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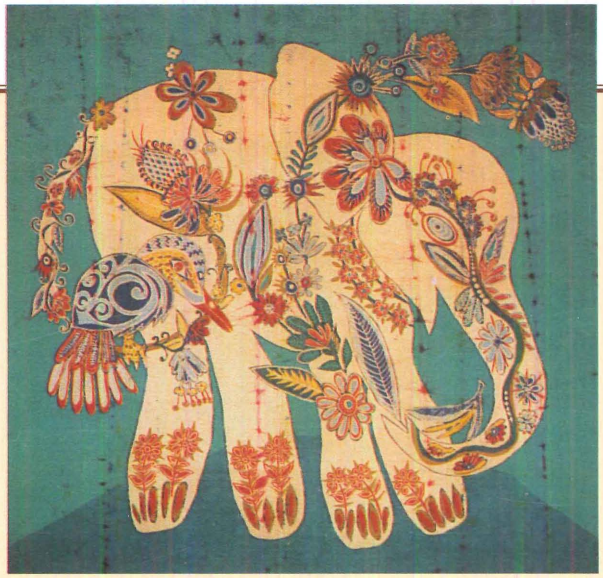


Elephant Batik (Sri Lanka). From a private collection. (John Seidensticker)

ELEPHANTS: SPECIAL SECTION

JEFFREY P. COHN

The first elephant birth in the National Zoo's 105-year history provides occasion to reflect not only on the event itself, but also on the outlook for these amazing creatures that have fascinated humankind since our beginnings. And what better way to kick off FONZ's "Year of the Giants" than with an in-depth look at the world's largest land animals? A 16-page special section celebrates the birth of Kumari and the survival of these magnificent relicts from the Age of Giants.

DEPARTMENTS

FEATURE

From the Front Lines of the Rhino Wars

The rhinoceroses of Africa face a different battle for survival than many species threatened with extinction. In most cases, the preservation of species and of biological diversity in general is a matter of preserving habitat. However, "habitat is not the issue for rhinos," says Evan Blumer, director of animal health and science at the Fossil Rim Wildlife Center in Glen Rose, Texas, where some rhinos are being bred. "Rhinos are being lost purely to greed."

Poaching is the biggest threat to rhino survival in both Africa and Asia. The problem is massive in Africa: 65,000 black rhinos roamed the continent in 1970; today only an estimated 2,480 are left. Wildlife managers and government officials in Africa are attempting a variety of bold measures—involving everything from political pressure to high-technology experiments to Draconian laws—to protect the remaining rhinoceroses.

Rhino horns and hides are employed in Chinese medicine to treat fever and other ailments. And, men in the Middle Eastern country of Yemen carve the horns into hilts for ceremonial daggers, or *jambias*. These uses fuel the demand for black-market rhino horns and motivate poachers with the sky-high prices the horns fetch. As a result, wildlife managers are getting a little desperate.

One controversial management method sounds a little like cutting off a rhino's nose to spite his defacers. In some African countries, managers are immobilizing black and white rhinos and sawing off their horns in hopes that the animals will thus become worthless to poachers. (Rhino horns are made of keratin, the major protein in hooves, nails, skin, and hair, and will grow back if knocked or sawed off.)

Some scientists worry that dehorning may have adverse effects on rhinos. Rhinoceroses use their horns to spar with each other, defend themselves and their young against predators, dig for water, and forage for food.

Joel Berger and Carol Cunningham, biologists at the University of Nevada–Reno, are studying the behavior of hornless black rhinos in Namibia, where the government began the dehorning effort in 1989. In the field since 1991, Berger and Cunningham have made preliminary observations that suggest that female rhinoceroses cannot protect their calves from predators such as spotted hyenas as effectively without their horns.

