

NR6/125.13/2008/Spring
c.2

Colorado's Wildlife Company

COLORADO STATE PUBLICATIONS LIBRARY



3 1799 00147 5862



2008 SPRING COMPENDIUM OF WILDLIFE APPRECIATION



Dog

A Prairie Home
Companion
2008

A New Look at an Old Dog

by Mary Taylor Young



Three Dog Night

Colorado is home to three species of prairie dogs:

Black-Tailed Prairie Dog

Cynomys ludovicianus

The most abundant and widespread 'dog in Colorado, the blacktail is also the most familiar. Black-tailed prairie dogs inhabit open lands of eastern Colorado, from the Eastern Plains into the foothills. These highly-social animals live in large colonies, with a high level of interaction between individuals. The adults weigh from one to three pounds and measure 12.4 to 16 inches from nose to tip of tail. They have a plump, reddish-tan body and medium-length, black-tipped tail. They are active throughout the year, though they will stay underground for periods of inactivity during bad winter weather.

Gunnison's Prairie Dog

Cynomys gunnisoni

The smallest of Colorado's three 'dog species, Gunnison's prairie dogs are found in mountain parks and open, grassy areas of central and southwestern Colorado. They are much less social than blacktails and their colonies are only loosely organized. They don't clip tall plants around their colony and their burrows are sometimes dug under rocks and other features. They have a tan coat and gray-tipped tail, with dark fur on their cheeks, brow and the top of the head. Adults measure 11.8 to 15.3 inches long and weigh from one to three pounds. They hibernate in winter.

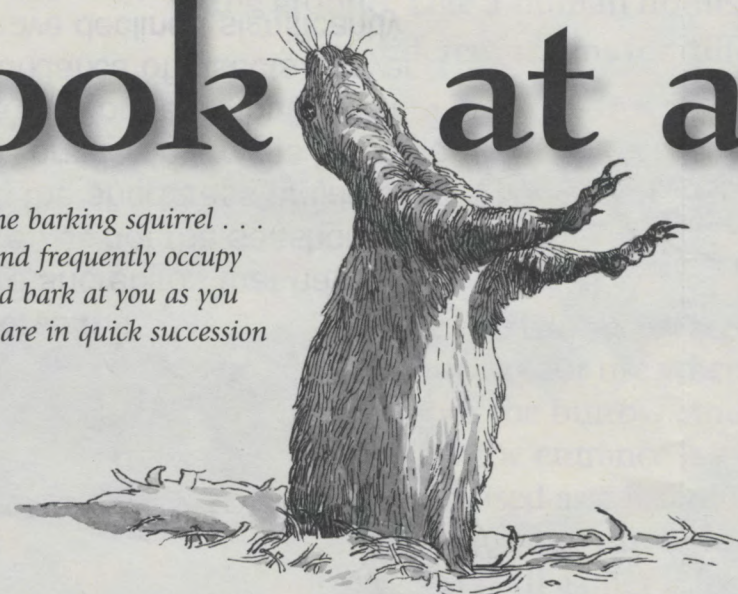
White-tailed Prairie Dog

Cynomys leucurus

Restricted to the northwestern part of the state, the white-tailed prairie dog has the smallest range in Colorado of the three species. Its colonies are more loosely-organized than those of black-tailed 'dogs, with less interaction between individuals. The whitetail's coat is whitish-gray to yellowish-buff, with distinctive dark brown to black patches on the head extending from the cheeks to above the eye. The species' common name comes from its short, white-tipped tail. Adults measure 12.4 to 15.75 inches from nose to tail and weigh 1.4 to 3.75 pounds. Some populations hibernate in winter.

The little animals found in the plains of the Missouri which I have called the barking squirrel . . . generally associate in large societies placing their burrows near each other and frequently occupy in this manner several hundred acres of land . . . They will generally set and bark at you as you approach them, their note being much that of the little toy dogs, their yelps are in quick succession and at each they give a motion to their tail upwards

Meriwether Lewis, July 1, 1806



Barking Squirrels

When Lewis and Clark explored the American West, they encountered many animals previously unknown to science. Among these was what Lewis called a "barking squirrel," the creature we know as the black-tailed prairie dog.

