



PRAIRIE DOG ACTION PACKET

The Prairie Dog Coalition is an alliance of non-profit organizations, concerned citizens, and scientists dedicated to the protection of imperiled prairie dogs and the restoration of their ecosystems. To accomplish this mission, we provide information and advocacy training, facilitate communication and planning, and promote conservation projects.

This action packet is meant to provide helpful information that can assist you in becoming an animal advocate in your community.

PRAIRIE DOG FACTS

There are five species of prairie dogs: White-tailed, Black-tailed, Utah, Mexican, and Gunnison prairie dogs. Colorado has White-tailed prairie dogs, Black-tailed prairie dogs, and Gunnison prairie dogs.

Over the last century, prairie dogs have lost most of their native habitat to agriculture and urban development. As a keystone species for the prairies, entire ecosystems rely upon prairie dogs to thrive.¹

Prairie Dogs Are A Keystone Species And Ecosystem Engineers

Prairie dogs and their activities have profound impacts on grassland ecosystems by increasing habitat heterogeneity, modifying ecosystem processes, and enhancing regional biodiversity. Prairie dogs are ecosystem engineers because they influence the abiotic and biotic characteristics of their habitat, landscape architecture, and ecosystem structure and function. Prairie dogs and their burrowing activities alter soil properties, surface topography, runoff, and water infiltration. Prairie dogs modify vegetation structure, plant composition, plant communities, biomass production, and nutrient cycling. The combined result of all these effects is the maintenance of grasslands and their biodiversity.²

Prairie dogs are considered a “keystone” species because their colonies create islands of habitat that benefits approximately 150 other species.³ They are a food source for many animals, including coyotes, eagles, and the critically endangered black-footed ferret. The local distribution and activity of badgers (*Taxidea taxus*) depends on fossorial prey, like the prairie dog.⁴ Many species, like the burrowing owl, black-footed ferret and tiger salamander, use their burrows as homes.

Prairie Dogs Have An Advanced Communication System

Prairie dogs communicate with different calls or “words” for tall human in a yellow shirt, short human in a green shirt, coyote, deer, red-tailed hawk and many other creatures. They can even coin new terms for things they’ve never seen before, independently coming up with the same calls or words.

Prairie Dogs Are Not Overpopulated

Black-tailed prairie dogs now occupy less than 1% of their historic range. Prairie dogs actually breed at a very low rate compared to other small mammals. They reproduce only once per year and the average litter size is 3-4 pups. Survival for the first year is approximately 50-54% due to the major mortality factors such as predation, disease, infanticide, habitat loss, poisoning, trapping and shooting.

Prairie Dogs Do Not Carry Plague

Sylvatic plague is a bacterial disease of wild rodents that is transmitted by fleas. It can afflict numerous species of mammals, including prairie dogs. Because prairie dogs lack a sophisticated immune system, if they come into contact with an infected flea, within several days they will exhibit symptoms and die. The Colorado Department of Health has documented only 42 plague cases since 1957. Of those, just 6 were linked to prairie dogs. Other mammals, such as squirrels, also become exposed and die quickly from the plague. Humans can take simple steps to avoid contracting plague, and it is now easily treatable with standard antibiotics.

Prairie Dogs And Cattle Can Coexist

It is understandable why people believe that prairie dogs compete with cattle for forage. Looking onto a prairie dog colony, one often sees less grass and more bare ground. However, the grasses on the colonies are higher in nutritional quality, more succulent and digestible which compensates for the grass that prairie dogs eat. Bison co-existed for thousands of years among 700 million acres of prairie dogs. Bison, elk, antelope, and cattle prefer to graze in prairie dog colonies. Cows and bison also need to graze on non-colonized areas to consume an adequate volume of bulk, but prairie dog colonies provide for this as well, creating a mosaic of colonized and non-colonized areas.⁵

Prairie Dogs Control Weeds

Prairie dogs can influence environmental heterogeneity, plant succession, hydrology,



nutrient cycling, biodiversity, and landscape architecture.⁶ Prairie dogs control sagebrush, mesquite, prickly pear cactus, and other weeds noxious to native ungulates and livestock. Recently, an elegant series of studies have shown that prairie dogs and associated fauna can be an over-riding factor suppressing the establishment of mesquite (*Prosopis*) communities, and thus preventing the disappearance of grasslands.⁷

