Tracking Wildlife Conservation in Southern Africa: Histories of Protected Areas in Gorongosa and Maputaland

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Kathleen McKeown

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

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October 2015

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ACKNOWLEDGMENTS

I want to thank my advisors, Allen Isaacman and Helena Pohlandt-McCormick, for their support and guidance throughout the conception, research, and writing of this dissertation. I also wish to thank the other members of my doctoral committee, Susan D. Jones, Kevin Murphy, and Ajay Skaria, whose careful reading and thoughtful feedback will shape the continued evolution of this project for the better. Thanks also to Heidi Gengenbach for serving on my preliminary exam committee and for influencing the development of my dissertation proposal.

Several individuals generously offered their time, insights, and access to materials. I want to thank Paul Dutton, in particular, for his hospitality and endurance over long conversations about wildlife conservation in the region, past and present, and for sharing his collection of images. Thanks also to Ian Player and Ed Ostrosky, who were not only generous interviewees, but also granted me access to their personal archives. Thanks to Ken Tinley for sending various materials, resources, and thoughts about conservation. Thanks also to George Hughes, Carlos Lopes Pereira, Baldeu Chande, Roberto Zolho, John Burlinson, Judy Oglethorpe, Scotty Kyle, Rod de Vletter, Joâo José Macoteco, and Pereira Araujo Charles for sharing their experiences of working in these regions. I want to thank the following individuals for generously providing background material, pointing me in the direction of documents and interviewees, or granting access to pursue this project across several sites and archives: Simon Anstey, Yusuf Adam, Rich Beilfuss, Carlos Bento, Samuel Bila, Kerry Butler, Greg Carr, Markus Coerlin, Peter Coulon, Madyo Couto, Rodolfo Cumbane, Bridget Conneely, Regina Cruz, Rozenn Diallo, Ross Douglas, Miguel Gonçalves, Celestino Gonçalves, Armando Guenha, Cathariné Hanekom, Sifiso Keswa, Ivy Khumalo, Roelie Kloppers, Julieta Lichuge, Fernando Mequicene, Ernest Mokganedi, Domingos Muala, Mateus Mutemba, João Nogueira, Cornelio Ntumi, Maria de Luz Prata Dias, Bradley Poole, Rob Pringle, Antonio Reina, Richard Penn Sawyers, Franziska Steinbruch, Allan Schwarz, Leseho Sello, Cynthia Sithole, Antonio Sopa, Bartolomeu Soto, Marc Stalmans, and Paula Travassos Dias. I am hugely appreciative of the assistance and access I received from the various archives on which this dissertation relied. I particularly want to thank Vanessa de Vos from Ezemvelo KZN Wildlife for allowing me to comb through the trove of material from the former NPB and KBNR (and for working to ensure that these documents continue to be preserved) and Vasco Galante for access to the impressive archive he has collected at Gorongosa National Park and for pointing me towards several important figures in the park's history.

I received financial assistance from several sources. The University of Minnesota's Interdisciplinary Center for the Study of Global Change, Office of International Programs, and History Department provided funds for pre-dissertation and dissertation research, as well as travel assistance to conferences where I could test and develop my arguments. I am also grateful to the International Institute of Education, from which I received a Graduate Fellowship for International Study to conduct research in South Africa, Portugal, and Mozambique.

This work was influenced by conversations with and input from several individuals. Many thanks to William Beinart for ongoing discussions about animals, conservation, and bioinvasions and for introducing me to the possibilities of turning a personal interest in wildlife into an academic one. Mercedes Bailey informed me of the growing historical archive at Gorongosa National Park, which sparked the beginning of this project. Thanks to the participants at the 2010 ASA conference, the 2012 Winter School (particularly Patricia Hayes for commenting on my presentation), and the 2014 World Congress of Environmental History, whose suggestions influenced the direction of this dissertation. Thanks also to my colleagues at the University of Minnesota, especially Frank Murphy, Alicia Lazzarini, Paul Vig, Virgil Slade, Elizabeth Williams, Adam Blackler, and Diana Dinerman. I would particularly like to thank Siân Butcher, Dave Morton, Elliot James, and Meryl Lauer Lodge, who commented on parts of this dissertation and kept me accountable. Your enthusiasm, interest, and empathy provided much-needed motivation at various stages of this project. Many thanks also to Charlotte Cross, Jacob McKnight, and Simon Pooley for reading parts of this dissertation and making suggestions that improved its form and content. Conversations with Abigail Neely, Simon Pooley, Mucha Musemwa, Francis Massey, Gary Minkley, and Sandra Swart all influenced the direction of this project. Despite the huge amount of input from all of the individuals mentioned above (and others), I take full responsibility for all errors, omissions, and inadequacies.

I want to also thank my friends and family for their continued support, motivation, and encouragement over the course of researching and writing this dissertation, especially those who suggested they might even be interested in reading the final version. A special thanks is due to Marcél for marrying me in the midst of fieldwork and not divorcing me over a very long writing period. The completion of this PhD is a testament to your perseverance as much as my own—thank you. And, finally, I want to thank Tully and Oscar for being the best writing companions anyone could ask for: you kept my feet warm in winter, listened uncritically as I pieced sentences together, and always knew when it was time to stop agonizing and go for a walk.

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ABBREVIATIONS

AHM	*Arquivo Histórico de Moçambique* [Historical Archive of Mozambique]
ANC	African National Congress
BME	Blanchard Mozambique Enterprises
CBNRM	Community-based Natural Resource Management
CFM	*Portos e Caminhos de Ferro de Moçambique* [Ports and Railways of Mozambique]
DNFFB	*Direcção Nacional de Florestas e Fauna Bravia* [National Directorate of Forests and Wildlife]
DPSV	*Direcção Provincial dos Serviços de Veterinária* [Provincial Directorate of Veterinary Services]
EKZNW	Ezemvelo KwaZulu Natal Wildlife
EWT	Endangered Wildlife Trust
FRELIMO	*Frente de Libertação de Moçambique* [Liberation Front of Mozambique]
GEF	Global Environment Facility
GNP	Gorongosa National Park
IUCN	International Union for Conservation of Nature
JPL	Johannesburg Public Library
KBNR	KwaZulu Bureau of Natural Resources
KCAL	Killie Campbell Africana Library
KZN	KwaZulu Natal
MML	Msunduzi Municipal Library
NASA	National Archives of South Africa
NGR	Ndumo Game Rerserve
NPB	Natal Parks Board
MCT	*Missão de Combate às Tripanossomíases* [Mission to Combat Trypanosomiasis]
RENAMO	*Resistência Nacional Moçambicana* [Mozambican National Resistance]
SADF	South African Defense Force
SANParks	South African National Parks
SDI	Spatial Development Initiative
SPCFT	*Direcção dos Serviços dos Portos, Caminhos de Ferro e Transportes* [Directorate of Ports, Railways, and Transport Services]
SPWL	Natal Society for the Preservation of Wild Life
SARCCUS	Southern African Regional Commission for the Conservation and Utilization of the Soil
TEP	Tembe Elephant Park
TFCA	Tranfrontier Conservation Area
UEM	Universidade de Eduardo Mondlane [Eduardo Mondlane University]
WCL	William Cullen Library
WWF	World Wildlife Fund

Introduction

Putting Wildlife in Place: Protected Area Histories

This project began as an investigation into the visual history of Mozambique's Gorongosa National Park and the way that wildlife images shaped its past. I wanted to expand the historiography of protected areas beyond the human displacement narratives that had directed the field and think more carefully about how different images of "wilderness," which had incited and corroborated human displacements and dispossession, were produced and circulated. I was also interested in exploring alternative visions of these areas beyond white, colonial, and tourist projections. I intended to explore different media, including films and photography, as well as local impressions of the landscape, as a way of understanding diverse constructions of place. However, as I was conducting preliminary fieldwork for that project in July 2010, I was struck by a problem Gorongosa's restoration team was having in restocking the park's zebra population.

Gorongosa's zebra, like many other species, had been largely depleted as a result of the armed conflict that followed Mozambique's independence from Portugal in 1975. In 2010 the park's management team was hoping to bolster the population of these and other grazers in order to limit the threat of fire to overgrown grasslands and to allure tourists back to the area. However, there was a problem. Scientists and officials could not agree on what type of zebra to introduce. Some argued that the pre-conflict population had been most similar to the Selous Zebra (*Equus burchelli selousii*), now critically endangered with the only viable population for translocation in neighboring Zimbabwe, while others argued that the type of zebra did not matter as long as it performed its ecological function as a grazer and its economic function as tourist attraction.[1] The Zimbabwean government was unwilling to sell its zebra, and the management team was at an impasse.[2] I began to wonder increasingly about how decisions regarding what belongs in protected areas are made and by whom. This seemed, in part, to be an argument between historical and ecological grounds for wildlife conservation, and I became interested in the

[1] This debate is outlined in Jeremy L. Anderson et al., *Proposed Strategy to Reintroduce and Supplement Wildlife Populations in Gorongosa National Park, Moçambique*. 2006. Gorongosa National Park (GNP) Archive.

[2] It was suggested in 2004 that the Selous zebra is synonymous with the Crawshayi zebra (*Equus burchellii crawshayii*). Anderson et al, 13. In 2013, GNP reintroduced seven Crawshayi zebra (now known scientifically as *Equus quagga crawshayi*) from an area 120 kilometers away in a neighboring province of Mozambique. "Zebra and Eland relocated to Gorongosa!" *Gorongosa National Park Blog,* 17 September 2013. http://www.gorongosa.org/blog/park-news/zebra-and-eland-relocated-gorongosa.

connection between these categories. As I investigated studies on wildlife management policy, I was increasingly compelled by the deployment of "indigeneity" as an organizing concept in the designation and development of protected areas, and accompanying objections to alien species. This led me to rethink how protected areas were constituted and shift my research focus from image-making processes, which often served to exclude human habitation, to the deployment of different categories of *belonging* for non-human inhabitants, which would influence their inclusion in (or exclusion from) particular protected areas.

Southern Africa's current rhino conservation crisis similarly demonstrates how categories of belonging are marshalled in wildlife management. Although there are currently around 21,000 rhino in South Africa (representing 83 percent of Africa's population and 73 percent of all rhinos globally),[3] a dramatic increase in demand for rhino horn has threatened their survival. Although its medicinal benefits are unproven, there is a large market for rhino horn in Asia (and Vietnam in particular), where the product is used to treat a host of ailments and act as a symbol of social status, which has fueled a growing illegal trade. This is supported on the ground in South Africa by the country's relatively large supply of rhino coupled with endemic poverty and a lack of job opportunities.[4] From an average of 14 rhino killed illegally each year between 1990 and 2005, the numbers have increased radically with a record 1,215 rhino illegally killed in South African in 2014.[5] The previous year, neighboring Mozambique reportedly lost its last rhinos to poaching,[6] and Zimbabwe's population fell to 750.[7] South Africa's Kruger National Park, sharing a porous border with Mozambique as part of the Greater Limpopo Transfrontier Park, is the most targeted

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[3] These statistics encompass the white rhino and black rhino (*Diceros bicornis*) in Africa and Asia's Indian, Javan, and Sumatran species. Sarah Standley and Richard Emslie, *Population and Poaching of African Rhinos across African Range States*. Evidence on Demand. UK, 2013. http://dx.doi.org/10.12774/eod_hd078.oct2013.standley and "Poaching: The Statistics," *Save The Rhino*, accessed 20 May 2014. http://www.savetherhino.org/rhino_info/poaching_statistics.

[4] Tom Milliken and Jo Shaw, *The South Africa – Viet Nam Rhino Horn Trade Nexus: A deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates.* TRAFFIC. Johannesburg, 2012 and Julian Rademeyer, *Killing for Profit: Exposing the Illegal Rhino Horn Trade* (Cape Town: Zebra Press, 2012).

[5] Milliken and Shaw, *Rhino Horn Trade Nexus,* 11 and "Minister Edna Molewa highlights progress in the war against poaching and plans for 2015," *Department of Environmental Affairs (DEA)*, 22 January 2015. https://www.environment.gov.za/mediarelease/molewa_waragainstpoaching2015.

[6] Sapa-AP, "Mozambique rhino 'extinct' again," *Mail & Guardian*, 2 May 2013. http://mg.co.za/article/2013-05-02-mozambique-rhino-extinct.

[7] AFP, "Zimbabwe rhino poaching drops in 2013, 750 animals remain," *Sunday Times,* 11 March 2014. http://www.timeslive.co.za/africa/2014/03/11/zimbabwe-rhino-poaching-drops-in-2013-750-animals-remain.

spot.[8] The two countries recently signed a Memorandum of Understanding in order to bolster cross-border collaboration to fight poaching and the illegal rhino horn trade.[9] If poaching continues at the current rate, some wildlife experts suggest that wild rhino could be extinct as early as 2020.[10]

This is not the first time that South Africa's rhinos have been threatened by extinction. By the 1920s, the number of white rhinoceros (*Ceratotherium simum*) had been severely depleted by big game hunting and tsetse fly eradication campaigns, with the only viable population left in the vicinity of the Umfolozi Reserve in South Africa's Natal province.[11] Under the management of the Natal Parks Board, the white rhino population in Umfolozi grew to 437 in 1953, a number that was becoming unfeasible to maintain due to pressures on the habitat and threats from surrounding communities.[12] Rather than cull the animals, Umfolozi's conservators boosted the population and distribution of white rhino by translocating more than 1,100 to zoos and reserves between 1961 and 1972 as part of a relocation program known as Operation Rhino.[13] Some specialists now believe that every Southern White Rhino (*Ceratotherium simum simum)*, including Kruger National Park's remaining rhinos, derives from Operation Rhino's breeding population.[14]

The recent threat to southern Africa's rhinos has led to new initiatives aimed at relocating rhinos, this time to safer locations as "insurance" against extinction.[15] In 2015, two private

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[8] "Why are Kruger's rhinos being hit so hard?," *Save the Rhino*, May 2013. http://www.savetherhino.org/latest_news/news/667_why_are_krugers_rhinos_being_hit_so_hard and Shaun Smillie, "The town that thrives on rhino horn," *The Star*, 23 April 2013. http://www.iol.co.za/scitech/science/environment/the-town-that-thrives-on-rhino-horn-1.1505125#.U33G6PmSxFj

[9] Edna Molewa, "Renewed hope in poaching war," *Sunday Independent,* 4 May 2014. http://www.iol.co.za/sundayindependent/renewed-hope-in-poaching-war-1.1683083#.U33IDfmSxFg

[10] Amel Ahmed, "Rhinos face extinction by 2020, wildlife experts warn," *Al-Jazeera*, 14 April 2014. http://america.aljazeera.com/articles/2014/4/14/rhinos-face-extinctionby2020.html.

[11] Many reports suggest that as few as 20-50 rhino remained in southern Africa, confined only to Zululand, where Umfolozi and Ndumo are located. However, it is more likely that the Zululand population never dropped below 200. Nonetheless, this is a startling number. Kees Rookmaaker, "The Alleged Population Reduction of the Southern White Rhinoceros *(Ceratotherium simum simum)* and the Successful Recovery," *Säugetierkundliche Mitteilungen* 45, no. 2 (2000): 55-70.

[12] Ian Player, *The White Rhino Saga* (London: Collins, 1972), 9.

[13] Ibid., 249.

[14] Richard Emslie, "Rhino Population Sizes and Trends," *Pachyderm* 44 (January-June 2008): 89.

[15] Others include dehorning and devaluing rhino horn. "The town that's saying no to rhino poaching," *Project: African Rhino*, accessed 22 May 2014. http://africanrhino.org/2012/12/20/the-town-thats-saying-no-to-rhino-poaching and "First state conservation agency in Africa trials devaluing of rhino horn," *Peace Parks Foundation*, 10 September 2013. http://www.peaceparks.org/news.php?pid=1264&mid=1342

tourism agencies plan to move 100 rhinos from South Africa to Botswana, which has far fewer poaching incidents than South Africa, as part of their Rhinos without Borders initiative.[16] The South African government is also engaged in efforts to use translocation in order to "create rhino strongholds: areas where rhino can be cost-effectively protected while applying conservation husbandry to maximize population."[17] In the last quarter of 2014, the country's Department of Environmental Affairs (DEA) relocated 54 rhinos from "poaching hotspots" to undisclosed "Intensive Protection Zones" and other secure areas and also moved 100 rhinos to neighboring states.[18] Rhinos could also potentially be relocated much farther afield. The Australian Rhino project is hoping to receive a limited number of rhino that would act as a genetic seed bank, from which the species would eventually be returned to their continent of origin.[19] The project's website states, "The clear understanding being that the rhinos or their progeny will be introduced into Africa—not necessarily South Africa—once the situation stabilises."[20] This statement demonstrates a clear concern for replacing rhinos in their native territory (broadly defined) once the threat of the rhino horn trade subsides. Like Operation Rhino, these initiatives are intended to protect and expand the species. However, where Umfolozi's rhino population in the 1960s was too large for its habitat, South Africa's protected areas are now struggling to maintain stable populations in the face of increasing demands for rhino horn and increasingly sophisticated methods for retrieving it.

These appeals for relocation raise questions about the role of protected areas in wildlife conservation history, specifically how they have been produced, inhabited, and controlled.[21] The

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[16] David Smith, "Rhino to be moved from South Africa to Botswana in anti-poaching drive," *The Guardian*, 13 February 2014. http://www.theguardian.com/environment/2014/feb/13/rhinos-south-africa-botswana-anti-poaching-drive

[17] "Minister Edna Molewa highlights progress in the war against poaching and plans for 2015," *DEA*, 22 January 2015. https://www.environment.gov.za/mediarelease/molewa_waragainstpoaching2015.

[18] Ibid.

[19] Tony Carnie, "Proposal to ship SA rhinos to Australia in anti-poaching bid," *Pretoria News,* 17 February 2014, p.3.

[20] "History," *The Australian Rhino Project*, accessed 22 May 2014. http://theaustralianrhinoproject.org/index.php/2014-02-18-00-50-59/background.

[21] When I write of wildlife "conservation" in this dissertation, I am speaking broadly of initiatives aimed at protecting wildlife from extinction, either through complete protection or through some form of utilization. Rosaleen Duffy has pointed out that although the issue of wildlife conservation has drawn the attention of the industrialized world, the meaning of this word is seldom interrogated and therefore obfuscates the complexities of its practices. She writes, "Broadly, conservation and preservation constitute different approaches to wildlife policy, since preservation is more concerned with protecting a habitat, an animal or a resource from any use at all, while conservation allows some use but ensures against extinction or overuse." *Killing for Conservation: Wildlife Policy in Zimbabwe* (Oxford: James Currey, 2000), 1. By

history of wildlife protection around the world has focused principally on the designation of protected areas selected on the basis of species' habitats or an area's unique biodiversity. However, the current rhino crisis shows this model of protecting species in their native habitats has not proven adequately effective. Under threat of extinction, rhinos are now being relocated from their native territories not as part of an effort to return species to historical rangelands, but rather to protect them from threats at home. The current poaching crisis certainly stems from complex causes and will require a combination of context-specific solutions. Nonetheless, whether rhino are bred in private farms for horn harvesting to supply what many South Africans hope will be a legal rhino horn trade[22] or graze in a safari park in central New South Wales, the solutions offered to address the threat to the species raise important questions: Where do rhino belong, and to whom?[23]

In this dissertation, I argue that the development and demarcation of protected areas in southern Africa has not only been a process of defining boundaries but also of defining belonging. I focus specifically on how wildlife has been determined to *belong in* particular areas and how these animals have been claimed as *belonging to* provinces, nations, regions, or universally as world heritage.[24] Scholars in the humanities and social sciences have described the ways that the development and management of protected areas have displaced people from the

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using the term "conservation" to include what might be considered "preservationist" practices, I realize that I am perpetuating the problem of defining this term. However, for lack of a better word, I will use the word "conservation" to mean the intentions and interventions of those seeking to prevent the extinction of species considered to be "wild."

[22] There is an ongoing debate in South Africa regarding whether the legalization of the rhino horn trade might halt the current crisis. See for example Julian Rademeyer, "SA pushes for legal trade in rhino horn," *Mail & Guardian*, 22 March 2013. http://mg.co.za/article/2013-03-22-00-sa-pushes-for-legal-trade-in-rhino-horn; Sipho Kings, "Rhino Farms: Win-win or hell, no?" *Mail & Guardian*, 13 November 2013. http://mg.co.za/article/2013-11-14-rhino-farms-win-win-or-hell-no; Colin Bell, "Rhinos: It's time for plan B," *Daily Maverick*, 4 February 2014. http://www.dailymaverick.co.za/opinionista/2014-02-04-rhinos-its-time-for-plan-b/#.U32bPfmSxFg; Economists at Large, *Horn of Contention: A review of literature on the economics of trade in rhino horn*. Prepared for IFAW South Africa. Melbourne, 2013. http://www.ifaw.org/sites/default/files/Horn-of-Contention.pdf and Andrew Taylor et al., *The Viability of Legalising Trade in Rhino Horn in South Africa.* Department of Environmental Affairs. Pretoria, 2014. https://www.environment.gov.za/sites/default/files/docs/rhinohorntrade_southafrica_legalisingreport.pdf.

[23] The first of these questions is greatly influenced by Ken Thompson's recently published *Where do Camels Belong?: The Story and Science of Invasive Species* (London: Profile Books, 2014), which examines how categories of "native" and "alien" have come to embody "an alien invasions industry" that preserves natives and eradicates aliens.

[24] I use "wildlife" to refer collectively to species that are commonly classified in this manner and "animals" to refer to more specific individuals or populations belonging to wildlife species. I discuss some of the complexities of classifying "wildlife" below.

land and resources on which they depend.[25] By displacing people, even those that could be classified as indigenous to a particular place, many proponents of protected areas have denied their rights to territory and have both physically and symbolically facilitated their territorial unbelonging.[26] I look at the other side of management decisions pertaining to the contents, processes, and inhabitants permitted in these places.[27] I am interested in both the ideas and practices of belonging in protected areas, following Shirley Brooks's reminder that discursive orderings have spatial consequences.[28] The way that these areas are represented, imagined, and legislated has had a material impact on human and non-human lives.

This dissertation focuses specifically on wildlife conservation initiatives in protected areas in Mozambique, a former Portuguese colony, and the northern part of KwaZulu Natal, a province of South Africa, bordering southern Mozambique, with particular emphasis on protected areas in Gorongosa and Maputaland. It also focuses primarily on the period from the early 1960s to the late 1990s, a time of great social and political change in both South Africa and Mozambique. I have selected these areas not to propose points of comparison between conservation practices in these neighboring territories, but rather to demonstrate complex and dynamic continuities, exchanges, and cross-fertilizations that occurred in the region. Ideas about

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[25] Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (Oxford: Oxford University Press, 1999); Roderick Neumann, *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa* (Berkeley: University of California Press, 2002); Arun Agrawal and Kent Redford, "Conservation and Displacement: An Overview," *Conservation and Society* 7, no. 1 (2009): 1-10; and Daniel Brockington and James Igoe, "Eviction for Conservation: A Global Overview," *Conservation and Society* 4, no. 3 (2006): 424-470; and Karl Jacoby, *Crimes Against Nature* (Berkeley: University of California Press, 2001).

[26] This is my phrasing but the sentiment is evident in Mark Dowie, *Conservation Refugees: The Hundred-Year Conflict between Global Conservation and Native Peoples* (Cambridge: MIT Press, 2009).

[27] In this dissertation I use a variety of words to reference geographical sites pertinent to my study. I use "space" to reference abstract, relative, or imagined terrain, such as "wilderness" (with the obvious exception of demarcated "wilderness areas"). In line with animal geographers Philo and Wolch, I use the term "place" to "capture the situated, material dimensions of space." To clarify, "The concept of place is not relative, but absolute: it describes the particularities of singular, unique, nameable settings where phenomena, natural and human, together create a distinctive assemblage which is clearly 'this place'… rather than any other." Christopher Philo and Jennifer Wolch, "Through the Geographical Looking Glass: Space, Place, and Society-Animal Relations," *Society and Animals* 6, no. 2 (1998): 111. When I use the phrase "areas" in the dissertation, I am referring specifically to places that have been designated as protected areas (national parks, game reserves, etc.). When discussing "territory," I am calling attention to geographical terrain that has been claimed or occupied in some capacity by people, wildlife, the state, or an extra- or intra-state body.

[28] Shirley Brooks, "Human Discourses, Animal Geographies: Imagining Umfolozi's White Rhinos," *Current Writing* 18, no. 1 (2006): 6-27.

wildlife conservation crossed national borders, as did animals, their advocates, and, eventually, protected area boundaries.

Figure 1. *Map of Southern Africa showing Gorongosa National Park and Maputaland.* Generated by Brittany Krzyzanowski and Coleman Shepard using data from www.protectedplanet.net.

The way that wildlife has been managed in these places is part of a regional history, and wildlife conservation ideas and practices have developed through the circulation and spread of expertise. By employing a transnational perspective on protected area histories, I am able to illustrate and analyze this movement of personnel, non-human animals, and concepts between nation-states. In interrogating the science and policy-making of protected area development, my narrative foregrounds the ways that wildlife has been implicated in and impacted by ideas about where these animals belong and to whom.[29] I explore how the scientists, conservation agencies, and government departments that influenced and legislated protected areas have determined who or what has the right to dwell inside the boundaries of these territories. This approach to belonging in protected areas diverges from the work of many other scholars in the humanities and social sciences who have focused (importantly) on how people have been displaced from these areas. I place animals, mostly large mammals, at the center of a complex analysis that is fully in conversation with previous work but focuses instead on the ways that non-humans have been fixed in place by the discursive and spatial orderings of protected area science, management, and politics. Although wildlife is my primary concern, this dissertation informs historical studies more broadly because concepts of "belonging" and "alien-ness" have relevance beyond their application to non-humans.

Histories of Wildlife Conservation in Protected Areas

In this section I outline the dominant approaches to wildlife conservation from the humanities and social sciences literature and introduce the shift from "fortress" conservation to community-based models and transboundary, or transfrontier, conservation areas.

Fortress Conservation

Much of the academic literature in the humanities and social sciences pertaining to protected areas in Africa and elsewhere has focused on how the spatial designation and management of wildlife conservation has displaced and dispossessed people, resulting in what

[29] I consider nonhuman animals to be actors in this history as well. They have impacted the designation and development of protected areas and have responded in unexpected ways when protected area boundaries have been imposed upon them. In this dissertation, I therefore see animal agency as the means by which nonhuman animal actors have impacted and influenced the territories in which they reside and the practices and ideologies that have located them in protected areas.

has become known as "fortress conservation." Scholars have attributed this physical division to an imagined dichotomy between humans and spaces set aside for "wilderness," or wildlife protection.[30] William Cronon's 1995 essay, "The Trouble with Wilderness," posited the need to uproot the imaginary boundary between humans and wilderness that shaped environmentalism in the United States (and elsewhere). Cronon argued that scholars and environmentalists needed to "rethink wilderness" as *inclusive* of humans, and succeeding scholarship has built on this assertion.[31]

African historians and geographers have taken up this call, critiquing national parks and protected areas as colonial creations and their contemporary manifestations as postcolonial constructs. Elizabeth Lunstrum, for example, has deemed national parks to be "constituted through an originary act that erases history" as they are remade as "wilderness."[32] Scholars have shown the various ways that "wilderness" in Africa was not preserved through conservation interventions throughout the twentieth century so much as it was created and imposed.[33] This is seen to be part of a larger process of Western imperialism and the exercise of power over territory and resources.[34] Paul Landau has described the way hunting big African game was first a commercial enterprise but gradually became a more scientific, conservationist venture linked to the collection of wildlife photographs. He contends that hunting became a way of asserting masculine domination over nature and in turn, European domination over Africa.[35] In time, colonial administrators became self-appointed environmental stewards, labeling African hunters

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[30] See for example, Roderick Nash, *Wilderness and the American Mind, 4th ed.* (New Haven: Yale University Press, 1982) and Bernhard Gissibl, Sabine Höhler, and Patrick Kupper, eds. *Civilizing Nature: National Parks in Global Historical Perspective* (New York: Berghahn Books, 2012).
[31] William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York: W. W. Norton & Co., 1995), 69. See Paul Wapner, *Living Through the End of Nature: The Future of American Environmentalism* (Cambridge, MA: The MIT Press, 2010).
[32] Elizabeth Lunstrum, "The Making and Unmaking of Sovereign Territory: From Colonial Extraction to Postcolonial Conservation in Mozambique's Massingir Region," (PhD diss., University of Minnesota, 2007), 3.
[33] Neumann, *Imposing Wilderness*.
[34] Richard Grove, *Green Imperialism* (Cambridge: Cambridge University Press, 1995) and John M. MacKenzie. *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1988).
[35] Paul Landau, "Empires of the Visual: Photography and Colonial Administration in Africa," in *Images and Empires: Visuality in Colonial and Postcolonial Africa*, eds. Paul S. Landau and Deborah D. Kaspin (Berkeley: University of California Press, 2002), 147.

as poachers, while white hunters maintained privileged access to wildlife as avowed conservationists.[36]

Ideas and images of wilderness encouraged and legitimized land management practices, delineating boundaries between African people and the environments they inhabited and upon which their livelihoods were based. Jonathan Adams and Thomas McShane have blamed the failure of conservation efforts on this "myth of Wild Africa" perpetuated by travel accounts of colonial encounters and reinforced in literary and pictorial images of the continent.[37] They argue that dominant photographic and literary images imagined an Africa in need of taming by culturally superior experts with African people depicted as savage, destructive, or naïve to conservationist imperatives. Similarly, Roderick Neumann's work on the landscape imagery of the Serengeti locates the roots of contemporary conservation struggles in colonialism and "European ideals of the scenic African landscape." These images of "wilderness" presented African environments to be wild, untouched, and often void of African people. This ideological division between humans and the environment led to the physical displacement of people from "wilderness" landscapes and the criminalization of their livelihoods.[38]

Many scholars consider this wilderness ideology to be perpetuated in the practice and promotion of protected areas in postcolonial or post-apartheid countries. Dan Brockington, for example, argues that colonial boundaries have been reinforced in the work of more contemporary conservationists as African people have been excluded from environmental initiatives in the preservation of imagined Edens through the perpetuation of fortress conservation.[39] Rosaleen Duffy's *Nature Crime* addresses issues in wildlife trade, tourism, and global conservation agendas to interrogate why conservation policies are failing to preserve species, and furthermore, how they continue to produce "exclusion, marginalization, and even violence."[40] She argues that

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[36] MacKenzie, *The Empire of Nature* and Edward I. Steinhart, *Black Poachers, White Hunters: A Social History of Hunting in Colonial Kenya* (Oxford: James Currey, 2006).
[37] Jonathan Adams and Thomas McShane, *The Myth of Wild Africa: Conservation Without Illusion* (Berkeley: University of California Press, 1996).
[38] See for example Neumann, *Imposing Wilderness* and Steinhart, *Black Poachers, White Hunters*. For U.S. examples see Spence, *Dispossessing the Wilderness* and Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2003).
[39] Dan Brockington, *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania* (Oxford: James Currey, 2002).
[40] Rosaleen Duffy, *Nature Crime: How We're Getting Conservation Wrong* (New Haven: Yale University Press, 2010), 221.

conservation agendas employ global "wilderness" ideologies in efforts to fight poverty, the largest perceived threat to conservation. Maano Ramutsindela suggests that the making of transfrontier conservation areas in the postcolonial period re-invigorates wilderness ideologies and perpetuates unequal access to territory and resources.[41]

The fortress conservation critique is certainly valuable for illuminating the failure of many African conservation schemes to recognize humans as part of the "natural" environment and for revealing the unequal power relationships inherent in protected area management. These areas are not primordial places, devoid of human histories or interests. They are managed and maintained, and both their borders and inhabitants (floral, faunal, and human) have changed over time, sometimes through human-imposed measures and sometimes through "natural" ones.[42] While this critique of conservation areas forms a necessary part of protected area historiography, it does not reveal all facets of these places' histories, including the motivations behind the designation of specific protected areas, the complexities of mapping, legislating, and enforcing their boundaries, or the ways in which the creation of these places has been implicated in other narratives of belonging and unbelonging.

Community Conservation

Critiques of the fortress conservation model coincided with emerging trends, particularly in southern Africa, to include communities in the management of wildlife and protected areas. In 1985, ten years before Cronon's rallying call was published, scholars from the hard and social sciences met in the UK to discuss how development could be reconciled with conservation agendas in Africa. In the book that resulted from this conference, the editors condemn programs that have excluded local people from resources and decision-making, suggesting that "the use of the term 'alienation' in referring to this kind of conservation says, perhaps unintentionally, as much as needs to be said about its basic philosophy."[43] Rather than alienate people from protected

[41] Maano Ramutsindela, *Transfrontier Conservation in Africa: At the Confluence of Capital, Politics, and Nature* (Wallingford: CABI, 2007).
[42] I use inverted commas here not to suggest that all of nature is human-influenced, but rather as a means of suggesting that humans are not separate from "nature," for lack of a better word.
[43] David M. Anderson and Richard Grove, "The scramble for Eden: past, present and future in African conservation," in *Conservation in Africa: People, Policies, and Practice,* eds. D. Anderson and R. Grove (Cambridge: Cambridge University Press, 1987), 8.

areas, they proposed that future planning for the African rural environment should include the direct participation of African rural people.[44]

By the 1990s, community conservation became the dominant paradigm of conservation practice in southern Africa, emerging in several different guises, with the aim of including local communities, and particularly indigenous people, in protected area management.[45] Various governments and conservation agencies created programs aimed at expanding local participation in wildlife conservation and access to its potential economic benefits. Community-based Natural Resource Management (CBNRM) initiatives in Zimabwe and Namibia were globally applauded for their inclusive approach.[46] After South Africa's first democratic elections in 1994, the country's principal conservation body, South African National Parks (SANParks), shifted toward a community-based focus as a means of implementing wider democratic and racial transformation.[47]

Despite the participatory rhetoric of community conservation, academics have criticized the models and programs that fell under this category. Though purporting to shift conservation practices from the state to the community, many of these initiatives have maintained top-down structures that have actually shifted authority from the state to tourism markets and donor funding.[48] Like fortress conservation, community conservation has come under intense scrutiny and criticism as a highly political approach to conservation that fails to be fully inclusive. The "community" is not a simple, homogenous, or apolitical grouping, and the individuals subsumed in this category are impacted by internal power dynamics as well as external ones. In some instances, the community conservation model supplanted fortress conservation with boundaries of difference and dispossession enacted on a smaller scale, where local government or "community" politics supplanted the state in determining (and selectively excluding) access to resources.[49]

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[44] Ibid., 10.
[45] John Hutton, William M. Adams, and James C. Murombedzi, "Back to the Barriers? Changing Narrative in Biodiversity Conservation," *Forum for Development* Studies 2 (2005): 341-370 and William M. Adams and John Hutton, "People, Parks and Poverty: Political Ecology and Biodiversity Conservation," *Conservation and Society* 5, no. 2 (2007): 147-183.
[46] Wolfram Dressler et al. "From Hope to Crisis and Back Again? A Critical History of the Global CBNRM Narrative," *Environmental Conservation* 37, no. 1 (2010): 9-10.
[47] Jacklyn Cock and David Fig, "From Colonial to Community Based Conservation: Environmental Justice and the National Parks of South Africa," *Society in Transition* 31, no. 1 (2000): 22-35.
[48] David Hulme and Marshall W. Murphree. eds. *African Wildlife and Livlihoods: The Promise and Performance of Community Conservation* (Oxford: James Currey, 2001).
[49] Dan Brockington, "Community Conservation, Inequality and Injustice: Myths of Power in Protected Area Management," *Conservation and Society* 2, no. 2 (2004): 411-432.

Furthermore, the successful rhetoric of community conservation drew the interest of international NGOs, who have perpetuated the message of the community conservation narrative while assuming power over local conservation practices.[50] The failures of community conservation have incited some calls to return to the fortress conservation model or to develop new models, which might more successfully ensure alignment between wildlife conservation and sustainable livelihoods for rural people.[51] Other scholars have noted that such "win-win" scenarios are almost unachievable and that conservation practitioners and relevant institutions should be honest and transparent about the need to make compromises or trade-offs between biodiversity loss and human costs.[52]

Political and Disciplinary Boundaries in Protected Area Historiography

The majority of conservation histories in Africa have been written along national lines, focusing on the development of particular national parks or reserves within the political context of a colonial or independent state.[53] Scholars have chronicled a series of colonial and post-colonial policies that have served to exclude African people from the environments they inhabit and criminalize their dependence on environmental resources.[54] Most histories of conservation sites and practices are micro-studies of specific places which, in turn, are analyzed in line with colonial and/or independent state interventions.

Although national parks may lend themselves to "national" histories, perhaps nowhere are the imaginary boundaries of "nations" less analytically useful than in the study of wildlife and other facets of the environment.[55] In a recent state of the field essay about environmental history,

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[50] Rosaleen Duffy, "Global-local Linkages: The Meanings of CBRNM in Global Conservation Politics," in *Beyond Proprietorship: Murphree's Laws on Community-based Natural Resource Management in Southern Africa,* eds. Billy Mukamuri, Jeanette Manjengwa, and Simon Anstey (Harare: Weaver Press, 2009), 58-72.
[51] Hutton et al., "Back to the Barriers?" and Dresser et al., "From Hope to Crisis."
[52] Thomas O. McShane et al., "Hard Choices: Making Trade-offs between Biodiversity Conservation and Human Well-Being," *Biological Conservation* 144 (2011): 966-972.
[53] See for example Jane Carruthers, *The Kruger National Park: A Social and Political History* (Pietermaritzburg: University of Natal Press, 1995); Neumann, *Imposing Wilderness*; Duffy, *Killing for Conservation*; and Christopher A. Conte, *Highland Sanctuary: Environmental History in Tanzania's Usambara Mountains* (Athens: Ohio University Press, 2004).
[54] Brockington, *Fortress Conservation*; MacKenzie, *Empire of Nature*; and Steinhardt, *Black Poachers, White Hunters*.
[55] See Donald Worster, "World Without Borders: The Internationalization of Environmental History," *Environmental Review* 6 (1982): 8-13 and Richard White, "Nationalization of Nature," *Journal of American History* 86, no. 3 (December 1999): 986.

J.R. McNeill accepted criticism of environmental historians' deferral to the nation-state: "The natural phenomena that form part of environmental history's subject matter pay no heed to political borders."[56] Furthermore, "the cultural and intellectual trends concerning human views of nature migrate internationally with almost equal ease."[57] Therefore the "nationalist" tendency in historical scholarship on environmental resources and territories has limitations with regard to illuminating the expansion of landscapes and wildlife, as well as the movement of ideas, across political boundaries. Research on transfrontier conservation areas (TFCAs) has formed a natural bridge across those political borders.

Emerging from the community-based conservation ethos, TFCAs have been touted as a model for linking conservation, economic development, and diplomacy. Most social science scholarship on TCFAs has thus focused on their governance, as well as their failure to adequately engage community "partners" purported to have a stake in their management and revenue.[58] Most of these works specifically explore the political rationales for or consequences of the creation of these "peace parks," analyzing their implications for national and local sovereignty. William Wolmer has argued that transfrontier parks could undermine community conservation models by re-centering state (or trans-state) interests and curtailing cross-border movement or informal transborder networks.[59] Elizabeth Lunstrum's dissertation explored the history of territorial formation on the Mozambican side of the Great Limpopo Transfrontier Park (the flagship Peace Park in Southern Africa, which includes Kruger National Park in South Africa, Gonarezhou National Park in Zimbabwe, and Limpopo National Park in Mozambique). Her study of Mozambique's Massingir region, situated along the South African border, traced processes of territorialisation, deterritorialization, and the consolidation of state power as this geographic region was remade according to a complex set of "spatial relations," or national, regional, and international interests.[60] Clapperton Mahvunga's work on the history of Zimbabwe's Gonarezhou National Park investigated how different forms of animal and human movement across

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[56] J.R. McNeill, "State of the Field of Environmental History," *Annual Review of Environment and Resources* 35 (November, 2010): 359.
[57] Ibid.
[58] See Ramutsindela, *Transfrontier Conservation in Africa;* Marja Spierenburg and Harry Wels, "'Securing Space,': Mapping and Fencing in Transfrontier Conservation in Southern Africa," *Space and Culture* 9 (2006): 294-312;.and Rosaleen Duffy, "Global Governance and Environmental Management: The Politics of Transfrontier Conservation Areas in Southern Africa," *Political Geography* 25, no. 1 (2006): 89-112.
[59] William Wolmer, "Transboundary Conservation: The Politics of Ecological Integrity in the Great Limpopo Transfrontier Park," *Journal of Southern African Studies* 29 (March 2003): 261-278.
[60] Lunstrum, "The Making and Unmaking of Sovereign Territory," 227.

boundaries (including national boundaries with Mozambique and South Africa) served to influence boundary-making in the protected area.[61] David McDermott Hughes has described the creation of TFCAs as a form of "third nature," which sacrifices social and ecological realities for economic interests, paying little heed to "actual nature" and none to the material consequences for those who are fenced out of their boundaries.[62]

Political borders and the physical boundaries of protected areas are not the only boundaries that scholars have argued warrant analytical transgression. The limitations of disciplinary boundaries have also been forced into the spotlight. Soon after Cronon's 1995 book was published, scholars from the hard sciences, as well as environmental history, debated the merits of Cronon's arguments.[63] Michael Soulé, a biologist and co-founder of the Society for Conservation Biology, was one of the most vocal adversaries to the notion of nature as a social construction.[64] Soulé co-edited a volume entitled *Reinventing Nature?* that brought a series of multidisciplinary challenges to Cronon's "postmodern deconstruction."[65] In his chapter entitled, "The Social Siege of Nature," Soulé argued that viewing nature as a social construction has real consequences for the future of species biodiversity and wildlands and complements the physical assault on "living nature" already taking place. He suggests that the ideological affront to "nature" could serve to justify the ongoing siege against "native species of plants and animals in their native settings" being "carried out by increasing multitudes of human beings equipped and accompanied by bulldozers, chainsaws, plows, and livestock."[66]

American environmental historian Donald Worster weighed in on this debate, emphasizing the key role historians can play in interrogating change and dynamism in natural environments, not to the point of constant relativization, of which some postmodernists might be

[61] Clapperton Mavhunga, "The Mobile Workshop: Mobility, Technology, and Human/Animal Interaction in Gonarezhou (National Park), 1850-Present," (PhD diss., University of Michigan, 2008).
[62] David McDermott Hughes, "Third Nature: Making Space and Time in the Great Limpopo Conservation Area," *Cultural Anthropology* 20 (2005): 157-184.
[63] This was the focus of the very first issue of the journal *Environmental History* 1, no. 1 (January 2006).
[64] Soulé has been an advocate of the Conservation Biology discipline since the early to mid-1980s. See for example Michael E. Soulé, "What is Conservation Biology?: A new synthetic discipline addresses the dynamics and problems of perturbed species, communities, and ecosystems," *BioScience* 35, no. 11 (1985): 727-734.
[65] Michael Soulé and Gary Lease, eds. *Reinventing Nature? Responses to Postmodern Deconstruction* (San Francisco: Island Press, 1995).
[66] Ibid., 137.

guilty, but rather by thoughtfully interrogating specific contexts to support decisions regarding "what changes are vital and which are deadly."[67]

> Today, historians can no longer claim there is a single universal narrative of change that all species, all communities, all places, must conform to. "History" has given way to "histories." Each of these histories needs space to play itself out, to unwind its narrative. This is precisely what the modern idea of conservation aims to do: provide the space, either set aside in large, discrete blocks or protected within the interstices of the landscape, so that all the many histories can coexist – the history of the coral reef alongside the history of a coastal city, the history of a tropical rainforest alongside the history of a political struggle.[68]

In mitigating against an unknown future, Worster sees environmental conservation as an effort at "promoting the coexistence of many beings" and preventing the progress of one species from destroying the survival of others.[69] Protected areas can be considered a tool for safeguarding the continuation of the narratives of both humans and wildlife species.

This dissertation represents an attempt to chronicle and analyze the histories of some of these set-aside spaces, arguing that territorial belonging is an organizing principle of their designation and development. In demarcating places for the protection of non-human species, governments, scientists, and other conservationists have privileged the territorial rights and needs of wildlife (often over those of people) indigenous or native to particular habitats. Furthermore, the process of privileging the rights of non-humans to dwell in particular places has been enacted on different scales by different political and scientific entities over time. These decisions have also privileged the rights of certain people, organizations, or governing bodies over others as claims to manage these areas have changed with political circumstances and dynamic notions of what belongs in these territories and who they (and their constituent parts) belong to. By looking at wildlife conservation as a regional (rather than national) process, I demonstrate that protected area management has not only entailed decisions regarding who or what belongs in those areas; it has also involved the negotiation of contesting claims between states and conservation bodies to the territory, resources, and non-human inhabitants that constitute protected areas.

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[67] Donald Worster, "Nature and the Disorder of History," in *Reinventing Nature? Responses to Postmodern Deconstruction*, eds. Michael Soulé and Gary Lease (San Francisco: Island Press, 1995), 82.
[68] Ibid.
[69] Ibid.

