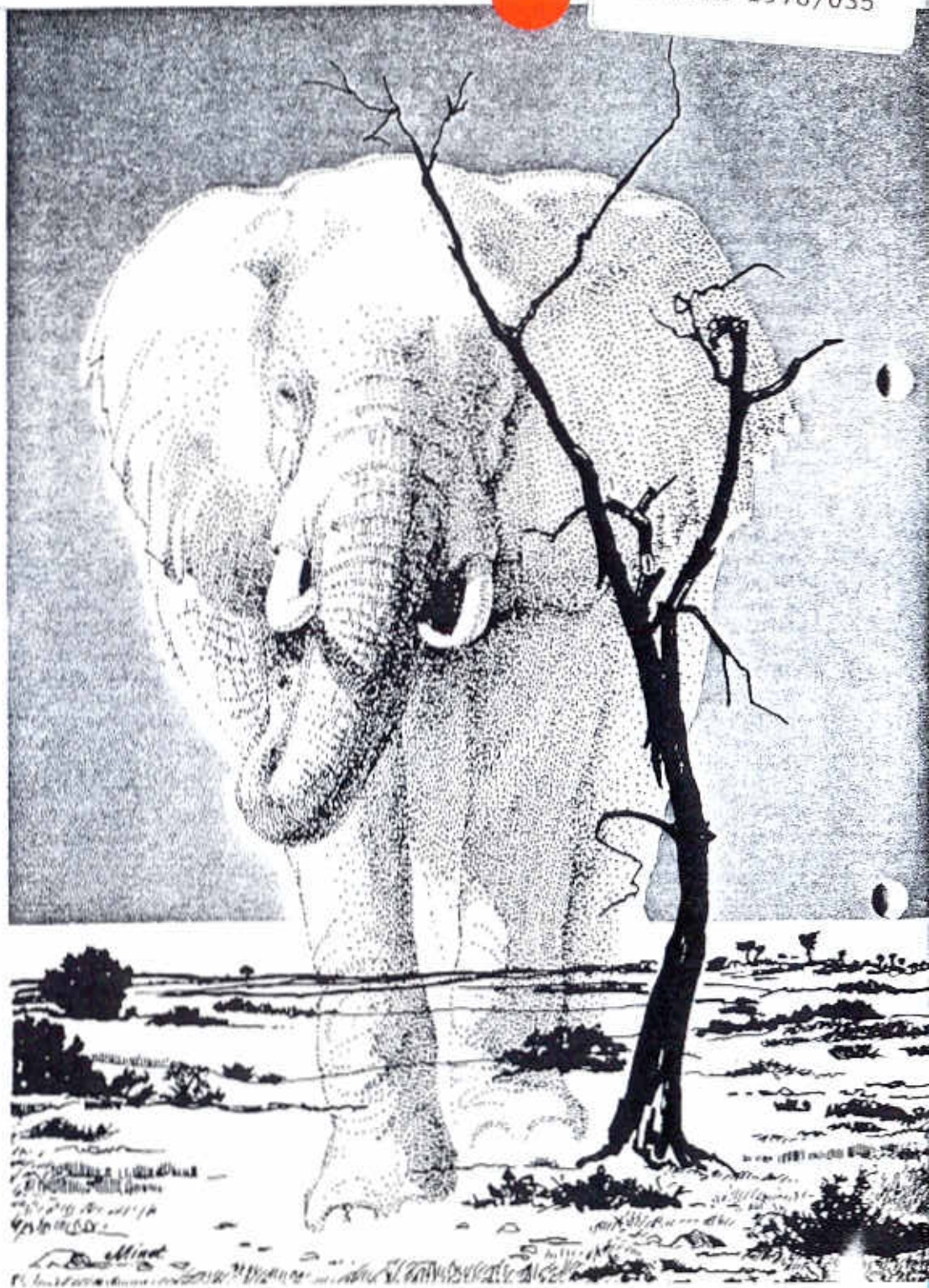


# WHERE are all the elephants going ?

by  
IAN DOUGLAS-HAMILTON

*The following article by Iain Douglas-Hamilton is based on a talk he gave to the Wilderness Congress in October 1977. I am sure Douglas-Hamilton is familiar to most readers of the "News" as the author, with his wife Oria, of Among the Elephants, about their work in Lake Manyara National Park in Tanzania from 1965 to 1970. Douglas-Hamilton continues to monitor the Manyara population, but his major work now is directing the WWF/IUCN Elephant Survey and Conservation Programme, which is also supported by the New York Zoological Society. AWLF has been involved with his project, cooperating in an elephant census of the huge Selous Game Reserve in Southern Tanzania.*



To me elephants epitomize the wilderness and it's an honour to represent them to you. They need space, and in Africa and Asia they still range from burning deserts to dripping rain forests, and from mountain slopes down to sea-level. In Kenya this August, Oria and I were down at the coast north of Lamu, and we actually found them on the sand-dunes and spotted a bull that had swum, or waded out, through the mangroves and clambered up on to a small coral island to sample the vegetation. He was standing there with the wind blowing his ears forward, overlooking the great waves smashing up against cliffs on the sea-ward side.