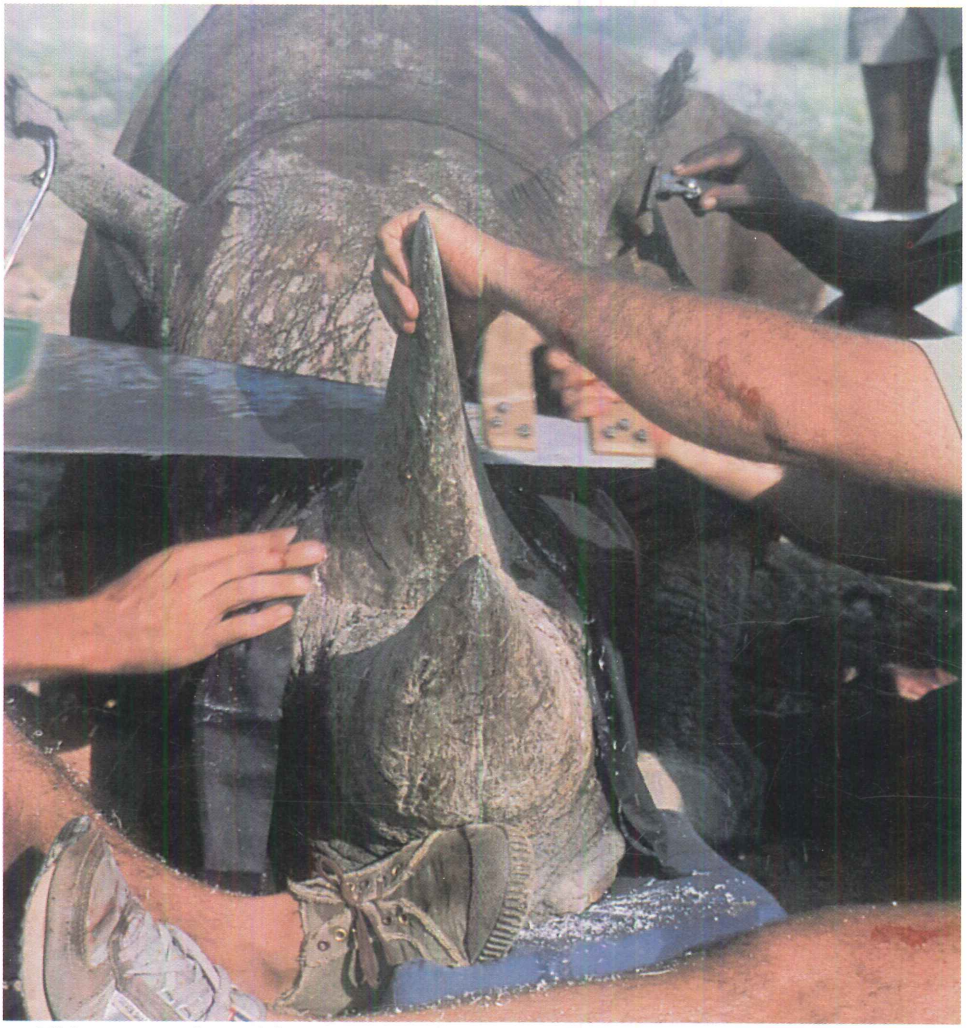
In Zimbabwe, the behavioral ramifications of horn removal may be a moot point. In one experiment, 90 rhinos in a population of 120 animals were dehorned. Eighteen months later only six rhinos remained. Hornlessness didn't seem to deter poachers in the least.

Blumer suggests a few reasons for this, each more unsavory than the previous. It could be that, in the thick brush, poachers don't wait to see the whites of a rhino's eyes, let alone the tips of its horns, before shooting, realizing only when it's too late that the animal has no horns. Then again, a little bit of horn may be better than none at all to a needy poacher. It may also be that poachers feel they waste too much time tracking hornless rhinos and shoot them to get them out of the way. Or it could be an act of defiance, a poacher's message to a conservation-minded government that he will not be stopped so easily. Finally, it might be a willful, systematic attempt to eliminate rhinos, because once they are extinct, the value of remaining stockpiled rhino parts will skyrocket.

Rhinoceros protection has entered the electronic age. In Bophuthatswana, rangers now immobilize black rhinos and insert microchips encoded with unique identification numbers into their horns. If an animal is poached and the horn is confiscated by law enforcement personnel anywhere in the world, it can be traced back to its origin by passing a wand over the horn, in much the same way that the price of a dozen eggs is recognized electronically at the supermarket.

In Zimbabwe, wildlife managers use electronic tracing equipment in a more proactive manner. Scientists implant a transponder about the size of a roll of Lifesavers under the animal's skin. The transponder emits a signal that permits managers to track individual rhinos and plot their locations on a computer. If rhinoceroses wander into a region known to be a dangerous poaching area, rangers can step in and herd them back to safer ground.

Political action may also serve to protect the rhinocer-



Wildlife managers hope dehorning rhinos will help protect them from poachers. (Joel Berger)

os. Although four of the five rhino species are endangered and the fifth is threatened, and all five species are protected under the Convention on International Trade in Endangered Species (CITES), much work remains to be done. For example, CITES has no influence over domestic trade, and, until recently, such trade in rhino horn was legal in Taiwan and China.

The United States has recently stepped up pressure on the two countries to regulate themselves. In September 1993, Secretary of the Interior Bruce Babbitt cleared the way for President Clinton to impose trade sanctions on the two countries for obstructing United States environmental laws regarding trade in endangered species. Clinton, however, has deferred any action on the matter until March. Politics may be too slow to help.

According to Blumer, "The only solution for now is to rebuild the population in small, managed areas in what we call 'intensive protection zones'; they're not captive, but they're not really free." That may not be as easy as it sounds, however. Kenya has had some success with this approach, but funding is tied to the less than dependable income from tourism.

Blumer believes wild populations will be supplemented with zoo-bred animals. Rhinos are reproducing in zoos, but they have been succumbing to four or five bizarre diseases, according to Blumer. More research is needed in this area.

In the meantime, Zimbabwe has a shoot-to-kill policy for poachers that has claimed 200 lives since 1984. Still, in the last eight years, 1,170 rhinos have been poached in that country.

—Lisa Strong-Aufhauser