

Greater Serengeti Ecosystem and Ecotourism

by Walt Anderson

A visitor to Serengeti National Park in Tanzania could easily assume that this is an area frozen in time, a pristine wilderness where little has changed since the Pleistocene, where megafauna like elephants, giraffes, rhinos, lions, zebras, and wildebeest roam as they have always done, where Nature is as natural as you can find anywhere. That assumption would be completely false (Sinclair 1979, Adams and McShane 1992).

The Greater Serengeti Ecosystem (GSE), consisting of Serengeti National Park (SNP), Ngorongoro Conservation Area (NCA), Masai Mara National Reserve (Mara), the Loliondo Game Controlled Area, and various Game Reserves and Wildlife Management Areas (WMA's), is a dynamic landscape that has undergone many changes even in the past few centuries. That it appears pristine is a measure of its resilience and of management practices that have promoted wildlife populations and tourism.

To be sure, the diversity of megafauna today reflects a long history of co-existence of people and wildlife; Africa did not experience the wave of megafaunal extinctions that accompanied human migration to other continents or islands (Martin and Klein 1984).

But human and wildlife populations have been anything but stable. Different ethnic groups have moved in to displace, absorb, or co-exist with previous residents (Reid et al. 2015, Knapp et al. 2015). The arrival of Maasai pastoralists led to violent conflicts, resulting in displacement of the Datoga in the Ngorongoro Highlands and the Bantus in the western part of GSE by 1850. People often say that the Maasai have been there "since time immemorial," but they actually were recent invaders who arrived only shortly before the European settlers.

The colonial periods were also fairly brief (Germans from 1885-1916 and English from 1918-1961) (Knapp et al. 2015). During this period, wildlife populations experienced major fluctuations. Intense ivory poaching led to ecological changes from the removal of elephants, a keystone species. The rinderpest epidemic starting in the 1980s (which killed off as much as 90% of the social ruminants like wildebeest and cattle), as well as smallpox, sleeping sickness, and resulting famines, depopulated large areas and shifted wildlife populations dramatically. Even then, some visitors (big-game hunters) reported the landscape as "natural."

Tourism in East and southern Africa began as safari hunting and evolved into non-lethal wildlife watching as hunting excesses became prominent and values began to change. The first government-sponsored protected area in GSE was declared in 1929, and through some additions and additional declarations, Serengeti National Park, one of the world's first, was established in 1951 (Sinclair 2012).

It did not take long for international conservation organizations (especially the Frankfurt Zoo with the charismatic Bernhard Grzimek) to worry about potential human-wildlife conflicts in the Serengeti, so in 1959, Maasai living in the redefined park were moved east into the new Ngorongoro Conservation Area as the first major experiment in community-based conservation. Both SNP and NCA were declared

World Heritage Sites and part of a Biosphere Reserve. The NCA authority later disallowed the Maasai the right to live within the actual crater and has since set more limits on what the Maasai can and cannot do within the NCA; the intended win-win for wildlife and Maasai has certainly not resulted in a net win for the Maasai in the area (Reid et al. 2015).

Tourism growth in the Serengeti was halted in 1979 when Tanzania abruptly closed the border with Kenya. The rationale seemed simple: tourists were flying into Nairobi, Kenya and hiring tour operators there who drove directly across the border into the Serengeti, taking advantage of Tanzanian wildlife without providing significant revenue. The border closure actually harmed the Tanzania economy even more; tourism dropped dramatically, and without tourist revenue and presence, poaching became rampant in the Serengeti (Sinclair 2012). Black Rhinos, a prime target for poachers, went from about 500 in 1979 to a mere 10 in 1998 (there have been some repatriation efforts since then). Elephant numbers dropped from 2000 in 1976 to about 400 traumatized animals in 1986. Buffaloes also declined precipitously from poaching. The few rangers left on the job were harassed, even killed, and die-hard tourists were ambushed often. Eventually outside support and direct efforts by the Tanzanian government got poaching under control, and tourism has rebounded. The direct lesson was that tourism, which provided eyes on the ground and revenue to support ranger patrols, clearly had benefits for wildlife populations vulnerable to poaching.

The Mara, the northern extension of the Serengeti ecosystem and a vital link for the Great Migration of ungulates, is managed by the Narok and Trans Mara County Councils. Part of the area is closed to Maasai residency (an inviolate reserve), while much is open for Maasai living and land management. Unfortunately, the Mara has suffered from encroaching agriculture, expanding human populations, privatization of former group ranches, and excessive tourist numbers and associated impacts (Reid et al. 2015). Tourism has contributed to problems by driving local population growth; the population of the Mara region within 10 km of the reserve grew by an astonishing 9% per annum from 1967-2003 (Norton-Griffiths et al. 2008).

David Western (2008), former head of Kenya Wildlife Services, founding president of The International Ecotourism Society (TIES), and strong proponent of community-based conservation, described the contradictions whereby Kenya's Masai Mara became an example of both the best and worst of tourism (see also Honey 2008). Some outstanding ecotourism enterprises contrast dramatically with mass tourism and corruption of certain players, including government officials. Wildlife populations have declined dramatically in much of the Mara, and future landscape changes (e.g., the continued decline in flows of the Mara River, a major trunk road through the northern Serengeti) could seriously damage the Great Migration itself (Reid et al. 2015). There are less destructive alternatives, so financial and political resources must be focused wisely and effectively.

The GSE is a complex and dynamic system of land management areas that range from complete human domination (e.g., agriculture) to intact and functioning natural areas (parts of SNP). Successful conservation will depend on both protected areas and community-based conservation employing practices that improve human livelihoods while protecting ecosystem function (Sinclair 2008). One promising sign is the creation of the Serengeti Ecosystem Community Conservation Forum (SECCF), an

NGO trying to bring stakeholders together to develop “trust, commitment, transparency, accountability, sustainability, fair and equitable benefits, cooperation, partnership, and empowerment” (Randall et al. 2015). Since a good percentage of the pastoralists in the GSE do not even understand the existence of parks and of community-based conservation efforts, good communication must be a key element of any conservation strategy.

The future success of conservation, including ecotourism, is dependent upon more than the policies and programs of the Tanzanian government. The Father of the Nation of Tanzania, Julius Nyerere, spoke in 1961 in his Arusha manifesto: “The conservation of wildlife and wild places calls for specialist knowledge, trained manpower, and money, and we look to other nations to cooperate with us in this important task—the success or failure of which not only affects the continent of Africa but the rest of the world, as well.”

Western (2008) made a strong plea for conservation philanthropy, calling on ecotourists to support the ecosystems that attract them for memorable travel experiences. Tourism’s economic power must be linked to political and social power, as well. There are examples that prove this can be done, and some of the deepest thinkers on this issue have made solid recommendations (e.g., Randall et al. 2015, Reid et al. 2015). Decisions and actions taken in the next few years will likely determine whether or not the people and wildlife of East Africa can continue to co-exist in spite of conflicting priorities and uncertainties such as climate change.

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