



11/05/2020

ELEPHANT MANAGEMENT The Kruger Controversy

PART III

A Tale of Two Countries. South Africa cf. Zimbabwe

When debating the elephant management issue in South Africa - or in any other country in southern Africa for that matter - the reader must determine just WHAT the purpose of a national park is because THAT purpose is what must guide our intellect, and our intimate and responsible thought processes. I have always been led to believe - going back more than 60 years - that the primary purpose of a national park is to maintain its endemic species diversity; and to protect the natural landscapes. All the literature will tell you that that was certainly the reason why Kruger National Park (KNP) in South Africa was created; and throughout the developmental journey it has been regularly stated that every living organism in KNP should be treated with equal reverence. No one species (of plant or animal) should be considered greater than the whole; or, individually, more important any other.

The simple purpose of the parliamentary mandate handed down to SANParks many moons ago – ‘to maintain species diversity’ – therefore, clarifies parliament’s intentions with regard to how SANParks should manage living resources within South Africa’s national parks and wildlife estate; and it provides the direction I am trying to define. The idea is intrinsically holistic. It tells us that KNPs various parts are intimately interconnected and explicable only by reference to the whole.

The parliamentary mandate, therefore, is simple; its intentions are good; it covers all eventualities; and it can only be misconstrued with a great deal of pernicious mischief.

In August 2004, Dr Graham Child, former Director of the Zimbabwe Department of National Parks and Wildlife Management, wrote (ZimConservation Opinion 1:1-6):

Zimbabwe has a population of 100 000 elephants in habitats that can support about half that number. This does not indicate successful conservation, but failure of the conservation authority to preserve natural values. By not fulfilling its mandate the authority is guilty of allowing elephants to prejudice their habitats, those of other animals and the nation's biological diversity. It also encourages local destruction of the country's long-term ecological productivity. Put differently, mismanagement of over abundant elephant is a serious danger to the human environment and to wildlife and its habitats, including healthy elephant populations.

No species, other than man, can modify habitats as rapidly and extensively as elephant. As dominant herbivores, elephant damage has a cascading effect through the ecosystem, affecting many sympatric plants and animals. Commonly, ecosystems are simplified with a loss of species and an impoverishment of the soil/water relationships, which is accentuated in ecologically sensitive sites or poor rainfall years. For example, a frequent manifestation of too many elephant is a loss of large trees and perennial grasses, leading to bush encroachment, a loss of sensitive grazing species like roan, sable and tsessebe, and their replacement by thickets and increased numbers of impala and kudu. The process is often accompanied by soil capping, reduced infiltration and increased run off of rainwater, leading to accelerated soil erosion.

Veld degradation, including that caused by elephant, obeys two principles. Firstly, it is not a uniform process, but proceeds past a series of critical thresholds over which recovery is, at best, problematical. If recovery occurs naturally, or can be induced, it may take hundreds of years, or cost many times the market value of the land. Secondly, recovery is more rapid in successively higher trophic levels of the ecosystem, making it ecologically and economically preferable to deal with an over-abundance of herbivores.

The recently late Dr Graham Child was one of Africa's foremost elephant management experts. He created a circle of equally competent scientists around him: including Dr David Cumming, Dr Rowan Martin, Vernon Booth and others, who share their understanding of man-dominated elephant management principles.

The current KNP scientific elephant management regime (circa 2007/8) - consequent upon it having implemented its no-intervention-by-man Landscape Management programme (beginning 1994) - has announced that 'there is no point in trying to census elephants' (because, it says, 'it is not possible to do so accurately'). This means that

whatever these KNP scientists say about the current size of KNP's elephant population, it is just a personal preference guesstimate. They also 'give the assertion' (without proof or guarantees) that the elephant population will 'stabilise at a certain density and perpetuate itself in harmony with its environment'. And finally, they state that 'culling will not be reinstated as the park can accommodate a much larger population (of elephants)' - which statement was again provided without any kind of corroborating support. And they make no comment about the likely concomitant and massive loss of species diversity consequent upon the application of this very unconventional ideology.

The current KNP scientific regime is claiming that that level of desired homeostasis has now been achieved - which they say is why the elephant population has stopped expanding. How can they say that when no recent counting has taken place?

