

A Lifeline for Lions

By Pamela S. Turner

All over the Serengeti, the lions were in trouble.

Tourists in a hot-air balloon were the first to notice. As the tourists were flying low over the savannah, they spotted a big cat lying on the ground. This lion wasn't lazing around, as lions do when they are not hunting. It was shaking and shivering.

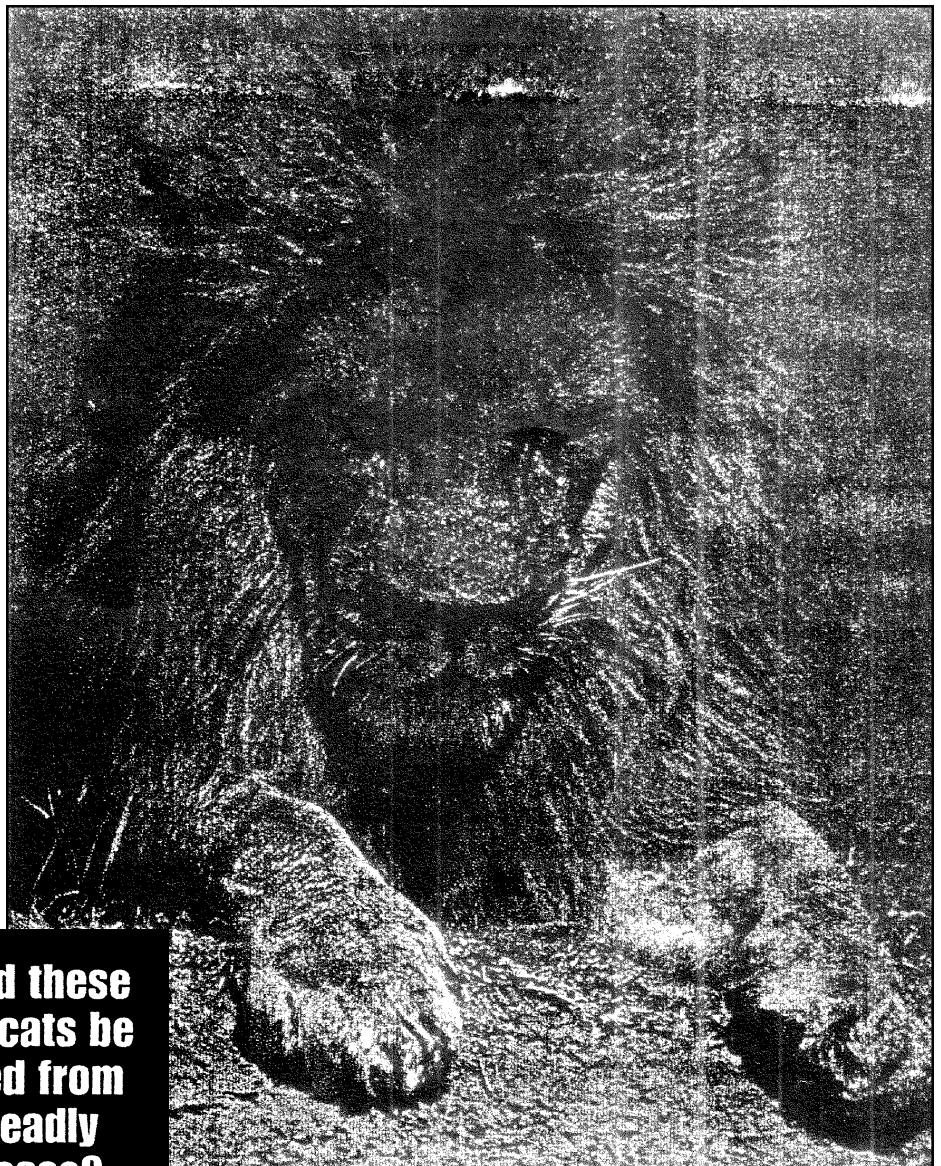
The tourists called the park veterinarian, Dr. Melody Roelke. She watched the lion, but didn't know what was wrong.

The Serengeti is a large wildlife park in Tanzania where no hunting is allowed. The Serengeti might seem like a safe place, but wild animals face dangers other than guns. In this case, the danger was disease.

Lions began to die all over the park. After ten days, it was clear something extraordinary was going on," says Dr. Craig Packer, a biologist at the University of Minnesota. He has studied lions for 25 years. "We had no idea what it was, and we were afraid we might never know."

Usually, veterinary science focuses on the kinds of animals that are most important to people—pets and livestock. Wildlife diseases are not well understood. Dr. Packer and Dr. Roelke sent blood and tissue samples from dead lions to experts in different countries. One expert was able to solve

Could these wild cats be saved from a deadly disease?



Lions like this one were threatened by a disease called distemper.

the mystery. The lions were dying of distemper, a disease commonly found in pet dogs.

Small but Deadly

Distemper is caused by a virus. (Viruses cause many diseases, including measles, polio, and the common cold.) Sometimes an animal's body can fight off the distemper virus.

But if it can't, the virus invades the animal's nervous system. Distemper can cause fever, shaking, and finally death.

In 1994, just before the distemper outbreak, there were an estimated three thousand lions in the Serengeti. "Over

ninety percent of the Serengeti's lions were infected," says Dr. Packer. About one thousand lions died." Many other animals also died—leopards, hyenas, wild dogs, and bat-eared foxes.

