

Last of the Black-footed Ferrets?

By TIM W. CLARK

Photographs by FRANZ J. CAMENZIND
and the author

ON THE NIGHT of September 26, 1981, John Hogg's ranch dog killed a strange animal intruding too near its food bowl. John's wife, Lucille, persuaded the rancher to take the mink-like victim to Larry LaFranchi, a taxidermist in a nearby northwest Wyoming town, who identified it as a male black-footed ferret. LaFranchi called Jim Lawrence, a warden with the Wyoming Game and Fish Department, and Jim reached me, knowing I had been looking long and hard for just such a creature.

The news electrified me. For eight years I'd been searching in vain for this rare North American mammal. In those years only a handful of sightings had been confirmed; some people had already grimly dismissed it as another species forever lost. Did this sudden discovery mean that the animal had perhaps moved back from the brink of extinction? My colleague Tom Campbell and I rushed to the area with fresh hope.

A research project supported by your Society

Within a few miles of the killing site, we located and searched several prairie dog colonies. Black-footed ferrets, we knew, live in prairie dog burrows and prey primarily on those tunneling rodents. The ferrets have black feet and black-tipped tails. Black raccoon-like "bandit masks" lend them a thievish look. Their nocturnal habits may afford them protection against eagles, hawks, coyotes, and badgers.

We discovered other prairie dog colonies that might harbor ferrets and searched them, also to no avail. But just a few weeks

Captured for a moment by a mesmerizing spotlight, a curious black-footed ferret peers out of the night. A few dozen of the elusive animals discovered in Wyoming are the only known population on earth. DOUG BROWN



later a cowboy on an adjacent ranch reported seeing a live ferret while rounding up cattle. His dog had chased it into a prairie dog hole. The cowboy said he had gotten off his horse, crept on all fours to the burrow, and watched as the ferret bobbed in and out only inches away.

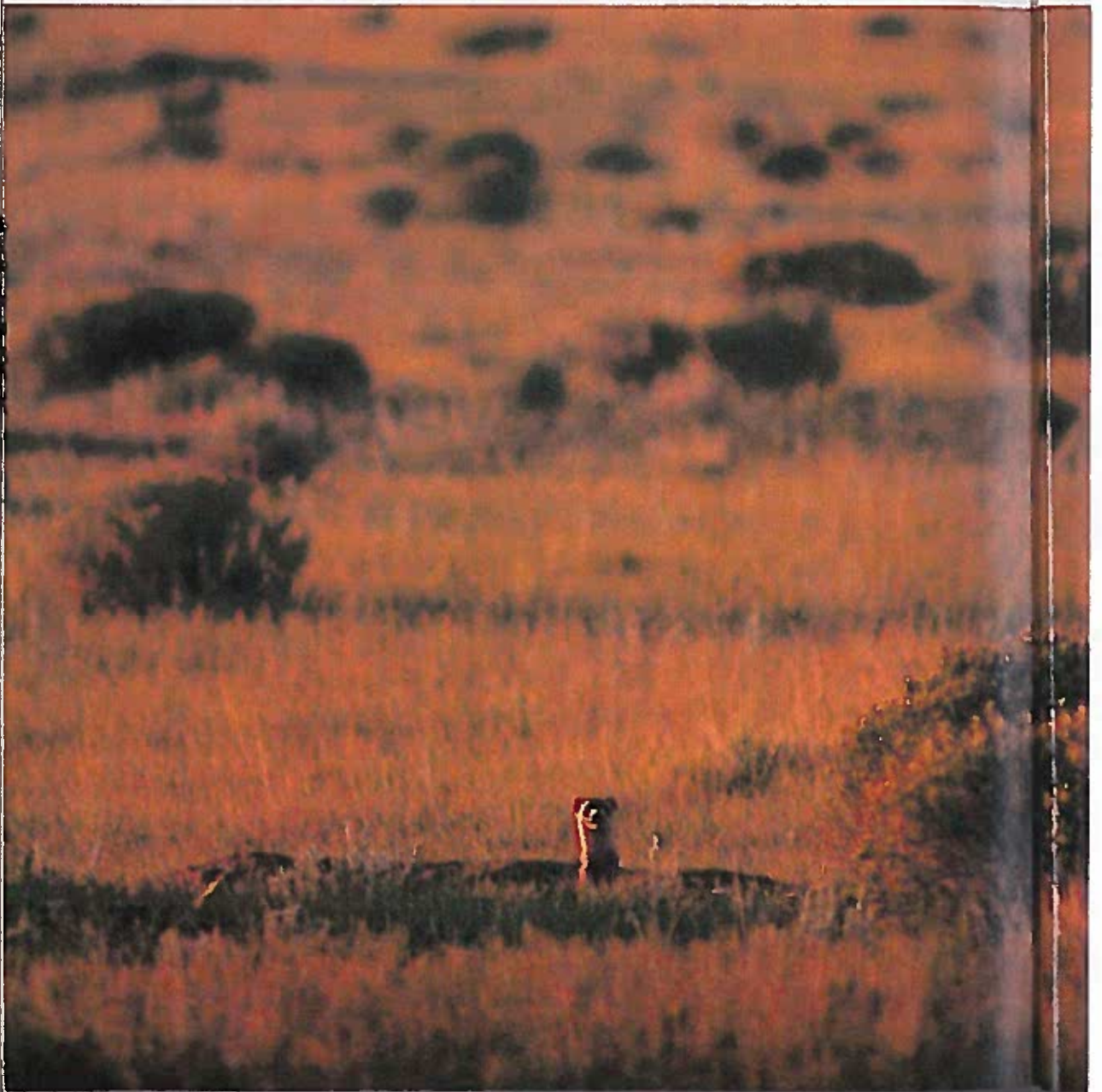
He guided biologists to the area, where later Steve Martin and Dennie Hammer of the U. S. Fish and Wildlife Service livetrapped a ferret and fitted it with a radio collar. The Tim W. Clark, a biology professor at Idaho State University and head of his own research firm, has pursued ferrets for ten years. He reported on prairie dogs in the August 1979 GEOGRAPHIC.

