

Preserving the New Tanzania: Conservation and Land Use Change*

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Introduction

Consider the facts. Tanzania has the largest protected area estate in Africa, both absolutely and relatively. Tanzania at independence inherited a large protected area estate, it has been vigorously expanding it ever since, and particularly so in recent years. Table 1, drawn from the World Database of Protected Areas, shows its dominance. Excluded, however, from those data are forest reserves, which cover a further 10 percent of the country. We then have to consider the expansion of the Katavi and Mikumi National Park, the creation of the Rukwa, Luafi and Usangu Game Reserves, the creation of the Kitulo National Park and upgrading of Mkomazi Game Reserve to National Park status, and the upgrading of the forest reserves on Kilimanjaro to National Park status, all within the last ten years. Tanzania had set aside about 31 percent of its land mass by 2003 in national parks, game reserves and forest reserves (we have not included game controlled areas), and that was before the expansion of Mikumi National Park was announced. Tanzania's conservation estate is unrivalled in Africa.

In addition, there is another expansion of less formally protected conservation estate, at the village level. Two types are prominent—wildlife management areas and village forest reserves. The former involves villages setting aside a portion of their land for wildlife habitat, often adjacent to national parks and game reserves, and then selling the right to hunt or photograph wildlife on those lands to tour operators. The process is fraught with conflict. Some villages insist that they were not properly consulted and resent the sudden and peculiar appearance of wildlife management areas on their land.¹ Others have set up their own agreements independently of government support, and earned valuable sums from it.²

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¹ Jim Igoe and Beth Croucher "Poverty Alleviation Meets the Spectacle of Nature: Does Reality Matter?" *Conservation and Society* 5, 4 (2007), 534–61.

² Fred Nelson, "The Evolution and Impacts of Community-Based Ecotourism in Northern Tanzania." *IIED Drylands Programme Issue Paper* 131 (2004); Fred Nelson and Sinandei O. Makko, "Communities, Conservation and Conflicts in the Tanzanian Serengeti" (Third Annual Community-Based Conservation Network Seminar: Turning Natural Resources into Assets, Savannah Georgia, 2003).

Less financially lucrative, but still important for the landscape and protected area estate, has been the growth of village forest reserves and *ngitili*. The former are areas of village land with demarcated boundaries and locally agreed and enforced rules of use. They have been endorsed with national level legislation and are growing in diverse regions in the country.³ The latter are private and village owned grazing and forest reserves set up to strengthen local resource use. *Ngitili* are a traditional institution of the Sukuma people which had fallen into disrepair, but have since been invigorated with demonstrable ecological and livelihood impacts, particularly in the region south of Lake Victoria.⁴

We will examine two aspects of this remarkable division and categorization of land in Tanzania. First, we will consider what its consequences for vegetation, wildlife, and people have been. Then we will examine some of the forces that have marshalled and directed this expansion. We will argue that, although the initial impetus for the conservation estate derived from a colonial vision for Africa's landscape, Tanzania's remarkable growth of protected areas reflects vigorous state support for conservation (boosted by the revenues it offers) combined with a powerful international conservation lobby. Extensive as the expansion of the conservation estate has been, it is difficult to imagine the growth ceasing.

Landscape Change

In 1930 Major Richard Hingston was sent to Tanganyika by the Society for the Preservation of the Fauna of the Empire to investigate the possibility of establishing national parks there as part of a coordinated program of nature conservation in African lands. Hingston's report envisaged a future where agricultural development had transformed the landscape except in the parks, where wildlife alone could be found.⁵ He

³ Liz Alden Wily and Peter A. Dewees, "From Users to Custodians: Changing Relations between People and the State in Forest Management in Tanzania," *World Bank Policy Research Paper* No. 2569 (2001); Liz Alden Wily and Othmar Haule, "Good News from Tanzania: Village Forest Reserves in the Making—the Story of Duru-Haitemba," *Forest, Trees and People Newsletter* 29 (1995), 28–37; Elmer Topp-Jorgensen, Michael K. Poulsen, Jens F. Lund, and John F. Massao, "Community-Based Monitoring of Natural Resource Use and Forest Quality in Montane Forests and Miombo Woodlands of Tanzania," *Biodiversity and Conservation* 14, 11 (2005), 2653–77; Lorenz Petersen and Anna Sandhovel, "Forestry Policy Reform and the Role of Incentives in Tanzania," *Forest Policy and Economics* 2, 1 (2001), 39–55; Tom Blomely and H. Ramadhani, "Going to Scale with Participatory Forest Management: Early Lessons from Tanzania," *International Forestry Review* 8, 1 (2006), 93–100.

⁴ G.C. Monela, S.A.O. Chamshana, R. Mwaipopo, and D.M. Gamassa, "A Study of the Social, Economic and Environmental Impacts of Forest Landscape Restoration in Shinyanga Region, Tanzania" (Nairobi, IUCN, Eastern Africa Regional Office, 2004). How village government has been strengthened to support them is less apparent. See Dan Brockington, "Devolution, Community Conservation, and Forests: On Local Government Performance and Village Forest Reserves in Tanzania," *Society and Natural Resources* 20 (2007), 835–48.

⁵ Richard W.G. Hingston, "Proposed British National Parks for Africa." *The Geographical Journal* 77, (1931), 401–428.

Table 1: Trends in Terrestrial Protected Area Establishment (IUCN category 1–4) 1959–2004.

Country	Percentage of land area set aside 1959	Growth 1960–2004 as a % of land available	Percentage of land set aside in 2004	Area of land area set aside 2004 (km ²)	Rural Pop. density/km ²
Tanzania	9.0%	8.0%	16.5%	145,938	19
Chad	0.1%	9.6%	9.7%	121,869	3
DRC	0.8%	3.8%	5.1%	115,228	No data
Botswana	0.0%	18.4%	18.4%	104,406	1
Niger	0.2%	6.5%	6.7%	84,940	4
Sudan	1.0%	2.3%	3.3%	78,571	7
CAR	10.0%	2.0%	11.8%	73,512	3
South Africa	2.6%	1.5%	5.2%	63,958	12
Zambia	0.0%	8.4%	8.4%	62,442	5
Angola	1.8%	2.5%	4.3%	53,233	5
Ethiopia	0.6%	4.8%	5.3%	52,868	No data
Mali	2.4%	0.6%	3.0%	36,382	5
Nigeria	0.1%	3.8%	3.9%	35,484	59
Kenya	4.1%	2.0%	6.0%	34,051	25
Congo	0.3%	9.5%	9.8%	33,320	3
Burkina Faso	3.5%	7.9%	12.1%	33,063	25
Namibia	0.0%	4.0%	4.0%	32,970	1
Cameroon	1.5%	4.8%	6.8%	31,461	13
Mozambique	0.0%	3.7%	3.7%	29,017	13
Zimbabwe	4.1%	3.1%	7.0%	27,194	15
Senegal	4.4%	6.9%	11.2%	21,550	19
Uganda	3.8%	6.9%	10.5%	20,724	63
Ivory Coast	0.0%	6.2%	6.2%	19,756	18
Madagascar	0.7%	1.7%	2.4%	14,137	13
Ghana	0.0%	4.7%	4.7%	10,583	37
Malawi	3.2%	7.8%	10.7%	10,076	64
Benin	5.2%	2.7%	7.8%	8,644	25
Eritrea	5.9%	0.0%	5.9%	5,923	No data
Eq. Guinea	0.0%	16.3%	16.3%	4,559	7
Togo	7.6%	0.0%	7.6%	4,136	39
Rwanda	7.3%	4.5%	11.4%	2,817	205
Mauritania	0.2%	0.0%	0.2%	2,500	1
Somalia	0.0%	0.0%	0.3%	1,802	7
Sierra Leone	0.8%	1.1%	1.9%	1,328	36
Burundi	1.5%	3.5%	5.0%	1,282	170
Gabon	0.0%	0.4%	0.4%	1,076	1
Liberia	0.0%	1.0%	1.0%	965	13
Guinea	0.1%	0.1%	0.2%	425	16
Swaziland	0.0%	2.1%	2.1%	359	30
Lesotho	0.0%	0.3%	0.3%	87	39
Gambia	0.0%	0.1%	0.1%	5	58

Source: Protected Area data from the World Database of Protected Areas 2005. Population Density data are from the World Bank 2004.



