators of black-tailed prairie dogs include: coyotes (*Canis latrans*), bobcats (*Lynx rufus*), North American badgers (*Taxidea taxus*), Golden Eagles (*Aquila chrysaetos*), Prairie Falcons (*Falco mexicanus*), accipiter hawks (*Accipiter* spp.), buteo hawks (*Buteo* spp.), bullsnakes (*Pituophis melanoleucus*) and rattlesnakes (*Crotalus* spp.).

Reproduction occurs in the spring. Females breed in their second year producing litters averaging in four or five hairless, blind young in March or April and then breed once a year after that. The young will appear above ground in May or early June, generally at the age of six weeks. This is also the time at which yearlings and some adults relocate. By August or September, the young will be about  $\frac{2}{3}$  the size of an adult.



# Plague in Black-tailed Prairie Dogs & How to Monitor Black-tailed Prairie Dogs



## Plague in Black-tailed Prairie Dogs

Plague is a flu-like disease caused by a gram-negative bacteria (*Yersinia pestis*), transmitted through flea bites and contact with infected animals. The disease affects rodents such as rats, squirrels, and prairie dogs; and also cats and people. Plague is periodically found in rodents in the western two-thirds of Texas. Plague kills prairie

dogs. Once plague is present in a prairie dog colony it can become persistent, periodically erupt and potentially extirpate the local prairie dog population. Fleas can carry the plague bacterium for more than a year. Cases in humans are rare, but do occur. Plague is easily treatable in animals and humans if caught early. To protect yourself, while mon-

itoring prairie dogs, avoid all direct contact. Fleas can jump 7"-8" vertically and 14"-16" horizontally, so it is recommended that you stand at least 5 to 10 feet from the perimeter of the prairie dog colony when monitoring. If within a week after contact you feel sick, consult your doctor. Do not feed prairie dogs or touch sick or dead prairie dogs.

## How to Monitor Black-tailed Prairie Dogs

There are two ways you can participate in Texas Black-tailed Prairie Dog Watch. Please note that each survey type has its own unique data form. Feel free to photo copy these forms.

### Site Survey

The first method is designed for monitoring prairie dog colonies on an adopted site. A site can range from public property, such as a state park, to your own property. We simply ask that you visit your site at least 2 times a year, once before and once after the birth of prairie dog pups. Pups are born in March or April, so your first visit should occur before March. The young appear above ground in May or early June. By August or September, the young will be about 2/3 the size of an adult, so your second visit should occur sometime between June and August. An additional visit in the fall is recommended. You will be recording the distribution of prairie dogs within the colony as well as environmental conditions. For information on how to record the data at your site, follow the directions on the enclosed data form and also see the enclosed example. Record the data on the appropriate form during each visit. If you adopt more than one colony, make additional copies of the data form for each colony.

If possible, map out the colony on an application such as Google™Earth (<http://earth.google.com/>).

We hope that you will record data at your site for many years and help us to learn more about population trends in Black-tailed prairie dog colonies. You can also use this data form to report prairie dog colonies found outside your adopted site.

### Density Study

The second method also involves monitoring prairie dog colonies on an adopted site. A site can range from public property, such as a State Park, to your own property. This method goes a step further than the site study and uses a Texas Tech University model (Boal and Pruett 2004) that provides an efficient way to obtain estimates of prairie dog population sizes in colonies. When approaching the colony, wait 5 minutes before starting the count. This is an acclimation period that gives the prairie dogs a chance to get used to your presence. Counts consist of scanning the entire colony and counting every visible prairie dog. Each count should take approximately 10 minutes to conduct. Boal and Pruett (2004) found that May through September counts are statistically more accurate than counts conducted November through March. Therefore, we recommend that these counts be conducted between May through September. Counts should be conducted during the mornings and evenings when prairie dogs are most active. A total of 4 counts should be conducted and the data should be recorded on the

enclosed data form. Each count should be at least 2 hours apart. They can be conducted on consecutive days but the hours should still be at least 2 hours before or after the previous days count.