tracking device led the men to other ferrets, and eventually nine were observed.

It was shortly thereafter that we began surveying the same large dog town. Ranging over it with spotlights on the night of December 1, 1981, we were thrilled with our first fleeting glimpse of a live ferret. Over the next few weeks we recorded sightings of more than a dozen animals!

Still, the tragic fact remains that *Mustela nigripes* is regarded as one of North America's most endangered mammals. The entire Wyoming population may total about 60.

An enigma to science, the black-footed ferret was first reported in 1851 by John

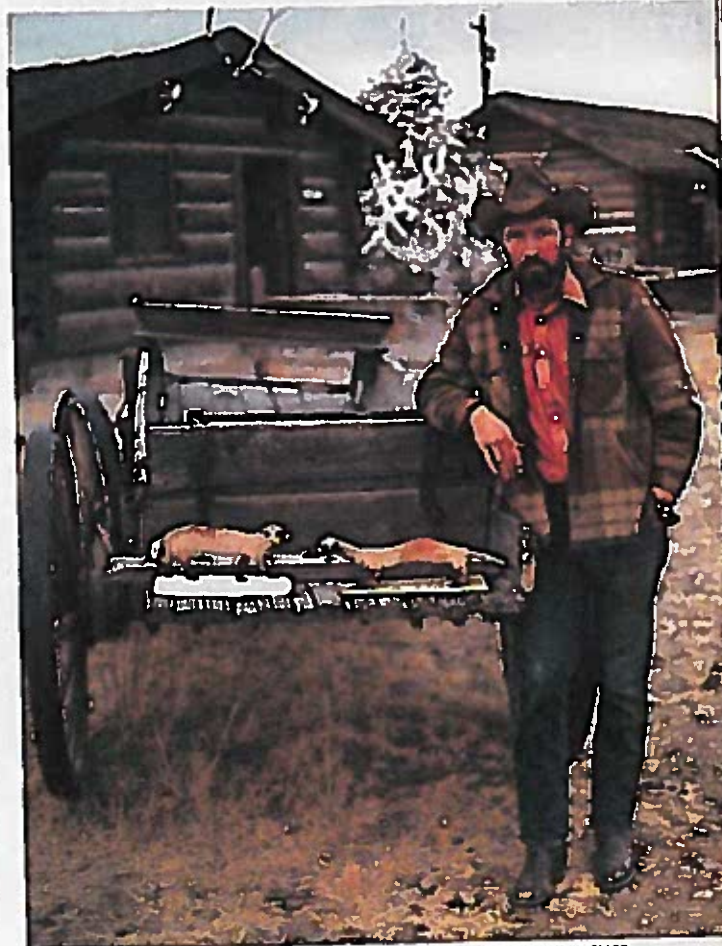


James Audubon and John Bachman from a skin obtained at Fort Laramie, Wyoming. Since 1877, when a second ferret was discovered near Cheyenne, about 1,000 reports, as well