The Last Nomad

The hump-nosed saiga antelope of the Russian and Central Asian steppe may soon disappear.

By Laura Williams

I strain my eyes over the flat, endless plain of Russia's southern republic of Kalmykia, blinking as the horizon melts into a delusional mirage. There is not so much as tree, bush, or hill as far as I can see. Wait. . . something. A cloud of red dust several hundred yards away. Through my binoculars, I see a brown ribbon of, perhaps, a hundred saiga antelope reeling away. The herd flows like water across the parched terrain, once the bed of a shrunken Caspian Sea. In an instant the animals drift out of sight. Only the red dust lingers.

I am fortunate to have witnessed a sizable herd of what many fear is a dying species only a mile from where I set up camp with my husband Igor, a Russian nature photographer and naturalist. After driving 900 miles in our army jeep from our home in the Bryansk Forest in western Russia, we arrived the night before to this area known as the "Black Lands" in eastern Kalmykia.

On this warm day in late April, luminous white tufts of feathergrass sway in the slight breeze. The sweet, pungent smell of wormwood—a silverygreen, low-lying herb – drifts to my nostrils. A loud chirping sound erupts from a colony of pygmy ground squirrels nearby, no doubt worried about the long-legged buzzard circling in the sky overhead.

But the ground squirrels aren't the only ones who are worried. Scientists fear that another, once





ubiquitous, inhabitant of the dry steppe—the saiga—may soon disappear. Saiga numbers have plummeted 90 percent in the past decade, according to conservation scientist Dr. Eleanor Milner-Gulland of Imperial College London. Poachers target male saiga for their horns, used in Chinese medicine. "The situation with the saiga is desperate," says Milner-Gulland, who began researching the saiga as part of her PhD studies. "If poaching continues, clearly the populations will decline towards extinction," she told me when I reached her at her office in London.

Milner-Gulland started studying the effects of international trade on population dynamics of elephants and rhinos in the early 1990s. At that time, researchers at the Chinese University in Hong Kong had found that saiga horn was as effective as that of the rhino in reducing fevers. A decade ago, populations of saiga antelope seemed stable enough that conservationists working to halt rhino poaching began to recommend using saiga

saiga's abrupt downturn, considering that the ancient antelope once roamed alongside mammoths and wooly rhinoceroses. Its range originally extended from England to the Yukon and, until the 18th century, were found from Carpathians to Mongolia. But hunting and development of arid steppe lands in the 19th and 20th centuries fragmented saiga populations and reduced their numbers—from nearly two million in the middle of the 20th century to fewer than 45,000 today. Saiga survive in four isolated populations in the former Soviet Union. Russia's only population of saiga, in Kalmykia, has about 15,000 animals remaining. Three other isolated groups, with a combined population of 30,000, are found primarily in Kazakhstan, occasionally migrating south to Turkmenia and Uzbekistan. A different subspecies of the saiga is found in Mongolia in small numbers.

Buoyed by my first saiga sighting in the steppe, I am anxious to visit the nearby Black Lands Biosphere Reserve, Kalmykia's main saiga

