Global Ban Sought on Ivory Trade

It's official: the African elephant is hurtling towards extinction, victim of a voracious global trade in ivory. "Previously we had been frustrated by a lack of data," World Wildlife Fund's president Russell Train said in Washington last week. "Now we have the facts. And the facts tell us that there is no alternative to a complete and permanent ban on the commercial ivory trade, if the elephant is to survive."

Train was speaking at the launch of a report by the Ivory Trade Review Group, which was commissioned by the International Union for the Conservation of Nature. Released simultaneously in Washington, Geneva, and Hong Kong, the report makes grim reading, a litany of devastation of the world's largest land mammal. "The African elephant has declined in numbers by at least 50% in the last 10 years," it notes. "In 1979 there were estimated to be at least 1.3 million elephants in Africa. In 1987 the figure had dropped to 750,000."

Within days of the publication of the review group's report President Bush announced a halt to all ivory import into the United States. "We urge the nations of the world to join us in this ban," he said.

According to demographic and population dynamics calculations, current patterns of elephant slaughter will ensure complete extermination within 50 years. The population is in such a precarious state that even a modest increase in the rate of killing would hurtle the species to oblivion dramatically faster. "In this case [a mere 10% increase], virtual extinction would come in 15 years."

The study, which was instigated by Kenyan wildlife expert David Western, is a combination of previously unavailable data on elephant population and the ivory trade, and mathematical modeling of population dynamics. "We knew things were bad," says Western, who is an official of Wildlife Conservation International, "but this is the first time we've been in a position to know accurately just how bad it really is. It's appalling. The results are more compelling than we'd expected."

It's not just a question of population numbers, dangerously low though they are. The quest for ivory has distorted the species' demographics and social structure. "The pursuit of bull elephants for their ivory has been so intense that in some areas they comprise less than 5% of the adult elephants," states the report. "There is now evidence that in places where the bulls are so rare, a female is likely to come into estrus without being detected by a male. Such missed mating opportunities depress the reproductive rate of the population."

Numbers of a different kind reveal starkly the impact of the ivory trade on the tuskers' fate. Even though the ivory trade has remained roughly steady at 800 tons a year for the past decade, much of which is obtained by illegal poaching, three times as many elephants have to be killed now to reach that figure than was necessary in 1979. "With the disappearance of the big males, the mean tusk size declined rapidly," explains the report, "which meant that ever larger number of ever younger elephants had to be killed to supply the same tonnage." More than a quarter of the animals that die in the wake of the ivory hunters are infants that starve when their mother's death leaves them orphaned.

Elephant social structure is matriarchal, with mature females leading "families." With the big bulls gone, these old females became the poachers' prime targets, with devastating consequences. "In one Tanzanian population, only 15% of families now have [leadership by an old female], compared with the norm of 75%."

The most efficient way to exploit an elephant population for its ivory is to allow natural maturation, explains Western. When the old bulls die their huge tusks give a high effective yield per animal. "But to sustain the



Big tusker. Victim of a bull market.

population at its present 625,000 animals, the annual total yield would have to be one tenth of its current level," he says.

The Convention on International Trade in Endangered Species seems set at its October meeting in Switzerland to list elephants as officially endangered, and to consider a permanent ban on commercial ivory trade. Meanwhile, says Train, "It is absolutely vital that the United States and the European Community immediately ban ivory imports until international agreement can be reached." Train fears that, with the prospects of such an international ban looming, ivory hunters will fling themselves into a last ditch effort, leading to "an elephant holocaust across Africa." **ROGER LEWIN**

NIH, CDC Search Committees Formed

James O. Mason, the assistant secretary of health, is casting a wide net for candidates to head the National Institutes of Health and the Centers for Disease Control. Last month, he sent out about 8000 letters to individuals and institutions around the country asking for recommendations of individuals to fill those two posts and a third vacancy at the head of the Health Resources and Services Administration. To help sift through the candidates, Mason has also established three search committees, one for each post. He says he has so far gotten a "tremendous response" to his letters.

Mason, whose elevation from the directorship of CDC to the assistant secretary's post created one of the vacancies, says the committees hope to send a short list of candidates to Health and Human Services Secretary Louis Sullivan by mid-July. NIH Director James B. Wyngaarden has announced his intention to leave on 1 August.

Among those on the NIH search committee are: Harold Amos of Harvard Medical School; Theodore Cooper, chief exective officer of the Upjohn Company; Assistant Attorney General James Dickson; James R. Gavin of the University of Oklahoma; Deputy NIH director Joseph Rall; Frederick Robbins of Case Western University; Richard Ross of Johns Hopkins University; and Virginia Weldon, vice president for scientific affairs of Monsanto Company.

The CDC search committee consists of Edward Brandt of the University of Oklahoma; assistant Surgeon General James Dickson; Helene Gayle, minority HIV policy coordinator at CDC; George Hardy, assistant director of CDC; Donald Henderson of Johns Hopkins University; Donald Hopkins, Global 2000 Inc.; Marcus Key, University of Texas Health Science Center; and H. Denman Scott, Rhode Island Department of Health.