

The Great Game: conservation in East Africa 1950–2016

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In the first issue of *Oryx* E.B. Worthington (1950) cast backwards to the start of the 20th century, when concern for Africa's wildlife first arose. The creation of the Society for the Preservation of the Wild Fauna of the Empire in 1903 crystallized that concern (Prendergast & Adams, 2003). The Society's E.N. Buxton had hunted in 'the great game fields' of East Africa, the 'Kenia-Kilimanjaro Plateau' and the Sudan, and had seen their 'depletion' at the hands of reckless and 'unsporting' European hunters. The Society sensed a crisis and began lobbying for game reserves in African colonies.

Fifty years on, much of what the Society asked for had come to pass: 'everyone, even the antagonists of extensive wild life conservation, is now convinced that the fauna must not be allowed to be exterminated' (Worthington, 1950, p. 46). Hunting regulations and game reserves had been created across East Africa and there was optimism about conservation: 'no animal of East Africa has become extinct and most species are still abundant. There is still time to save the interesting fauna in its natural habitat, provided reserves are chosen wisely' (Foster-Vesey-Fitzgerald, 1954, p. 286). Yet Worthington looked forwards with foreboding: 'in fifty years' time the factors operating against the fauna will have increased immeasurably in all parts of the continent outside national parks and reserves. . . I believe that the African fauna must look forward to a time, not more than fifty years hence, when all its larger members will be eradicated, or at least heavily persecuted, nearly everywhere except in those areas which will be devoted exclusively to their well-being' (Worthington, 1950, p. 46).

Fears for East Africa's large mammals in the 1950s were fed by concerns about African independence and the processes of economic development, cultural modernization and population growth. The Director of National Parks in Kenya wrote 'Africa is the last stronghold of wild nature and to-day is surging under the various forces of human achievement'. About this development he harboured doubts: 'what will he achieve and at what cost if he succeeds in his endeavours and converts the greater part of this dark continent into a highly civilized economy?' (Cowie, 1955, p. 9).

In the 1950s protected areas were at the heart of conservation in East Africa (Worthington, 1950). The need to separate wildlife and people seemed self-evident: 'stock farmers cannot range their cattle with lions, nor can the wheat farmer allow his crop to be plundered by thousands of grass-eating antelopes. And, so, on the one hand there must be areas for human development and on the other hand let me plead for areas for total protection of nature' (Cowie, 1955, p. 10).

Such protected areas needed active management (Worthington, 1950). Culling was essential (Darling, 1964, p. 221). Protected areas became a focus for scientific research, to

acquire 'the knowledge that will enable us to push our thoughts and ideas forwards' (Pearsall, 1958, p. 306). The positioning of conservation as part of a broader scientific and developmental endeavour led to the idea of managing wild animals as a resource, or what has come to be called sustainable use: conservation was seen as two-pronged, with national parks and 'areas devoted to game production for meat, recreation, and tourist income through hunting' alongside them (Petrides & Swank, 1960, p. 303).

The approach to conservation had been 'too static' (Worthington, 1960, p. 341) and there were potential conservation, social and economic benefits in local hunters cropping wildlife meat in buffer zones surrounding National Parks (Worthington, 1960, p. 342). Time has shown the naivety of such ideas. Thus a game cropping operation—much like those Worthington had proposed—in the Western Corridor of Serengeti, for example, was much later found to be economically unsustainable, making only a minor economic contribution compared to illegal hunting (Holmern et al., 2002).

The problem of illegal hunting grew in East Africa after world war two, driven by poverty, hunger and market demand. For a moment, around the end of the colonial era, government authorities seemed on top of it: 'all out poaching control efforts' in Kenya had 'overpowered organized game destruction' (Petrides & Swank, 1960, p. 296). But success was illusory. Poaching for rhino horn and ivory drove elephant and rhino populations down (Hillman & Martin, 1979; Borner, 1981; Malpas, 1981; Douglas-Hamilton, 1987): the northern white rhino was extinct in the wild by 2008 (Leader-Williams, 2013). For decades, Kenya has supported calls for a CITES ban on the legal trade in ivory and rhino horn (e.g. Poole & Thomsen, 1989). The debate continues with undimmed urgency.