as some 125 skins and skeletons, have come from the broad region reaching from Alberta to Texas, Utah to Nebraska. This area of the western Great Plains and intermountain basins coincides almost exactly with the range of the prairie dog, whose numbers Ernest Thompson Seton estimated at more than five billion during the late 1800s. Such hordes could have supported tens of thousands of ferrets.

The radical decline of the black-footed

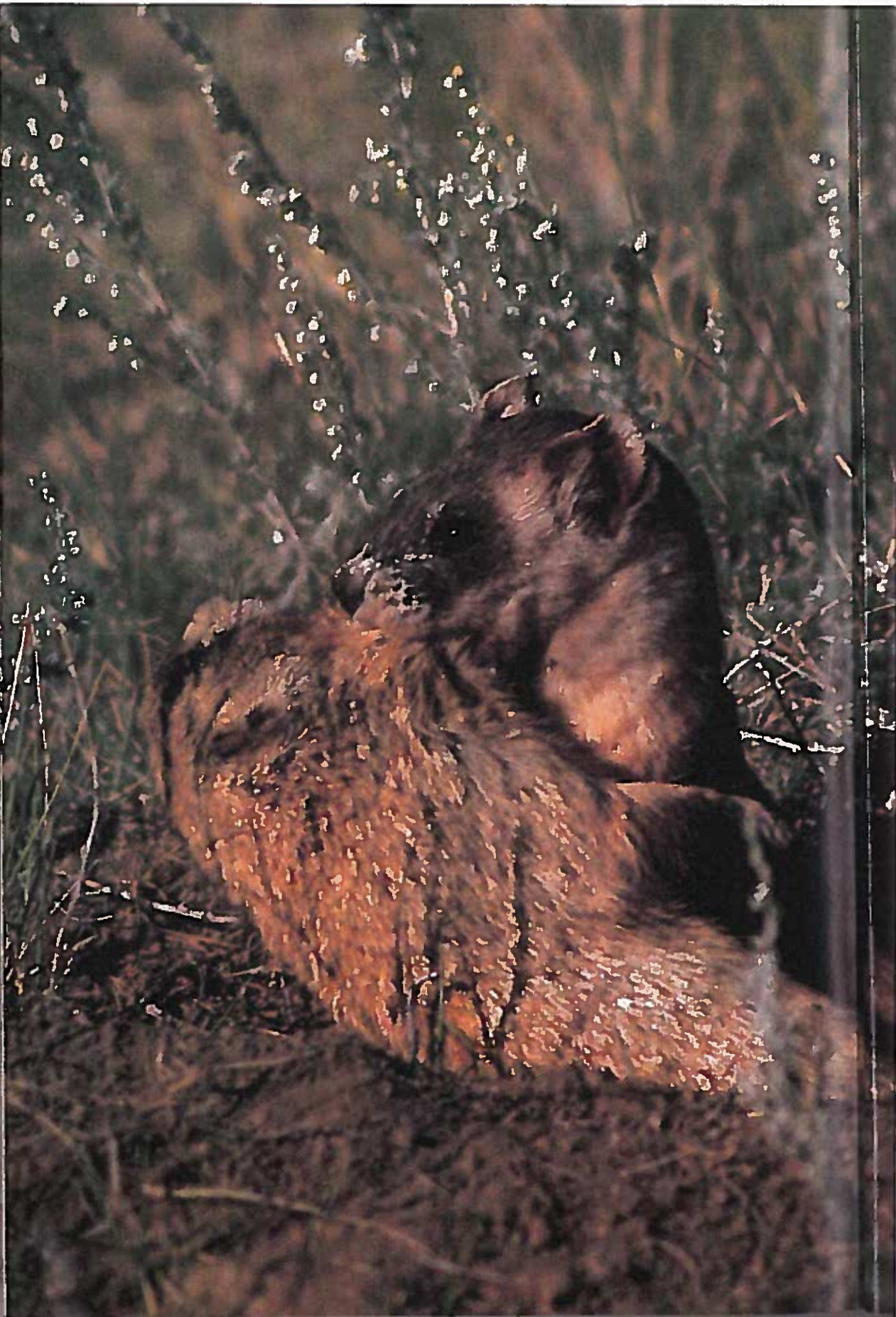
ferret was probably caused by settlers' elimination of prairie dogs, increasingly viewed as range pests. Eradication campaigns over the past century have employed cyanide, strychnine, and other poisons; gases, dynamite, and shooting, as well as plowing under the dog towns. In some states, prairie dogs have been reduced by 99 percent since 1900.