Figure 1. From Hingston 1931. Proposed national parks are shaded in black.

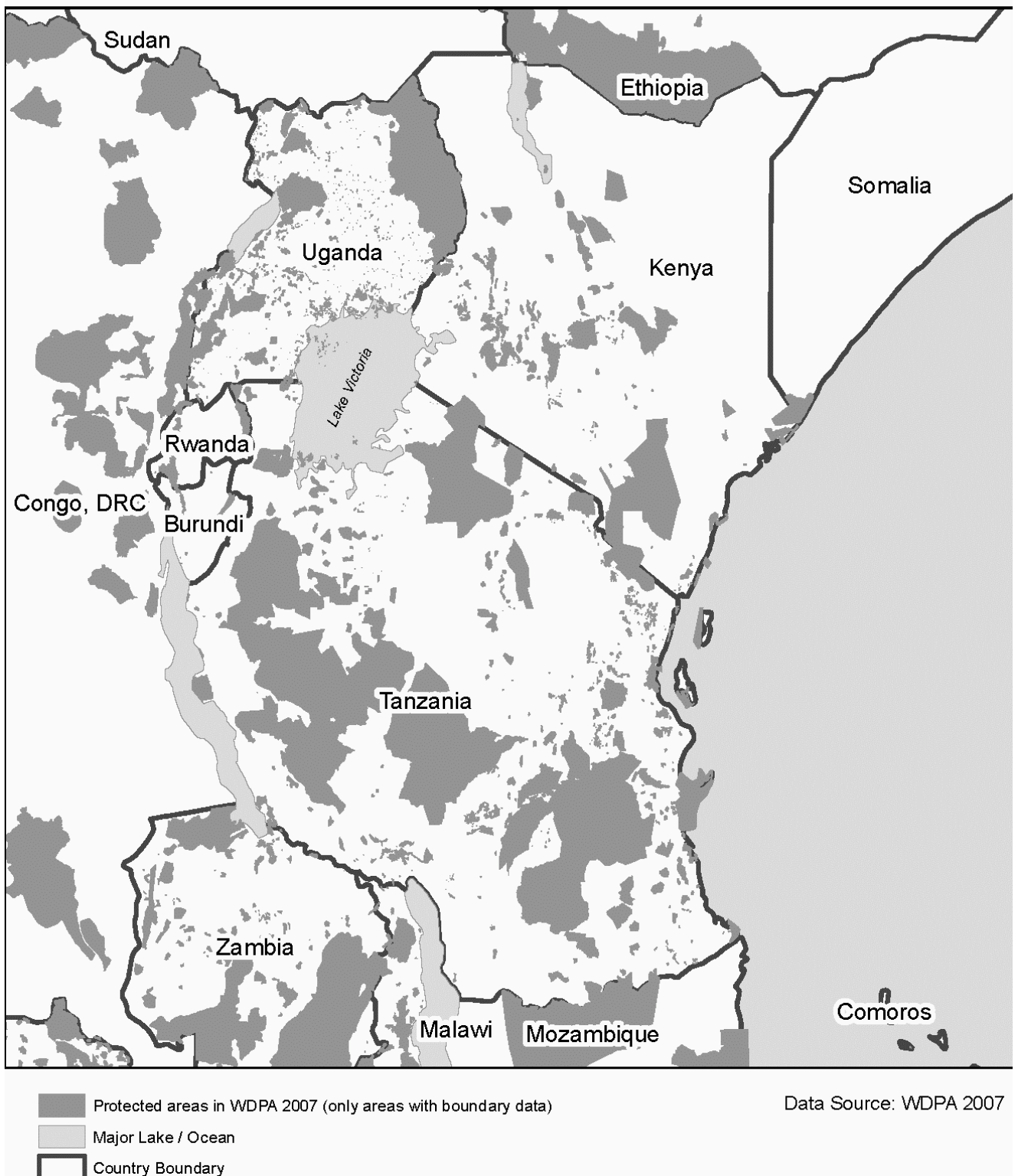


Figure 2. The current geography of protected areas in East Africa. Note, does *not* include forest reserves.

proposed three modest parks for Tanganyika (Figure 1). The current geography of protected areas differs in that much more land is set aside, and in larger constellations (Figure 2). In many places the contrast between protected and unprotected land has unfurled as Hingston foretold, but not always, and not always as he might have expected. Tanzania's protected areas have long been chronically under-funded, and under-policed. But its regulations do have teeth. The regulations have visible impacts in the vegetation, landscape, and wildlife distributions of the country, as well as the lives and livelihoods of its citizens. To appreciate their achievements it is helpful to step back and consider some broader recent ecological trends.

Kjekhus has suggested that precolonial bush clearance allowed East Africans to cope with the threat of trypanosomiasis.⁶ The collapse of livestock and human populations after rinderpest (which arrived in 1891) was partly due to the collapse of their ecological controls. The recovery of populations in the twentieth century required that control to be re-established by re-clearing the bush. The history of that century therefore in Tanzania can partly be told in fallen trees, as rural peoples (with some government assistance) cleared the bush to eradicate the tsetse. Ford records that the British administration cleared *ca.* 2,000 km² of bush to rid it of the tsetse fly, but that local, unsupervised clearance added a further 7,000 km² of fly-free land.⁷ The transition from the forest reserves of Tabora north to the treeless zones of Mwanza near the lake reflect that history of population expansion and land clearance.⁸

Generally, therefore, on the largest scale, it should be no surprise that the impacts of conservation are visible in the relative vigorous vegetation cover. Pelkey and colleagues examined NDVI and LANDSAT satellite data for the years 1982–94 and 1978–82, respectively. They found that vegetation in national parks and game reserves was generally greener (healthier) than unprotected land, particularly woodlands, swamps, and bushlands. Forest reserves however, which are often not patrolled, did not provide strong protection.⁹

The health of montane forests is particularly tightly tied to strong conservation policies. The Eastern Arc forests, found on isolated mountains and rich in biodiversity,

⁶ Jim Giblin, "Trypanosomiasis Control in African History: An Evaded Issue?" *Journal of African History* 31, (1990), 59–80; Jim Giblin, *The Politics of Environmental Control in Northeastern Tanzania 1840–1940* (Philadelphia: University of Pennsylvania Press, 1992); Jim Giblin, "East Coast Fever in Socio-Historical Context: A Case Study from Tanzania," *International Journal of African Historical Studies* 23, (1990), 401–21; Helge Kjekshus, *Ecology Control and Economic Development in East African History: The Case of Tanganyika 1850–1950* (1977; reprint, London: James Currey, 1996).

⁷ John Ford, *The Role of Trypanosomiasis in African Ecology: A Study of the Tsetse Fly Problem* (Oxford: Clarendon Press, 1971).

⁸ Per Brandstrom, "The Agro-Pastoral Dilemma: Underutilisation or Overexploitation of Land among the Sukuma of Tanzania," *Working Papers in African Studies*, No. 8 (African Studies Programme, Department of Cultural Anthropology, Sweden, 1985); Per Brandstrom, "Boundless Universe: The Culture of Expansion among the Sukuma-Nyamwezi of Tanzania" (Ph.D. thesis, Uppsala University, 1990).