As well as artisanal hunting, Worthington also saw opportunities in sport hunting, when 'conservation measures' were applied (1960, p. 343). Such hunting continues, although not in Kenya, as do debates about its effects (Nelson et al., 2013). The attraction of legalized and regulated hunting was that protected areas alone were seen to be insufficient to ensure the survival of large mammals (Worthington, 1950). People increasingly occupied the best land, with 'the fauna' restricted 'mainly to. . . marginal lands' (Worthington, 1950, p. 44).

Moreover, there were increasing claims to the land in protected areas. Proposals to revise the boundaries of Serengeti in the 1950s were fiercely opposed (Boyle, 1956). The retiring conservator might claim the Ngorogoro Conservation Area a success as a 'coordinated experiment in multiple land usage', thanks to 'the strong support which the nation's leaders are giving to wildlife conservation' (Fosbrooke, 1965, p. 167) but conflicts persisted around Serengeti, as elsewhere, over land rights and poaching (e.g. Makacha et al., 1982). Belatedly it became clear that hunting by rural people is about more than subsistence (e.g. Goldman et al., 2013).

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In the later 20th century, it became widely accepted that poor communities around protected areas should receive economic benefits, both to meet their needs and to incentivize support for conservation. Sachedina & Nelson (2010) compared community-based conservation approaches around Tarangire and Lake Manyara National Parks, showing that schemes that linked the income of communities from wildlife to land protection (in this case tourism concessions and direct payments) were most effective in conservation terms.

One problem above all has bedevilled Worthington's ideal of wild animals roaming outside protected areas: the impact of crop raiding and livestock predation on rural people. Worthington's solution was to accept that wildlife should be limited to protected areas and zones where wildlife could be hunted as an economic crop. He suggested that Game Departments should 'go all out' to reduce the numbers of 'undesirable animals' (baboons, bush pigs and hyaenas almost everywhere, and in places elephants, buffalo and monkeys), to reduce local opposition to the conservation of the fauna 'where it can do little or no harm, in national parks and game reserves' (Worthington, 1950, p. 46).

The problem is perhaps most acute with elephants. Elephant crop raiding leads to human injury and sometimes death, farmers chase and sometimes kill elephants, and wildlife departments end up shooting so-called 'problem elephants' (Hoare, 2000). One obvious solution is that local people should benefit economically from elephants on their land, for example through tourism, or safari hunting (Thouless, 1994). Another approach is the development of farm-based deterrents and early warning (Sitati & Walpole, 2006; Graham & Ochieng, 2008; Graham et al., 2012). But the problem remains: elephants and farmers make difficult neighbours. 'Conflict' has acquired huge political salience even in countries where elephant populations are declining.

How would Worthington view the conservation of large mammals in East Africa today? He would probably be delighted that the protected area system is so extensive, and not surprised that its management was proving challenging, although he might not have expected the political strength of rural people in the turbulent democracies of independent nations. The threats and opportunities he identified remain substantially unchanged, however. A recent assessment of the threats to Kenya's protected areas identified poaching, human-wildlife conflicts, encroachment, and loss of migration corridors and dispersal areas as the most severe problems (Kiringe et al., 2007). However, as the assessment showed, the shrinking space for all mammals except humans and their livestock is conservation's biggest challenge—just as Worthington predicted.

Worthington would surely challenge us to better his analysis of this problem. Perhaps he would also draw attention to the conservation importance of species beyond charismatic large mammals (maybe, radically, even plants). Above all, he would surely suggest that the conservation Great Game is still there to be played by anyone whose view of conservation is not 'too static'.

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