

The Great Game: Conservation in East Africa 1950-2016

WILLIAM M. ADAMS

WILLIAM M. ADAMS Department of Geography, University of Cambridge, Downing Place, Cambridge, CB2 3EN, UK. E-mail wa12 @cam.ac.uk.

In the first issue of *Oryx* E.B. Worthington (1950) cast backwards to the start of the 19th 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 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 East African conservation (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 game cropping operation—much like those Worthington had proposed—in the Western Corridor of Serengeti, for example, was found to be economically unsustainable, making only a minor economic contribution compared to illegal hunting (Holmern et al., 2002).

The problem of illegal hunting became ubiquitous in East Africa, 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., 1979). Belatedly it became clear that hunting by rural people is about more than subsistence, (e.g. Goldman *et al.* 2013).

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 and 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 elephant, 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). 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 illegal bushmeat hunting, poaching of large mammals, human-wildlife conflicts, encroachment, and loss of migration corridors and dispersal areas as the most severe problems (Kiringe et al., 2007). However, as the review showed the shrinking space for all mammals except humans and their livestock to be 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'.

To mark Volume 50 of *Oryx* this Editorial and the references cited herein are freely available as a virtual issue of the journal at <http://journals.cambridge.org>

References

- Borner, M. (1981) Black rhino disaster in Tanzania, *Oryx*, 16, 59–66.
Boyle, C.L. (1956) What of the Serengeti? *Oryx*, 3, 303–318.
Cowie, M. (1955) Preserve or destroy? *Oryx*, 3, 9–11.
Darling, F.F. (1964) Must we kill to conserve? *Oryx*, 7, 219–222.

- Douglas-Hamilton, I. (1987) African elephants: population trends and their causes. *Oryx*, 21, 11–24
- Fosbrooke, H.A. (1965) Success story at Ngorongoro. *Oryx*, 8, 164–168.
- Foster-Vesey-Fitzgerald, D. (1954) Wild life in Kenya: a consideration of animals and their habitats. *Oryx*, 2, 286–293.
- Goldman, M.J., Roque de Pinho, J. and Perry, J. (2013) Beyond ritual and economics: Maasai lion hunting and conservation politics, *Oryx* 47 (4): 490–500
- Graham, M.D, Adams. W.M. & Kapiro, G.N. (2012) Mobile phone communication in effective human-elephant conflict management in Laikipia County, Kenya. *Oryx*, 46, 137–144.
- Graham, M.D. & Ochieng, T. (2008) Uptake and performance of farm-based measures for reducing crop raiding by elephants *Loxodonta africana* among smallholder farms in Laikipia District, Kenya. *Oryx*, 42, 76–82.
- Hillman, K. & Martin, E. (1979) Will poaching exterminate Kenya's rhinos? *Oryx*, 15, 131–132.
- Hoare, R. (2000) African elephants and humans in conflict: the outlook for co-existence *Oryx* 34: 34–38.
- Holmern, T., Røskoft, E., Mbaruka, Samson, J. Mkama Y. & Muya, J. (2002) Uneconomical game cropping in a community-based conservation project outside the Serengeti National Park, Tanzania. *Oryx*, 36, 364–372.
- Kiringe, J.W., Okello, M.M. & Ekajul, S. W. (2007) Managers' perceptions of threats to the protected areas of Kenya: prioritization for effective management. *Oryx*, 41, 314–321.
- Leader-Williams, N. (2013) Fate riding on their horns—and genes? *Oryx*, 47, 311–312.
- Makacha, S., Msingwa, M.J. & Frame, G.W. (1979) Threats to the Serengeti herds. *Oryx*, 16, 437–444.
- Malpas, R. (1981) Elephant losses in Uganda—and some gains. *Oryx*, 16, 41–44.
- Nelson, F., Lindsey, P. & Balme, G. (2013) Trophy hunting and lion conservation: a question of governance? *Oryx*, 47, 501–509.
- Pearsall, W. H. (1958). Conservation as a world problem. *Oryx*, 4, 301–306.
- Petrides, G. A. & Swank, W. G. (1960) The status of wildlife and wilderness areas in East Africa. *Oryx*, 5, 295–306.
- Poole, J.H. & Thomsen, J.B. (1989) Elephants are not beetles: implications of the ivory trade for the survival of the African elephant. *Oryx*, 23, 188–198.
- Prendergast, D.K. & Adams, W.M. (2003) Colonial wildlife conservation and the origins of the Society for the Preservation of the Wild Fauna of the Empire (1903-1914). *Oryx*, 37, 251–260.
- Sachedina, H. & Nelson, F. (2010) Protected areas and community incentives in savannah ecosystems: a case study of Tanzania's Maasai Steppe. *Oryx*, 44, 390–398.
- Sitati, N.W. & Walpole, M.J. (2006) Assessing farm-based measures for mitigating human–elephant conflict in Transmara District, Kenya. *Oryx*, 40, 279–286.
- Thouless, C. (1994) Conflict between humans and elephants on private land in northern Kenya. *Oryx*, 28, 119–127.
- Worthington, E. B. (1950) The future of the African fauna. *Oryx*, 1, 44–50.
- Worthington, E. B. (1960) Dynamic conservation in Africa. *Oryx*, 5, 341–345.