⁹ N.W. Pelkey, C.J. Stoner and T.M. Caro, "Vegetation in Tanzania: Assessing Long Term Trends in Effects of Protection Using Satellite Imagery," *Biological Conservation* 94 (2000), 297–309.

have been substantially cleared by farmers seeking fertile land in well watered, often malaria free mountains. Conte has documented the devastating clearance of a forest reserve in the Usambara mountains after it was degazetted following independence.¹⁰

But at smaller scales, and in particular ecosystems, this general rule cannot be applied. The Ngorongoro Conservation Area, in which people live, performs better than national parks where they do not. Homewood and colleagues' comparative study of land cover change in the Serengeti ecosystem between Kenya and Tanzania shows that what matters is not the categorization of land into protected and unprotected, but the form of tenure and the opportunities for commercial agriculture they afford.¹¹

At the general level, the protection of vegetation is matched by higher abundances of wildlife within protected area boundaries.¹² Heavier ungulates in particular, targeted by poachers for their better returns for effort, are more abundant in protected areas.¹³ More strictly protected areas are better more often for more species than less protected areas. But this is not just a story of healthy wildlife populations amid a sea of change. Some large species (buffalo and eland) fared better outside national parks and game reserves in some ecosystems. Moreover it is not yet possible to test how different species fare under different forms of protection that require more local participation.¹⁴

Another difficulty is that in many ecosystems numerous species depend on land beyond the borders of national parks. The health of the ecosystem therefore depends not just on the land that has been protected by the state, but the nature of land use outside its boundaries.¹⁵ The Amboseli National Park protects a small dry season concentration area,

¹⁰ Chris A. Conte, "The Forest Becomes a Desert: Forest Use and Environmental Change in Tanzania's West Usambara Mountains," *Land Degradation and Development* 10 (1999), 291–309.

¹¹ Katherine Homewood, "Policy, Environment and Development in African Rangelands," *Environmental Science and Policy* 7 (2004), 125–43; Kathy Homewood, Eric F. Lambin, Ernestina Coast, A. Kariuki, Idris Kikula, Julius Kivulia, M. Said, S. Serneels, and Mick Thompson, "Long-Term Changes in Serengeti-Mara Wildebeest and Land Cover: Pastoralism, Population, or Policies?" *Proceedings of the National Academy of Sciences of the United States of America* 98 (2001), 12544–49; Mick Thompson and Katherine Homewood, "Entrepreneurs, Elites and Exclusion in Maasailand: Trends in Wildlife Conservation and Pastoralist Development," *Human Ecology* 30, 1 (2002), 107–37.

¹² Chantal Stoner, Tim Caro, Simon Mduma, Charles Mlingwa, George Sabuni, Marcus Borner, and C. Schelten, "Changes in Large Herbivore Populations Across Large Areas of Tanzania," *African Journal of Ecology* 45, 2 (2007), 202–15; Tim M. Caro, N. Pelkey, Marcus Borner, K.L.I. Campbell, B.L. Woodworth, B.P. Farm, J.O. Kuwai, S.A. Huish and E.L.M. Severre, "Consequences of Different Forms of Conservation for Large Mammals in Tanzania: Preliminary Analyses," *African Journal of Ecology* 36, 4 (1998), 303–20.

¹³ Caro et al., "Consequences."

¹⁴ Stoner et al., "Changes," 645.

¹⁵ Mara Goldman, "Sharing Pastures, Building Dialogues: Maasai and Wildlife Conservation in Northern Tanzania" (Ph.D. thesis, University of Wisconsin, 2006).

and wildlife depend on lands beyond it in the wet season.¹⁶ The same is true in the Serengeti and Tarangire, where wildebeest and other herbivores (together with their carnivore followings) range far beyond national park boundaries into lands where people live.

The interactions between different species and people can be complex and unexpected impacts emerge in the relative abundance of different species of wildlife in protected ecosystems. The impact of parks on decision making, wildlife and land use change is also often felt far beyond their boundaries. For example, the removal of Maasai pastoralists from the Serengeti National Park in the 1950s may have facilitated the irruption of the wildebeest population, from about 200,000 to 1.4 million.¹⁷ Populations were rebounding anyway as they recovered from rinderpest, but the Maasai were wont to fence off some waterholes for their cattle on the plains in the wet season. Their absence removed this constraint.¹⁸ The result has been the further exclusion of Maasai stock from the plains of the Ngorongoro Conservation Area where they live with the wildlife. Wildebeest calves carry malignant catarrhal fever, which is fatal to livestock and herders have to avoid them. Since 1976 (known to the Maasai as the year of the wildebeest), wildebeest have been too numerous for Maasai livestock to use the fertile short grass plains in the wet season.¹⁹ This confines stock to colder, less productive pastures where they do not perform well. It is one of the factors, combined with policies suppressing burning, which has accelerated dependence on agriculture.²⁰

The suppression of elephant hunting by Watta bowmen from Tsavo National Park in the 1950s resulted in many more elephants and their deforesting of large parts of the park.²¹ Before the poaching crisis of the 1970s “solved” the problem, park wardens were worrying about what to do about the degradation elephants were causing, just as they are in

¹⁶ David Western, “Ecosystem Conservation and Rural Development: The Case of Amboseli,” in David Western and R. Michael Wright, eds., *Natural Connections: Perspectives in Community-Based Conservation* (Washington, D.C.: Island Press, 1994).

¹⁷ Katherine M. Homewood and W. Alan Rodgers, *Maasailand Ecology: Pastoralist Development and Wildlife Conservation in Ngorongoro, Tanzania* (Cambridge: Cambridge University Press, 1991).

¹⁸ Katherine Homewood, personal communication, February 2004.

¹⁹ Tomas Potkanski, “Pastoral Economy, Property Rights and Traditional Mutual Assistance Mechanisms among the Ngorongoro and Salei Maasai of Tanzania,” *IIED Pastoral Land Tenure Series Monograph 2* (1997).

²⁰ Kathleen Galvin, Jim Ellis, R.B. Boone, A.L. Magennis, N.M. Smith, S.J. Lynn, and P. Thornton, “Compatibility of Pastoralism and Conservation? A Test Case Using Integrated Assessment in the Ngorongoro Conservation Area, Tanzania,” in Dawn Chatty and Marcus Colchester, eds., *Conservation and Mobile Indigenous Peoples: Displacement, Forced Settlement and Sustainable Development* (New York: Berghen Books, 2002).

²¹ Krishna B. Ghimire and Michel Pimbert, “Social Change and Conservation: An Overview of Issues and Concepts,” in Krishna B. Ghimire, and Michel Pimbert, eds., *Social Change and Conservation* (London: Earthscan, 1997); Ed I. Steinhart, *Black Poachers, White hunters: A Social History of Hunting in Colonial Kenya* (Oxford: James Currey, 2006).

Southern Africa now. The problem may begin to emerge in Tanzania. Poaching is minimal and healthy elephant populations are rebounding in national parks. In Tarangire, they have grown by 7 percent per annum since 1994, close to their known maximum reproductive rate.²² The population now numbers approximately 2,300 individuals, the largest elephant population in northern Tanzania. The creation of village forest reserves may have further extended habitat for elephant populations. Topp-Jorgensen and colleagues report the recent case for many years of people killed by elephants near the village forest reserve of Mgori, the first for many years.²³

But the creation of parks does not just create healthy populations of wildlife that migrate beyond their borders. They can also facilitate the depopulation of wildlife outside their own boundaries. They sharpen their own hard edges; their creation accelerates the separation of landscape into the categories “developed” and “wild” that Hingston envisaged. In Tanzania, villagers are alleged to have systematically destroyed chimpanzees in one forest after a visit from a Parks official was misinterpreted to portend gazettement.²⁴ Sachedina’s research shows that pastoralists turning pasture to agricultural land near Tarangire state that one of their reasons for doing so was in part to strengthen their claims to land and counter a perceived threatened expansion of the conservation estate, and in part to establish the practice that has been banned in the NCA.²⁵ It is not a problem confined to Tanzania. Villagers in Uganda set about killing as much wildlife as they could to try and avert the re-creation of the Lake Mburo National Park.²⁶

The hostility results from local resentment of conservation policy. There has been repeated eviction and continual exclusion from protected areas.²⁷ The eviction of people from protected areas has been accompanied by sporadic campaigns against residence and resource use, both nationally (such as operation Uhai in the late 1980s, which clamped down on elephant poaching) and locally around specific reserves. Encounters with poachers can be violent—there was a recent scandal in the Serengeti when fifty poachers from one village were alleged to have been captured and then shot by guards.²⁸ The presence of safari hunting companies also adds to the eyes (and fire power) on the ground as armed Wildlife Division rangers are required to accompany every tourist hunting party,

²² Hassan Sachedina, “Wildlife Are Our Oil: Conservation, Livelihoods, and NGOs in the Tarangire Ecosystem, Tanzania” (D.Phil. thesis, University of Oxford, 2008).

