Doggone!

Prairie dogs have been eliminated from more than 95 percent of their grassland habitat. And now they, and the vast and complicated ecosystems they sustain, face a new and deadly threat.

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The "City of Russell Springs," Kansas, a seven-hour drive west of Kansas City, is not a major tourist destination. No store. No phone. No cell service. Population: 29. You bring your own food, and you bunk at the city's single hotel—the Logan House, built in 1887; no management on site; \$50 a night; leave your check on the desk.

Stroll outside the city limits, and you can see for 10 miles on all compass points. This wet August the landscape is mostly green and, save for the odd, distant grain elevator, seemingly undefiled by humans. The only sounds impart a sense of peace—the rustle of cottonwoods, the buzz of cicadas, the occasional banter of crows. But a war is raging between locals on one side and wildlife, environmentalists, and the feds on the other.

This is privately owned farm and ranch country, where the Farm Bureau and the three-man, elected Logan County Commission rule—the Farm Bureau purely with rhetoric, the commission by promulgating and attempting to enforce regulations of dubious legal standing eminently challengeable in court. These entities encourage the notion, popular in these parts, that government should not impose on a rancher's life except to issue him checks for farm assistance and that property rights are sacrosanct except when the rancher wants to impose on the lives of his neighbors. Here, as in most of their range, black-tailed prairie dogs are reviled because they're thought (often wrongly) to compete with cattle for grass. While they eat very little grass, they clip a lot so they can see predators. But sometimes where cattle are frequently rotated to new pasture, prairie dogs benefit them because the plants that grow around the dog towns are especially nutritious. That's why cattle often gravitate to dog towns in spring and summer.

Prairie dogs are ground squirrels that sound and act like dogs. They bark, sit erect, wag their tails, wrestle like puppies, and exchange "kisses" with jaws agape. Throughout the West about 95 percent of the black-tailed prairie dogs—the most widely distributed of the five species—have been eliminated by land use change, poison, shooting, and bubonic or "sylvatic"—meaning found in the wild—plague, probably introduced by stowaway rats from Asia circa 1899 and now spreading through the West. Accordingly, the U.S. Fish and Wildlife Service proclaimed in 1998 that the black-tailed prairie dog warranted listing as threatened. But two years later it ruled that listing was "warranted but precluded"—bureaucratese for, "Yeah, we should do it, but we're too busy." Rousted by court order, the service is currently conducting a "status review" to see if listing is necessary. While actual extinction seems unlikely, that's the common goal in the West. "I think you have to try to kill them all," said rancher and Logan County Commission chairman Carl Uhrich when I interviewed him at his house just south of Oakley. "It's just like if you got termites in your house. Do you just kill part of them? Or do you clean them all out?"

But when you clean out prairie dogs you clean out lots of other wildlife. As prey they feed all manner of mammalian and avian carnivores and scavengers, and as burrowers they aerate soil and provide shelter for reptiles, amphibians, burrowing owls, rabbits, and rodents. At least 150 vertebrate species benefit from prairie dogs—about 30 of which depend on them to varying extents, including the endangered black-footed ferret, which can't exist without them and whose wild population (in spring, before kits are born) is about 500. Black-footed ferrets had been presumed extinct until September 1981, when they were rediscovered in Meeteetse, Wyoming, by an investigator named Shep, who toted a dead one back to a ranch house. Shep was a dog. Because the population wasn't doing well, the Wyoming Game and Fish Department and the U.S. Fish and Wildlife Service

evacuated all animals in order to breed them in captivity, and I went out to file a report for Audubon. I hadn't expected them to be so beautiful or so small. They popped out of their artificial prairie dog burrows and fixed me with bright, alert eyes. Much of the environmental community, myself included, passionately opposed removing black-footed ferrets from the wild. And if the biologists had followed our advice (see my "The Final Ferret Fiasco," May 1986), black-footed ferrets would be extinct.