You will be recording the density and distribution of prairie dogs in the colony as well as environmental conditions. For information on how to record the data at your adopted site, follow the directions on the enclosed data sheet and refer to the example provided. If you adopt more than one colony, then make additional copies of the data sheet for each colony.

If possible, map out the colony on an application such as Google™Earth (<http://earth.google.com/>).

The data collected from this study will be put into a formula by TPWD biologists to determine the population of prairie dogs at your site. The formula for this study can be found on page 10 in Boal and Pruett (2004).

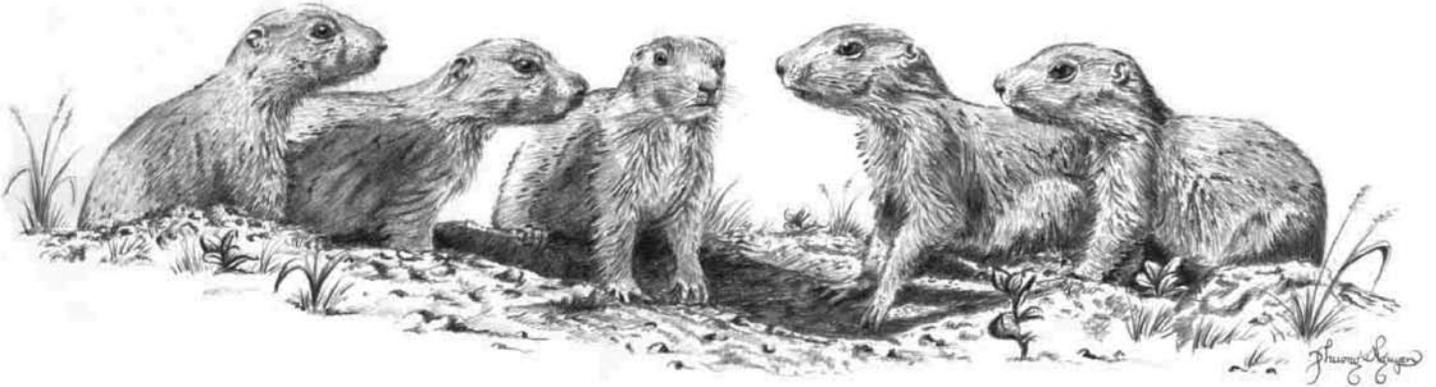
**Information from this study will help TPWD biologists answer questions like the following:**

*Do black-tailed prairie dog densities vary in different regions in Texas?*

*Are currently used estimates accurate?*



## Additional Monitoring Notes...



- Please stand at least 10 feet from the perimeter of the prairie dog colony when monitoring. Monitoring can also be done from a vehicle using binoculars or spotting scope.
- From November through March, black-tailed prairie dogs have a unimodal pattern and are active outside of their burrows during the afternoon. From May through September, they have a bimodal pattern and are active in the morning and in the evening.
- There is little above ground activity during any precipitation regardless of tem

perature, time of day, or season, therefore counts should not be conducted when it is raining or snowing.

- The habitat types are defined on page 11.
- Also include any sightings and the numbers of other species that may be directly or indirectly associated with prairie dog colonies. If you observe species that are not included on the list, please add them to the space provided. If there is not enough space, please use the back of this form for additional species.
- Please note on your data form if there is any evidence of disease in the prairie dog colony. Examples may include lethargy

or signs of starvation. If there are dead prairie dogs observed within the boundary of the colony, please note this on the data form and contact the Texas Department of Health, Zoonosis Control Division at (800) 252-8239 and select option #3. For more information please visit: [www.tdh.state.tx.us/zoonosis/diseases/plague](http://www.tdh.state.tx.us/zoonosis/diseases/plague)  
**DO NOT ENTER THE COLONY SITE IF THERE IS EVIDENCE OF DISEASE**

- TPWD cannot accept sightings from private property without the landowner's written permission. A Private Lands Access Request Form has been provided for you in this booklet.