Yet today, on the surveys I fly in Africa, all too often I cross miles of harsh landscape where until a few years ago elephants thrived along the watercourses. Now I may find bones, a skull or two, sometimes a corpse held together in its dried up skin like a mummy, and often these spread-out carcasses are the only signs of elephants. Sometimes drought is blamed, more often man, and we ask the question "Where are all the elephants going?"

To answer the question and to find ways of preserving the elephants and their wilderness presents man with more problems and paradoxes than any other animal. Of all the wild animals elephants interact with man the most, and whether as raiders of crops, destroyers of woodlands, earners of tourist revenues, or providers of ivory, there is always lively debate over how they should be preserved, conserved, hunted or managed.

When I first began my research in Manyara National Park, Tanzania in 1965, the elephants lived peacefully. The burning issue facing scientists and wardens was

whether or not there were too many elephants and should they be culled. By 1970, it was generally accepted that these problems of elephant over-crowding were usually caused by the concentration of "refugee" elephants within protected areas where they could escape human harassment, and where they proceeded more often than not to destroy mature trees faster than they could regenerate. Large populations still abounded in unconserved areas where human density was low, in East Africa and elsewhere.

Then one factor changed suddenly and further upset the man/elephant relationship. The price of ivory increased ten-fold to around \$30-50 per kilo. The volume of trade followed suit. For example, Kenya's custom figures which in the 1960's showed an annual average export of about 40 tons, increased to 213 tons for the year 1973. We have recently weighed thousands of tusks in Dar es Salaam and an average pair of tusks weighs just under ten kilos, about 27 lbs. If this average holds true for the rest of Africa, it means that 1 ton of ivory is equivalent to roughly 100 elephants. In fact official export figures from Africa are often as much as 50% low, since the price rise has given profiteers the means of bribing and smuggling on a scale which is only exceeded by the international traffic in drugs.

A more reliable indication of world trade in ivory can be gained from the importing countries. In 1975 Hong Kong alone imported 515 tons. By the end of 1976 Hong Kong imports swelled nearly 40% to 710 tons of ivory, roughly equivalent to 71,000 elephants. This rate of trade would account for South Africa's entire elephant population in just over a month. These

Hong Kong imports are perfectly legal, but even so customs officials have discovered ivory being shipped in disguise as machinery, and on one occasion a box broke open spilling out a pile of tusks. Admittedly some of the Hong Kong ivory was imported from intermediate countries, but Africa is also exporting raw ivory directly to Japan, China, India, the Middle East, Europe and America.

In all, ivory leaving Africa in 1976 may have come from anything between 100,000 and 400,000 elephants and there seems to be no let up in the demand.

Can the elephants sustain such a yield? This is the question which the Survival Service Commission of the IUCN has asked the Elephant Specialist Group to answer. We are supported by the World Wildlife Fund and the New York Zoological Society, who provide funds for a small staff and the means for getting around by light aircraft. The research is intended to lead to an action plan.

Our work is regrettably no longer the intimate study of known elephants. Nowadays we can only snatch a few weeks in a year to visit Manyara. We have set up an office in Nairobi and developed a network of informants across the continent. Scientists, wardens, hunters and farmers must act as an early warning system to tell us of elephants in danger of extinction. A similar secretariat exists for the Asian elephant which is already classified as endangered.

In areas of special interest we carry out our own spot surveys and using total counts or sample transects, we make detailed estimates from the air, including information on human settlement patterns and elephant carcasses. From both the in-



## IVORY CARVING

direct and direct research we now have a fair idea of the elephant situation in Africa, a picture which steadily becomes clearer as more people, organisations and governments pool their information with us.

I can hardly begin to summarize these results, but I will try to show the complexity of the elephant's situation in a few examples. It is generally true to say that elephants face three threats to their survival.