Belonging as a Wildlife Conservation Concept

Sarah Whatmore and Lorraine Thorne have argued, "The enduring coincidence between the species and spaces of wildlife as the antipodes of human society means that to ask what is wild is simultaneously a question of its whereabouts."[70] The category of wildlife not only implies assumptions about where such life exists but also where it should exist, or in other words, where it belongs. However, the notion of belonging in or to a particular place is particularly complicated when thinking about wildlife. First, belonging to a place implies some sort of domestication, by which I mean the process of becoming "at home" there, either through the imposition of real or imagined boundaries or through autonomous acclimatization, or settling in. The concept of domestication contradicts our sense of what it means to be wild, usually identified with something or somewhere uncontrolled, unconfined, or devoid of human influence. What is perhaps more complicated in thinking about wildlife belonging in "the wild" is that these "wild" species are now largely relegated to protected areas that are created, managed, and regulated by humans. Their "wildness" is curtailed by human-imposed boundaries that restrict free movement.[71] Shirley Brooks contends that "the animal experience – not unlike that of marginalized groups of human beings – is one of having geographies imposed upon them."[72]

Linking wildlife to "the wild" raises important questions about indigeneity, or being "native" to a place. Anthropologists have become particularly attentive to the problems of categorizing "native" human inhabitants, as this category marks the subject as a geographical and cultural "other" and also fails to account for the movement of people in and between places. James Clifford therefore asked: "What does it mean, at the end of the twentieth century, to speak…of a 'native land'?"[73] In considering the co-construction the idea of the "native" with a pervasive Eurocentric hierarchy, Arjun Appardurai determined that "natives are not only persons who are from certain places, and belong to those places, but they are also those who are somehow *incarcerated,* or confined, in those places."[74] Although referring to humans, and subjects of

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[70] Sarah Whatmore and Lorraine Thorne, "Wild(er)ness: reconfiguring the geographies of wildlife," *Transactions of the Institute of British Geographers* 23, no. 4 (1998): 435.
[71] David Lulka, "Stabilizing the herd: Fixing the Identity of Nonhumans," *Environment and Planning D: Society and Space* 22 (2004): 438-463.
[72] Shirley Brooks, "Human Discourses," 12.
[73] James Clifford, *The Predicament of Culture* (Cambridge: Harvard University Press, 1988), 275 as quoted in Akhil Gupta and James Ferguson, "Beyond 'Culture': Space, Identity, and the Politics of Difference," *Cultural Anthropology* 7, no. 1 (1992): 9.
[74] Arjun Appardurai, "Putting Hierarchy in its Place," *Cultural Anthropology* 3, no. 1 (1988): 37.

anthropological study in particular, this way of seeing the "native" resonates with ways of seeing non-human "natives," or native species, confined to a place or "immobilized by their belonging to a place."[75] In the case of wildlife, the immobilization of "native" identity is often physical as well as ideological, as wild animals – often dependent on movement and territorial migration for access to food and water or genetic diversity – become confined to their native habitats either through fencing or by virtue of human encroachment that curtails movement outside a designated area. Like nativeness, wildness can be viewed as both a place and a condition.

Applying concepts of nativeness and indigeneity to wildlife serves to link a species' identity to territory; in other words, its fixes identity in place, paralleling the physical enclosure of species in protected areas. However, as Stefan Helmreich points out, the problem of defining nativeness is "far from being a straightforward matter of biological classification…; [it] is a taxing taxonomic question."[76] This is due to the cultural and political influences that shape the way nativeness is ascribed and valued at different junctures. Despite these complexities, time and human agency remain two of the key parameters used to distinguish species as "natives."[77] Ironically, until the eighteenth century, the word "native" was synonymous with "wild" or "uncultivated."[78] In the mid-nineteenth century British amateur botanist H. C. Watson, intent on distinguishing between naturally and artificially occurring plants, redefined "native" species as those for which there is "little or no reason for supposing it to have been introduced by human agency."[79] Thus, a species could be considered native to a territory even if at some point in the past it had relocated by "natural" means (i.e., not through human action or influence). Over the following century, what was a relatively neutral category for Watson began to take on increasing value. The publication of Charles Elton's seminal text on ecological invasions in 1958 solidified the privileging of native species over alien or introduced species, which continues to exist today.[80] According to Ken Thompson,

> Elton believed firmly that species belong to wherever they happen to be right now, irrespective of length of tenure or where they had evolved or migrated

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[75] Ibid.
[76] Stefan Helmreich, "How Scientists Think; About 'Natives', For Example. A Problem on Taxonomy Among Biologists of Alien Species in Hawaii," *Journal of the Royal Anthropological Institute* 11 (2005): 108.
[77] Ibid., 125.
[78] Thompson, *Where do Camels Belong?*, 31.
[79] Matthew K. Chew and Andrew L. Hamilton, "The Rise and Fall of Biotic Nativeness: A historical perspective," in *Fifty Years of Invasion Ecology: The Legacy of Charles Elton*, ed. David M. Richardson (Oxford: Blackwell, 2011), 37.
[80] Thompson, *Where do Camels Belong?,* 36-38.

> from. More than that, he believed that belonging confers rights of occupancy, that these rights extend indefinitely into the future, and that natives are morally superior to aliens. And these are views all too often shared by Elton's many modern admirers and disciples.[81]

Where many of Elton's contemporary followers maintain the moral superiority of natives and the imperative that these species belong where they occur, their definition of this category usually hinges to a large extent on the duration of their stay in their place or territory of occupancy and the lack of human involvement in getting them there (in line with Watson's definition). As Chew and Hamilton state, "Because human occupancy is a geologically recent development, this verdict invokes civil rights of prior occupation."[82] Non-human inhabitants are often more "native" than human ones, a point that has served to support the development of protected areas. The flexibility in determining at what point in time a species becomes (or became) "native" is one of the challenges of employing this concept in wildlife conservation.

Despite the difficulties of defining nativeness, and its accompanying qualifiers, I will offer some parameters here. The International Union for Conservation of Nature (IUCN), a global membership body aimed at conserving biodiversity, uses the term "native" interchangeably with "indigenous." Both are defined as "a species, subspecies, or lower taxon living within its natural range (past or present), including the area which it can reach and occupy using its own legs, wings, wind/water-borne or other dispersal systems, even if it is seldom found there."[83] This definition assumes "natural" to mean unassisted by human beings and posits a notion of territory that includes past, present, and potential occupancy. The concept of habitat is particularly relevant in determining indigeneity, as this is the territory which wild species inhabit, or as defined by the IUCN, "the place or type of site where an organism or population naturally occurs."[84] Habitat is thus not just where species currently reside but also the landscape, vegetation, climate, etc. that is comparable to where they are usually found. "Endemic" species are those that are "confined to a particular geographic region,"[85] meaning that they occur nowhere else in the world. These indigenous species are often threatened and thus become a high conservation priority. I use the term "indigeneity" in this dissertation in an effort to link the concept of belonging to both history

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[81] Ibid., 41.
[82] Chew and Hamilton, "Rise and Fall of Biotic Nativeness," 41.
[83] Jeffrey A. McNeely, ed. *The Great Reshuffling: Human Dimensions of Invasive Alien Species* (Gland, Switzerland: IUCN, 2001), 3.
[84] "Biodiversity Glossary," *IUCN*, last modified May 2010. http://iucn.org/iyb/about/bio_glossary.
[85] Ibid.

and place. I do not mean to use this as a static category, since like ethnicity, nationality, and other categories of identity, indigeneity can be a fluid and dynamic concept, wielded at particular times for particular purposes. This dissertation focuses instead on how indigeneity has been applied to non-human dwellers of particular places. At different points, however, I use this term for both humans and non-humans, always implying the word has been ascribed to groups in the process of giving credence to particular populations' claims or rights to reside in particular territories.

Embedded in the term "indigeneity" is the opposing notion of that which is "non-native," "alien," or even "invasive,"—ideas also born out of imperial processes which brought each category into competition with the other.[86] As humans moved around the globe, they both intentionally and accidentally transported plants and animals to new habitats, changing the global landscape and facilitating new relationships to the natural environment. Ecologists, conservation biologists, and specialists in natural resource management have paid extensive attention to the scientific ramifications of preserving "native species" to the detriment of "non-native" species. [87] Historians have tended to apply these concepts mainly in the context of forced and coerced removals of "indigenous" people from conservation sites, which have led to a redefining of the relationship these displaced people have with the environment.[88] Recently, however, some scholars have begun to explore the connection between human ideas about race and nationality and their perceptions of (and initiatives against) "invasive" plant and animal species.[89] This scholarship connects notions of ecological and national belonging.[90] Jane Carruthers' work on

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[86] Tom Griffiths and Libby Robin, eds. *Ecology and Empire: Environmental History of Settler Societies* (Seattle: University of Washington Press, 1998) and Peter Coates, *American Perceptions of Immigrant and Invasive Species: Strangers on the Land* (Berkeley: University of California Press, 2006).
[87] For ecological and geographical works on ideas about "invasion" and "indigeneity" see Mark A. Davis, *Invasion Biology* (Oxford: Oxford University Press, 2009) and David M. Richardson, et al. "Biological invasions – the widening debate: a response to Charles Warren," *Progress in Human Geography* 32, no. 2 (2008): 295-298.
[88] William M. Adams and Jon Hutton, "People, Parks and Poverty: Political Ecology and Biodiversity Conservation," *Conservation and Society* 5, no. 2 (2007): 147-183.
[89] Coates, *American Perceptions of Immigrant and Invasive Species.*
[90] Australian scholars have been particularly interested in this relationship. See for example David Trigger, "Indigeneity, Ferality and What 'Belongs' in the Australian Bush: Aboriginal Responses to 'Introduced' Animals and Plants in a Settler-Descendant Society," *Journal of the Royal Anthropological Institute* 14, no. 4 (2008): 628-646; Lesley M. Head and Pat Muir, "Nativeness, Invasiveness and Nation in Australian Plants," *Geographical Review* 94, no. 3 (2004): 199-217; and David Trigger et al., "Ecological Restoration, Cultural Preferences and the Negotiation of 'Nativeness' in Australia," *Geoforum* 39, no. 3 (2008): 1273-1283.

South Africa's Kruger National Park, for example, links the creation of a conservation site with the formation of a (heterogeneous) white South African identity.[91]

Increasing interest has been paid to the historical relationship between "alien" and "invasive" flora, in particular, and the development of cultural or national identities.[92] This is particularly true in the context of post-apartheid South Africa. Jean and John Comaroff's article, "Naturing the Nation," published in 2001, for example, describes how political anxieties about national identity and belonging were enacted in the discourse surrounding bush fires that blazed near Cape Town a year earlier.[93] Where "fire has long been recognised as endemic to the Cape floral ecology," which is characterized largely by *fynbos* ("fine bush" in Afrikaans, referring to plant species native to the Cape Floral Kingdom), the catastrophic scale of the 2000 fire was blamed largely on alien floral species, which had apparently caused the burning to reach unnatural levels.[94] The Comaroffs see this panic around alien flora threatening the nation's natural heritage as a projection of fears of alien people threatening South Africa's nationhood and its citizens, representing "deep-seated questions facing the postcolonial state about the nature of its sovereign borders, about the right to citizenship within it, about the meaning and the passion inherent in national belonging."[95]

Abigail Neely responded to this article, arguing that South African attention to alien floral species was not limited to this "postcolonial" moment, but rather had a long history embedded in an evolving invasive ecology, grounded in both ecological and cultural perceptions.[96] Ecologist Daniel Simberloff published an article two years later reminding scholars that there are often real ecological and economic consequences to invasive species introductions and that critiquing the control of alien species as a xeonophobic exercise ignores the material

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[91] Jane Carruthers, *The Kruger National Park*.
[92] Much of this research is influenced by Crosby's *Ecological Imperialism,* first published in 1986. See for example Jane Carruthers, et al., "A Native at Home and Abroad: The History, Politics, Ethics and Aesthetics of Acacias," *Diversity and Distributions* 17 (2011): 810-821; Simon Pooley, "Pressed Flowers: Ideas About Alien and Indigenous Plants at the Cape, c.1902–45," *Journal of Southern African Studies* 36 (2010): 599–618; William Beinart and Karen Middleton, "Plant Transfers in Historical Perspective: A review article," *Environment and History* 10 (2004): 3-29; and Kenneth Olwig, "Natives and Aliens in the National Landscape," *Landscape Research* 28 (2003): 61-74.
[93] Jean and John L. Comaroff, "Naturing the Nation: Aliens, Apocalypse and the Postcolonial State," *Journal of Southern African Studies* 27, no. 3 (2001): 627-651.
[94] Ibid., 641.
[95] Ibid., 650.
[96] See also Lance van Sittert, "'The Seed Blows About in Every Breeze': Noxious Weed Eradication in the Cape Colony, 1860–1909," *Journal of Southern African Studies* 26, No. 4 (2000): 655-674.

impacts these species often have.[97] It turned out that there was no solid evidence to blame the 2000 fires on alien species; however, their subsequent eradication still had positive consequences. Neely suggests that what was important about the fervor around the Cape fires was that it facilitated a joint approach to nature conservation, poverty eradication, and ecological research, which resulted in the production of socially responsible studies and new knowledge regarding alien invasive species and their management.[98] Simon Pooley also demonstrates that the entanglement of debates about national identity and introduced or indigenous plants dates back to the beginning of the twentieth century with efforts to protect indigenous fynbos.[99] Pooley also illustrates how some foreign ecological experts, intent on preserving the Cape's native flora, had misguided notions about how to do so, basing their assumptions on ecological theories from the northern hemisphere that were incompatible with South Africa's indigenous species. These scholars have called attention to the way notions of indigeneity are bound to changing perceptions of what belongs in a given place. However, where the Comaroffs were more concerned with the naturalization of indigeneity as a proxy for nationhood, I align my research with Neely and Pooley, who, while interested in the social influence of "indigenous," "native," and "alien" categories, also recognize that these signifiers have grounding in the natural, or biological, world and reflect developments pertaining to these categories in the production of scientific knowledge and practices.

The privileging of native species in the development of protected areas for the protection of wildlife species has been fundamental to conservation science since the late nineteenth century. As the conservation movement grew, initiatives to remove "indigenous" people from newly protected areas were coupled with an interest in preserving "indigenous" flora and fauna and removing or eradicating those seen as "invasive." This interest in preserving a species-selective "indigeneity" continued throughout the twentieth century and remains a mobilizing agenda for conservationist entities across the world, including southern Africa. As colonial authorities recognized the decline in wildlife numbers in the first half of the twentieth century (resulting from colonial expansion and the spread of trophy hunting), preserving "native" species became more important, and the boundaries of protected areas expanded and contracted to include or

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[97] Daniel Simberloff, "Confronting Introduced Species: A Form of Xenophobia?" *Biological Invasions* 5 (2003): 179-192.
[98] Abigail Neely, "'Blame it on the Weeds': Politics, Poverty, and Ecology in the New South Africa," *Journal of Southern African Studies* 36, no. 4 (2010): 869-887.
[99] Simon Pooley, "Pressed Flowers."

exclude different species. In the second half of the twentieth century and the first decade of the twenty-first century, nativism became a particularly significant concept as species were relocated to national parks where their numbers had been previously depleted. This concept of preserving indigenous species remains a fundamental conservationist agenda. The current SANParks mission statement, for example, reads as follows: "To acquire and manage a system of national parks that represents the indigenous wildlife, vegetation, landscapes and associated cultural assets of South Africa, for the joy and benefit and spiritual well-being of the nation and the people of the world."

This mission statement reflects the way "indigenous wildlife" is claimed as property, belonging in a particular territory and also belonging to whatever entity assumes the power to manage that territory. This could be a local community, the province, the state, the region, a non-governmental organization, global citizens, or a combination of these categories. According to SANParks, wildlife within protected areas belongs to the South African nation but is preserved for the benefit of the global human population, who, along with domestic citizens, might have the pleasure of visiting South Africa's parks.[100] As such, wildlife represents a part of South Africa and the world's natural heritage, imbued with cultural and political value. It also represents potential economic value from tourist revenue.[101]

The question of ownership is central to wildlife relocation programs, including those presented at the beginning of this introduction regarding Gorongosa's zebra and South Africa's rhinos. In relocating wildlife, either for the purposes of ecological restoration or safeguarding species, wildlife conservators move animals across territorial and national borders, sometimes reassigning ownership rights. In Gorongosa, attempts to reinvigorate a park's historical zebra population were trumped by the Zimbabwean state. The potential movement of South African rhinos to Australia with the promise of future repatriation (to Africa, if not South Africa) is premised on the idea that these animals belong in their historic rangelands. Furthermore, this

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[100] Njabulo Ndebele has drawn attention to the racialized and colonial nature of wildlife tourism. Njabulo Ndebele, "Game Lodges and Leisure Colonialists," in *Blank: Interrogating Architecture after Apartheid*, eds. Hilton Judin and Ivan Vladislavic (Cape Town: David Phillips, 1998), 10-14. However, scholars have begun to complicate this exclusionary perception, presenting nuanced historical studies of African experiences of tourism in South African game reserves. See for example Edward Teversham, "The Nature of Leisure in the Manyeleti Game Reserve for Africans, South Africa, 1967-1985," *The International Journal of the History of Sport* 30, no. 16 (2013): 1877-1888 and Jacob Dlamini, "Putting the Kruger National Park in Its Place: A Social History of Africans, Mobility and Conservation in a Modernizing South Africa, 1900-2010" (PhD diss., Yale University, 2012).

[101] Marie-Christine Cormier-Salem and Thomas J. Bassett, "Nature as Local Heritage in Africa: Longstanding Concerns, New Challenges," *Africa* 77, no. 1 (2007): 1-17.

transcontinental effort at protecting them represents an assertion that these species are part of *our* heritage, not just Africa's or South Africa's—they belong to all people, and we all have a right to and responsibility for their continued survival.[102] Historically, ecologists and conservationists have expressed a preference for reintroducing species to areas they previously inhabited over "assisted colonizations," or human-assisted movement of species into new areas.[103] In 1995, the IUCN defined reintroduction as "an attempt to establish a species in an area which was once part of its historical range, but from which it has been extirpated or become extinct."[104] In the organization's most recent guidelines, the phrase "historic range" is changed to "indigenous range,"[105] inferring a primordial tie to a place rather than a more recent history of habitation.

Despite their persistence in conservation practice, the utility of the categories of indigeneity are being challenged from both the hard and social sciences.[106] The shaky historical terrain on which the "native" and "alien" sit is increasingly being brought into view, and conservationists are beginning to emphasize a species' functions in an ecosystem over its origins when making decisions about whether and where it should be reintroduced.[107] Simultaneously, notions of "belonging" seem to be sidelined the closer to extinction a species becomes, when the creation of seedbanks or strongholds becomes more pressing than rangeland integrity. Zoologist Philip Seddon argues that "we are moving…away from the almost sole reliance on the rigid and often flawed dictates of historical species distribution records, toward the inclusion, where appropriate, of more aggressive and risky intervention that will be required to respond to…anthropogenic impacts."[108] Efforts to relocate rhinos to places as far from their historic range

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[102] In practice, however, this universality is curtailed by power relations embedded in networks of privilege, class, race, and gender.
[103] Anthony Ricciardi and Daniel Simberloff, "Assisted Colonization is not a Viable Conservation Strategy," *Trends in Ecology and Evolution* 24, no. 5 (2009): 248-253.
[104] Richard H. Emslie, Rajan Amin, and Richard Kock, eds., *Guidelines for the In situ Re-introduction and Translocation of African and Asian Rhinoceros*. IUCN. 2009, 8.
[105] IUCN Species Survival Commission, *Guidelines for Reintroductions and Other Conservation Translocations*. Gland, Switzerland, 2013, 2.
[106] Chew and Hamilton, "Rise and Fall of Biotic Nativeness." See also Ian D. Rotherham and Robert A. Lambert, eds*. Invasive and Introduced Plants and Animals: Human Perceptions, Attitudes and Approaches to Management* (Washington DC: Earthscan, 2011); Lesley Head, "Decentring 1788: Beyond Biotic Nativeness," *Geographical Research* 50, no. 2 (2012): 166-178; and Jane Mulcock and David Trigger, "Ecology and Identity: A Comparative Perspective on the Negotiation of 'Nativeness,'" in *Toxic Belonging: Identity and Ecology in Southern Africa*, ed. Dan Wylie (Newcastle: Cambridge Scholars, 2008), 178-198.
[107] Mark Davis et al., "Don't Judge Species on Their Origins," *Nature* 474 (2011): 153-154.
[108] Philip Seddon, "From Reintroduction to Assisted Colonization: Moving along the Conservation Translocation Spectrum," *Restoration Ecology* 18, no. 6 (2010): 796.

as Australia reflects the increased palatability of "assisted colonizations." At this juncture, it is worth assessing the value of categories of belonging in the protection of wildlife species and how these have historically operated on the ground.

Notions of "indigeneity" and "nativeness" have been used to privilege the rights of some species over others (including humans) in the demarcation and development of protected areas and in determining practices of ownership over the territories that these species inhabit. Despite recent revelations about the cultural and political influences on these seemingly neutral categories, they remain fundamental in determining who or what has the right to dwell in particular territories, sometimes with good reason. These categories provide ways of thinking about land use, territory, and citizenship rights beyond (but sometimes tied to) human existence and development. Despite the pitfalls of this category, Chew and Hamilton suggest that "without nativeness, the ecological past offers us data, but not counsel."[109] The moral imperatives of wildlife belonging, however fraught their foundations, allow for the inclusion of non-human species in a world marked by increasingly strained terrain. These categories of belonging (both in and to) become increasingly complicated when animals and expertise travel across the borders of protected areas and nation-states. By exploring how these notions have been employed the demarcation, definition, and constitution of protected areas in Gorongosa and Maputaland, I aim to illuminate a regional and transnational history of wildlife management.

An Historical Overview of Wildlife Conservation in Mozambique and KwaZulu Natal

Mozambique and KwaZulu Natal (a province of South Africa and formerly the colony of Natal) share several thematic convergences, transfers of knowledge, and political conflicts in their development of protected areas. The historical overview that follows is by no means an exhaustive chronology of protected area development in the sites which constitute the focus of this dissertation. Instead, it is meant to provide some background and contextualization for the following chapters, introducing key personnel, pointing to broad trends in protected area management, and outlining some of the regional confluences in these histories.

[109] Chew and Hamilton, "Rise and Fall of Biotic Nativeness," 45.

The creation of protected areas in the late nineteenth and early twentieth centuries in South Africa and Mozambique stemmed largely from concerns regarding the obliteration of particular species wrought by large scale colonial sport hunting. The oldest surviving game reserves on the African continent were designated in Zululand (now part of the KwaZulu Natal province) in 1895, when the former Zulu kingdom was brought under British control. The proclamation of the Umfolozi and Hluhluwe reserves united local interests in separating domestic livestock from wild animals harboring the tsetse fly, which caused *nagana* (animal trypanonsomiasis) in some domestic species, with the emerging desire of sport hunters to protect the white rhinoceros from extinction. These neighboring territories were thought to hold the last viable population of the species in southern Africa.[110]

[110] Shirley Brooks, "Changing Nature: A Critical Historical Geography of the Umfolozi and Hluhluwe Game Reserves, Zululand, 1887 to 1947" (PhD Thesis, Queens University, 2001), 198-223.

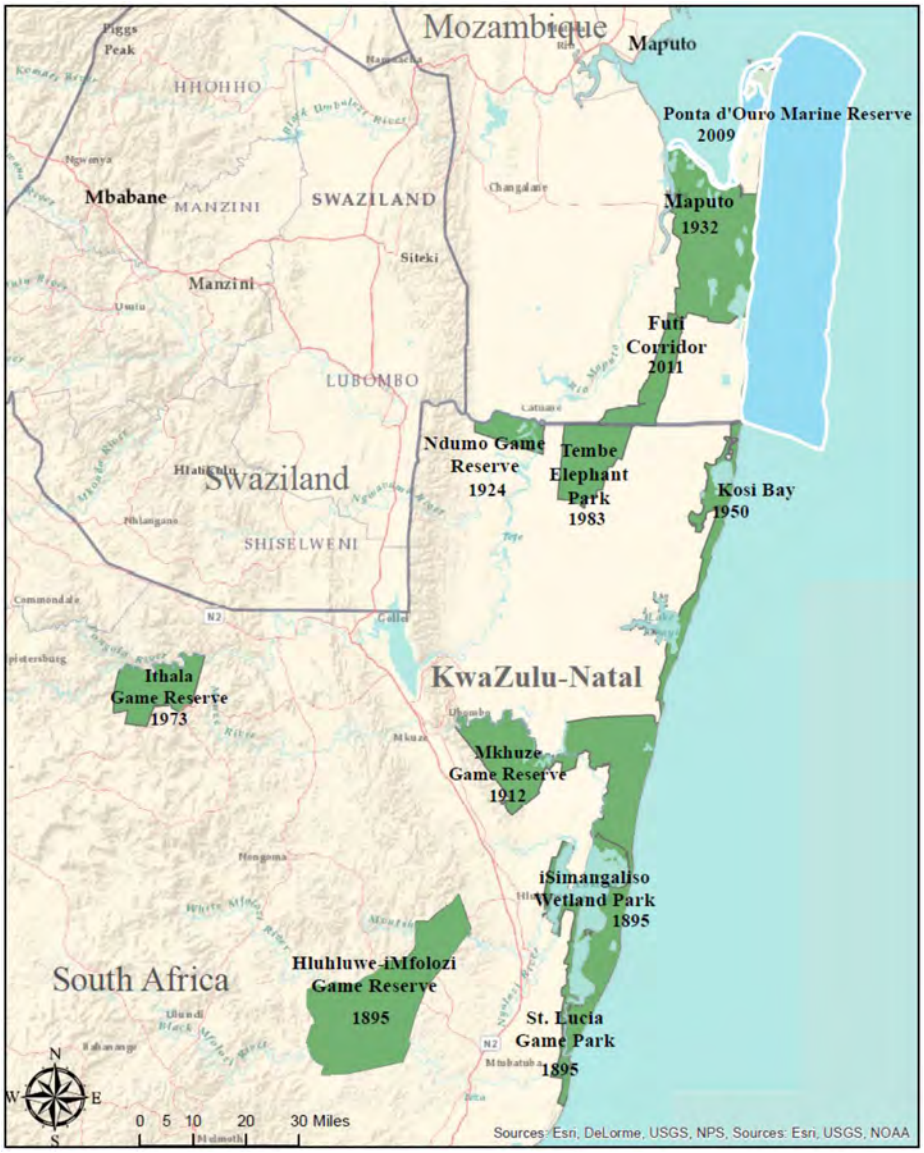

Figure 2. *Map of Protected Areas in Northern KwaZulu Natal (Zululand) and the Maputaland Region Showing the Year each was Established*. Generated by Brittany Krzyzanowski and Coleman Shepard using data from www.protectedplanet.net.

With the creation of the Union of South Africa in 1910, the responsibility for managing wildlife in Zululand fell to the newly formed province of Natal, and Frederick Vaughan Kirby was appointed head game conservator of Zululand the following year.[111] As white farmers continued to settle the region, many called for the abolishment of the Zululand reserves in order to stem the threat that *nagana* posed to their cattle. It was likely in response to threats of losing

[111] Beverly Ellis, "Game Conservation in Zululand 1824-1947, Changing Perspectives," *Natalia* 23 and 24 (1993/1994): 38.

Hluhuwe and Umfolozi that Nduma Game Reserve (subsequently called Ndumu and finally Ndumo) was proclaimed 1924, on the border with Mozambique.[112] Although the reserve is commonly considered to have been created for the protection of its hippopotamus population, there is some evidence that its resident nyala and impala populations may have also figured in the area's designation as a protected area.[113]

The protection of big game also played a key role in the demarcation of the first protected areas in the neighboring Portuguese colony. In 1921 the Portuguese concessionary *Companhia de Moçambique* [Mozambique Company], created a hunting reserve in the Gorongoza district of the Sofala province.[114] The *Companhia de Moçambique's* involvement in the destruction of the province's game, as its officials garnered profits from the then legal trade in ivory, rhino horn, and animal skins, had compelled the creation of the reserve in order to manage and maintain the province's game stock for its own benefit.[115] The boundaries of this reserve were expanded and contracted at various stages, and the reserve eventually became Mozambique's first national park in 1960.[116] The origins of the Maputo Special Reserve in southern Mozambique, close to the South African border, also lay in hunting interests. In 1909 the colonial government established a *coutada* (hunting ground) in the area, which regulated hunting for sport purposes. This was deproclaimed in 1927,[117] and five years later the Maputo Reserve was created at the same site as one of multiple reserves where hunting was completely prohibited, created by legislation that updated the Portuguese colony's hunting regulations.[118] Although not evident in the legislation,

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[112] B. Ellis, "Game Conservation in Zululand (1824-1947)" (BA (Hons), University of Natal, 1975), 47. See also Shirley Brooks, "Changing Nature," 299.
[113] Alan Mountain, *Paradise Under Pressure* (Johannesburg: Southern Book Publishers, 1990), 39 and *Ndumo Game Reserve: Integrated Management Plan: 2009-2013*. Ezemvelo KZN Wildlife. Pietermaritzburg, 2009, 17. Ezemvelo KZN Wildlife (EKZNW) Archive.
[114] Ordem do Governador do Território [Order of the Governor of the Territory] 4178, *Boletim da Companhia de Moçambique [Bulletin of the Mozambique Company]*, 16 March 1921 (6): 72.
[115] Ibid.
[116] Armando Rosinha, "*Alguns Dados Históricos Sobre O Parque Nacional de Gorongosa* [Some Historical Facts About Gorongosa National Park]," *Arquivo* 6 (1989): 211-238.
[117] José Luís Pessoa Lobão Tello, "*Reconhecimento Ecológico da Reserva dos Elefantes do Maputo, Primeira Parte* [Ecological Reconaissance of the Maputo Elephant Reserve]," *Veterinária Moçambicana* 5, No. 2 (1972):105.
[118] *Diploma Legislativo* [Legislative Decree] Nº 343, Capítulo [Chapter] II, Art. 13 (1), *Boletim Oficial da Colónia de Moçambique [Official Bulletin of the Colony of Mozambique]*, Série [Séries] 1, 23 April 1932 (17): 251.

later management plans noted that the reserve was created with the explicit intent of protecting the area's native elephant population.[119]

Figure 3. *Map of Major Protected Areas in Mozambique Showing the Year each was Established.* Generated by Brittany Krzyzanowski and Coleman Shepard using data from www.protectedplanet.net.

The development of protected areas in Natal, a province of South Africa, and Mozambique, a colony and then province of Portugal, was influenced by their peripheral

[119] *Direcção Nacional de Florestas e Fauna Bravia* (DNFFB) [National Directorate of Forests and Wildlife], *Plano de Maneio, Reserva Especial de Maputo, 1997-2001* [Management Plan, Maputo Special Reserve], Vol. 2, Ch. 2. Maputo, 1997, 1. IUCN Library, Maputo.

relationship to their respective national or colonial governments. When the Union of South Africa passed its National Parks Act in 1926, facilitating the creation of its flagship Kruger National Park, some members of the Natal Provincial Administration hoped that their province's reserves might attain the same status as a means of achieving increased protection against the agricultural lobby seeking to eradicate these areas completely. Shirley Brooks identifies two factors that likely stifled these efforts. She writes, "The first was the increasingly marginalized position of the Natal province and its largely English-speaking voting population within the Union of South Africa, a factor which made it difficult to sell the idea of a Zululand park as part of a 'national' heritage."[120] Where Kruger became a nationalizing project symbolizing the shared identity and heritage of white Afrikaans-speaking South Africans,[121] the former British colony was seen as separate from the rest of the Union (embodied in the Afrikaans aphorism, "*Natal is anders,*" meaning "Natal is different"). Brooks's second factor was that national politicians would have been unlikely to oppose the concerns of white settlers in a province where nagana was so prevalent and would have supported the agricultural lobby over the interests of wildlife conservation.[122] In 1939 a provincial ordinance created the Zululand Game Reserves and Parks Board to manage protected areas in the northern part of present-day KwaZulu Natal, and in 1947 the province formed the Natal Parks, Game and Fish Preservation Board, which would eventually be shortened to the Natal Parks Board (NPB), to consolidate provincial autonomy over wildlife conservation.[123] Natal was the only province which remained under the control of the United Party after the National Party won the general election in 1948 and ushered in formal apartheid policies. It was therefore the United Party, under the leadership of conservation enthusiast Douglas Mitchell, which oversaw the Natal Parks Board in the following decades, ensuring continued control of nature protection at the provincial level.[124]

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[120] Shirley Brooks, "National Parks for Natal? Zululand's Game Reserves and the Shaping of Conservation Management Policy in Natal 1920s to 1940s," *Journal of Natal and Zulu History* 22 (2004): 106.
[121] Carruthers, *Kruger National Park.*
[122] Brooks, "National Parks for Natal?" 107.
[123] Ibid., 102 and 104.
[124] Graham Linscott, *Into the River of Life: A Biography of Ian Player* (Johannesburg: Jonathan Ball Publishers, 2013), 169. The United Party had been South Africa's ruling party prior to the National Party's electoral victory in 1948. Where the National Party had a clear racial stance and overt intentions to preserve white supremacy, the United Party's stance on racial politics remained largely ambiguous until the 1970s. Nonetheless, it remained the official opposition party during the years of high apartheid. The continued governance of the Natal province under the United Party, while the other provinces (and the national government) were led by the National Party, reflected a continued separateness of the province.

As a colony and then overseas province of Portugal, Mozambique also maintained a large degree of autonomy over the management of its wildlife and other natural resources, which allowed for stronger conservation alliances with neighboring countries than with the metropole. As in Zululand, tsetse flies were rife in large parts of Mozambique, bringing much of the management of wildlife under the control of the *Missão de Combate às Tripanossomíases* (Mission to Combat Trypanosomiasis, hereafter MCT), which continued to hunt large numbers of wildlife until the late 1960s under the auspices of tsetse fly eradication.[125] Mozambique's wildlife was also managed by a centralized Game Commission, which posted wardens in some of its protected areas.[126] Although it was only in 1960 that the management of wildlife transferred to a new Department of Veterinary Services in Mozambique, veterinarians were already playing a key role in wildlife management prior to that time, instilling a large focus on disease control and protein production. Veterinarians like Jaime Travassos Santos Dias, the head of the MCT, and Armando Rosinha would continue to play important roles in the management of protected areas and wildlife resources.

Two key players in wildlife conservation in the region started their careers as game rangers in Ndumo in the early 1950s under the leadership of the Natal Parks Board. As young rangers, Ian Player and Ken Tinley were responsible for removing large segments of the human population from inside the reserve to surrounding areas.[127] In 1955 both men were transferred to Umfolozi, where Ian Player would initiate Operation Rhino a few years later.[128] At Umfolozi they met Jim Feely, another young ranger who introduced Tinley and Player to the writings of international ecologists Aldo Leopold and Fraser Darling, which would greatly influence the development of localized versions of the American wilderness concept.[129] In Player's case, this included calls for designated "wilderness areas" in Umfolozi, which would preserve development-free sections of the reserve, limiting potentially damaging tourist access and other forms of human encroachment, and the creation of wilderness trails in these areas, which resulted in a multiracial Wilderness Leadership School that would allow young people to access these

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[125] J. A. Travassos Santos Dias and Armando José Rosinha, "*Terão Justificação os Abates Indisciminados da Caça Como Medida de Luta Contra a Mosca Tsé-Tsé*? [Is the indiscriminate disposal of game justified in as a method in the fight against the tsetse fly?" *Anais dos Serviços de Veterinária de Moçambique* [Annals of the Veterinary Services of Mozambique] 17/19, 1969-71 (1973): 50.
[126] Rosinha, "*Alguns Dados Históricos*," 222.
[127] Ken Tinley, email message to the author, 8 April 2013 and Ian Player, interview by the author, Karkloof, KZN, 29 August 2013.
[128] Linscott, *River of Life*, 84.
[129] Ibid., 84-86.

areas on minimum impact camping trips. In the late 1960s, Ken Tinley went to work as an ecologist for the Portuguese government in Mozambique and tried to implement a similar vision of wilderness areas in Gorongosa National Park. He was soon followed by Paul Dutton, another former Ndumo ranger who, like Tinley and Player, contended that local people must benefit from protected areas, even if they should not live directly inside them. While working in Gorongosa, Tinley proposed that local people be moved outside of the boundaries of the park and off the slopes of Mount Gorongosa, the park's perennial water source, but to equally fertile agricultural land in the vicinity. At the same time, he proposed the development of a buffer zone around the park that would allow local people regulated access to its resources.

Two species would receive particular prominence in Natal in the 1960s – rhinos and sea turtles. Under Player's direction, Operation Rhino successfully saw the relocation of over 1,000 rhinos to other protected areas across the continent, including Ndumo, Gorongosa, and the Maputo Reserve. Cross-border translocations were accompanied by study trips from Mozambican officials wanting to learn about translocation techniques and resulted in the sharing of experience and expertise. Operation Rhino is credited with protecting the species in southern Africa, and many consider Umfolozi's rhinos to be the founding population of all white rhinoceros living today.[130] Like the movement of white rhinoceros, efforts to protect the sea turtle population that nested on Natal's northern coastline near the Mozambican border also involved cross-border research. George Hughes, who began surveying sea turtle nesting on the coast in 1963 and would go on to undertake research expeditions all the way up Mozambique's coastline, became an important conservation figure in the region and would eventually lead the Natal Parks Board and the amalgamated Ezemvelo KZN Wildlife after 1994.[131] Hughes also participated in a regional wildlife conference in Angola in 1971, which brought together experts from across the region, formalizing relationships that had begun through more informal study trips and transplantations of experts across political borders.

In 1975, Mozambique gained independence from Portugal, and the new FRELIMO (*Frente de Libertação de Moçambique,* Liberation Front of Mozambique) government nationalized all natural resources.[132] Responsibility for wildlife management shifted from the

[130] I discuss this program in detail in Chapter 5.
[131] George Hughes, *Between the Tides: In Search of Sea Turtles* (Johannesburg: Jacana, 2012).
[132] Bartomoleu Soto, "Protected Areas in Mozambique," in *Evolution and Innovation in Wildlife Conservation: Parks and Game Ranches to Transfrontier Conservation Areas,* eds. H. Suich, B. Child, and A. Spenceley (London: Earthscan, 2009), 88.

Department of Veterinary Services to a newly established *Direcção Nacional de Florestas e Fauna Bravia* (National Directorate for Forestry and Wildlife, DNFFB) under the Ministry of Agriculture. Many wildlife experts continued to work on wildlife protection in the newly independent country, including Travassos Dias, Rosinha, and Dutton (Tinley had already returned to South Africa by this point), maintaining a continuity of key personnel. Dutton and Fernando Costa started a wildlife conservation school in Gorongosa in the late 1970s to train emerging wildlife managers.[133] Two of the students at this school, Baldeu Chande and Roberto Zolho, would become important figures in the restoration of Gorongosa in the 1990s at the end of the armed conflict. With José Lobão Tello, a former ranger in the Maputo Special Reserve and Gorongosa who was responsible for importing rhinos into Mozambique and encouraging Hughes' turtle research on his side of the border, Paul Dutton was also involved in the establishment of Emofauna, a national wildlife utilization agency, aimed at ensuring Mozambicans benefitted from wildlife use. From the early 1980s, all wildlife management practices, including the administration of protected areas, effectively ceased to exist as the country suffered a prolonged armed conflict between the ruling party (FRELIMO) and an opposition (RENAMO, *Resistência Nacional Moçambicana,* Mozambican National Resistance) supported first by Rhodesia and then by South Africa.

In the late 1970s, there were also major changes occurring in the management of wildlife and protected areas in Natal and Zululand. The apartheid government declared Zululand part of a new bantustan, or homeland, under the leadership of Chief Minister Buthelezi, by then a long-time friend of Ian Player in the NPB. The homeland system was aimed at dispossessing black South Africans of their national citizenship by spatially and symbolically bounding them in peripheral territories. These would act as reservoirs for cheap migrant labor, on which the South African economy had long been dependent. Although many in the NPB feared that the creation of the KwaZulu homeland would have negative consequences for the protected areas within its boundaries as more and more people would be relocated in the bantustans, putting increasing pressure on the land and its resources, Buthelezi became an important advocate for wildlife conservation and the existing protected areas. In 1982 he created the KwaZulu Bureau of Natural Resources (KBNR), the only dedicated conservation department in one of the established homelands.[134] The KBNR and NPB became allies in the early 1980s in lobbying against the

[133] John Burlinson, interview by the author, Skype, 7 May 2013.
[134] Linscott, *River of Life*, 169.

national government's decision to cede the northern portion of KZN, bordering Mozambique and Swaziland, on the basis of the impact this would have on the existing protected areas in the region and on its wildlife. At the same time, the KBNR demonstrated its commitment to wildlife protection by establishing the Tembe Elephant Park, a new protected area aimed at protecting a native elephant population on the Mozambican border. This reserve also acted as a refuge for elephants threatened by the increasing violence of the armed conflict across the border.

In 1992 FRELIMO and RENAMO signed a peace accord ending the armed conflict, but the decimation of wildlife continued until the government began to reinstate management personnel with the assistance of international aid and wildlife organizations in 1994. Both South Africa and Mozambique held their first democratic, multi-party elections in 1994. At this time the Natal Parks Board and the successor to the KwaZulu Bureau of Natural Resources merged to form what is now Ezemvelo KwaZulu Natal Wildlife (EKZNW), which would maintain control of protected areas at the provincial level. From 1995 the governments of Mozambique and South Africa, with the assistance of the World Bank, began exploring possibilities for creating transfrontier parks. This prospect was accelerated with the establishment of the Peace Parks Foundation in 1997 by prominent South African businessman and former president of the South African Nature Fund (South Africa's WWF chapter), Anton Rupert. Rupert was responsible for initiating a conversation with Mozambican President Chissano around transborder initiatives and for securing financing for their establishment.[135] One of the proposed TFCAs was intended, in part, to link southern Mozambique and the northern part of the new province of KwaZulu Natal and to reestablish previous migratory routes of elephants that traveled across the national border. This was formalized with the creation in June 2000 of the Lubombo TFCA, which is a constellation of five smaller transfrontier conservation areas between South Africa, Mozambique, and Swaziland. Around the same time that preliminary discussions around transboundary protected areas were taking place, international funding was given to Mozambique for the restoration of Gorongosa National Park, with Baldeu Chande and Roberto Zolho at the helm. In the late 1990s and early 2000s, two American philanthropists tried, with different degrees of success, to administer and drive the development of protected areas in Mozambique. The first, James Blanchard, died before his vision could be realized, and his plans were supplanted by the

[135] "Origins of Peace Parks Foundation," *Peace Parks Foundation*, accessed 21 August 2011. http://www.peaceparks.org/story.php?pid=1&mid=2

transfrontier initiative. The second, Greg Carr, remains in charge of the country's flagship national park.[136]

In 1999 the government of Mozambique enacted its first wildlife legislation since the colonial period, which included provisions for community management of natural resources, and in 2001, responsibility for protected areas was transferred from the Direcção Nacional de Florestas e Fauna Bravia (DNFFB) to the Ministry of Tourism.[137] At the time of writing both Mozambique and KwaZulu Natal are suffering increasing depredations due to the illegal wildlife trade, with the former often used as a departure point for smugglers leaving the continent. In April 2014 the Mozambican parliament passed new conservation legislation which would inflict harsher penalties on poachers,[138] and soon after, the country signed a Memorandum of Understanding with South Africa on biodiversity, conservation, and management with the purpose of joint protection of endangered species and shared law enforcement against the illegal wildlife trade.[139]

Methodology: Tracking Wildlife Conservation Histories across Borders

Historical attention to the transnational links between southern African countries has tended to focus on the experiences of migrant labourers, critical actors in the region's past.[140] Patrick Harries' work is particularly salient to this project in that he deliberately bridges the disciplines of labor history and cultural history to explore the ways in which new ideas and cultural products were produced through the migration process.[141] Where Harries's vectors for creating new cultural practices and spaces were Mozambican migrants to South Africa, I have focused on the transnational movement of wildlife species, products, and conservationist

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[136] I discuss these restoration projects in depth in Chapter 4.
[137] John Hatton, Mia Couto, and Judy Oglethorpe, *Biodiversity and War: A Case Study of Mozambique*. World Wildlife Fund (WWF) Biodiversity Support Program. Washington, D.C., 2001, 35.
[138] "Mozambique: Stiff Penalties for Poaching in New Bill On Conservation," *AllAfrica*, 9 April 2014. http://allafrica.com/stories/201404100710.html.
[139] "South Africa and Mozambique sign Memorandum of Understanding in the field of Biodiversity, Conservation and Management," *DEA*, accessed 14 May 2015. https://www.environment.gov.za/legislation/international_agreements/sa_mozambique_sign_mou.
[140] See for example Patrick Harries, *Work, Identity, Culture: Migrant Laborers in Mozambique and South Africa, c. 1860-1910* (Portsmouth: Heinemann, 1994); David Coplan, *In the Time of Cannibals: The Word Music of South Africa's Basotho Migrants* (Chicago: University of Chicago Press, 1994); and Charles Van Onselen, *Chibaro: African Mine Labour in Southern Rhodesia 1900-1933* (London: Pluto Press, 1976).
[141] Harries, *Work, Identity, and Culture.*

expertise as a means of exploring how protected area borders and ideas about wildlife conservation changed throughout the twentieth century, and particularly since the 1960s.

The transnational focus of my research is reflected in the methodology used to unearth it. Much of my fieldwork was spent tracking individuals, documents, organizations, and even animals (through their archival "traces"[142]) across the boundaries of archives, protected areas, provinces, and countries. In seeking to illuminate how decisions about protected area management changed over time, I followed archival clues, connecting dots between documents produced in different organizations, countries, and languages to find common themes or causal developments. Sometimes I was successful, other times not. Several catalogued or referenced works seem to have been lost or destroyed in Mozambique, in particular. I was lucky to be able to interview several people involved in wildlife conservation in these areas, in person, over the phone, or by email, to supplement, correct, or clarify the written sources I found. However, I was still limited by my inability to track down key figures, their availability, or their interest in communicating with me. Furthermore, many individuals involved in the protected areas I focus on have passed away.

I have analyzed my sources not for gaps or silences in the archive, but for what they can tell me about changing priorities in wildlife conservation. Of course, these gaps and silences do exist, both symbolically and materially. In addition to the missing items from archives' shelves or moments from informants' memories, my dissertation is curtailed by my selective focus on the work of the conservation policy-makers and practitioners influential in the development of protected areas. In order to interrogate categories of belonging inherent to the histories of in Gorongosa and Maputaland, I have relied heavily on material produced by the conservation bodies responsible for managing these areas. There are strengths and limitations in this approach. The principle weakness is that the voices and experiences of local people living in and around these areas are largely silent in this narrative. Furthermore, much of the material I engage describes plans for initiatives that have not actually happened (due to a variety of factors including Mozambique's armed conflict, lack of funding, or lack of political will), which prevents an assessment of the merits of these developments had they actually occurred. As such, a large part of this dissertation focuses on discourses of belonging in protected areas according to the

[142] Etienne Benson, "Animal Writes: Historiography, Disciplinarity, and the Animal Trace," in *Making Animal Meaning*, eds. Linda Kalof and Georgina Montgomery (East Lansing: Michigan State University Press, 2011), 3-16.

ecologists, experts, conservationists, and policy-makers intent on shaping their development. However, even these perspectives do not tell a clear and unified story. In reading these sources "along the archival grain," I found complex negotiations of indigeneity, nativeness, and the privileging of particular rights over others which impacted wildlife management planning.[143] Focusing on the production of conservation science and its manifestation in protected areas allowed me to explore and expose the myriad ways that wildlife belonging has been both discursively and spatially defined in these areas. I recognize that this represents one of many narratives that could have been written about these contested landscapes.