### Prairie Dog Tracks



*The black-footed ferret is an endangered species that is believed to be extinct in Texas. The last recorded observations of black-footed ferrets in Texas were in 1953 in Dallam County and in 1963 in Bailey County. Black-footed ferrets depend upon prairie dogs for food and use their burrows as dens for shelter. Once thought to be extinct, reintroductions of black-footed ferrets are currently taking place in other states. No reintroductions have taken place in Texas.*



# Site Survey Data Form

Site #: \_\_\_\_\_ (To be assigned by TPWD)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

County: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

**Location of site** (Lat-Long or distance & directions from nearest town): \_\_\_\_\_

**INSTRUCTIONS:** Please use this sheet to record data each time you visit your adopted site. There is no limit to the number of times you may record data at each site; however we encourage you to visit the site at least 2 times (before March and after May). Please use a separate data sheet for each site. Mark site location on a map if possible.

**Date:** \_\_\_\_\_ **Time of Day:** \_\_\_\_\_ **Temperature:** \_\_\_\_\_ °F or \_\_\_\_\_ °C

**Sky:**

Few clouds

Partly cloudy or variable sky

Fog or smoke

Cloudy or overcast

Estimated size of colony (acres or description of physical boundaries): \_\_\_\_\_

**Habitat Type (described on page 11):**

Short Grass Prairie

Mid Grass Prairie

Mesquite Savanna Openings

Playas (dry)

Old Fields/Cropland (No-Till)

Sand Sage Depression

Creosote-Tarbrush Openings

Estimated # of Prairie Dogs in colony: \_\_\_\_\_

**Species directly or indirectly associated with prairie dog colonies:**

Burrowing Owl  **Yes**  **No** # Present \_\_\_\_\_

Ferruginous Hawk  **Yes**  **No** # Present \_\_\_\_\_

Swainson's Hawk  **Yes**  **No** # Present \_\_\_\_\_

Mountain Plover  **Yes**  **No** # Present \_\_\_\_\_

Swift Fox  **Yes**  **No** # Present \_\_\_\_\_

Other species (record # present): \_\_\_\_\_

Is there evidence of disease in colony?  **Yes**  **No**

If **Yes**, please describe: \_\_\_\_\_

Are dead prairie dogs observed?  **Yes**  **No**

If **Yes**, contact the **Texas Department of Health, Zoonosis Control Division at (800) 252-8239 (select option #3)**

How long has the colony been at this site? \_\_\_\_\_

Has the colony:  **expanded**  **declined**  **remained stable**

Has the colony been managed?  **Yes**  **No**

If **Yes**, please describe: \_\_\_\_\_

Map out the colony on an application such as Google™Earth (<http://earth.google.com/>) and include map with completed data sheets. Send completed form(s) to: "Prairie Dog Watch," Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, TX 78744



# Density Data Form 1

Site #: \_\_\_\_\_ (To be assigned by TPWD)

Name: \_\_\_\_\_

County: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

**Location of site** (Lat-Long or distance & directions from nearest town): \_\_\_\_\_

**INSTRUCTIONS:** Please use this sheet to record data each time you visit your site. Wait 5 minutes before beginning count. Counts consist of scanning the entire colony and counting every visible black-tailed prairie dog. Please conduct counts between May and September. Also conduct counts during mornings and evenings when prairie dogs are most active. Each count should be at least 2 hours apart. There is no limit to the number of times you may record data at each site. Please use a separate data sheet for each site. Mark site location on a map if possible.