The first is straightforward human predation, mainly for ivory but also in defence of crops. Licenced hunting never posed a threat until recently, when the temptation of short term profits overcame the scruples of some hunters. The second

threat is loss of range associated with a rising human population, an inevitable process which can only end when human population is controlled. The third threat is the habitat degradation within the elephant sanctuaries caused as a direct consequence of compression.

The general continental picture is one of decline. The northernmost elephants live in Mauritania, but not one has been seen in the last ten years, only their droppings indicate their existence. In Chad it is reported that rockets have been used to shoot at elephants from helicopters. In the Ivory Coast a Minister remarked that, unless draconian measures were taken to curb the poaching the country would have to change its name. In Sudan I have received very recent reports that some tribes are still burning elephants to death by setting alight the long grass around a herd. Even if elephants escape the flames their feet become charred as they walk over red hot ashes, and lame elephants are an easy target for spears.

In a few countries accurate counts are available. We know that Kenya has lost more than half her elephants since 1970 and now has a population in the region of 55,000-75,000. Some have died due to drought, but the major cause has been ivory poaching. Our counting today often records more carcasses than living elephants. Uganda has shown an even greater decline and within the Kabalega National Park itself, elephants crashed from 14,000 to just over 2,000. In West Africa, in countries such as Ghana, Liberia and Sierra Leone, the elephants are hunted for their meat rather than their ivory. Human density and protein deficiency are much higher there than elsewhere.

Out of 34 countries in Africa that still have elephants, the populations are probably declining in all but three. These are Ruanda where all but 26 were eliminated in a shooting program in 1974, and in Botswana and South Africa where most of the elephants were exterminated over a hundred years ago, but where the remnant is now strictly protected.

But let me be positive. At least in Tanzania there are huge wildernesses with the largest concentrations of wildlife anywhere in the world. Last year a survey I made estimated 100,000 elephants in the Selous Game Reserve; a month ago another survey revealed 40,000 in Rungwa and Ruaha. Only a week ago we flew over the Serengeti where 1,300,000 wildebeest make their annual migration.

In all there are probably at least 300,000 elephants in Tanzania, and policies of conservation are actively propagated throughout the ranks of political leadership, down to the grassroots. There are some very dedicated Tanzanian wardens, who keep their parks running well, and keep the poachers at bay with very little logistical support.

For the whole of Africa our minimum estimates indicate a total of 1.3 million elephants *though numbers are no safeguard in themselves*. The hardest paradox of all to explain is the overall decline of elephants in 90% of their range and the overpopulation of elephants in the remaining 10%.

As an outcome of the surveys the IUCN elephant group has developed a four-point action program for elephants, dealing with Research, Conservation, Economics, and Education. Having identified specific problems, we pass on our

suggestions for remedial action to the IUCN for governments of countries which still have elephants. This is intended to be used as a basis for fund raising in which we would like to ask other conservation bodies to join in an "Elephants and their Environment Campaign" using the elephant as a symbol to start a campaign to raise money and to tackle a vast range of conservation priorities.

The research program is a continuing development of our surveys. We would like to use new techniques such as radio-tracking from satellites to determine forest ranges, and to census forest elephants with infrared sensing techniques.

Under direct Conservation the most essential need is to reinforce anti-poaching efforts, but here we meet another paradox. Within the overcrowded parks and reserves there is often an overwhelming necessity to reduce elephant density with shooting.

At the same time to win the support of local people elephant barriers are often necessary to protect elephants from people and vice-versa. Attitudes can be changed as in the Aberdares where the local Kikuyu have no grudge against elephants now that their farms are protected by an elephant ditch. The same could be said of the citrus farmers around the Addo National Park in South Africa. After all if

you can lose half your annual income in one night when elephants destroy your crops, you are unlikely to be sympathetic. In addition, bringing direct financial benefits to local people from elephants and other wildlife by means of tourist revenues can also change attitudes.

The second is to control the trade in their products, but here again, we are faced with a paradox. Kill the trade with import bans and you may remove any economic incentive for keeping elephants in non-tourist areas. Alternatively, let the trade continue and, however good the controls you devise, they are likely to be evaded by dealers with generations of



Neville West

**AN  
ELEPHANT  
POACHED  
BY  
A SNARE**

experience in smuggling ivory out of Africa. We ask the question, is there either the ability or the will within the trade to regulate itself, what are the long-term attitudes of ivory dealers to the future of the trade? If the present course of over-exploitation continues, we fear that the survival of most elephant populations, like those of the great whales, will be placed in jeopardy.