Archives and Sources

I began my fieldwork in July 2012 with an Institute of International Education Fellowship to conduct research in South Africa, Mozambique, and Portugal. Over the next thirteen months, I conducted archival research in the Arquivo Histórico de Moçambique (housed in three different sites) and the libraries of the Ministry of Agriculture, the International Union for the Conservation of Nature (IUCN), the Ministry of Coordination of Environmental Affairs (MICOA), and the Veterinary Faculty of the University of Eduardo Mondlane in Maputo; the Arquivo Nacional da Torre do Tombo, Arquivo Histórico Ultramarino (Historic Archive of Overseas Territories), the Centro de Documentação e Informação (Center of Documentation and Information), and the Sociedade de Geographia (Geographic Society) in Lisbon; the Killie Campbell Library in Durban; the library and archives of Ezemvelo KZN Wildlife in Pietermaritzburg; the William Cullen Library of the University of Witwatersrand and the Central Library in Johannesburg; and the National Library and National Archives in Pretoria. I also conducted archival research and interviews in the Maputo Special Reserve, Ndumo Game Reserve, Tembe Elephant Park, and Kosi Bay. I interviewed individuals in Maputo and the north coast of Durban as well as over phone and email. I spent time in Gorongosa National Park in 2010 while on a pre-dissertation fellowship where I conducted interviews and archival research. In writing this dissertation I have relied on scientific and ecological reports, veterinary publications, protected area management plans, newspaper and magazine articles, scientific journals, and the experiences of ecologists and government officials working in and managing these areas to look at the structuring paradigms of wildlife conservation, the emergence of particular conservation practices, and battles over these territories at a political level. As such, I

[143] Ann Laura Stoler, "Colonial Archives and the Arts of Governance," *Archival Science* 2 (2002): 87-109.

take these protected areas seriously on their own terms; not simply as land grabs that perpetuate colonial processes and disproportionate access to resources for African people but as initiatives intended to support the survival of non-human species.

In relying largely on ecological, technical, and government reports, I have privileged the role of "scientific expertise" in conservation management. As Beinart, Brown, and Gilfoyle point out, such expertise has largely received "bad academic press."[144] This is based on the collapsing of this type of expertise by some scholars into the larger project of colonialism. Many scholars have sought to redress this power relationship by privileging indigenous or local knowledge instead.[145] In line with Beinart, Brown, and Gilfoyle I suggest that it is possible to examine the work of "experts" at a distance from its colonizing condition, by considering the complexities of their understanding of ecology, protected area management, and a developing understanding of wildlife as a usable resource.

Conservation Science and Writing History "From Above"

Until the end of apartheid in South Africa and colonialism in Mozambique, conservation was largely the domain of white men, and in many places it still is. With some exceptions, the sources I have used in this dissertation reflect that racial and gendered hierarchy. I recognize that there is a danger in reproducing the unequal power relationships in which practices of wildlife conservation were forged by privileging these sources. However, I argue that conservation science is and was not a monolithic practice and dismissing it as a colonial (or apartheid) project neglects the nuances in the ways this science has been envisioned and enacted. Like African, rural "communities," which have been the focus of several studies aimed at redressing the exclusionary practices of wildlife conservation, the label "conservationists" obscures a variety of interests, practices, affiliations, and power dynamics. Just as the "community" is not a homogenous or monolithic entity, neither is the state nor the conservation bodies that have held responsibility for wildlife protection and management. I have focused predominantly on the work of conservation "experts" in this dissertation in order to understand how diverse and complex conservation ideas

[144] William Beinart, Karen Brown, and Daniel Gilfoyle, "Experts and Expertise in Colonial Africa Reconsidered: Science and the Interpenetration of Knowledge," *African Affairs* 108 (2009): 413-433.
[145] See for example James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-savanna Mosaic* (Cambridge: Cambridge University Press, 1996); Jan Bender Shetler, *Imagining Serengeti: A History of Landscape Memory in Tanzania from Earliest Times to the Present* (Athens: Ohio University Press, 2007) and William Beinart and Karen Brown, *African Local Knowledge & Livestock Health: Diseases and Treatments in Africa* (Johannesburg: Wits University Press, 2013).

and methods impacted the creation and development of protected areas and decisions regarding who or what has the right to dwell within them.

Many of the actors involved in wildlife conservation in Natal could be classified broadly as liberal conservationists.[146] Although they were involved in relocating people from reserves, ecologists like Ian Player, Ken Tinley, and Paul Dutton felt strongly that wildlife should not just be a tourism resource enjoyed by elite visitors, but instead should be part of a larger multiracial heritage. Ken Tinley's work, in particular, as early as the 1960s asserted the importance of considering humans to be an integral part of a region's ecology and ensuring that people living in an around protected areas have a stake in their resources. White liberals in South Africa during the 1970s were heavily criticized by Steve Biko, a prominent anti-apartheid activist and leader of the Black Consciousness Movement. In his essay "Black Souls in White Skins?" Biko described white liberals as paternalistic "do-gooders," that maintained the privileged status of the white community and justified its place in a hierarchy of racial power.[147] While Biko's critique of liberal interventions as paternalistic projects could be applied to some of the management practices I have studied, this approach, like focusing specifically on the impact of conservation on "local communities," would preclude the opportunity to understand complex negotiations of wildlife conservation with other government entities, contested claims to territory, and the genealogy of discourses and practices of non-human indigeneity that continue to drive wildlife conservation today.

While remaining sensitive to the racialized disparities of wildlife conservation, past and present, I focus instead on how conservation practices were embedded in and created spatial and discursive orderings for wildlife in the region. I have therefore interrogated my sources for the opportunity they provide to see how wildlife conservation has been a tool of inclusion as well as exclusion, bounding certain communities in place while driving out others. This reading has opened opportunities to analyze how expertise and conservation ideas moved across borders, how conservation agencies engaged with or opposed the state, and how individuals advocated for non-human access to territory. It has also allowed me to observe moments in the archive when wildlife were not simply objects of conservation management, but also historical actors that

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[146] These figures by no means represent an exhaustive list of liberal conservationists in Natal during this period or influential figures in the development of conservation ideologies and practices. I highlight them in this dissertation because they were particularly important in the specific areas I focus on.
[147] Steve Biko, "Black Souls in White Skins?" in *I Write What I Like* (Cambridge: ProQuest LLC, 2005): 19-26.

played important roles in the development of these areas.[148] More broadly, the use of sources embedded in conservation science or wildlife management has allowed me to reinsert wildlife into the history of areas set aside for wildlife protection, which have tended to be more about humans than non-humans. While I would not classify this dissertation specifically as an animal history, it is a work that takes non-human animals seriously as subjects of historical enquiry and as agents of historical change.

Since the 1970s, social historians have sought to write history "from below" as a means, in part, of giving voice to poor, rural peasants silent in the historical archive and nationalist narratives. As a consequence of this tradition, aimed at inverting and exposing the unequal relationships of colonizers and the colonized, colonial (post-colonial) science and expertise have been portrayed mainly as tools of colonial or imperial domination.[149] Beinart, Brown, and Gilfoyle have recently asked "whether Africanist literature has become trapped in a critique of science and whether it obscures interesting and important questions about scientific and technical ideas that have provided the building blocks for understanding environment and disease in Africa."[150] One of these questions pertains to the spread of information between Europeans and Africans that has shaped scientific knowledge. Explorations into the complex production of scientific ideas have shown this to be a process of negotiation and exchange in both directions between the colonizers and the colonized, "expertise" and indigenous knowledge.[151] Therefore, although local knowledge is not the focus of this project, it must be seen as the "constitutive other" to conservation science and wildlife management.[152] Furthermore, I see this as a complementary project to those that foreground the detrimental effects of conservation practices on African people or local responses to conservation initiatives.[153]

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[148] I focus on this in Chapter 5.
[149] Beinart et al., "Experts and Expertise."
[150] Ibid., 433.
[151] See for example Beinart and Brown, *African Local Knowledge & Livestock Health* and Patrick Harries, *Butterflies and Barbarian*s: *Swiss Missionaries and Systems of Knowledge in South-East Africa* (Oxford: James Currey, 2007).
[152] Allen F. Isaacman and Barbara S. Isaacman, *Slavery and Beyond: The Making of Men and Chikunda Ethnic Identities in the Unstable World of South-Central Africa, 1750-1920* (Portsmouth, NH: Heinemann, 2004), 15, quoting Judith Butler, *Gender Trouble* (London, 1990).
[153] Other scholars have made important contributions to illuminating local responses and engagements with conservation agendas in Gorongosa and Maputaland. These include Todd French, "'Like Leaves Fallen by Wind': Resilience, Remembrance, and the Restoration of Landscapes in Central Mozambique," (PhD diss., Boston University, 2009); Cardoso Henriques Meque, "*O envolvimento das Comunidades Locais na Gestão do Parque Nacional da Gorongosa e o Problema das Queimadas Descontroladas. Caso do Regulado de Muanandimai – Cheringoma* [The involvement of local communities in the development of

This dissertation is an attempt to take an alternative view of the discourses and practices of conservation science in the development of selected reserves in southern Africa, exploring how individuals, networks, initiatives, and wildlife crossed the boundaries of protected areas to deploy and produce categories of belonging that continue to shape contemporary wildlife conservation practices. I locate this study within the growing body of literature that explores the complexities of expert knowledge production and the networks in which these processes are embedded. Timothy Mitchell, for example, has illuminated the heterogeneous networks of power, agency, and expertise that shaped the production of Egypt's economy.[154] Helen Tilley's work has demonstrated that "colonial science" in Africa rather than functioning solely as a tool of empire, in some cases subverted the imperial administration.[155] Furthermore, she shows how experts developed the discipline and understanding of ecology, which then informed scientific knowledge in the metropole. Nancy Jacobs's recent work has explored the development of scientific and cultural networks linking Europeans and Africans in producing knowledge about migratory species.[156] Etienne Benson, has shown how the work of international biologists in East Africa in the mid-twentieth century established territoriality as a defining feature of wildlife behaviour, which was then used to justify land use decisions.[157] All of these studies of expertise have revealed the complex ways in which scientific knowledge has been produced, circulated, and enacted. The "experts" on which this dissertation hinge represent a diverse range of interests, authorities, and power relations. Whether game rangers, ecologists, veterinarians, consultants, state or extra-state agencies, government bodies, or even well-meaning American philanthropists, these individuals and entities produced ideas about wildlife intimately bound to the management

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Gorongosa National Park and the problem of uncontrolled fires]" (*Licenciatura*, Universidade Pedagógica da Beira, 2008); Roelof Kloppers, "Utilization of Natural Resources in the Maututine District of Southern Mozambique: Implications for Transfrontier Conservation" (MA, University of Pretoria 2001); Roelof Kloppers, "Border Crossings/Life in the Mozambique/South Africa Borderland" (D. Phil, University of Pretoria, 2004); and Jennifer Lee Jones, "Dynamics of Conservation and Society: The Case of Maputaland, South Africa," (PhD diss., University of Pretoria, 2006). Domingos Muala, a member of the Gorongosa Restoration Team, has conducted several oral histories with people living in Gorongosa National Park. These works represent important interventions into understanding the particular dynamics between specific local populations and conservation management.

[154] Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley: University of California Press, 2002).

[155] Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (Chicago: University of Chicago Press, 2011).

[156] Nancy J. Jacobs, "Africa, Europe and the Birds Between Them," in *Eco-Cultural Networks and the British Empire*, eds. James Beattie, Edward Melillo, and Emily O'Gorman (London: Bloomsbury, 2015), 92-120.

[157] Etienne Benson, "Territorial Claims: Experts, Antelopes, and the Biology of Land Use in Uganda, 1955-75," *Comparative Studies of South Asia, Africa and the Middle East* 35, no. 1 (2015): 137-155.

of and claim to territory. In privileging conservation science over other forms of knowledge production, I explore how state and extra-state actors engaged in contestations over what belongs in these areas, which practices have been deemed acceptable at different points in time, and whose interests have been prioritized.

Chapter Outline

The chapters in this dissertation do not follow a strict chronological order. Instead, I have chosen to structure the argument thematically. This has allowed me to demonstrate the regional and transnational processes at play in the determination of who or what belongs in the protected areas I have chosen to focus on and who claims ownership over these territories and their inhabitants at different points in time.

The first chapter outlines the processes of boundary-making in these protected areas linked to changing notions of what belongs in these spaces from the 1920s to the present. I explore how state and provincial officials, ecologists, and wildlife societies mapped, delineated, and bounded protected areas in Gorongosa and Maputaland. Interrogating policy documents, scientific reports, ranger's diaries, and newspaper articles, I explore the ways in which different components of an area were privileged in the architecture of these spaces over time. In the wake of extensive game destruction led by sport hunting and tsetse fly eradication campaigns, the founders of reserves in the 1920s and 30s focused specifically on the protection of large game, and sometimes particular species habitant to the area. From the 1950s, with the development of the field of ecology, species-specific interests were supported by a greater understanding of habitat. This led to an overarching emphasis on ecosystem protection, whereby scientists and government officials sought to protect dynamic ecological processes, of which wildlife were a part. From the 1990s, increasing developments in scientific knowledge about ecosystem function (as well as new political interests with the emergence of multiparty democracy in both South Africa and Mozambique) ushered in an era of creating transfrontier conservation areas, or "Peace Parks," which aimed to connect ecosystems and policies across political borders. As this chapter makes clear, the development of wildlife conservation in South Africa and Mozambique from the 1920s, was a transnational process, led and facilitated by regional interests and actors engaged across political borders and protected areas. In setting the scene for the way in which protected areas in Gorongosa and Maputaland were made through exchanges of conservation ideas and the

physical bounding and mapping of these spaces, this chapter lays the background for subsequent thematic analyses of different processes of inclusion and exclusion within the borders.

The second substantive chapter focuses on the development of "sustainable use" in the discourse and practice of conservationists in Mozambique and Natal and how wildlife came to be thought of as a form of productive land use. Duffy defines "sustainable use" as the "use of wildlife without jeopardizing the continued survival of the species."[158] Inherent to this concept is the assessment of wild animals as resources suitable for some form of human consumption. It provides wildlife with an economic value which some see as necessary in facilitating its competition with other forms of land use. Others criticize this concept for privileging of the needs of humans over those of other animals.[159] Whatever one's opinion, the sustainable utilization of wildlife has been hailed in southern Africa as a way of bridging wildlife conservation and development interests. I argue that the process of regulating wildlife use in and out of protected areas entailed complex choices about which species, practices, and individuals belonged in different areas and who had the right to claim wildlife resources. In this chapter I explore how decisions were made about the management of wildlife in and outside of protected areas and how wildlife might be used for the benefit of local communities or the nation. In the historiography of protected areas, community conservation initiatives are generally considered to have been developed in the 1980s. However, in Gorongosa and Maputaland, initiatives aimed at including benefits for local people were conceived from the 1960s, albeit with different levels of success. I look at how hunting practices were either exploited or criminalized in protected areas depending on how different conservation actors considered the purpose of the animals within them and how plans to domesticate wildlife for meat production ushered in an ethic of sustainable use in Mozambique. I consider the means by which wildlife and wildlife products became productive resources for selective exploitation, who was involved, and how this impacted the assessment of the effectiveness of protected areas. In addition to conservation reports, veterinary proposals, and newspaper articles, I look at the proceedings from two regional conferences that convened experts across boundaries to determine a sustainable use ethic for southern Africa. The concept of "sustainable utilization" also provides a useful way to think through the limits of our understanding of *wild*life, if indeed it is bred or sustained to be used and even domesticated. I limit the discussion in this chapter to the material use of wildlife. Although the model of

[158] Duffy, *Killing for Conservation,* 9.
[159] Duffy, *Killing for Conservation,* 174.

sustainable use has come to incorporate tourism, I reserve the analysis of tourism resources for a later chapter.

In the third substantive chapter I focus on contestations between the discourses of conservation and development, which sparked debates regarding what or who belonged in these areas in the 1970s and 1980s. I analyze the conflicts arising over two proposed port projects in Maputaland: one on the Mozambican side of the border in the 1970s and the other in South Africa in the 1980s at the height of the Cold War. In the proposed development of a deep water harbor at Ponta Dobela, within the Maputo Special Reserve, conservationists laid claims for the rights of elephants to access a key water source, which would have been obstructed with the creation of a railway line to the port through the middle of the reserve. While the Ponta Dobela development project would have ostensibly benefitted Mozambique's human citizens, the rights of non-human citizens were privileged when the project was indefinitely postponed. A similar debate arose the with the announcement of the Ingwavuma Land Deal in South Africa in 1982, when the national government ceded a portion of Maputaland including two protected areas, to Swaziland. The land deal not only illuminates debates around nation, ethnicity, and citizenship critical to the geopolitical context at the time, but also shows the means by which wildlife protection brought different factions together, creating new "communities" and conceptions of belonging regarding these territories. These case studies exemplify the means by which different conceptions of citizenship shaped protected areas as they were extended to the rights of non-human inhabitants.

In the following chapter, I look at the remaking of place and the recasting of landscape in Mozambique's protected areas in the aftermath of the country's armed conflict, which followed its independence from Portugal in 1975. From the signing of the peace accord between FRELIMO and RENAMO in 1992, the government was eager to redevelop its protected areas as a means of promoting tourism, an industry thought to be one of its best hopes for economic development. These areas' wildlife populations were almost completely decimated during the armed conflict and the two years after in which they were left unmanaged. Thus began varying stages of restoring Gorongosa National Park and the Maputo Special Reserve. In this chapter I look at the politics of these wildlife restoration projects, focusing both on who claimed the right to manage them, as well as how decisions were made about what belonged in these areas. I rely on various policy documents, interviews, and media reports to examine how these spaces were reimagined and remade after the armed conflict. Both were selected by American philanthropists who pursued different visions of how each protected area should be repopulated and experienced

by tourists. Each invoked a particular sense of the place's past in order to recreate it in the present. I argue, therefore, that these proposed restoration projects demonstrate that concepts of belonging in protected areas are influenced as much by time as they are by place.

In the final substantive chapter of this dissertation, I explore the translocation of animals into Gorongosa and Maputaland's reserves since the 1960s, analyzing how conservation practices have been influenced by ideas of animal indigeneity and how animals have responded to these initiatives. Influenced by Bruno LaTour's Actor Network Theory, animal geographers have introduced the idea of "more-than-human geographies" in which non-humans are shown to play a critical role in social processes and the making of space and place. Where previous chapters focus on the histories of these spaces in situ, or how discourses and practices of belonging and unbelonging are employed within their boundaries, this chapter focuses instead on the movement of members of individual species into or outside of their limits, allowing me to analyze how decisions have been made to introduce or reintroduce species through the movement of both animals and expertise across borders. Furthermore, this chapter explores the relationship between wildlife (as both species representatives and as individuals), the humans striving to protect them, and the places to which they are transported. Where in the majority of my dissertation, wildlife are objects of conservation discourse and practice, in this chapter I explore how animals participate in processes of belonging, expanding this concept beyond imposed categories and geographies to ways that it is claimed by non-human actors. The unexpected consequences of wildlife translocations blur categorical boundaries of wildness and domesticity, belonging and unbelonging, inclusion and exclusion.

Chapter 1

Bounding Nature in Gorongosa and Maputaland

"To those devoid of imagination, a blank place on the map is a useless waste, to others, the most valuable part."

Aldo Leopold, "Conservation Esthetic," *A Sand County Almanac* [1]

Aldo Leopold (1887-1948), a prominent figure in the history of environmental thought, is credited with popularizing the notion that all parts of the natural world are interdependent, including humans, flora, fauna, soils, and water.[2] His expansion of the idea of "community" to include natural resources marked the growing incorporation of ecological thought in conservation, which would become a guiding force in protected area management in the second half of the twentieth century.[3] Despite this interdependence, in order to protect "the land" (including flora, fauna, soils, and water) from unfettered human exploitation, Leopold's land ethic argued that non-human biota have the "right to continued existence, and, at least in spots…continued existence in a natural state."[4] This chapter focuses on how such spots were selected, mapped, and defined in southern Africa since the 1920s, highlighting the development of protected areas in Gorongosa and Maputaland.

Leopold's emphasis on the interdependence of living beings and the importance of maintaining wilderness areas influenced the development of protected areas in this part of the world, largely through the work of group of rangers working for the Natal Parks Board (NPB) in the north-eastern corner of South Africa, now KwaZulu Natal. Ken Tinley's work, in particular, figures prominently in this chapter. Tinley grew up in South Africa's Natal province, and began his career as a game ranger at Ndumo Game Reserve in 1954, where, with Ian Player, he was

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[1] Aldo Leopold, "Conservation Esthetic," in *A Sand County Almanac: With Essays on Conservation from Round River* (Oxford: Oxford University Press, 1966), 294.
[2] William Beinart and Peter Coates, *Environment and History: The Taming of Nature in the USA and South Africa* (London: Routledge, 1995): 82.
[3] Mark V. Barrow, Jr. *Nature's Ghosts: Confronting Extinction from the Age of Jefferson to the Age of Ecology* (Chicago: University of Chicago Press, 2009), 205.
[4] Leopold, *Sand Country Almanac*, 240.

responsible for starting to fence the reserve and remove people living within its boundaries. In 1957 and '58, he worked across the northern Natal province (in what was then referred to as Tongaland) to survey the hippo population and compensate local people affected by hippo damage to crops. In the late 1960s, he was hired by the Portuguese government in Mozambique to advise on Gorongosa's ecological boundaries, and in the early 1980s he worked in Tongaland again to advise the government on a land use plan that would integrate wildlife conservation with the needs of the rural economy. Tinley's work demonstrates an emerging interest in ensuring local people benefit from wildlife conservation in the second half of the twentieth century. This is even evident as far back as the 1960s when fortress conservation was ostensibly the norm across the continent. Of course, benefitting from conservation measures and residing within protected areas are different propositions, and I do not mean to conflate them. I do argue, however, that this sensitivity to and awareness of humans' roles in an ecosystem and their integral relationship to the success of protected areas was, it seems, ahead of its time, and challenges the fortress conservation critique. Although involved in erecting fences in Ndumo in the 1950s, which divided humans from the protected area's natural resources, Tinley proposed management plans that recognized the interdependence of humans and Leopold's conception of "the land."[5]

Tinley's work also represents, and perhaps led the way for, a growing concern regarding the scale of protected areas. Over the course of the twentieth century, protected areas grew from small species-specific habitats to encompass entire ecosystems. Tinley's study of the ecological boundaries of Gorongosa National Park in the late 1960s bridged a "wilderness" interest with an effort to integrate key components of the ecosystem into the park's boundaries. From the late 1980s, there was mounting acceptance from conservationists globally that small protected areas were not going to save the world's species, particularly large predators, and efforts were instigated to create corridors and other connective routes between protected areas to allow these species, and the ecosystems they are part of, to flourish. At the same time, a movement was growing in southern Africa to connect protected areas across national borders. With strong leadership from Anton Rupert's Peace Parks Foundation, transboundary protected areas "sought to address the worst effects of arbitrary borders drawn on maps that crossed, blocked, and interrupted ecosystem processes."[6]

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[5] See page 31 in this dissertation regarding Tinley's introduction to Leopold's work.
[6] Caroline Fraser, *Rewilding the World: Dispatches from the Conservation Revolution* (New York: Metropolitan Books, 2009), 108.

This interest in expanding protected areas was not solely focused on the needs of wildlife species; for many, including Tinley and the Peace Parks Foundation, it was tied to the desire to ensure that local people would benefit in some way from protected areas. In Gorongosa, Tinley proposed the protection of Mount Gorongosa, the system's perennial water source, not only for the benefit of the park's non-human inhabitants but also the humans who depended on this area and its resources. He proposed encircling the core park with buffer zones that would allow regulated human activity, including hunting. This was intended to allow each part of the protected area to mutually benefit the other.[7] In the early 1980s, Tinley and the future head of the Peace Parks Foundation, Willem van Riet, produced a proposal for land use in Maputaland that was intended to protect the region's biodiversity while providing economic development opportunities for people living in the area. The Peace Parks Foundation intended to have transboundary conservation areas pay for themselves through tourism, which would also create jobs for local people.[8]

The fence remains one of the most enduring symbols of wildlife conservation, representing the physical and ideological division of humans and nature, and in southern Africa, specifically black Africans from territories designated for wildlife protection.[9] While the designation of protected areas in the late nineteenth and early twentieth centuries by colonial powers stemmed largely from the recognition that white sport hunters had destroyed unimaginable numbers of game for trophies or to clear land for other purposes, these spaces continued to serve the interests of white governments, citizens, and settlers, excluding rural African people from the land and resources on which they depended. "Fortress conservation" has also been called the "fences and fines" approach, where fencing created territories forbidden to rural hunters (usually subsistence hunters), who would become "poachers" once they transgressed the protected area boundary and be fined, or worse, if caught.[10] This colonial model of conservation, resulted in "apartheid parks," which divided rural African people from landscapes set aside largely by and for colonial interests.[11] From the 1980s, this colonial approach to

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[7] The core-buffer zone model was promoted in the early 1970s as a key feature in UNESCO's "Man and the Biosphere" program, which designated several key sites representing important ecosystems and encouraged their protection. Fraser, *Rewilding the World*, 27.
[8] Ibid., 126.
[9] Marja Spierenburg and Harry Wels, "'Securing Space': Mapping and Fencing in Transfrontier Conservation in Southern Africa," *Space and Culture* 9, no. 3 (2006): 294-312.
[10] Ibid., 296.
[11] Marc Cioc, *The Game of Conservation: International Treaties to Protect the World's Migratory Animals* (Athens: Ohio University Press, 2009), 50.

segregated conservation was increasingly questioned by conservation bodies, and initiatives aimed at incorporating communities into the management and benefits of protected areas were symbolized in the call to "move beyond the fences."[12] The physical erection of fences was much more prominent in South Africa than in Mozambique throughout the majority of the twentieth century; however, whether physically erected or symbolically represented as lines on a map, fencing has been an integral part of the history of wildlife conservation in this region, representing attempts to divide human and non-human populations, often for the protection of one from the other.

However, the fence has not only been a tool or symbol of exclusion. It has also served to connect and protect species, denoting not only what is deemed not to belong within its boundaries but also what does belong. As Giorgio Miescher reminds us, "a border necessarily has two sides—an internal and an external dimension—and, as a dividing marker, it is empowered with signification and definition to either side."[13] The changing demarcations of protected area borders have not only divided or exiled communities, they have united them as well. The early designations of protected areas, often intended to exclude rural people, also designated wildlife species as native inhabitants indigenous to these areas and therefore belonging to or in them. The protection of species' habitats gave way to attempts to protect entire ecosystems in line with a growing awareness that species exist in complex and interdependent ecological communities, largely thanks to Aldo Leopold.

By the 1990s, the idea of "moving beyond the fences" was not solely linked to the desire to redress the wrongs of "fortress conservation" by including local communities in the benefits and management of protected areas; this also became part of a movement to connect ecosystems that had been fragmented by the designation of protected areas too small to meet the needs of their non-human inhabitants and to provide a diplomatic bridge for southern African governments. This "moving beyond the fences" imagery was perpetuated in the creation of transfrontier conservation areas (TFCAs) in southern Africa and through the discourses of the Peace Parks Foundation, which sought to take down the fences altogether in order to reestablish migratory routes, reconnect ecosystems, and promote diplomatic relations after the end of apartheid. In the early 1990s, Mozambique's armed conflict was coming to an end, and the South

[12] Spierenburg and Wels, "Securing Space," 295.
[13] Giorgio Miescher, *Namibia's Red Line: The History of a Veterinary and Settlement Border* (New York: Palgrave MacMillan, 2012), 7.

African government was in the process of formally ending apartheid policies and ushering in democratic processes. This presented an opportunity for the formerly contentious states to create new links across political borders. South Africa's apartheid government had played a major role in supporting RENAMO, the opposition to Mozambique's leading party after the country gained independence from Portugal in 1975, and during Mozambique's armed conflict, which ended in 1992. The softening of political relations in the early 1990s presented an opportunity to soften the borders of these neighboring states. "Peace Parks" thus offered a means not only of joining ecosystems divided by colonial cartography but also of joining post-conflict Mozambique with newly democratic South Africa and addressing the violences of geographical partitioning that affected human populations. According to South African President Mbeki, TFCAs offered a means of "[redressing] the legacy of the colonial regional landscape that fragmented ecosystems and separated families and communities."[14]

In this chapter I track the designation of protected areas alongside changing global priorities of wildlife protection from species-specific interests in the first half of the twentieth century to ecosystem protection in the second half. The expertise that influenced border changes, and occasionally the borders themselves, have transgressed political boundaries, demonstrating the making of these protected areas to be transnational processes. In addition to tracking the movements of these experts across borders, I also track the erection and removal of real and symbolic fences between humans and non-human inhabitants of these protected areas. Heidi Gengenbach has written that each mapping of Mozambique's Magude district, "contains historical 'truths,' truths that are embedded in the identities and interests of its creator(s), the social contexts of its production and use, the visual and narrative techniques it deploys, and the content of the materialities its makers see and at the same time are helping to construct."[15] I argue that the scientific and legislative mapping of these territories since the early 1900s reveals an increasing sensitivity to both human and non-human claims to territory and the deployments of "belonging" as a key factor in boundary-making processes.

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[14] Quoted in Elizabeth Lunstrum, "Reconstructing History, Grounding Claims to Space: History, Memory, and Displacement in the Great Limpopo Transfrontier Park," *South African Geographical Journal* 92, no. 2 (2010): 134.

[15] Heidi Gengenbach, "Mapping Magude," in *Binding Memories: Women as Makers and Tellers of History in Magude, Mozambique.* Columbia University Press. http://www.gutenberg-e.org/geh01/index.html

Early Reserves in Gorongosa and Maputaland: International Conventions, the Great White Hunter, and the Tsetse Fly

By the end of the nineteenth century, changing attitudes toward wildlife were prompted by a growing public awareness of the vast depletion of wildlife by sportsmen and commercial hunters since the settlement of Europeans in southern Africa.[16] Widespread scarcity of game species led to selective hunting restrictions and an increasing appreciation for the scientific and aesthetic value of wild animals, beyond their economic uses.[17] John MacKenzie has argued that as Europeans limited wildlife access to African people for the purposes of their own sport and subsistence, they developed a conservation aesthetic that dramatically changed African landscapes.[18] In this section I introduce three key components in the development of reserves in southern Africa in the first half of the twentieth century: international conventions, sport hunting, and the tsetse fly. International conventions, particularly the London Conventions of 1900 and 1933, influenced and consolidated a "European" view of the African landscape. Intended largely to restrict the activities of white sport hunters, these conventions also led to the division between rural African people and protected areas. In this period, it became widely acknowledged that indiscriminate sport hunting was the cause of the devastating decimation of large mammals across the continent. Sport hunters, ironically, became an important lobby in the development of protected areas, which would act as breeding grounds for desirable trophies, ensuring key species would not become extinct. The proclamation of the Gorongoza Game Reserve (later Gorongosa National Park) in 1921 is a prime example of the role of sport hunting in the development of these areas. Finally, the tsetse fly was another vector for the designation of game reserves during this period.[19] Initiatives aimed at eradicating the fly, which caused *nagana*, or sleeping sickness, in cattle, wiped out large herds of game in Natal, and even greater numbers in Mozambique. By preserving wildlife, particularly large ungulates (hoofed animals) that might harbor the fly

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[16] William Beinart, "Introduction," in *Conservation in Africa: People, Policies, and Practice*, eds. David Anderson and Richard Grove, (Cambridge: Cambridge University Press, 1987), 16.
[17] Ibid.
[18] John MacKenzie, *Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1988), ix.
[19] Helen Tilley's work has shown how expertise about nagana and trypanosomiases was generated through transnational networks. Furthermore, these experts created new knowledge about the spread of disease through the exchange and assimilation of vernacular science and local knowledge regarding the tsetse fly. See Helen Tilley, "Ecologies of Complexity: Tropical Environments, African Trypanosomiasis, and the Science of Disease Control in British Colonial Africa, 1900-1940," *Osiris* 19 (2004): 21-38 and *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (Chicago: University of Chicago Press, 2011).

(though immune to its effects), in protected areas, conservationists not only created divisions between these species and humans, but also separated them from domestic livestock that would be at risk of contracting nagana.

Figure 4. *Map of Gorongosa Game Reserve,* 1952. Printed by Inprensa Nacional de Moçambique, Gorongosa National Park Archive.

Although the Cape Colony and the Transvaal established laws for the protection of particular species with a recognized commercial or subsistence value throughout the nineteenth century, it was not until the late 1800s that collective international action worked to protect

African wildlife.[20] International cooperation was considered particularly important for wildlife in Africa, "where neither animals nor hunters were likely to acknowledge the arbitrary political boundaries that criss-crossed the continent."[21] Marc Cioc describes early twentieth century animal conservation treaties as hunting treaties, rather than conservation treaties.[22] He argues that the London Conventions of 1900 and 1933, which were preliminary efforts at wildlife protection attended by colonial powers (the Union of South Africa attended the latter), were more concerned with protecting hunting grounds and game species than animal habitats or natural ecosystems. Nonetheless, these treaties and the ideas that prompted them influenced the creation of national parks and reserves in the southern and eastern parts of the continent. While the 1900 convention can be seen as a "preservationist" treaty for sport, the London Convention of 1933 was influential in turning game reserves into national parks, altering the status of "vermin" species, and excluding even elite hunters from conservation areas.[23] These conventions also had the effect of criminalizing subsistence hunting by black Africans while establishing boundaries between African people and African wildlife.[24]

This interest in protecting wildlife for sport hunting purposes is reflected in the creation of Mozambique's first game reserve in the center of the colony. On the second of March, 1921, Governor Pery de Lind of the Companhia de Moçambique[25] created a hunting reserve in the Gorongoza district of the Sofala province.[26] The Companhia de Moçambique's involvement in the destruction of the province's game—its officials garnered profits from the legal trade in ivory,

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[20] Marc Cioc, *The Game of Conservation*, 29.
[21] Harriet Ritvo, "Destroyers and Preservers: Big Game in the Victorian Empire," *History Today* 52, no. 1 (2002): 38.
[22] Marc Cioc, *The Game of Conservation*.
[23] MacKenzie, *Empire of Nature.*
[24] See also Edward I. Steinhardt, *Black Poachers, White Hunters: A Social History of Hunting in Colonial Kenya*. (Oxford: James Currey, 2006).
[25] The Companhia de Moçambique was a firm granted a concession in the central regions of Manica and Sofala in 1888 to exploit the area's mineral deposits. This was one of many concessionary companies established in the Portuguese colony to compensate for the metropole's limited financial resources, and like the others it failed to deliver any beneficial growth or development in the region. After the state chose not to renew the concession in 1942, the Governor of Manica and Sofala declared that the Companhia de Moçambique "did nothing to develop the potential wealth of this entire region, preferring to plunder it and alienate the natives." As quoted in Allen Isaacman and Barbara Isaacman, *Mozambique: From Colonialism to Revolution, 1900-1982* (Boulder: Westview Press, 1983), 37.
[26] Ordem do Governador do Território [Order of the Governor of the Territory] 4178, *Boletim da Companhia de Mocambique [Bulletin of the Mozambique Company]*, 16 March 1921 (6): 72. The reserve had the following perimeters: the Nhanduè River on the north, the Urema River on the east, a line running 10 kilometers north of and parallel to the Punguè and Dinguè-Dinguè Rivers on the southern boundary, and a line running parallel to the Urema River as its western boundary.

rhino horn, and animal skins—had impelled the creation of the reserve so as not to exhaust the province's game stock.[27] Although this 1,000 km^2 area was not created with preservationist aims, its proclamation did result in "preserving for the future an area, and its wildlife, of undeniable natural value" that was lauded by its visitors.[28] Of course, when the reserve was proclaimed, the privilege of hunting its game was granted only to the white colonial elite, including members of the Companhia de Mocambique's administration, as well as the President of the Republic of Portugal and his generals when they came to visit the colony.[29] In 1935 the reserve was expanded to 3,200 km^2.[30] According to veterinarian Armando Rosinha, who held responsibility for wildlife conservation in the late colonial government and independent Mozambican state, this expansion was made to include areas inhabited by the rhinoceros and nyala, two species considered important for hunting purposes.[31]

Despite efforts at wildlife protection, however fraught, in many cases the slaughter of wildlife in the region continued under the auspices of disease prevention, with the tsetse fly being the usual target. John Ford argues that pre-colonial societies had managed to co-exist with the fly, gaining partial immunity to the disease through environmental management and constant low-level contact. He links the spread of the disease in the late nineteenth and early twentieth centuries to colonial management attempts and demographic change associated with the colonial economy.[32] The fly harbors trypanosomes which can be transmitted to humans, manifesting as trypanosomiasis or sleeping sickness, as well as cattle, manifesting as nagana. Because most wild animals in Africa carry trypanosomes but are resistant to the disease, campaigns were led for their elimination. The first major cull in Zululand (the area now occupied by northern KwaZulu Natal), took place in 1894, and various attempts at game eradication continued in the region for more

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[27] Ibid.
[28] Armando Rosinha, "*Alguns Dados Históricos sobre o Parque Nacional da Gorongosa* [Some Historic Facts about Gorongosa National Park]," *Arquivo* 6 (October 1989): 221.
[29] Ibid., 220.
[30] Decreto [Directive] 26 076, Capítulo [Chapter] II, Artigo [Article] 9, *Boletim do Govêrno do Território da Companhia de Moçambique [Bulletin of the Government of the Territory of the Mozambique Company]*, 2 January 1936 (1): 2. The new boundaries were: the Inhanduè River to its confluence with the Macombeze River in the north, the Mocombeze and Urema rivers to the east, the Punguè to the south, and in the west, the road going from Mutiambaba to Vila Paiva de Andrada and from there to Maringuè until it crosses the Inhanduè.
[31] Rosinha, "Alguns Dados Históricos," 220.
[32] John Ford, *The Role of the Trypanosomiases in African Ecology: A Study of the Tsetse Fly Problem* (London: Oxford University Press, 1971).

than four decades.[33] John MacKenzie has described the complex relationship between tsetse eradication and the creation of game reserves throughout the first half of the twentieth century.[34] While some campaigners lobbied to deproclaim reserves believed to harbor the tsetse fly, others invoked the necessity of game reserves as an antidote to mass slaughter. The Umfolozi Reserve in Zululand, for example, was proclaimed in 1895 as a territory uninhabited by humans due largely to the presence of nagana but home to a population of white rhino thought to be extinct elsewhere in southern Africa.[35] It was deproclaimed in 1920 on the back of a strong farming lobby fearful of the spread of the tsetse fly and proclaimed again ten years later in order to test a tsetse fly control scheme. The preservation of game in Zululand was one of the principal agendas of the Natal Society for the Preservation of Wildlife and Natural Resorts, launched in 1946. Between December 1943 and April 1946, 66,162 head of game had been destroyed in Zululand as part of the tsetse fly eradication campaign.[36] Run and supported by zoologists, botanists, and entomologists, the Society actively publicized the failures of game eradication to wipe out the disease and proposed alternative solutions.[37]

While Natal's nagana campaign ended in 1948 with the acceptance that synthetic insecticides like DDT were far more effective than wildlife eradication, the battle raged on in Mozambique. In 1947, the Mozambican *Missão de Combate às Tripanossomíases* (Mission to Combat Trypanosomiasis, MCT), petitioned the government to deproclaim the Maputo Elephant Reserve in the southern part of the country, as its existence was impeding attempts at tsetse eradication.[38] At a conference held in September 1950 at Victoria Falls regarding the Fauna of British East and Central Africa, Francisco Pires, head of the MCT at the time, declared the tsetse fly to be "one of the greatest obstacles to the economic and social development of Mozambique."[39] He stated a view, which he claimed was shared by most in the Mozambican

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[33] A. de V. Minnaar, "Nagana, Big-game Drives and the Zululand game reserves (l890s-1950s," *Contree* 25 (1989): 12-21. Ezemvelo KZN Wildlife (EKZNW) Library.
[34] MacKenzie, *Empire of Nature*, 225-260.
[35] Shirley J. Brooks, "Changing Nature: A Critical Historical Geography of the Umfolozi and Hluhluwe Game Reserves, Zululand, 1887 to 1947" (PhD Thesis, Queens University, 2001).
[36] Natal Society for the Preservation of Wildlife and Natural Resorts, "Tsetse and Nagana: Slaughtering or Preserving Game in Zululand," July 1947, 2. Killie Campbell Africana Library (KCAL)
[37] Natal Society for the Preservation of Wildlife and Natural Resorts, "Tsetse and Nagana."
[38] Dispatch from the *Comissão de Caça* [Game Commission] no. 57/1947, 30 April 1947, "*Caça: Reservas e parques de caça* [Game: Game reserves and parks]"' Governo Geral, cota 178, pasta C/3. Arquivo Histórico de Moçambique (AHM).
[39] "Controlling Measures for the Wild Fauna Required by the Economic-Social Development," in "*Conferencia da Fauna – A Realizar em Victoria Falls* [Wildlife Conference – Held in Victoria Falls]," Governo Geral, cota 383, pasta A/13. AHM.

government, that wildlife should be preserved in areas unsuitable for economic exploitation and that wild animals roaming outside those designated zones should be used as food or for industrial purposes. This, he believed, would allow for the full eradication of pests and the effective utilization of land.

In 1953, a project was under way to draft new legislation for the protection of flora and fauna in Portugal's overseas provinces in line with the conclusions of the London Convention of 1933. In his memo to the Governor General regarding the draft decree, Pires's successor lauded the decision to write special legislation for wildlife protection, citing the "regime of free hunting" as the principal reason for the shortage of indigenous game in large tracts of land. He wrote, "As an integral part of our heritage, indigenous wildlife is an important element of study, and for scientific investigation, it is a valuable feature of tourism and has rich potential as a source of proteins, fats, and other products."[40] However, he criticized the absence of any mention of the province's tsetse problem in the draft legislation, which he called "one of Africa's most serious problems." Even with new legislation in place, wildlife continued to be hunted under the auspices of tsetse control. Between 1947 and 1969, the MCT killed 233,513 head of game in their five principal areas of operation.[41] This does not include the work of hunting brigades sanctioned by the MCT in other areas.[42] It was not until 1971 that some of the figures who had been involved in the MCT began to publically lament the destruction wrought by the tsetse eradication operations.[43]

The groundwork for the development of protected areas in southern Africa was laid largely by a combination of sport hunting interests, tsetse fly eradication campaigns, and international conventions. Sport hunters, the largest culprits in the mass slaughter of wildlife in the nineteenth century, sought areas that would act as stockpiles for trophies and selectively restricted access to large game in the early twentieth century, including Gorongoza Game Reserve. Tsetse fly eradication campaigns compounded the threats of sport hunting to large

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[40] "*Comissão de Caça - Regulamento, pessoal, materal, licences*, etc. [Game Commission – Regulation, staff, equipment, licenses] 1948-1958," Governo Geral, cota 430, pasta c/18a, AHM. My translation.
[41] J. A. Travassos Santos Dias and Armando José Rosinha, "Terão Justificação os Abates Indiscriminados da Caça Como Medida de Luta Contra a Mosca Tsé-Tsé? [Is the Indiscriminate Killing of Game Justified in the Battle Against the Tsetse Fly?]" *Anais dos Serviços de Veterinária de Moçambique* [*Annals of the Veterinary Services of Mozambique*]17/19, 1969-71 (1973): 50.
[42] See for example Missão de Combate Tripanossomíasis [Mission to Combat Trypanosomiasis, Relatório Anual de 1949-53 [Annual Report from 1949-1953], (Lourenço Marques: Imprensa Nacional de Moçambique). William Cullen Library (WCL).
[43] Travassos Dias and Rosinha, "Terão Justificação os Abates."

ungulates and increased risks of species scarcity. As I will outline in the next section, this played a large role in the designation of other early reserves. The London Convention of 1933 was particularly influential in creating global pressure for the allocation of land for wildlife protection.

Bounding Species and Confining Resources

Born out of the species-specific interests of hunters and sportsmen, and in the wake of the extinction of species like the blue antelope and the quagga in the nineteenth century, it is unsurprising that many of southern Africa's early reserves were developed for the protection of particular species habitant to particular regions. Species-specific reserves, such as Hluhluwe and Umfolozi, were established in 1895 at the behest of sport hunters wanting to protect the white rhino, as this region contained one of the few viable populations of the species left on the continent.[44] In the Cape Province, national parks were established to protect the bontebuck (Bontebuck National Park 1931), the gemsbok (Kalahari Gemsbok National Park 1931), and the Cape Mountain Zebra (Mountain Zebra Park 1937).[45] Addo National Park was established to protect the remnants of an elephant herd that had been nearly exterminated due to conflict with a local agricultural scheme.[46]

In this section I look at the designation and demarcation of Ndumo Game Reserve, located in KwaZulu Natal on the Mozambican border, created primarily for the protection of its hippo population, and the Maputo Special Reserve, located in southern Mozambique and designated primarily for the preservation of its resident elephants. The creation and management of these protected areas served not only to confine and protect their native mammals; they also largely excluded local communities from the resources of these territories.

Ndumo Game Reserve

In the early 1920s, residents of South Africa's Natal province voiced strong opposition to game reserves on account of fears that they harbored the tsetse fly. However, the provincial

[44] The famed hunter Frederick Selous had considered them extinct. See Shirley Brooks, "Changing Nature," 200.
[45] Jane Carruthers, "Conservation and Wildlife Management in South Africa's National Parks," *Journal of the History of Biology* 41 (2008), 211.
[46] Ibid.

government was not swayed to get rid of them. Perhaps in response to threats of losing Hluhuwe and Umfolozi, Nduma Game Reserve (subsequently called Ndumu and finally Ndumo) was proclaimed in 1924.[47] Legend has it that on proclamation of this reserve, Minister of Lands Deneys Reitz declared, "I have done my duty to God and the hippo."[48] In his 1943 book, *No Outspan,* Reitz wrote about his travels in northeastern Zululand.

