7:30 p.m. It’s early evening, and the western horizon is rapidly changing from yellow to pink to maroon as the day’s light gives way to darkness. A sizable crew has gathered in the ranch yard to sort out equipment and get last minute instructions for the upcoming night’s work. We’re in Logan County, Kansas, preparing for a night of spotlighting in prairie dog colonies to locate black-footed ferrets. These critically endangered animals are part of a reintroduction project that first started here in December 2007, when 24 captive-bred animals were released onto private property.

Each spring and fall, a group of folks carve out a few nights from their busy schedules to assist the U.S Fish and Wildlife Service with surveys. People here are from federal and state agencies, universities, zoos, and conservation organizations. They represent scientists, students, nature lovers, and those simply curious to see one of the rarest mammals in North America.

The black-footed ferret, once thought to be extinct, is the rarest mammal in North America and was extirpated from Kansas. However, animals from a captive breeding program were reintroduced in 2007. Wonder how they’re doing?

by Dan Mulhern
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photos by Bob Gress
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Each crew needs a high-clearance vehicle, one or more spotlights, GPS unit, communication radio, area map, ferret live traps and markers, and sufficient quantities of caffeine and junk food to get them through the night. Once everyone gets their equipment allocation and has a specific pasture assignment, the group disperses into the gathering darkness. A quick radio check confirms that everyone is able to communicate, and the survey begins.

I set out with two others I’ve never met before, who we’ll refer to as Ike and Tina. The expectation in the air is palpable.

**10:15 p.m.** Things started off pretty exciting earlier in the evening, with several sets of eyes glowing in the bright beam of the spotlights. But a closer inspection indicated we were observing part of the landowner’s cattle herd on a distant hillside. Like every other denizen of the prairie dog colony, even a cow’s eyes glow with reflected light from our spotlights. And Ike has taken some convincing to believe that the pink glow from rabbit eyes should not be confused with the emerald green of a ferret. As we encounter our 25th jackrabbit of the night, he’s starting to come around.

Suddenly, the radio crackles to life. Another crew has just put out a ferret trap, and the first trap of the night is always cause for some radio smack-talking about who will make the first capture. I’m not too worried yet; there’s plenty of night ahead of us. Tina mutters something under her breath about maybe choosing the wrong crew, and I give my “it’s not a competition” speech. Then I become more determined to prove to everyone who the professional is in this group.

**12:45 a.m.** Despite a bit of a chill in the air, there is no wind to speak of, and the pastures are very dry from a lack of recent rainfall. Driving around with spotlights held outside open truck windows, this combination gives us the double bonus of allowing the cab to simultaneously fill with dust and small moths that are attracted to our lights. Each wayward breeze sends a cloud of them into my face where I inhale large numbers at once. Moths don’t taste any better than they look like they would, and I would simply breathe through my nose if my nostrils hadn’t packed full of dead moths an hour ago. At least they don’t smell bad. I take another sip from my dusty Gatorade bottle and press on.

My companions, neither of whom have ever done this before, are convinced I’ve trapped them in some mammalogical version of a snipe hunt. Several reports of other teams encountering ferrets, and even a couple of captures, haven’t convinced them everyone else isn’t in on the hoax. I give them my “this is unpredictable field work” speech, but I can just picture dubious eyes on me in the darkness of the cab. The 73rd jackrabbit of the night runs across our path.

Before the reintroduction in 2007, a wild black-footed ferret hadn’t been seen in Kansas since 1957. In fact, the species was considered extinct until a wild population was found in Wyoming in 1985. From those wild ferrets, a captive breeding program was started, producing ferrets for introduction to their native range.
2:50 a.m. We have just had a marvelous discovery. We followed a pair of glowing eyes that kept eluding us through the yucca, and finally got a brief glimpse of the animal as it disappeared over a distant hilltop. None of us is completely certain, but all agree that it was most likely a chupacabra. We share a hushed moment of exhilaration and introspection, and then discuss the fact we’ve all been up for over 20 hours at this point. I pass around energy shots and double-stuff Oreos, and we continue our quest.