The irrational hatred of prairie dogs is particularly evident in the "varminters," who speak reverently of "IVG" (instant visual gratification), experienced when their high-powered bullets make prairie dogs explode in "red mist." "Red-Mist Society" T-shirts were popular in 1992 when, on another Audubon assignment, I observed a prairie dog shoot in South Dakota, where a bill was later introduced to rename the prairie dog the "prairie rat." Rich Grable—better known as "Mr. Dog"—rested his .222 rifle on a foam pad taped to the base of his truck window and partly melted by barrel heat. Crack. He cut a target in half, sending hindquarters spinning. "Dead," he declared, punching his dashboard-mounted kill counter. Babies, standing beside burrows with paws on their siblings' shoulders, exploded in red mist. Once Grable killed five with a single shot. "Can ya hear it go plop?" he cackled. "Dissolved him! Ha. Ha." Whenever a target dragged itself back into its burrow, minus major body parts, Mr. Dog would shout: "I done somethin' to him." According to his shooting journal, he'd killed 7,652 the previous year.

That mindset hadn't changed on August 18, 2009, when I visited Gene Bertrand at his cattle ranch in Wallace, Kansas. Bertrand spoke proudly of the wild turkeys I'd seen behind his house, and he told me about all the species that depend on prairie dogs and how some of them are disappearing. But even prairie dog advocates aren't opposed to hosting varminters at \$150 per person, per day. "We had a nice hunting business up until a year ago," he said. "We averaged \$25,000 a year; that's about what I get per acre with cattle. We used to see 30 or 40 ferruginous hawks a day; they learned to come to the sound of the guns."

That wasn't great for the hawks because the prairie dogs varminters leave to rot on the ground are frequently impregnated with lead splinters, poisoning anything that eats them. For four years Ron Klataske, director of Audubon of Kansas, has been offering varminters nontoxic copper ammo at the cost of slightly cheaper lead bullets. He's had no takers.

Shooters can only thin dog towns, not eliminate them. But a weapon of mass destruction has recently been deployed on prairie dogs. It's Rozol, an anticoagulant that causes uncontrolled bleeding in anything that ingests it. Rozol was registered for black-tailed prairie dogs by George W. Bush's EPA in Colorado, Kansas, Nebraska, Oklahoma, Texas, and Wyoming and, in May 2009, by Barack Obama's EPA in the remaining five states where black-tailed prairie dogs exist—Arizona, Montana, New Mexico, South Dakota, and North Dakota. (A similar anticoagulant, Kaput, has also been registered in Colorado, Nebraska, Wyoming, Texas, and Kansas, but it's not in wide use, perhaps because it's newer.) Three Ph.D. scientists from the EPA's Environmental Fate and Effects Division were ignored when they warned their superiors that Rozol has "considerable potential for both primary and secondary risks to birds and nontarget mammals and possibly reptiles." (As Audubon went to press, Defenders of Wildlife and Audubon of Kansas sued the EPA over its decision about the use of Rozol on prairie dogs.)

Zinc phosphide, the previous poison of choice, kills few nontarget species. It's effective, fast-acting, cheap, and readily available. But prairie dogs find it bitter, so to condition them to eating, you have to "pre-bait" with untreated grain. The advantage of Rozol is that prairie dogs don't mind the taste, so you can skip pre-baiting. According to the label, you must place Rozol-treated bait only in burrows, which isn't always done. And you must return and bury the carcasses, something few if any ranchers would do and which is impossible anyway because Rozol can take up to 20 days to kill, during which time prairie dogs leave their burrows, slowly bleed from every orifice, and stumble around, magnets for all predators and scavengers.

Ferruginous hawks, golden eagles, bald eagles, owls, magpies, turkey vultures, badgers, swift foxes, coyotes, raccoons, and grain eaters like wild turkeys and red-winged blackbirds have been turning up dead around Rozol treatment sites, and while some carcasses have yet to be tested, lethal concentrations of Rozol are being found in ones that have been.

The Fish and Wildlife Service is outraged. Pete Gober, the biologist in charge of black-footed ferret recovery, says this: "For every dead animal you find on the ground there might be 100 you don't find because nature cleans them up so quickly. We've hammered EPA with our concerns about Rozol and about permitting it without ever consulting us on endangered species impacts [as required by Section 7 of the Endangered Species Act until the George W. Bush administration changed the rule, possibly illegally]. And EPA just blows us off."

