

Can She Be Saved?

Out in the wilderness, an orphaned baby elephant is wounded and alone. And time is running out.

BY JUSTIN O'NEILL

**AS YOU
READ**

What is being done to stop poachers?

The baby elephant was lying in the bushes—scared, starving, and struggling to breathe.

Just a few days earlier, this baby elephant had been with her mother, happy and healthy, roaming the sweeping grasslands of the Tsavo Conservation Area.

Located in the East African country of Kenya, Tsavo is a beautiful wilderness that **teems** with life. Zebras and giraffes wander among baobab trees. Hippos splash in springs, and gazelles **cavort** across the sweeping savanna. Elephants thrive here too. More than 10,000 of them live in the 23,166-square-mile area and surrounding lands—a space about the size of Massachusetts and Maryland combined.

The baby elephant and her mother had probably lived within the security of a herd, an extended family of elephants that protect and care for one another.



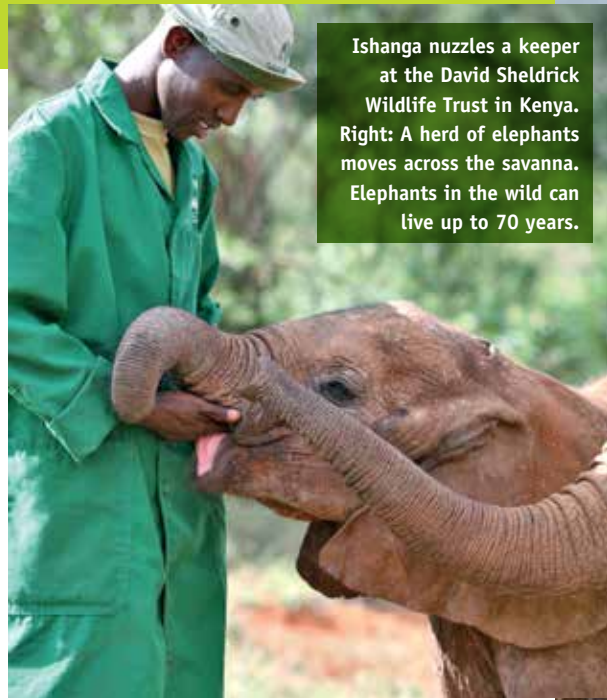
Some members of the baby's herd had likely been together for decades.

Then tragedy struck: The baby's mother was killed.