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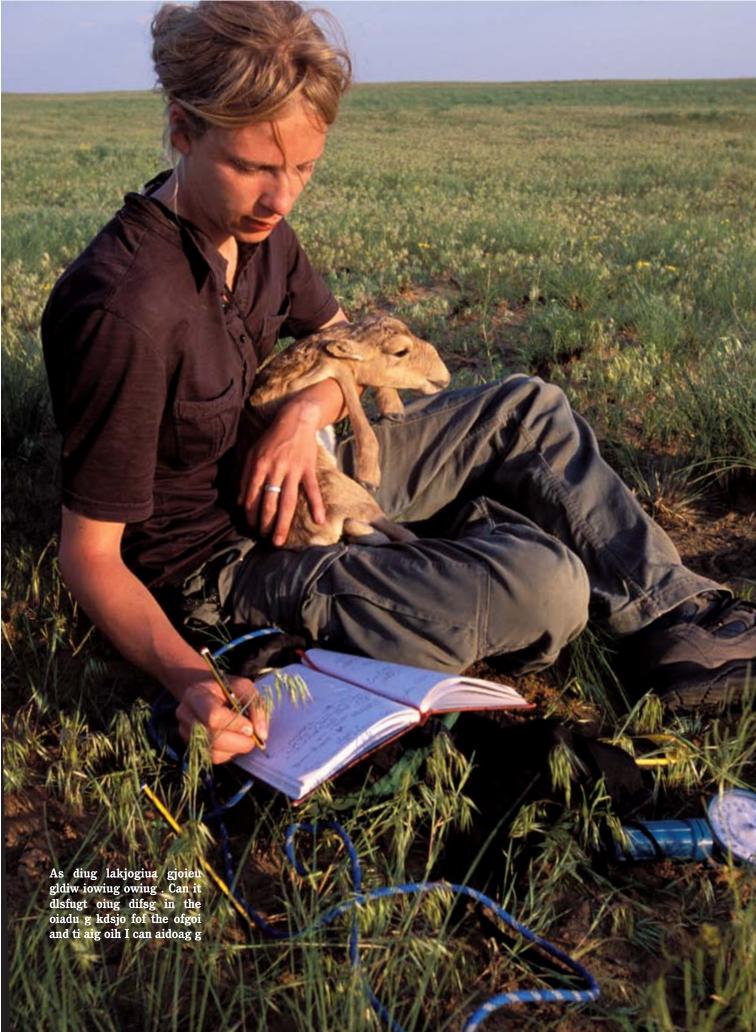
horn instead. But saiga populations soon came under intense hunting pressures and trade increased with the opening of borders after the collapse of the Soviet Union in 1991. Harsh winters and heavy predation by wolves may also have taken their toll. The combination of factors led to the saiga's rapid decline—one that scientists are calling the most dramatic of any species in recent history.

Like many, I am surprised by the

refuge. Covering more than 300,000 acres of steppe, the reserve was created in 1990 to protect saiga habitat, by then reduced to less than a fifth of its previous extent. Three sanctuaries with lower levels of protection have also been established in this southern Russian republic. Each May, over 70 percent of the Kalmykian saiga population gathers here to give birth, protected by armed rangers from the reserve and a mobile anti-poaching







squad from Kalmykia's Game Management Agency. Despite their efforts, poaching and natural predators have reduced the saiga population in Kalmykia to just five percent of its 1997 level.

It would be easier for rangers to protect the animals if only they would stay put. But nomadic saiga often cross borders of countries and provinces during migrations to winter grazing areas. Herds travel hundreds returned. Witnesses reported that the snow was red with blood from the saiga slaughter.

The saiga is even more peculiar

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year of life and gives birth to her first calf at one year. Older females bear two and even three calves per year. "This is a very resilient species," says Milner-Gulland. "They have shown their ability to bounce back from very low numbers."

This is not the first time the saiga has faced extinction. Intensive hunting and development of steppe lands reduced saiga populations to the low thousands by the early 20th



of miles to flee predators such as wolves or find scarce water in their notably dry habitat. Their mobility often puts them in harm's way. Highways and railroads, canals, pipelines, and poachers create obstacles to saiga movement. Poachers eradicate entire groups during migrations: approximately 80,000 saiga crossed from Kalmykia into the neighboring Russian republic of Dagestan to the south during the particularly harsh winter of 1998-99. Weeks later only a few small groups

looking than I recall from pictures in books. About the size of a large dog, they have stout bodies propped on short, skinny legs. The comical bulbous hump on the antelope's soft nose, which has mucous sacs found elsewhere only in whales, serves to filter out dust when it runs across the dry plain. Males, which carry spiky yellow horns, rut in the fall and defend harems, traditionally consisting of one or two dozen females. Saiga females are known for their high fecundity—a female begins breeding in the first century. Soviet policies then gave them new life. Closed borders supported the antelope population by cutting off international trade routes and saiga hunting was banned from 1919 until the 1950s. The antelope went from nearly disappearing to the most numerous ungulate (two million) in the Soviet Union.

With disintegration of the Soviet Union, however, borders reopened. Saiga horns now fetch up to \$100 a kilo, fueling unprecedented levels of poaching. In the Betpakdala Region



of Kazakhstan, the saiga population plummeted from more than half a million in 1993 to fewer than 4,000 in 2002. Other saiga populations faced similar threats and subsequent declines. To compound matters, targeting of males for their horns has distorted herd sex ratios and impaired the species reproductive capacity.