Prairie dogs are ground squirrels, cousins to chipmunks and marmots. They are well-adapted for life on the ground, and under it, with wide paws and sharp claws for digging into the prairie soil. Short, powerful legs allow them to scuttle down and along the tight confines of their burrows. Their eyes are set near the top of the skull, to aid in spotting predators that might come from the sky as well as the ground. This also allows them to hunker within the cover of their burrow entrance and still have a view of the world around. Prairie dogs feed on the leaves, flowers, seeds, shoots and roots of grasses and soft, flowering plants. Most of their day is spent foraging

and feeding. Like an army of range managers, their grazing changes and controls the growth of the plants within their community. Because a clear line of sight is so important, prairie dogs also clip any tall vegetation within their town. Keeping the grass clipped like a putting green encourages the growth of other plants, thereby increasing the diversity of plant species. The clipped vegetation also grows more vigorously when cut back. Studies have found that vegetation growing within a prairie dog town is higher in protein and nitrogen and favored for grazing by bison, pronghorn and elk.

It Takes A Village

A prairie dog town may look like a collection of critters milling around munching on grass but it's actually a highly-organized and sophisticated community. Each family group, known as a coterie, consists of a male, several females, and their young. The coterie occupies a burrow, and a collection of burrows makes up the prairie dog colony. The coterie members share food, play, groom each other, work together to dig and maintain burrows and have a sophisticated system of vocal communication, with different calls for danger, pleasure, anger and "all-clear."

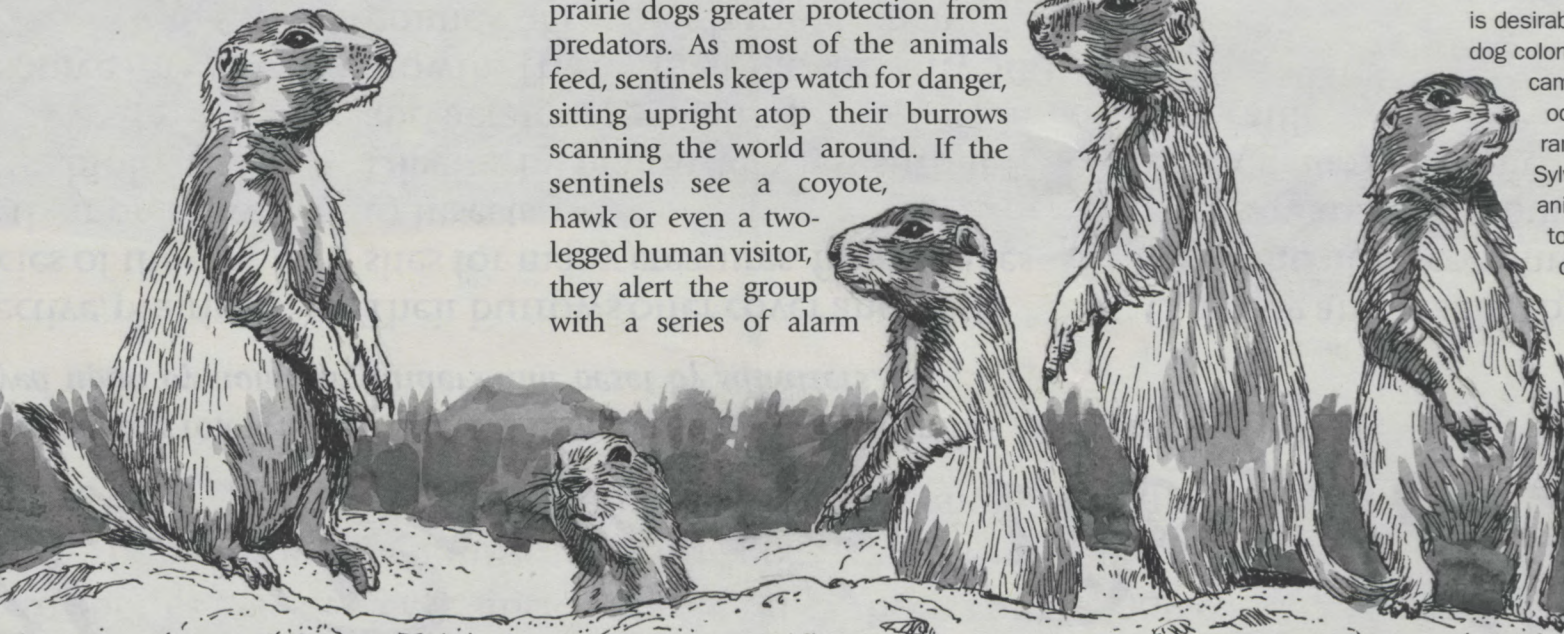
Living in a large group offers prairie dogs greater protection from predators. As most of the animals feed, sentinels keep watch for danger, sitting upright atop their burrows scanning the world around. If the sentinels see a coyote, hawk or even a two-legged human visitor, they alert the group with a series of alarm

