



Where the

# Prairie Dogs

Roam

Deep in the heart of national grassland, The HSUS helps resettle members of an embattled species

by RUTHANNE JOHNSON





**H**undreds of black-tailed prairie dogs sleep comfortably in their burrows this July morning—unaware that government scientists, conservationists, and HSUS employees are readying to steal through the dark and set live traps outside their holes.

The team leaves nothing to chance. Some prairie dogs will inevitably dig under the traps to snatch the grain sprinkled inside, so HSUS environmental scientist Lindsey Sterling Krank instructs their rescuers to foil the thievery by packing down the soil beneath and along the sides.

Her colleague, World Wildlife Fund-U.S. wildlife biologist Kristy Bly, chimes in, reminding everyone of the need to work quickly and quietly. The pair knows that any untrapped animals on this site in eastern Wyoming's Thunder Basin National Grassland

are otherwise destined for cruel deaths by poisoning; they're considered too close to a large tract of private property whose owner wants them gone. They also know that it's not just the survival of the prairie dogs hanging in the balance, but the future of black-footed ferrets, endangered animals who depend almost entirely on prairie dogs for food.

Thankfully for both species, the project is being led by a trio of scientists who live and breathe all things prairie dog. As experts in the field of prairie dog relocation, Bly and Sterling Krank have about 17 years of experience between them. Bly has established 50 new colonies from the ground up on rural, private lands, and Sterling Krank has moved dozens of colonies from urban environments. They're joined by Defenders of Wildlife environmental scientist Jonathan Proctor, a 16-year veteran of the fight to save prairie dogs.

Prairie dogs communicate through touch, smell, and a complex system of vocalizations.



It's their job to train U.S. Forest Service employees in humanely trapping the animals and setting up new homes so the work can continue long after they're gone. In the pre-dawn hour, everyone radiates nervous energy. They have less than one hour to set the traps so these shy early risers can venture outside their burrows to nibble the grain treats without fear of humans lurking nearby.

The workers fan out quietly to set the traps, a sense of urgency in their steps. Pencil-thin rays of light from their headlamps become moving specks on the ground. If all goes as planned, more than 500 prairie dogs will settle into new homes deeper in the heart of federally protected land—out of the poison's reach.

### STRUGGLING SPECIES

In directions she gives visitors to the Thunder Basin relocation project, Sterling Krank notes some unlikely landmarks on the landscape: a sign that says “horse,” a basketball hoop, a stand of cottonwood trees, an oil derrick pumping in the distance. Rolling mixed grasslands lift and lock horns with badland outcrops: buttes, mesas, and escarpments of sandstone, weathered by wind and rain. Below the soundtrack of meadowlark songs, cattle lows, and the occasional cry of a hawk, the prairie is profoundly quiet. Whiffs of manure boil up and blow away, superseded by the sweet scents of soil and sky. In this wide sweep of land at the edge of civilization, it seems unlikely that any animals would be in peril of poisoning, that somehow there's not enough room for all the prairie's species to share.

But that is indeed the narrative playing out on the Great Plains—though cold, hard statistics reveal the folly of this tale.

Prairie dog populations have plummeted by 95 percent after decades of persecution, habitat loss, and even capture for the pet trade. Sylvatic plague is a particularly devastating threat; introduced into the U.S. around the turn of the 20th century, the disease spreads from fleas and can wipe out an entire colony in just a few days. In Thunder Basin alone, outbreaks have caused the area colonized by prairie dogs to plunge from 21,456 acres in 2001 to about 4,000 acres in 2010.

Once prevalent across the Great Plains, the five species of prairie dogs now occupy just 2 to 8 percent of their historic ranges, and many scientists believe that without serious conservation efforts, they may soon disappear.

The effects of the decline in these keystone species have rippled across the prairie. As coral reefs are to marine life, so are prairie dog colonies to grassland flora and fauna. These dynamic communities draw life into their circle. At least nine species depend on prairie dogs for food and shelter, while another 200 are associated in some way with prairie dogs and the habitat they create.

Burrowing owls use their intricate tunnels to take shelter and raise young; ferruginous hawks and swift foxes prey on them; and mountain plovers nest in the low-vegetation areas left behind as the dogs munch grasses down to a stubble.

Where colonies have disappeared, numerous grassland species have declined. Proctor of Defenders of Wildlife remembers visiting Thunder Basin in 1999 to show a reporter the importance of black-tailed prairie dogs in the ecosystem. At the time, it was one of the largest remaining complexes on federal land, with prairie dogs as far as the eye could see. “It was beautiful,” he says. “... This entire area was a city of wildlife—dozens of hawks flying overhead, herds of



### MASTER GARDENERS

As bulldozers and ardent grazers, prairie dogs aerate and enrich their habitats.



pronghorn, and lots and lots of black-tailed prairie dog colonies.” Surveying the same area today with binoculars, he can only lament the emptiness.