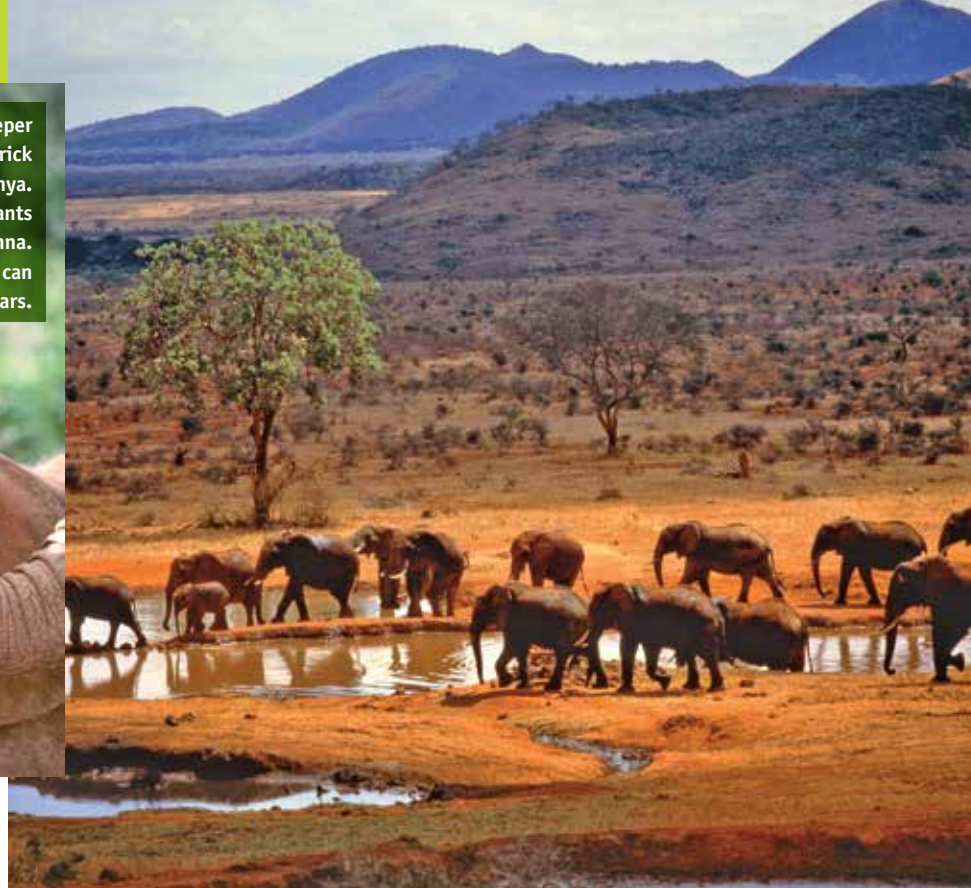
No one knows for sure what happened, but poachers—hunters who illegally take or kill wild animals—were the likely **culprits**. According to some estimates, poachers kill almost 100 elephants each day in Africa. Most poachers are after the elephants' precious ivory tusks, which are used to make statues, jewelry, and other prized objects. The sale of ivory is banned in most countries, but that doesn't stop these criminals, who can make thousands of dollars selling tusks illegally.



When poachers find an elephant with a healthy set of tusks, they kill the elephant and chop off its tusks. If the elephant is a mother, her baby is doomed. Elephant babies need their mother's milk for the first two years of their lives, and a mother can feed only one baby at a time. When a baby loses its mother, the other elephants in the herd are powerless to help. They have no choice but to leave orphans behind.



Ishanga nuzzles a keeper at the David Sheldrick Wildlife Trust in Kenya. Right: A herd of elephants moves across the savanna. Elephants in the wild can live up to 70 years.



Brave Rescuers

On November 17, 2010, an antipoaching team of rangers was on patrol in Tsavo. These rangers stay out for weeks at a time, tracking poachers and searching for deadly wire traps called *snare*s that poachers set throughout the park. Over the past decade, rangers have removed thousands of snares.

In a stroke of luck, the team spotted the baby elephant in the bushes. She had probably wandered alone for days, exhausted and hungry, until she collapsed, helpless as death closed in.

As soon as the rangers saw her bulging cheekbones and sunken eyes, they knew she was starving. They were rushing to help when suddenly, a lion sprang from the bushes. It pounced on the baby, clamping its jaws around her neck.

Chaos erupted.

One of the men pulled out a gun and fired shots into the air. The noise startled the lion; it released its grip and slunk away.

But the damage was done. Blood dripped from a gruesome gash on the elephant's neck. In the distance, a group of hungry lions circled.

The team knew what they had to do: get the dying baby to the David Sheldrick Wildlife Trust. But it was 200 miles away.

Calm Voices

Dr. Dame Daphne Sheldrick founded the Wildlife Trust 40 years ago and named it in honor of her late husband, an expert on Kenyan wildlife. The Trust is a place where orphaned elephants can be safe from almost certain death in the wild. Over the years, the Trust has raised 190 orphaned elephants and 95 are now living back in the wild.

The baby elephant's rescuers worked for the Trust. After the lion departed, they carried the injured baby by Jeep across rocky dirt roads to an airstrip and waited for a rescue plane to arrive. All the while, her condition continued to **deteriorate**.

After an agonizing wait followed by an hour-long plane ride, the team at last arrived at the Trust. The medical staff worked frantically to treat the baby's wound. But she was frightened, bucking her head and refusing to eat or drink.

