

THE HISTORY, MYSTERY AND MYTHS OF MANA POOLS

By Dick Pitman

The Zambezi Society's Co-Founder and former Director for 25 years, DICK PITMAN, shares his personal reflections on the History, Mystery and Myths of Mana Pools. He was inspired to write in response to public reaction to the devastating drought conditions of 2019.



During the 2019 drought months, social media have been awash with uninformed comments about Mana Pools, many of them inferring that the Middle Zambezi Valley – including Mana – has been an Edenic wildlife paradise since the beginning of Time, should be preserved like an insect in amber, and indeed could be were it not for the evil influence of man. They also display a near-total ignorance of the real purpose of a National Park besides “protecting the animals” and of the implications for Park management that arise from the legislation that governs their goals and objectives.

Fairly obviously, we have no information regarding the Mana wildlife scenario before humans arrived on the scene, other than a fossil record consisting almost entirely of trees and dinosaurs that existed here 150million and more years ago. But we do know a number of things from more recent times.

One is that the idea of a human-free Africa, populated solely by other species, is a modern-day, developed-world fairy-tale. Mankind's roots are in Africa. Humans have lived alongside wildlife here for a million years or more, as both predator and prey; and today's Zambezi Valley wildlife areas, including Mana Pools, were inhabited by people within living memory. You will find pottery shards on the sandstone ridges immediately south of Chine Pool; and other evidence elsewhere in the Park.

A second thing is that – although there is very little reliable historical data on the abundance or otherwise of Zambezi Valley wildlife - the Middle Zambezi Valley has been traversed, occupied, inhabited and hunted over for centuries. Elephants were a particular “target” species because of the high commercial value of ivory.

Thirdly, we know that – as a result of this hunting - elephant populations south of the Zambezi had been virtually annihilated by the late 19th century, and that elephants were a rarity in the Mana Pools area. In about 1880, Frederic Selous said that “Every year elephants were becoming scarcer and wilder south of the Zambezi, so that it had become impossible to make a living by hunting at all.” He failed to find any elephants in the Middle Valley area, and headed north into the Zambian plateau to find them.

Marcel Mytton, a hunter who roamed the Middle Valley in the early 20th century, said that he never even bothered to look for elephants because he knew he wouldn't find them. He hunted his elephant on the plateau to the south, near today's Karoi and Chinhoyi – habitats now eliminated by the spread of agricultural and urban developments.

And an old villager who once lived near the confluence of the Zambezi and Chewore told a Parks warden that the entire village would turn out to see an elephant if it appeared in the neighbourhood.

Fourthly, we also know that today's alluvial river terraces (aka, wrongly, as “floodplains”) and the associated *Faidherbia albida* (winterthorn) woodlands are a recent – and almost certainly transient – development; and that the growth of the woodlands was probably facilitated by a near-total absence of elephant . So modern commentators are broadly correct in their assertion that human activity has shaped the current wildlife scenario in the region, and often for the worse.

Where they are wrong is in assuming that this influence has remained equally malign in recent history. In fact, today's common perception of Mana as a timeless wildlife Eden is almost entirely the result of enlightened mid-20th century legislation.

Initially promulgated as a “non-hunting reserve” , Mana Pools was gazetted as a “game reserve” in 1963 and as a National Park in 1975. Along the way, the major casualties resulting from this legislation were the human inhabitants of the area, who were evicted and moved to areas south of the Zambezi Escarpment. The memory of this event still lives on, not only in the form of resentment, but also in the survival of

legends such as that of Changamuchiri, the “rolling stone” in Mana Pools and the Chimombe “Iron God legend” from the Chewore.

You can call this eviction either callous, or farsighted, or both; but the fact remains that it facilitated an explosion of wildlife populations. As regards elephant: because of these measures, Zimbabwe’s total elephant population has grown from that estimated ± 4000 countrywide in 1900, to $\pm 80\ 000$ in 2014, when the most recent nationwide census took place. As regards Mana: at the last official count, in the 2014 dry season, there were ± 11500 elephant throughout the Mid-Zambezi Valley between Kariba and Kanyemba.

About 3000 of them were in the Mana Pools National park at an overall density of 1.4 per sq km, but ranging up to 2.8 per sq km in the survey area closest to the Zambezi frontage and including the alluvial terraces – a level at which the integrity of woodlands and biodiversity is severely compromised.

Today, all these data are available, including full reports of the 2014 nationwide wildlife population surveys and the 2015-2020 Zimbabwe National Elephant Management Plan. But – and we’ll come back to this later - you have to search for it, and be motivated enough to find and read the publications involved.

Nonetheless, bad news is always easily available, because it hits the headlines. As most conservationists with any involvement in the Park will know only too well, the elimination of human predation has only been partly successful. Illegal hunting – i.e. “poaching” – reduced the Zambezi Valley’s elephant population by 40% between 2001 and 2014. Several other species also underwent serious declines throughout the Valley during this period.

It’s possible to argue that the poachers have simply done a job that should have been done by the management authority, i.e. eliminated a large proportion of the impact of Zambezi Valley wildlife on its environment. The obvious flaw, of course, is that it has been an uncontrolled “management action” which, if allowed to persist, could ultimately result in the local extinction of the species concerned.

For this reason, anti-poaching activity is – rightly - a top priority for the Parks Authority, supported by the non-governmental Zambezi Elephant Fund. But because of the success of this effort in eliminating this form of human predation, further management actions will almost certainly be required to mitigate the consequences and achieve the stated management goals and objectives of a National Park.