Driving for hours in a prairie dog colony in the dark, you have a lot of time to think and ponder important questions in life. “Why don’t all-night classic rock stations play more Allman Brothers?” “Why didn’t I bring more Oreos and jerky?” There’s plenty of dust-flavored Gatorade left, so I know we’ll get through the night. If you tune into the AM side of the radio dial, you can also learn some fascinating information in the middle of the night when the real news is discussed. Did you know our government is involved in a massive cover-up to keep us from finding out that extraterrestrials live among us? I, for one, won’t be duped any longer. But I still can’t seem to find a ferret.

3:38 a.m. Tina is in the passenger seat up front running the big roof-mounted spotlight while I drive. She’s still doing a good job of sweeping the pasture with a back and forth motion although I’m wondering whether she’s doing it in her sleep or not; there’s been no word out of her for half an hour. No need to wonder about Ike in the back seat behind me; his light is pointing unmoving at the ground about 10 feet from the cab, and I can hear him snoring. Suddenly, I spot two bright spots of green about 75 yards off to our left in the passing beam of Tina’s light. I slam on the brakes (we’re going about 7 mph) and ask her to move the beam of light back a bit. Even Ike’s light now comes up and starts searching, so I know we’re all on high alert.

There! There they are again, and I’m convinced. I turn the truck toward the tiny but intense pinpricks of emerald fire and we race at a breakneck 15 mph over the rough terrain toward the darting target. When we get a bit closer, the eyes stop at a prairie dog mound and begin to “telescope” up and down, a classic ferret behavior. Before I stop the truck 15 yards short of the burrow mound, we can clearly see the masked face and elongated body of the ferret as it tries to figure out what we are. Ferrets are often very curious of us and sometimes show little if any alarm at our approach. But they’re wild animals, so when we get out of the truck to walk toward the mound, the animal disappears underground. A quick look with a flashlight shows a pair of green eyes framed within a black mask looking back up at us from a depth of about 2 feet.

We set our first trap of the night, an elongated rectangular wire tube stuck into the prairie dog burrow with a trap door at one end. We mark the location on the GPS, set out a reflector stake to aid in relocating the spot, and drive off more awake than we’ve been all night. Now it’s just a matter of checking periodically to see if we are successful.

5:25 a.m. We’re on our way to check our trap for the third time. The enthusiasm and adrenaline rush we experienced when setting the trap has worn off, and I’m feeling like we’re going through the motions, but it’s time to check it again. Ike jumps out of the truck as I stop beside the trap, shines his flashlight into the trap, and immediately comes to life. He turns toward the cab with eyes as big as saucers and excitedly blurts out something unintelligible, which is a common way of informing your crew you’ve just caught a ferret. Tina

While elusive, ferrets can be curious when the vehicles and spotlights arrive. Ferrets have distinct green eyeglow.
bails out of the cab in a rush to get her first up-close look at one of these elusive animals. Having done this “a million times,” I am more nonchalant about my exit, right up to the moment my boot lands in a fresh cow pie. Field biology isn’t for the squeamish.

We quickly enter the site information on our data sheet, Ike holds the trap on his lap in the back seat, and Tina gets on the radio to inform the vet crew we’re on our way with our capture. From her description you’d think we were the single most experienced ferret survey crew ever assembled. The 15-minute drive back to the processing center is the most jubilant 15 minutes of our collective lives. No trio of prehistoric hunters bringing supper back to their clan was ever any prouder than we were to bring our ferret to the veterinarian crew for processing.

A small door on one end of the trap was lined up with the open end of a 4-inch tube of PVC hooked up to a vaporizer that dispensed a dose of isoflurane gas into the tube once it was sealed shut. This home-made gas chamber was used for anesthetizing the animal for handling. A few minutes in the tube and the ferret was as limp as a tube sock filled with powdered sugar. Ferrets are lightning quick, with needle sharp canine teeth; you don’t want to handle one when it’s fully awake. The ferret was then transferred to a face mask that maintains the flow of gas to keep it sedated.