Estimated size of colony (acres or description of physical boundaries): \_\_\_\_\_

**Habitat Type (described on page 11):**

- Short Grass Prairie
                         
  Mid Grass Prairie
                         
  Mesquite Savanna Openings  
 Playas (dry)
                         
  Old Fields/Cropland (No-Till)
                         
  Sand Sage Depression  
 Creosote-Tarbrush Openings

Is there evidence of disease in colony?       **Yes**       **No**

If **Yes**, please describe: \_\_\_\_\_

Are dead prairie dogs observed?       **Yes**       **No**

If **Yes**, contact the **Texas Department of Health, Zoonosis Control Division at (800) 252-8239 (select option #3)**

How long has the colony been at this site? \_\_\_\_\_

Has the colony:     **expanded**       **declined**       **remained stable**

Has the colony been managed?       **Yes**       **No**

If **Yes**, please describe: \_\_\_\_\_



## Density Data Form 2

	Example	Count #1	Count #2	Count #3	Count #4
<b>Date:</b>	August 1, 2005				
<b>Time:</b>	4:00 P.M.				
<b>Temperature (°C):</b>	35				
<b>Sky Ratings:</b> 1. Few clouds    3. Partly cloudy or variable sky 2. Fog or smoke    4. Cloudy or overcast	<b>Sky:</b> 1				
<b># of Black-tailed Prairie Dogs:</b>	352				
<b># of Burrowing Owls:</b>	15				
<b># of Ferruginous Hawks:</b>	0				
<b># of Swainson's Hawks:</b>	2				
<b># of Mountain Plover:</b>	0				
<b># of Swift Foxes:</b>	0				
<b># of other species:</b>					
<b># of other species:</b>					
<b># of other species:</b>					
<b># of other species:</b>					

Map out the colony on an application such as Google™Earth (<http://earth.google.com/>) and include map with completed data sheets.

Send completed form(s) to: "Prairie Dog Watch," Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, TX 78744



## Species Associated with Prairie Dog Colonies



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**Burrowing Owl (*Athene cunicularia*)**—Prairie dog towns furnish the ideal habitat for these birds. This owl is active both during the day and at night. The burrowing owl is a small, ground-dwelling owl with long legs. The owl's head is round and lacks ear tufts. Burrowing owls can be found in West Texas and the Panhandle throughout the year, but will vacate the northern Panhandle during the winter months. For more information, go to: <http://www.tpwd.state.tx.us/huntwild/wild/species/burowl/> and <http://www.birds.cornell.edu/programs/AllAboutBirds/>



C. Brunner

**Ferruginous Hawk (*Buteo regalis*)**—Prairie dogs are one of the primary prey of Ferruginous Hawks. They often can be found in numbers of 5 to 10 perching near a prairie dog town waiting to attack their prey. The Ferruginous Hawk is a large, buteo, with broad wings and a large head. It has a white or light gray tail. Legs are feathered to the toes. In the light morph, in flight, the head

is whiter than that of most hawks and the back and shoulders are rufous. The dark morph has a dark head and the upper wings and back feathers are fringed with rufous. Ferruginous Hawks can be found in West Texas and the Panhandle during the winter months and year-round in the northwest portion of the Texas Panhandle. For more information, go to:

<http://www.tpwd.state.tx.us/huntwild/wild/species/ferhawk/> and <http://www.birds.cornell.edu/programs/AllAboutBirds/>



©USFWS/Paul Kerris

**Swainson's Hawk (*Buteo swainsoni*)**—The Swainson's Hawks diet during the breeding season consists of mainly mammals, birds and reptiles. This hawk has a stout body and broad wings, but compared to other North American hawks, it has a slimmer appearance and narrower wings. In flight, the dark flight feathers contrast sharply with the lighter feathers on the leading edge of the wing. Dark adult Swainson's Hawks lack this sharp contrast. The light morph adult has dark brown plumage with a brown breast and a pale belly. It also has a white chin. The dark morph has a similar pattern but is overall darker. The Swainson's Hawk depends on open grasslands for foraging. The Swainson's Hawk can be found in the western portions of Texas and the Panhandle during the summer months. For more information, go to: <http://www.tpwd.state.tx.us/huntwild/wild/species/swainson/> and <http://www.birds.cornell.edu/programs/AllAboutBirds/>