chirps or barks. The call is taken up by the community, as up to half of the animals also begin barking. When the danger is gone, the sentries give an "all clear" call, tossing back their heads in what's called a "jump-yip."

Researcher John Hoogland of the University of Maryland has identified different alarm barks for different types of predators. The bark for four-legged creatures like coyotes differs from the bark for danger from the sky, like a hawk or owl.

'Dogs On the Decline

Visitors passing a busy prairie dog town might think there are plenty of prairie dogs out there. But the days of vast prairie dog communities are gone. Because prairie dogs occupy land that is desirable for farming and ranching, millions of acres of prairie dog colonies have been eliminated through intensive poisoning campaigns over the last 100 years. Today, prairie dogs occupy only an estimated 2-5 percent of their original range, much of this in small, fragmented colonies. Sylvatic plague, a non-native disease to which the animals have no resistance, frequently wipes out up to 100 percent of the animals in a colony. Human development further threatens prairie dog colonies. The decline of prairie dogs has affected many animals that depend on them to one degree or another.



Educator's Guide



Prairie dogs are an endearing and popular watchable wildlife species. People of all ages love to watch the plump ground squirrels scamper between their mounds, greet each other with "kisses" and munch on the grass. Their "towns" are just about everywhere and because prairie dogs are active during the day, even in winter, they are easy to observe. Most ecological concepts can be readily observed in the prairie dog ecosystem — predator/prey interactions, food chains and webs, niche, symbiotic relationships, and so on. Your students will have the opportunity to explore some of these concepts in this activity guide.

Colorado's Wildlife Company and this publication are both available at our Web site: www.wildlife.state.co.us/colo_wild_co/homepg/cwcindex.htm. Comments or suggestions for this publication can be sent to wendy.hanophy@state.co.us.

Enjoy!
Wendy Hanophy



Our Town — Doggone Good Theater

ART, DRAMA, LANGUAGE ARTS, SCIENCE

Our Town, the renowned play by Thornton Wilder, is a story that details the interactions between citizens of an everyday town in the early 20th century through their everyday lives. Like a human town or village, a prairie dog community has a broad cast of characters. Prairie dog colonies are busy places. After reading "A New Look at an Old Dog" and the Prairie Dog Ecosystem with students, ask students to list some of the interactions they might see between prairie dogs. Then ask students to list

the interactions they might see between all the animals that live in a prairie dog town.