Works Cited

- ¹ Adapted from WildEarth Guardians' Report from the Burrow 2013, www.wildearthguardians.org/site/DocServer/Report_from_the_Burrow_2013.pdf
- ² Ceballos, G., Pancheco, J. & List, R. (1999). Influence of prairie dogs (*Cynomys ludovicianus*) on habitat heterogeneity and mammalian diversity in Mexico. *Journal of Arid Environments*, **41**: 161-172.
- ³ For more details, visit <http://www.defenders.org/prairie-dogs/prairie-dogs-101>
- ⁴ Clark, T.W., Campbell, T.M., III, Socha, D.G. & Casey, D.E. (1982). Prairie dog colony attributes and associated vertebrate species. *Great Basin Naturalist*, **24**: 572-582.
- ⁵ Kretzer, J.E., Cully, Jr., J. F. (2001). Effects of Black-Tailed Prairie Dogs on Reptiles and Amphibians in Kansas Short grass Prairie. *The Southwestern Naturalist*, **46**, No. 2: 171-177.
- ⁶ Ceballos, G., Pancheco, J. & List, R. (1999). Influence of prairie dogs (*Cynomys ludovicianus*) on habitat heterogeneity and mammalian diversity in Mexico. *Journal of Arid Environments*, **41**: 161-172.
- ⁷ Weltzin, J.F., Archer, S. & Heitschmidt, R.K. (1997a). Small-mammal regulation of vegetation structure in a temperate savanna. *Ecology*, **78**: 751-763.
- Weltzin, J.F., Dowhower, L. & Heitschmidt, R.K. (1997b). Prairie dog effects on plant community structure in southern mixed-grass prairie. *Southwestern Naturalist*, **42**: 251-258.

RELOCATION

A STEP BY STEP PROCESS FOR CONDUCTING A SUCCESSFUL PRAIRIE DOG RELOCATION PROJECT

The first step in every relocation effort is finding a receiving site. A receiving site is the place where the prairie dogs will be moved to. This can be private land, or public land; however, politics do play a role here and we'll get into that later. In most states, including Colorado, a permit is required to trap and transport wildlife for relocation purposes. Checking with your state is also a good step in finding out any new requirements. Colorado Parks and Wildlife (CPW) has a downloadable permit that lists all the required steps needed before they will approve any relocation.

For Colorado permits and requirements:

<http://cpw.state.co.us/learn/Pages/SOC-Black-tailedPrairieDogPermits.aspx>

Do note: For Colorado, if you're requesting a cross-county relocation, SB 99-111 applies. Information on SB-99-111 can be found here:

http://tornado.state.co.us/gov_dir/leg_dir/olls/digest1999/AGRICULTURE.htm

http://cpw.state.co.us/Documents/WildlifeSpecies/SpeciesOfConcern/BlackTailedPrairieDog/PDF/Entire_Report.pdf

According to the CPW Final Report Black-Tailed Prairie Dog Study of Eastern Colorado, (above link), "Existing Colorado laws and regulations still strongly reflect an agricultural bias against prairie dogs on private lands and an implied bias against their management on public lands. Prairie dogs are considered an "agricultural pest" by both the U.S. Department of Agriculture and the Colorado Department of Agriculture. A recent law passed by the Colorado State Legislature (Senate Bill 99-111), prohibits the relocation of prairie dogs across county boundaries without approval from the Board of County Commissioners. And, while relocations within county boundaries are somewhat easier (i.e., they no longer require County Board approval), CDOW still requires a permit for them."



NOW, HOW TO FIND LAND FOR THE RECEIVING SITE

As stated previously, the receiving site can be either private or public land, but first you need to know where the prairie dog colony you wish to move is located and that will help gauge where to start looking for potential receiving land. Let's start with a private landowner wanting to relocate his/her prairie dogs.

The most common scenarios are:

1) Private to Private

If you're looking to relocate prairie dogs from private property, start looking for another private landowner who is willing to take them (assuming they already have prairie dogs or prairie dog habitat). Look for a private landowner whose land is large enough to easily replicate the area that the prairie dogs would be coming from. CPW will likely not approve a permit where the habitat size is much smaller than the "take site." "Take site" in this context refers to the original land, where the prairie dogs currently exist.

You can do this by word of mouth, or an article in the newspaper, or even contacting ranchers in your area. Social media helps a lot in this effort!

2) Private to Public

Even though you're a private land owner, there is still a chance that your local public lands are available. Go ahead and contact the Open Space and Natural Lands Department within your town or city. In addition, you can try contacting the manager for Parks and Recreation within your town or city as well. However, these areas sometimes have restrictions within each zoned area, but it never hurts to ask! With each season, things can change and the managers may be open to taking in different source populations to assist in their own prairie dog management efforts. But be aware that prairie dogs are considered an "agricultural pest" by both USDA and CDA. Local municipalities also have biases against them from a management standpoint on their natural lands.