### RETHINKING THE PUZZLE OF THE PRAIRIE

The loss of prairie dogs isn’t just a blow to wildlife lovers like Proctor; it’s a matter of life and death for black-footed ferrets, mostly solitary animals who need vast areas of their main prey’s habitat to survive. With the collapse of prairie dog populations, their numbers had plummeted so low by the late 1970s that the U.S. Fish and Wildlife Service presumed them extinct. Then in 1981, a small population of 129 ferrets was discovered in Meeteetse, Wyo. But four years later, canine distemper—and probably plague—killed all but 18. To save the species, the government trapped the remaining ferrets for a captive breeding program aimed at raising more of them for release into the wild. The fragile population has slowly increased; as of fall 2008, scientists estimated the total wild population at 800 to 1,000 individuals.

Despite the tentative outlook for these animals, some private landowners in the Great Plains want to keep eliminating prairie dogs. Ranchers complain about health risks from plague and competition with their cattle for forage. They often poison or shoot prairie dogs on their properties; some consider the animals a com-

modity and charge “varmint” hunters a fee for shooting contests on their land.

It was amid this politically charged environment of endangered species and economic pressures that Forest Service employees, led by deputy district ranger Misty Hays, decided a plan was needed to sort through the competing interests. Mary Peterson, who later blessed the new strategy as Thunder Basin’s forest supervisor, says the goal was to manage the area’s wildlife in a more holistic manner.

“The grassland ecosystem of the Great Plains has been one of the most changed ecosystems probably of anywhere in the world,” says Peterson, now retired. “Native habitats were being converted to nonnative species, in farms generally. A lot of the rivers had been dammed to prevent flooding or for power generation. ... As we planted more trees on the Great Plains, we also created a way for Eastern and Western species to move across the barriers of the Great Plains.” Chemicals, pesticides, and mining pose further threats.

“With all of this,” she adds, “you could see how there would be species on the edge.”

Under Hays’ direction, the Forest Service began applying dust around the colonies to kill plague-carrying fleas. Since prairie dogs prefer low grasses to better detect predators, the agency began setting controlled fires to encourage them to move into new territories, at the same time letting grass grow tall around potential conflict zones.

Among the prairie dog’s cohorts are some of the rarest animals in North America. Dependent on prairie dogs for food and shelter, these species are in decline in large part due to the persecution of their hosts.



Burrowing Owls



Black-footed Ferret



Swift Foxes

PREVIOUS SPREAD: THE HUSK; OPPOSITE PAGE: ROBERTA OLENIK/PHOTOLIBRARY; THIS PAGE: OWLS AND FERRET: DAVESHOWALTER; FOX: JIM BRANDENBURG/WINDEN PICTURES

The Forest Service also banned prairie dog shooting in the area designated for ferret release. Poisoning, officials decided, was to be undertaken only under limited circumstances, such as a threat to public health or safety.

The first test of the new management plan came after a local resident approached the Forest Service last year about removing two colonies on Thunder Basin land near his property. Officials wanted to pursue nonlethal strategies. Relocation topped their list, but they had no experience moving prairie dogs.

At a ferret recovery meeting in Colorado in early 2010, The HSUS's Sterling Krank asked if the agency had considered such an option, says Forest Service wildlife biologist Cristi Painter, who helped develop the new management plan. "We said, 'We've thought about it, but we don't have enough money,' " recalls Painter. "We don't have enough equipment. We don't have enough help. And we don't know how to do it."

As director of the Prairie Dog Coalition, which became a pro-

gram of The HSUS in late 2009, Sterling Krank quickly rallied troops from The HSUS and other conservation groups—Defenders of Wildlife, World Wildlife Fund-U.S., and Biodiversity Conservation Alliance. "We all started talking to each other and the whole thing started to swirl," Painter says. The HSUS became a major player in the endeavor, providing equipment and supplies, funding, and on-site training for the Forest Service.

### WORKING LIKE A PRAIRIE DOG

Relocating prairie dogs is no easy task, even for the experts. It involves more than just showing up with a bunch of traps on moving day—and not just because of the copious government paperwork required to bless the first relocation to date on national grasslands. The animals live in an elaborate system of tunnels that can run 16 feet deep, and they rarely venture far from home. If trouble comes while outside the burrow, they duck inside to the safety of a listening chamber near the entrance, where they stay until the coast is clear.

They also rely on warning chirps of sentinels who keep watch atop nearby mounds.

To desensitize the wary animals to the traps, Bly and Sterling Krank arrived in Wyoming about a week before the first moving day and filled the devices with grain, setting them out locked in the open position. Forest Service employees erected an electric fence around the two removal sites to prevent cattle from snacking on the grain.