How could a wild lion or leopard catch a disease from a pet? Serengeti National Park is huge—larger than the state of Connecticut—but there are farms and villages all around it. In those villages and on those farms are about thirty thousand dogs.

The disease is spread like a cold from dogs to wildlife. "We think hyenas are the key," says Dr. Packer. If a hyena looks for

food in a village garbage dump, it may come into contact with an infected dog. Then the hyena may take distemper back into the park.

“Hyenas move over large distances and hang out around lions’ kills,” Dr. Packer says. From the hyenas, the distemper probably spread to lions and other animals.

Lion Lovers Respond

When people heard about the sick and dying lions, offers

of help poured in from all over the world. Major funding came from the World Society for the Protection of Animals and several companies.

“We began vaccinating dogs around the Serengeti against distemper,” says Dr. Packer. “That was the beginning of Project Lifelion.”

Why vaccinate dogs instead of the lions themselves? “It is a lot easier to catch and vaccinate thirty thousand dogs than three thousand lions,” ex-

plains Dr. Packer. “Many lions are very shy, and live in remote areas. And vaccinating lions would do nothing for the other animals at a risk—hyenas, leopards, wild dogs, and foxes.

Healthier Pets

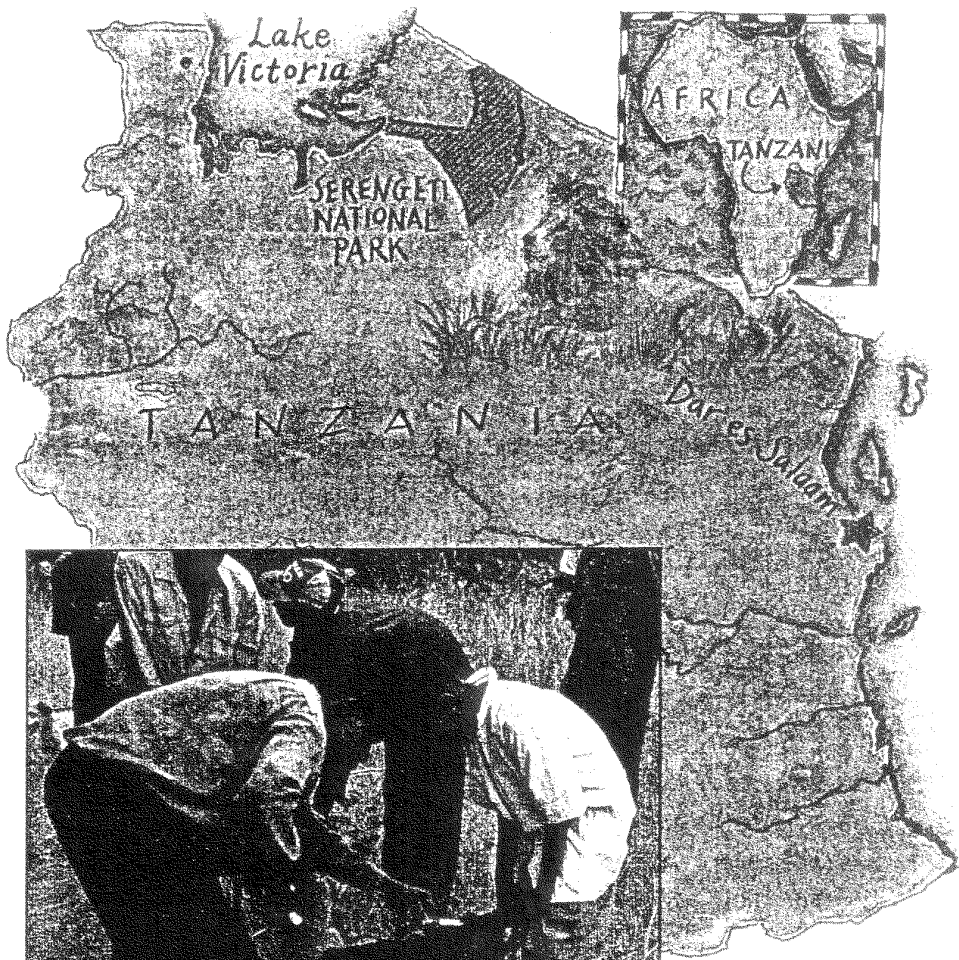
Project Lifelion has been vaccinating dogs around the Serengeti since 1995. Before Project Lifelion, the Tanzanian Veterinary Service took care of cattle, goats, and sheep, but not pets. With funding from Project Lifelion, the veterinarians now offer free distemper shots for dogs. They also give rabies vaccinations. Although people can’t catch distemper from dogs, they can get rabies.

“Local people are happy with the program,” says Dr. Packer. We’re saying, ‘If you have a dog, let’s make it a healthy dog.’ We tell them it is for the lions, and that is OK, too. They know lions bring tourists and tourism brings jobs.”

A Circle of Protection

Project Lifelion aims to encircle the Serengeti with a ring of vaccinated dogs. This should prevent any future distemper outbreaks. New dogs are born or move into the area every year, so Project Lifelion will need to continue as long as lions roam the Serengeti.

The lions are now doing well—very well. Only three years after the terrible distemper outbreak of 1994, the lion population had rebounded to three thousand. Today, there are about four thousand lions. “There seem to be more lions than ever,” says Dr. Packer. “The Serengeti is still a rich and robust place.”



Workers for Project Lifelion give injections to dogs. These vaccinations protect the dogs (and wildlife) from distemper.