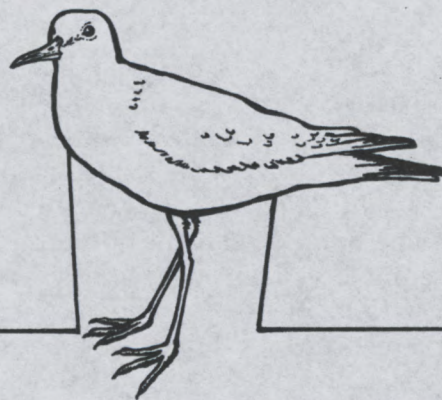
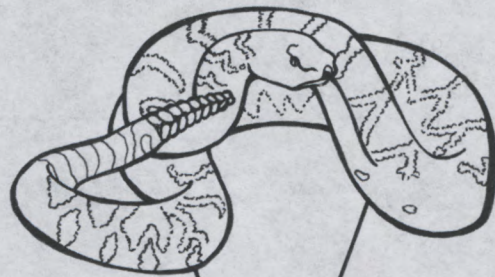
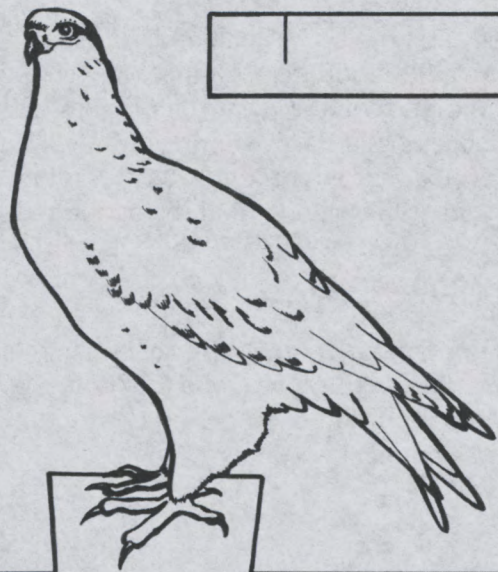
If possible, visit a prairie dog town with your students. They can be found throughout most of the state. Some colonies are located in vacant lots and open spaces on the fringes of urban areas — a few are even on school grounds! Have students write down their observations of prairie dog behavior to add to their lists.

Explain to students that in the play *Our Town*, the Stage Manager narrates

the goings on in the town of Grover's Corners. It will be the students' job to create and narrate a play that details life in their particular prairie dog ecosystem. Allow them to work in pairs or teams to create and perform their stories.

Photocopy the next two pages onto heavyweight paper for each student. Ask students to cut out and construct the town and animals for their theater production.





Dog Town News Classified Ads

LANGUAGE ARTS, SCIENCE

Prairie dog towns provide homes for many animals. Each animal requires a different kind of home. Help each animal find a place to live. Some of the ads may appeal to more than one animal. Which animals might answer each real estate ad?

Interested "buyers"

Golden Eagle

Burrowing Owl

Mountain Plover

Ferruginous Hawk

Swift Fox

Coyote

Pronghorn

Rattlesnake

Badger

Black-footed Ferret

Hilltop Estate

Large home constructed on ledge near top of butte. Overlooks miles of grassland. Safe, secluded, with room to raise a family.

Hillside Condo

Cozy hideaway built into hillside. Low ceilings, retains heat in winter, cool shade in summer. Single entrance. Good view of the surrounding community.

Great Deal!

Undeveloped Land — Great views! Miles and miles of grass! No trees.

Land Available

Mix of short vegetation and bare ground. Easy to excavate.

Apartment Complex

Over one dozen good-sized mounds with tunnels underground. Many entrances. Immediately available. Previous occupants have moved to new construction nearby. Dark 24/7. Protection from extreme weather.

TREETOP MANSION

Built from local sticks. Sturdy. Built to last.

The Prairie Dog Ecosystem

A prairie dog town is much like a community of hard-working villagers, preyed upon by nomadic raiders and beset by squatters.

From an ecological perspective, prairie dogs are a "keystone" species of the prairie ecosystem because their presence and activities foster a diverse biological community.

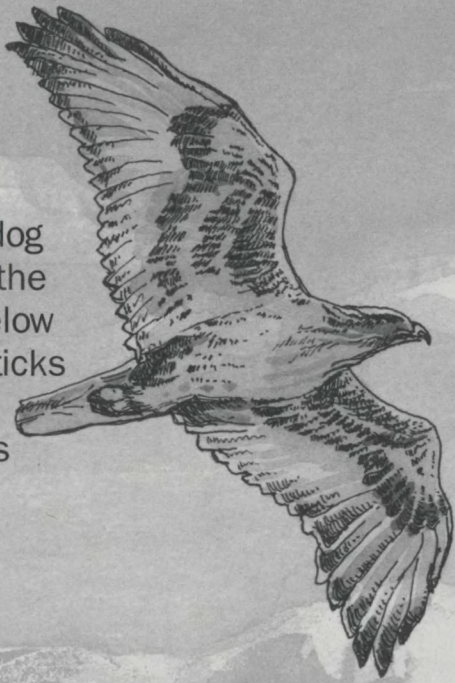
- Prairie dogs are a prey source for predators of all kinds.