So – what, in fact, are these goals and objectives? They are identified as follows, in Section 21 of Zimbabwe’s 1975 Parks Act:

“Purposes of national parks and duties of Minister in relation thereto:

(1) The purposes for which national parks are or may be constituted under this Act shall be—

(a) to preserve and protect the natural landscape and scenery therein; and

(b) to preserve and protect wild life and plants and the natural ecological stability of wild life and plant communities therein;

for the enjoyment, education and inspiration of the public.”

Let's just focus on two key aspects of these goals. Firstly, (1) (b): to protect wild life and plants... etc. One can fault this clause on the grounds that "natural ecological stability" is something of a myth, since ecosystems can become wildly unstable for numerous reasons. But the essence is clear: the Act seeks to maintain all ecosystem components, including vegetation. If vegetation is threatened from whatever cause, including overpopulations of elephants or any other species, the Parks Authority has a clear duty to act.

Note the phrase – "or any other species". I've focused largely on elephant because of the relatively reliable historical data from the early 20th century onwards. But that 2014 census also estimated that, as well as 880 elephants, there were 900 buffalo, 1100 impala and 2100 hippo – yes, that's right, 2100 - in that same area of Mana's Zambezi frontage.

Being grazers, these other species obviously don't compete with the elephants on the albid browselines; but elephants also graze; and 2100 hippo can potentially eat up to 80-odd tonnes – yes, tonnes! - of grass in one night. It's little wonder that there isn't a blade of grass left standing by the end of most Mana dry seasons.

Anyway – back to the Act, Secondly: "For the enjoyment, education and inspiration of the public." So – yes – it's all about you and me. And here's where it all falls down, because we all enjoy – and all get inspired, or I wouldn't be writing this – but where's the education? Where are the interpretive centres; the explanations of biology, ecosystems and management activities; the historical scenario; where's anything except a formidable list of do's and don'ts on the end of the Mana office block?

If such information was easily available to visitors, instead of having to search for it, as noted earlier, I probably wouldn't need to write this piece. As it is, I can only do so because of long acquaintance with many Mana rangers, wardens and ecologists over the years, and a 40-year personal involvement in the conservation of Mana

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And so – very tortuously – to the conundrum: why could I condone human interventions in the form of – for instance – culling, but be very dubious about endorsing the recent animal feeding exercise at Mana?

Largely because I'm lucky enough to have that access to well-informed ecologists and wildlife managers, all of whom are opposed to the feeding exercise, on two grounds. One is that it seeks to perpetuate an inherently unsustainable ecological situation. Another – very cogent – reason is that there is a high risk of introducing exotic and invasive plant species into the alluvial area, with immense associated biological consequences.

There are many indications of the inherent unsustainability of the current scenario; but along the way, I was given one striking insight into a phenomenon that I'd never even considered. Why does Boswell – a Mana icon - get up on his hind legs to browse the *F. albidas*?

Simply because the equally iconic albid foliage and pods are now out of reach for most elephants. The "back story" lies in the entourage of other elephants that often follows Boswell (and others) around and eats their leftovers: elephants too small, insufficiently muscular, or simply less intelligent to do the same trick.

Boswell may be a photographer's icon, but in ecological terms he – and those other elephants that have learnt the same trick – are merely one more indication of the fundamental issue: the extraordinarily severe pressure of an unchecked animal population, basically freed of human predation, on very limited food resources. Drought can reduce these pressures by enabling the fittest to survive while checking population growth and eliminating the weaker specimens. Artificial feeding merely “kicks the can down the road.”

Finally, a crucial issue. By default, Mana Pools currently appears to be “managed” by and for tourism and income maximisation – in other words, by the balance sheet, without any consideration of ecological integrity. Tourists love Mana's spectacular gatherings of wildlife, but often have little understanding of their ecological causes or implications, and no idea of what they are looking at. In Mana's case, they're seeing an ephemeral woodland probably destined to revert to bushland as the Zambezi – through entirely natural causes – continues its northward shift; but with this natural change currently hastened by heavy wildlife pressure creating a seriously degraded ecosystem.

Therefore, a key question. Are we prepared to abandon more complex biological management goals, and to manage National Parks mainly as large-scale zoos for tourists, as appears to be the case in Mana today?*

If so, well, feeding programmes may well become annual events, with all the biological risks involved, and rendered all the more necessary by continued degradation of the Mana environment. More pans will be pumped and boreholes drilled, again with all the ecological risks and consequences involved. And – regardless of the factual arguments to the contrary - everyone will continue to place all the blame on the Kariba dam wall as the scenario worsens. I'll look forward with interest to the irrigation of the alluvium with sprinklers, which is just one of the wilder suggestions I've seen on Facebook.

If not – then we must accept that wildlife management may sometimes involve some hard choices – in this case, between deliberate and well-controlled population reductions – e.g. “culling” (which public opinion usually rejects) - and allowing natural forces such as drought to solve the problem (with all the harrowing scenes that this entails)

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Trouble is, it's far easier to post a kneejerk Facebook comment and get 50 “likes” than to make a serious attempt at understanding!

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**The emphasis on tourism, and particularly on high-priced international tourism, is creating another extremely undesirable side-effect: the increasing alienation and exclusion of the Zimbabwean public, who are the ultimate “owners” of Mana Pools. We are seeing more and more “Private Concession - Road Closed” signs; increasingly restricted public access to the Zambezi river within the Park; and the allocation of once-public camp sites to safari operators.*

It is not widely known that, in 2010, a lot of money was spent on creating a Park Plan which – if implemented – would represent a very sound “blueprint” for the equitable and biologically sound development and management of the Park. It has never been signed, let alone implemented. If it had been, then – again – there'd probably be no need for me to feel compelled to write these notes today.