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**Mountain Plover (*Charadrius montanus*)**—The Mountain Plover is a native to the short grass prairies, not mountains. It nests in sites used historically by prairie dogs, bison and pronghorns. The Mountain Plover is a fairly large plover, about the same size as a Killdeer (*Charadrius vociferous*) but has longer legs. It can closely resemble the American Golden-Plover (*Pluvialis dominica*), migrates through Texas. The Mountain Plover is drably colored and lacks a black breast band. The upperparts of this bird are sandy brown that extends along the side of the neck and onto the chest. The forehead, throat, breast and underwings are white. Breeding birds have a distinctive black stripe extending from the bill to the eye. It is the only North American plover with a black bar on the front of the crown and a clear white breast. Mountain Plovers can be found in the northern regions of the Texas Panhandle during the summer months and the southern regions of Texas during the winter. For more information, go to: <http://www.birds.cornell.edu/programs/AllAboutBirds/>

**Swift Fox (*Vulpes velox*)**—The swift or kit fox is the smallest of the American Foxes. This fox lives in open desert or grasslands. It has a pale buffy yellow coat with a buffy gray tail that has a black tip. The swift fox can be found in West Texas and the Panhandle. For more information, go to: <http://www.tpwd.state.tx.us/huntwild/wild/species/kitfox/>



## Description of Habitat Types



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*Prairie Dog Town in Mesquite Savanna*

**A. Short Grass Prairie**—Rangeland in the High Plains, Rolling Plains and Edward's Plateau Ecoregions and is dominated by buffalo grass (*Buchloe dactyloides*) on clay (and other compacted) soils. Grass species may include blue grama (*Bouteloua gracilis*), three awn (*Aristida* spp.), and dropseed (*Sporobolus* spp.).

**B. Mid Grass Prairie**—Rangeland in the High Plains, Rolling Plains and Edward's Plateau Ecoregions and is dominated by grama (*Bouteloua*) grasses. Other important grasses Texas wintergrass (*Nassella* (= *Stipa*) *leucotricha*), curly mesquite (*Hilaria belangeri*), tridens (*Tridens nuticus*), three awn (*Aristida* spp.), cane & silver bluestem (*Bothriochloa* spp.), vine mesquite (*Panicum obtusum*), little bluestem (*Schizachyrium scoparium*), Indiangrass (*Sorghastrum nutans*), and cottontop (*Digitaria californica*).

**C. Mesquite Savanna Openings**—Rangeland found state wide. Moderately dense to dense mesquite (*Prosopis glandulosa*) shrubland interspersed with openings in shallow swales or playa-like depressions. Openings are often maintained by the activities of black-tailed prairie dogs. These grassland openings frequently contain buffalo grass (*Buchloe dactyloides*), blue grama (*Bouteloua gracilis*) and tobosa grass (*Pleuraphis* (= *Hilaria*) *mutica*), but grass composition will vary with intensity of grazing and by Ecoregion.

**D. Playas (dry)**—Rangeland found in High Plains, Rolling Plains, western Edwards Plateau and eastern Trans-Pecos Ecoregions. Habitat dominated by vine mesquite (*Panicum obtusum*) and buffalo grass (*Buchloe dactyloides*), and is normally found in localized depressions (e.g. *playas*) that retain more moisture than the surrounding landscape. When heavily grazed, buffalo grass (and/or forbs) tends to dominate the lowest areas, with Vine Mesquite virtually absent or apparent only at the edges. When un-grazed, vine mesquite can be abundant everywhere. During drought, this alliance may contain a significant amount of bare ground. Other grasses include grama (*Bouteloua*) spp., western wheatgrass (*Agropyron* (= *Pascopyrum*) *smithii*), and tumble grass (*Schedonardus paniculatus*).

**E. Old Fields/Cropland (No-Till)**—Old fields and croplands occur statewide. In addition to plowed fields and fields with crops, this classification includes forbdominated out-of-production cropland and no-till fields. The vegetation varies and is primarily comprised of crops and/or annual forbs.