On August 19, 2008, the Western Association of Fish and Wildlife Agencies (WAFWA), representing 23 states and Canadian provinces from Alaska to Texas and Saskatchewan to Hawaii, wrote the EPA's director of pesticide programs, Debbie Edwards, urging her to fully consult about Rozol as required by law and, meanwhile, to rescind all existing permits because of the gross secondary poisoning potential. WAFWA never received a response. So on March 24, 2009, Bill Van Pelt, WAFWA's grasslands coordinator, wrote John Herbert, head of the EPA's Insecticide-Rodenticide Branch, documenting secondary poisoning of birds. And he attached the unanswered August 19, 2008, letter to Edwards. Van Pelt never received a response. Then, last May 13, Herbert signed the expanded Rozol permit.

Occasionally a rancher cherishes and cultivates prairie dogs and the wildlife they support, thereby becoming a pariah. Four examples are Larry Haverfield, his wife, Bette, and their neighbors Gordon Barnhardt and his wife, Martha, who own ranchland six miles south of Russell Springs. "It's not prairie dogs alone that we like; it's the whole ecosystem that depends on them," Gordon Barnhardt told me. "All kinds of amphibians and reptiles winter down those holes. Prairie dogs do kill grass, but over the long term they dig holes, which serve as water channels. And they bring up fresh dirt, which stimulates growth of grasses and forbs. There is no other critter that does so much to benefit other species. The Fish and Wildlife Service said black-tailed prairie dogs deserve to be listed, but we're not going to do it. Now what the hell does that mean? To me it was a coded message to all the redneck ranchers to get those bastards poisoned now before we have to declare them threatened."

In gathering twilight I wandered through a dog town while two border collies raced around me and photographer Matt Slaby shot photos of the Haverfields. Save for the twinkle in their eyes and missing pitchfork, they'd have passed for "American Gothic." Later they invited me into their house to view photos of local swift foxes and of Larry holding a dead golden eagle, which may have been killed by county-applied Rozol. He'd found it last March on the Barnhardts' property (which he now leases). On the wall was a poster depicting the ranch product the Haverfields and Barnhardts are proudest of under the caption: "Wanted Alive: Black-footed ferrets."

Increasingly, ranchers find themselves on chemical treadmills. "When you kill off the prairie dogs you kill off their predators," said Larry. "So after the prairie dogs get going again there's nothing to control them except poison." I asked him if prairie dogs hurt his cattle. "No," he said. "In fact, we think they're healthier with prairie dogs. We went to rotation grazing school in 1986, and we're sold on it. It's the only way you can come close to imitating what the buffalo did."

In 2005 Haverfield elicited gasps of anger and disbelief when, at a county commission meeting to coordinate an all-out chemical offensive against prairie dogs, he rose to express his fondness for them and the wildlife they sustain. "The local paper reported '99 against one,' " he recalls. "And I was proud of that."

Shortly thereafter Barnhardt and Haverfield invited Audubon of Kansas's Ron Klataske over to check out their dog towns. Klataske, a trained wildlife biologist who had served on the black-footed ferret recovery team, was blown

away. No black-footed ferrets had been seen in Kansas since December 31, 1957. But here, finally, were dog towns large enough and healthy enough to support them. With Klataske's help the Haverfields and Barnhardts wrote a letter to the Fish and Wildlife Service, inviting it to assess their property for black-footed ferret reintroduction. The service deemed the site promising; as an added benefit, that part of Kansas was free of plague.

The furor over coddling prairie dogs was mild compared with the furor over the planned reintroduction of an endangered species. "We asked the Fish and Wildlife Service not to bring ferrets in here," says county commissioner Uhrich, who likes to wear a hat advertising Rozol when wildlife advocates are present. "And they brought them in anyway. First thing we knew they turned them loose. Ranchers don't like having an endangered species because they bring all the federal rules with them. We [the commission] passed a resolution and the Fish and Wildlife Service just ignored it, said federal law overruled local law. I said, 'Well, you can take your ferrets and go home then.' "The resolution, legally meaningless, wrongly calls the black-footed ferret "not indigenous" and proclaims "that no person or agency shall bring into Logan County one or more black-footed ferret or any one or more of any other species which is considered . . . an endangered species, a threatened species, or a sensitive species."