- Their burrows offer cover and nest sites for many creatures, from snakes to insects.
- Digging by prairie dogs redistributes and aerates the soil, improving plant growth. The animals move nearly 500 pounds of soil per burrow when excavating holes.

- Clipping and grazing by prairie dogs alters the plant community and makes plants more nutritious for large grazing mammals such as pronghorn and cattle.

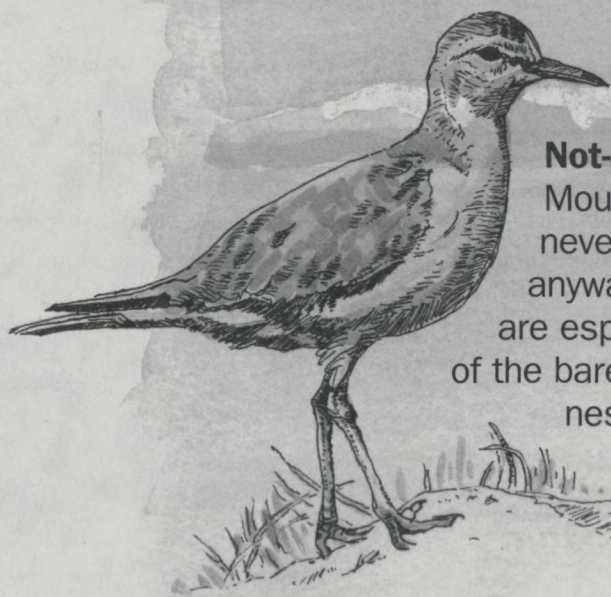
'Dog-Hunting Hawks

As birds of prey go, the ferruginous hawk is a prairie dog specialist. These large grassland hawks will linger on the ground at the entrance to a prairie dog burrow, just below the line of sight, waiting to grab any prairie dog that sticks up its head. Ferruginous hawks have been observed peering into burrows, poking their heads into the holes seeking prey.



Not-So-Near-the-Shorebirds

Mountain plovers are shorebirds that have never seen the shore . . . not the seashore, anyway. They nest on the shortgrass prairie and are especially partial to prairie dog towns because of the bare ground, where they prefer to build their nests, and the abundance of insects. Plover populations have declined significantly due to loss of prairie habitat.



Gone To the Dogs

Black-footed ferrets are true prairie dog-hunting specialists. They live in abandoned burrows within prairie dog towns. At night, they emerge to slip down the occupied burrows to kill the prairie dogs as they sleep. Nocturnal and secretive, black-footed ferrets were not discovered by the scientific community until the mid-nineteenth century, when populations were already declining. They were thought to be extinct until a colony was discovered in the 1970s in Wyoming. Biologists have been working for decades to bring this species back from the brink through captive breeding programs. Black-footed ferrets were released into white-tailed prairie dog colonies in northwestern Colorado beginning in 2001.



Little Ground Owls

In April and May, small owls that are more at home on the ground than in trees arrive in Colorado to take up residence in abandoned prairie dog burrows. Burrowing owls choose prairie dog towns not because they prey on the 'dogs (the owls mainly eat insects and small rodents) but because of the pre-dug nesting habitat and the prairie dog alarm system, which benefits the owls as well as the 'dogs. Burrowing owl numbers have gone down drastically with loss of native prairie and prairie dog communities. They are currently classified as a species of special concern.