**F. Sand Sage Depression**—This rangeland is interspersed with midgrass and short grass community types, and occurs in the High Plains and Rolling Plains Ecoregions. This evergreen shrubland or midgrass prairie alliance includes several distinct associations, all of which occur on sandy soils. Composition varies with precipitation, disturbance, and soil texture, with midgrasses common on high quality rangeland. Mesquite (*Prosopis glandulosa*) may be a component. Important grasses include little bluestem (*Schizachyrium scoparium*), sand dropseed (*Sporobolus cryptandrus*), big sandreed (*Calamovilfa gigantea*), three awn (*Aristida* spp.), grama (*Bouteloua* spp.), and lovegrass (*Eragrostis* spp.).

**G. Creosote-Tarbrush Openings**—Rangeland found in the Trans-Pecos Ecoregion. This association is dominated by black grama (*Bouteloua eriopoda*), vine mesquite (*Panicum obtusum*), buffalo grass (*Buchloe dactyloides*), sideoats grama (*Bouteloua curtipendula*), creosote bush (*Larrea tridentata*), and tarbrush (*Flourensia cernua*).



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*Playa on the High Plains*



## Landowner Form

### To the landowner:

\_\_\_\_\_ (volunteer name) is participating as a volunteer in Texas Black-tailed Prairie Dog Watch. Texas Black-tailed Prairie Dog Watch is a monitoring program that uses citizen volunteers to gather data about the status of Black-tailed prairie dogs in Texas. Although these species are not currently considered threatened and endangered, throughout their range there has been a drastic decline in the population. Texas Parks and Wildlife Department is very pleased to have the assistance of concerned Texans in monitoring black-tailed prairie dog populations.

We have, however, instructed our volunteers that they cannot collect data on private land without the approval of the private landowner. Accordingly, we have prepared this form for your approval. The sections described below are the releases that we and our volunteers are required to obtain from you under Section 12.103 of the Texas Parks and Wildlife Code. If you approve, then please sign one or both sections and provide a copy to our volunteer.

#### 1. Use of information

This documents my approval for TPWD volunteers and employees to use (such as analyses) site-specific information from the property I own or manage. This may include placing that information onto a topographic map and entering the information into a Department database. Thus, the information could be viewed by the public.

\_\_\_\_\_  
(Landowner or authorized agent signature)

\_\_\_\_\_  
(Date)

#### 2. Reporting information

This also documents my approval for TPWD volunteers and employees to report (such as in publications or technical reports) the above approved information in a manner that permits identification of the location of the specific parcel of property that I own or manage.

\_\_\_\_\_  
(Landowner or authorized agent signature)

\_\_\_\_\_  
(Date)

#### 3. Other conditions

If there are any conditions that apply to this approval, please specify and initial below.

\_\_\_\_\_  
**Name and Address**  
(of landowner or authorized agent)

**Optional:**

Name \_\_\_\_\_ Name of ranch or tract \_\_\_\_\_

Address \_\_\_\_\_ County \_\_\_\_\_

City \_\_\_\_\_ Acreage \_\_\_\_\_

State, Zip \_\_\_\_\_ Location \_\_\_\_\_

Phone number \_\_\_\_\_

## Now Get Out There and Count Your Prairie Dogs!



### If you have any questions or need additional copies of monitoring materials:

Please Contact:

Texas Black-tailed Prairie Dog Watch  
Texas Parks and Wildlife Department  
4200 Smith School Road  
Austin, TX 78744  
800-792-1112 ext.8111

Or visit our Web Site at:  
[www.tpwd.state.tx.us/trackers](http://www.tpwd.state.tx.us/trackers)



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**Texas  
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Prairie Dog  
Watch**

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**Texas Black-Tailed  
Prairie Dog**

Texas Parks and Wildlife Department  
4200 Smith School Road  
Austin, Texas 78744