In our study area in northwest Wyoming, intensive prairie dog eradication was never pursued. We found ranchers there concerned for wildlife and its conservation, a live-and-let-live spirit that accounts for the ferrets' survival—and the hope of their restoration—in these rangelands today.



BOTH BY TIM W. CLARK

Frontier memories fill Bob Edgar's open-air museum at Cody, where two *Mustela nigripes* (above) have become artifacts of the Old West. Once found in brush grasslands (left) from Texas to Alberta, the ferret was hunted by Sioux, Blackfeet, Crows, Cheyennes, and Pawnees for food, fur, and religious rites. A longtime Wyoming resident, Edgar helped researchers meet landowners in the study area.





Working overtime to feed her young, a female ferret, normally a nocturnal hunter, pulls the body of a white-tailed prairie dog (left) from its hole. Though known to eat mice, rabbits, ground squirrels, and other small animals, ferrets prey mostly on prairie dogs, making life more precarious for this white-tail carrying nesting material (below). Ferrets also rely on the gregarious rodents for shelter, inhabiting burrows in prairie dog towns. Thus when ranchers in many parts of the West tried to eradicate the prairie dogs, viewing them as threats to cattle and crops, the black-footed ferrets suffered as well.



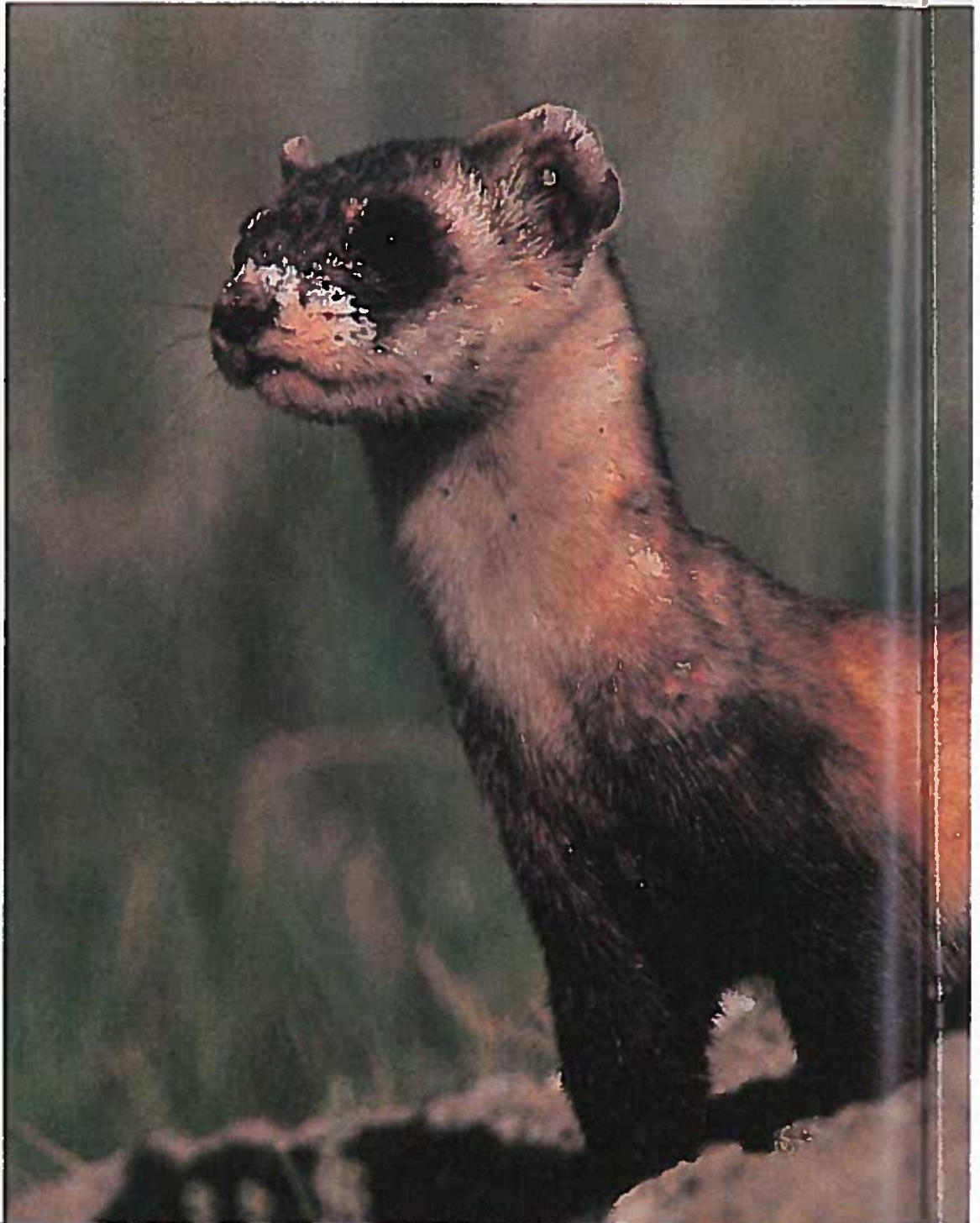
TIM W. CLARK (LEFT); FRANK J. CAMERZIND

In 1973, when I began the Ferret Search project in Wyoming, timely support came from the National Geographic Society and many conservation organizations. Through wanted posters, postcard mailings, and newspaper and magazine articles, I solicited sighting records. Hundreds of resulting reports—most of them false alarms—were thoroughly checked out. Now, at last, our

long years of effort were being rewarded.

Over four months of snow-tracking in the winter of 1981-82, we compiled evidence of 22 ferrets. Even the harsh breath of the Wyoming winter, seeping into my field quarters in a sheepherder's wagon, could not chill our spirits as my associates and I mapped each day's records.

One morning in the bleak predawn, I



lighted the kerosene lamp, freed my boots, which were frozen to the floor, and set about frying eggs on the small iron stove. My four colleagues, bivouacked in tents nearby, bustled into the wagon for breakfast.