Next, let's discuss Public land relocations. If you're a local resident or constituent and trying to find land for a public site, you have some options.

3) Public to Public

Let's assume you've read that a local government is looking to develop a parcel of their land that has prairie dogs. And you're reading this because you want to help find a

non-lethal management option for them.

1. The first step would be to approach the city or town and ask if they have other lands they could designate for these “impacted prairie dogs”, so that the city or town could manage their concerns for development, but also mitigate for the wildlife impacted using non-lethal options.
2. Ask if they have a wildlife management plan that includes prairie dogs. If they do, ask to review it. Not all cities or towns have these, but if they do it will help illustrate what their obligations are to wildlife.
3. Ask to assist in the effort to find land within their own jurisdictions management, where these prairie dogs can be moved to. Often times, these local governments won’t set funds aside to properly evaluate non-lethal options, so volunteering your time can be appealing and open a door to conversation.
4. If they aren’t willing to put some legwork in, ask them for a list of all of their areas with prairie dogs present or that have plagued out in the last several years. They should be able to get this information to you within a few days. (And to make that resource even more helpful, ask if they could provide you with any information on management control that’s been done on each area).
5. With that information, do the footwork for them. Go through the list and see if you recognize any that might be a good fit.
6. If they provided you with any management control, or lethal that’s been done on sites, refer to those as sites that probably wouldn’t be a good fit for relocation as problems already exist there for one reason or another. And if there’s a choice in the matter, you’d rather not choose a place where they routinely poison.

All of these things can potentially open up doors to conversations about options and it shows that you’re invested in the project.

LOOK UP THE LOCAL POWERS, ESPECIALLY 1034 POWER

You can Google search Colorado Local Government Handbook and find the PDF.

Two provisions of 1034 powers that are of particular importance for the protection of wildlife habitat includes:

"29-20-104. Powers of local governments. (1) Without limiting or superseding any power or authority presently exercised or previously granted, each local government within its respective jurisdiction has the authority to plan for and



regulate the use of land by: . .

(b) Protecting lands from activities which would cause immediate or foreseeable material danger to significant wildlife habitat and would endanger a wildlife species; . . .

(h) Otherwise planning for and regulating the use of land so as to provide planned and orderly use of land and protection of the environment in a manner consistent with constitutional rights."

This language should support the adoption of specialized city, town, or county regulations to protect wildlife habitat in ways that are not specifically prohibited or preempted by state statute.

Why is this important to you? It's simple, this power of local government is not being implemented enough, and this gives you an "edge" that might make them listen to your request a bit differently now (in a good way).

IS THE LAND YOU'RE LOOKING AT ADJACENT TO RESIDENTIAL DEVELOPMENTS, SCHOOLS OR DEVELOPED PARKS?

This is important to determine, because in any permitting process, CPW will want to know if you've informed any adjacent landowners. The permit recommends you formally notify adjacent landowners at the receiving site. If there is a large outcry demonstrating opposition to the relocation, CPW may decide to deny the permit. So keep this in mind if this potential exists and try to mitigate it prior to sending in the permit.

If you worry this may happen, try the following:

1. Holding a community meeting is sometimes helpful.
2. Send out detailed information about the project's intent and goals.
3. Assign a contact person to address individual concerns about the relocation.

REMEMBER THAT SOMETIMES, YOUR SURROUNDINGS CAN LEVERAGE YOUR CASE. IF THE SITE THAT'S IN DANGER OF

BEING DEVELOPED IS ADJACENT TO RESIDENTIAL HOMES, SCHOOLS OR HOSIPTALS, THEN:

Use this as point to push for non-lethal management techniques. There are strict guidelines that contractors must adhere to when applying pesticides near these areas. Each product has its own guidelines and you can find information about them here:

<http://www.ext.colostate.edu/pubs/natres/06506.html>

Aluminum Phosphide, which is a pesticide used to kill prairie dogs, for example, can only be used within 100 feet of “residential use” areas. The EPA imposed this 100 foot buffer in 2010 after several misuses of the product resulted in the death of two young girls, and several hospitalizations.