²³ Topp-Jorgensen, “Community-Based Monitoring.”

²⁴ Martin Walsh, “Mammals in Mtanga: Notes on Ha and Bembe Ethnomammalogy in a Village Bordering Gombe Streams National Park, Western Tanzania,” MS in author’s possession (1997).

²⁵ Sachedina, “Wildlife Are Our Oil.”

²⁶ David Hulme and Mark Infield, “Community Conservation, Reciprocity and Park-People Relationships: Lake Mburo National Park, Uganda,” in David Hulme and Marshall Murphree, eds., *African Wildlife and Livelihoods* (Portsmouth, NH: Heinemann, 2001).

²⁷ Dan Brockington and Jim Igoe, “Eviction for Conservation: A Global Overview,” *Conservation and Society* 4, 3 (2006), 424–70. <http://www.conservationandsociety.org/vol-4-3-06.html>.

²⁸ Roderick Neumann, “Moral and Discursive Geographies in the War for Biodiversity in Africa,” *Political Geography* 23 (2004), 813–37.

and hunting companies are legally required to conduct anti-poaching activities in their hunting blocks throughout the year. Finally the role of international NGOs is also increasing. They too are injecting funds and equipment into making parks and protected areas work.²⁹

The literature on eviction is generally unsystematic, and we are likely to know of only a fraction of what has happened.³⁰ But some patterns are apparent. Tanzania is a country reasonably well-endowed with reports about the impacts of eviction.³¹ We know

²⁹ J.P. Rodriguez, A.B. Taber, P. Daszak, R. Sukumar, C. Valladares-Padua, S. Padua, L.F. Aguirre, R.A. Medellin, M. Acosta, A.A. Aguirre, C. Bonacic, P. Bordino, J. Bruschini, D. Buchori, S. Gonzalez, T. Mathew, M. Mendez, L. Mugica, L. F. Pacheco, A.P. Dobson, and M. Pearl, "Environment—Globalization of Conservation: A View from the South," *Science* 317, 5839 (2007), 755–56; Thaddeus Sunseri, "‘Something Else to Burn’: Forest Squatters, Conservationists, and the State in Modern Tanzania," *Journal of Modern African Studies* 43, 4 (2005), 609–40.

³⁰ Brockington and Igoe, "Eviction for Conservation"; Arun Agrawal and Kent Redford, "Conservation and Displacement: An Overview," in Kent H. Redford and Eva Fearn, eds., *Protected Areas and Human Displacement: A Conservation Perspective* (New York: Wildlife Conservation Society, 2007).

³¹ Kjekshus, "Ecology Control"; Ed Barrow, Helen Gichohi, and Mark Infield, "The Evolution of Community Conservation Policy and Practice in East Africa," in David Hulme and Marshall Murphree, eds., *African Wildlife and Livelihoods* (Portsmouth, NH: Heinemann, 2001); Patrick Bergin, "Accommodating New Narratives in a Conservation Bureaucracy: TANAPA and Community Conservation," in Hulme and Murphree, *African Wildlife*; Roderick Neumann, "Local Challenges to Global Agendas: Conservation, Economic Liberalization and the Pastoralists' Rights Movement in Tanzania," *Antipode* 27 (1995), 363–82; Roderick Neumann, "Primitive Ideas: Protected Area Buffer Zones and the Politics of Land in Africa," *Development and Change* 28, (1997), 559–82; Roderick Neumann, *Imposing Wilderness, Struggles over Livelihood and Nature Preservation in Africa* (Berkeley: University of California Press, 1998); W. Alan Rodgers, R.I. Ludanga, and H.P. DeSuzo, "Biharamulo, Burigi, and Rubondo Island Game Reserves," *Tanzania Notes and Records* 81, 82 (1977), 99–124; Roger Yeager and Norman N. Miller, *Wildlife, Wild Death: Land Use and Survival in Eastern Africa* (Albany: State University of New York Press, 1986); Lucy Emerton and I. Mfunda, "Making Wildlife Economically Viable for Communities Living around the Western Serengeti, Tanzania," *Evaluating Eden Series Discussion Papers* 1 (London: IIED, 1999); Elizabeth Fisher, "Forced Resettlement, Rural Livelihoods and Wildlife Conservation along the Ugalla River in Tanzania," in Chatty and Colchester, eds., *Conservation*; Dan Brockington, *Fortress Conservation. The Preservation of the Mkomazi Game Reserve, Tanzania* (Oxford: James Currey, 2002); Henry Fosbrooke, "Pastoralism and Land Tenure" (paper presented at the workshop on Pastoralism and the Environment, Arusha, Tanzania, April 1990); Kemal Mustaffa, "Eviction of Pastoralists from the Mkomazi Game Reserve in Tanzania: An Historical Review," *IIED Pastoral Land Tenure Series*, No. 8 (1997); A. Mascarenhas, "Ngorongoro: A Challenge to Conservation and Development," *Ambio* 12, 3–4 (1983), 146–52; Eliot Fratkin and T. S.-M. Wu, "Maasai and Barabaig Herders Struggle for Land Rights in Kenya and Tanzania," *Cultural Survival Quarterly* 21, (1997), 55–61; George Monbiot, *No Man's Land: An Investigative Journey through Kenya and Tanzania* (London: Macmillan, 1995); C. Deihl, "Wildlife and the Maasai," *Cultural Survival Quarterly* 9, (1985), 37–40; Dorothy Hodgson, *Once Intrepid Warriors: Gender, Ethnicity, and the Cultural Politics of Maasai Development* (Bloomington: University of Indiana Press, 2001); William Olenasha, William Ole Seki, and Margareth Kaisoe, "Tanzania," in John Nelson and Lindsay Hossack, eds., *Indigenous Peoples and Protected Areas in Africa* (Moreton-in-Marsh, UK: Forest Peoples Programme, 2003); Mara Goldman, "Partitioned Nature, Privileged Knowledge: Community-Based Conservation in Tanzania," *Development*

that over 50 percent of the protected area estate (by area) has involved some sort of clearance of people (Table 2, Table 3). Most of this happened in the middle of the century, some building on previous policies of clearing land to cope with sleeping sickness, or confining ethnic groups to “their” areas.³² The removals of the latest waves of expansion of protected area estate have yet to reach the academic literature surveyed in those tables. We know of them from the press, which has been concerned about the removals from Usangu Game Reserve, in which some people died.³³

We cannot tell how many people have been moved in total. Veit and Benson have estimated that 100,000 Maasai pastoralists have been evicted from protected areas in East Africa.³⁴ This seems unreasonably high; Veit could not break it down to specific figures from particular protected areas when pressed.³⁵ Our calculations suggest that 22,000 would be a likely maximum for Maa-speaking pastoralists in Tanzania.³⁶ A further 50,500 people were moved from three other reserves, but otherwise we have no data on the number of people displaced by conservation policies that have removed nearly a third of the landmass of the country from occupation by people.³⁷

Eviction and displacement have been strongly criticized internationally.³⁸ Drastic measures may sometimes be necessary for the preservation of such species. But there are

and Change 34, (2003), 833–62; Martin Enghoff, “Wildlife Conservation, Ecological Strategies, and Pastoral Communities: A Contribution to the Understanding of Parks and People in East Africa,” *Nomadic Peoples* 25–27 (1990), 93–107; Homewood and Rodgers, *Maasailand Ecology*; Terrence McCabe, S. Perkin, and C. Sholfield, “Can Conservation and Development Be Coupled among Pastoral People? An Examination of the Maasai of the Ngorongoro Conservation Area, Tanzania,” *Human Organisation* 51 (1992), 353–66; Kaj Arhem, “Pastoralism under Pressure: The Ngorongoro Maasai,” in Jannick Boesen, Kjell J. Havnevik, Juhani Koponen, and Rie Odgaard, eds., *Tanzania Crisis and Struggle for Survival* (Uppsala: Scandinavian Institute of African Studies, 1986); Jim Igoe, *Conservation and Globalisation: A Study of National Parks and Indigenous Communities from East Africa to South Dakota* (Belmont, CA: Wadsworth/Thomson Learning, 2004).