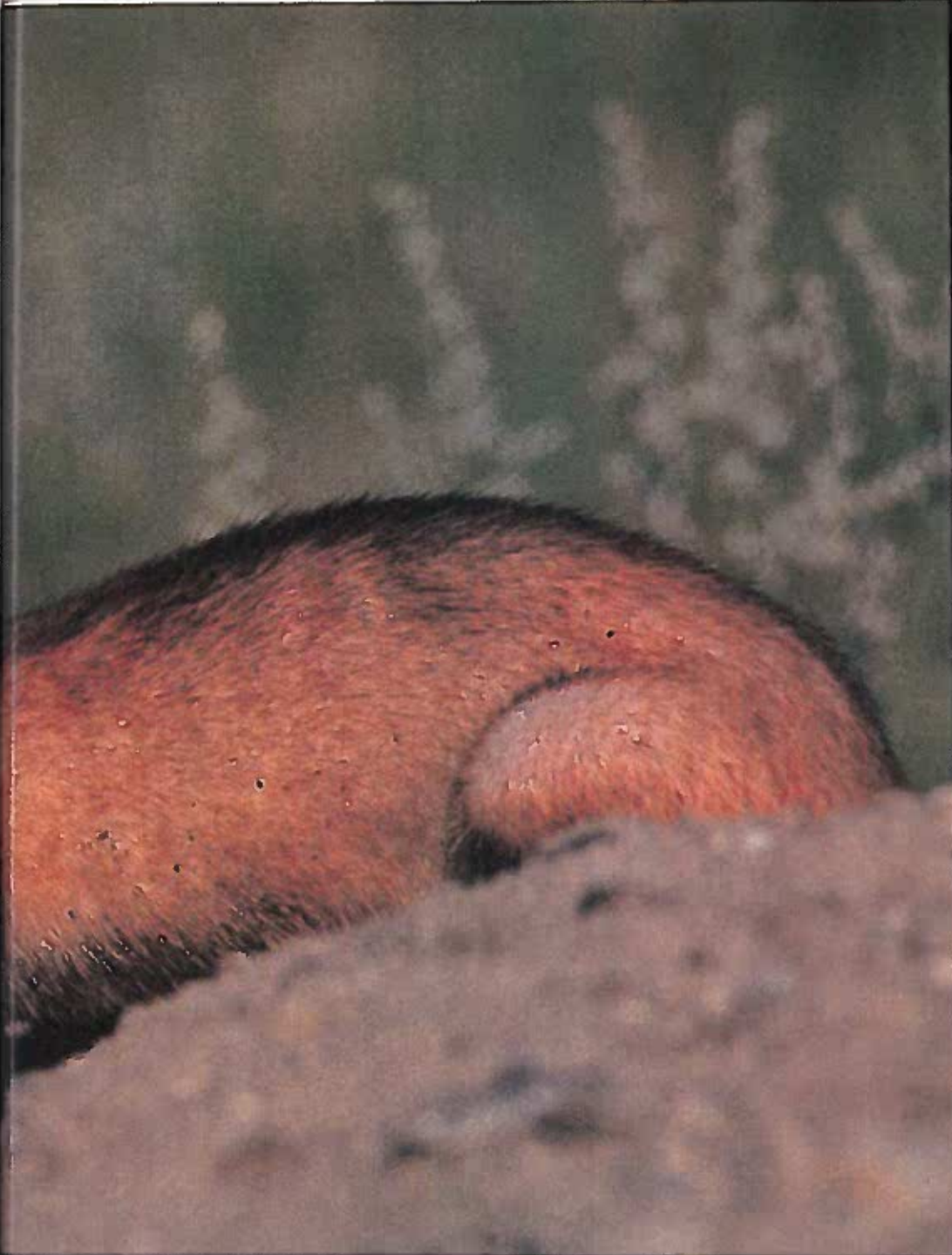
"It's kinda crisp!" muttered Louise Richardson.

The thermometer read minus 38°F.

Had the ferrets been active again last

A pound and a half of intensity, an alert female scans the neighborhood. In one winter night of hunting, a ferret may visit 250 prairie dog holes within a range of 150 acres. Related species in Europe have been used by hunters for centuries to "ferret out" rabbits from burrows.

FRANZ J. CAMERLING



night, despite the frigid weather? The two previous evenings it had stopped snowing about 9 p.m., providing a clean page for the imprint of ferret tracks.

If the five of us worked fast, we just might, before nightfall, be able to cover the rest of the five-square-mile prairie dog colony. In the evening, when our total count added up to snow signatures of 22 ferrets, jubilation filled the creaking old wagon.

All of us involved in the ferret study agreed not to reveal our precise working location, for the slightest attrition of such a critically marginal population—however innocently caused—might tip the balance against survival.