> I remained at the Inyameti [now called the Nyamithi pan, located in the Ndumo Game Reserve] for a few days and then began the homeward journey. The hippo I shot is the last that has been killed there, for I had the lake and the adjacent land proclaimed a sanctuary and since then they have lived in peace and they are increasing in number.[49]

Although these statements have led to various reports that this reserve was created to protect its resident hippopotamus population, it has been suggested in more recent publications that its importance was more closely tied to it being the chief breeding ground of the nyala and impala, or that Reitz's intentions for wildlife protection were more universal and that he hoped to create an "animal sanctuary."[50] As the nagana campaign was still being enforced at the time the reserve was created, it is possible that through this proclamation Reitz may have prevented the decimation of almost all of the diverse fauna to be found in the Maputaland region today.[51]

Formally established as Ndumu Game Reserve under the Zululand Game Reserves and Parks Ordinance (1939) in March 1947, Ndumo's boundaries were determined to be the Mozambican border to the north, a line running south from the confluence of the Pongolo and Usuthu Rivers to the east, and straight lines on the south and east sides. These boundaries established an area of 11,898 hectares. [52] The reserve contains the infamous Nyamithi pan, home not only to Reitz's hippo but also to a variety of fish and birdlife, along with the Banzi pan (the

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[47] B. Ellis, "Game Conservation in Zululand (1824-1947)" (BA (Hons), University of Natal, 1975), 47. See also Shirley Brooks, "Changing Nature," 299.
[48] Ian Player, interview with the author, Karkloof, KZN, 29 August 2013.
[49] As quoted in *Ndumo Game Reserve: Integrated Management Plan: 2009-2013*. Ezemvelo KZN Wildlife. Pietermaritzburg, 2009, 16. EKZNW Archive.
[50] Alan Mountain, *Paradise Under Pressure* (Johannesburg: Southern Book Publishers, 1990), 39 and *Ndumo Game Reserve: IMP: 2009-2013*, 17.
[51] Ibid.
[52] Erroneously cited as around 25,000 acres or 10,117 hectares in some documents. For the correct figure see Mountain, *Paradise Under Pressure,* 39 and *Ndumo Game Reserve: IMP: 2009-2013*, 9. The Zululand Game Reserves and Parks Ordinance of 1939 created a Parks Board that would be the precursor to the Natal Parks Board, which came into being in 1947 and continued to have control over conservation in the province until the consolidation of Kwa-Zulu land in the 1970s.

largest in the reserve), several smaller pans, and part of the Pongolo River, which runs north into Mozambique where it joins the Usuthu River and becomes the Maputo River.

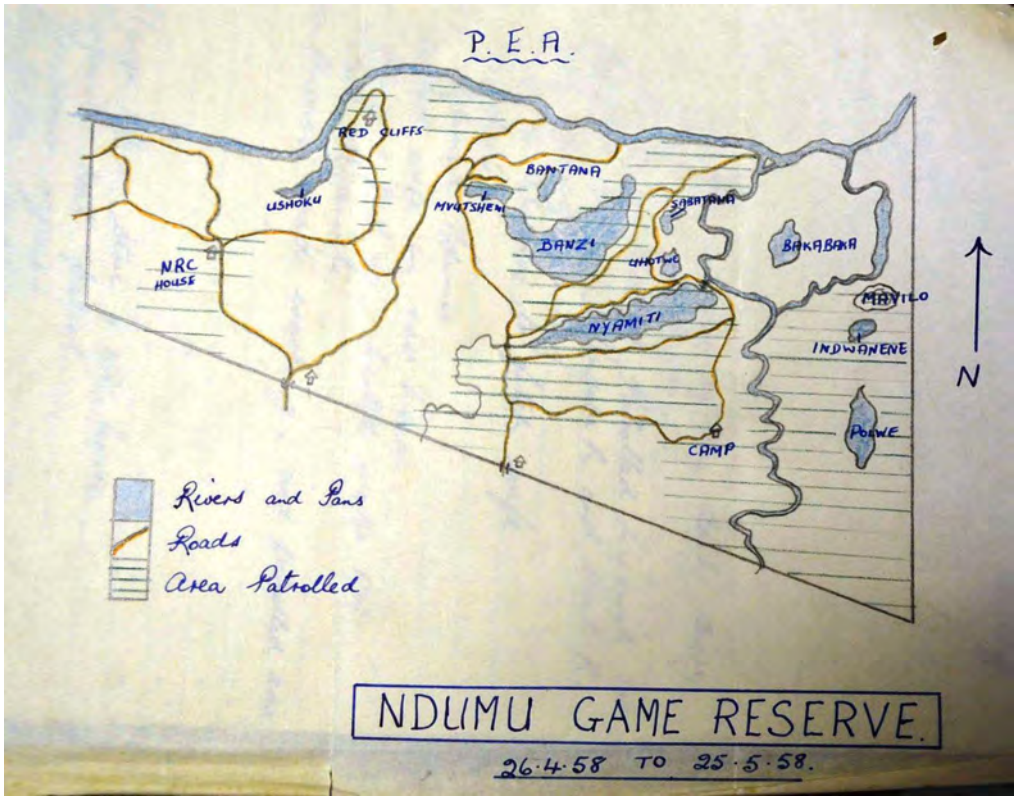

Figure 5. *Map of Ndumo Game Reserve*, D. de Wet, 1958. Ndumo Game Reserve Rangers' Reports, EKZNW Archive.

The Ndumo Game Reserve was originally staffed only by African game guards with a chief conservator overseeing conservation in the whole of Zululand.[53] In 1947, however, the newly formed Natal Parks Board (NPB) appointed E.B. Burnett game ranger to the whole of north-eastern Zululand, including Ndumo.[54] This decision was viewed as an indication of an increasing concern for wildlife preservation, and the ranger's remit specifically included the protection of elephants and other game "instead of destroying or chasing them back across the border."[55] In 1952, Ian Player[56] was given his first posting as a game ranger at Ndumo, and two

[53] Ellis, "Game Conservation," 55. This conservator was renowned hunter Vaughn-Kirby.
[54] Bulletin of the Natal Society for the Preservation of Wild Life and Natural Resorts (April 1947): 9, Msunduzi Municipal Library (MML) and Ndumo Game Reserve Rangers' Reports, 1947-1951, no. 1. EKZNW Archive.
[55] Bulletin of the Natal Society for the Preservation of Wild Life and Natural Resorts (April 1947): 9.
[56] Will be discussed further in Chapter 5 in relation to Operation Rhino.

years later he was joined by Ken Tinley, who would become known for his ecological studies across southern Africa. His first, however, were a series of three documents drafted in 1958 for the NPB on the principal hydrological areas of the Tongaland region.[57] Each was divided in focus between the status of the hippopotamus in the area and a general account of the environment, including the relationship between the local human populations and available natural resources. It is unclear from these reports exactly why hippo studies were needed. However, at the time the distribution of hippos in the region was changing rapidly, due in part to increased hunting in Portuguese East Africa, which pushed hippos across the Usuthu River and into the Pongolo floodplain.[58] Whatever the proximate cause of these studies, the hippopotamus was clearly still considered an important species in the region, although increasingly seen as part of a broader ecology.

In the mid-1950s game rangers at Ndumo began forcibly removing Ndumo's human inhabitants and fencing the reserve on its eastern, southern, and western borders, leaving the northern international border of the Usuthu River unfenced. In 1959 however, there were still over 1,000 people living in the reserve with their livestock.[59] That year all of the livestock were removed due to an outbreak of foot and mouth disease across the border, and Ndumo acted in essence as a veterinary disease buffer between the Natal province and the Portuguese colony.[60] The "native" human population was not the only one targeted. The reports from Ndumo's game rangers during this period show that they spent a surprising amount of time shooting the "native's" dogs found in the reserve.[61] By 1964 there were only 500 human residents, and the combined reduction in hunting and fencing of the reserve saw a large increase in wildlife numbers, particularly in the nyala population.[62] An article produced out of a trip to the area in 1947 noted a shortage of game in the Tongaland region, with the exception of Ndumo "with its

[57] Reports can be found in the "Ken Tinley" file, EKZNW Archive. These focus on the Pongolo and Mkuze Flood Plains, Lake Sibaya, and the Kosi Lake System and were reprinted in K. L. Tinley, *The Ecology of Tongaland.* (Durban: The Natal Branch of the Wildlife Society, 1976).
[58] "A Preliminary Report on the Ecology of the Pongolo and Mkuze Flood Plains: With Particular reference to the Hippopotamus, 23.7.58 to 31.8.58," in "Ken Tinley," EKZNW Archive.
[59] K. L. Tinley, "Summary of an Ecological Survey of Ndumu Game Reserve, Tongaland, December 1963 to February 1964," 1. N. Conservation. Ecological Survey Ndumo [sic] 1964. Ndumo Game Reserve (NGR) Archive.
[60] Ibid.
[61] Ndumo Game Reserve Rangers' Reports, 1947-1961, nos. 1 and 2. EKZNW Archive.
[62] Tinley, "Summary of an Ecological Survey of Ndumu," 1.

beautiful nyala and other buck, protected for all time."[63] Although once known as "home of the hippo," Ndumo eventually became better known for its resident nyala.[64] The fencing of the reserve put new demands on its management, including controlled fires and culling, for the health of the reserve's flora and fauna.[65]

Although the boundaries of the reserve have not been redrawn in its 90-year history, this has not precluded a border dispute and potential revision. An issue of concern for the current management of Ndumo Game Reserve, Ezemvelo KZN Wildlife, the provincial conservation arm, is that the Usuthu River, which is both the northern boundary of the reserve and the international boundary with Mozambique, has started to divert from its original course (into South African territory), and in many places is flowing further south.[66] This is not the first instance of a riverine diversion in Ndumo. In his 1964 report, Tinley describes the changing route of the Pongolo River, which inevitably affected the eastern pans of the reserve, and the ungulates that drink there.[67] At the time, however, the pending damming of the Pongolo River further upstream was of greater concern than the natural shift in the river's course. The Pongolapoort dam was finally constructed in 1973.

Maputo Special Reserve

Across the border in the former Portuguese colony of Mozambique, approximately 35 miles northeast of Ndumo's precarious boundary, lies the Maputo Special Reserve, which was formerly known as the Maputo Elephant Reserve and is situated along the Indian Ocean coast south of the nation's capital. There had been a *coutada* (hunting ground) created in the area in 1909, which was deproclaimed in 1927.[68] Five years later, the Maputo Reserve was proclaimed, bounded by the Maputo River on the west and the South African border to the south, as one of multiple reserves where hunting was completely prohibited, created by legislation updating the

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[63] Austin Ferraz, "Probing the Mysteries of Tongaland," *The Outspan.* 3 September 1947. D74/072, "Tongaland Expedition." KCAL.
[64] See for example "Ndumo: Home of the Nyala," *African Wildlife* 27, no. 4 (1973): 154; Ellis, "Game Conservation in Zululand," 47. Although its nyala numbers remain high, Ndumo is now more widely marketed to birders.
[65] Tinley, "Summary of an Ecological Survey of Ndumu," 33.
[66] *Ndumo Game Reserve: IMP:2009-2013*, 9.
[67] Tinley, "Summary of an Ecological Survey of Ndumu," 5.
[68] José Luís Pessoa Lobão Tello, "*Reconhecimento Ecológico da Reserva dos Elefantes do Maputo* [Ecological Reconnaissance of the Maputo Elephant Reserve*], Primeira Parte* [First Part]," *Veterinaria Moçambicana* 5, no. 2 (1972): 105.

Portuguese colony's hunting regulations.[69] Although not evident in the legislation, it is suggested in later management plans that the reserve was created with the explicit intention of protecting the area's native elephant population.[70] As early as 1911, the region was noted as an "interesting territory," where one could find "the elephant in its habitat," and in 1916 one of the region's resident females, subsequently named "Maputo," was moved to Lisbon's Zoological Garden where she acted as a representative of what was considered to be a distinct Mozambican species, *Elephas africanus moçambicus,* though she was likely just an ordinary savannah elephant (*Loxodonta africana africana*).[71] In 1953 the *Direcção dos Serviços Administrativos e dos Negócios Indígenas* (Directorate of Administrative Services and Native Affairs) suggested lifting the status of the reserve. The C*omissão de Caça* (Game Commission) opposed this proposal, citing the need to defend the reserve's elephant population and its floral species, and also pointing to possibilities for agricultural and livestock production and tourist opportunities, which would not be possible in the future were the status of the reserve to change.[72]

In 1960, the *Boletim da Sociedade de Estudos de Moçambique* (The Bulletin of the Society of Mozambican Studies) published an essay by Armando Rosinha, a veterinarian working at the time for the MCT but would later become warden of Gorongosa National Park. In it Rosinha called for a significant reduction in the reserve's territory.[73] Citing the extensive destruction of game by hunters from the nearby colonial capital, Rosinha reasoned that shrinking the reserve's total area, fencing it, and bringing it even closer to Lourenço Marques would halt the extermination of wildlife in the region, curtail human-wildlife conflict, encourage tourism, and allow for the exploitation of parts of the former reserve area for agricultural and livestock production. That year the boundaries were reduced as suggested.[74] The new legislation called the

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[69] Diploma Legislativo [Legislative Diploma] Nº 343, Capítulo II, Art. 13 (1) *Boletim Oficial da Colónia de Moçambique [Official Bulletin of the Colony of Mozambique]*, Série 1, 23 April 1932 (17): 251.
[70] Direcção Nacional de Florestas e Fauna Bravia (DNFFB), *Plano de Maneio, Reserva Especial de Maputo [Management Plan, Maputo Special Reserve], 1997-2001*, Vol. 2, Ch. 2. Maputo, 1997, 1. International Union for Conservation of Nature (IUCN) Library, Maputo.
[71] O.W. Barrett, "*A Região do Maputo* [The Region of Maputo]," in *Província de Moçambique* [Province of Mozambique], "*Relatórios e Informações* [Reports and Information," *Anexo ao Boletim Oficial* [Annex of the Official Bulletin] (Lourenço Marques: Imprensa Nacional, 1911), 120-122. SGL.
[72] Tello, "Reserva dos Elefantes, Primeira Parte," 105.
[73] Armando Rosinha, "*Valerá a pena recuperar a Caça no Maputo* [Is it worth recovering the game in Maputo]?" Separada do *Boletim da Sociedade de Estudos de Moçambique* 125 (November-December 1960).
[74] Diploma Legislativo 1994, *Boletim Oficial de Moçambique*, Série 1, 23 de Julho de 1960 (30): 827. The new boundaries were: the ocean coast to the Zitundo-Salamanga road (at parallel 26°33'0"), following this road to the bridge over the Futi River, from there to the Canguecane geodesic vertex, to the Maputo River

area the *Reserva Especial de Protecção aos Elefantes* (Special Reserve for the Protection of Elephants), identifying the local population as a "scientific rarity," labeled *Elephas africanus moçambicus* by Frade in 1924, which needed to be protected in accordance with the International Convention of London.[75]

In 1961, fencing of the reserve began, and three years later its boundaries were re-examined by a dedicated commission that concluded the coastline should be excluded from the reserve.[76] Around the same time, an agreement was made between Chief Muvukuza of a community located near Ponta Milibangalala, a coastal point located within the past and present boundaries of the reserve, and the district administration that would allow the Muvukuza community to continue living there.[77] According to the son of João Carreira, the honorary hunting supervisor that facilitated the agreement, his father was heavily involved in the development of the reserve and never intended to preclude local people from accessing its resources. This is the only community agreement pertaining to the reserve that exists from that period.[78]

In 1969, the name of the reserve was changed, and its present boundaries were established. After the introduction of new wildlife species, including white rhinoceros and ostrich, 'elephant' was removed from the reserve's name, and it became known instead as the *Reserva Especial de Maputo* (Maputo Special Reserve).[79] Special Reserve status was legislated in

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in the west, following the course of the river to its mouth, following the coast until longitude 32°53'0" and latitude 26°18'0," and from here following a straight line to the Tane geographic mark and then south to parallel 26°33'0."

[75] Ibid., 826-827.

[76] Tello, "Reserva dos Elefantes, Primeira Parte," 106.

[77] Judy Oglethorpe, "*Reserva Especial de Maputo: História e Estatutos* [Maputo Special Reserve: History and Statutes]," in DNFFB, *Plano de Maneio, Reserva Especial de Maputo, 1997-2001,* Vol. 2.

[78] Hanne Haaland, "Narrating history, Negotiating Rights. A Discussion of Knowledge, Land rights and matters of identity in Madjadjane, Mozambique" (PhD Thesis, Norwegian University of Life Sciences, 2008), 59.

[79] Diploma Legislativo 2903, *Boletim Oficial de Moçambique*, Série 1, 9 August 1969: 957. It's new boundaries were: the north coast from the Maputo River estuary until the arm at the bottom of the Machangulo Peninsula, with the northern boundary stretching across the parallel at that arm to the east coast; all of the east coast until the Matonde mark; on the south the anti-hunting fence that runs south of Lake Piti, Lake Chingute, and the Mechingane mark, then runs northwest around 2km from the Salamanga-Ponta do Ouro road until Nunes' canteen at which point the boundary runs perpendicular to the aforementioned road until the Futi River bridge; and to the west, the current fence running at various distances from 50 to 100 m from the left bank of the Fúti River then heading northwest through an inspection post until the Viana mark and from there the fence follows a north-south line for about 8km until it veers northwest again until it meets the right bank of the Maputo River and follows on toward the estuary. These new boundaries marked a southward expansion to include the lake now known as Xingute (Chingute) and areas to the west of the Futi River, while excluding part of an exotic forest.

1964 as a category of land designated for the protection of more than one species of plant or animal and where hunting is completely prohibited.[80]

Figure 6. *Map of Protected Areas (Tourism Sites) in the Maputo Special Reserve Region*, José Luís Pessoa Lobão Tello, 1972. From "Reconhecimento Ecológico da Reserva dos Elefantes do Maputo [Ecological Reconnaissance of the Maputo Elephant Reserve]," *Veterinaria Moçambicana* 6, no. 2 (1972).

[80] Oglethorpe, "Reserva Especial de Maputo," 2.

As early as 1961, the reserve boundaries were already deemed inadequate. Elephants and nyala preferred areas outside of the reserve boundaries. When laying the fence, these shortcomings were partially improved by placing it farther west of the Futi River on land not already occupied by farmers and erecting the fence south of rather than through Lake Chingute.[81] However, in his ecological study of the region published in 1972 and 73, Tello determined that the boundaries were still not sufficiently aligned with the area's ecology. His criticisms included the exclusions of: the Manhoca area, frequented by elephants and other animals; the forests and vegetation west of the Futi River, necessary for the river's protection and for which the elephants had a "marked predilection"; the forests between the Maputo and Futi Rivers, also frequented by elephants; the Nhambsé pan, home to interesting bird species and a possible water source for mammals that would be introduced in the future; the southern part of the forest between Mechingane and Gala, populated by multiple birds and mammals; unique swamp forests around lake Chingute and Piti; and the southern part of Lake Piti.[82] In addition to disturbing the ecological integrity of the region, these exclusions facilitated human-wildlife conflict. Tello therefore offered three suggestions. The first was to redraw the boundaries as shown in option A on the map below [Figure 7] according to the ecological boundaries. Although this would have been optimal for the flora, fauna, and hydrology of the region, the massive displacement and interference with the activities of people and government departments lead Tello to an alternative option.[83] Shown in option B on the map, this would entail a much smaller extension of the reserve, most notably with expansions in the northwest, to include more land west of the Futi and to the south of the reserve. Noting that this option would be likely unfeasible, Tello suggested that at a minimum all of the Manhati (or Matus) forest be included, as would an area 2.5 km west of the Futi River and all of Lake Piti.[84] Three years after the publication of his recommendations, Mozambique gained independence from Portugal, and soon after any border disputes became moot as the country descended into a prolonged armed conflict.

[81] Jose Tello, "Reconhecimento Ecológico da Reserva dos Elefantes do Maputo, 2nd part: Manutenção dos Sistemas Naturais [Maintaining Natural Systems]," *Verinaria Mocambicana* 6, no. 2 (1973): 135.
[82] Ibid., 135-136.
[83] Ibid., 136-137.
[84] Ibid., 138.

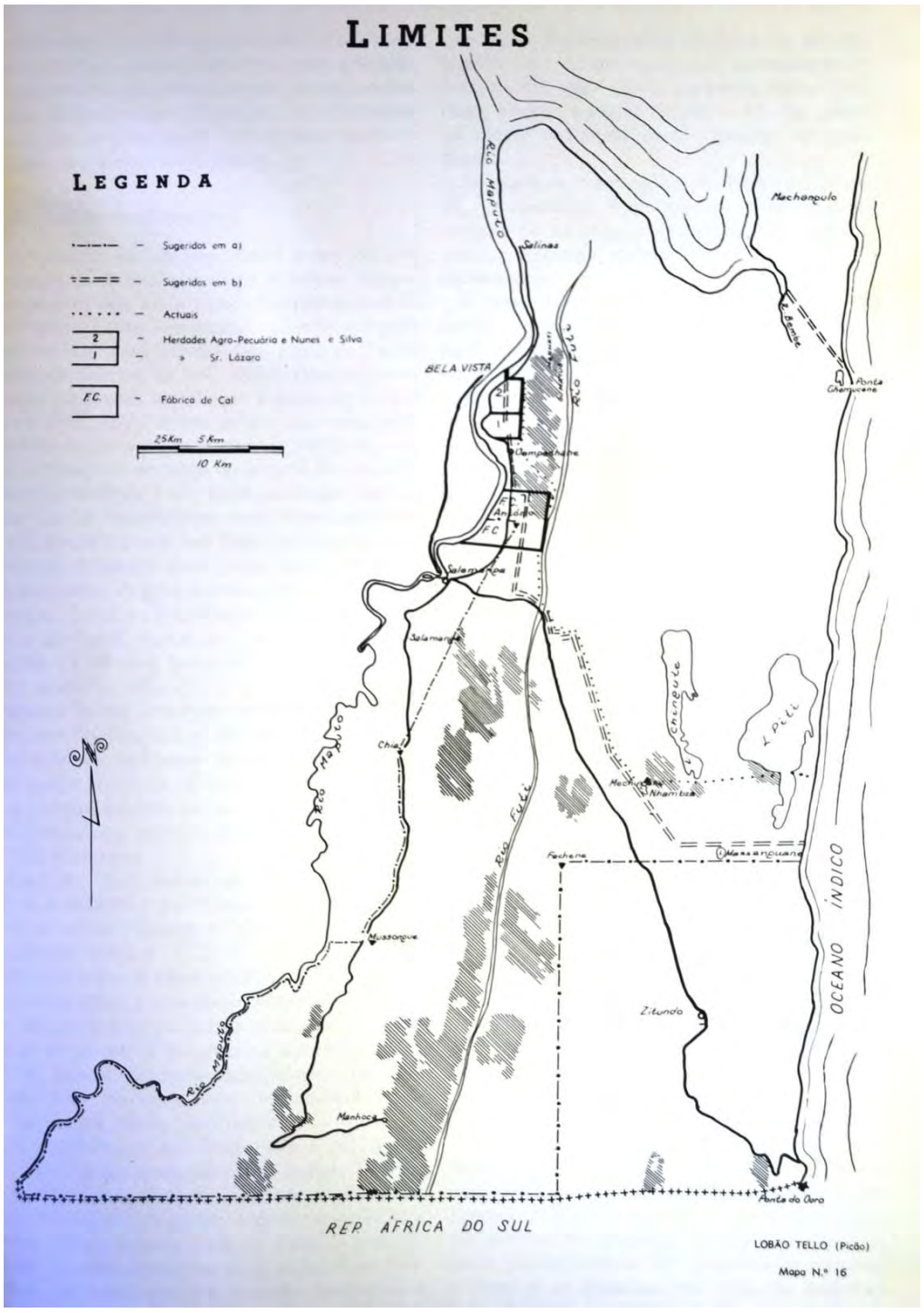

Figure 7. *Map of the Maputo Special Reserve Boundaries*, José Luís Lobão Tello, 1972. This map shows Tello's suggestions (*sugeridos* a and b) for boundary alterations and the actual (*actuais*) reserve limits (*limites*). From "Reconhecimento Ecológico da Reserva dos Elefantes do Maputo [Ecological Reconnaissance of the Maputo Elephant Reserve]," *Veterinaria Moçambicana* 6, no. 2 (1972).

Gorongosa National Park: From National Park to Ecosystem

In this section I look at the designation of Gorongosa as Mozambique's first national park, in line with the growth of similar protected areas in the region, as a nation-building project meant to safeguard not only charismatic species, but also the habitats in which they reside. This expanding interest in the habitat as important in its own right coincided with the development of ecological science and early attempts to expand protected area boundaries on the basis of a territory's ecological integrity. In the late 1960s Ken Tinley was hired by the Mozambican government to study the region's ecology, and he subsequently proposed the expansion of the Gorongosa National Park's boundaries. Concluding that the boundaries were inadequate to protect its perennial water source, Mount Gorongosa, Tinley proposed including the mountain within its limits. Furthermore, he proposed the creation of a "wilderness area" inside Gorongosa in line with Leopold's view that selected parts of protected areas should have limited human access, even for tourists. However, Tinley's proposal did not posit a clear division between rural African people living in Gorongosa and its vicinity. In contrast, and spurred by Leopold's writings, Tinley recognized the dependence of local inhabitants on this area's resources and conceived people living in the vicinity of the park as part of the region's larger ecosystem, an idea which was fairly revolutionary for southern Africa at that time.

South Africa introduced its National Parks Act in 1926, prompting the creation of Kruger National Park, the nation's first. The transition from game reserves to national parks in South Africa marked a shift in protectionist thinking from a focus on increasing animal numbers to the designation of preserves for white tourism, denoting a racialised "nation" to which the park belonged.[85] Jane Carruthers has described the creation of Kruger National Park as part of a nation-building project, bridging differences between English-speakers and Afrikaners toward a shared white South African identity.[86] This burgeoning nationalism coincided with the parallel exclusion of black South Africans, leading to Carruthers' assertion that who constitutes a "nation" is dependent on the political interests of a particular time and place and that the owners and inheritors of national, or natural, heritage are in constant flux. Although the National Parks Act presented an opportunity for bringing the Zululand reserves under national protection, Natal's

[85] Jane Carruthers, "Creating a National Park, 1910 to 1926," *Journal of Southern African Studies* 15 (1989): 214-215.
[86] Jane Carruthers, *Kruger National Park: A Social and Political History* (Pietermaritzburg: University of Natal Press, 1995), 48.

protected areas remained under provincial control (and still do today). Despite heavy campaigning by conservationists in the 1920s and 1930s, the presence of *nagana* (which would pit the interests of wildlife protection against white agricultural settlement) as well as the increasing marginalization of Natal within the Union, were critical factors that worked against the perception of these sites as shared national heritage.[87]

The London Convention of 1933 pushed for the proclamation of more protected areas in Africa, specifically the creation of "national parks, strict natural reserves, and other reserves within which the hunting, killing or capturing of fauna, and the collection or destruction of flora shall be limited or prohibited." In historian Marc Cioc's view, these were "apartheid parks," which delineated a firm spatial distinction between humans and animals.[88] The proclamation of national parks also marked a shift towards symbolizing the long-term protection of these sites as a means of reasserting an imagined primordial past, when these areas were not inhabited by humans. MacKenzie sees perpetuity as one of the distinctions between game reserves and early national parks, which had state legislation backing their survival.[89] In the 1930s, James Stevenson-Hamilton, a key figure in the proclamation of Kruger and first warden of its progenitor, the Sabi Game Reserve, envisioned national parks in South Africa as opportunities to visit places existing as they might have without the effects of human settlement.[90] After the second World War, British East and Central Africa saw a boom in the creation of national parks, which Roderick Neumann attributes to late colonial modernization and economic development schemes, supported a decade later by mass tourism and scientific wildlife management.[91] These modernization schemes remade territories into "wilderness" areas, while at the same time bringing them under control of the colonial state.[92]

In 1948, the Portuguese government finally ratified the London Convention of 1933. This led to the development of new legislation, enacted in 1955, that aimed to protect not only the fauna, but also the flora and soil of its overseas territories, laying the foundation for new

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[87] Shirley Brooks, "National Parks for Natal? Zululand's Game Reserves and the Shaping of Conservation Management Policy in Natal 1920s to 1940s," *Journal of Natal and Zulu History* 22 (2004): 73-108.
[88] Cioc, 50.
[89] MacKenzie, *Empire of Nature,* 264.
[90] Ibid., 265.
[91] Roderick Neumann, "The Postwar Conservation Boom in British Colonial Africa," *Environmental History* 7, no. 1 (2002): 22-47.
[92] Roderick Neumann, "Africa's 'Last Wilderness': Reordering Space for Political and Economic Control in Tanzania," *Africa: Journal of the International African Institute* 71, no. 4 (2001): 641-665.

categories of protected areas.[93] Though it had been referred to as a national park since the early 1950s, this status was only officially conferred on Gorongosa in 1960, making it Mozambique's first. Like Kruger, the making of Gorongosa National Park could also be viewed as a nation-building project—as a means both of showcasing the colony's unique natural heritage and selectively designating what or who belonged within its boundaries. As William Beinart and Peter Coates have observed, South African conservation policy in the 1950s shifted from a species-specific focus towards general habitat protection.[94] This shift is reflected in the legislation that formalized Gorongosa's status as a national park, stating the need to establish a "true" national park on the scientific basis of the protection of nature more broadly, not just wildlife.[95]

As attention shifted toward more holistic views of protected areas, the status of vermin species began to change, and animals that were once considered pests, such as the lion, became principal attractions at certain parks. When Gorongosa National Park was established, almost 40 years after it had been proclaimed a game reserve, its lion inhabitants became the symbol of the park and one of its main marketing draws. However, as certain animal species' status was raised, African people were increasingly seen as "pests" to be eradicated from protected areas.[96] Gorongosa was enlarged to 5300 km^2 in 1960 when it was designated a National Park but reduced to 3,770 km^2 six years later as a means of ensuring that "tribal cultivators" would successively be left outside the limits of the protected area.[97] In May 1967, the park's boundaries were finalized.[98] Much of the surrounding territory was designated *coutadas*, or hunting reserves, accessible to tourists through operators based out of Beira, the provincial capital located 115 kilometers south-east of the park. Over the next 10 years Gorongosa became one of Africa's premiere wildlife destinations, rivalling South Africa's Kruger National Park in species diversity and wildlife density, and attracted regional and international visitors, including Hollywood stars, and other

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[93] Decreto 40 040, *Boletim Oficial de Moçambique*, Série I, No. 8, 24 February 1955, 189-202. See also Armando José Rosinha, "Legislação Base da Protecção da Natureza no Ultramar Português [Legislative Base for the Protection of Nature in Portugal's Overseas Territories]," in *Fauna Selvagem e Protecção da Natureza* [Wildlife and the Protection of Nature] (Lisboa: Agência Geral do Ultramar, 1973), 127-189.
[94] William Beinart and Peter Coates, *Environment and History,* 86.
[95] Diploma Legislativo 1993, *Boletim Oficial*. 23 July 1960, 826.
[96] Clapperton Chakanestsa Mavhunga, "Vermin Beings: On Pestiferous Animals and Human Game," *Social Text* 29, no. 1 (2011): 151-176.
[97]Kenneth Tinley, "Framework of the Gorongosa Ecosystem" (PhD diss., University of Pretoria, 1977), 6. Some documents suggest that the Game Commission (Comissão de Caça) had created a buffer zone around the reserve in 1951, which expanded its total area to 12,000 km^2, however, I am unable to find legislation supporting this. That expansion would have meant that the area was drastically reduced when it was declared a national park. See for example, Armando Rosinha, "Alguns Dados Históricos," 223.
[98] Diploma Legislativo 2750, *Boletim Oficial*, 6 May 1967, 672-673.

celebrities. From hosting a total of only 1,361 visitors in 1952, by 1962, almost 5,500 people visited the park. In 1972, this number reached 20,525.[99]

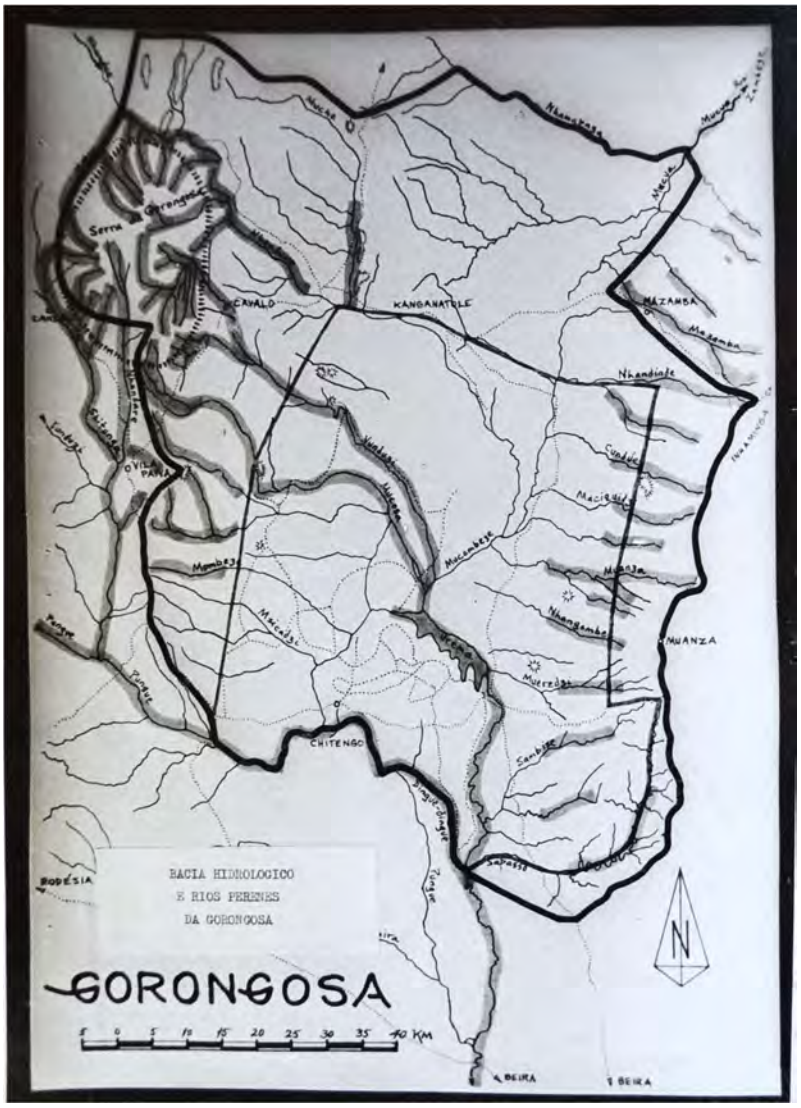

Figure 8. *Hydrological Base and Perennial Rivers of Gorongosa*, K. L. Tinley, 1969. From "Parque Nacional da Gorongosa, Mocambique: Limites Ecólogicos Manutenção da Natureza Bravia [Gorongosa National Park, Mozambique: Maintaining Ecological Boundaries of Wild Nature]," August 1969. Armando Rosinha's Archive. Courtesy Dr. S. Bila, Veterinary Faculty, UEM. The thick black line represents his proposed boundary changes, while the thin line shows the contemporary boundaries. The lighter lines show the rivers dependent upon Mount Gorongosa.

[99] Fernando C. Paisana and Armando J. Rosinha, "Inventariação dos Problemas Relacionados com a Protecção da Fauna e sue Aproveitamento Racional," *Anais dos Serviços de Veterinária de Moçambique* 20/21, 1972/1973 (1975): 61.

In 1968, the Ken Tinley was hired by the Mozambican government to determine the ecological limits of the park. In his 1969 report for Mozambique's Directorate of Veterinary Services, Tinley noted that the boundaries of Gorongosa National Park had changed many times for the purposes of accommodating large numbers of ungulates in the dry season and for keeping human populations at bay. However, these boundaries were never based on an understanding of the ecological system as a whole.[100] He proposed expanding the area to almost 8,700 km^2 (slightly more than half the size of Kruger National Park), [101] in line with the three fundamental aspects of the area's ecosystem:

> a. Its perennial water source;
> b. adequate representation of all of the region's ecosystem, with emphasis on those depended upon by gregarious [social] ungulates [hoofed animals];
> c. patterns of distribution of large ungulates and their migrations on point with the dry and rainy seasons.[102]

This expansion would include the incorporation of Coutadas 1 and 3 as well as the park's perennial water source, Mount Gorongosa, which performed a critical function in the area's hydrology. Tinley recognized the importance of protecting this mountain, not only for the flora and fauna of the area, but also for the human population who depended on its catchment area for agricultural production. In order to protect this water source for the area's inhabitants and to maintain the integrity of Gorongosa as a National Park in line with Portugal's 1955 legislation, which limited human habitation, Tinley suggested that the human inhabitants be relocated to areas outside the park which had better or equally good possibilities for agricultural cultivation.[103] Furthermore, he contended that they should benefit from meat culling and tourism proceeds.[104] The exception to this relocation scheme would be cattle farmers on the western slope of Mount Gorongosa whom he understood to represent a benefit to the region.[105] However, he considered the continuation and intensification of agriculture on the mountain by peasant cultivators to represent a threat to its tributaries and surrounding vegetation.[106] To further minimize the park's

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[100] K.L. Tinley, "Parque Nacional da Gorongosa, Moçambique: Limites Ecológicos Manutenção da Natureza Bravia [Gorongosa National Park, Mozambique: Maintaining Ecological Boundaries of Wild Nature]," Report for the Direcção Provincial dos Serviços de Veterinária, August 1969, 10. IUCN Archive, Maputo.
[101] Ibid., 12., In his PhD thesis, Tinley uses the figure 8,200 km^2.
[102] Ibid., 17.
[103] Ibid., 44.
[104] Ibid., 44, 49.
[105] Ibid., 54.
[106] Ibid., 21.

vulnerability, Tinley explained the importance of creating a *zona de tensão periférica* (peripheral buffer zone) of *coutadas* (hunting reserves) around the national park.[107]

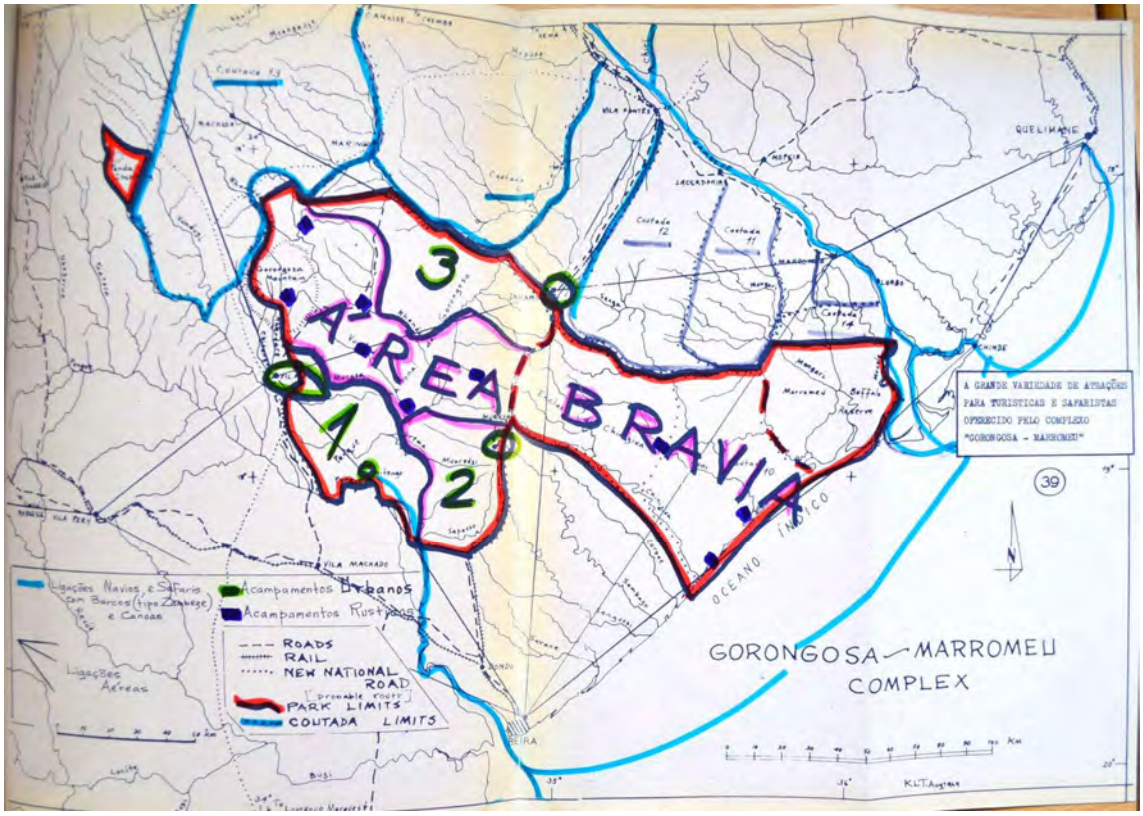

Figure 9. *The Great Variety of Attractions for Tourists and Safari-goers Offered by the "Gorongosa-Marromeu" Complex*, K. L. Tinley, 1969. From "Parque Nacional da Gorongosa, Mocambique: Limites Ecólogicos Manutenção da Natureza Bravia," August 1969. Armando Rosinha's Archive. Courtesy of Dr. S. Bila, Veterinary Faculty, UEM. The map show the proposed Gorongosa-Marromeu Complex. The "*Area Bravia*" is the proposed wilderness zone, while the numbered areas designate particular tourism areas.

In order to safeguard representative examples of the country's most important ecosystems, Tinley suggested the creation of a "Wilderness Area" to be incorporated into the national park at a later stage, which would extend from Mount Gorongosa to the Indian Ocean seafront, over 100 miles away. This would include a core corridor of the park where tourism would be limited.[108] Calling for the integration of Coutada 10 into the Marromeu Buffalo Reserve in order to protect the buffalo population that migrated into the *coutada* during the rainy season

[107] Ibid., 63. This idea had already been used in the Natal reserves as a buffer against tsetse expansion.
[108] Ibid., 6.

would allow for the eventual incorporation of Marromeu and Gorongosa into an integrated "complex," and protect the area between them, which Tinley called the Chinizuia Enclave, home to a valuable example of hygrophilous forest [one that thrives in damp conditions], as yet unrepresented in a nature reserve.[109]

Tinley emphasized the importance of recognizing the natural values parks and reserves represent to a country, as opposed to the potential of these spaces to be subsumed into urbanisation or development projects. In this, he drew on the work of Aldo Leopold, an early advocate for ecological thought who emphasized the interdependence of living beings and the value of natural assets to humans.[110] Tinley suggested that national parks and reserves, "act as standards of measurement and terms of comparison, by which one can evaluate what nature produces when left alone and the means by which it maintains itself and survives, and can then study the possible utilization of wild places and compare that with what man carries out in the adjacent areas he occupies."[111] In this sense, calling for national parks and reserves to "be conserved in as natural a state as possible" is not purely a demand for the removal of African people.[112] Tinley was more concerned with the imposition of "artificial" entertainment and development projects, such as dams, within designated wilderness areas. He supported the utilization of natural resources within these spaces, but demanded that these resources be managed as minimally as much as possible

Tinley's 1969 report formed the basis of his 1977 PhD thesis at the University of Pretoria, "Framework of the Gorongosa Ecosystem," which has been called "one of the most comprehensive analyses of an African ecosystem ever produced." [113] In it he described the historical development of the ecosystem, concluding that soil moisture balance was critical in all ecological interactions. With regard to the Gorongosa ecosystem, he echoed the importance of Mount Gorongosa as its water source as well as the alluvial plug (a sediment deposit allowing the river to expand in the wet season), which maintained surface water in Lake Urema. Including an extensive analysis of the projected historical and contemporary interactions of the ecosystem's

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[109] Ibid., 3.
[110] For more on Leopold's contribution to the field of ecology see Part 5: The Morals of a Science: Ethics, Economics, and Ecology in Donald Worster, *Nature's Economy: A History of Ecological Ideas*. Second Edition (Cambridge: Cambridge University Press, 1994).
[111] Tinley, "Parque Nacional da Gorongosa," 61.
[112] Ibid, 62.
[113] Philip Gourevitch, "The Monkey and the Fish," *The New Yorker*, 21 & 28 December 2009, 103.

salient features, as well as descriptions of the area's climate, vegetation, and wildlife, this document became a key tool in the park's restoration projects from the mid-1990s. Whether or not scientists agreed with his synopsis of the Gorongosa "kaleidoscope," this was the best, and perhaps only, document to work from for the post-conflict management of the area. As such, this tome has been referred to as Gorongosa's bible.[114]

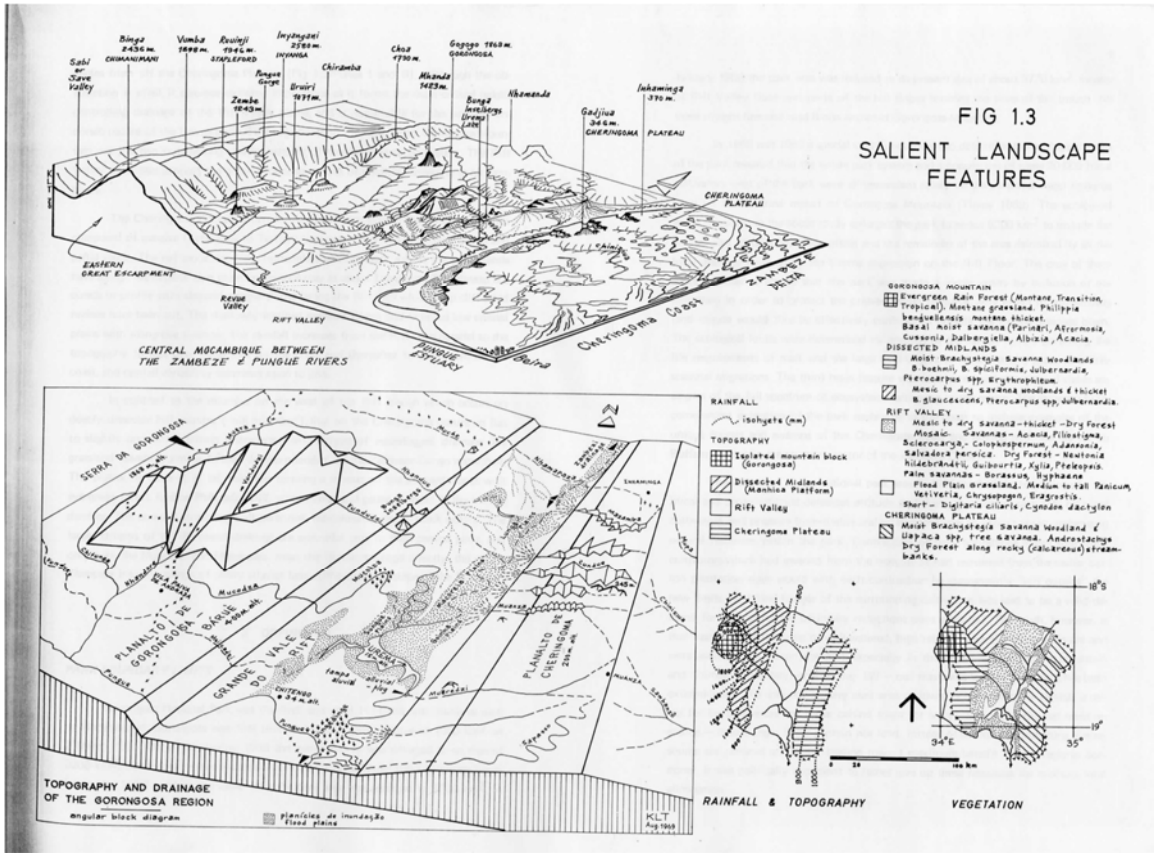

Figure 10. Gorongosa's Salient Landscape Features, K. L. Tinley, 1977. From K. L. Tinley, "Framework of the Gorongosa Ecosystem" (PhD diss., University of Pretoria, 1977).