³² Brockington, *Fortress Conservation*; Fisher, “Forced Resettlement.”

³³ Martin Walsh personal communication; Christopher Nyenyembe, “Walazimishwa kuhama Usangu bila kulipwa fidia,” *Daima*, 19 March 2007.

³⁴ Peter G. Veit and Catherine Benson, “When Parks and People Collide,” *Environmental Rights Spring* (2004), 13–14.

³⁵ Peter Veit, personal communication, January 2005.

³⁶ Brockington in *Fortress Conservation* estimates a maximum of 10,000 pastoralists removed from Mkomazi. Tarangire, which is approximately the same size, might have displaced a similar number. Neumann in *Imposing Wilderness* reports 1,200 removed from the Serengeti. An estimate of 22,000 is the very upper limit, half that figure would be more plausible.

³⁷ Neumann, *Imposing Wilderness*.

³⁸ Patrick C. West and Steven R. Brechin, *Resident Peoples and National Parks* (Tucson: University of Arizona Press, 1991).

Table 2: The geographical distribution of reported evictions from Protected Areas (PAs).

IUCN Region	STATE	IUCN Category								Not in WDPA	% of PAs with evictions reported		% of PA estate with evictions reported			
		I	II	III	IV	V	VI	U	WDPA Total		1-4	All	1-4	All		
W + Cen A.	Benin		1							1		50.0	1.6	67	20.6	
	Cameroon		10		1					11		57.9	31.4	86	70.0	
	CAR		1							1		7.7	1.4	1.	0.9	
	Congo		3							3		30.0	12.0	92	58.3	
	DRC		1		1					2		12.5	2.4	10	4.6	
	Eq. Guinea										1					
	Gabon				2					2	2	66.7	22.2	23	9.5	
	Ghana							1		1		0.0	0.3	0.	0.2	
	Nigeria		1							1		3.2	0.1	10	2.6	
	Rwanda		1		1					2	1	40.0	33.3	52	52.5	
Togo		2							2		22.2	2.1	29	17.3		
<i>Total</i>		20		5			1		26	4						
E'n and S'n	Botswana		1		3				1	5		33.3	7.0	67	39.3	
	Ethiopia		3							3		14.3	7.5	12	3.3	
	Kenya		6						1	7		12.0	2.0	65	30.2	
	Madagascar		3							3		6.5	5.0	4.	3.3	
	Malawi		1		1					2	1	22.2	1.5	40	20.9	
	Moz'bique				1					1		10.0	2.4	2.	0.8	
	Namibia		2					1		3		14.3	1.7	22	21.9	
	Sou' Africa		8						1	9	1	2.3	1.6	47	41.0	
	Swaziland				1					1		50.0	12.5	47	29.2	
	Tanzania		7		6			1		14	2	29.5	1.7	55	18.4	
	Uganda		5		1					6		18.2	0.8	24	7.4	
	Zambia		3							3		7.9	0.4	57	12.0	
	Zimbabwe		5					2		7		15.2	2.8	69	20.5	
<i>Total</i>		44		13			4	3	64	4						
Grand Total		0	64	0	18	0	5	3	70	8						

From Brockington and Igoe, "Eviction for Conservation."

Table 3: The establishment dates of protected areas from which evictions have been reported. NB. Establishment date and date of eviction are not always the same.

IUCN Region	COUNTRY	Pre-1990	Decade beginning . . .									Est. date unknown	Total		
			1900	1910	1920	1930	1940	1950	1960	1970	1980			1990	2000
W'n + C. Africa	Benin								1						1
	Cameroon				1			1	4		1		4		11
	Central											1		1	
	Congo											1	2	3	
	DRC									1	1			2	
	Gabon								2					2	
	Ghana									1				1	
	Nigeria											1		1	
	Rwanda			1									1	2	
Togo								2					2		
<i>Total</i>				1	1			4	6	2	2	3	7	26	
E'n + S'n Africa	Botswana									3	1			1	5
	Ethiopia							1	1	1					3
	Kenya					4					2			1	7
	Madagascar							1			2				3
	Malawi								1	1					2
	Mozambique									1					1
	Namibia								2	1					3
	South Africa	2		1	1				2	2		1			9
	Swaziland										1				1
	Tanzania,														
	United			1				4	4	4	1				14
	Uganda							1	2		1	2			6
	Zambia												3		3
Zimbabwe				1		1	1	1	3					7	
<i>Total</i>		2		3	1	5	8	17	19	4	3		2	64	
Grand Total		2	0	0	6	2	5	12	23	21	6	6	7	2	70

From Brockington and Igoe, "Eviction for Conservation."

established procedures for moving people by states for diverse reasons.³⁹ The problem is that eviction for conservation is yet to be covered by a rigorous set of policy protocols ensuring good practice.

We have much sympathy for the criticisms of eviction, with two caveats. First, too much attention to the ills of eviction can obscure the other forms of exclusion and marginalization associated with protected areas that are probably more common than physical removals.⁴⁰ Second, we recognize that eviction will be a necessary tool in conservation's arsenal of mechanisms to protect nature. The Alliance for Zero Extinction lists seven sites in the country (one on Pemba, the rest in the Eastern Arc mountains) that house endangered and critically endangered populations of restricted range species.⁴¹ Of the sixteen species found there, the populations of all but two were thought to be decreasing at the last count, the other two were unknown. But while we recognise that the presence of people can be the prime threat to endangered biodiversity, the ecological case for eviction of *all* people has rarely been made from any protected area in Tanzania. People undoubtedly have an impact on ecosystems, but do these impacts necessitate complete eviction? At the Mkomazi National Park, where pastoralists populated the landscape sparsely, it is impossible to tell whether their presence had adversely affected the high levels of bird, vegetation, or invertebrate biodiversity found there.⁴² In many cases, unfortunately, the ecological arguments are irrelevant. Human residence and resource use is forbidden by law from national parks and is almost always denied as a matter of policy inside Game Reserves. Ugalla Game Reserve is a notable exception as it allows honey gathering.

What we witness, therefore, in the consequences of protected areas on the landscape, is the imposition of land use categorization. It is not always the reasoned outcome of good ecological science. There are many livelihoods that tread lightly on the landscape (extensive pastoralism, hunter-gathering, honey collecting), their ecological consequences are complex and the necessity of complete eviction to further conservation objectives are not obvious. This is particularly the case in drier ecosystems, which are better characterized by their resilience than fragility and which are better able to assimilate the biotic interactions between people, animals, and vegetation.⁴³

³⁹ Michael M. Cernea, "'Restriction of Access' Is Displacement: A Broader Concept and Policy," *Forced Migration Review* 23 (2005), 48–49; Michael M. Cernea and Kai Schmidt-Soltau, "Poverty Risks and National Parks: Policy Issues in Conservation and Resettlement," *World Development* 34, 10 (2006), 1808–30.

⁴⁰ Brockington and Igoe, "Eviction for Conservation."

⁴¹ Taylor H.E. Ricketts, E. Dinerstein, T. Boucher, T.M. Brooks, S.H.M. Butchart, M. Hoffmann, J.F. Lamoreux, J. Morrison, M. Parr, J.D. Pilgrim, A.S.L. Rodrigues, W. Sechrest, G.E. Wallace, K. Berlin, J. Bielby, N.D. Burgess, D.R. Church, N. Cox, D. Knox, C. Loucks, G.W. Luck, L.L. Master, R. Moore, R. Naidoo, R. Ridgely, G.E. Schatz, G. Shire, H. Strand, W. Wettengel, and E. Wikramanayake, "Pinpointing and Preventing Imminent Extinctions," *Proceedings of the National Academy of Sciences of the United States of America* 102, 51 (2005), 18497–501.

⁴² Katherine M. Homewood and Dan Brockington, "Biodiversity, Conservation and Development," *Global Ecology and Biogeography Letters* 8 (1999), 301–313.

