

A Humane Approach to Elephant Population Control

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A female African elephant in Kruger National Park is immobilized from a helicopter.

All necessary exams and contraceptive treatment could be completed on this downed elephant in less than 15 minutes.



A tracking collar is fastened on a treated cow so her roaming patterns can be detected.



The author secures a radio collar to a cow as part of an ultrasound pregnancy test before the treatment selection.



Despite the continued presence of poaching in parts of Africa, elephant populations are growing at rates of 4 to 5 percent in some regions of the continent. At the same time, a decline in elephant habitat, given over to an expanding human population and an increased agricultural presence, has led to human-elephant conflicts, degradation of habitat and a decreased tolerance for the species in many areas. This has spurred management actions of a lethal nature, and the Kruger National Park in the Republic of South Africa killed between 300 and 800 elephants annually until 1995, in an effort to stabilize the population.

That year, a coalition of scientists from the Science and Conservation Center, University of Georgia, University of Pretoria and Kruger embarked on a project to test the concept of immuno-contraception in Kruger's elephants, since it had been so successful in the United States with wild horses, urban deer and zoo animals. While there was an undercurrent that contraception was not liked by many locals because of its cost and the fact that it was being pushed by foreigners, there was enough support to conduct the study.

Twenty-nine adult female elephants were captured by immobilization between Oct. 1996 and 2000, then tested for pregnancy by ultrasound, fitted with radio collars and given an initial inoculation of the contraceptive vaccine porcine zona pellucida (PZP). Booster inoculations were given without capture, by a dart from a helicopter. The treated elephants could then be followed over several years.

The results demonstrated the PZP vaccine is highly effective in inhibiting fertility, that it is reversible in its contraceptive actions because it requires annual booster inoculations, that it is safe to give to pregnant and nursing animals and that no debilitating health side effects result from treatment. Ultrasound examination of the reproductive tract indicated



A hog dog rodeo fight is interrupted by the use of a breakstick.



A pack of dogs attack a vulnerable hog as their owner looks on.



Dogs are selectively bred as hog killing machines.

Inhumanity Disguised as Family Fun

Hog dog rodeos, also known as hog catches, are taking place in rural areas of the South and the Midwest, and those who profit from them bill animal cruelty as family entertainment. In actuality, it is a horrible display of inhumanity toward both wild hogs and domestic dogs. The organizers of these weekend rodeos release a mutilated hog into a make-shift ring with a dog, usually a pit bull trained to attack. In order to reduce the amount of harm that may befall the dog, the hog's tusks are often removed with bolt cutters or a steel pipe and hammer. On occasion, the dog is dressed in a leather jacket for added protection.

The hog is forced into the fighting ring, and the dog is then released to maul his flesh—tearing the hog's ears off and mangling his snout. This horrifying event lasts until the pit bull has "pinned" the innocent hog and is deemed winner of the match. Only then is the dog pulled off the hog, a situation that can involve the use of a breakstick to loosen the dog's death grip. The event's profit comes from an entrance fee to the rodeo and from

gambling on the dog with the fastest "pin" time. Unfortunately, the hog has to suffer this torture more than once on an event night, as they are used over and over each rodeo to accommodate the number of dog entries.

In most of the states where these rodeos are thought to take place, animal fighting is illegal; hog dog rodeos, however, are not specifically addressed, and a lack of law enforcement allows them to continue. Yet thanks to an undercover investigation early last year by an Alabama NBC affiliate, this despicable practice was brought to the public's attention. In December 2004, raids across three states yielded arrests on animal cruelty charges to hog dog event organizers. In late February, three suspected operators of three distinct hog dog rodeo operations were arrested in Escambia County, Ala. and charged with animal cruelty: 45 hogs were confiscated and will most likely be euthanized because of their injuries and possible diseases.

There may be an end to this terrible abuse. Louisiana passed a law in 2004 that bans hog dog events, and it went into effect last August. Mississip-

pi introduced a similar piece of legislation that passed the State Senate, but died in the House Judiciary "Division B" Committee. As of late March, Tennessee and Alabama had related legislation pending. While there seems to be some hope for restricting hog dog rodeos, hunting wild hogs with teams of dogs is legal in many of the same states where the rodeos occur—a sign of exploitation of both hogs and dogs may continue.

Human hunters take advantage of the dogs' natural courage and power, sending a Cur dog out to track a hog and alert them when one is caught. Taking a sick pleasure in the horrific violence, the hunters then release a pack of Dogos—dogs bred specifically for this type of hunting—and let them rip the hog's flesh to shreds. Like the rodeos, this puts both hogs and dogs at risk of unnecessary pain, all for the humans' amusement. If you suspect this cruel practice is occurring in your area, please contact your state fish and game department and let it be known that hog hunting, the original inspiration for the rodeos, should be stopped. 🐾

Bequests to AWI

If you would like to help assure the Animal Welfare Institute's future through a provision in your will, this general form of bequest is suggested:

I give, devise and bequeath to the Animal Welfare Institute, located in Washington, D.C., the sum of \$_____ and/or (specifically described property).

Donations to AWI, a not-for-profit corporation exempt under Internal Revenue Code Section 501(c)(3), are tax deductible.

We welcome any inquiries you may have. In cases where you have specific wishes about the disposition of your bequest, we suggest you discuss such provisions with your attorney.



A calf meddles at the side of his mother while her treatment takes place.



A cow at Makalali receives her yearly contraceptive dart. Once research was completed in Kruger, the animals no longer had to be captured, but were darted remotely.

the ovaries continue to look healthy and function properly and the uterus of the treated animals remains normal. It was clear by 2000 that contraception was in fact a reasonable approach to the humane management of elephants.