Far from reflecting the need to maintain a pristine wilderness, Tinley's work emphasized the ecosystem's state of constant flux. Influenced by the work of Scottish landscape architect Ian McHarg, this study focused on identifying the ecosystem's salient features, or "keystone elements holding an ecosystem together as a dynamic system."[115] He wrote, "The identification and protection of salient factors holding an ecosystem together ensures survival of its components and

[114] Roberto Zolho (warden of Gorongosa National Park 1996-2007), interview by the author, WWF office, Maputo, 10 April 2013.
[115] Tinley, "Framework of the Gorongosa Ecosystem," 9.

processes over the long-term in a human temporal scale. In the geological time scale, however, it would merely act as a damper to the tempo of inexorable landscape change."[116] Furthermore, he conceived the Gorongosa ecosystem as a "constantly changing kaleidoscope of the physical and living components in different rhythms directed from below by the constraints or opportunities presented by changing edaphic [soil-related] properties" caught in a particular stage in space and time.[117]

In a chapter entitled, "Man," Tinley described the human influence on the Gorongosa ecosystem, beginning with a brief historical outline of regional hunting which he dates to "Bushman times" with added pressure accumulating from the advent of Indian and Arab trade in the 12th -14th Centuries.[118] With the aid of contemporary archeological studies detailing the region's export economy, Tinley asserted

> Up to the time of the proclamation of Gorongosa as a national park the region had since time immemorial been subjected to intensive hunting pressure, particularly of tuskers. It is probable, therefore, that the wildlife populations recorded in the early 1970s, during the period of this study, represent some of the greatest concentrations ever to occur in the recent history of Gorongosa as the 1963-1973 decade saw the best attempt at strict conservation measures.[119]

Gorongosa came to be "teeming with wildlife" in the early 1970s due to a crescendo of human circumstance, including the development of wildlife protection measures. This was not a timeless Eden interrupted by the "encroachment" of African populations but a product of years of human interaction that included hunting as well as agricultural production.

Tinley's recommendations for the park's future rested on "the development of an altruistic symbiosis between the surrounding rural people and the natural area (park, reserve, wilderness area, etc.) by means of benefiting from park products [including wildlife as a food source]."[120] While on the surface his recommendations may appear to perpetuate a false division of humans and nature, which has served to justify "fortress conservation" models and are embodied in academic critiques of "wilderness" spaces, Tinley's intention was to create a viable landscape where these inextricable forces might benefit from one another. He wrote, "The natural areas of the African continent must be seen in their geographical, ecological and cultural context.

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[116] Ibid., 7.
[117] Ibid., 183.
[118] Ibid., 79.
[119] Ibid., 79-80.
[120] Ibid., 177.

Their diversity in each region or locality should be used in accordance with their intrinsic properties for a variety of criteria – from near total protection (e.g., for endemics) to rural hunting areas. In this way natural areas and wildlife will be integrated as part of the whole man-land relationship."[121]

He maintained that human activity was a threat to the Gorongosa ecosystem, but he saw this threat in light of changing access to resources. Tinley contended that the depletion of wildlife around the park by trophy hunters was the main cause for the "present subtle invasion of the park by local tribesmen." Furthermore, "the import of the relatively modern innovations from foreign cultures, of facilities (trading stores), timber extraction, cash crops, roads, railways and safaris has resulted in the depletion of wildlife as a food resource." He argued that every reduction of the park's boundaries to keep humans out of the park only resulted in a "fresh invasion" of African cultivators, safari workers, and timber and cotton companies operating ever deeper into the protected area.[122] He criticized the 1966 reduction of the park's boundaries as a symptom of an increasingly defeatist stance on the part of political and conservationist factions giving in to these pressures.[123] Condemning the acceptance of land hunger as a valid demand for this and further reductions in the park's boundaries, Tinley suggested that huge tracts of uninhabited areas suitable for timber and agricultural production existed all around the park's limits, and that it was in fact a "hunger for protein not land," which had spurred the increasing encroachment of humans into the park boundaries.[124] Rather than protect wildlife as a resource for meat that could be rationally utilized, authorities were prepared to allow these resources to be completely eliminated.[125]

Despite his interest in integrating local interests with park planning, Tinley remained critical of agricultural activity on Mount Gorongosa. The incorporation of the mountain into the park was meant to be the first step in a proposed expansion that would extend the National Park from "mountain to mangroves," reaching all the way to the Indian Ocean. In 1972, Gorongosa elicited significant media attention around this issue and was identified at the time as "another Eden in peril."[126] A *National Geographic* article showcased plans to combat the ecological

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[121] Ibid., 178.
[122] Ibid., 80.
[123] Ibid., 6.
[124] Ibid.
[125] Ibid. I discuss this further in Chapter 2.
[126] Allan C. Fisher, Jr., "Save a Mountain to Save a Park," *National Geographic*, February 1972, 176

pressures of subsistence farming with an expansion in the park's boundaries and the relocation of 16,000 people.[127] The proposal was lauded for its ecological prowess. "It would then be perhaps the only park in Africa that could be called an ecological entity, self-sufficient in water, forage, and space for its wild denizens."[128] In the same article, the Governor General of Mozambique was quoted as saying, "It is a dream – but sometimes dreams come true."

It was not "tribal cultivators" but a brutal armed conflict that had the most dire impact on the Gorongosa ecosystem. For various reasons, very few of Tinley's recommendations were incorporated prior to the region being subsumed first into the war for independence and later into the country's armed conflict.[129] In 1969 Coutadas 1 and 3 were deproclaimed in preparation for incorporation in the national park, however, this plan was not executed during Tinley's time at Gorongosa. At the same time, Coutada 2, which included Mount Gorongosa, was also deproclaimed, and while this would have provided an opportunity to incorporate the area into the park, it was not capitalised upon, likely due to the large human population, which had driven most of the coutada's game into Gorongosa National Park.[130] Although Tinley wrote that the new FRELIMO government prohibited cultivation above 600 meters from the base of Mount Gorongosa, I found no evidence that this was enacted in legislation, and the point soon became moot as the region was subsumed in a devastating armed conflict. In the early 1970s, during Mozambique's liberation struggle, Portuguese troops and the Provincial Volunteer Organisation established a presence at Chitengo, Gorongosa's main camp, where they brazenly hunted game for food or money.[131] This ended with Mozambique gaining independence in 1975, but the calm was short-lived. In 1979, RENAMO, the opposition to the new Mozambican government backed first by neighboring Rhodesia and then South Africa, moved into Gorongosa, locating its headquarters within the present day buffer zone and paying for arms through trade in local ivory, tusks, and animal pelts. This area was overtaken at different points by competing factions, each dependent upon the area's natural resources to maintain power in the region. Although the legal

[127] Ibid.
[128] Ibid.
[129] Armando Rosinha, "Alguns Dados Históricos," 232-236.
[130] *Relatorio de Commisão de Estudos das Coutadas* [Report by the Commission for the Study of the Coutadas], c. 1967, in "Fauna" files (probably belonged to Armando Rosinha), Library of the Veterinary Faculty, Eduardo Mondlane University (UEM), Maputo.
[131] Rosinha, "Alguns Dados Históricos," 237.

boundaries of the Park and surrounding coutadas became ambiguous during this period, local people continued to inhabit and rely on this territory in various capacities.

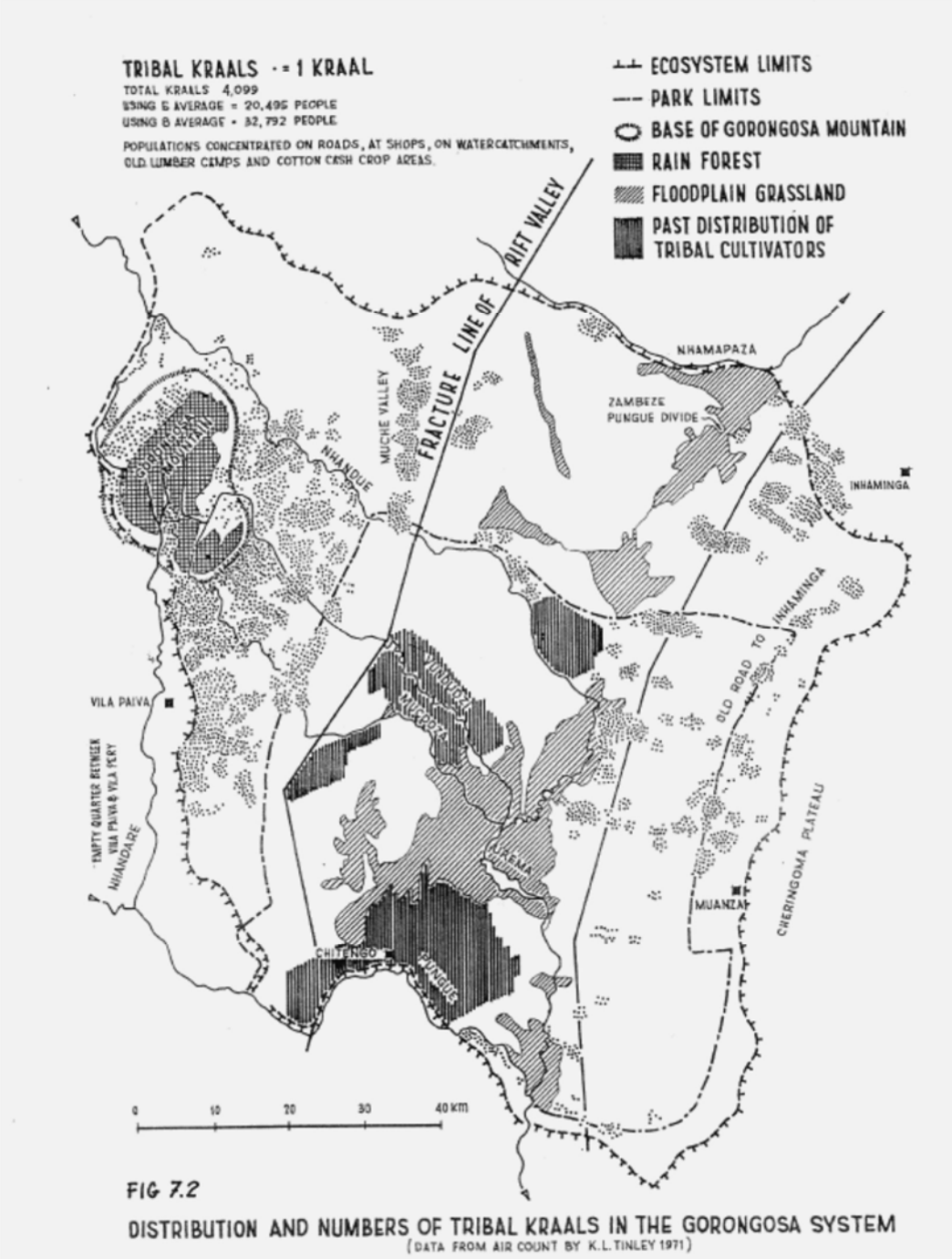

Figure 11. *Distribution and Numbers of Tribal Kraals in the Gorongosa System,* (Data from 1971), K. L. Tinley. From K. L. Tinley, "Framework of the Gorongosa Ecosystem" (PhD Thesis, University of Pretoria, 1977).

From 1994, in the aftermath of the armed conflict, former park employees began attempts to restore GNP. However, it was not until ten years later that American philanthropist Greg Carr accelerated this prospect with a substantial injection of capital. In recent years, fears have resurfaced about the fate of Mount Gorongosa, and in July 2010, the top of the mountain was legally incorporated into the Park.[132] At the same time, former Coutadas 1 and 3 were finally drawn into Gorongosa's expansive buffer zone, a "sustainable development" area over which the Park's management has considerable influence. These revised boundaries have sparked debates surrounding the future of this landscape and what or who belongs in it.[133]

Defining Maputaland: Endemism and (Re)Becoming Transnational

Before describing the ways in which Maputaland has been delineated geographically, it seems prudent to first illuminate some of the problems with naming the region at all. The South African portion of this area has at various stages been referred to as North-Eastern Zululand, Tongaland, Makatini, Maputaland, and Makhasani. In *Studies on the Ecology of Maputaland,* Bruton and Cooper, South African scientists and proponents of the area's protection, gave a lengthy explanation of the origin of the name, linking it to the Maputa river, which was named after the amaTonga chief Mabudu.[134] Prior to 1980, Tongaland was more commonly used to identify the part of this region on the South African side of the border, considered by some to be the "least derogatory, least politically sensitive, and the least inaccurate of the alternatives."[135] The name came from the word Thonga, ascribed to the Shangane-Ndau-Karanga people living in the region. Although the people living in the region sometime still refer to themselves as Tembe-Thonga, the word Thonga is used derogatorily by local Zulus. "Maputaland" is not without its own pitfalls as "a 'puta' in the Portuguese language is a prostitute (hence land of)…In Zulu 'iputa' is a mistake (hence land of)."[136] Nonetheless it was the name the KwaZulu Government requested to be used in the late 1970s to describe the Ingwavuma and Ubombo districts of north-eastern KwaZulu, and it is presently the most commonly used name for the area encompassing

[132] Decreto 78/2010, 31 December 2010, *Boletim da República*, I Série, No. 52, 322-323.
[133] I will discuss these further in Chapter 4.
[134] M. N. Bruton and K. H. Cooper, eds. *Studies on the Ecology of Maputaland* (Grahamstown: Rhodes University, 1980), 533.
[135] K. L. Tinley and W. F. van Riet, *Tongaland: Zonal Ecology and Rural Land Use Proposals*, Unpublished report for the Department of Co-operation and Development, 1981, 6. NLSA, Pretoria.
[136] Ibid.

the southern part of Mozambique and northern KwaZulu Natal in conservation and environmental circles.[137] For those reasons, I use "Maputaland" to refer to this region (except in reference to historical material that uses another name). This is not meant to disregard alternative options that might more accurately reflect the desires of people living in this region but rather to minimize confusion for the reader.[138]

In the multiple iterations of demands for Maputaland's protection, the role of humans in this area, perceived as a remote wilderness by many white South Africans living far away from it, played a critical role in imaging how the area should be managed. While some sought to curtail certain forms of resource use, others have seen the region as a possible exemplar of effectively integrating ecological processes with human needs. Whereas this area was initially of ecological interest primarily south of the border, a broader understanding of the human and non-human ecology has, more recently, led to the transnational understanding of this area as an ecological entity straddling South Africa and Mozambique. In this section I explore how conceptions of Maputaland, and its borders, shifted throughout the twentieth century, finally resulting in the proclamation of a transfrontier conservation area (TFCA) in 2000.

Austin Roberts (the namesake of *Roberts Birds Guide,* perhaps southern Africa's most celebrated birding resource) provided the first ecological description of the region based on surveys undertaken between 1928 and 1933.[139] His exploration included the whole of the former Ubombo and Ingwavuma magisterial districts, surpassing the present-day Maputaland boundaries on the South African side.[140] Although describing the landscape as "patchily interesting," he exuded enthusiasm for the region's potential interest to naturalists and tourists.[141] In the introduction to his survey of specimens collected in the region, he wrote, "It seems a pity that

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[137] Bruton and Cooper, *Studies on the Ecology of Maputaland.*
[138] For example, Tinley and van Riet report that Chief Tembe of the region would prefer the area to be called Makhasani. Tinley and van Riet, *Tongaland,* 6. For a history of the Mbudu-Tembe people see Roelof Kloppers, "The History and Representation of the History of the Mabudu-Tembe" (MA, University of Stellenbosch, 2003).
[139] Wayne Sidney Matthews, "Contributions to the Ecology of Maputaland, Southern Africa, with Emphasis on Sand Forest" (PhD, University of Pretoria, 2005), 2. See Austin Roberts, "Report Upon a Survey of the Higher Vertebrates of North-Eastern Zululand: Under Union Research Grants, and on Behalf of the Transvaal Museum, During October, November, and December, 1928 and 1929, and July, August, and September, 1933," *Annals of the Transvaal Museum* 18, 163-251.
[140] Roberts, "Report Upon a Survey of Higher Vertebrates," 165-166. This included part of the district of Piet Retief "given by a Swazi king to the Transvaal Republic, to form a buffer between his people and the hostile Zulus!"
[141] Ibid., 168.

such an attractive part of South Africa should have received so little attention and be unknown and unexploited."[142] In addition to listing a variety of species found in the region, many found nowhere else in the country, Roberts's survey expressed heavy concern for damage being done to the region's forests and animal life by the "native" populations, and to a lesser extent by European hunters, calling for the Native Affairs Department to tighten its regulations in these districts. He wrote, "Natives would certainly benefit far more by a policy of development of the land under cultivation and protection of the flora and fauna for the attraction of tourists than by the present reckless pursuit of the way of their forefathers."[143] Though distinctly racist, his vision for nature tourism did not preclude aligned agricultural development for the benefit of the local population.

Eleven years after the publication of Roberts's survey, the Natal Society for the Preservation of Wild Life (SPWL), a key lobbying group in ending the nagana campaign, played a critical role in expanding interest in the Maputaland region. On July 7th, 1947, the organization led an expedition into the remote region it called Tongaland, an area described by an accompanying journalist as "a half-way house between tropical and sub-tropical Africa, a land of beauty and mystery, a land whose very inaccessibility has earned it the description of a paradise half-lost."[144] Comprised of SPWL personnel, scientists, a member of the National Parks Board of Trustees, three press representatives, an employee of British Paramount Films, and two students specially selected by the headmaster of the esteemed Hilton College secondary school, the members of the expedition set off northwards from Durban to collect scientific information on this little-known part of the country with the ultimate aim of assessing the suitability of the area as a nature reserve.[145]

The media publications that emerged from this "expedition" put the region on the map, so to speak, highlighting its unique features, including Ndumo Game Reserve, and revealing debates over the potential creation of a larger protected area. Journalist Austin Ferraz accompanied the expedition and wrote in his article for *The Outspan*, that its members had to assess whether the area "was suitable not only as a wild life sanctuary but also as a national park, a 'park' because of its unique beauty, its wonderful vegetation, its hippos, its crocodiles, its 23 fresh water pans and

[142] Ibid., 170.
[143] Ibid.
[144] Ferraz, "Probing the Mysteries of Tongaland," D74/072-079. KCAL.
[145] "Tongaland Expedition," D74. KCAL.

its great lakes – Kosi and Sibayi – and last, but not least its tropical swamp forests, including the forest of giant raffia palms, one of the highlights of the trip."[146] The team made various discoveries with regard to the region's archeological and natural heritage. Amongst its diverse vegetation, several new species of plants were discovered, and more than 165 bird species were observed.[147] Cycads, among the earliest type of vegetation, were discovered in the swamp forests around Kosi Bay, and fossils of human activity were unearthed in Ndumo.[148] Present-day human activity was captured in great detail with rich descriptions of the lala palm wine industry and the fish kraals that have since become the quintessential image of Kosi Bay. Alex Hammond, for example, wrote of his impressions in an article published in *Spotlight*.

> It is the fishing and wine-making that is the most interesting to the visitor. Fish of all types teem in the Estuary of Kosi Bay and are trapped in kraals. The Natives build a maze of these fences across the shallow waters, each circling into a basket. When the tide goes out the fish strike the walls of the kraal and, in endeavouring to escape, swim into the large baskets, where they are collected. To prevent the theft of fish the Natives often place poisoned thorns near the ends of the traps. At one stage it was feared that Kosi Bay would silt up if these kraals were not removed. Now the fishing is controlled by the police and the Natives are forced by law to leave a 30-foot channel through the kraals. This has proved beneficial in that the number of fish entering the estuary has been increased so obviously that Native opposition has ceased.[149]

Films from the expedition were shown to packed houses, and when a 1948 expedition was announced, applications to participate flooded in.[150] Further expeditions produced even more scientific finds, and garnered reports and specimens of the region's flora as well as its fish, insects, and birdlife.[151] In addition, these trips provided a basis for proposals regarding the economic development of the region. Considered "not climatically suited to settlement by Europeans," it was suggested that Tongaland's economic development should be primarily focused on bettering "native agriculture" towards the improvement of nutrition and living standards. [152] Secondly, it was suggested that a cash crop industry should develop so that the

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[146] Ferraz, "Mysteries of Tongaland," 23. D74/074. KCAL.
[147] Ibid, D74/075-077.
[148] Ibid, D74/076.
[149] Alex G. Hammond, "Natal's 'Lost World,'' *Spotlight*, 29 August 1947. D74/101. "Tongaland Expedition." KCAL.
[150] "Oh! These Early Expeditions," *African Wildlife* 30, no. 5 (1976): 46.
[151] *Bulletin of the Natal Society for the Preservation of Wild Life and Natural Resorts*, 1948-49. MML.
[152] J.S. Beard, "The Economic Possibilities of Tongaland," *Bulletin of the Natal Society for the Preservation of Wild Life and Natural Resorts*, Aug & Sept. 1948, 3.

region "will become productive and contribute to the whole South African economy, instead of being a self-contained back water."[153]

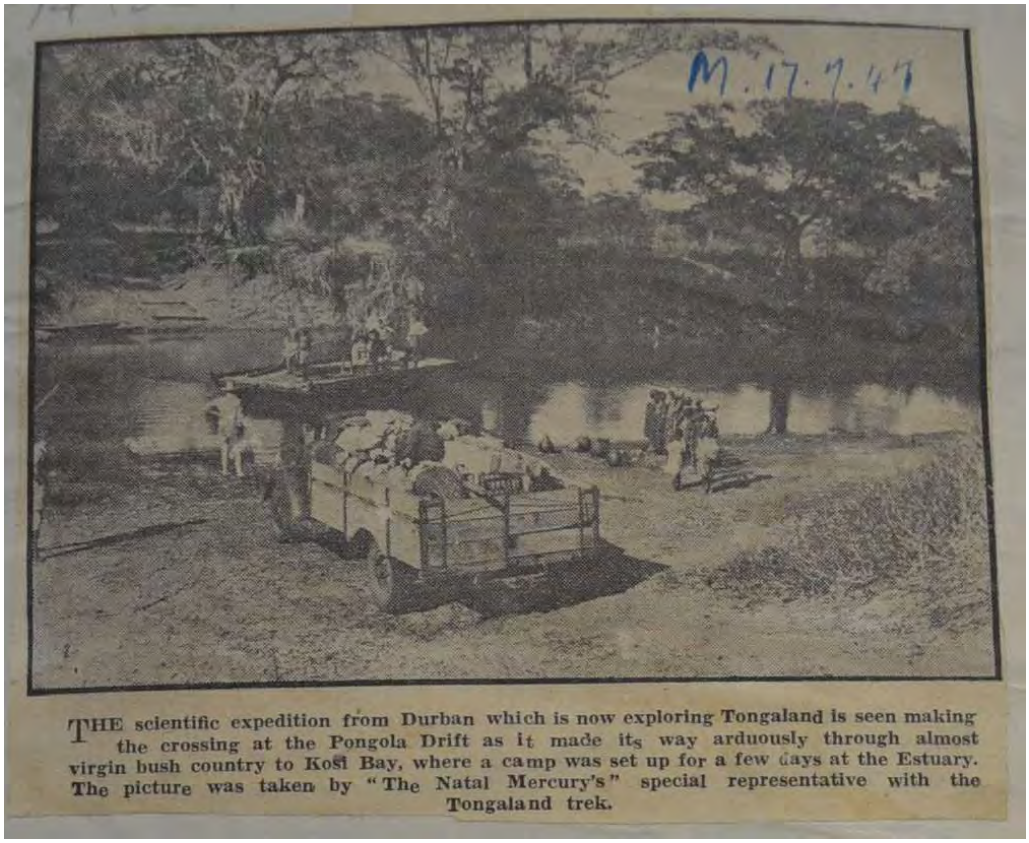

Figure 12. "On the Way to Kosi Bay," *Natal Mercury*, 17 July 1947. D74/087. Killie Campbell Africana Library.

On the eve of their return home, members of the 1947 Tongaland Expedition resolved that the Society should not advocate for Tongaland to be declared either a nature reserve or a national park.[154] As the area was wholly under the control of Native Trust Lands[155] and its population numbered 30,000, it was deemed impractical to push for population removals. The region's poor roads, high malarial risk, and the discovery that the soil would not be suitable for selected agriculture or timber cultivation further swayed consensus away from any form of total

[153] Ibid.
[154] *Bulletin of the Natal Society for the Preservation of Wild Life and Natural Resorts*, August 1947, 1.
[155] This was state-owned land designated for occupation by black South Africans. Christina Murray and Richard Stacey, "Tagging the Bill, Gagging the Provinces: The Communal Land Rights Act in Parliament," in *Land, Power, & Custom: Controversies Generated by South Africa's Communal Land Rights Act*, eds. Aninka Claassens and Ben Cousins (Cape Town: UCT Press, 2008), 81.

protection.[156] The Society did suggest, however, that areas within 400 yards of Kosi Bay, Lake Sibaya, and some of the region's large pans should be proclaimed protected areas. Furthermore, they called for Kosi Bay's Giant Palms, the only ones in existence outside of Madagascar, and the swamp forests at the head of Kosi Lake, believed to be unique in South Africa, to be declared a National Monument, as they had already suffered damage by fire and vandalism.[157] The Sihangwana (later spelled Sihangwane) area, hosting the deepest concentration of game in the region, although already monitored by the Natal Parks Board's Tongaland Game Ranger, was thought to be a suitable location for a future reserve. Though recognizing the limitations of declaring the whole of Tongaland a reserve, the society suggested, "with vigorous control and preservation there appears to be no reason whatsoever why Tongaland should not become a natural, if not proclaimed Reserve, that would operate for the benefit of its native population, together with the citizens of other races."[158] Although the decision was made not to declare the entire region a protected area, 50 acres of Native Reserve at Kosi Bay was granted to the Natal Provincial Administration as a result of the Tongaland Expedition.[159] In 1950, the Kosi Bay Nature Reserve was proclaimed with P.R. Eglington appointed as its first ranger.[160] Two years later a coastal forest reserve was proclaimed along Maputaland's coast.[161]

In his 1964 book *Men, Rivers, and Canoes*, Ian Player made another plea for greater nature protection in Maputaland, and in the same year Maputaland came into the limelight again with news of research and protection efforts for the sea turtles nesting on its coast.[162] However, it was not until the South African government's KwaZulu land consolidation plans were published in 1972, that fervor around the conservation of natural resources in the region was reignited. As part of the Bantustan policy, the apartheid government aimed to section off parts of Natal as a KwaZulu homeland. Chief M. Buthelezi, Chief Executive Councillor of KwaZulu responded to specific concerns regarding the future of Ndumo Game Reserve in an article in *African Wildlife.*

> Of course we are going to keep Ndumu as a game reserve. Ndumu is one of the very few assets impoverished Kwa-Zulu will have, and we will cling to one of the few things we have of value…I take this whole idea of the future of Ndumu

[156] Ferraz, "Mysteries of Tongaland," D74/079.
[157] *Bulletin of the Natal Society for the Preservation of Wild Life and Natural Resorts*, August 1947, 1.
[158] Ibid.
[159] "Natal Granted Fifty Acres by Tongas at Kosi Bay," *Natal Mercury*, 16 July 1947. D74/092. "Tongaland Expedition." KCAL.
[160] Kosi Bay Ranger's Reports. EKZNW Archive.
[161] M. N. Bruton, et al. "A Brief History of Human Involvement in Maputaland," in M. N. Bruton and K. H. Cooper, eds. *Studies on the Ecology of Maputaland* (Grahamstown: Rhodes University, 1980), 452.
[162] This is discussed in Chapter 3.

as a challenge to me as a Black man, and to my government as a Black government…People tend to forget that my ancestors did have sanctuaries for wild animals. The greatest damage done to wildlife was by the white man with the gun. However I will admit that today our people do not have the opportunity to see wildlife, and this is something we need inculcate anew.[163]

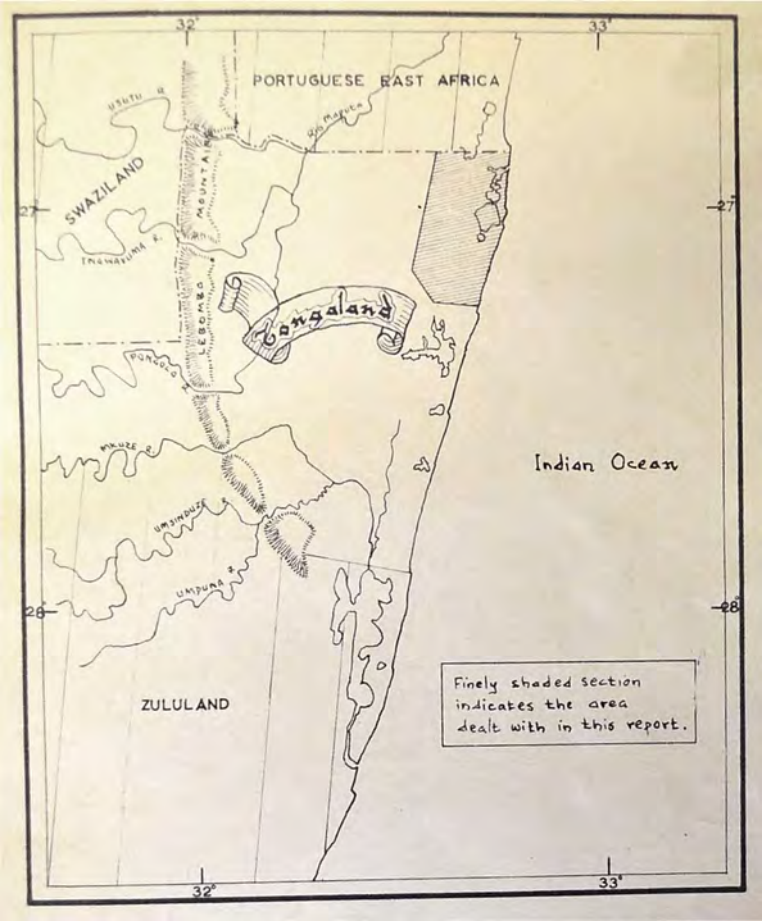

Figure 13. *Tongaland*, Ken Tinley, 1958. From Tinley's 1958 report on the Ecology of the Kosi Lake System. "Ken Tinley" file. Ezemvelo KZN Wildlife Archive.

On the following pages, a call for Tongaland's increased protection was supported by statements from South Africa's contribution to the International Biological Programme, an effort to compile ecological studies from around the world, as well as by ecologist Ken Tinley, who had recently written a report entitled, "Tongaland – the Ecology of Land Use," which included a proposal for a national park.[164] In his plan, Tinley was careful not to ignore the needs of the

[163] "What is Going to Happen to Ndumu?" *African Wildlife* 27, no.4 (1973): 155.
[164] *African Wildlife* 27, no. 4 (1973): 156-160.

Tonga people living in the region, suggesting that the national park only "take up the minimum of substrates [surface area on which flora or fauna live] useful to man."[165] Nonetheless, with increasing pressure from a growing human population, he believed the increased protection of this region necessary as it was the only place in South Africa with tropical flood plains, the most important turtle nesting grounds on the east coast of Africa, tropical dry forest, and a potential habitat for the dugong (a mantatee-like marine mammal), at the time only resident further up the coast in Mozambique's bays and estuaries.[166]

The following year, James Clarke of Johannesburg's daily *The Star*, published an article proposing that South Africa and its neighbors capitalize on the growing tourism industry in the region by linking protected areas across international boundaries. He suggested that joining reserves such as Gorongosa National Park in central Mozambique with South Africa's Kruger National Park and Rhodesia's Gona-Re-Zhou, and the Maputo Special Reserve with KwaZulu's Ndumo would provide unrivalled tourism opportunities. This idea was circulated in periodicals based out of Portugal and Mozambique, which lauded the possibility of involvement in "the largest reserve in the world," which, if executed as Clarke proposed, could reach up to 100,000 km^2, an area larger than the Portuguese metropole.[167] This was not the first discussion of cross-border protection. Almost immediately after Kruger was proclaimed in 1926, Portugal, South Africa, and Rhodesia debated the possibility of expanding protected areas across the park's and South Africa's borders.[168] Spierenburg and Mahvunga have suggested those early plans were impeded by competing ideas about the most lucrative form of land use, as well as by veterinary disease concerns. While similar conflicts may have been in play in 1973, the commencement of two armed conflicts, one in Mozambique and one in Rhodesia, would have certainly halted any agreement that might have been achieved. Nonetheless, the 1973 renewal of the 1926 transboundary concept may have ignited the interest of some of the key figures involved in advancing the agenda 25 years later.

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[165] Ibid., 160.
[166] Ibid.
[167] "Organiza-se a maior Reserva do Mundo? [Is the greatest reserve in the world being organized?]" *Permanência* 3, no. 33 (February 1973): 26-27 and "Protecção da Fauna Selvagem Significa (Também) Preparar o Futuro [Protection of Wildlife Means (Also) Preparing for the Future]," *Tempo* 146 (1 July 1973): 24-25.
[168] Clapperton Mavhunga and Marja Spierenburg, "Transfrontier Talk, Cordon Politics: The Early History of the Great Limpopo Transfrontier Park in Southern Africa, 1925-1940," *Journal of Southern African Studies* 35, no.3 (2009): 715-735.

Figure 14. *Map of Proposed Protected Area Expansions,* From James Clarke's article in *The Star*, 1973. Reprinted in "Protecção da Fauna Selvagem Significa (Também) Preparar o Futuro [Protecting Wildlife Means (Also) Preparing for the Future]," *Tempo* 146, 1 July 1973.

In 1975, KwaZulu's director of Agriculture and Forestry signed a memorandum outlining the structure of the new KwaZulu Nature Conservation Division, which would take over conservation responsibilities from the Natal Parks Board in KwaZulu areas.[169] This included a proposal for a Tongaland Reserve, which would stretch along the border of the newly independent Mozambican state and would include Ndumo Game Reserve, the Sihangwane Forest, Kosi Bay, and Lake Sibaya.[170] The following year the Natal branch of the Wildlife Society of Southern Africa (formerly the Society for the Preservation of Wild Life) organized a workshop in Durban on the ecology of Tongaland with the aim of making research undertaken in

[169] "Dreams of the Past to Come True – Exciting plans to proclaim new nature reserve," *Natal Wildlife*, April 1975, 4. Johannesburg Public Library (JPL).
[170] Ibid.

this region available to the KwaZulu government.[171] In 1978, the KwaZulu government commissioned a preliminary development plan, which called for a national park in Maputaland.[172] In 1980, the papers presented at the Tongaland workshop were published alongside a number of other contributions in an edited volume on the region's ecology meant to act as a complementary text to the new development plan.[173] The authors defined Maputaland as "that part of northeastern Zululand bounded in the north by the Mozambique border, in the east by the Indian Ocean, in the south by the St. Lucia estuary and in the west by the western scarp of the Lebombo mountains and a line connecting the southern end of the Lebombo mountains to St. Lucia estuary."[174]

In a chapter on the conservation of the region, the volume's co-editor and an expert on fish biology, M. N. Bruton, expressed regret that the Tongaland Expedition had advised against the establishment of a national park in Maputaland, noting the lack of agricultural development in the region and only moderate timber development.[175] In the 33 years since that expedition, the population of the Ingwavuma and Ubombo districts had grown to 148,453, and the author suggested that, had a greater emphasis been placed on conservation outside of the reserve, the whole economy of the region would be better situated.[176] In developing a plan for greater protection for the region, including the creation of a national park, Bruton wrote in 1980 that "[t]he preservation of a wilderness atmosphere for its own sake is clearly not an economic proposition, but it should be borne in mind that the present and potential natural productivity and diversity of Maputaland would be the main working capital on which a natural resource-based economy and tourist industry would be established. There is no doubt that this working capital will be competitive on the international market."[177] He therefore imagined a land use plan that would utilize the natural, leisure, and economic value of this region for the benefit of its human population and the world population. His rationale for a national park included the high diversity of ecosystems in the region, the unusual diversity of flora and fauna for the size of the area, the compatibility of recreational activities with indigenous ways of life (as opposed to large scale agriculture), the increasing demand of recreational activities from black and white tourists, and

[171] The studies were published in the same year the society published Tinley's ecological studies on the region, which had been made 18 years prior.
[172] E. Thorrington-Smith, M. Rosenberg, and L. McCrystal, Towards a Plan for KwaZulu: A Preliminary Development Plan 1. Ulundi, Kwazulu Government. 1978. EKZNW Library.
[173] Bruton and Cooper, *Studies on the Ecology of Maputaland*.
[174] "Gazetteer of localities in Maputaland," in Bruton and Cooper, *Studies on the Ecology of Maputaland.*
[175] Ibid., 511.
[176] Ibid., 508 and 511.
[177] Ibid., 526.

the "international prestige" that such a park would bring to the people of KwaZulu.[178] Noting that the park's exact boundaries could only be decided by the KwaZulu people, Bruton suggested a muli-use L-shaped area hugging the Mozambican border and the coast, with differently classified areas which would allow for the protection of the most "valuable and/or vulnerable" places and the sustainable development of areas with more potential for agricultural, silvacultural, game farming, or tourist productivity.[179] In the book's concluding discussion, the editors posited the following:

> The outlook for Maputaland is good. In the nick of time the value and importance of this fascinating part of South Africa has been appreciated. We are confident that the application of modern development policies which integrate conservation and development, and whose pace is determined by the intrinsic strengths and weaknesses of the area concerned, will result in Maputaland being transformed from a microcosm of Africa's problems into a showpiece of Africa's solutions.[180]

The accompanying development plan was written by Ken Tinley and Willem van Riet, a landscape architect who would go on to become CEO of the Peace Parks Foundation.[181] They determined the Tongaland region to be an area of around 8,000 km^2 "bounded by and including the Lebombo Range on its western inland margin, the Indian Ocean on the east, the Moçambique border in the north and the Lake St. Lucia drainage in the south."[182] It is comprised of six ecological zones: the Lebombo Range, the Pongolo Zone, the Sand Forest Zone, the Mozi Palm Zone, the Coastal Lake Zone, and the Coast zone.[183] As with the Greater Gorongosa Ecosystem, Tinley used the metaphor of a kaleidoscope to describe the region's complex natural systems.[184] In line with emerging global discourse around sustainable use and the need to align conservation and development objectives, the authors described the "single outstanding failure" in Africa as the "almost complete lack of dialogue with people for whom the developments are intended."[185] The authors argued that this failure had supported a preservationist imperative that had failed in developing the region's economy. They therefore suggested the re-instatement of natural resource areas, aligned with the identified ecological zones, where the specific resources of each zone

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[178] Ibid., 516-518.
[179] Ibid., 519.
[180] Ibid., 532.
[181] Tinley and van Riet, *Tongaland*.
[182] Ibid., 3.
[183] Ibid. 11.
[184] Ibid., 12.
[185] Ibid., 17. See also Megan Sumner Curry, "Integrated Conservation-Development: An Analysis of Policy and Practice in Northern Maputaland" (MA, University of Natal, 2001). I discuss the emergence of sustainable development discourse and practice in Chapter 2.

could be utilized for the benefit of the people living in them, echoing Bruton's description of multi-use zones.[186]

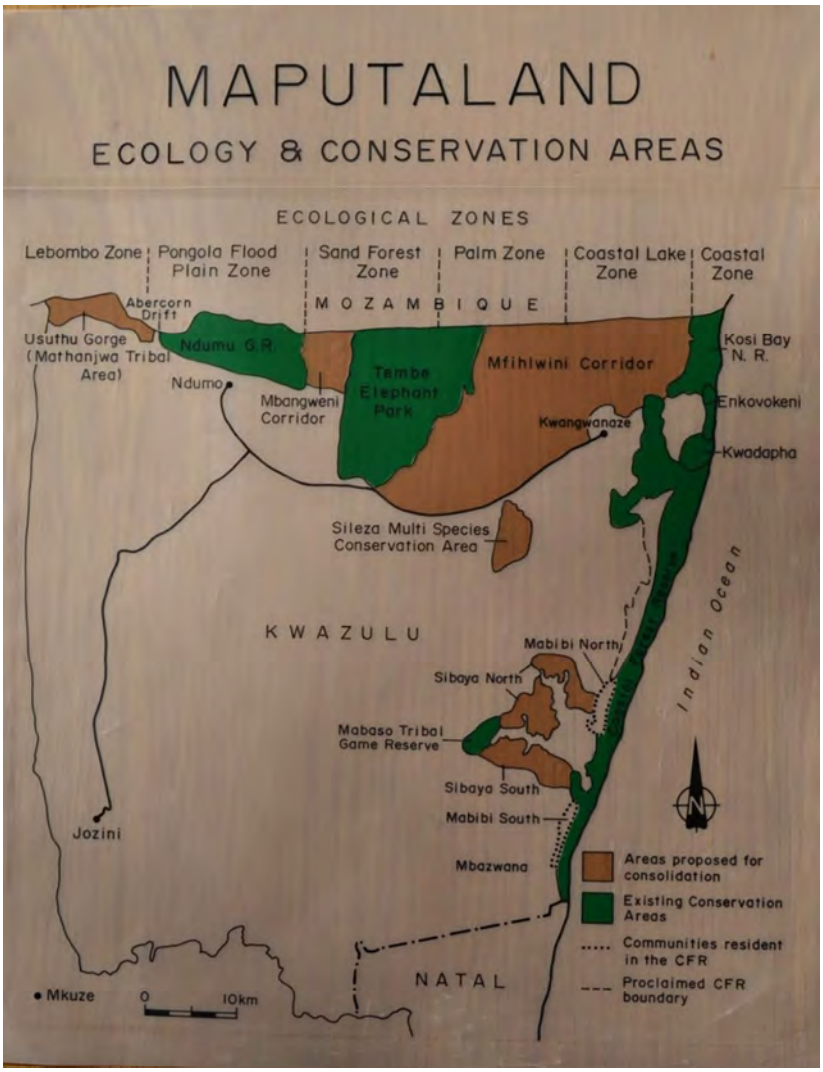

Figure 15. *Maputaland Ecology and Conservation Areas,* Undated, circa 1984. Ndumo Game Reserve Archive.

In addition to outlining the effective uses of the resources of Maputaland's ecological zones, Tinley and van Riet proposed boundaries for the Tembe Elephant Reserve, which would be established in the Sihangwane Forest to protect the only elephant "survivors" in Natal and KwaZulu.[187] These last wild elephants belonged to the same breeding population as those of the

[186] Tinley and van Riet, *Tongaland*, 31.
[187] Ibid., 120.