“Residential Use” means use of a pesticide directly:

1. On humans or pets
2. In, on, or around any structure, vehicle, article, surface, or area associated with the household including, but not limited to, areas such as non-agricultural outbuildings, non-commercial greenhouses, boats, or
3. In any preschool or day care facility, schools, and hospitals

In an athletic field or park, the applicator **MUST** post a sign at entrances prior to application and must remain there during the duration of application and activation period.

For more information, please contact the Colorado Department of Agriculture. (You may also file a complaint here if you believe a contractor is not following procedure).

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2331W. 31st Ave., Denver, CO 80211-3859
Phone: (303) 477-0076

http://www.colorado.gov/cs/Satellite/ag_Main/CBON/1251626373787

IF YOU’VE FOUND LAND, START LOOKING OVER YOUR PERMIT.

<http://cpw.state.co.us/learn/Pages/SOC-Black-tailedPrairieDogPermits.aspx>

This is helpful, as there are additional items that need to be addressed before actually sending in the permit. There is a checklist for you to help guide you through the process.



For a list of relocators:

http://www.humanesociety.org/about/departments/prairie_dog_coalition/prairie-dog-relocation-groups.html#.UvEaHbQZPFg

As much as we'd love to assist in every relocation effort, we currently do not have enough staff and resources to assist with all aspects of these projects. However, if you have found land, please check in with us to see how we might be able to assist you. Whether it's rallying up volunteers through social media, or providing equipment, we will try our best to help in any way we can.

DEPENDING ON IF ITS PRIVATE OR PUBLIC YOUR STEPS MAY VARY:

If this is a private to private relocation with both sites in agreement, and within the same county, you simply need to fill out the permit application and acquire CPW's approval.

If this is a private to private relocation that crosses county lines, you will need to gain approval from the receiving site's county commissioners prior to submitting your permit to CPW.

If this is a public to public relocation, the city or town will be submitting the permit to CPW in most cases. The city will not submit a permit for a relocation project they do not support/approve, so you MUST reach out to them at the beginning of this process to see if relocation is something they are willing to pursue. !

GO TO YOUR CITY'S PLANNING & ZONING DEPARTMENT:

Each city is responsible for the planning and zoning currently conducted within their city or county limits. If there is no signage on the parcel of land, the city or county may be able to provide you with a direct line of contact. (This applies to private or public parcels)

If you need help finding a contact number, please email us for a general list. (Note this may require "pushing it up the ladder" to people in charge to get to the right person, but there's no way around it. So be patient, and you're doing awesome for getting this far so be proud of yourself).

This is also an opportunity to ask if they would be willing to take these prairie dogs or allow for passive relocation to occur if they have land adjacent to this property!

Once you've acquired the correct contact information, you then need to gather up all the knowledge you have on the site (if its next to a school or your house, if they are already poisoning and not using proper signage, if there is a place to passively move them to adjacent to the site, and if the city is willing to take them).

Private Property-

With this, you can ask the developer take one or several courses of action:

1. Designate land and relocate the prairie dogs to this land instead of killing them.
2. Passively relocate these prairie dogs to an area (city land?). (several contractors can do this) *If applicable*
3. Stop all poisoning as it does not comply with EPA regulations (within 100 ft. buffer).

Public Property-

With this, you can ask your city or town if they are willing to do one or several things:

1. Designate another area within their department to relocate the prairie dogs.
2. If passive relocation is appropriate, this could be an option as well.
3. Tell them you would prefer to see non-lethal management techniques used instead of lethal control.

Email us for any questions relating to passive relocation. Passive relocation is a way to move prairie dogs without actually handling them. It only applies in certain situations.

NOW KEEP GOING, HEAD TO YOUR COUNTY WEBSITE:

<http://ccionline.org/counties/>

Here you can scroll through the counties, select your county where the issue is taking place and then select COUNTY COMMISSIONERS. (If the link isn't easily located, try typing in *Commissioners* into the search engine on that specific webpage).

From here, you can email your county commissioners and request they conserve and protect more land for wildlife, including prairie dogs. The more your commissioners hear about wildlife, the more likely they are to care about it later on. And this may mean less land set aside for development and more land set aside for habitat. ** Use your information you learned about Power 1034- Local Government **

The county link also allows you to look up the regularly scheduled meetings. The public is always welcome to attend. Council members are elected officials and at least one of them if not all of them (depending on the structure of the council) represents YOU so they should be willing to hear your input. Ask for more protected land for prairie dogs and their associated species!



If you are looking to relocate prairie dogs across county lines, you will need to obtain approval from the receiving site's County Commissioners. Contact them via email, phone, and their regularly scheduled meetings until you get a response. From past experiences, this takes a good bit of time, and often repetitive calls and requests. Response times will vary from county to county.