A study by Milner-Gulland and scientists from Russia and Kazakhstan found that males account for less than one percent of the population in Kalmykia, down from 25 percent in 1991. As a result, many subdominant females remain barren. Later while visiting family in Colorado, I stopped in to see Richard Reading, Conservation Biology Director at the Denver Zoological Foundation, who has garnered international support for saiga conservation in Kalmykia. Reading says that studies of some antelope species in zoos have found that males must fight to build up testosterone and sperm count. Reading thinks lack of such combat may contribute to diminished saiga reproductive capacity.

After exploring the Black Lands

Biosphere Reserve, we climb into the jeep and travel 32 kilometres to the village of Khulkhuta with ranger Arslang Udjakov, a tall, dark Kalmykian. Salt flats stretch between the reserve and the village. Here poachers chase the antelope attracted by the salt—in groups on motorbikes. "The saiga have no chance to escape in the salt flats," says Udjakov. Driving at speeds of over 70 miles per hour, the hunters run the antelope until they keel over from exhaustion. Often poachers cut horns from males while the animals are still alive—antlers harvested in this manner contain more blood and fetch higher prices from Chinese buyers. "These flats are soaked with the blood of many thousands of saiga," says Udjakov.

We stop at a roadside café in Khulkhuta, and a dark-skinned Kalmykian woman with broad cheekbones offers us mutton soup. I inquire how we could get a hold of some saiga meat to test her reaction. She looks around to make sure no one is listening, and then says to me under her breath, "That's not easy. There are rangers, you know. But come back later, and I will try to find out."

Kalmykians, descendents of the Mongolian Oirat people, were traditionally nomadic like the saiga. They moved their herds of horses, sheep, cattle, and camels—along with their families—to new pastures as the seasons changed and as scarce water became available. But the Soviets forced Kalmykian shepherds to work in collective farms and change their nomadic ways. Now after the collapse of the collective farm system, many Kalmykians, like those I see in Khulkhuta, must turn to poaching saiga to support their families.

Zoologist Anna Luschekina of

the Russian Man and the Biosphere Committee (MAB) firmly believes that poaching will not stop until people are rewarded for protecting saiga rather than killing them. In the spring of 2003, Dr. Milner-Gulland received funding from the UK Government's Darwin Initiative to work with Luschekina towards improving the incomes of rural peo-

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ple living in saiga habitat.

Alexei Vaisman of TRAFFIC-Russia, the wildlife trade-monitoring network of WWF and IUCN, says demand in China must also be curtailed and black market dealers weeded out. "As soon as the export channels are cut off," Vaisman says, "the absence of demand will trickle down to poachers."

Luschekina calls for setting aside more saiga habitat as well. "The problem is not only that existing protected areas cover too small a portion of the animal's range; it is also that they are fixed in space, while the animals are not," says Luschekina.

But many conservationists believe to save the saiga urgent measures are needed to boost the number of males. Yuri Arylov, former science director at the Black Lands reserve, is breeding saiga in captivity at a center he created with support from MAB. When we stop by the breeding center, Arylov points out a half a dozen male saiga that he plans to release shortly into the Kalmykian population.

Leaving the breeding center and villagers behind, Igor and I head back to the sanctity of the Black Lands Reserve. I climb a low rise and catch sight of a herd of several hundred saiga. Most of the animals are heavily pregnant females, and I see only one horned male. I pick out a dozen saiga babies lying motionless and nearly invisible on bare batches of sand. Poachers may find the herd, which must remain here until all the calves are born and strong enough to run.

We climb back into the jeep and rattle down the long road home. Soon we leave the parched plain behind, gradually returning to the



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land of water and trees. In two days time I am home, and I feel relief and regret at once. I realize that the peculiar antelope of the steppe has made a lasting impression on me. I vow to return to Kalmykia in a year or two, and can only hope that the saiga will still be there to meet me.

Laura Williams is a Russian-based writer who focuses on wildlife conservation efforts. This is her first article for CW.