Maputo Elephant Reserve, from which there had been a recent large influx due to illegal poaching on the Mozambican side of the border as a result of the escalating armed conflict between FRELIMO and RENAMO. It was suggested that the reserve be linked to Ndumo as a means of consolidating a "single game production resources area," and that Ndumo be enlarged to include the Madlankhute Pan on the Pongolo River. This area was south of Ndumo's boundary, and Tinley recalled this area as "a longtime favorite" of elephants from his days as a ranger in Ndumo and noted that it is "relatively sparsely inhabited."[188] Rather than erect fencing or barriers, it was suggested that roadways should be used to demarcate boundary lines, which elephants would learn to identify by the harassment they met once crossing the line.[189] Tinley and van Riet referred to this elephant population as the "Sihangwane elephant resource" contending that it must be made clear to local people that this elephant reserve was "to be developed as *their* game resource area (i.e. not for the whites, or government or Natal Parks Board) primarily for protein production and its by-products which would initiate a whole series of cottage industries along its periphery."[190]

The first boundary discussions with Chief Tembe began in 1979, but it was not until Ed Ostrosky, who would become the reserve's first Officer-in-Charge, arrived in July 1982 that boundary negotiations proceeded with haste.[191] Ostrosky was given authority by the acting Director of the KwaZulu Bureau of Natural Resources (KBNR) to create the boundaries as recommended by Tinley and van Riet and Walther Klingelhoeffer, an Honors student at the University of Pretoria selected to carry out a survey of the elephant population in the late 1970s by Clive Walker, head of the Endangered Wildlife Trust.[192] Although the intention was to eventually link Ndumo and Tembe, it became clear that the Tembe Tribal Authority would not allow the Mbangweni area, located between Ndumo and the Sinhangwane Forest, to be part of the reserve at that stage.[193] At a gathering on 29 October, 1982, Ostrosky told the chief, *indunas* (tribal councilors) and headmen present that the reserve as suggested by Klingelhoeffer proposed the smallest viable area and took them to visit accessible points on the boundary line. One of the

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[188] Ibid.
[189] Ibid., 121.
[190] Ibid.
[191] E. Ostrosky, "Tembe Elephant Reserve: Past & Present Status, Summary of Past Boundary Agreements," letter to the Director of the KwZulu Bureau of Natural Resources. Undated, c. 1983. E. Ostrosky personal archive.
[192] Ibid. and Clive Walker, "Emerging from the shadows – Elephants of KwaZulu Natal," *Africa Geographic*, October 2012.
[193] Ostrosky, "Tembe Elephant Reserve," 2.

indunas suggested that the area southeast of point C, visited by the delegation, should be omitted from the reserve to allow for extra grazing in the dry season (see Figure 16). With this change made, the Tembe Tribal Authority accepted the boundaries of the reserve, and on the 1st of December, Ostrosky received the formal acceptance of the application for the Tembe Elephant Game Reserve, which included compensation for any people that would be moved out of the agreed boundaries and a provision permitting continued access to water and thatching grass and reeds from inside the reserve.[194] The resulting area comprised approximately 320 km^2, with the hope that the area would be expanded in the future to link to the Ndumo Game Reserve, as access to travel between the Pongola floodplain and Muzi swamp was seen as essential to prevent damage to Sihangwane's rare sand forest.[195]

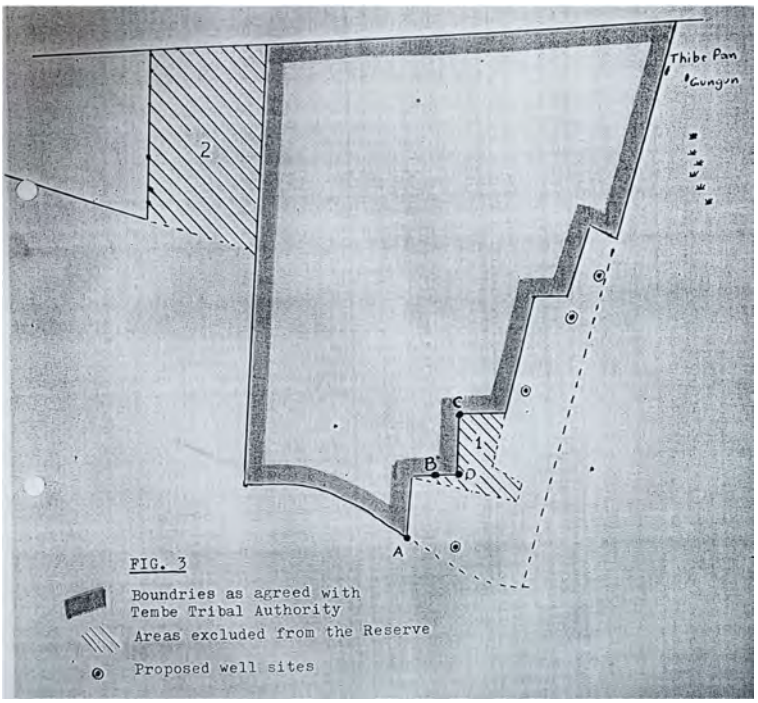

Figure 16. *Boundaries of Tembe Elephant Park agreed with the Tembe Tribal Authority*, From E. W. Ostrosky, "Tembe Elephant Reserve: Past and Present Status," letter to the Director of the Bureau of Natural Resources, undated, c. 1983. E. Ostroksy personal archive.

Upon agreement of the boundaries, Chief Tembe asked Ostrosky to begin fencing as soon as possible to prevent further conflict between the elephants and the local population. Tinley and

[194] Letter from the Tembe Tribal Authority to the Regional Nature Conservation Officer, Sinhangwane Camp, 1 December 1982. E. Ostroksy personal archive.
[195] Ostrosky, "Tembe Elephant Reserve," 5.

van Riet had suggested that the boundary lines "must naturally be applied with sensitivity, i.e. *go round* existing Sand Forest, homes and fields instead of through the middle of them."[196] Once fencing of the reserve began, this is precisely what happened and why the eastern boundary is not represented by a straight line.[197] By February 1983, fencing of the eastern boundary had begun, even though the Tembe Elephant Park was not officially proclaimed until 21 October that year.[198] Later the western and southern sides of the reserve were fenced. Finally, in 1989, due to increased poaching across the border as a result of the escalated armed conflict and decreasing numbers of elephants entering the Tembe Elephant Reserve, an electric fence was erected along the international border.[199] It is estimated that in 1988 alone, around 10 percent of the Tembe elephant population was lost to poaching in southern Mozambique, and 25 percent of bulls showed signs of snare damage.[200]

Also in 1988, management of the Ndumo Game Reserve and Kosi Bay Nature Reserve was finally transferred to KBNR from the NPB as part of KwaZulu's land consolidation.[201] Two years later, the whole of Maputaland was showcased once again as a potential site of simultaneous protection of natural resources and management of sustainable access to them.[202] In his book *Paradise Under Pressure,* Alan Mountain, a writer and photographer of South Africa's heritage, wrote, "Maputaland represents a microcosm of the great dilemma that faces the new Africa. It has one of the most interesting, valuable and diverse biotas in southern Africa. But this natural heritage is subject to unprecedented pressures from a rapidly growing population and consequent reduction in available resources…."[203] In the foreword to Mountain's book, Chief Minister of KwaZulu, Mangosuthu Buthelezi, described Maputaland as "an inhabited wilderness" and "one place where it may still be possible to achieve a sustainable relationship between the environment and the people who live in it."[204] As a region "relatively 'unspoilt'" due to the challenges of climate and disease, Maputaland was presented as a potential beacon for merging

[196] Tinley and van Riet, *Tongaland*, 120.
[197] Ed Ostrosky, interview by the author, Howick, KZN, 30 August 2013.
[198] Ostrosky, "Tembe Elephant Reserve," 4 and Mountain, *Paradise Under Pressure*, 43.
[199] Ed Ostrosky, interview by the author, Midmar, KZN, 24 April 2013.
[200] Memorandum: Tembe Elephant. From CCM(N) to Executive Management Committee. 22 June 1999. KZN Nature Conservation Service. "Tembe/Ndumo Complex" file. EKZNW Archive.
[201] Mountain, *Paradise Under Pressure*, 40 and Tony Pooley and Ian Player, *KwaZulu/Natal Wildlife Destinations* (Southern Book Publishers, 1995), 218.
[202] Mountain, *Paradise Under Pressure.*
[203] Ibid., 3.
[204] Ibid., Foreword

conservation with sustainable development.[205] Mountain argued that the creation of reserves like Ndumo and Tembe, proclaimed to protect unique species or ecosystems, created "islands of pristine natural beauty being surrounded by a sea of increasingly hostile abject poverty and rural degradation."[206] Heeding the calls of Tinley, van Riet, Bruton, and Cooper to develop Maputaland as a multiple use management area therefore represented the "high road" to merging a conservation and development agenda, albeit with the caveat of a simultaneous reduction in population growth.[207]

In 1992, Mozambique's armed conflict officially ended with the signing of the Rome Peace Accord, and two years later both Mozambique and South Africa held their first democratic elections. The same year, the Maputaland Centre was demarcated by the International Union for the Conservation of Nature (IUCN) as a Centre of Plant Endemism. This not only revived scientific interest in the region, but reconfigured it as an area extending across the international boundary. Professor Abraham van Wyk of the University of Pretoria provided the research that led to this area's recognition and defined its boundaries.[208] These are the parts of southern Mozambique and northeastern KwaZulu Natal bounded biogeographically on the east by the Indian Ocean, on the west by the Lebombo Mountains, the St. Lucia Estuary in the south, and on the north by the Inkomati and Limpopo Rivers.[209] Although singled out for its endemic plant species, this region has become known for its high biodiversity and endemism across its floral and faunal populations.[210] It was recently incorporated into the Maputaland-Pondoland-Albany Hotspot, one of only 36 conservation areas designated globally for its high biodiversity.[211]

In 1995, the Global Environment Facility (GEF), a grant-funding body of the World Bank developed a Transfrontier Conservation Areas and Institution Strengthening Project for Mozambique, which included a proposed Maputo Transfrontier Conservation Area.[212] This idea had been resurrected in 1990 when Anton Rupert, one of South Africa's wealthiest businessmen

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[205] Ibid., 5.
[206] Ibid., 114-115.
[207] Ibid., 124-125.
[208] Matthews, "Contributions to the Ecology of Maputaland," 2.
[209] Ibid.
[210] Ibid.
[211] Ibid., 3.
[212] This was published in 1996. World Bank. *Mozambique - Transfrontier Conservation Areas Pilot and Institutional Strengthening Project*. World Development Sources, WDS 1996. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/1996/12/695082/mozambique-transfrontier-conservation-areas-pilot-institutional-strengthening-project

and now president of the South African Nature Foundation, met with Mozambique's President Joaquim Chissano to discuss the possibility of linking Kruger National Park with protected areas across the border. The South African Nature Foundation (which would become WWF-South Africa) commissioned a feasibility study by none other than Ken Tinley and Willem van Riet. On the back of that report, the Mozambican government requested the GEF's assistance.

The original notion of a transfrontier park evolved into that of a transfrontier conservation area (TFCA), and the Peace Parks Foundation, which would go on to champion the concept throughout southern Africa, was born.[213] TFCAs are defined by the World Bank as "relatively large areas, which straddle frontiers between two or more countries and cover large scale natural systems encompassing one or more protected areas. These are areas where human and animal populations have traditionally migrated across or straddled political boundaries."[214] These represent an attempt to "harmonize conservation of important ecosystems with the social and economic needs of local people."[215] The following was an early version of the Peace Parks's mission statement from the organization's website:

> Dream of an Africa without fences. Dream of ancient migration trails trodden deep by an instinct that time has never contained. Dream of a wilderness where the elephant roams and the roar of the lion shatters the night. Dream, like us, of experiencing Africa wild and free, where people can reap the benefits of nature and in turn support her. This is the dream of the Peace Parks Foundation. A dream that will only be realised through the establishment of peace parks.[216]

This call to tear down the fences and reinstate the ancient migratory routes of elephants suggests a reversion to a "wild and free" Africa untouched by human influence. This imagery of a particular past that Peace Parks proposed to resurrect represents a clear contrast to Tinley's understanding of landscape and ecology as a complex web of factors that has continued to change throughout time. While Peace Parks's discourse may contradict the dynamism of social, cultural, and biological change, as a public relations exercise, the symbolic merging of the revival and preservation of a primordial "Africa" with economic development has been very effective.[217]

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[213] "Origins of the Peace Parks Foundation," Peace Parks Foundation. http://www.peaceparks.org/story.php?pid=1&mid=2.
[214] World Bank, *Mozambique - Transfrontier Conservation Areas Pilot and Institutional Strengthening Project*, 5-6.
[215] Ibid., 6.
[216] Cited in Fraser, *Rewilding the World*, 124.
[217] On the discourse of the Peace Parks Foundation and TFCAs see Bram Büscher, *Transforming the Frontier: Peace Parks and the Politics of Neoliberal Conservation in Southern Africa* (Durham: Duke University Press).

The Maputo TFCA was selected as one of the early transboundary conservation areas not only because it includes the Maputaland Centre of Endemism, but also in order to create a Futi Corridor (on either side of the Futi River), which would link the Maputo Elephant Reserve with the Tembe Elephant Park and the Ndumo Game Reserve, reuniting the elephant populations on either side of the international border.[218] Ed Ostrosky, then Chief Nature Conservator of Tembe Elephant Park and the Ndumo Game Reserve, and Wayne Matthews, the area's regional ecologist, were asked by Mozambique's *Direcção Nacional de Florestas e Fauna Bravia* (National Directorate of Forests and Wildlife – DNFFB) to comment on the GEF's Futi Corridor Proposal. Ostrosky and Matthews argued that the Futi area not only be considered purely as corridor but rather as an area of great conservation value in its own right and in turn should be regarded as the Futi Transfrontier Conservation Area.[219]

Ostrosky and Matthews posed two options for the development of the conservation area. The first, and preferred, was that almost all of the land east of the Maputo River be included in the TFCA, creating an area of international conservation significance comprised of parks, biosphere reserves, and multi-use resource areas. As a vast proportion of the population of southern Mozambique had fled during the armed conflict, this area was relatively unpopulated, and it would have been possible to take advantage of this depopulation for maximum environmental and economic impact.[220] The second option was to create a minimum viable area, approximately 15 kilometers wide, which due to its smaller size would not have the same scope of conservation potential, but it would nonetheless allow for the "free flow of genetic material between the currently isolated populations and increase their long term viability."[221]

Plans for the Maputo TFCA and the accompanying Futi TFCA were eventually brought in line with the Lubombo Spatial Development Initiative (SDI), which was developed to link not only southern Mozambique and northern KwaZulu Natal, but also eastern Swaziland. SDIs were promoted by South Africa's post-apartheid government as a means of bringing economic development to underdeveloped regions. The Lubombo SDI was specifically targeted at enticing

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[218] World Bank, *Mozambique - Transfrontier Conservation Areas Pilot and Institutional Strengthening Project*. Appendix 1-1 and 1-2.
[219] E. W. Ostrosky and W. S. Matthews, "The Transfrontier Conservation Initiatives In Southern Maputo Province, Mozambique, Comments on Feasibility of the Futi Corridor," Prepared for Direcção Nacional de Florestas e Fauna Bravia (DNFFB), October 1995. IUCN Library, Maputo.
[220] Ibid., 5.
[221] Ibid., 7.

private investment in the development of the region's tourism infrastructure with the intention that the area would be marketed as an international tourism destination.[222]

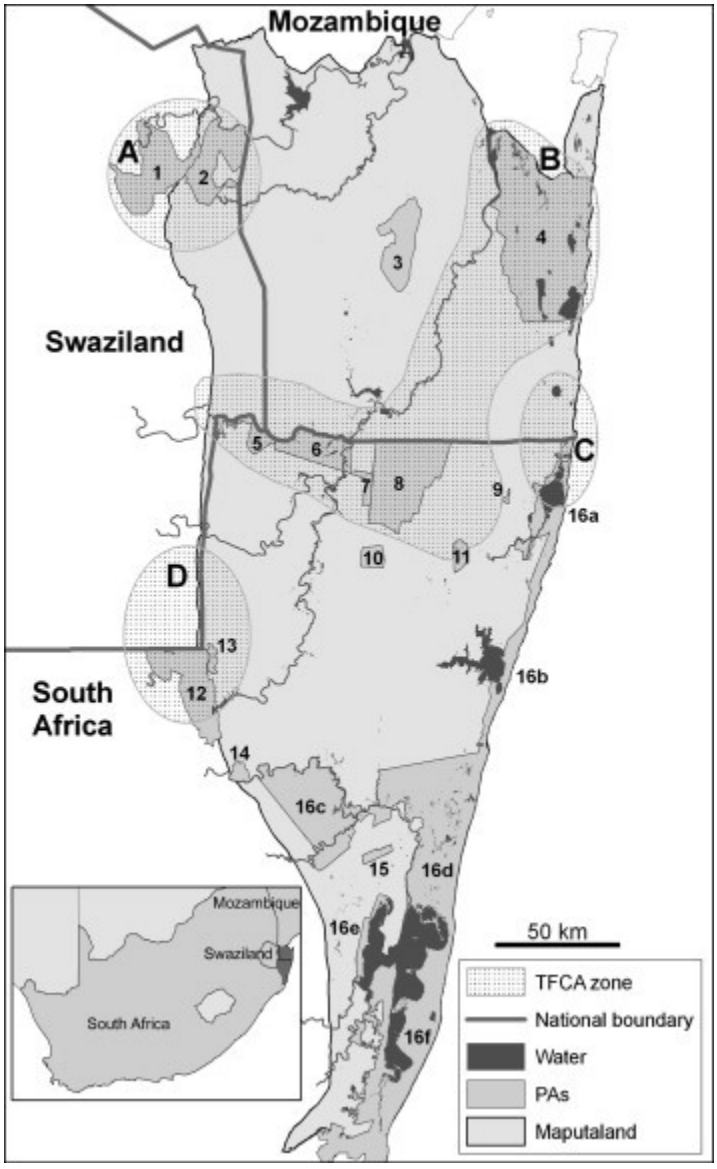

Figure 17. *Protected Areas and Lubombo TFCA Zones in Maputaland*. From Robert J. Smith, et al. "Designing a Transfrontier Conservation Landscape for the Maputaland Centre of Endemism using Biodiversity, Economic and Threat Data," *Biological Conservation* 141, no. 8 (August 2008): 2127–2138.

TFCA zones are labeled alphabetically and PAs are labeled numerically according to the following system:

A = Lubombo-Goba, B = Usuthu-Tembe-Futhi, C = Kosi Bay-Ponta do Ouro, D = Nsubane–Pongola

1 = Hlane Royal National Park, 2 = Mlawula NR, 3 = Licuati Forest Reserve (FR), 4 = Maputo Special Reserve, 5 = Usuthu Gorge Community Conservation Area (CCA), 6 = Ndumo Game Reserve (GR), 7 = Bhekabantu CCA, 8 = Tembe Elephant Park, 9 = Manguzi FR, 10 = Tshanini CCA, 11 = Sileza NR, 12 = Phongola NR, 13 = Hlatikulu FR, 14 = Ubombo Mountain Reserve, 15 = Makasa Biosphere Reserve, 16 = iSimangaliso Wetland Park, 16a = Kosi Bay, 16b = Lake Sibaya, 16c = Mkhuze GR, 16d = Ozabeni, 16e = False Bay Park, 16f = Eastern Shores.

On June 22, 2000, the leaders of those three countries signed the protocol for the Lubombo Transfrontier Conservation and Resource Area, as well as its five constituent TFCAs, including the Usuthu-Tembe-Futi TFCA, the spirit of which was to "promote sustainable

[222] Roelof Kloppers, "Utilization of Natural Resources in the Maututine District of Southern Mozambique: Implications for Transfrontier Conservation" (MA, University of Pretoria 2001), 25-26.

development and utilization of the natural resource base, the maintenance of a healthy environment, and holistic cross-border ecosystem management."[223] The Lubombo TFCA covers an area of 4,195 km^2, of which 66 percent lies in Mozambique, 26 percent in South Africa, and eight percent in Swaziland.[224] Another TFCA within the Lubombo TFCA is the Ponto do Ouro-Kosi Bay Marine TFCA. After the southern portion of this TFCA, the Isimangaliso Wetland Park, stretching south from the international border and encompassing the St. Lucia wetlands, was proclaimed South Africa's first World Heritage site in 1999, the focus was on protection of the portion north of the border.[225] Ten years later, the Ponta do Ouro Partial Marine Reserve was declared. The 678 km² marine protected area includes the coast of the Maputo Special Reserve and extends 3 km into the sea, and down to the international boundary, meaning that the entire coastline of the Ponta do Ouro-Kosi Bay TFCA is protected.[226] The "partial" status of this reserve designates multi-resource use, but this declaration is nonetheless seen as an important conservation effort, particularly for the marine turtles that nest on the coast. In 2011, the Futi Corridor was officially declared a protected area on 14 June 2011, with boundaries closely aligned to Ostrosky and Matthews less favored option 2.[227] Although fencing of the corridor has begun to minimize human-elephant conflict, it is unlikely that this will become a true TFCA. In 2002, the Tembe Elephant Park introduced four lions, which have bred rapidly with current counts standing around 48. The Mozambican government is, for obvious reasons reluctant to have the northern boundary of the reserve taken down.[228]

Conclusion: Tearing Down the Fences

The making and unmaking of boundaries in Gorongosa and Maputaland reveal the various ways wildlife and ecosystems have been implicated in a complex politics of indigeneity, where different "native" populations are prioritized at different points in time. Endangered by

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[223] Ernest Mokganedi (TFCA Director, Department of Environmental Affairs), interview by the author, Pretoria, 22 January 2013.
[224] Ibid.
[225] Peace Parks Foundation Annual Review, 2006, 6. http://www.peaceparks.org/images/files/tkmughfggqdwbdmu4d6a270dda3cd.pdf
[226] "Proclamation of Marine Protected Area in Africa's First Marine TFCA," *Peace Parks Foundation*, 15 July 2009. http://www.peaceparks.org/news.php?pid=1096&mid=1144
[227] "Futi Corridor Now a Protected Area," *Peace Parks Foundation*. 24 June 2011. http://www.peaceparks.org/news.php?pid=1098&mid=1118&year=2011&lid=1006
[228] Ernest Mokganedi, 22 January 2013 and Cathariné Hanekom (EKZNW wildlife ecologist), interview by the author, Pietermaritzburg, 29 August 2013. I discuss this further at the end of Chapter 5.

tsetse fly control campaigns and sport hunting, particular species were singled out for protection in the first half of the twentieth century, leading to the protection of the areas they inhabited. Emboldened by the London Convention of 1933 and early North American efforts at protecting large tracts of land, the national park movement took hold in southern Africa with an increasing interest not only in the protection of particular species, but also in the areas that they inhabit. From the 1950s, ecological integrity began to trump species-specific interests, a tenet which ostensibly formed the basis of the incorporation of protected areas into larger TFCAs and shifted the value of wildlife from a national asset to an integral part of transboundary ecological heritage. The shifting scale of conservation priorities from species to habitats to ecosystems has paralleled an expansion of which bodies claim ownership over these territories, from provincial to national, and eventually to transnational conservation entities.

Although not all of the areas described above have been demarcated by physical fences, the idea of a fence is a useful tool in analyzing the real and imagined divisions created by the demarcation of protected areas. In *The Myth of Wild Africa*, Adams and McShane wrote, "The idea of a fenced park plays on a Western idea of wild Africa by making the mistaken claim that a fence is a barrier against both man and nature, creating in effect a time capsule; the land inside the fence shall endure, untainted by man, regardless of what happens beyond."[229] In Gorongosa and Maputaland both the boundaries and constituents of protected areas have been malleable and dynamic, changing, as this chapter has shown, in conjunction with political, institutional, and ecological forces both inside and outside their borders. Some of the boundary changes in these areas were intended to keep certain species in while others were developed to keep certain species out, circumscribing a complex process of determining who or what belongs in a demarcated area and to whom the territory belongs. However, the fence has also been a site of traversing and transgression, where war, poverty, and resource needs have challenged the process of containing flora and fauna in particular areas.

In line with the "fortress conservation" critique that pervades African historical scholarship on the history of wildlife conservation, the image of the fence suggests not only a physical divide between humans and animals, but an ideological one, creating a false dichotomy between humans and nature. The imaginary border between humans and nature, which has facilitated a top-down, "fortress" approach to conservation, must be razed in order to ensure

[229] Jonathan Adams and Thomas McShane, *The Myth of Wild Africa: Conservation Without Illusion* (Berkeley: University of California Press, 1996), 56.

support for protected areas. However, with increasing population pressures and scarcity of land and wildlife resources, many argue that a real need for physical fences exists.[230] Threats of human-wildlife conflict will likely impede the realization of the Usuthu-Tembe-Futi TFCA, part of the larger Lubombo TFCA, where the fence is considered necessary by those living around it since the translocation of lions into one of its reserves in 2002.[231]

In reality, the fence itself represents human intervention, management, and attempts to both control and protect human and non-human populations, upsetting the myth that Adams and McShane describe. Fences have not only precluded people from the resources within them. They have also curtailed the mobility of wildlife populations. As science began to dictate ecological interests in protected areas and politicians played on political ones, some fences were touted as barriers to ecological integrity. However, the removal of fences has not always gone as planned. After the creation of the Great Limpopo Transfrontier Park, joining Kruger National Park with a new protected area in Mozambique, elephants translocated from Kruger across the border into Limpopo National Park took advantage of the absent sections of fence, representing the unification of territory, and migrated back home. Elephants translocated to Gorongosa National Park (which has never been fenced) as part of recent restoration work, endeavored to make their way back to Kruger but were thwarted by the inhabitants of villages in the way, and most perished.

Analyzing the history of boundary-making in these particular areas not only illustrates the importance of real and symbolic fences (and their relationship to each other) in the development of southern Africa's protected areas, it also reveals a regional circulation of expertise across the boundaries of protected areas and national borders. In fact, this exchange of experts across borders helped to develop regional ideas regarding who or what belongs in protected areas. Ken Tinley, for example, not only studied ecological systems in South Africa and Mozambique but also in Botswana and Namibia. I would argue that his approach to ecology posits a challenge to a critique of conservation as premised upon a perceived division between humans and the natural world. Although they might have resulted in the displacement of people from certain areas, his studies were based upon an understanding of the interdependence of all facets of a landscape or

[230] See for example Craig Packer, "Good Fences Make Safe Lions," *Los Angeles Times,* 25 April 2013. Available: http://articles.latimes.com/2013/apr/25/opinion/la-oe-packer-how-to-save-lions-20130425.
[231] I discuss this further in Chapter 5.

ecosystem, including the human population and foregrounded models of community-based conservation that would become the norm in the region in the 1980s and 1990s.

While the inequalities that have facilitated the designation of wildlife conservation areas and have been perpetuated by the practices privileging protected areas over other forms of land use have been widespread and well-documented,[232] the ideological division of wildlife from humans, exemplified in the concept of "fortress conservation," has not been as universally pervasive as some literature might suggest. Southern Africa led the way in developing practices that attempted (though often unsuccessfully) to shift the power dynamics of conservation programs by providing management authority and/or benefits to human neighbors of protected areas.[233] In Gorongosa and Maputaland, some conservationist practitioners and ecologists were attuned to the importance of the "community" in ensuring the success of wildlife conservation as early as the 1960s. Encouraged, in part, by the work of Aldo Leopold, Ken Tinley was a key figure in promoting the notion that people living in and around protected areas must benefit from them, even while proposing the creation of wilderness areas, with limited human access (by tourists or local people). Though his proposal for the expansion of Gorongosa National Park, submitted to the Mozambican government in 1969, was thwarted by the country's war for independence and subsequent armed conflict, this work represented an important milestone in conceiving humans as an integral part of an ecosystem.

The inroads made by Tinley and others in incorporating rural African people into the paradigm of conservation management and planning has not precluded continued contestations over these territories. The fence has been a particularly important symbol in recent claims to Ndumo's fertile Pongolo floodplains by people living outside the reserve's eastern boundary. In 2000, people living in Mbangweni, the corridor between Ndumo and Tembe Elephant Park, burned down part of Ndumo's eastern fence, calling this action a "fence telegram," aimed to

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[232] Adams and McShane, *Myth of Wild Africa;* Dan Brockington, *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania* (Oxford: James Currey, 2002); Roderick Neumann. *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa* (Berkeley: University of California Press, 2002); Daniel Brockington and James Igoe, "Eviction for Conservation: A Global Overview," *Conservation and Society* 4, No. 3 (2006): 424-470; and Mark Dowie, *Conservation Refugees: The Hundred-Year Conflict between Global Conservation and Native Peoples* (Cambridge: MIT Press, 2009).

[233] Brian Child and Grenville Barnes, "The Conceptual Evolution and Practice of Community-based Natural Resource Management in Southern Africa: Past, Present and Future," *Environmental Conservation* 37, no. 3 (2010): 283-295.

express their frustration with an unresolved land claim.[234] In June 2008, people from the same area tore down 11 kilometers of the fence in a symbolic and political gesture aimed at acquiring farming access along the Pongolo River banks.[235] Efforts to restore the fence have been met with quick removals, and Ndumo's eastern border remains unfenced today.[236]

As conservationists have recognized the importance of including rural people in management and planning of wildlife conservation, efforts have been made to link conservation with economic development. In the following chapter, I focus on the development of "sustainable use" both in discourse and practice in these protected areas. I consider the means by which wildlife and wildlife products have become productive resources for selective exploitation through legislation and other initiatives. This chapter not only raises the complexities of determining who manages and benefits from protected areas and their resources, but also what constitutes wildlife, when it is so clearly managed for different means of human consumption.

[234] Fraser, *Rewilding the World,* 161.
[235] Alison Westwood, "Ndumo signals red alert for conservation," *Getaway*, October 2008. http://alisonwestwood.com/2012/08/31/ndumo-signals-red-alert-for-conservation/
[236] "The Killing of Ndumo Game Reserve," *Zululand Times*, 4 November 2014. http://zululandobserver.co.za/51169/the-killing-of-ndumo-game-reserve/

Chapter 2

Buffalo and Biltong: Wildlife as a Form of Land Use

The displacement of people from protected areas and their resources has been a dominant narrative in the historiography of wildlife conservation within the humanities and social sciences, and it is an important one. During both colonial and independent rule protected areas have barred humans from the land and resources on which they have depended. The creation of protected areas and hunting laws has criminalized the practices of poor, rural people living in and around these areas in various parts of the world, labeling them "poachers" and inciting contests over access not only to territory, but also to resources. Like land in African history, wildlife has become a scarce resource, highly contested and its management deeply political.[1] From the 1980s, historians and social scientists shared a growing awareness of the exclusionary practices of wildlife conservation with conservation practitioners, who sought to redress colonial "fortress," or "fences and fines," models with community-based conservation.[2]

One of the principle methods of linking conservation with the economic development of rural African communities has been through the sustainable utilization of wildlife, or the "use of wildlife without jeopardising the continued survival of the species."[3] The discourse and practice of sustainable use gave wildlife, previously prized for its aesthetic value, an economic value, where, within limits, it was largely considered to be worth more dead than alive. A substantial portion of sustainable utilization has aimed to provide benefits in the form of wildlife meat or revenues from hunting and culling operations. With the success of wildlife conservation initiatives, many fenced reserves were seen as having surplus animals that endangered a protected area's equilibrium. These animals could thus be harvested for economic or nutritional purposes. In some cases, wildlife species, deemed more suitable to particular areas than domestic livestock, were specifically bred for consumption. By ensuring wildlife's economic (or nutritional) value,

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[1] For a historical overview of land scarcity in Africa see Sandra Evers, Marja Spierenburg, and Harry Wels, "Introduction—Competing Jurisdictions: Settling Land Claims in Africa, Including Madagascar," in *Competing Jurisdictions: Settling Land Claims in Africa,* eds. S. Evers, M. Spierenburg, and H. Wels (Leiden: Brill, 2005), 1-20.
[2] David Anderson and Richard Grove, eds. *Conservation in Africa: People, Policies, and Practice* (Cambridge: Cambridge University Press, 1987).
[3] Rosaleen Duffy, *Killing for Conservation: Wildlife Policy in Zimbabwe* (Oxford: James Currey, 2000), 9.

governments and other conservation entities have tried to present protected areas as valuable forms of land use rife with productive renewable resources.

"Sustainable use" is neither a neutral nor a self-evident term. It has been wielded in different ways in different contexts. Rosaleen Duffy has demonstrated an acute relationship between wildlife management and political agendas in Zimbabwe in her book *Killing for Conservation.*[4] By chronicling the rhetoric of "sustainable utilization" through a variety of political actors, Duffy shows that there is often little "natural" about the natural science of conservation. Instead, protectionist aims and conservation agendas are mediated through a variety of power relations. Like Duffy, Clark Gibson's *Politicians and Poachers* shows how the enactment and enforcement of wildlife laws in Africa are contingent upon a variety of political interests.[5] Anthropologist David McDermott Hughes has demonstrated that the development of Peace Parks, or Transfrontier Conservation Areas (TFCAs), ostensibly intended, in part, to facilitate access of local communities to wildlife resources, encourages the shrinking of territory for small holders while expanding space for wild flora and fauna.[6] By confining peasant societies to fenced villages while the barriers for wildlife come down, McDermott Hughes argues that TFCAs perpetuate "a tradition of structural and spatial racism."[7] While the division of territory between people and wildlife has certainly been embedded in unequal power relationships and have perpetuated unequal access to land, the histories of protected areas and wildlife policies in southern Africa have also included efforts to extract benefits from these areas and the resources they hold for local people.

In this chapter, I analyze the relationship between wildlife and place by looking at the emergence of sustainable use concepts and mechanisms employed in Mozambique and South Africa's Natal Province from the 1950s through the 1980s. During this period, the Portuguese administration became increasingly concerned about regulating and limiting subsistence hunting in Mozambique whilst promoting sport hunting for tourism purposes and revenue generation. One

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[4] Rosaleen Duffy, *Killing for Conservation.*
[5] Clark C. Gibson, *Politicians and Poachers: The Political Economy of Wildlife Policy in Africa* (Cambridge: Cambridge University Press, 1999). See also Edward I. Steinhardt, *Black Poachers, White Hunters: A Social History of Hunting in Colonial Kenya* (Oxford: James Currey, 2006). For a relevant argument in the American context see Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2003).
[6] David McDermott Hughes, "Third Nature: Making Space and Time in the Great Limpopo Conservation Area," *Cultural Anthropology* 20, no. 2 (2005): 157-184.
[7] Ibid, 174.

of the consequences of this was the development of *coutadas* (hunting reserves) on the peripheries of protected areas and in other parts of Mozambique. Coutadas were intended to serve as buffer zones around Gorongosa, for example, where the core of the park would act as a breeding sanctuary for animals that could be hunted for sport when they moved into the peripheral zones. The Department of Veterinary Services, which held policy responsibility for wildlife at this time, endeavored to productively breed some wildlife species for meat consumption in order to supply protein to Mozambicans. Although these efforts failed, they suggest important interventions and changing ways of thinking about wildlife and land use. As Mozambique became embroiled in a liberation struggle in the late 1960s and early 1970s and then a civil conflict after gaining independence from Portugal in 1977, the consumption (and production) of wildlife became tied to sustaining soldiers and citizens in wartime. Gorongosa, its surrounding areas, and the nearby Marromeu Buffalo Reserve became important repositories for wildlife products. From the 1960s the administrators of Ndumo Game Reserve, across the border in South Africa, began using culling operations and other forms of resource extraction as a means of maintaining positive relationships with rural people living around the reserve. Finally, this period saw the consolidation of networks of expertise across the South Africa-Mozambique border and institutionalization of methods of sharing information regarding sustainable wildlife use through organizations like the Southern African Regional Commission for the Conservation and Utilization of the Soil (SARCCUS) and conferences that joined representatives of southern African territories, including Ken Tinley, to discuss ways of improving wildlife protection whilst promoting its economic value.

I argue that the process of regulating wildlife use in and out of protected areas entailed complex choices about which species, practices, and individuals belonged in different areas and who had the right to claim wildlife resources. I explore how indigenous species under threat of extinction became indigenous resources, belonging to colonies, provinces, conservation bodies, and independent governments, which could be exploited for economic or nutritional purposes. This shift from protectionism to utilitarianism was seen as the best chance for wildlife's future survival; by attributing an economic value to wildlife, there would be a material incentive to ensure the perpetuation of wildlife species. In order to chart this changing philosophy of wildlife protection, I first outline changing hunting regulations in Mozambique, where wildlife was gradually legislated to be a usable resource. I then look at the emergence of culling programs in Ndumo Game Reserve as well as other initiatives that would eventually supply the local

"community" with resources from this protected area. Finally, I chart pleas to establish a game ranching industry in Mozambique when it was still province of Portugal. Although this never came to fruition on the scale imagined, the utilization of wildlife as a resource for meat and other products remained an organizing principle of wildlife conservation in post-independence Mozambique and was enacted through a buffalo harvesting program in one of the country's wildlife reserves. This not only blurs the boundaries between "domesticated" and "wild" life but also challenges conceptions of protected areas as pristine reserves, whose resources are held for posterity rather than the present. The circulation of ideas regarding sustainable use shows the development of this concept to be a regional phenomenon, influenced by the movement of expertise and experience across political borders.

Regulating Hunting in Mozambique

As I outlined in the previous chapter, many of Africa's protected areas emerged from the threat of large-scale game hunting to species populations, and some, like the Gorongoza Game Reserve (later Gorongosa National Park), were founded on the determination to preserve large mammals to guarantee that white colonial elites would have a continued trophy stockpile. Although the near extinction of many animal populations was perpetrated predominantly by white men, with the emergence of wildlife protection regimes, it was more often the subsistence hunting of black African people that was criminalized.[8] Although this type of subsistence hunting was certainly curtailed within Mozambique's reserves, the colonial government tried to facilitate access to the meat resources of wildlife outside of its national parks and game reserves while ensuring the survival of this resource for the future, as I will outline later in this chapter. From the mid-1950s through the early 1970s, Mozambique's legislators imposed a series of laws that regulated access to hunting with the aim of maximizing the nutritional and tourism potential of the province's wildlife. These laws limited the hunting activities of both white sport hunters and rural African people in efforts to protected wildlife from extinction, while garnering economic benefits from wildlife for the Portuguese colony.

In the early 1950s, members of Mozambique's *Comissão de Caça* (Game Commission) and Mission to Combat Trypanosomiasis (MCT) were bemoaning the extensive losses of the

[8] See for example Steinhart, *Black Poachers, White Hunters*.

province's wildlife that had occurred during the previous decades. In a marketing monograph for hunting opportunities in Mozambique presented at the 4th African Tourism Congress held in Lourenço Marques in 1952, the Game Commission reported:

> Places that less than 20 years ago had been densely covered with the most varied kinds of big game, and going there always meant an act of daring that now and again would end in tragedy, are nowadays silent and quiet zones from which the frightening shadows and noises have disappeared forever.[9]

The following year, the chief of the Mission to Combat Trypanosomiasis sent a memo to the office of the Governor General of the province attributing the "pronounced scarcity of indigenous fauna in large territorial areas to the '*regime de caça livre'* [regime of free hunting]," and supporting the development of new legislation pertaining to the defense of wildlife.[10] He wrote, "As an integral part of our heritage, indigenous fauna is an important element for study and scientific investigation, it has an educational function, it is a valuable feature of tourism and it constitutes rich potential as a source of protein, fats, and other products."[11]Wildlife were therefore not only viewed as economic or nutritional resources; they were also ideological resources used to construct a national identity.

Portugal's 1955 Decreto 40 040 laid the foundations for wildlife protection in its overseas territories, intending to "preserve [wildlife] as part of a bioecological balance and to develop it for the use of man, avoiding, however, that which would result in losses."[12] In addition to defining different types of protected areas, such as national parks and nature reserves, this legislation laid the foundation for the development of coutadas and controlled hunting in "*terrenos abertos*" (open areas) by way of different types of hunting licenses, where *autóctones* (indigenous or native people) retained the right to hunt and capture animals for subsistence purposes as long as the species were not completely protected by law.[13]

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[9] *Caça em Moçambique* [Hunting in Mozambique] (Porto: Litografia Nacional, 1952), 13. (My translation.) AHM.
[10] Paracer: O projecto da proteccao a fauna e flora [Memo: The project of protecting flora and fauna]. From M. A. de Andrade Silva to Chefe da Repartição de Gabinete do Governo Geral, 19 October 1953. Commisão de Caça: Regulamento, pessoal, material, licences, etc. [Game Commission – Regulation, staff, equipment, licenses] 1948-1958. Governo Geral, cota 430, pasta c/18a. AHM.
[11] Ibid.
[12] Decreto 40 040, *Boletim Oficial de Moçambique*, Série I, No. 8, 24 February 1955, 189-202.
[13] Fernando C. Paisana and Armando J. Rosinha, "Inventariação dos Problemas Relacionados com a Protecção da Fauna e seu Aproveitamento Racional [Inventory of Problems Related to the Protecion of Wildlife and its Rational Use]," *Anais dos Serviços de Veterinária de Moçambique* 20/21, 1972/1973 (1975): 29.

In Mozambique, it was not these subsistence hunters, but professional hunters who were seen as the biggest culprits of the destruction of game outside of protected areas prior to the 1960s. Exploiting their professional licenses, these hunters employed large gangs consisting mainly of local African people to not only supply meat to large plantations in the north of the province, but also to sell more widely to local communities and traders.[14] When the government issued new hunting regulations in 1960 in line with the principles of wildlife protection enacted in Decreto 40 040, the activities of these professional hunters were severely restricted.[15] Furthermore, the government created a category of hunting license, specifically aimed at the tourist market, and for predominantly white hunting guides, who would facilitate the sport hunting of tourists in the province.

The Mozambican press was intent on promoting hunting tourism in the 1960s. Papers published stories about the need for greater "propaganda" to disseminate the province's hunting opportunities so that the industry's potential might be fully realized.[16] Articles about developments in the hunting industry garnered full-page spreads.[17] Newspapers reported the visits and conquests of Americans visiting the province to hunt its large game as an affirmation of the importance of this industry to the province. *A Tribuna*, for example, reprinted a letter from Barry Johnson of Illinois about his "safari" in the province, praising Mozambique for offering the best safari conditions in the world, both in terms of animals species and the "peace and security that the tourist hunter breathes."[18] Fred Middleton of San Antonio, Texas, killed the second largest black-maned lion on record while hunting in Mozambique, and Bob Swinehart, also from the

[14] C. F. Spence, *Moçambique* (Cape Town: Howard Timmins, 1963): 16-17.
[15] Ibid., 18. See also Diploma Legislativo 1982, *Boletim Oficial de Moçambique*, Série I, no. 23, 8 June 1980, 609-630.
[16] "Encerrou oficialmente a época da caça no Distrito de Manica e Sofala [The hunting period in the district of Manica and Sofala is officially closed]," Undated. Newspaper clippings, "Fauna" binders, UEM Veterinary Faculty Library.
[17] See for example, "Único Ponto de Mira da Sociedade de Safaris de Moçambique que investiu em escassos meses 17 mil contos em melhoramentos em pro do turismo cinegético de Manica e Sofala [Unique point of view of the Mozambique Safari Society that invested 17,000 contos in a few months in hunting tourism in Manica and Sofala]," *A Tribuna*, 4 August 1965 and "Dezassete mil contos foi quanto a sociedade de Safaris de Moçambique investiu já na indústria de turismo cinegético [Seventeen thousand contos was what the Mozambique Safari Society has invested in the hunting tourism industry," *Diário de Moçambique,* 2 August 1965. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library.
[18] "Carta de Illinois: Como um Americano viu o turismo cinegético de Moçambique [Letter from Illinois: How an American saw hunting tourism in Mozambique]," *A Tribuna*, undated. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library. (My translation.)

U.S., was the third visiting hunter to use a bow and arrow, with which he took down 14 animals, including an elephant and leopard.[19]

Figure 18. *O milionário Barry Johnson com os presas do elefante que abateu* [The millionaire Barry Johnson with the tusks of the elephant he killed] in "*Carta de Illinois: Como um Americano viu o turismo cinegético de Moçambique* [Letter from Illinois: How an American saw hunting tourism in Mozambique]," *A Tribuna*, undated. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library.

However, like many professional hunters, some hunting guides were exploiting their positions and seizing opportunities to hunt illegally. Newspaper articles called for greater regulation in the industry, so that disreputable outfits would not tarnish the country's image as a

[19] "O leão de juba negra abatido por um turista na área do Mungári constitui o segundo recorde mundial em dimensões e porte [The black-maned lion shot by a tourist in Mungári area holds the second world record in dimensions and size]," *Diário de Moçambique*, 4 July 1965, 2 and "Um archeiro em Moçambique: elefante e outros animais abatidos com arco e flecha [An archer in Mozambique: elephant and other animals slaughtered with bow and arrow]," *A Tribuna,* 13 July 1965, 3 and 10. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library.

hunting destination.[20] One article reported the establishment of hunting camps inside Gorongosa National Park, one of which had ties to an honorary game warden.[21] Furthermore, the existing regulations were seen to suffer from some gaps, used by illegal hunters to escape penalties when caught.[22] Thus, in 1965, hunting regulations were overhauled once again.[23] These included new regulations for Mozambique's coutadas.

Veterinarian Dr. Travassos Dias, former head of the MCT and a key figure in wildlife conservation in Mozambique who likely had a hand in creating coutadas, praised these hunting reserves for not only bringing economic benefits to the country in the form of hunting tourism but also for allowing wildlife populations to grow by providing greater protection than would have occurred without their designation.[24] In 1965, 170 tourists traveled to Mozambique specifically to hunt, spending around 20,000 *contos*, killing around 16 animals each.[25] However, Travassos Dias was critical of the way some of the concessionaires were managing the coutadas on the ground, particularly in respect of local populations, or *indígenas*. Despite having protection within the coutada regulations for the protection of "the rights of indigenous inhabitants to these territories, and especially to obtain, by means of hunting, the meat necessary for their food, using weapons permitted by law,"[26] these rights were not being upheld on the ground. Instead, some of the concession holders were stealing weapons from the local inhabitants, invading their huts, and imprisoning those who "tried to resist such robbery of their heritage."[27] He condemned this as a system of feudalism.