Through the night, the staff treated her with modern medicine and old-fashioned loving care. They soothed her with gentle strokes and calm voices. And they named her Ishanga.

Ishanga was stubborn, but she was also hungry. Before long, she was

guzzling from a milk bottle. Soon after she ate, though, she collapsed, shivering. The keepers covered her with blankets and worked to revive her. But they feared the worst.

Deep Bonds

After two hours of intensive medical care, Ishanga finally awoke. She slowly struggled to her

feet, to the great relief of the two keepers and the veterinarian who had stayed with her all night.

The next day, though Ishanga remained weak, her keepers introduced her to some of the other elephants at the orphanage. The keepers stood back as the elephants extended their trunks to Ishanga in friendly greeting—an elephant's way of shaking hands. (Elephants communicate through touch and sound, intertwining trunks and speaking in grunts, barks, and shrieks.)

The older elephants led Ishanga around, giving her a tour of her new home. They showed her the dormitories where they sleep; the field where they run, wrestle, and play soccer; the mud pit where they bathe; and the dining area where they drink from gigantic bottles.

Scientists believe that elephants feel many of the same emotions that people feel—joy, excitement, and love, for example, as well as fear, anger, and loneliness. Elephants have been observed shedding

tears over the death of a companion. And just as humans visit graveyards to remember family and friends who have passed away, elephants will return to the places where their relatives have died, even years later.

Elephants also form strong relationships—both with other elephants and

with humans. To prevent elephants at the Trust from becoming too attached to one person, keepers take turns caring for them. If an elephant forms too deep a bond with just one keeper, the elephant will fall into a depression, sometimes refusing to eat or drink, any time that person is away.

No Longer Alone

The relationships orphaned elephants develop with one another and with their keepers can be remarkably healing. Just look at Ishanga. Within a month of her arrival at the orphanage, her wounds had healed and she was starting to gain weight, though she still had bad dreams that kept her up at night.

Within a year, she was thriving. A big eater, she had learned the feeding schedule by heart and was always first in line, often causing trouble by climbing into the wheelbarrow the keepers use to carry milk for the elephants.

Today, Ishanga still lives at the Trust, but she has been moved to a more open area, where she mingles with wild elephants. It will be up to her to decide when she's ready to leave for good. Returning to the wild is a long process that can take more than 10 years.

For now, Ishanga seems to be in no rush to leave this extraordinary community of elephants and humans behind.

It seems that she has a long and happy life ahead of her. ●

THE DAVID SHELDRIK WILDLIFE TRUST (ISHANGA)

WOLFGANG MEIER/GETTY IMAGES (HERD); JIM McMAHON/MAPMAN® (MAP)



Can Drones Stop Animal Killers?

A new weapon in the fight against poaching

BY KRISTIN LEWIS



Stephan De Necker, an Air Shepherd drone operator, prepares to launch a drone in South Africa, where rhinos are being hunted by poachers.



NICOLE FRANCO (STEPHAN DE NECKER); VALERIE SHAFF/GETTY IMAGES (RHINO)

It flies through the night air, invisible in the pitch-black sky. It is silent and stealthy as it darts through trees and over bushes and grasses. You would never know if it was watching you, because you cannot see it, hear it, or smell it.

It is a drone—or, in technical terms, an unmanned **aerial** vehicle.

Drones are small planes that are operated remotely. Tonight, this drone is on a high-stakes mission in South Africa: hunting poachers, some of the most vicious criminals in the world.

Criminal Enterprise

Poaching is a \$70 billion a year criminal **enterprise** that has

fueled an environmental catastrophe. According to a study led by Colorado State University, nearly 100,000 African elephants were slaughtered for their tusks from 2011 to 2013. Rhino poaching has increased 9,000 percent since 2007 in South Africa alone, according to the World Wildlife Fund.