WHAT NEXT?

If you have made it this far, you are doing great! Relocating prairie dogs within Colorado is becoming more and more challenging, but not impossible!

Once you have submitted the permit application, or your city/town has completed this step, CPW has 30 days to review the permit application. At that time, they will either approve or deny it. During those 30 days, a CPW wildlife official will perform a site evaluation to determine if the receiving site is suitable for your requested relocation.

If this permit gets approved, relocations typically occur after June 1st. During the breeding and pup rearing season, CPW will not allow any relocation to occur. This is from March 1st through June 1st.

BARRIER OPTIONS CAN PROVIDE ADDITIONAL BENEFITS

Barriers provide not only a visual barrier for prairie dogs to deter encroachment, but if you choose a natural barrier (vegetation), you will be enhancing your landscape at the same time. We recommend barriers in urban areas where a future conflict could arise with a prairie dog colony. Barriers are also very important if you have a feature (i.e. soccer field) that prairie dogs could encroach upon.

For urban areas, barriers should be at least 3 feet high and opaque. Prairie dogs are known to challenge barriers and the weakest point will be along the bottom of the barrier. It is important that no light is visible under the barrier and that extra fortification such as 1-inch netting poultry wire be laid horizontally along the ground and lip up vertically against the barrier--this inhibits prairie dogs from digging under the barrier.

Barriers with a slick surface work best, but there are many different types of fencing that can be used. Materials such as wooden privacy fence, stone walls, chain-linked fence with woven privacy slats, vinyl fabric manufactured by Grifflyn works well and can be used in conjunction with chain-linked fence (perfect application for parks and athletic fields) and sheets of corrugated barn siding (i.e. metal barriers). If you meet basic height and visibility guidelines you have a higher chance of a successful barrier.

BARRIER OPTIONS CAN INCLUDE:

1. SNOW FENCING WITH POULTRY WIRE
2. VINYL WITH POULTRY WIRE
3. SOLID WOOD WITH ROCK LAYER
4. METAL BARRIER
5. VEGETATION BARRIERS FOR NATURAL SETTING

SNOW FENCING WITH POULTRY WIRE



The snow fence application was used on this site because winds were a significant issue. There are two, four-foot wide pieces of poultry wire where one is laid on the ground to discourage prairie dogs from digging under the barrier. The other piece applied vertically discourages prairie dogs from going through the wood slats.

The lip on the top of the vertical barrier hinders the prairie dogs' ability to climb over the poultry wire. The slats are four feet high.

VINYL WITH POULTRY WIRE



SOLID WOOD WITH ROCK LAYER

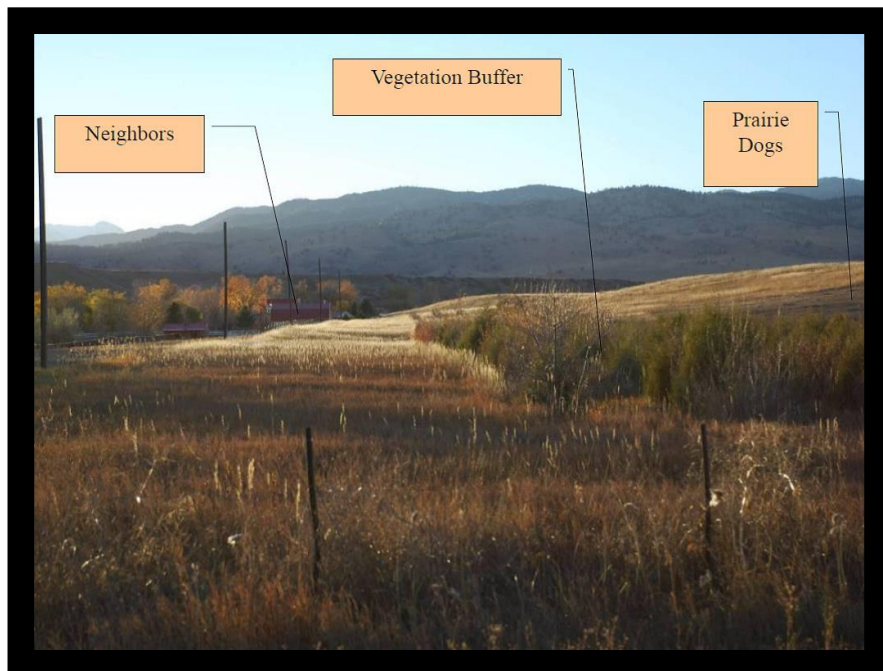
The photo with the four-foot wooden fence has a thick layer of large rocks extending horizontally for a more polished look which also prevents digging under.