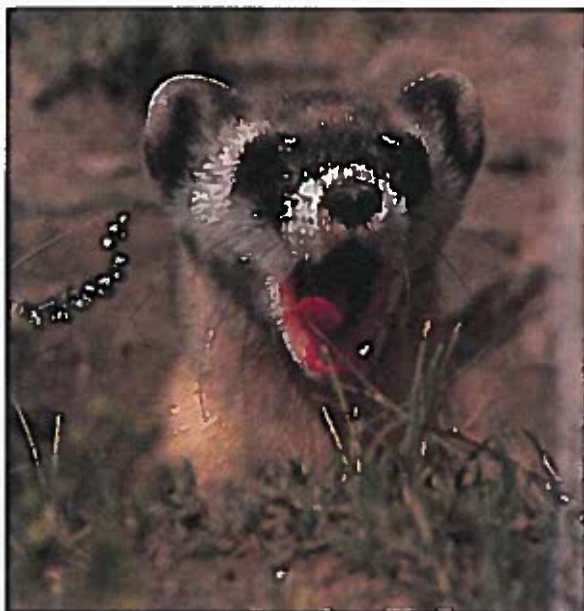
THROUGH THE WINTER we concluded that the ferrets were solitary animals. We identified them by their hunting sites—"the salthouse ferret," "Section 17 ferret"—depending on where we found their tracks.

But in mid-March things changed. Tracks started overlapping, distances of nightly movements increased, and small scratched-out areas appeared around bushes. These actions suggested a hunt for mates at the start of the breeding season.

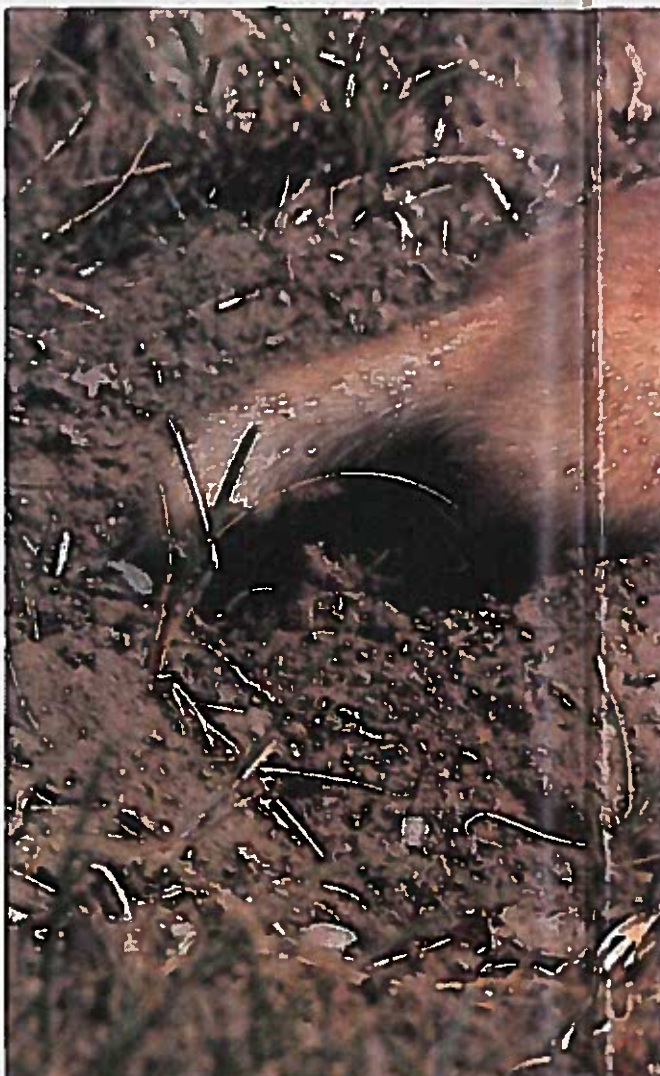
Earlier studies had reported a gestation period of 42 to 45 days. While waiting for nature to take its course, we mapped all the prairie dog colonies in a 130-square-mile area known to contain ferrets. These 21 colonies covered more than 7,000 acres and contained 111,000 prairie dog burrow openings. To inspect them, our team walked all told some 2,500 miles.

At last came a landmark day, June 28, 1982, when at 2 a.m. we spotted a mother carrying three tiny kits, one at a time, from one burrow to another. In an intensive effort to locate and count litters, we kept at least two vehicles and four people covering the ferret-occupied colonies every night. Quartering the rolling miles of grass and sagebrush, we swept the landscape with powerful six-inch aircraft landing lights, seeking the small, elusive animal that spends nine-tenths of its life underground. My associate Steve Forrest saw 16 ferrets in one night, a modern-day record!