South African society, therefore, has every reason to be concerned when the current scientists in KNP are seen to be working within wildlife management parameters that highly experienced elephant managers strongly reject; and when the red-flag signals attached thereto are abundantly obvious.

There is a general public belief that African elephants are a dying breed and that the species will soon be extinct. The general public's reaction to this myth - grossly overstated by the animal rightists in their propaganda - is to demand the closure of all lethal elephant management activities: no population reduction; no culling, no hunting, no trade in ivory, and no capture and removal of individuals. In other words, they want nature in a national park to be left to its own devices. Blaming man-induced elephant deaths/reductions to be the reason for (imagined) elephant population declines, however, is also a myth.

Consider these figures (by Cummings). Zimbabwe's elephant population in 1900 - throughout the whole country - was estimated to be 4 000. By 1930 this figure had grown to 10 000 - at which time, the national herd entered a phase of exponential growth. By 1940 the number was 17 000 and by 1950, 25 000. Furthermore, in spite of removing 46 775 elephants between 1960 and 1991, the national population grew to 76 000 head (G. Child 1995). And it exceeded 100 000 in 2003. The increase in elephant numbers is attributable mainly to population growth which has been measured at between 5% and 7% in Zimbabwe and South Africa.

Vernon Booth (1989) records the numbers of elephants killed in Zimbabwe between 1960 and 1988, mostly on culling operations, at 44 500. Despite this large number, the overall population estimate grew from 32 700 in 1960 to 51 097 in 1988. And while Graham Child was Director of Zimbabwe's Department of National Parks and Wildlife Management (1971-1986), 30 529 elephants were killed, mostly on culls, and the countrywide population grew from 44 109 to 52 583.

Child commented: Clearly, we were taking too little action, too late, to curb population growth and habitat destruction; and he said that 'the Department' was sensitive to the political repercussions of over-culling a charismatic species like elephant and (the department) had no measure of what constituted a 'safe density' for the species (i.e. it had no idea what the elephant carrying capacity was) .

NB: My own records indicate that (in 1960) the Zimbabwe National Parks' Board - noting that 3 500 elephants were definitely too many for Hwange National Park to carry sustainably (because of continuing habitat damage) – judged that the probable carrying capacity was more likely to be 2500. This equates to about one elephant per five square kilometres or one elephant per two square miles.

And within the body of this extended article, I have presented an argument which supports the view that the sustainable elephant carrying capacity for the Kruger habitats is 3500 (calculated at a time when the habitats were still healthy - 1955). This equates to one elephant per six sq. kilometres.

The important conclusion we should draw from these figures is that the calculated elephant carrying capacities for both these important wildlife sanctuaries - although very similar - are infinitely less than anybody has every suggested in the past. And THAT is probably where all our 'mistakes' have originated. We have all erroneously assumed that the elephant carrying capacities of our national parks are far greater than is actually the case.

The official attitudes towards elephant management controversies in these sister organisations (in Zimbabwe and in South Africa) is profound.

A Zimbabwean excerpt: In spite of removing 4000 elephants in three years, the population index increased by 2 650 head. We, therefore, had to increase the rate of take-off to reduce elephant pressures on habitats and to conserve biological diversity (Child). He then goes on to say: "Clearly, controlling elephant (numbers) was a major priority and had greater importance to conserving biological diversity than trying to obtain better protection of the country's ecotypes. To be true to its mandate the Department had to intensify elephant culling.

Child goes on to say "Off-takes were increased to between 3 019 and 5 339 in 1983 through 1986 (my last year as Director). Removal of 17 845 elephant reduced the

countrywide population index to 51 097. By then it was obvious that Zimbabwe could not support more than 50 000 elephant and a more modest population was safer. I therefore believed we had to reduce the countrywide population by a further 5 000 to bring it down to 50 000 head. Thereafter, we would have had to cull around 2 500 elephant each year, while monitoring elephant/habitat relationships and watching for in-migration.

After my retirement at the end of 1986 (Child goes on to say), culling is reported by Martin and his co-workers in the Department's Terrestrial Ecology Branch. The data suggests that annual culls after 1986 were never adequate to curb population growth. Some 1 525 and 2 861 animals were removed in 1987 and 1988. Thereafter, the countrywide off-take of elephant for all purposes, including recreational hunting and problem animal control, was between 403 and 624 head. The national herd rebounded and grew to 75 000 animals in 1992, and 100 000 a decade later, but no further culling took place. The department was (thereby) giving a clear signal that it had abandoned its mandate to conserve biological diversity. This is something that KNP has done too.