METAL BARRIER



VEGETATION BARRIERS FOR NATURAL SETTING





BULLDOZING ACTION PACKET

START WITH YOUR CITY'S PLANNING & ZONING DEPARTMENT:

Each city is responsible for the planning and zoning currently being conducted within their city limits. This means that if a developer is bulldozing prairie dogs or any other wildlife, the city should know about it so they can intervene! This may still mean that the prairie dogs end up the hapless victims of human development, a humane method can and should be implemented as an alternative burying these animals via BULLDOZERS!

If you need help, we can provide you with a list of numbers that may assist you in reaching the person in charge. (Note this may require "pushing it up the ladder" through a number of different people in charge in order to get through to the right person, but there's no way around it so be patient, but persistent!). And request a call back once they've resolved the issue.

WHAT TO DO ABOUT POISON?

IF YOU CAN, FIND OUT WHOM THE DEVELOPER IS IMMEDIATELY!

Sometimes, it can be as simple as finding the sign at the parcel of land that has the developer's name. Other times, this may involve some investigative work which may involve contacting the city or county. Chances are, if you're aware poisoning is about to happen; you do not have a lot of time to waste before contacting the developer and contractor. Asking for a non-lethal form of management is a long shot, but you never know and it CAN work! In 2013, developer; Trammell Crow Residential, used passive relocation to move approximately 10-15 prairie dogs instead of utilizing lethal control in Boulder.

IS THIS LAND NEAR NEIGHBORHOODS, SCHOOLS, AND PARKS?

There are strict guidelines that a contractor must adhere to when applying a pesticide near these things. Each product has its own guidelines and you can find information about them here: <http://www.ext.colostate.edu/pubs/natres/06506.html>

Aluminum Phosphide, which is pesticide used to kill prairie dogs, for example, can only be used within 100 ft. of residential use areas. The EPA imposed this 100 foot buffer in 2010 after several misuses of the product resulted in deaths.

Residential Use means use of a pesticide directly:

1. On humans or pets
2. In, on, or around any structure, vehicle, article, surface, or area associated with the household including but not limited to areas such as non-agricultural outbuildings, non-commercial greenhouses, boats, or
3. In any preschool or day care facility, schools, and hospitals

In an athletic field or park, the applicator **MUST** post a sign at entrances... prior to application and must remain there during the duration of application and activation period.

For more information, please contact the Colorado Department of Agriculture. (You may also file a complaint here if you believe a contractor is not following procedure).

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Poisoning is cruel and inhumane, and requires applications on a regular basis, continually putting these dangerous chemicals into our environment. We have to stop sending the message to our children that it's okay to poison wildlife. This is the message to get across to each person you talk to.



OTHER VERY IMPORTANT THINGS YOU CAN DO:

1. Contact the people you vote for and/or your local wildlife agency and let them know non-lethal prairie dog management is important to you. Go to <http://www.votesmart.org/> to find your legislators. Just enter your address or zip code in the top search bar and find out all of your elected officials with contact information.

2. Talk to your friends, family and community about prairie dogs:

- Over 200 species are associated with prairie dogs.
- Prairie dogs dig intricate burrow systems as deep as 20 feet.
- Prairie dogs are interconnected with nearly 200 vertebrate species in the complex prairie ecosystem.
- Prairie dogs' language is so sophisticated they can communicate people's sizes and shape to each other. They can also differentiate between both people and objects.
- Check out humanesociety.org/pdc for more information about prairie dogs.

And you can always make a donation to The Humane Society of the United States' Prairie Dog Coalition!

https://secure.humanesociety.org/site/Donation2?df_id=3201&3201.donation=form1

Donations will go towards:

- Promoting nonlethal alternatives to poisoning
- Seeking protections under federal environmental laws
- Educating the public about the importance of conservation
- Promoting relocations when and where available

Additional Links to help you:

Our Main Webpage: humanesociety.org/pdc

- http://www.humanesociety.org/about/departments/prairie_dog_coalition/index.html
- http://www.humanesociety.org/about/departments/prairie_dog_coalition/prairie-dog-relocation-groups.html#.UvEaHbQZPFg (List of relocaters- availability may vary)

PRAIRIE  DOG
— COALITION —



THE HUMANE SOCIETY
OF THE UNITED STATES