⁴³ Roy H. Behnke, Ian Scoones, and Carol Kerven, *Range Ecology at Disequilibrium: New Models of Natural Variability and Pastoral Adaptation in African Savannas* (London: ODI, 1993); A. Illius and

The Imagined Landscape

For the purposes of this essay, removing people from the landscape and altering ecosystems is not the most interesting thing that conservation does. That is just a consequence. Far more important is the cause.

There are some powerful economic forces encouraging the creation of wild areas. Tourist revenues are rapidly increasing and are an ever more important part of the national economy.⁴⁴ Tourist revenues were amounted to \$740 million in 2000, about 16 percent of the total GDP. Tourism revenue represented 16.6 percent of GDP and 25 percent of export earnings in Tanzania in 2002, second only to coffee. Income from tourism activities increased to \$746.1 million in 2004 from \$731 million in 2003. It makes economic sense for Tanzania to exploit its comparative advantage as a remote, exotic corner of the world with beautiful landscapes and exciting stories to tell.

Tourists, however, are just symptomatic of more powerful forces. How do they know about these places? Why do they want to go there? Why do they not know about the evictions and histories of human residence that have characterized so many protected areas in the country? Tanzania's conservation estate is no mere collection of mountainous, savannah, or *miombo* landscapes. Its protected areas are far more than reservoirs of biodiversity, vegetation, or wildlife. Tanzania's national parks and game reserves are an imagined and symbolic landscape with historical origins deep in the early European encounters with Africa.

Conservation's major role in landscape change is in *re-imagining* the landscape in Tanzania, and then using these strong imaginations to reconfigure the landscape according to its vision. Mkomazi's supporters rejoice that the National Park's landscape (from which between 5 and 10,000 people were removed by the government in the late 1980s) is (we quote) a "wilderness restored," a "recovered pearl," or a chance to experience a landscape which "looks exactly the way East Africa is supposed to."⁴⁵ We suggest that similar visions supporting other protected areas have been at work in Tanzania, and East Africa more broadly, for decades.

The name for a vision that creates its own reality is a "virtualism."⁴⁶ To put it another way, a virtualism is a model of reality whose followers, when testing the model against the real world, expect the world, not the model, to change should they find any discrepancies. The idea of virtualism was first used in the context of economic models that were based on notions of rational thinking and market efficiency, and which expected irrationality and inefficiency to be corrected appropriately. West and Carrier

Tim O'Connor, "On the Relevance of Non Equilibrium Concepts to Arid and Semi-Arid Grazing Systems," *Ecological Applications* 9 (1999), 798–813; Sian Sullivan and Rick Rohde, "On Non-Equilibrium in Arid and Semi-Arid Grazing Systems," *Journal of Biogeography* 29 (2002), 1595–1618; Lindsay Gillson and Tim Hoffman, "Rangeland Ecology in a Changing World," *Science* 315 (2007), 53–54.

⁴⁴ Sachedina, "Wildlife Is Our Oil."

⁴⁵ James Malcolm, "A Visit to Mkomazi in Late March," MS in author's possession (1992); Mpiha J.J. Mangubuli, "Mkomazi Game Reserve—A Recovered Pearl," *Kakakuona* 4 (1991), 11–13; Rupert Watson, "Mkomazi—Restoring Africa," *Swara* 14 (1991), 14–6.

⁴⁶ James G. Carrier, "Introduction," in James G. Carrier and Daniel Miller, eds., *Virtualism: A New Political Economy* (Oxford: Berg, 1998).

have since applied the idea to ecotourism, noting that ecotourists often bring a vision of what their destination should look like with them, which is then rigorously and liberally applied by the destination managers in order to please and build their market.⁴⁷

Virtualisms of the African landscape are rife in African conservation. Indeed they have infested conservation from the very beginnings of the movement. In many ways what has happened in Tanzania, and what is continuing to unfurl, is the power of this virtualism writ large upon the national stage.

The imposition of European visions for Africa is well documented. Anderson and Grove have argued that the dominating impressions of European encounters with the African landscape were formed at an unusual moment in the history of the continent.⁴⁸ The late nineteenth century was a time when disturbances of slavery and several new diseases (most especially rinderpest) had shaken East African society to the core. Much of the landscape was severely depopulated, and it was into this unpeopled land that late Victorian travellers went, and about which they enthused their growing audiences back home. This, combined with the desire to find exotic paradises untroubled by awkward natives, and opportunities to start anew on clean slates, encouraged the vision of a peopleless Africa as the proper and desirable state for the landscape.⁴⁹

MacKenzie and Steinart have shown how complicated rituals of hunting shaped land and wildlife use.⁵⁰ These were heavily influenced by India and shaped by the peculiarities (as they are now seen) of Victorian ideals of virile manhood. They emphasized the nobility of the hunted (and their human predators), represented the contest as one between equals, and facilitated a denigration of all who hunted for base subsistence purposes and not noble sport. Thus local African use of wildlife was demeaned and made excludable.

This vision of the land and its wildlife had political influence because of the wealth and connections of explorers, safari hunters, and early entrepreneurs on the continent. Neumann, and with somewhat different emphasis, Prendergast and Adams and Adams, have all drawn attention to the power of the aristocratic Society for the Preservation of the Fauna of the Empire (SPFE, now Fauna and Flora International) and its role in furthering the establishment of national parks and game reserves in Africa.⁵¹ They sought to preserve game for their own hunting (they were nicknamed the penitent butchers). They perceived depredations of African hunting to be the main

⁴⁷ Paige West and James G. Carrier, "Ecotourism and Authenticity. Getting Away from It All?" *Current Anthropology* 45, 4 (2004), 483–98.

⁴⁸ David M. Anderson and Richard Grove, "Introduction: The Scramble for Eden: Past Present and Future in African Conservation," in David M. Anderson and Richard Grove, eds., *Conservation in Africa: People, Policies and Practice* (Cambridge: Cambridge University Press, 1987).

⁴⁹ Ksekshus, *Ecology Control*.

⁵⁰ John MacKenzie, *The Empire of Nature: Hunting, Conservation, and British Imperialism* (Manchester: Manchester University Press, 1988); Steinart, *Black Poachers*.

⁵¹ Neumann, *Imposing Wilderness*; William M. Adams, *Against Extinction: The Story of Conservation* (London: Earthscan, 2004); David K. Prendergast and William M. Adams, "Colonial Wildlife Conservation and the Origins of the Society for the Preservation of the Wild Fauna of the Empire (1903–1914)," *Oryx* 37, 2 (2003), 251–60.

threat and advocated game reserves, but also thought that national parks, on the exclusive Yellowstone model might, although they would disrupt the hunt, be the best way of ensuring the complete safety of viable populations.

The continued influence of these ideas is unmistakable. When Bernard Grzimek launched his famous campaign to set up and support the Serengeti National Park, supported by popular films (1956 and 1960) and a book, he tapped deep into these ideals and was rewarded with large funds, awards for his films, and an enthusiastic following. Films like *No Room for Wild Animals* emphasised the incompatibility of wildlife with (African) co-residents, and their suitability as companions for western tourists.⁵²

Often these visions of Africa are circulated by conservation non-governmental organizations (NGOs) as part of their fund and awareness raising activities. What began with the SPFE has expanded into a multi-billion dollar movement involving thousands of organizations worldwide and hundreds active in Africa. A survey of over 280 conservation organizations on the continent shows that Tanzania commands considerable interest from conservation organizations, less than Kenya or South Africa, but still a high number (Table 4).⁵³ The majority of these are based in the wealthy North (Table 5) and are important conduits of ideas and images (as well as funds) between Africa and the west.

Visions of a people-less Africa are remarkable for their continuity and power even to the present day, and their proliferation and reproduction throughout diverse media. Images of a peopleless Africa pervade tourist brochures, film, conservation literature, and children's books. The vision has got richer and more complicated with time. Tourists now also seek to relive colonial relations of privilege, to taste the life of luxury that fired the imagination when tales of the Happy Valley excited Britain struggling with misery of war. Films like *Out of Africa* and the lives of adventurers provide a social landscape into which tourists can place themselves. Many brochures will invoke images of colonial luxury, perhaps also appealing to unvoiced thoughts that their experience offers a chance to see an unspoiled Africa, as it was when Europeans were still in charge.