The impending invasion of feds and ferrets sent the county commission and the Farm Bureau into frontal-assault mode. Throughout Kansas—even 100 miles east of prairie dog range—the Farm Bureau played Music Man to gullible ranchers, whipping them to a froth of paranoia with tales of how scheming D.C. bureaucrats would be using the Endangered Species Act to seize control of their property. In 2005 the commission issued prairie-dog eradication orders, citing a century-old Kansas statute that authorizes county officials to enter private property "infested" with prairie dogs, "exterminate" them, then send the bill to the landowner. If Haverfield and Barnhardt could be bullied into poisoning off their prairie dogs, the feds would have no place to put their ferrets.

But Haverfield and Barnhardt aren't easily bullied. In 2006 the commission began treating the Barnhardt property with Rozol. It's illegal to apply Rozol near cattle, so Haverfield moved his cattle into the treatment area, thereby forcing the exterminator to withdraw. But the exterminator had illegally spread Rozol on the ground rather than just in the holes and therefore got hit with a \$2,800 fine from the state Department of Agriculture, a fine he has yet to pay. When Haverfield defied a county order to remove his cattle the county returned on a Friday after working hours, a standard method of preventing a court injunction, and applied Phostoxin—a poison gas permissible around cattle but which kills prairie dogs in their burrows along with everything else that uses them, such as snakes, box turtles, badgers, swift foxes, and burrowing owls. On September 10, 2007, Haverfield and Barnhardt stopped the gas attack and all future county poisoning inside the barrier with a court injunction. The county exterminator vacated the property, leaving it littered with plastic bags of sand he'd placed over the burrows to contain the gas. Then, on November 19—the day Haverfield drove to Topeka to attend a trial that ultimately extended the injunction against the county—the county returned and applied Rozol.

It's not as if Haverfield and Barnhardt aren't making an effective effort to be good neighbors by containing their prairie dogs. In 2006 and 2007, for example, Haverfield spent \$20,000 poisoning the perimeters of his property, Barnhardt's property, and other land he leases. He invited in varminters at no charge (and started wearing blaze-orange shirts to avoid being shot). He built 25 miles of cow-proof electric fence 30 yards in from his permanent fence to create a "vegetative barrier," which prairie dogs are loath to cross because it blocks their view of predators. In addition, Audubon of Kansas is constructing 10 miles of chickenwire barrier with a low electric fence that repels prairie dogs. Although Haverfield and Barnhardt successfully sued the state and county to prevent them from poisoning their land with Phostoxin, the judge ruled that the county could poison the whole barrier. None of this has been enough for most of the neighbors, who spew invective to the press but whose lawsuit against Haverfield and Barnhardt for allowing prairie dog proliferation has been thrown out of court.

In their crusade to nix ferret reintroduction, the county and the Farm Bureau hissed into the ears of the conservative Kansas congressional delegation, which hissed into the ears of the conservative Bush administration. Then, when the Fish and Wildlife Service hatched its draft environmental impact statement, the document vanished into a black hole for more than a year. Finally, in November 2007, it appeared in The Federal Register; a month later 14 ferrets (the first of about 50) were released on the Haverfield-Barnhardt complex. Twenty-four more have been released on nearby property owned by The Nature Conservancy (TNC).

The following July, when green forage was plentiful and poison bait therefore ineffective, the county poisoned the vegetative barrier with zinc phosphide, despite warnings from the Fish and Wildlife Service that it wouldn't work and despite the fact that the agency had scheduled the Animal and Plant Health Inspection Service (APHIS) to poison the barrier with zinc phosphide in August, when it would work. "Clearly, the county wanted to punish the Haverfields and Barnhardts by sticking them with a bill," says Klataske. Then, in the winter of 2008, the county stuck them with another bill by poisoning the barrier yet again, this time with Rozol.