The pair also traveled to the release sites to map out vacant colonies that were relatively close to an active one, as relocated dogs are more likely to stay in their new homes if there are friendly neighbors chirping nearby. At three of the sites, they dug out old burrow entrances, used an auger to enlarge accessible parts of the tunnels, and created roomy nest chambers below.

They also mowed the grass around each hole so the prairie dogs could see surrounding burrows, and they placed acclimation cages atop the burrows to prevent the animals from bolting for the open prairie, where they would make easy marks for predators. Because the prairie dogs could attempt to leave the release site to find missing family members, the pair showed Forest Service employees the complicated system of lettering and color coding used to keep family groups intact during the move.

On the eve of the first day of relocation, having worked sweaty 10- to 14-hour days preparing the trap and release sites, Bly, Sterling Krank, and Proctor returned to the old hunter's cabin where they were staying. Owned by the same ranchers who want the



The U.S. Forest Service's Misty Hays helps Kristy Bly (World Wildlife Fund-U.S.), Jonathan Proctor (Defenders of Wildlife), and Lindsey Sterling Krank (The HSUS) transfer prairie dogs into their acclimation cages.





Thanks to an unprecedented collaboration between the Forest Service, The HSUS, and other private organizations, these and more than 500 other prairie dogs on Thunder Basin National Grassland are safe from horrific deaths by slow bleeding. Rozol, the poison typically used by private landowners to kill prairie dogs, can also kill animals who feed on their carcasses or share their burrows.

prairie dogs gone, the cabin once regularly hosted recreational shooters who killed the animals for fun, until plague killed most of them on the property. Amidst hunting ephemera—rusty leghold traps hanging from the wall, an old gun rack, and a taxidermied bear standing lifeless in a corner—the team discussed the day’s events and what still needed to be done before crawling into bed.

### READY, SET, RELOCATE

It’s moving day, and the traps are set. As the sun’s first rays peek above the horizon, the team members stealthily pile into their trucks and drive the short distance to the prairie dogs’ new home—a large tract of grassland rich with western wheatgrass, buffalo grass, switchgrass, and prickly pear. Although prairie dogs are hardy creatures who survive on the harsh prairie by deriving sustenance and moisture from native vegetation, they are vulnerable, even fragile, when pulled from their environment. To keep them comfortable during the move, the team adds fresh carrots and frozen peas and corn into each acclimation cage and secures tarps on top for shade.

Back at the trap site, the workers begin collecting the prairie-dog-laden cages. Respectful of the animals’ angst, they remain quiet while gently loading the prairie dogs into the transport truck. A few prairie dogs call out and slam into the sides of the cages, but they quickly calm when towels are placed overhead. One by one, the occupied traps are collected, and the team slowly drives their precious cargo the short distance to the release site.

The release runs smoothly, even as the temperature climbs. Almost immediately, the team notices loose piles of soil in some of the holes—evidence of something called backfilling. “They often work as a team to clear the burrow of dirt. They are earth movers,” Sterling Krank explains. “When the first prairie dog in the hole digs, he pushes the dirt behind him. The second dog pushes the dirt behind until the dirt is pushed outside of the hole.” It’s a good sign that the prairie dogs will soon find the previous burrow system and

begin settling into their new digs.

During the following days of trapping and releasing, the team is pleased to see more and more prairie dogs standing atop freshly dug holes, busily checking out their new surroundings. Sterling Krank sees their little heads stretching up as they chirp and “jump yip”—a call often used to spread the news that a predator has left the area. “Hello, potatoes!” she calls out just as two prairie dogs pop up from one of the holes.

Proctor is hopeful as he gazes over the landscape. “In places where they have done prairie dog reintroductions, burrowing owls have been there within weeks,” he says. “All sorts of wildlife use prairie dog colonies as habitat—grasshopper mice, tiger salamanders, horned larks. Even sage grouse will use colonies as their mating grounds.”

As the first stage of the project winds down, the team drives to a high point above the prairie. Returning from a previous trip to the overlook, they’d whooped and hollered upon spotting a large active colony nearby. Now, as they examine a weathered sandstone pedestal, they find even more reasons to celebrate: evidence of raptors who’d fed on the area’s previous population of prairie dogs. Sterling Krank gathers the items—a decaying jawbone, an owl pellet, some nesting material—into a plastic bag, planning to use them as props for classes she helps teach about prairie dogs. “Finding special items like this reminds me how strong and beautiful nature really is,” she says. “How despite all the hardships that fall on animals, there is hope.”

It was a moment that crystallized why the team had endured blistered hands, sore muscles, and empty stomachs to build the prairie dogs their Shangri-la. In the weeks to come, the Forest Service employees would use the techniques they’d learned to continue the trapping, even expanding the release area to a seventh site. The saving of the prairie’s animals—the healing of a broken landscape—had begun. ■