To control the trade, we need first to understand it. It seems that over half the elephant populations of Africa may be extinct within the next 5-10 years.

I have not yet touched on education and public awareness as a key to the elephants' survival, but the way people think of them is vital. For instance, on the shores of Lake Chad live a tribe who do not kill elephants because they believe they are descended from them. In Ethiopia, the elephant was held to be the most holy of all animals because of its sexual moderation, and is frequently depicted in the ancient rock churches. The Ethiopians knew the art of elephant training in the Middle Ages and it may have come to them from the even older African civilization of Kush, who may have trained elephants for war as early as 800 B.C.—long before the Ptolemies used African elephants in Egypt, or Hannibal marched his African elephants over the Alps to strike at Rome. Sadly there are only small remnant elephant populations left in Ethiopia, the best known around Harar. There is much in African culture, folklore,

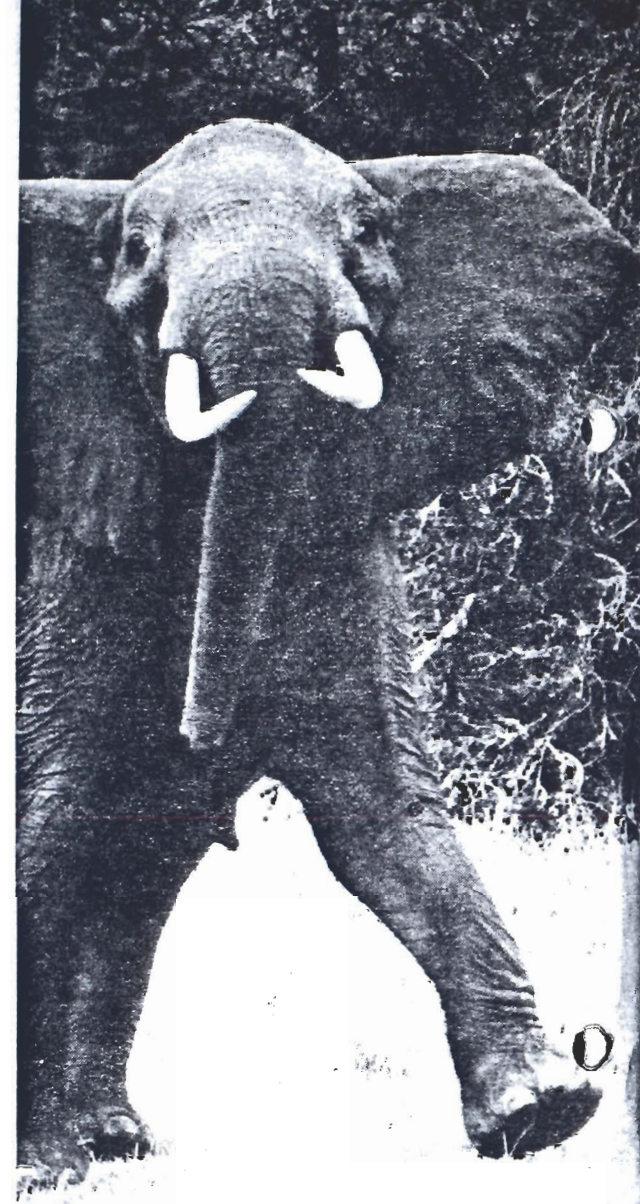
and tradition which could be harnessed to conserve the elephants and their wilderness.

Unfortunately, today the most frequent attitude, as one Ugandan Park warden told me is that "the quickest way to get rich is to kill an elephant."

I must apologise if my talk has been technical, at one removed from the elephants. Explanations of global strategies for conservation all too often take us away from the heart-beat of the wilderness. All that we have recommended for the preservation of elephants implies new rules and regulations. Yet to breathe, the individual must break away and go beyond the reach of other men's territories. So I leave you with the final paradox: for elephants and wilderness to survive, human activities have to be curbed and controlled by other human beings, yet this control and policing destroys much of the spirit of the wilderness. In most National Parks you are forbidden to leave your car.

There are still some wild unspoilt elephant ranges left where you can walk up to an elephant on foot by yourself, but to find them as an individual you have to search, (for you will seldom find them in the guide book). You will need to be self-sufficient and adventurous, and then you may find true wilderness. The explorer Baker of the Nile remarked in 1896:

"Being charged by an elephant is a new sensation—very absorbing for the time—and would be an excellent relaxation once a week for overworked men in high office".



## **A MATRIARCH DEMONSTRATING**