In January 2009, when the county, assuming the injunction no longer applied, announced that it would poison the Barnhardt property inside the barrier, the Fish and Wildlife Service threw in the towel and prepared to evacuate its ferrets. But the attorney representing the Haverfields and Barnhardts—Randy Rathbun of Wichita—saved the ferret project by getting the judge to inform the county that it was still under court order.

So there I was on the Haverfield-Barnhardt grasslands with Ron Klataske and 35 other volunteers to help the Fish and Wildlife Service see how the first black-footed ferrets to abide in Kansas for half a century were doing. We cruised assigned sections in trucks, sweeping dog towns with roof-mounted searchlights, looking for green eyes. Jack rabbits and cottontails paused, preened, and sped away through purple three-awn grass. Burrowing owls stared at us and buzzed off like moths, still visible in the brilliant starlight after they'd cut through the searchlight beam. The first night the survey team captured only one ferret (on the TNC property), a sick juvenile. So feeble was it that TNC's Rob Manes captured it with his jacket. A team then injected it with canine distemper vaccine and penicillin, and released it. "Scary, dismal," declared Klataske, assessing the count. "I think some of the ferrets have been killed by Rozol. The Fish and Wildlife Service [to appease the neighbors] has had APHIS poison the surrounding 4,500 acres, almost exclusively with Rozol."

But survey results improved. In the next four nights the group counted 26 more ferrets, seven of which it trapped, inoculated, and released.

The county commission's nature came into sharper focus for me after I'd visited Gene Bertrand, less able than Haverfield and Barnhardt to stand up to bullying in that he suffers from macular degeneration and is on supplemental oxygen for pulmonary disease. In assessing potential ferret release sites the Fish and Wildlife Service had placed his ranch second in the state, after the Haverfield-Barnhardt complex and ahead of the TNC property. Loving wildlife as he does, Bertrand was eager to host ferrets. But Uhrich got in his face with warnings about the lawsuits he could be hit with if he continued to coddle prairie dogs. Bertrand had sworn off Rozol after his coyotes had turned up dead, but on my arrival a hired hand had informed me that for the last two years the ranch had been blitzed with Rozol. That's why his varminter business dried up. After our interview I checked out the rangeland where the ferruginous hawks used to chow down on prairie dog carcasses left by the varminters. I couldn't find a single burrow.

Were it not for the advent of Rozol and the EPA's stubborn refusal to recall it or even consult with the Fish and Wildlife Service about its danger to listed species, the news about prairie dogs might be less grim. Attitudes are changing slowly. Arizona, the one state that successfully extirpated black-tailed prairie dogs, began reintroducing them in October 2008. WAFWA's Bill Van Pelt, a biologist with the Arizona Game and Fish Department, reports "a full spectrum of reaction" from ranchers. "But some are fully supportive," he says. "Attesting to this is that our

reintroduction is happening on BLM land, and it was actually requested by the rancher who had the grazing permit. There's progress. Oklahoma, for example, has an incentive program that rewards ranchers for hosting prairie dogs; six percent of their prairie dog acreage is in conservation agreements with landowners." WAFWA's 10-year objective was to maintain current acreage occupied by black-tailed prairie dogs and to increase it to 1,693,695 acres by 2011. But already, occupied range is put at 2,286,492 acres.

What needs to happen for this progress to continue and accelerate and for the black-footed ferret to remain on the planet is for Obama's EPA to ban Rozol and similar biocides for prairie-dog control. That doesn't seem like much of a hardship for ranchers who have a cheap, safe, effective alternative in zinc phosphide. And that doesn't seem like a big order for an enlightened administration that, with its superb appointments, has repeatedly demonstrated concern for and understanding of wildlife.

WHAT YOU CAN DO

Educate your friends and public officials about the ecological importance of prairie dogs. Email them and your legislators the link to this article. For the latest on Rozol use and black-footed ferret recovery in Kansas, click here.