A quick exam shows that our ferret is a first-year male in good condition. Since it was born onsite, it is unmarked, so a transponder chip is implanted under the skin between the shoulder blades. Using a transponder reader, that chip will identify an individual number for as long as the ferret lives. Our ferret is also given a canine distemper vaccination, a penicillin shot to counteract the other holes poked in it, dusted with flea powder, weighed, and dyemarked on its throat. The marking will allow us to identify this ferret for the duration of this multi-night survey effort, making sure we don’t spend time trying to capture it again.

After no more than 10 minutes the ferret is removed from the gas and placed into a portable pet carrier so it can recover. Within another 10-15 minutes, the ferret is groggy, but its head is up and it’s looking around. Our ferret has an “I’ve been abducted by aliens” look on its face. Once it can stand on its feet and looks pretty alert, we take it back to the same hole from which it was trapped. It may not be “home” burrow, but it’s the last place the ferret remembers being, and probably minimizes trauma and disorientation. Our ferret is a bit reluctant at first to exit the open door of the carrier with three humans standing around wanting to photograph every move. Eventually it peeks its head out to verify the surroundings. Once it gets a look at the open burrow literally right under its nose, the ferret makes a quick slide down the hole and is gone.

The eastern sky is pearly pink, indicating it’s time for nocturnal ferrets and biologists to think about sleep. There’s a lot of chatter on the radio from crews packing it up and preparing to leave the ranch. A total
of seven ferrets were captured this night, with four females and three males. Each crew at least saw ferrets even if all didn’t make a successful capture. Some are already making plans for when they need to be on-site tonight to increase their chances of finding the one that got away. As I drop Ike and Tina off where their cars are parked, I hear them quietly talking about whether the same crews will have to work together tonight or not. I give myself the “I don’t care whether anyone wants to work with me or not” speech, then turn the morning farm report up louder on the radio to keep me awake on the drive to the motel.

Since the first black-footed ferret reintroduction in December 2007, there were supplemental releases in fall 2008 and 2010. The first reproduction was documented fall 2008, with four litters confirmed after the first breeding season, and successful reproduction has been observed each year since. The population reached an all-time high last winter, with approximately 100 animals at Christmas 2010. Populations are usually lowest in spring, after the long winter, and highest in fall with lots of weaned kits added to the adult numbers. This year proved an exception to that rule, however.

After the high of winter 2010, we were able to observe 43 ferrets in spring 2011 preparing for the upcoming breeding season. Forty percent over-winter survival is pretty good, so things looked to be on track. However, the fall 2011 survey could only confirm 38 animals total, representing the first time the Kansas site has experienced a decline following a breeding season. While the specific causes for this are not known for certain, there are a few things we can point to.

For a number of reasons, the prairie dog numbers in this area declined fairly significantly over the last year, with up to 50 percent reduction in spring pup production reported from some sites. Additionally, coyote populations, which had been depressed for several years due to sarcoptic mange, have rebounded dramatically since last winter. So the things that ferrets eat are reduced, while the things that eat ferrets are increased. Using the knowledge I gained from my wildlife degree from a fancy university, I conclude this could be impacting the ferret numbers. (See, Mom and Dad, that tuition came in handy after all.) Like any other wildlife population, there are probably at least 10,000 other factors affecting the status and trends, but these are two obvious ones.

Nonetheless, we still found reproduction, and the numbers are still okay for a site this size, so it’s far too early to panic about the project. We have one more year of surveys, and then a five-year assessment will be conducted to determine where we’re at. The project could be discontinued if it appears the ferrets are not doing as well as expected, or it may be continued if things look promising. While there’s another year to observe, and this last year showed a downward blip, all other indications are that the site is doing well and producing self-sustaining ferrets. This is a testament to the hard work of many people and organizations, not the least of which are the landowners on whose property this is based.

So maybe you’re thinking you’d like to participate in one of our survey efforts. If you do, you’ll meet some interesting people, see some amazing countryside and wildlife at night, and be participating in one of the most unique wildlife restoration activities in Kansas. I can promise you’ll get very tired, dusty and probably cold, but I can’t promise you’ll see a ferret. Remember, zeroes are important data points, too.