Whenever we spotted the green eyeshine of a ferret, we stopped to map its location,



Too young to know better, a juvenile dozes in the sunshine (below), an easy target for a large hawk, golden eagle, coyote, or badger. Born during spring, litters averaging three





ALL BY FRANK J. CAMENZIND

young emerge from burrows in late summer to romp, explore, or yawn with fatigue (left). The mother then scatters these kits among nearby burrows, tending to them separately (above) till

they can hunt by themselves. Among the medium-size members of the weasel family, black-footed ferrets rarely grow to more than two feet in length from the tip of the nose to the end of the tail.

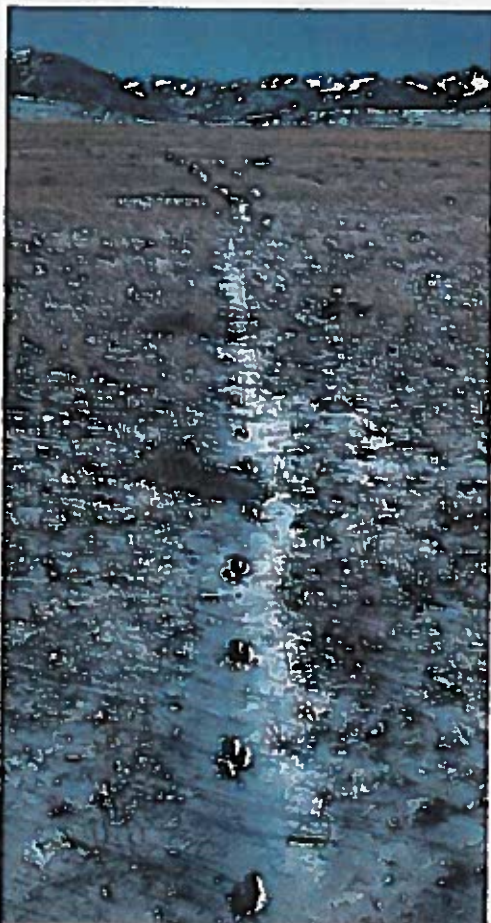




TOM M. CAMPBELL III (BELOW), LOUISE RICHARDSON

Worst days of winter are best for ferret research, since tracks in the snow reveal much about the animal's behavior. Still, it takes an extra effort to fix breakfast in the field (above) when the temperature has dropped to minus 38°F.

What the tracks can't reveal is where the species is heading: To a rapid extinction? Or to a gradual recovery through long-term conservation?



record its behavior, and determine if it was one of a group. When we sighted a troop of youngsters bobbing along behind their mother—nose to tail, pairs of eyes shining like headlights—we feared we might be seeing, as my colleague Denise Casey put it, “one of the last runs of the ferret train.”

By mid-July, when they began regularly to pop up above ground, the playful kits appeared about three-quarters grown. The mothers, grimly attending to bringing in meat for their litters, by summer's end appeared haggard and worn. Moreover, the summer-fat prairie dogs—some males weigh four pounds—were no easy prey for a one-and-a-half-pound female ferret. One mother appeared repeatedly with new wounds on her already scarred face.

At last the mothers began dispersing their youngsters into different burrows during the day. Soon the young had to begin killing prey on their own, living independent, solitary lives.

We had identified 12 litters, an encouraging result. Now we knew that at least 38 new individuals had been added to the local ferret population.

TO AVERT the still threatened extinction of the black-footed ferret, we have coordinated our field studies and shared our findings with others just as deeply concerned. The Wyoming Game and Fish Department, taking the lead role in management, cooperates with other state and federal agencies.

Equally important, of course, is the invaluable support of local ranchers who view protecting native wildlife as a historic responsibility.

Conservation of this small Wyoming population is possible, for the short term at least, barring a catastrophic epidemic fatal to ferrets or their prey. Recovery of the species to a healthy status—geneticists say 500 individuals are needed—is more problematic. Besides closely monitoring this population, we are seeking other aggregations of ferrets in remote areas throughout the West.

While I am hopeful for the future of this appealing animal, its survival hangs on the cooperation of many, and on the full understanding that the loss of a single species on this planet is irrevocable and a loss to all. □