In his three-volume report on the ecology of the Maputo Special Reserve published in 1972 and 1973, José Lobão Tello, a game ranger who would go on to have important roles in Gorongosa National Park and in the national administration of protected areas after

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[20] "O turismo cinegético é o que tem mais expressão na economia da Província [Hunting tourism is what is most expressed in the Province's economy]," *Notícias da Beira,* 25 October 1966, 4. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library.
[21] "Caça-sa dentro do Parque Nacional da Gorongosa? [Hunting inside Gorongosa National Park?]" *A Tribuna*, 19 March 1965, 3. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library.
[22] "O Novo Regulamento de Caça [The new hunting/game regulation]," *A Tribuna*, 9 March 1965, 4. Newspaper clippings, "Fauna" binders. UEM Veterinary Faculty Library.
[23] Diploma Legistalivo 2627, 2628, 2629, 2630, and 2631, *Boletim Oficial de Moçambique*, I, no. 32, 7 August 1965, 907-927.
[24] J. A. Travassos Santos Dias, "A Caça em Moçambique e o Turismo [Game in Mozambique and Tourism]," *Boletim da Sociedade de Estudos de Moçambique* 37, no. 154-155 (1968): 23.
[25] Ibid.
[26] Ibid., 19.
[27] Ibid., 21.

independence, recorded more than 3,000 people, their livestock, and several hundred dogs living within the reserve.[28] Amongst the conflicts experienced between these individuals and the reserve's wildlife, Tello noted large depredations by the human population. These were perpetrated through the use of firearms, and more frequently by employing spears and dogs.[29] On account of these and other conflicts, including the destruction of agriculture by wild animals and contestations over territory, Tello suggested relocating these 3,000 people to areas outside the reserve and erecting elephant-proof fencing to mediate against further clashes.[30]

Mozambicans were also crossing the border into South Africa to seek wildlife resources. Throughout the reports of Ndumo's rangers available from the 1950s until the 1980s in the archives of Ezemvel KwaZulu Natal Wildlife's (EKZNW) conservation headquarters, incidents of poachers crossing the Usuthu River into Ndumo Game Reserve are rife. This problem increased during the dry season when the river was easier to cross. In 1973, Ranger Schütte reported that two poachers received much harsher punishments across the border than they would have in South Africa: "I believe [they] have received severe lashings across their hands, under their feet, and across their bare backs plus imprisonment" from the "Bantu police" sent by Portuguese officials to find them. By comparison, Schütte writes, "those we arrest here say they put on weight in jail."[31]

In 1971 Drs. Travassos Dias, Sousa Dias, and Rosinha presented a paper at a veterinary conference outlining the various actors involved in illegal hunting and the methods they were using to threaten Mozambique's "wildlife heritage."[32] These included not only "rural hunters" but also "urban hunters" who illegally used bright lights to hunt at night, as well as administrative and military authorities abusing the powers of their positions. Amongst those "rural hunters," the authors noted that many did not only kill for subsistence purposes but also acted as middle men,

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[28] José Luís Pessoa Lobão Tello, "Reconhecimento Ecológico da Reserva Dos Elefantes do Maputo [Ecological Reconnaissance of the Maputo Elephant Reserve]," *Veterinária Moçambicana* 5, no. 2 (1972): 101.
[29] José Luís Pessoa Lobão Tello, "Reconhecimento Ecológico da Reserva Dos Elefantes do Maputo," *Veterinária Moçambicana* 6, No. 1 (1973): 50.
[30] Tello, ""Reconhecimento Ecológico," *Veterinária Moçambicana* 5, No. 2 (1972): 101.
[31] Report by G. W. Schütte for the month of July 1973, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 5 1973-1977. EKZNW Archive.
[32] J. A. Travassos Santos Dias et al., "Alguns Aspetos da Caça Clandestina em Moçambique e sugestões para se pôr cobro á destruição do nosso património cinegético [Some aspects of Clandestine Hunting in Mozambique and suggestions to put and end to the destruction of our hunting heritage]," *Revista de Ciências Veterinárias* [Veterinary Sciences Magazine] 4 (1971): 101-125.

procuring lucrative trophy species like elephants and leopards for sellers.[33] In order to halt the damage being done by these illegal hunters, stricter penalties were suggested, as well as the creation of new protected areas, where the surveillance by game guards might give wildlife a better chance at survival. However, the safety that protected areas and their boundaries promised was not always so certain, and often the threat came from within the reserve's own administration more than it did from illegal hunters that transgressed these boundaries.

Managing Surplus Resources in Natal's Protected Areas: Game Removals, Reed Harvesting, and *Fonya* Drives

While Mozambique was legislating access to hunting both within and outside the boundaries of protected areas, the Natal Parks Board (NPB) began various initiatives aimed at selectively utilizing the wildlife resources within its reserves. Due to the success of fencing Ndumo Game Reserve, it had surplus "indigenous" resources to be dispensed. This included meat from the reserve's wildlife populations. Where unregulated hunting has threatened the survival of some species, culling, or game removals, have been used as a method of controlling the effects of a species' overpopulation on the populations of other species and their habitats. Through culling, reed harvesting, and *fonya* drive activities (where fish would be collected from a drying pan with a fonya basket), the conservators of northern Natal began to offer selective benefits from wildlife conservation to the communities that were being fenced out.

In 1965, N.N. Deane, Chief Conservator of Zululand, wrote to the head of the NPB requesting that ungulates, such as the nyala be "controlled" in Ndumo and elsewhere in Zululand.[34] Where the species had once been so rare that famed hunter Selous had difficulty finding a specimen to take back to London's Natural History Museum at the end of the nineteenth century, they had, by 1965, become so abundant that they were taking over areas that would have been productive habitats for other species. He suggested culling 15 percent of the nyala and impala populations annually ("a figure well below that required to maintain a sustained yield"), which would more than meet the requirement for staff rations. Deane wrote, "While it is understandable that no one relishes shooting and I can safely say that the task is considered a

[33] Ibid., 103.
[34] N. N. Deane, "Inyala Populations and the Present Need for their Control," April 1965. EKZNW Library.

most unenviable one by those of us in the field elected responsible for carrying out the control policy, we have nevertheless got to face facts as one simply cannot have one's cake and eat it."[35] The fencing of Ndumo had curtailed the movement of these species leading to overpopulation in the reserve, and population "control," by means of culling, was deemed the necessary means of curtailing the population's inevitable expansion.

By the first quarter of 1968, 23 head of game were "captured and shot," including 17 nyala and six impala,[36] a species which had been reintroduced to the reserve in the 1950s. From the 1970s, monthly reports of Ndumo's game rangers were more likely to describe "game control" than "game observations," with culling being a principle activity of rangers' duties.[37] In 1978, a total of 400 nyala, 300 impala, and 60 hippo were culled.[38] The following year, 700 nyala, 300 impala, and 80 hippo were killed.[39] By 1980, Ndumo's rangers had managed to cull more than 60 antelope in one night, demonstrating that "a high culling rate can be achieved for rapid de-population."[40] Rangers were selective about the areas of the reserve where they culled and about the impact it might have on the animals. In early 1983, Ranger Jackson wrote, "No culling has been done on the Ndumu hill as this area was very heavily culled in past years, and I wished to give this population a break. In the future I hope to be able to work out how many animals I wish to remove from this area, and do so over as short a time as possible."[41]

This form of wildlife control was not confined to population management. Ndumo's rangers also spent much of their time killing "problem animals" in areas surrounding the reserve. In his report to the NPB for the winter months of 1967, ranger Paul Dutton relayed, "A number of nights were spent attempting to destroy marauding hippo in the Tonga fields," or at least to chase

[35] Ibid.
[36] Natal Parks, Game and Fish Preservation Board, "Game Removals in Zululand Reserves," 1968. EKZNW Library.
[37] Ndumo Rangers' Reports, No. 5 1973-1977. EKZNW Archive.
[38] Report by Senior Ranger E. Harris for December 1978. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[39] Report by Senior Ranger E. Harris for December 1979, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[40] Report by Senior Ranger E. Harris for June 1980, Ndumu Game Resreve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[41] Report by G. O. Jackson, Ndumu Game Reserve for 3rd quarter 82/83, Ndumu Game Reserve. NDumo Rangers' Reports, No. 6. EKZNW Archive.

them down river, away from human settlements.[42] After describing this "frustrating game of cat and mouse," Dutton wrote:

> It is never without interest to spend evenings in the Tonga fields outside the reserve. The hippos progress down the river is followed by various percussion instruments, shouting, dogs trained specifically to bark and chase the hippo and bugles probably made from cattle horn. These people do live in complete harmony with their habitat.[43]

As culling numbers increased, Ndumo's administration was forced to address "the problem of meat utilization and disposal."[44] Skinning and meat processing facilities were established to develop commercial products from these "game removals." In the late 1970s, meat from culling operations went to meat contractors from as far away as Komatipoort, near Kruger National Park.[45] When meat accumulation was low, sometimes it was only enough for staff rations or to feed the guards' dogs.[46] However, over time agreements were made with local people, such as this one described by Senior Ranger E. Harris:

> Due to the lateness of the culling season and the impending heat of summer I boosted the meat cooking facilities and on three separate days culled 11, 11 and 9 hippo. Due to the large quantities of meat local Bantu were asked to assist with the cutting up of carcasses and skin preparation in return for meat. This system has worked admirably and each culling session was completed in one day. There was no meat waste.[47]

The Ndumo administration soon began to sell large quantities of meat directly to people living around the reserve, in addition to supplying meat to the NPB and commercial enterprises from its *biltong* (jerky-like dried meat widely enjoyed in South Africa) factory. In the last quarter of 1980, over 4,000 kilograms of meat were sold locally, bringing in over 1700 Rand in revenue.[48] By the third quarter of 1981, Ranger Pillinger noted that they could not provide enough meat to meet the

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[42] Report of T. P. Dutton, Ndumu Game Reserve for the period April-August, 1967. Ndumo Rangers' Reports, No. 4 1967-72. EKZNW Archive.
[43] Ibid.
[44] Report by Senior Ranger E. Harris for June 1980, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[45] Report by Senior Ranger E. Harris for September 1978, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[46] Report by Senior Ranger E. Harris for March 1980, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[47] Report by Senior Ranger E. Harris for December 1979, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[48] Report by G. O. Jackson for 2nd Quarter 80/81, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.

demand of local farmers and villagers.[49] By the following year demand was dictating supply as one ranger recorded, "Animals were difficult to find during the quarter, but we managed to fulfill orders."[50] Selling the meat at R0.31 per kg, the reserve made a profit of just over R1,264 that quarter.[51]

In their 1981 proposals for land use in Tongaland, Ken Tinley and Willem van Riet relayed the following:

> In the larger national parks and game reserves efficient protection has resulted in population explosions of the larger game, with attendant damage to the habitats. Culling programmes have been initiated in some to balance the herbivores with the pasture resource. The products of these culling programmes, typically, never benefit the surrounding human populations. Either private enterprise or central government are the sole receivers of any financial advantage from such programmes, and the meat products are sold in urban centres to the 'haves'…The natural or indigenous resources must…be protected and used on a sustained yield basis and enhanced where possible to form the basis for a viable rural economy.[52]

By 1994, Ndumo's management had organized a system that rotated meat sales between the four *indunas* (headmen or tribal councilors) living on the reserve's periphery. However, they had to contend with requests from people coming from farther communities trying to access the reserve's meat resources "saying that this or that official…has said they can get meat." The officer in charge of the Ndumo-Tembe complex reported, "There is no such thing as 'extra' meat being available. The reserve is not, and will never be in a position to satisfy the demand for meat in the four indunas areas on the boundaries of the reserve let along supply in to the rest of the Mathenjwa Ward or Northern KwaZulu."[53]

The supply of these "indigenous" resources from within Maputaland's reserves were not limited to meat. When Tembe Elephant Park was proclaimed in 1983, the KwaZulu Bureau of Natural Resources (KBNR) decided to allow "*sustainable* utilization of resources within the

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[49] Report by S/R Pillinger for 3rd Quarter 1981, Ndumu Game Reserve, Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[50] Report by G. O. Jackson for 4th Quarter 81/82, Ndumu Game Reserve. Ndumo Rangers' Reports, No. 6. EKZNW Archive.
[51] Ibid.
[52] K. L. Tinley and W. F. van Riet, *Tongaland: Zonal Ecology and Rural Land Use Proposals*, Unpublished report for the Department of Co-operation and Development, 1981, 21-22. NLSA Pretoria.
[53] Letter from E. W. Ostrosky to the Regional Conservator, "Distribution of Meat from Culled Animals; Ndumo Game Reserve." 22 August 1994. 11/1/9. Ivory and other game products. TEP Archive.

proclaimed area."[54] In keeping with this policy, people living on the periphery of the reserve were able to harvest reeds from within the park's boundaries. During a four month period in 1988, 3291 bundles of reeds were collected, weighing 231,360 kilograms and generating R10,775 revenue for their harvesters.[55] In 1993, Fisheries Research Officer Robert (Scotty) Kyle completed a report on the sustainable use of Tembe's resources including reed harvesting in which he established parameters for the practice and reminded the reader that these might need to change in the future.

> All ecosystems are dynamic and it may well be that what are currently reed beds could climax into grasslands, bush, or even open water. This being the situation it is necessary to bear in mind the reality that sustainable yields do often vary with time. Even with sustainable usage some resources will dwindle and may in the future not be available.[56]

By 1998, Tembe's management noted the severe depletion of reed beds both inside and outside the reserve and thus refused a request by the Tembe tribal authority for larger offtakes. They wrote, "There is an almost limitless demand for reeds in the region, and this demand can never be satisfied by the remaining resources in the Tembe Elephant Park." Furthermore, "Increasing offtakes would also send the wrong message to the communities who must understand *sustainable* utilization."[57] This reed utilization program is still in place today.

In the mid-1990s, one of the indunas also requested access to fish from Ndumo's pans by way of a fonya drive, where fish would be collected from a drying pan with a fonya basket. It had been agreed several years earlier that if the Fontana Pan were to fill with water, a drive could be organized. In August 1995, conditions appeared optimal, and the drive was approved by the KwaZulu Bureau of Nature Conservation. 250 people arrived to take part, some planning to fish with spears, sticks, and knives instead of the approved fonya baskets. When they saw that the Fontana Pan did not have as many fish as they had hoped, many proceeded to other pans in the reserve that they did not have permission to fish. In his report on this failed fonya drive, Officer

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[54] E. W. Ostrosky, Memorandum. Subject: Request by the Tembe Tribal Authority for Increased Access to Reed Harvesting in the Tembe Elephant Park. 26 September 1998. Tembe/Ndumo file. Tembe Ndumo Complex box. EKZNW Archive.
[55] "Reed Utilisation," *Natal Wildlife* 30, no. 1 (1989). JPL.
[56] Robert Kyle, "Towards the wise, sustainable and appropriate use of the renewable natural resources of the Tembe Elephant Park/Ndumo Game Reserve," April 1993. Tembe/Ndumo. Tembe Ndumo Complex box. EKZNW Archive.
[57] E. W. Ostrosky, "Memorandum. Subject: Request by the Tembe Tribal Authority for Increased Access to Reed Harvesting in the Tembe Elephant Park," 26 September 1998. Tembe/Ndumo. Tembe Ndumo Complex box. EKZNW Archive.

Kyle remarked, "There is a massive need/want for fish and fishing from the people living just outside Ndumo Game Reserve and the reserve cannot supply this need and maintain stocks." Regional Conservator Des Archer noted on the report, "Serious consideration is required prior to allowing similar resource utilization of this nature if reservoir/stocks are to be placed under…pressure by persons not understanding the words sustainable and control."[58]

Although another fonya drive was subsequently proposed for a different pan in Ndumo, Ed Ostrosky, who by that time was Chief Nature Conservator of Tembe-Ndumo, decided against it for various reasons including the inability to predict if and when a pan will dry up and overfishing in the Usuthu and Pongola floodplains outside the reserve."Somewhere natural processes should be allowed to continue and that place is inside Ndumo."[59] I found no evidence that a fonya drive occurred again in the reserve, and presumably the preexisting policies regarding fishing in Ndumo remained. These permitted "ration" fishing by reserve staff and recreational fishing by Bureau staff and "VIP visitors" on the condition that all fish caught were released.[60] This relatively protectionist stance was based on the presumption that Ndumo's fish were the breeding stock for the rest of the floodplain, providing stock for a large fishery outside the reserve.[61]

Wildlife as a Productive Resource: Transnational Networks and Game Ranching

Jane Carruthers has described the development of extensive game ranching in South Africa as part of a trend towards the sustainable utilization of wildlife in the 1950s and 1960s.[62] Following Aldo Leopold's ideas published in the 1920s that wildlife should be "'positively produced, rather than negatively protected,' that it was a 'crop that nature will grow,'" the emergence of South Africa's game ranching industry represented a turn towards wildlife as a

[58] Robert Kyle, "A Brief Report on the Fonya Drive at Fontana Pan on 12 August 1995," October 1995. 11/9/3/16. Research Ndumo Game Reserve. NGR Archive.
[59] Letter from Chief Nature Conservator to Control Conservator (North), "Proposed Fonya Drive in Shokwe Pan, Ref Dr. R. Kyle," 25 January 1996. 11/9/3/16. Research Ndumo Game Reserve. NGR Archive.
[60] Robert Kyle, "Tembe/Ndumo Complex Fish Utilization in 1993," April 1994. 11/9/3/16. Research Ndumo Game Reserve. NGR Archive.
[61] Robert Kyle, "Recommendations Towards a Fish Utilisation Policy for Ndumo Game Reserve," 23 November 1988. 11/9/3/16. Research Ndumo. NGR Archive.
[62] Jane Carruthers, "'Wilding the Farm or Farming the Wild'? The Evolution of Scientific Game Ranching in South Africa from the 1960s to the Present," *Transactions of the Royal Society of South Africa* 63, no. 2 (2008): 160-181.

productive resource.[63] It also blurred the boundaries between what might be seen as "wild" and "tame," or even "domestic," and fortified the perception of wildlife as an economic commodity. These changing conceptualizations of game from objects of protection to exploitable resources were not unique to South Africa but were part of a regional circulation of knowledge and expertise. The proceedings of the 1963 Arusha conference on the "Conservation of Nature and Natural Resources in Modern African States" state:

> Only by the planned utilization of wildlife as a renewable natural resource, either for protein or as a recreational attraction, can its conservation and development be economically justified in competition with agriculture, stock ranching and other forms of land use.[64]

This represented a turn toward privileging the economic value of wildlife through its sustainable utilization, which was being encapsulated in the concept, "use it or lose it."[65]

In Mozambique's Inhambane district, wild ungulates such as eland, kudo, sable, and blue wildebeest were domesticated to perform agricultural work as early as the 1930s as an alternative to cattle that were susceptible to trypanosomiasis, or *nagana*.[66] Writing in 1961, Dr. Travassos Dias lamented that these activities had not continued, as he was certain they would have become the pride of Mozambique.[67] Portugal's 1955 Decreto 40 040 moved the responsibility of wildlife protection in Mozambique from the Game Commission to the Department of Veterinary Services, with the intention that wildlife would not only be protected but also promoted and utilized. This legislation included a provision for "promoting the establishment of experimental stations of domestication and hybridization [producing offspring from different species]."[68] Travassos Dias drew on this legislation to argue for the reimplementation of a program of wildlife domestication for agricultural purposes. Offering a specific vision for how animals such as eland, kudu, and

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[63] Ibid., 162. As quoted in C. Meine, *Aldo Leopold: His Life and Work* (Madison: University of Wisconsin Press, 1988), 240.
[64] As quoted Brian A. Child et al., "The Economics and Institutional Economics of Wildlife on Private Land in Africa," *Pastoralism: Research, Policy and Practice* 2, no. 18 (2012): 6-7.
[65] Ibid.
[66] J. A. Travaços [*sic*] Santos Dias, "Uma das Medidas de Fomento que Urge Promover em Moçambique [One of the methods of promotion that urges advancement in Mozambique]," *Boletim Geral do Ultramar* 37, No 431 (1961): 272-280.
[67] Ibid., 277
[68] Decreto 40 040, Chapter 5, Section 1, Article 44, 6, *Boletim Oficial de Moçambique*, I, no. 8, 24 February 1955, 189-202.

zebra (elephant were considered impractical) should be captured and habituated, he argued that this program would offer an "undeniable benefit for the economy of this territory."[69]

Dr. Sousa Dias, head of the Division of Wildlife Protection, suggested that this legislation created a possibility for radically modifying the means by which game meat was being procured previously, by hunters on a mass scale in a manner he considered "absolutely reprehensible" ("*absolutamente condenável*").[70] "Even with the limitations recently placed by the [Department of Veterinary] Services, we were walking toward the pure and simple extinction of productive species."[71] In order to exploit the potential of these species, Sousa Dias offered a plan for procuring, managing, and utilizing them within particular areas, which would also act as scientific laboratories for studying the reproduction and mortality of different species, their diets, different methods of containment (such as corridors and pens), the best age at which to slaughter them, how to slaughter them, how many to slaughter a year, and the production of other products, such as pelts.[72]

With the implementation of Decreto 40 040 the Department of Veterinary Services not only had responsibility for the creation of parks, reserves, and coutadas, with the eradication of the Game Commission it also supervised hunting outside these areas and was responsible for ensuring the protection of Mozambique's wildlife. Often the interests of the department, perhaps unsurprising given its disciplinary grounding, revolved around the control of animal pathogens. In laying out the challenges the department faced in conserving wildlife whilst protecting domestic animals and humans from the diseases wildlife carry, Dr. Garcia Valdão, a veterinary pathologist, argued that with proper coordination and scientific expertise, there could be a place for both game and for cattle, however not in the same space.[73] He wrote, "It is clear that you should not install a "game homestead" (*herdade de caça*) or a coutada in a farming zone," making it clear that "domestic" and "wild" animals do not belong in the same space.[74] Instead, he argued, a plan for livestock and agricultural production should take into account the challenges of safeguarding

[69] Travassos Dias, "Uma das Medidas," 280.
[70] Alexandre H. Garcia de Sousa Dias, "Subsídios para empreendimentos de criações de animais selvagens [Subsidies for wildlife breeding projects],"*Anais dos Serviços de Veterinária de Moçambique* [Annals of the Veterinary Services of Mozambique] 10, 1962 (1966): 231.
[71] Ibid.
[72] Ibid., 236-237.
[73] F. Garcia Valadão, "Alguns aspectos do problema da caça em relação com a ocupação pecuária [Some aspects of the hunting issue in relation to livestock breeding]," *Anais dos Serviços de Veterinária de Moçambique* 10, 1962 (1966):209-211.
[74] Ibid., 211.

Mozambique's wildlife without incorporating game into this "livestock" category. In the same journal in two different articles, Travassos Dias argued in favor of these herdades de caça, suggesting it was widely accepted that in areas where livestock species have difficulty acclimatizing, such as those infested with tsetse fly, homesteads of domesticated wildlife should be created.[75] He suggested that they be established close to parks or game reserves so that they could be easily restocked from protected areas and that the critical task would be to define how many head of game could be slaughtered each year without damaging the herds and while maintaining "perfect equilibrium with its feeding potential."[76] Citing an animal protein deficiency in Mozambique's human population and noting that around two thirds of Mozambique was occupied by the tsetse fly, Travassos Dias was eager to develop a game ranching industry, which he thought would effectively use the province's natural faunal resources and "augment [its] livestock heritage" ("*aumentar o património pecuária da Província")* with a few more species, specifically the buffalo, eland, kudu, hartebeest, sable, *namedoro,*[77] nyala, impala, and zebra."[78]

Travassos Dias continued this crusade for the development of a wildlife livestock industry, with the purposes of not only promoting wildlife labor but also wildlife consumption. In the following decade, he published a variety of articles and presented papers on the potential benefits of farming wildlife, "not only for its perfect adaptability to tropical conditions, for its resistance to diseases that affect domesticated cattle, for its great capacity using and processing plant resources from different regions in which it lives, but also for its ability to contribute in a powerful way to the supply of protein to a large part of this continent's population."[79] He suggested that rural populations would benefit from the aid of tamed buffalo, eland, and zebra in carrying out agricultural work.[80]

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[75] J. A. Travassos Santos Dias, "Algumas sugestões visando uma melhor conservação da nossa fauna selvagem [Some suggestions to improve the conservation of our wildlife]," *Anais dos Serviços de Veterinária de Moçambique* 10, 1962 (1966): 220.
[76] Ibid.
[77] I cannot find a translation for this animal.
[78] J. A. Travassos Santos Dias, "Importância da fauna ungulada selvagem no abastecimento cárneo da Província [The importance of wild ungulates in the province's meat supply]," *Anais dos Serviços de Veterinária de Moçambique* 10, 1962 (1966): 229-230.
[79] J. A. Travassos Santos Dias, "Da necessidade de se promover em Moçambique a pecuarização de algumas espécies de ungulados selvagens [The necessity of promoting the farming of some species of wild ungulates in Mozambique]," *Anais dos Serviços de Veterinária de Moçambique* 15, 1967 (1969): 248. (My translation.)
[80] J. A. Travassos Santos Dias, "A Pecuarização dos animais selvagens como forma de promoção do desenvolvimento económico-social das populaçoes rurais de Moçambique [The farming of wild animals as

Drawing on the development of game industries in neighboring countries, Travassos Dias suggested this industry also represented a means of rectifying the mass slaughter of game in the past, as it was on account of the creation of breeding ranches that wild ungulates such as blesbok, bontebok, and mountain zebra, were not wiped out by hunters.[81] In 1962, there were 3,000 game ranchers operating in South Africa, with much of their meat being dried into biltong. In December of that year, Travassos Dias and Sousa Dias went on a study trip to South Africa and Rhodesia[82] to look for examples of effective wildlife livestock management. Seeing that both South Africa's smaller scale farms (generally under 5,000 hectares) and Rhodesia's larger ranches (reaching up to 135,000 hectares) were productively "farming" wildlife, the veterinarians advocated for the implementation of both scales in Mozambique.[83] They suggested that the government open a new branch of the Veterinary Services Department to oversee wildlife production, which would garner both economic and scientific benefits and cultivate the admiration and respect of the whole world.[84]

In a worn binder labeled "Fauna" in the Veterinary Faculty Library of Eduardo Mondlane University in Maputo, I found amongst a host of other news clippings, an article from Rhodesia published in 1963 with a typed translation of the article into Portuguese. "Leading the world with its 5 million acre game ranching industry," Rhodesia had positioned itself to "'crash' overseas markets" with the export of tinned game meat.[85] The industry was controlled by the country's National Parks and Wild Life Department which posited the following reasons for promoting the industry: "The need to conserve Rhodesia's wild life resources outside game reserves; As a conservation measure against erosion and deterioration of soils, vegetation, and water; To prevent disease outbreaks from 'slum' areas of land through overcrowding of wild animals."[86]

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a form of promoting the socioeconomic development of the rural populations of Mozambique]," *Anais dos Serviços de Veterinária de Moçambique* 15, 1967 (1969): 375-400.

[81] Travassos Santos Dias, "Da necessidade de se promover em Moçambique a pecuarização," 243.

[82] Now Zimbabwe.

[83] Alexandre Heculano Garcia de Sousa Dias et al., "O Problema do aproveitamento racional dos nossos recursos faunísticos naturais como forma de se obviar a uma pecuária convencional deficitária [The problem of the rational utilization of our natural wildlife resources as a form of rectifying a livestock deficit]," *Boletim de Sociedade de Estudos de Moçambique* 32, No. 134 (1963): 129-153.

[84] Ibid., 142.

[85] "New Industry will 'crash' overseas markets," *Sunday Mail*, 1 August 1963. Newspaper clippings, "Fauna" binders, UEM Veterinary Faculty Library.

[86] Ibid.

Mozambique's Department of Veterinary Services seemed to be looking for similar collective returns from a domesticated wildlife ranching industry.

In 1972, a conference was hosted at Sá da Bandeira in Angola regarding the protection of wildlife in Portugal's overseas territories.[87] Amongst other facets of wildlife protection participants discussed its material value, including the economic benefits of using wildlife for hunting, tourism, and farming. Representing Mozambique were Ken Tinley, Armando Rosinha, Fernando Paisana, Travassos Dias, and delegates from the province's coutadas. Dr. Travassos Dias, who by then had become head of the Veterinary Faculty at Eduardo Mondlane University, again stressed the importance of these "game homesteads," or *herdades*, which were becoming more commonly referred to as "*ranchos de caça*" (game ranches). Although he had been proposing the establishment of these herdades for 12 years and legislation had been created in support of their creation,[88] there were still no real game ranches to speak of in Mozambique.[89] He suggested, therefore, that in overstocked coutadas, animals could be culled and their meat could be used productively.[90] This became one of the conference recommendations, along with a suggestion that relevant technological studies were carried out to access the feasibility of "industrializing" the use of game meat.[91] Participants in the discussion also concluded that pilot herdades should be created.

Another issue under discussion during this session on the Economic Value of Wildlife was the use of the word "*caça*" in the phrases "*explorações de caça*" (game farms) and "*herdades de caça*" (game homesteads, or ranches). [92] One of the delegates suggested a substitution of the word "caça" in those instances to "fauna" (fauna) or "*fauna selvagem*" (wildlife), stating, "The reason is clear: amongst us, unfortunately, people assume that all 'caça' (game) is to be '*caçada'*

[87] Reunião para o estudo dos problemas da fauna selvagem e protecção da natureza no ultramar Português [Conference for the study of the problems of wildlife and the protection of nature in Portugal's overseas territories]. 2 Volumes. Sa da Bandeira, Angola, 1972. AHM. The proceedings were published as *Fauna Selvagem e Protecção de Natureza* [Wildlife and the Protection of Nature] (Lisbon: Agéncia Geral do Ultramar, 1973).
[88] Diploma Legislativo 2427, 7 December 1963, allowed for the possibility of farming wild species for the production of protein. This was enacted by Diploma Legislativo 2977, 6 June 1970. Portaria 23 406, 2 September 1972, provided regulations for the farming of wild species. *Fauna Selvagem,* 60-61.
[89] Tema 3: Valor Económico da Fauna Selvagem, Discussão [Theme 3: Economic Value of Wildlfie, Discussion]. Reunião para o estudo dos problemas da fauna selvagem e protecção da natureza no ultramar Português. Sá da Bandeira. 24 November 1972. Vol. I. AHM. See also *Fauna Selvagem*, 59-79.
[90] Tema 3, Discussão, Reunião da fauna selvagem e protecção da natureza. 3.
[91] Recommendations 13 and 14, *Fauna Selvagem e Protecção da Natureza*, 287.
[92] Tema 3, Disscusão, Reunião da fauna selvagem e protecção da natureza, 18.

(hunted)."[93] Dr. Armando Rosinha, Gorongosa's warden and representing Mozambique's Technical Division of Wildlife from the Department of Veterinary Services, acknowledged the problem of using the word "caça" with various intended meanings, stating that new legislation would need to be more clear.[94] The publication that came out of this conference clearly states, "The game [caça] (in the sense of wildlife ranching) is not a sport. The methods of sport shooting not only disturb the animals but are less effective and time consuming."[95] It is thus suggested the most appropriate means of slaughtering these animals be found that would cause them the least disturbance.[96]

I discovered a translated copy of the conclusions and recommendations from the 1972 conference on wildlife protection in Portugal's overseas territories in the basement archive of the headquarters of Ezemvelo KZN Wildlife in Pietermaritzburg.[97] Ezemvelo is the provincial body in charge of wildlife conservation in KwaZulu Natal and is the descendent of both the Natal Parks Board and the KwaZulu Bureau of Natural Resources, which amalgamated in 1997. I mention this archival find because it is indicative of the way information and expertise was traveling across borders in the 1960s and 70s. The copy had been sent to Dr. de Graaff of South Africa's National Parks Board of Trustees by the Secretary General of the Southern African Regional Commission for the Conservation and Utilization of the Soil (SARCCUS).

SARCCUS originated out of the Inter-African Conference on Soil Conservation and Land Utilization in 1948, whose delegates recognized that natural resources were not subject to national boundaries and therefore needed to be conserved through inter-territorial cooperation.[98] In 1969, SARCCUS's Standing Committee for Nature Conservation, Wildlife Utilization and Management held its inaugural meeting in Pretoria.[99] Like the broader SARCCUS umbrella, this standing committee was intended to provide a forum for sharing technical expertise across

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[93] Ibid.
[94] Ibid., 23.
[95] *Fauna Selvagem*, 76-77. (My translation.)
[96] Ibid., 77.
[97] "Final Recommendations and Conclusions," Seminar for the Study of the Problems of Wild Fauna and Protection of Nature in the Portuguese Overseas Provinces. Angola 1972. "SARCCUS: Conservation Associations and Societies, 20/2 – 1973." Natal Parks Board. EKZNW Archive.
[98] A. B. Bridgens, "International Co-operation in Southern Africa with Special Reference to Sarccus and to the Okavango Delta," *Proceedings of the Symposium on the Okavango Delta and its future utilization, National Museum, Gaborone* 1976, 307. http://www.the-eis.com/data/literature_OK/Sympo32 percent20Bridgens.pdf
[99] "Preface," Proceedings of the Symposium on Nature Conservation as a Form of Land Use. Gorongosa National Park, Moçambique. 13-17 September, 1971. WCL.

national boundaries. Participants in this standing committee included Ken Tinley and Alexandre de Sousa Dias from Mozambique, as well as delegates from South Africa, Rhodesia, Botswana, Angola, and Lesotho.[100] The following year the committee met at Skukuza, in South Africa's Kruger National Park, and amongst other agenda items addressed the movement of wild animals and animal products across international boundaries, as well as game hunting.[101] The standing committee suggested that a consolidated International Export/Import permit be introduced as a means of supervising the traffic in wildlife products across member state borders. Furthermore, the delegates agreed on the need for a mechanism for sharing information regarding migratory species across international boundaries as a means of controlling the spread of veterinary diseases.

A Mozambican delegate (possibly Ken Tinley) submitted a memorandum to the committee on the need for multidisciplinary land-use planning in light of general misuse of "natural areas."[102] In addition to the loss of these natural areas due to shifting land-use and demands for agricultural terrain, this memo cited tourism as another factor in their misuse, suggesting that "the greatest destroyer of these natural areas is the continued proliferation of camps, villages, and other urban facilities *within* park space." Arguing that "economic pressure and the threatened survival of these natural areas" has led to the tourism industry dictating the "values" and use of these areas, he suggested that these facilities be moved to the periphery of protected areas allowing their primary objective ("To preserve the indigenous flora and fauna, and scenic masterpieces of a particular region…in their *natural state"*) to reclaim the space.

In 1971, the Standing Committee held its annual meeting in Gorongosa National Park, with the theme, "Nature as a Form of Land Use." By this time, delegates from South West Africa[103] and Malawi were participating in the committee alongside representatives from some of South Africa's provincial conservation departments, including the Natal Parks Board. As mentioned in the previous chapter, one of the key resolutions of this meeting recognized the need

[100] Inaugural Meeting of the Standing Committee for Nature Conservation, Wildlife Utilization and Management, Hotel Boulevard, Pretoria, 22-23 September, 1969. SARCCUS: Conservation Associations and Societies, 20/1 – 1970-1972." Natal Parks Board. EKZNW Archive.
[101] Minutes of the Second Meeting of the Standing Committee For Nature Conservation. SARCCUS: Conservation Associations and Societies, 20/1 – 1970-1972." Natal Parks Board. EKZNW Archive.
[102] Memorandum by Mozambique Delegate: Multidisciplinary Land-Use Planning. Annexure 9.1. Minutes of the Second Meeting of the Standing Committee For Nature Conservation. SARCCUS: Conservation Associations and Societies, 20/1 – 1970-1972. Natal Parks Board. EKZNW Archive.
[103] Now Namibia

to develop marine reserves to protect south-eastern Africa's coastline, particular on either side of the Mozambique-South African border. As part of the discussion on the importance of protecting marine resources, George Hughes, who would later become CEO of the Natal Parks Board and Ezemvelo KZN Wildlife, presented a paper on sea turtle protection.[104] Stating that "the tendency to mine the sea rather than farm it has given rise to numerous ecological disasters," Hughes offered a pragmatic approach to sea turtle protection that would safeguard sea turtle species, boosting their numbers through the establishment of marine reserves, thus allowing for regulated turtle hunting, which would benefit from accompanying education programs to ensure the whole turtle is effectively used upon slaughter. This approach, which recognized the economic benefit of turtle hunting to people living along the coastline, fell far outside the "fortress conservation" paradigm and instead conformed to an alternative idea of conservation, which Allen Heydorn (another key figure in South African wildlife protection) defined at the end of the session: "Conservation here is NOT in the sense of protecting individual species against extinction, but rather of assuring that the maximum benefit can be derived from our natural marine resources for the maximum period of time."[105]

Farming and Harvesting Buffalo in Mozambique

Before and after Mozambique gained independence from Portugal in 1975, practices of farming and harvesting buffalo symbolized a shift toward sustainable use in philosophies of wildlife conservation in Mozambique. As one of Africa's "Big 5" sought by visiting game hunters, intentions to domesticate this animal complicate the conception of what constitutes wildlife and where it belongs. Furthermore, by harvesting these animals from protected areas in the late 1970s, Mozambique's conservation practitioners were revising the function of these reserves from wildlife sanctuaries to reservoirs of a renewable resource.

The buffalo in question were not always native to Mozambique. In the early 1960s, Travassos Dias and fellow veterinarian Fernando Paisana were advocating for the introduction of

[104] George R. Hughes, "Sea Turtles: A Case Study for Marine Conservation in South East Africa," Proceedings of the Symposium on Nature Conservation as a Form of Land Use. Gorongosa National Park, Moçambique. 13-17 September, 1971. WCL.
[105] A. E. F. Heydorn, "Summary: Section V," Proceedings of the Symposium on Nature Conservation as a Form of Land Use. Gorongosa National Park, Moçambique. 13-17 September, 1971. WCL.

water buffalo (from Asia) as a source of labor, milk, and meat.[106] In 1972, Dr. Fernando Paisana, head of the Department of Veterinary Services, reported that the introduction of water buffalo had been completely positive and it was hoped that this animal would solve the protein deficiencies of populations living in marshlands along the coast.[107] The merits of this introduction were even touted in the American press, though likely by a Portuguese author, suggesting "they will allow to make [sic] possible the use of previously uncultivated land and their presence will greatly influence the economy of such regions."[108] Protected areas were often created in spaces thought unproductive for other forms of land use, and here wildlife were to be used where more ordinary domesticated animals were unsuitable. In this case, the species deemed most suitable were not even indigenous to the area.

This notion of utilizing different species of buffalo for productive purposes was not confined to Mozambique. In 1980, *Natal Wildlife,* the publication of the Natal branch of the Wildlife Protection Society,[109] reprinted an article from *Zimbabwe Wildlife* suggesting that Cape buffalo (found throughout southern and eastern Africa) be used as a source of "power and food, of valuable hides."[110] Citing that there were 125 million domestic water buffalo at the time, found mostly in Asia, the author was concerned that Africa's Cape buffalo had never been domesticated. He saw this as a problem of bureaucracy and a failure to heed overseas expertise. "There have been several academic dissertations about the desirability of this, and to maximise production to feed the under-nourished millions in Africa; but most of these comments come from wildlife experts from Europe or America who have come to Africa for one or two tours of duty, only to return 'home.'"[111]

As mentioned above, despite the best efforts of the country's veterinarians and legislators to facilitate the development of a game ranching industry, for reasons "entirely unknown," neither

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[106] J. A. Travassos Santos Dias, "O búfalo de água, uma espécie que convém introduzir em Moçambique [The water buffalo, a species that should be introduced in Mozambique]," *Notícias*, 3 May 1961 and F. Cardoso Paisana, "Das vantagens da Introdução do búfalo de água em Moçambique [The advantages of introducing water buffalo in Mozambique]," *Anais dos Serviços de Veterinária de Moçambique* 15, 1967 (1969): 61-72.
[107] Tema 3, Disscusão, Reunião da fauna selvagem e protecção da natureza, 10.
[108] "Animal life in Mozambique: and some considerations for the cattle rearing sector," *The Washington Post-Times Herald,* 6 February 1972, AD7.
[109] Formerly the Natal Society for the Preservation of Wildlife and Natural Resorts, founded in 1946.
[110] J. B. Condy, "An Idea for Zululand?! Buffalo trained to the Yoke – and answer to the fuel and food crisis," *Natal Wildlife* (November 1980): 16-17.
[111] Ibid., 17.

the government nor large-scale private entities pursued their development.[112] However, Travassos Dias cited one private hunting outfit which had begun to domesticate wildlife by the late 1960s. Located near the Save River, the European owner of Moçambique Safarilandia, had managed to capture and habituate a variety of animals, including nyala, impala, wild pigs, and even buffalo. The last of these made the greatest impression on the author, as they "were in a state of absolute docility, which left us amazed and even more enthusiastic, because [the buffalos] were treated not only as a species that hunting history has consecrated as among the most fearsome, but also as one with the greatest economic value."[113] This hunting outfit had finally succeeded in taming the wild buffalo for economic exploitation.

Figure 19. "Operation Buffalo helicopter," from Armando Rosinha's personal photo archive. Courtesy Dr. S. Bila, UEM Veterinary Faculty.

In 1962, when laying out the steps for developing wildlife production areas, Dr. Sousa Dias cited Marromeu, in the district of Manica and Sofala and to the east of Gorongosa, as the

[112] J. A. Travassos Santos Dias, "A Pecuarização dos animais selvagens como forma de promoção do desenvolvimento económico-social das populaçoes rurais de Moçambique [Wildlife ranching as a way to promote economic and social development of rural populations of Mozambique]," *Anais dos Serviços de Veterinária de Moçambique* 15, 1967 (1969): 387.
[113] Ibid.

first location for rolling out this program.[114] This 1500 km^2 area had been set aside as a special reserve in 1960, particularly for the protection of its Cape buffalo population.[115] However, this protection did not prevent initiatives aimed at productively using this species. At the wildlife protection conference held in Angola in 1972, Dr. Fernando Paisana, Director of Mozambique's Department of Veterinary Services, suggested that his department oversee the farming of buffalo in the Marromeu Reserve, which held approximately 20,000 head at the time.[116]

Figure 20. "Marromeu, '76, Operation Buffalo," from Armando Rosinha's personal photo archive. Courtesy Dr. S. Bila, UEM Veterinary Faculty.

After Mozambique gained independence in 1975, Lobão Tello and Paul Dutton, former Ndumo ranger and friend of Ken Tinley, began a culling program in Morromeu to supply meat to schools, orphanages, re-education camps, and the sugar industry, as well as ZANU-PF forces fighting Ian Smith's government in Rhodesia.[117] Paul Dutton estimates that there were around 60,000 buffalo in Marromeu and the time, and that up to 10,000 were culled a year, managed on a sustainable basis with aerial surveys. According to notes on 1979's Operation Buffalo season that I found in the Eduardo Mondlane University's Veterinary Faculty library, the program's

[114] Sousa Dias, "Subsídios para empreendimentos," 237.
[115] Paisana and Rosinha, "Inventariação dos Problemas," 62-63.
[116] Tema 3, Disscusão, Reunião da fauna selvagem e protecção da natureza, p. 10.
[117] Paul Dutton, interview by the author, Salt Rock, KZN, 21 September 2012.

operatives were harvesting and selling almost all parts of the buffalo. However the most lucrative product was dried meat, or biltong, which would last longer than fresh meat, thus easing supply and transport to the entities mentioned above. That year alone more than 195,000 kilograms of biltong were processed and sold for almost 14 million escudos.[118] Before "Operation Buffalo" formally began in Marromeu, a trial run was undertaken in Gorongosa. Members of the veterinary faculty, including Dr. Armando Rosinha, were present, testing the killed buffalo for diseases.

Operation Buffalo was a precursor to Emofauna, an agency that commercialized wildlife resources and managed hunting areas.[119] Mozambique's new constitution nationalized natural resources,[120] but Emofauna, established in 1980, represented an effort to extract economic value from them. According to Lobão Tello, who became the director of the organization, Operation Buffalo demonstrated that wildlife, "in addition to their high cultural and scientific value, has a direct economic value, translated by providing various types of meat and by-products (skins and trophies)."[121] In addition to managing the culling of surplus animals, the acquisition of trophies, and the distribution of wildlife meat for domestic and foreign consumption, Emofauna sought to provide ecological services to protected areas and "areas with potential to be future zones of conservation or utilization."[122] Furthermore, the organization offered training on how to correctly slaughter and use animals and their by-products to not only peasant populations but also hunting organizations and state agencies that used wildlife meat for food.[123] According to Tello:

> There is an imaginary contradiction between people who advocate for the pure protection of wildlife and those that advocate its utilization for the benefit of man. This is due to a lack of information and extremist attitudes. Utilization is an indirect form of wildlife conservation. Slaughters are controlled based on the extraction of surplus populations of animals, often targeting old animals without reproductive interest. Doing so keeps the balance between animals and grasslands.
>
> Placing wildlife in service to the country through the provision of meat and by-products, fauna ceases to have an abstract value; this is replaced by a concrete value, and hence people are more easily made aware of its value…we have to

[118] Probably from around 4,000 animals. Op. Buffalo 79. In "Fauna" files, UEM Veterinary Faculty Library.
[119] Paul Dutton, interview by the author, Salt Rock, KZN, 26 April 2013.
[120] Simon Anstey, "Institutional Change and Community Based Natural Resource Management in Northern Mozambique" (PhD diss. University of Zimbabwe, May 2009), 72.
[121] As quoted in Fernando Manuel, "Fauna é beleza é riqueza [Wildlife's beauty is wealth]," *Tempo* 590*,* 31 January 1982, 25. (My translation.)
[122] Ibid.
[123] Ibid., 26.

> look at it as one of the most important renewable resources of the country and, as such, it should and must be used correctly."[124]

This conception of wildlife as a renewable resource was becoming a part of a cohesive vision for wildlife conservation in independent Mozambique. This notion was reiterated in discussions that took place at Mozambique's first National Wildlife Meeting held at Gorongosa National Park in 1981. Participants considered how best to use wildlife directly, through the extraction of meat and trophies, and indirectly, through the provision of infrastructure for a tourism industry, while conserving wildlife populations.[125] The day after the conference ended, forces from RENAMO, the opposition to the incumbent FRELIMO government, raided Gorongosa National Park, taking one of the park's ecologists hostage. The position of wildlife conservation in the country soon deteriorated, and the capacity for wildlife numbers to replenish themselves was severely tested.

Before the General Peace Agreement was signed in Rome in 1992, Mozambique's wildlife populations were severely depleted by demands for meat and byproducts that would both nourish soldiers and pay for arms.[126] Hunting was perpetrated by both sides of the conflict and by South African forces supporting RENAMO and Zimbabwean forces supporting FRELIMO. Gorongosa was hit particularly hard as the national park was located close to RENAMO's headquarters, and troops were based there for long periods of time.[127] Elephant numbers declined from around 3,000 before the armed conflict to around 100 in 1994.[128] Buffalo, hippo, and wildebeest appeared completely absent in an aerial survey after the war. In Marromeu, buffalo numbers were reduced to 2,346.[129] Even after the armed conflict ended, a lack of enforcement from both government and local authorities allowed the unconstrained killing of wildlife to continue.[130] One of Gorongosa's game guards that stayed in the region throughout the war and continued working in the park afterwards told me that a commercial meat market was established

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[124] Ibid. (My translation.)
[125] Ibid., 21-22.
[126] John Hatton, Mia Couto, and Judy Oglethorpe, *Biodiversity and War: A Case Study of Mozambique*. World Wildlife Fund (WWF) Biodiversity Support Program. Washington, D.C., 2001.
[127] Ibid., 47.
[128] Ibid., 43.
[129] Ibid., 44.
[130] Ibid., 48.

outside of Gorongosa during that time, locally known as "The Rome Accord" after the peace agreement.[131]

Where Mozambique's veterinary services department had spent several years developing an ethos for the sustainable use of wildlife that would see species survive in perpetuity, this uncontrolled slaughter for immediate ends nearly saw wildlife wiped out all together in many parts of the country. Furthermore, threats to wildlife in Mozambique impacted the development of protected areas in South Africa, particularly Ndumo and Tembe, as wildlife ventured across the border into these reserves. The armed conflict also forced many people to move out of southern Mozambique, settling in the Mbangweni corridor between Ndumo and Tembe. This effectively prohibited the future amalgamation of these reserves and put extra pressure on their collective resources.