One of the few remaining questions centered on the possibility that fertility control and a plethora of non-pregnant animals would change the complex social behaviors and structures of elephant society. Unfortunately, Kruger is not a good place to study behavior because of the dense bushveldt in which the animals live.

The Makalali Experience

Makalali, a private game park in South Africa, requested the research team begin long-term studies on its grounds as the Kruger project neared completion. This park had about 60 elephants on limited land and its officials didn't want many more animals. At the same time, it was not interested in pursuing lethal controls because of opposition from the public. In this long-term study, the formulation and doses of the vaccine were altered, treatment was remote and the focus of the study was on behavior.

This study is ongoing and is entering its fifth year, but already a number of important discoveries have been made. First, the change in formulation of the vaccine led to a 100 percent efficacy in contraception, as opposed to the 75 percent efficacy achieved at Kruger. Second, it was revealed that smaller doses can bring about contraception, which has reduced the cost. The study has also confirmed the earlier discoveries that the vaccine was safe to give to pregnant animals. No behavioral consequences

have yet been discovered, except that animals became more wary of the darters. The PZP vaccine does not inhibit estrous cycles, but bulls did not harass treated females over the course of the study. Perhaps most importantly, it was demonstrated that fertility control could manage an entire population, and growth of this herd has stopped. None of the 350 elephants we treated died in this study.

The success at Makalali led to enthusiasm from a number of game reserves throughout South Africa, and the demand for vaccine increased to the point that the Science and Conservation Center was unable to provide the large quantities needed and still meet the domestic demands for wild horses, zoo animals and deer in the United States. This phenomenon led to the third phase of the elephant contraceptive program.

Technology Transfer

From the beginning of this project in 1995, it was made clear that the elephant "problem" was an African problem, and the involvement of North American scientists was only advisory in nature. Consequently, the grand design of this huge endeavor was to avoid "conservation imperialism" and to teach the Africans to be self-sufficient in the event the project worked. Dr. Henk Bertschinger, a professor of theriogenology at the University of Pretoria, traveled to the Science and Conservation Center in 2003 to

be trained to make the PZP vaccine with his lead technician. His group produced enough vaccine by the end of 2003 to treat hundreds of elephants, and at least five game parks have been added to the list of parks managing their elephants with this humane approach.

The remaining task is to overcome resistance from those who prefer culling elephant populations and to turn to the technology of fertility control to keep South Africa's elephant populations healthy and in concert with their habitats. Some may still press for their death, but it is clear that a kinder and gentler approach to managing these magnificent animals does exist.

These projects were made possible with support from the Science and Conservation Center, US Fish and Wildlife Service's African Elephant and Rhinoceros Conservation Fund and the Humane Society of the United States. 🐘

YOU CAN MAKE A DIFFERENCE

A South African National Parks official recently told news media culling could soon resume at Kruger as a quick fix to curbing the elephants' population size. Please send letters in support of non-lethal population management to South Africa President Mbeki at:

The Presidency
Private Bag X1000
Pretoria, South Africa 0001



Kangaroos Unsafe in the Outback

Australia's own wildlife is killed in record numbers

The kangaroo is the most famous symbol of the "land down under," but Australia is not doing its part to protect its greatest animal celebrity. Kangaroos are a mere commodity. Australia exports 3 million of their skins each year to be made into Adidas soccer shoes, golf gloves and other sporting goods marked as "K leather." Their meat is marketed as a gourmet delicacy, but it is realistically most often made into pet food. Viewed by the country's government as a "renewable resource," kangaroos are given virtually no protection under Australian law. A death quota in the millions is set for them each year, and six species are indeed already extinct. Others, such as the red kangaroo, are declining rapidly.

The marsupial many local farmers unfairly deem a "pest" faces unthinkable brutality. Hunters routinely blind kangaroos with bright spotlights, freezing them in place to make them easier targets. In addition to being furtively tracked and killed in the immense outback, their still-dependent young are often pointless casualties. Whenever a female kangaroo is killed, her joeys are decapitated or abandoned.

But this is not the only way hunters disrupt the structure of the animals' society. They often kill the fittest males, leaving female kangaroos less options for mating. The result is a weakened gene pool and a generally younger, smaller species; the average age of a red kangaroo, for example, is 2 years old, whereas less than half a century ago it was 12, the Vegetarians International Voice for Animals has reported. The government has convinced the Australian people that kangaroo herds are in "plague proportions," but their current population of about 20 million is less than half of what it was only three years ago. "In a recent survey of overseas visitors, one quarter of people surveyed didn't see the wild kangaroos they wanted to," commented Pat O'Brien, president of the Wildlife Protection Association of Australia.

Kangaroos already have to deal with the stress of the droughts and wildfires in their country, and yet thousands are killed by hunters each year. Many are merely injured by bad shots, then left to die in agony by irresponsible people who do not care about the animals' welfare. Australia is sending a very mixed message by continuing to promote the kangaroo as an emblem of its country, yet permitting—and even encouraging—shockingly inhumane treatment of this animal. However, convincing proponents of kangaroo culling to believe this argument is difficult. "Adidas is the biggest threat to kangaroos, and it refuses to listen to any arguments against using the skins—because they are cheap," O'Brien said.

Over half of the mammal extinctions in the past two centuries have occurred in Australia, and some kangaroo species could be next on this country's list. Like many animals before it, the kangaroos' numbers have made it a target—recall the story of the passenger pigeon if you believe they are not worth protecting, and look at the red kangaroo today to see culling's effects. AWI asks our readers to please avoid purchasing kangaroo meat, leather and Adidas products. Please write Australian Federal Environment Minister Ian Campbell at Parliament House, Canberra, ACT, Australia 2600. Be sure to let him know the killing of kangaroos and the trade of their skins and meat will not be tolerated! 🐾



Photo: wildlife/photograph by of hearing