Little Town Under the Prairie

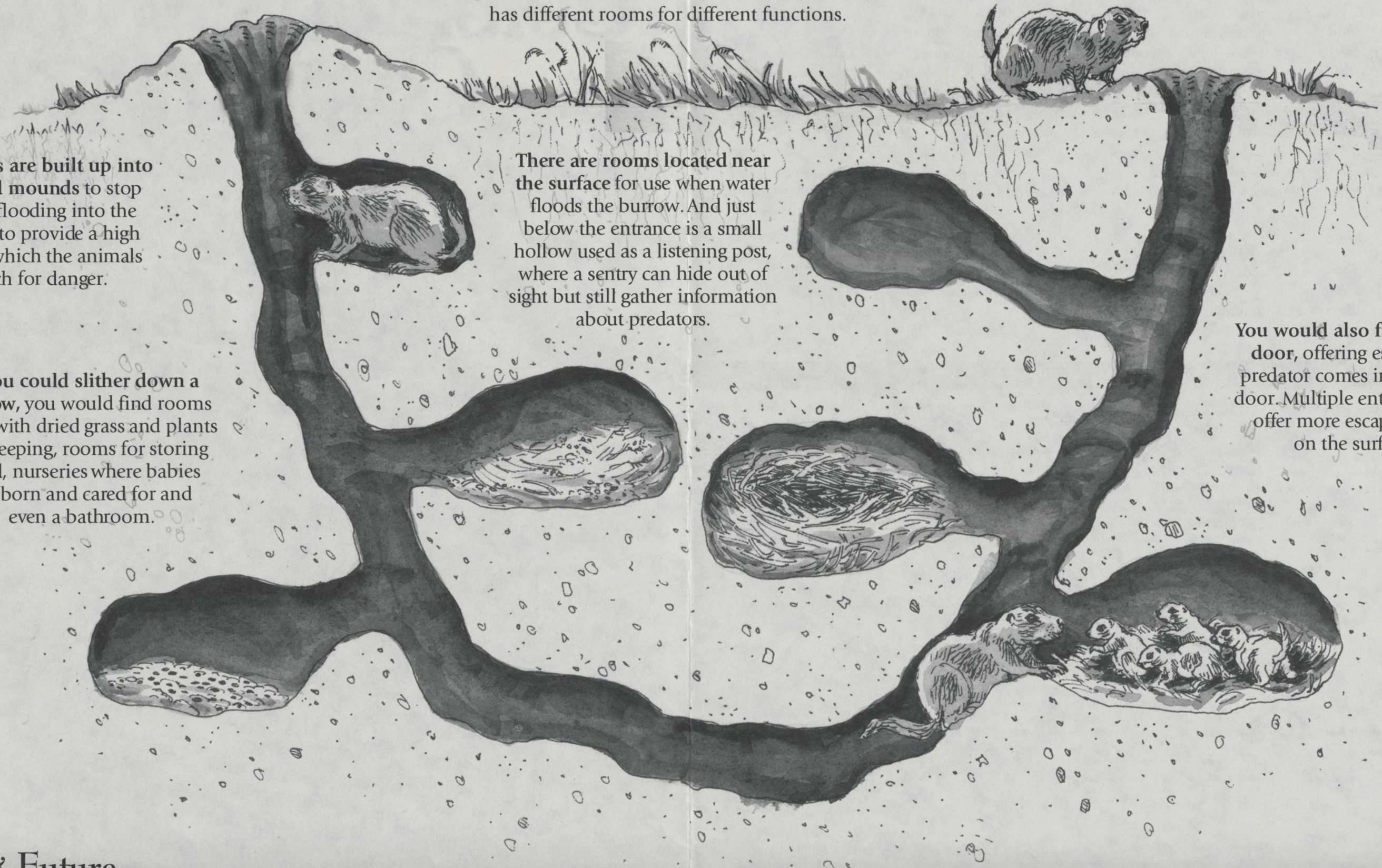
Much of the life of a prairie dog family takes place beneath the ground. Like a human home, a prairie dog burrow has different rooms for different functions.

The entrances are built up into cone-shaped mounds to stop water from flooding into the burrow and to provide a high point from which the animals can watch for danger.

If you could slither down a burrow, you would find rooms lined with dried grass and plants for sleeping, rooms for storing food, nurseries where babies are born and cared for and even a bathroom.

There are rooms located near the surface for use when water floods the burrow. And just below the entrance is a small hollow used as a listening post, where a sentry can hide out of sight but still gather information about predators.

You would also find a back door, offering escape if a predator comes in the front door. Multiple entrances also offer more escape routes on the surface.