Alternatively tourists can imagine themselves in more contemporary roles. The work of charismatic/celebrity conservationists offers wonderful lives that tourists can briefly participate in on their safari holidays, and good causes to which they can add their voice and support.⁵⁴ The vicarious enjoyment that is integral to celebrity allows tourists to continue participating in wildlife conservation long after their holiday has

⁵² William Beinart, "The Renaturing of African Animals: Film and Literature in the 1950s and 1960s," in Paul Slack, ed., *Environments and Historical Change* (Oxford: Oxford University Press, 1999); Dan Brockington, *Celebrity and the Environment: Fame, Wealth and Power in Conservation* (London: Zed, 2009).

⁵³ Katherine Scholfield and Dan Brockington, "The Work of Non-Governmental Organisations in African Wildlife Conservation: A Preliminary Analysis," MS available at <http://www.sed.manchester.ac.uk/idpm/research/africanwildlife/> (2008).

⁵⁴ Brockington, *Celebrity and the Environment*.

Table 4: Distribution of Conservation NGO activity within Africa. The table shows the number of organisations working in each country and the money they spend there.

West Africa			Central Africa			East Africa			South Africa		
Country	NGOs	Annual \$	Country	NGOs	Annual \$	Country	NGOs	Annual \$	Country	NGOs	Annual \$
Liberia	6	1,085,126	DRC	29	10,414,426	Tanzania	36	13,811,495	South Africa	55	13,661,116
Sierra Leone	4	833,052	Gabon	4	7,229,380	Kenya	64	13,723,455	Madagascar	22	10,612,681
Nigeria	13	776,347	Congo	9	4,587,024	Uganda	17	4,172,423	Zambia	25	5,495,338
Guinea	3	664,934	Cameroon	12	4,105,047	Ethiopia	12	1,571,405	Mozambique	9	4,179,575
Ghana	7	530,940	Rwanda	8	2,519,820	Sudan	3	133,213	Namibia	27	3,992,435
Ivory Coast	5	394,462	CAR	6	1,645,803	Eritrea	1	12,085	Zimbabwe	18	3,641,267
Senegal	3	373,374	Angola	6	577,620	Djibouti	2	3,216	Malawi	15	2,192,147
Guinea-Bissau	4	309,169	Burundi	2	337,891	Somalia	3	-	Botswana	23	1,223,728
Niger	3	148,070	Eq Guinea	1	188,290				Swaziland	5	575,237
Gambia	4	142,814	S. Tome & P'pe	1	2,949				Lesotho	1	575,237
Cape Verde	1	81,641	Chad	1	-						
Burkina Faso	5	54,491									
Togo	2	15,676									
Mali	5	230									
Benin	2	-									
Total	67	5,410,327	Total	79	31,608,249	Total	138	33,427,292	Total	200	46,148,759

From Scholfield and Brockington "The Work of Non-Governmental Organisations in African Wildlife Conservation."

Table 5: The location of head offices of NGOs working in sub-Saharan Africa, with organizations working in Tanzania in brackets.

Country	Head Offices	Country	Head Offices
USA	65 (12)	Switzerland	3 (2)
UK	34 (6)	Uganda	2
South Africa*	33	Belgium	1
Kenya	16 (1)	Burkina Faso	1
Namibia	11	Burundi	1
Tanzania	11 (4)	Denmark	1
Botswana	10	Djibouti	1
Madagascar	9	DRC	1
France	8 (1)	Egypt	1
Germany	7 (1)	Ethiopia	1
Netherlands	7 (3)	Gambia	1
Zimbabwe	7	Ghana	1
Malawi	6	Guinea-Bissau	1
Nigeria	6	Israel	1
Zambia	6	New Zealand	1
Cameroon	4	Portugal	1
Canada	3	Rwanda	1
Sierra Leone	3	Somalia	1
Australia	2 (1)	Sudan	1
Liberia	2	Tunisia	1
Norway	2	Grand Total	278

From Scholfield and Brockington “The Work of Non-Governmental Organisations in African Wildlife Conservation.”

ended.⁵⁵ As with the colonial visions there is often a racial dimension at work here. The heroes and heroines of African wildlife conservation are rarely black.⁵⁶ This is a white man’s,

⁵⁵ Dan Brockington, “Powerful Environmentalisms: Conservation, Celebrity, and Capitalism,” *Media Culture & Society* 30, 4 (2008), 551–68; Chris Rojek, *Celebrity* (London: Reaktion Books, 2001); Graham Turner, *Understanding Celebrity* (London: Sage, 2004).

⁵⁶ Brockington, *Celebrity and the Environment*.

and woman's, burden. The lives of African wildlife professionals are, as Garland has so ably shown, invisible.⁵⁷

Conservation and wilderness visions, however, do not just imagine a peculiarly European image of the past, and move people around accordingly. They actively obliterate local memories of place. Creating new symbolic landscapes involves a profound, often institutionalized, forgetting of their role and place in it. It requires histories to be rewritten to celebrate the wild and its champions, and denigrate the people who had used and lived in it as interlopers. The popular history of the Serengeti or Ngorongoro does not include the struggles of the Maasai against it. Far less the struggles of less exotic peoples who live to the west of the national park.⁵⁸ When the conservation of the Mkomazi National Park is celebrated, its former residents, present for generations before it was gazetted, have been dismissed as "not indigenous," or simply are not mentioned.⁵⁹

Conservationists are by no means united around the idea of removing people from conservation areas. Far from it, many advocate diverse forms of making conservation meaningful and useful to rural African livelihoods and world views.⁶⁰ Perhaps the most comprehensive critique of the idea of removing people from protected areas is Adams and McShane's book *The Myth of Wild Africa*.⁶¹ They dwell at length on the historical inaccuracies of this version of Africa, on the fact that these are landscapes that were much more peopled than Westerners commonly recognize, and on the dangers of basing conservation policy on such obviously false expectations and histories. They advocate more inclusion of local Africans in the landscape and decision making.

Adams and McShane, however, overstate the importance of their argument. They believe that "conservation based on myth is bound to fail."⁶² Why should it fail because it is historically wrong? If the ideas can generate money, gain the support of foreign and political elites, and widespread public sympathy ("global" opinion) then these provide reasons for their success. The alternative message, that use of wildlife (i.e., killing them) can be good for conservation, is rarely palatable. It is often dismal and unheroic. It is difficult to encourage wealthy westerners to support conservation policies that raise money for local people by killing elephants. Fortmann has recorded considerable difficulty in getting the message across in California that this form of safari hunting might be beneficial for wildlife.⁶³ Myths that can

⁵⁷ Elizabeth Garland, "State of Nature: Colonial Power, Neoliberal Capital and Wildlife Management in Tanzania," (Ph.D. thesis, University of Chicago, 2006).

⁵⁸ Jan B. Shelter, "Restoring People to the Historical Serengeti Landscape: How Western Serengeti Peoples Came To Be 'Poachers'" (paper presented at the African Studies Association, Boston, 2003).

⁵⁹ Brockington, *Fortress Conservation*.

⁶⁰ David Hulme and Marshall Murphree, *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation* (Portsmouth, NH: Heinemann, 2001).

⁶¹ Jonathan S. Adams and Tom O. McShane, *The Myth of Wild Africa: Conservation without Illusion* (Berkeley: University of California Press, 1992).

⁶² Adams and McShane, *The Myth*, 245.

⁶³ Louise Fortmann, "What We Need is a Community Bambi: The Perils and Possibilities of Powerful Symbols," in J. Peter Brosius, Anne. L. Tsing, and Charles Zerner, eds., *Communities and Conservation*.

raise money are likely to succeed, irrespective of their truth or falsehood. Indeed, arguing thus substantially misses the point that these myths, as virtualisms, can create and become their own truth.