Looking at the KNP scenario as in an open book, we have:

1. An elephant population the numbers of which (in 2020) change according to who is making the assessment. Ferreira and van Aarde, for example, state the number is now static at 15 000 to 17 500. Joubert claims the figure cannot be less than 32 000. Thomson aligns himself with Joubert. Who should the reader believe?
2. Thomson claims the KNP's sustainable elephant carrying capacity is 3500 (when the habitats were healthy - circa 1955). Thomson claims Hwange's elephant carrying capacity was probably 2500 in 1960 (when the habitat was reasonably healthy).
3. The KNP habitat (AND the Hwange habitat) - for the last 50 years - has been trashed by far too many elephants (Generally accepted scientific statements).
4. A situation where 'more than 95 percent' of KNP's Top Canopy Trees have been eliminated (ref. KNP scientists)
5. A situation where the understory habitats in all former deciduous woodland habitats have been totally exterminated (Thomson);
6. A situation where an excessive number of elephants, over far too long a period of time, have stripped the habitats of all edible plants within elephant-walking-distance of permanent water during the dry season (Thomson).
7. A situation where all 'lesser' animals (lesser, that is, than elephants) are unable to walk the prestigious distances that the elephants are required to walk every day during the dry season, between water and food, and back to the water again.

These lesser animals, therefore, have to scratch-out a survival by 'somehow' continuing to exist in the foodless (desert) zone that the elephants have created within elephant-walking-distance from dry season water. These lesser animals HAVE to stick close to the water or they will die of thirst; yet all food plants that were once available within a reasonable walking distance of the water during the dry season, have been long ago eaten to extinction. The focal zones of all wild animal home ranges in KNP, therefore, are nothing less than barren and foodless slums. (Thomson).

8. So, for the duration of the life-spans of those elephants that are alive in KNP today (max 60 years) the elephant, as a species, will likely cling onto survival. But for all the other species, they are slowly dying out - and one really severe drought will knock them all out completely (Thomson). This reality, however, doesn't seem to bother the KNP scientists, just so long as the elephants of Kruger are not stood up against a wall and shot by man.
9. And all the while consideration of our vitally important conservation priorities – the soil, the plants, and our animal species diversity – is being sacrificed on an altar that has been created and erected by the animal rights brigade, to safeguard the new God in their lives, the African Elephant.
10. The elephants in KNP have already extirpated the kind of habitats (thicket vegetation) that Black Rhino's require to survive; and in which black rhino mothers require to hide their babies in at night, from spotted hyenas – when the mother rhinos go down to the waterholes, alone, to drink. The black rhino, therefore, will soon be unable to rear their babies, and the species will become extinct in KNP without a single poacher's bullet being fired.

Few people understand the ecological havoc that the elephants have already caused by eliminating 'more than 95 percent' of KNP's Top Canopy Trees. All animal species exist because they are adapted to the particular kinds of habitat that occur in the sanctuaries where they live. If those habitats are extirpated - as they are being destroyed in KNP - therefore, the animal species that are adapted to them will die out, too.

Certain dominant botanical features characterise the more important habitats – features such as the nature and the size of Top Canopy Trees. So, when a major habitat in a game reserve (like KNP's deciduous woodland habitat) loses 'more than' 95 percent of its Top Canopy Trees, you must understand that several major habitats have already disappeared; and that many animal species have already been rendered extinct, too.

CONCLUSION: This three-part article has exposed readers to two official 'attitudes' towards the scientific management of the African elephant; and to the scientific management of our national parks. The one, the old Zimbabwe example, focusses

public attention on the loss of species diversity when elephant numbers are not maintained at levels that are at, or below, their habitat's elephant carrying capacity. The other, the South African example, gives readers a glimpse into how deserts, with very limited species diversity, are being created right under our noses.

The author will be forwarding copies of this article to the Minister of Environmental Affairs, Forestry and Fisheries with the request that an official Commission of Inquiry be conducted into the wildlife management practices of SANParks in Kruger National Park.

Ron Thomson CEO -TRUE GREEN ALLIANCE

www.mahohboh.org

mahohboh@mahohboh.org

Facebook: thetruegreenalliance

Cell: 072 587 1111