Most poached tusks and rhino horns end up in China or Vietnam. They are often used to make jewelry, trinkets, and health remedies—though such remedies are largely **discounted** by scientists. In recent years, tusks and horns have also become status symbols in many Asian countries. In Vietnam, for example, people

flaunt their wealth by sipping expensive drinks containing ground-up rhino horns.

If poaching continues at its current rate, African elephants and rhinos could be extinct in the wild in as little as 10 years.

Drones on Patrol

In wilderness areas across Africa, countless men and

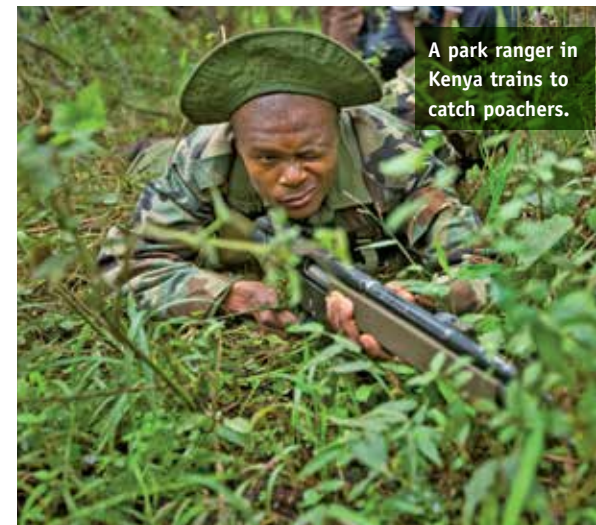
women are working tirelessly to stop poachers. But poachers are **notoriously** difficult to catch. They are well-armed, ruthless, and hard to find—especially at night, when most poaching takes place. It's not uncommon for poachers to shoot at those who try to stop them. As poachers see it, there is too much money to be made to let anyone get in their way. A pair of elephant tusks can bring in as much as \$100,000. A pair of rhino horns? As much as \$400,000.

Now, conservationists are turning to drone technology to fight back.

Currently, a number of organizations, businesses, and nations—including Google and the U.S. government—are exploring the **potential** of drone technology in antipoaching efforts. The University of Maryland recently worked with rangers in South Africa to create a system that predicts where poaching will likely occur next, based on animal migration patterns, drone **surveillance**, and other data. These predictions help rangers focus their patrols on high-risk areas.

Another group, Air Shepherd, flies drone missions in South Africa, Malawi, and Zimbabwe. The drones, outfitted with **infrared** cameras, are flown at night. If potential poachers are spotted, teams of park rangers are immediately **deployed** to the scene before any animals can be killed.

Since the program began, Air Shepherd has seen a significant decrease in poaching in the areas patrolled by its drones. Air Shepherd has been invited to several other countries in Africa and is currently raising money to expand its operation, says John Petersen, the chairman of the board of the Lindbergh Foundation, which started Air Shepherd.



A park ranger in Kenya trains to catch poachers.

Can It Work?

Petersen believes that drone technology can turn the tide in the war against poaching. There are certainly challenges though. For one, if poachers get word that drones are patrolling a particular area, the poachers may simply go elsewhere. “What we need to do is field more teams and broaden our area of coverage,” says Petersen. “And that is when it starts to make a huge difference.”

Another challenge is training park rangers to use drones effectively. In addition, drones can be expensive to buy and can fly for only a few hours before running out of power.

Still, in the fight to save elephants and rhinos, drones have the potential to be an effective tool.

And rangers need all the help they can get to protect these magnificent creatures.

“These animals have been around for millions of years. They are icons. They are an essential aspect of who we are and the environment we live in,” says Petersen. “And to think that they could be extinct in the wild in Africa in 10 years . . . We can't let that happen.” ●

WRITING CONTEST

Why is poaching a concern? What can be done to “turn the tide” against poaching? Explain your answer, using evidence from both texts. Send your essay to **STOP POACHING CONTEST**. Five winners will each get *What Elephants Know* by Eric Dinerstein.

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