Status & Future

The US Fish and Wildlife Service (USFWS) has ruled that the status of black-tailed prairie dogs and high elevation populations of Gunnison's prairie dogs warrants listing under the Endangered Species Act. However, since there are other species of

higher priority waiting to be listed, the USFWS has precluded listing both species. The white-tailed prairie dog was previously rejected for listing but in a February 2008 court case, the USFWS agreed to reconsider federal protection for the species.

DOW Working to Protect Grassland Species

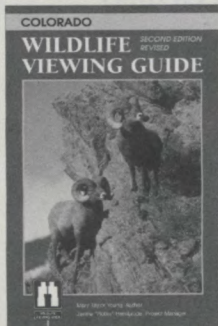


The Colorado Division of Wildlife has implemented a number of programs to conserve grassland wildlife. Good data provides the foundation for any conservation effort. DOW, with the support and cooperation of private landowners, is gathering information on the populations and distribution of prairie dogs in eastern Colorado as well as their impacts and interactions with other prairie species. Recent aerial surveys estimated 788,000 acres of land occupied by black-tailed prairie dogs in eastern Colorado, an increase in occupied habitat from 2002 surveys. The data showed that black-tailed prairie dogs still occupy all counties in which they were historically found and are thriving in areas with suitable habitat. The Conservation Plan for Grassland Species is a roadmap for conservation not only of black-tailed prairie dogs but other species of concern, including

burrowing owls, mountain plovers, swift foxes and ferruginous hawks. It focuses on using high quality science, partnerships with other groups and agencies and voluntary non-regulatory incentives for landowners. The plan uses an adaptive management approach to respond to changes and new information. The plan is available online at www.wildlife.state.co.us/WildlifeSpecies/GrasslandSpecies.

Various private landowner outreach programs work with landowners throughout the shortgrass prairie region of eastern Colorado. The goal is to balance long term viability of grassland habitats and species with the long-term economic viability of private landowners, who own or manage 80 percent of all lands in the Great Plains. To learn more, go to www.wildlife.state.co.us; click the Land/Water tab, then Private Land Programs.

WWW.WILDLIFE.STATE.CO.US



Discover more than **200 places to view wildlife throughout the state.**

Search by geographic locations or by species. Included are detailed descriptions of each site, color maps, and helpful viewing tips.

The *Colorado Wildlife*

Viewing Guide is available for only \$14.95 at retail booksellers or buy online at www.wildlife.state.co.us/wildlifeStore.



Small stamp. Big difference.

Wildlife loses thousands of acres of habitat every year. Your purchase of a Colorado Wildlife Habitat Stamp protects essential habitat areas, contributes to the Colorado Search and Rescue fund, and grants you access to beautiful State Wildlife Areas and State Trust Lands. The Habitat Stamp is only \$10.25 or \$5 when automatically purchased with a hunting or fishing license. Call 1-800-244-5613 or visit www.wildlife.state.co.us for more information.



Wildlife Watch Workshops

Become a better wildlife watcher by discovering when, where and how to responsibly watch wildlife. Fun half-day workshops offer the opportunity to sharpen your senses to sight and sounds, learn about wildlife habitats and how to use field guides. The programs are hands-on and followed by nature walks. Held statewide, small fee. Call 303-291-7258 for information or visit www.wildlife.state.co.us/viewing/workshops.

Permission granted for reproduction for educational and noncommercial uses only, with credit to writers, illustrators, *Colorado's Wildlife Company*, and the Colorado Division of Wildlife.

Printed on 75% recycled paper. Send letters to editor Mary Taylor Young at mary@marytayloryoung.com.

To request back issues contact Renée Herring, Colorado Division of Wildlife, 6060 Broadway, Denver, CO 80216; 303-291-7258.

STATE OF COLORADO
Bill Ritter, Governor
DEPARTMENT OF NATURAL RESOURCES
Harris Sherman, Executive Director



COLORADO DIVISION OF WILDLIFE
Tom Remington, Director
6060 Broadway
Denver, CO 80216



Return Service Requested

RECEIVED

JUL 23 2008

STATE PUBLICATIONS
Colorado State Library

PRSR STD
U.S. Postage
PAID
Denver, CO
Permit 1533