Conservationists have been generally slow to appreciate this because of the dominance of another powerful idea—the notion that conservation that does not have local support is bound to fail.⁶⁴ This can be true, and there are many protected areas that have failed because of local opposition. But it is not *necessarily* true. Where the opposition is weak and disunited, or facing overwhelming force, then the opposition, not the park, will fail.⁶⁵ Indeed, it can fail spectacularly, allowing the violent conservation model to go on and become a model of successful, good and repeatable conservation suitable for the world over. It is only relatively recently that the histories of American Indian removal and displacement that underlie Yellowstone National Park are being written.⁶⁶

Attention to the power of local resistance has diminished our understandings of the power of myth of wild Africa. It is important to understand how the myth works and how it reworks, reproduces, and reinvents itself. We have already discussed its genesis and importance to the European psyche. We have touched upon the diverse media in which it becomes visible, but there are other aspects. We have to recognize that the images of wilderness, wildlife, and wild places that pepper conservation fund-raising literature are themselves commodities.⁶⁷ They are sold in calendars and on t-shirts; they are used to raise money.⁶⁸ The creation of protected areas itself provides the vistas and pleasing prospects that fuel a small industry in wildlife and landscape photography for postcards, coffee table books, and fund-raising images. Protected areas and their supporters exist in symbiosis, each creates conditions amenable to the other's continued existence.

Tanzanian conservation also benefits from the influential visions of the super-rich. The billionaire financier Paul Tudor Jones has sunk millions into Grumeti Reserves Limited.⁶⁹ The project's vision draws on deeply held western notions about what these

Histories and Politics of Community-Based Natural Resource Management (Walnut Creek, CA: Altamira, 2005).

⁶⁴ David Western, "Taking the Broad View of Conservation—A Response to Adams and Hulme," *Oryx* 35, (2001) 201–203; Grazia Borrini-Feyerabend, T. Banuri, Taghi Farvar, Ken Miller, and Adrian Phillips, "Indigenous and Local Communities and Protected Areas: Rethinking the Relationship," *Parks* 12 (2002), 5–15.

⁶⁵ Dan Brockington, "Injustice and Conservation: Is Local Support Necessary for Sustainable Protected Areas?" *Policy Matters* 12 (2003), 22–30; Dan Brockington, "Community Conservation, Inequality and Injustice: Myths of Power in Protected Area Management," *Conservation and Society* 2, 2 (2004), 411–32.

⁶⁶ Mark D. Spence, *Dispossessing the Wilderness: Indian Removal and the Making of National Parks* (Oxford: Oxford University Press, 1999); Karl Jacoby, *Crimes against Nature. Squatters, Poachers, Thieves and the Hidden History of American Conservation* (Berkeley: University of California Press, 2001).

⁶⁷ Dan Brockington, Rosaleen Duffy, and Jim Igoe, *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas* (London: Earthscan, 2008).

⁶⁸ Timothy W. Luke, "On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism," *Cultural Critique* 31, (Autumn 1995), 57–81; Timothy W. Luke, "The (Un)Wise (Ab)Use of Nature: Environmentalism as Globalized Consumerism," MS in author's possession (1997)

⁶⁹ Robert M. Poole, "Heartbreak on the Serengeti," *National Geographic* (February 2006).

landscapes should look like, and who can rightfully use them. First they have to be cleansed of people. The Tanzanian Government evicted people from the Grumeti and Ikorongo Game Reserves in 1994 (before Jones began working there).⁷⁰ In addition, Grumeti Reserves Ltd. is also attempting to negotiate a compensation package that would relocate an entire village. It is promoting a form of ethical hunting where by clients “kill” animals with a camera shaped like a gun, which marks where they would have shot the animal had they been firing a bullet.

Conclusion

Conservation has been a powerful force in shaping the environments and land use of Tanzania, and has been for decades. Tim Caro and Paul Scholte, in a recent essay in *African Journal of Ecology*, were downbeat about the achievements of parks in Africa. They reported that the trend from divergent long term studies was that wildlife populations were declining, even within national parks, and that conservationists should just get used to the idea of much less abundant wildlife populations, and accept a continent “containing isolated pockets of large mammal diversity living at low population sizes, just like Europe.”⁷¹ The data from Tanzania are not so universally depressing for conservation biologists. Some ecosystems, and some species, differ from this general trend.⁷² The impact of Tanzania’s conservation policies distinguishes the country from the rest of the continent.

Why has the state made such a deep commitment to conservation in this country? Economics, as we have seen, provide some explanation. There are clear gains to be had from a large area of safari hunting estate, which commands lucrative fees, and from photographic tours. Furthermore, to a rational state actor there are obvious “strategies of extraversion” to employ here.⁷³ The numerous overseas-based conservation NGOs in the country are ideal for such strategies. The occasional billionaire investor, or Arabian prince with hunting interests, can make a useful business partner. As the country opens its borders to more corporate investment, and seeks to integrate more closely with the national economy, these trends will continue.

The importance of revenues for conservation sentiment in government is visible in the hostile reaction of the central state to a productive innovation on the East of the Serengeti that allowed one village to earn tens of thousands of dollars by conserving wildlife on its lands. The village of Ololoskwan had entered into a co-operative arrangement with a photographic tour company worth \$50,000 a year, but has done so on land that the Wildlife Department had allocated for hunting.⁷⁴ The government fought the decision and the agreement has been declared unlawful in court. It can prove frustrating for all sides for such an obvious win-win arrangement to be denied.

Nelson and Agrawal have compared the relative performance of community conservation strategies in different southern and east African countries. They observed that Tanzania was marked by the relatively important levels of revenues from conservation that

⁷⁰ Nelson, “The Evolution and Impacts.”

⁷¹ Tim Caro and Paul Scholte, “When Protection Falters,” *African Journal of Ecology* 45 (2007), 233–35.

⁷² Stoner, “Changes in Large Herbivore Populations.”

⁷³ Jean-Francois Bayart, *The State in Africa: The Politics of the Belly* (London: Longman, 1993).

⁷⁴ Nelson and Makko, “Communities, Conservation and Conflicts.”

had been successfully captured by the central state, which was also characterized by high levels of corruption. They argue that it is simply not in most officials' interests to devolve power or revenues to lower levels of government, and that this explains the relative failure of community conservation in this country, and elsewhere in the region where these characteristics are found. Conversely, devolution tends to be more successful where they are absent.⁷⁵ In a similar vein, Brockington has previously suggested that Tanzania's political economy is characterized by a "environmental-conservation" complex,⁷⁶ comprising its protected area estate, tourist and hunting revenues, and donor interest. Supporting the complex occupies much government resources and attention.

But, while we believe that the complex exists, it is not a satisfactory explanation for the country's growth in protected areas. Why has it proved so easy for the wildlife interests within the state to have their way over, for example, plans for agricultural development, or cattle rearing? Both can be lucrative. It is not as if Tanzania has a particularly sparsely distributed population that makes setting up protected areas relatively easy. On the contrary, as Table 1 shows, its population density is much higher than other countries at the top of the table. The creation of protected areas has had many local costs, and could not have been easy to impose.

Why should the state be motivated thus? Why, on Julius Nyerere's death, did senior politicians call for a national park to be set up in his honor? Whence conservation's symbolic power? The forces described above cannot quite explain why Tanzania should be so receptive to all this western ideology and capital. We need to know a little more about how individuals are operating within these power structures to appreciate how they are reproduced.

But if more insights into the mind of the Tanzanian state would be helpful, we can at least be certain that conservation in the country is not really conserving it. Instead it is forging it anew. Conservation policies alter the relative abundances of different wildlife species and changes trends in vegetation dynamics. It introduces ecosystems without people, which are, in the long term view of things, a radical innovation in the region. Conservation is, in short, actively re-imagining and recreating Tanzania. It preserves a new country. It will continue to do so on a larger and larger scale. We cannot be sure how much of the land may have been successfully set aside in twenty years time, or when the growth of the protected area estate will end. In fact, we believe that all we can be sure about, is that it will not.

⁷⁵ Fred Nelson and Arun Agrawal, "Patronage or Participation: Community-Based Natural Resource Management Reform in Sub-Saharan Africa," *Development and Change* 39, 4 (2008), 557–85.

⁷⁶ Dan Brockington, "The Politics and Ethnography of Environmentalisms in Tanzania" *African Affairs* 105, 418 (2006), 97–116.