

FYI

These elephants have no tusks. No poachers either.

ADDO, South Africa — Through the narrow slit of the underground hide in front of the water hole, an African morning revealed itself. The sun painted the earth orange. A lion stepped out of the bush and a small herd of perfectly camouflaged kudus, a large antelope-like animal, started and bolted away.

Soon a single bull elephant appeared where the lion had been, shaking his head as if scanning the bush. After a while, five female elephants descended the orange hillside to drink.

Even from a distance it was easy to tell they were females; in South Africa's Addo Elephant National Park, they are almost always the ones without tusks.

In most African elephant populations, as few as 2 percent of the cows lack tusks. But among Addo's 300-odd females, the rate is 90 percent to 95 percent, a trait that has evolved rapidly over the last century.

And at least partly as a result, Addo's elephants have also been spared something else: poaching.

"Addo elephants might be the biggest success story anywhere," said the park's conservation manager, John Adendorff. "So maybe it's not a bad thing that they don't have tusks. Tuskeness has helped protect them."

Addo is the most dramatic example of the increase in the numbers of African elephants without tusks but not the only one.

In Mozambique's Gorongosa National Park, widespread poaching during that country's civil war in the 1970s to 1990s killed off disproportionately large numbers of elephants with tusks.

The result is that in Gorongosa, 53 percent of adult females and 35 percent of newborn females have no tusks, said Joyce Poole, an elephant biologist with the research and conservation organization Elephant Voices who has studied the animals for 43 years.

entially killing animals with tusks and leaving tuskless ones to survive, so they were breeding and producing more tuskless offspring," Poole said.

An increase in females without tusks has also been seen in Zambia, Tanzania and Uganda in recent years.

Although scientists have not worked out the genetics, the absence of tusks appears to be a sex-linked trait and rarely occurs among males, except through injury.

This is why the unnatural selection brought about by poaching has not affected bull elephants much. Even in Addo, nearly all bulls have tusks, although they tend to be smaller than those of bulls elsewhere — another disincentive to poachers.

A 50-year-old bull can grow tusks as heavy as 108 pounds each. With a world ivory price in the range of \$1,000 per kilogram, that's a nearly \$100,000 payday for poachers.

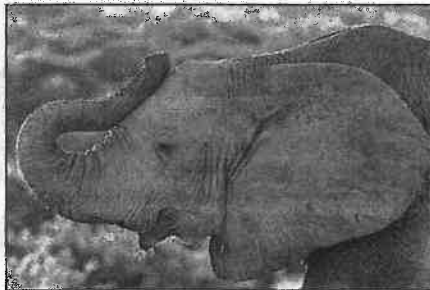
The Addo park on South Africa's Eastern Cape is almost as far south as any of the world's wild elephants go.

Although the lack of tusks on the female population has discouraged poachers, the park is taking no chances. Its 80 rangers are armed and ready with military training and weaponry, a small air wing, and high-tech infrared and motion-detecting sensors planted throughout the park.

The rangers stake out water holes and game trails, regularly camping out overnight in the thickets. When one of the sensors picks up something that may be human or a vehicle, the rangers' smart phones trill with alerts.

"In order to catch a thief, you have to think like a thief," said Michael Paxton, a ranger who is a veteran of poacher wars in South Africa's Kruger National Park along the Mozambique border.

— *The New York Times*



FINBARR O'REILLY / The New York Times

A tuskless elephant uses her trunk to swat flies from her face at Addo Elephant National Park in Addo, South Africa, on June 5.