Conclusion

Although much of the scholarly work from with the humanities and social sciences focuses on the exclusionary politics of protected areas, in this chapter I have shown that some sustainable use practices in Natal and Mozambique from the 1960s endeavored to facilitate access to the resources of these areas for the benefit of local communities or the nation as a whole. Mozambican veterinarians tried to build a game ranching industry in the Portuguese province as a means of supplying meat to laborers and compensating for protein deficiencies. Around the same time, Ken Tinley and others were trying to find ways that game reserves in northern Natal and Mozambique could benefit surrounding populations. These initiatives were not always successful, but they are worth inserting into the history of wildlife conservation in this region as a means of looking at how conservationists imagined protected areas to function and who they intended as the beneficiaries of their resources In Mozambique, any progress that may have been made in using wildlife resources productively was halted by a devastating armed conflict, which saw wildlife used as fuel to sustain a war.

This chapter also demonstrated that ideas about wildlife as a usable resource circulated across borders via conferences and study trips aimed at discovering the best economic uses for

[131] Pereira Araujo Charles (GNP game guard from 1970s to 2012), interview by the author, Gorongosa National Park, 30 July 2010.

indigenous wildlife products and wildlife labor. Though not always explicitly described as "sustainable utilization" or "sustainable use," the legislation, programs, and land use ethos that I have tracked in this chapter reveal an emerging focus on the importance of deriving economic benefits from wildlife and protected areas, which continues to be a guiding force in wildlife conservation. Furthermore, the discourses and practices of sustainable and productive use reveal complex negotiations of what practices are suitable within protected areas and to whom these resources belong. They also complicate our understanding of what counts as *wild*life, when some of these species are treated as exploitable stockpiles of meat or trophies, whether or not they are within the boundaries of protected areas.

The link between wildlife protection and maximizing these species' productive benefits, inherent to sustainable utilization practices, may seem incongruous, and some have criticized this philosophy as elevating the needs of humans over those of wildlife.[132] Though part of an emerging trend aimed at joining economic development with conservation, sustainable use nonetheless privileges wildlife's utility for humans over its "right to continued existence."[133] Where wildlife species had been protected in the late nineteenth and early twentieth centuries due to threats of scarcity or extinction, the success of such conservation programs created new threats to individuals of overpopulated species that had become a burden on a protected area's habitat or ecosystem.

Where this chapter focused on attempts to link wildlife conservation with economic development, in the following chapter I explore two historical moments when wildlife conservation and economic development were at distinct odds with one another. I focus on two port projects proposed within Maputaland in the 1970s and 1980s as a means of analyzing conflicting claims to territory. These examples not only reveal contestations between development and conservation. They also demonstrate that when advocating for wildlife protection against the threats of "development," whether expressed through industrial projects or territorial changes, conservation advocates used citizenship discourses to defend the rights of an area's non-human inhabitants, implicitly suggesting that the rights of non-humans to territory be privileged over those of the governments that manage these spaces. Discussions between

[132] Duffy*, Killing for Conservation*, 174.
[133] Aldo Leopold, "Conservation Esthetic," in *A Sand Country Almanac: With Essays on Conservation from Round River* (Oxford: Oxford University Press, 1966), 5.

government officials regarding who or what belongs in these areas reveal a politicized process of place-making in protected areas tied to what or who belongs in them.

Chapter 3

A Tale of Two Harbors: Conservation, Development, and "Natural" Citizenship

There is rich scholarly material on the complex relationship between conservation initiatives and local development, or poverty-eradication schemes.[1] However, conflicting claims to land and its resources do not occur only at the local level, and community and sustainable development are not the only ideals on which these spaces have been contested.[2] Territorial contestations also occur within and between states, illuminating disparate views over what or who belongs in a demarcated place and what or who is prioritized in its management. Protected areas have also been claimed for larger economic development projects, where different government factions push different land use agendas. These projects often show land-use politics to be embedded in divergent discourses regarding what is best for a country's citizens. In this chapter I look at two case studies in the Maputaland region where state actors pursued development programs that tested the ecological integrity of the region's protected areas, inciting decisive criticism from conservation agencies as well as public debates about citizenship, belonging, and nationality.

The 1970s and 1980s were turbulent decades in Mozambique and South Africa. The former was embroiled first in a fight for independence from colonial rule and then in a protracted armed struggle, fueled by arms and anti-communist sentiments from its white-ruled neighbors. The latter responded to growing organized resistance to the country's apartheid policies with efforts to quash its opposition and also destabilize newly independent countries in the region, who were in turn providing support to South Africa's freedom fighters. In the final years of colonialism in Mozambique and apartheid in South Africa, each government sought to consolidate power by either utilizing or brokering its coastal resources. Amidst the precarious

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[1] For a review of this literature see William M. Adams and Jon Hutton, "People, Parks and Poverty: Political Ecology and Biodiversity Conservation," *Conservation and Society* 5, no. 2 (2007): 147-183. For a review of policy interventions and NGO programs see William M. Adams et al., "Biodiversity Conservation and the Eradication of Poverty," *Science* 306 (2004): 1146-1149.

[2] Much of the scholarly work on state contestations over land focuses on governance issues arguing that states have tried to use protected areas to consolidate power over territory. See for example Bram Büscher and Ton Dietz, "Conjunctions of Governance: The State and the Conservation-development Nexus in Southern Africa," *Journal of Transdisciplinary Environmental Studies* 4, no. 2 (2005): 1-15.

position of these weakening states, the exploitation of their natural resources prompted discussions around citizenship and belonging tied to the sites of resource exploitation.

In the early 1970s, a site within Mozambique's Maputo Special Reserve was selected for a deep water port and ocean terminal in aid of the province's economic development. While advocates for the reserve's ecological integrity did not criticize the potential consequence of the harbor on the aquatic environment, they did voice intense criticism against the inland rail infrastructure that would accompany the port, crossing the reserve's southern section and displacing its fauna, particularly its elephant population, from a critical fresh water source. This environmental lobby was successful in the short term obstruction of the project, privileging the needs of the area's non-human citizens in their call to reroute the railroad.

A decade later, in the height of Cold War politics, the South African national government decided to cede Kosi Bay and its inland territories, including Ndumo Game Reserve, to Swaziland, granting the small, land-locked country its long-held desire for a route to the sea. The exact reasons why the South African government proffered the Ingwavuma land deal at the time it did are still something of a mystery. However, it is likely that a variety of geopolitical factors were at stake, including the creation of a buffer with independent socialist Mozambique and continuing the process of denationalizing South Africa's own black population. The discourse around this project was couched in debates not only about what belonged in the parcel of land but also to which nation its inhabitants belonged. These extensive disputes about ethnicity and citizenship were widely publicized in domestic and international media which, along with regional political negotiations, resulted in the government annulling the deal.

Each of these projects was met with intense opposition from the agencies charged with managing the affected protected areas. Dr. Travassos Dias, the Mozambican veterinarian who had rallied for the development of a game ranching industry from the 1960s, continued to be an influential figure in wildlife conservation in Mozambique. By the early 1970s he was president of the Nature Protection Association and used that position to advise the government against the deep water harbor on account of the potential impact to the Maputo Special Reserve's elephant population. In 1963, the Natal Parks Board (NPB) began a survey of sea turtles nesting on the province's northern coast, just south of Kosi Bay, which led to a program of protection that saw

500 loggerhead and 70 leatherback turtles nesting annually by 1983.[3] George Hughes began to work on the project in 1966, becoming one of its staunchest supporters. He then became an important critic of the Ingwavuma land deal in the early 1980s on account of the threat it posed to the coastline and its amphibious seasonal visitors due to the likelihood of a Swazi harbor built at Kosi Bay.[4] I use each of these failed harbor projects as a means of exploring the contestations between wildlife conservation and other forms of territorial development during this period. I analyze the discourses that supported these divergent agendas, arguing that these contestations were grounded in notions of citizenship rights, extended by their advocates to non-human inhabitants of these areas.

Each project invoked extensive public and private debate about who should be prioritized in the place's development, or in other words, who its citizens were. Mahmood Mamdani has described the colonial (and apartheid) experience in Africa as a process that created spatially and racially distinct citizens and subjects.[5] He argues that under colonial rule, citizenship was bestowed upon the "civilized," while rural, native people became subjects of the state with limited political rights. In turn, this bifurcation led to the development of "tribalism" in rural areas. Terence Ranger has also argued that what some might see as "tradition" in Africa, was actually invented by the European modernizing mission of colonialism, and Leroy Vail stresses the historical development of "ethnic consciousness, or tribalism" over time.[6] These scholars and others show citizenship and identity to be political categories, employed by different actors towards the attainment or suppression of power in different circumstances.[7] Nira Yuval-Davis demonstrates that discourses of belonging, tied to citizenship claims, can be multivalent, drawing on shared identity or ethnicity, as well as social or physical locations.[8] In Ingwavuma, these discourses centered on ethnic (and racial) citizenship, while in the case of Ponta Dobela in the

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[3] R. S. Crass, "Conservation Value of Ingwavuma District," 3 January 1983. E2/1 Kos file. EKZNW Archive.
[4] He would also go on to become CEO of the Natal Parks Board and Ezemvelo KZN wildlife. George Hughes, *Between the Tides: In Search of Sea Turtles* (Johannesburg, Jacana, 2012) and George Hughes (sea turtle researcher and former CEO of the Natal Parks Board and EKZNW), interview by the author, EKZNW headquarters, Pietermaritzburg, 23 April 2013.
[5] Mahmood Mamdani, *Citizen and Subject*: *Contemporary Africa and the Legacy of Late Colonialism* (Princeton, NJ: Princeton University Press, 1996)
[6] Terence Ranger, "The Invention of Tradition in Colonial Africa," in *The Invention of Tradition*, ed. Eric Hobswam and Terence Ranger (Cambridge: Cambridge University Press, 1983), 211-262 and Leroy Vail, ed. *The Creation of Tribalism in Southern Africa* (Berkeley: University of California Press, 1989).
[7] See also John and Jean Comaroff, *Ethnicity, Inc.* (Chicago: University of Chicago Press, 2009).
[8] Nira Yuval-Davis, "Belonging and the Politics of Belonging," *Patterns of Prejudice* 40, no. 3 (2006): 197-214.

Maputo Special Reserve, discussions focused on the rights of the area's non-human inhabitants to the land and its resources.

In this chapter I focus on the discourses of belonging that circulated around these two development projects, fomenting opposition on the basis of the territorial or citizenship rights. In both cases, the rights of the non-human inhabitants of Maputaland's protected areas (on either side of the national border) to the resources of land and water were proffered as ammunition against the proposed port developments. With the abolition of the Ingwavuma land deal, the rights of the region's human inhabitants to belong to and with their ethnic and national community trumped the political interests and were far more influential than the condemnations of conservationists. However, I spend time illustrating these ethnic and nationalistic debates in order to present a context for the conservationist discourses of belonging that were also circulating around this issue. Citizenship, and the rights it confers, was a highly coveted status during this period, particularly given how tenuous it was at the time.[9] In previous chapters I have referenced work by several scholars who have shown the means by which protected areas have disenfranchised and displaced human citizens.[10] I argue in this chapter that by enclosing territory for the safeguarding of non-human species, conservationists conferred rights of tenure to wildlife, which was then used as fodder to oppose development projects that threatened those rights. I argue that wildlife advocates in and affiliated with conservation organizations used the language, implications, and power of citizenship (even if they did not explicitly use the word) to lobby against potentially harmful large-scale development projects intended to benefit the nation's human populations. As such, they legitimated the rights of wildlife to continue to dwell in protected areas, even when these rights were misaligned with objectives of economic or political development.

[9] This was also true in Mozambique after the country's independence from Portugal. See Jason Sumich, "Tenuous Belonging: Citizenship and Democracy in Mozambique," *Social Analysis* 57, no. 2 (2013): 99-116.

[10] See pages 9-12, 47, and 102 in this dissertation.

"Elephants ruin railway project"[11]: Conservation and Development at Ponta Dobela

In *Seeing Like a State,* James Scott identifies a "high-modernist ideology" as one of the factors necessary for the catastrophic failure of well-intended development schemes.[12] Identified, in part, as an uncritical over-confidence in science and technology and the ability of humans to master nature, Scott argues that this high-modernist ideology fueled large infrastructure or social engineering in Europe during the early twentieth Century. The planned port at Ponta Dobela in the Maputo Special Reserve could be seen through Scott's high-modernist lens. Like other concurrent large development projects in Mozambique, plans for the intended deepwater port showcased a human desire to control and manipulate the natural environment. However, for the project's architects, the reserve's non-human inhabitants (and their human advocates) would prove difficult to subdue or ignore.

In the early 1960s, as decolonization swept across much of the African continent, anti-colonial forces in Mozambique consolidated into the *Frente de Libertação de Moçambique* (Mozambique's Liberation Front, or FRELIMO), a liberation movement that would spend the next 13 years fighting for independence from Portugal.[13] However, the ongoing armed struggle did not stop the government from proceeding with large scale development projects. The building of the Cahora Bassa dam, which began in 1969 and ended just six months before Mozambique's liberation in June 1975, has been cited as one of the most curious examples of late colonial development.[14] Mozambican historian Malyn Newitt writes, "That one of the world's greatest civil engineering projects should have been undertaken in the dying days of colonialism in one of the remotest and most backward regions of Africa is an astonishing aspect of Mozambican, indeed of African history."[15] At the time of its completion, Cahora Bassa was the fifth largest dam in the world, and the largest created primarily for export with 82 per cent of its energy flowing to neighboring South Africa.[16]

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[11] Derived from "Elefantes estragaram projeto ferroviário [Elephants ruined railway project]," *Noticias*¸ 25 January 1974, 3.
[12] James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).
[13] See Chapter 5, "The Struggle for Independence," in Allen and Barbara Isaacman, *Mozambique: From Colonialism to Revolution, 1900-1982* (Boulder: Westview Press, 1983), 79-108.
[14] Allen and Barbara Isaacman, *Dams, Displacement, and the Delusion of Development: Cahora Bassa and Its Legacies in Mozambique, 1965-2007* (Athens: Ohio University Press, 2013).
[15] Malyn Newitt, *A History of Mozambique* (Johannesburg: Wits University Press, 1995), 528.
[16] Isaacman and Isaacman, *Dams, Displacement, and Delusion,* 3 and 11.

Cahora Bassa was not Portugal's only attempt to develop the province's infrastructure during the war for liberation. In the late 1960s, the *Direcção dos Serviços dos Portos, Caminhos de Ferro e Transportes* (Directorate of Port, Railway, and Transport Services, henceforth abbreviated to SPCFT) and *Portos e Caminhos de Ferro de Moçambique* (Ports and Railways of Mozambique, the public company responsible for implementing port and railway projects, commonly abbreviated to CFM) began scouting locations for a deepwater port and ocean terminal that would be integrated into the port complex of Lourenço Marques. This new port would be able to service large vessels, such as ore carriers and oil tankers carrying more than 250,000 tons.[17] This would be the first specialized port of its size in Portugal, Angola, or Mozambique and would cost approximately 2 million *contos* to build.[18] In consultation with American firm Soros Associates, SPCFT selected Ponta Dobela in the Maputo Special Reserve as the most appropriate site for the port due to its favorable meteorological, oceanographic, and geological attributes as well as the comparable ease of constructing supporting terrestrial infrastructure.[19] In addition to the 1600 meters of coastline this port would occupy, further proposals included a railroad linking Ponta Dobela with Lourenço Marques that would run across the reserve just north of lakes Piti and Chinguti[20] to the town of Salamanga outside the reserve, a parallel thoroughfare for motor vehicles, and other supporting roads within the reserve.[21]

While South Africa's relationship to the development of Ponta Dobela is much less clear than in the case of the Cabora Bassa dam, the neighboring country was certainly increasingly embedded in the economic and environmental terrain of Mozambique during this period. An article about the port published in *Voz de Moçambique* (Voice of Mozambique, a magazine aimed primarily at white citizens) cites CFM's contention that Ponta Dobela would not principally serve the South African market.[22] While this may have been true, the need to qualify that South Africa

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[17] "Ponta Dobela – Terminal Oceânico [Ponta Dobela – Ocean Terminal]," *Permanência* [Permanence] 37, June 1973, 32-33.
[18] "Dois milhões de contos para Ponta Dobela [Two Million contos for Ponta Dobela]," *Voz de Moçambique [Voice of Mozambique]*, 30 November 1973. A *conto* was equivalent to 1,000 escudos. At the time two million contos would have been equivalent to $80 million dollars.
[19] Reserva E. Do Maputo, 12 761 [a file with government communications regarding the Maputo Special Reserve, mostly from 1973]. IUCN Library, Maputo; "Ponta Dobela – Terminal Oceânico," 32-33. This was not the first time Ponta Dobela had been selected as a harbor. According to the reserve's current warden, Armando Guenha, there is a CFM placard at Ponta Dobela dating from the 1920s, designating the point as the site of a future project. Unfortunately, due to the poor condition of the roads, Ponta Dobela was not accessible to visitors during the time of writing, and I was unable to investigate this myself.
[20] Also spelled Chingute and Xinguti
[21] Reserva E. Do Maputo, 12 761. IUCN Library, Maputo
[22] "Dois milhões de contos para Ponta Dobela."

would not be the primary beneficiary of the development is telling. At the time, the two countries were becoming increasingly economically entwined. Over 100,000 migrant workers were still supplying labor to South Africa's mines, and South Africa was investing heavily in several industrial sectors in Mozambique, including petroleum.[23] By 1973, South Africa had overtaken Portugal as Mozambique's largest investment and trading partner.[24] As Allen and Barbara Isaacman noted in regard to the Cahora Bassa dam, it is important to consider here "what is being developed and for whom."[25]

In 1971, members of the *Direcção Provincial dos Serviços de Veterinária* (Provincial Directorate of Veterinary Services, hereafter DPSV), which at that time held responsibility for protected areas in Mozambique, voiced concern within their department about the construction of a port at Ponta Dobela.[26] One issue raised was the concurrent application for a tourist concession within the reserve from South African Theunus Bester, whose request was soon to be reviewed by the High Council of Ministers in Lisbon. As part of his plans for developing tourism within the reserve, Bester had proposed a large hotel complex near Ponta Dobela on the banks of Lake Piti, close to where the proposed harbor would be built and the supporting railway would run. Furthermore, Ponta Dobela, considered to be the reserve's most valuable beach, would be occupied by construction and port workers who would supposedly pay little regard to the welfare of the reserve's wildlife. These internal reports also raised ecological concerns, as the proposed railway could cut wildlife off from two major water sources.

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[23] Carlos Nuno Castel-Branco, "Economic Linkages between South Africa and Mozambique," *Southern African Regional Poverty Network.* August 2002. http://www.sarpn.org/documents/d0000120/P117_SA-Mozambique_Link.pdf

[24] Newitt, *History of Mozambique*, 537.

[25] Isaacman and Isaacman, *Dams, Displacement, and Delusion*, 8 and 19.

[26] Armando José Ròsinha, Informação 25/971, "*Construção de um porto de mar na Reserva Especial do Maputo* [Construction of a sea port in the Maputo Special Reserve]," *Direcção Provincial dos Serviços de Veterinária* [Provincial Directorate of Veterinary Services], *Repartição Técnica da Fauna* [Techinical Office of Fauna], 5 July 1971 and Alexandre de Sousa Dias, Informação 44/971, "*Construção de um porto de mar na Reserva Especial de Maputo* [Construction of a sea port in the Maputo Special Reserve]," Direcção Provincial dos Serviços de Veterinária, Repartição Técnica da Fauna, 27 October 1971 in Reserva E. Do Maputo, 12 761. IUCN Library, Maputo.

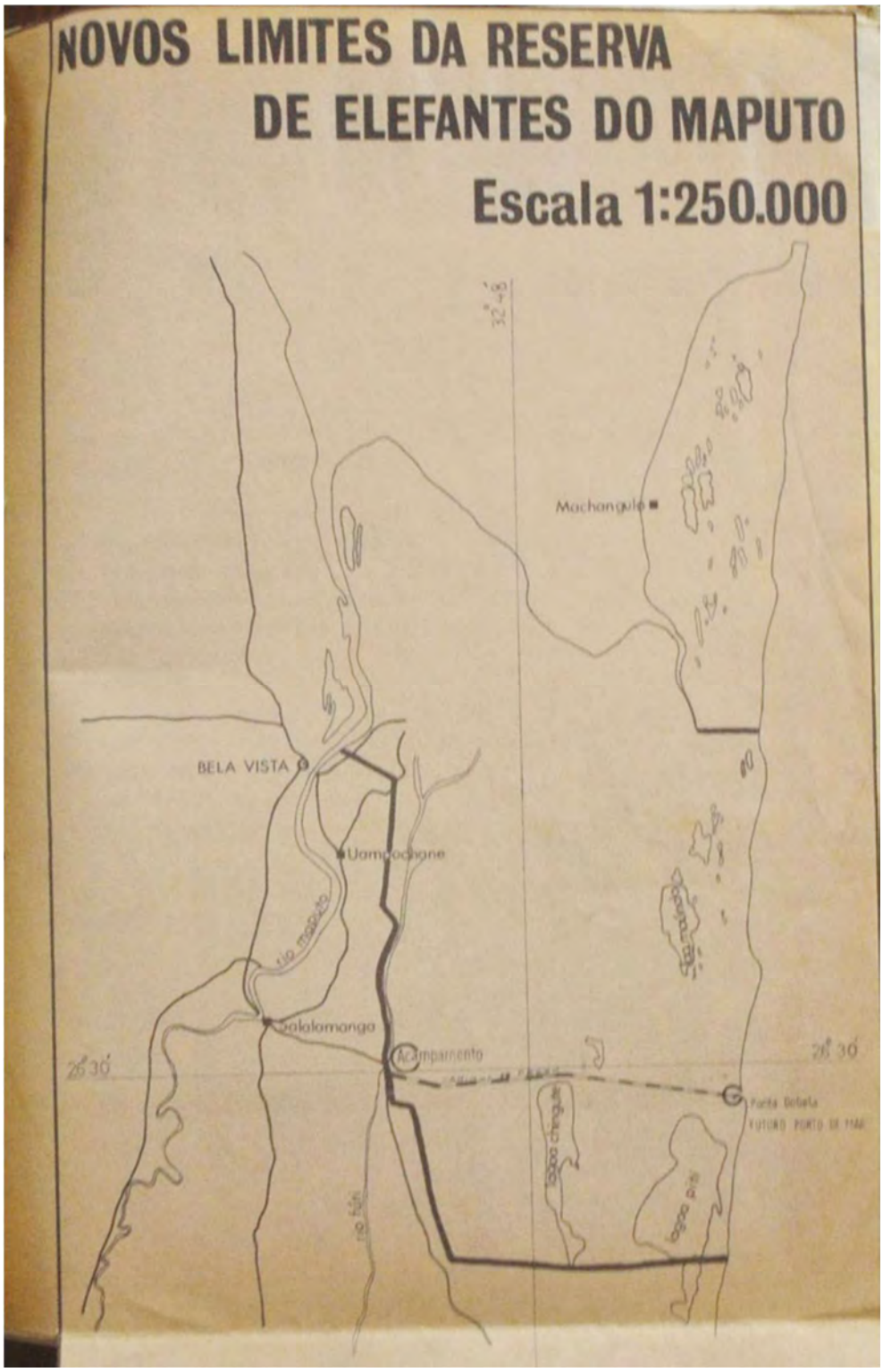

Figure 21. *New Boundaries of the Maputo Elephant Reserve,* undated, c. 1973. The map shows the planned railway line through the reserve to Ponta Dobela (represented as a broken line). From Reserva E. Do Maputo, 12 761. IUCN Library, Maputo.

The same year, the ecological drawbacks of a railway across the Maputo Special Reserve were publically criticized. Jaime Augusto Travassos Santos Dias, a Veterinary Professor and President of the *Associação de Protecção da Natureza de Moçambique* (Nature Protection Association of Mozambique) published an article in *Voz de Moçambique* (*Voice of Mozambique*) condemning the proposed railway as a "*golpe de morte"* (death blow) to the reserve's existence, which would inevitably produce a *"rasto sangrento"* (bloody trail) in its wake.[27] He wrote, "We are not against progress and we do not ignore the urgent need to find a new sea port…However, we understand that one should not destroy riches to create others."[28] Travassos Dias specifically couched the benefits of the reserve not only in cultural, but also in economic terms, citing its potential for tourism development and alluding to plans already in place to allow Bester's concession. He also cited South Africa's recent decision to decommission a railway line that crossed Kruger National Park in order to "properly preserve that sanctuary" as evidence that Portugal's plan was objectively a bad idea.

The following year, Travassos Dias, along with other delegates from the Provincial Department of Veterinary Services, attended a conference in Angola entitled *Reunião Para o Estudo dos Problemas da Fauna Selvagem e Protecção da Natureza no Ultramar Português* (Conference for the study of problems of wildlife and nature protection in Portugal's overseas territories).[29] Other participants at the conference included safari operators from Mozambique and Angola as well as South African ecologists Ken Tinley, Brian Huntley and David Wearne.[30] At the conference Prof. Travassos Dias again brought up the threat of Ponta Dobela to the Maputo Special Reserve, citing his *Voz de Moçambique* article at length. He also drew attention to fact that a government agency was threatening "one of Mozambique's most beautiful sanctuaries," the incompatibility of the railway line and the survival of the reserve, the necessary inviolability of areas set aside as nature reserves, and requested that alternative railway routes to Ponta Dobela be

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[27] J.A. Travassos Santos Dias, "*Em Perigo a Reserva Especial do Maputo!* [The Maputo Special Reserve in Danger!" *Voz de Moçambique* 345, 1 August 1971, 16. Reserva E. Do Maputo, 12 761. IUCN Library, Maputo.

[28] Ibid., 11.

[29] This is also discussed in Chapter 2. Reunião para o estudo dos problemas da fauna selvagem e protecção da natureza no ultramar Português [Conference for the study of problems of wildlife and nature protection in Portugal's overseas territories], Sa da Bandeira, 1972. AHM. The proceedings were published in *Fauna Selvagem e Protecção da Natureza* [Wildlife and the Protection of Nature] (Lisbon: Agência-Geral do Ultramar, 1973).

[30] Like Ken Tinley, both formerly worked for the Natal Parks Board. Huntley and Wearne were working in Angola at the time.

considered.[31] This last point was included in the final recommendations put forward by conference delegates, who advocated for "the defense of the Maputo Special Reserve now affected by a proposed railway, whose route should be revised in order to circumvent the present limits of the reserve."[32] Critics of the Ponta Dobela project focused specifically on the potential ecological impact of the railway on the terrestrial ecosystem and paid no heed to the potential impact of the harbor on the aquatic ecosystem, which it would inevitably destroy. This is particularly striking given the next recommendation by the conference delegates pertained to the creation of a protected marine park in northern Mozambique.[33] This privileging of terrestrial over aquatic resources would be reversed in the opposition to a more recent port project just south of Ponta Dobela that I discuss in this chapter's conclusion.

In September 1973, Ken Tinley and Paul Dutton, veterans of the Natal Parks Board who were then working for Mozambique's DPSV, weighed in on the ecological consequences of the proposed railway line and the road that would accompany it.[34] They suggested that if the Maputo Special Reserve were to remain a "natural resource of national importance"[35] the scientific evidence already relayed in meetings between DPSV and CFM must be taken into account. They reiterated the importance of preserving access to fresh water, explaining the seasonal changes in the salinity of the reserve's fresh water sources, and the link between this seasonal variation and their influence on drainage systems as well as the only highly productive soils in the reserve, located near the Futi River and to the north of Lake Chinguti. Thus, they recommended that the railway line to Ponta Dobela should be deviated from north of the lake to run across its southern part. The road following the railway could then run to its south, acting as the southern border of the reserve. This alteration would add approximately 9 kilometers to the proposed plan but would allow the reserve to survive as "a natural system." As compensation for the loss of land in the

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[31] J.A. Travassos Santos Dias, "*Torna-se urgente e imperioso que se faça da "conserva*ção *da natureza" uma palavra de ordem* [It is urgent and necessary to make "nature conservation" a catchphrase]," Reunião para o estudo dos problemas da fauna selvagem e protecção da natureza no ultramar Português, Sa da Bandeira, 1972. AHM

[32] Translated from "A defesa da Reserva Especial do Maputo agora afectada com um projecto de caminho de ferro, cuja implantação deverá ser revista em termos do seu traçado apenas contornar os limites actuais daquela." *Fauna Selvagem e Protecção da Natureza,* 286.

[33] Ibid.

[34] K.L. Tinley and T.P. Dutton, "Alternativas Sugeridas Para os Traçados da Linha Férrea e da Estrada para que a Reserva do Maputo Possa Subsistir [Suggested Alternatives for the Routes of the Railway Line and Road so that the Maputo Reserve may Survive]," September 1973. Reserva E. Do Maputo, 12 761. IUCN Library, Maputo. As a point of note, Tinley had also been involved in an ecological reconnaissance of Cahora Bassa to determine what the effects of the dam would be on the non-human population.

[35] Translated from "um recurso natural de importância nacional."

south and south-eastern parts of the reserve, Tinley and Dutton suggested that the alluvial plains of the Maputo River between the existing boundary of the park and the proposed railway be included in the reserve. Furthermore, they noted that the urbanization of Dobela, as part of the ocean terminal, would create an opportunity to remove human populations, and their cattle, from the Maputo Special Reserve. Despite their conciliatory approach to the Ponta Dobela project, the authors noted that "rail lines and their associated installations are completely incompatible with the values of parks and tourism," supporting this statement with the example of Kruger National Park's recent removal of a railway line from within its borders.[36] They also pointed out the potential economic value of protected areas, using revenue from Kruger and Gorongosa as examples, to suggest the profitability of these areas from tourism revenue, as opposed to other forms of development.

Shortly thereafter, a CFM official issued an internal report concurring with Tinley and Dutton's assessment of the value of the reserve and their proposed alterations.[37] Although creating an artificial water source as a substitute for Lake Chinguti could be considered, this would result in the destruction of irreplaceable pastures and it would be impossible to maintain the necessary degree of salinity in the artificial lake. The author suggested that when the whole world is increasingly concerned with preserving the natural environment, it would behoove them "to find a formula of harmonization between technical development and the concerns of conservation."[38] Furthermore, he appealed to the recommendation posited at the 1972 conference on wildlife protection in Portugal's overseas territories, which by that time had been ratified by the Portuguese Minister of Overseas Territories, as evidence of the need to support the dual objectives of nature conservation and development. The fact that the recommendation had Ministerial approval yet no mandate had been given to modify the railway line is a point that Dr. Travassos Dias raised with the Governor General of Mozambique around the same time.[39] In a letter written in his capacity as president of the Nature Protection Association Travassos Dias

[36] Translated from "linhas férreas e as instalações lhe estão associados são completamente incompatíveis com os valores dos parques e turismo."
[37] "Traçado da via férrea e acesso rodoviário ao complexo da Ponta Dobela [Tracing road and rail access to the Ponta Dobel complex]," Informação para o Diretor dos Serviços dos Portos, Caminhos de Ferro e Transportes de Moçambique, 11 October 1973. In Reserva E. Do Maputo, 12 761. IUCN Library, Maputo.
[38] Translated from "encontrar uma fórmula de harmonização entre o desenvolvimento tecnológico e aquelas preocupações de conservação."
[39] Letter No. 62/74, Associação de Protecção da Natureza de Moçambique [Mozambican Association for the Protection of Nature], 22 October 1973. Reserva E. Do Maputo, 12 761. IUCN Library, Maputo. The Governor's copy is also available in GG 982, "Reservas e parques de caça, 1972-1974," Z 6/e. AHM.

reiterated Tinley and Dutton's concerns and further embedded the problem of Ponta Dobela in terms of its potential impact on a tourist economy as well as its environmental impact. He requested that the Governor General temporarily suspend CFM's plans to build the railway through the reserve and nominate a commission to revise the project.

At the end of the year, that commission was convened, and in early 1974 its findings were circulated.[40] Comprised of the district governor, a representative from CFM, and Veterinary Services, the commission's report echoed Tinley and Dutton's recommendations for altering the route of the railway line, amending the boundaries of the reserve, and removing its human inhabitants. The authors also again raised the importance of developing the reserve as a tourist attraction simultaneously with the development of Ponta Dobela. This would be done through clearly demarcated (one could read "fenced") boundaries for the different forms of land use.

On January 25, 1974, *Notícias,* one of Mozambique's major newspapers, declared, "*Elefantes estragaram projecto ferroviário*" ("Elephants have ruined railway project").[41] The paper reported that in order not to rob the animals of their safest water source during the dry season, the line would be rerouted to the south of Lake Chingute. Where for Cahora Bassa's engineers, the dam "confirmed that nature could be conquered and biophysical systems transformed to serve the needs of humankind,"[42] Ponta Dobela's architects were thwarted by elephants and their advocates.

Although the port plans were meant to be revised, political changes prevented these revisions from going ahead. By 1972, Mozambique's status had changed from a Portuguese province to a "state," suggesting an increase in political autonomy.[43] At the same time, its economic orientation was shifting from Portugal to South Africa.[44] However, it was not until the Armed Forces Movement in Portugal overthrew its country's authoritarian regime in 1974, that Mozambique's independence became inevitable.[45] This was finally attained on June 25, 1975, and FRELIMO embarked on the challenging task of building a nation from a geographically,

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[40] "Incidência do Acesso Ferro viário a Ponta Dobela na Reserva de Caça do Maputo [Incidence of railway access to Ponta Dobela through the Maputo Game Reserve]," Governo do Distrito de Lourenço Marques [Government of the District of Lourenço Marques]. Reserva E. Do Maputo, 12 761, IUCN Maputo.
[41] "Elefantes estragaram projeto ferroviário," *Noticias*¸ 25 January 1974, 3.
[42] Isaacman and Isaacman, *Dams, Displacement, and Delusions*, 3.
[43] Newitt, *History of Mozambique,* 534
[44] Ibid., 534. See also Isaacman and Isaacman, *Dams, Displacement, and Delusions*.
[45] Isaacman and Isaacman, *From Colonialism to Revolution*, 106-107.

ethnically, linguistically, and racially diverse population, the majority of which had been impoverished, exploited, and marginalized as a result of colonialism.[46] However, the space in which to accomplish this task was short-lived as FRELIMO was soon challenged by a violent opposition movement, born out of the region's history of banditry and warlordism, but capitalized upon by white-ruled Rhodesia and South Africa intent on destabilizing the new socialist regime.[47] Plans for the port at Ponta Dobela were thus submerged by the country's violent armed struggle, only to resurface in the late 1990s, as I discuss in this chapter's conclusion.

Grounding Ethnicity in the Ingwavuma Land Deal

While FRELIMO was fighting a war against Portuguese rule and conservationists were battling to protect the Maputo Special Reserve in the early 1970s, the South African government continued to disenfranchise the majority of its citizens in an effort to consolidate power along racial lines. From the 1950s, South Africa pursued policies of separate development through territorial separation, which included the creation of ethnic homelands.[48] After transferring the citizenship of all black South Africans to these homelands through the Bantu Homelands Citizenship Act of 1970, the apartheid government intensified its plans for territorial segregation in working towards granting them "independence."[49] This would denationalize all black South Africans and aid in the development of a white South African nation-state. While some homelands, like the Transkei, were granted "independence," others, like KwaZulu, only moved towards self-governance.

From the late 1970s, the South African government was also engineering regional developments in response to perceived political and economic threats across its borders. The liberation of neighboring Mozambique in 1975 and Zimbabwe in 1980 removed a geographic buffer between South Africa and "forces of African nationalism" to its north, causing the apartheid government to consider new strategies for political and military protection.[50] Furthermore, the Soweto Uprising of 1976 led to a loss of international economic support,

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[46] Ibid., 111-113.
[47] Newitt, *History of Mozambique,* 574-577.
[48] William Beinart, *Twentieth-Century South Africa* (Oxford: Oxford University Press, 2001), 161.
[49] John Dugard, "South Africa's 'Independent' Homelands: An Exercise in Denationalization," *Denver Journal of International Law and Policy* 10 (1980): 11-36.
[50] Robert M. Price, "Pretoria's Southern African Strategy," *African Affairs* 83, no. 330 (Jan 1984): 14.

causing South Africa to consider how best to improve its economic prospects and also render its policies less offensive to the international community. When P.W. Botha succeeded B.J. Vorster as Prime Minister in 1978 he envisaged the creation of a Constellation of Southern African States (CONSAS), which would weave nearby countries and independent homelands into a web of economic dependence on South Africa, precluding military action against the country, and inciting indirect international legitimacy of the separate development agenda.[51] Although CONSAS was promoted as an economic rather than political organization, its members would have to sign non-aggression pacts with South Africa.[52] Botha's government simultaneously pursued a policy of military destabilization in 'Marxist' Mozambique and Angola, with the intention of installing governments sympathetic to, or at least tolerant of, South Africa's political regime.[53]

On June 14, 1982, South Africa's Minister for Co-operation and Development, Dr. Piet Koornhof, announced that his government was giving the Ingwavuma district in the KwaZulu homeland to neighboring Swaziland.[54] What would become known as the "Ingwavuma Land Deal" came as a shock to most South Africans, including the inhabitants of the area, and sparked a series of debates around the Ingwavuma's ethnic history and as well as the merits of its protected areas, which at that time included Ndumo Game Reserve and Kosi Bay.[55]

The land deal included not only Ingwavuma, part of the KwaZulu homeland, but also the whole of the KaNgwane homeland in what was then the Eastern Transvaal. In return for incorporating these territories, the Swazi government would absorb around 854,000 black citizens from KaNgwane and 96,000 from Ingwavuma into its existing population of only 650,000.[56] The overt rationale for the land deal, according to the apartheid government, was that it would "bring

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[51] Price, "Pretoria's Southern Strategy," 15. See also Centre for African Studies, Eduardo Mondlane University, "The Constellation of Southern States: A New Strategic Offensive by South Africa," *Review of African Political Economy* 18, Special Issue on Zimbabwe (1980): 102-105.
[52] Joseph Hanlon, *Beggar Your Neighbours: Apartheid Power in Southern Africa* (Oxford: James Currey, 1986), 15
[53] Price, "Pretoria's Southern Strategy," 18-21.
[54] "Swazi land deal widely condemned," *Daily News*, 15 June 1982. Newspaper Clippings. EKZNW Archive.
[55] For an assessment of how the ethnicity of the Mabudu-Tembe of Maputaland has been manipulated over time, including during the land deal see Roelie Kloppers, "The History and Representation of the History of the Mabudu-Tembe" (MA, University of Stellenbosch, 2003).
[56] Ieuan L. L. Griffiths and D. C. Funnell, "The Abortive Swazi Land Deal," *African Affairs* 90 (1991): 52-53.

people together who belong together."[57] While ensuing reports confirmed that the people of KaNgwane had Swazi political and cultural ties, the rationale for ceding Ingwavuma on the basis of ethnic "belonging" was more contentious. The district included not only Tembe-Thongas, with closer cultural links across the Mozambican border than with Swaziland, but also the Nwayo, Mtenjwa, and Mngomezulu tribes with varying degrees of ties to both the Zulus and the Swazis.[58]

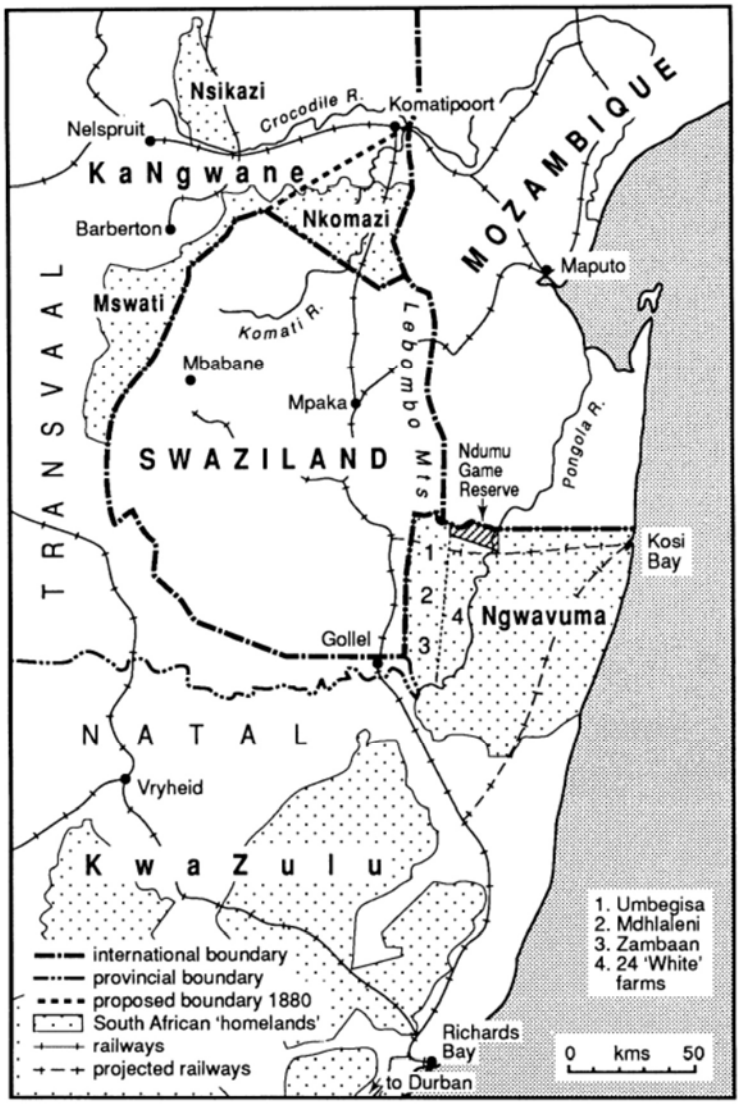

Figure 22. "Swaziland and Surrounding Areas," in Ieuan LL. Griffiths and D.C. Funnell, "The Abortive Swazi Land Deal," *African Affairs* 90 (1991): 53.

[57] Patrick Harries, "History, Ethnicity and the Ingwavuma Land Deal: The Zulu Northern Frontier in the Nineteenth Century," *Journal of Natal and Zulu History* 6 (1983): 1.
[58] Harries, "History, Ethnicity, and Ingwavuma."

Some scholars have suggested that South Africa included Ingwavuma in the land deal as an incentive for Swazliland to absorb KaNgwane's much larger population, which would have improved the "numbers game" for apartheid policies aiming at denationalizing the country's black population.[59] In return, land-locked Swaziland would acquire its long sought route to the sea, via Kosi Bay. Designs on a Kosi Bay harbor date back to the 19th century, when the Transvaal tried to control the area. In an article written when the transfer of Ingwavuma was still a possibility, South African conservation historian Jane Carruthers described the creation of the Pongola Game Reserve in Zululand as a strategic move by the land-locked Transvaal to acquire land, which that might give them leverage to annex Tongaland from the British, and in turn, rights over Kosi Bay.[60] After the Anglo-Boer War, the British controlled all of South Africa, and the reserve no longer served its original purpose.[61] Furthermore, "it had no genuine conservation value, being too small to comprise an ecosystem or even an intact habitat" and "there was no rare, endemic species requiring special protection."[62] Therefore, in 1921, South Africa's first government reserve was deproclaimed, illustrating the entanglement of conservation and politics that the Ingwavuma Land Deal would also come to demonstrate.[63] At the time of the land deal, Swaziland's designs on the Ingwavuma region were reported to have dated as far back as the Transvaal's, and they continued after Swazi independence in 1968.[64]

At the time of the land deal, rumors circulated that the U.S. might actually be the true beneficiaries of Swaziland's route to the sea. Where the U.S. could not openly seek coastal territory from South Africa, due to the increasingly negative status of South Africa in the international community, it was suggested in Parliament and the news media that the U.S. would build a new naval base at Kosi Bay once it was ceded to Swaziland.[65] The Pentagon denied these

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[59] Griffiths and Funnell, "Abortive Swazi Land Deal," 52.
[60] E. J. Carruthers, "The Pongola Game Reserve: An Eco-Political Study," *Koedoe* 28, no. 1 (1985): 1-16.
[61] Ibid., 14.
[62] Ibid.
[63] The Pongola Dam was built in 1973.
[64] Jon White, "Ingwavuma – A century old dispute," *Natal Witness,* 16 June 1982. Press Cuttings, K-N, 1 April – 30 September 1982. EKZNW Archive.
[65] See for example Ormande Pollock, "'US to build base at Kosi Bay' claim," *Natal Mercury*, 5 August 1982 and "Ingwavuma: truth is simpler than fiction," *Natal Witness*, 2 July 1982, 12. Press Cuttings, K-N, 1 April – 30 September 1982. EKZNW Archive.

claims, and strategists pointed out how infeasible such a base would be with the region's lack of infrastructure and remote location relative to the U.S.'s oil interests.[66]

In his recent book about the Natal Parks Board sea turtle conservation project that began in 1963 and continues to run today, George Hughes suggests the Kosi Bay harbor as one of three possibilities for the covert impetus for the land deal.[67] This first possibility rests on Seychelles' threat to resettle previously displaced communities at the site of an American airbase on the Changos Island. Due to global public opinion, the U.S. could not openly negotiate a new site at Kosi Bay with the apartheid government and ceding the land to Swaziland provided a plausible cover. The second possibility is that South Africa gave Swaziland the land in exchange for the country's commitment to evict ANC members and support counter-terrorism activities. The final suggestion relates to a failed coup attempt in the Seychelles in 1982. According to Hughes, the coup attempt was undertaken by the "Ancient Order of Froth Blowers," likely engaged by the South African government to overthrow the Seychelles' socialist president. The group of mercenaries used commercial Swazi planes to undertake their fateful mission and in the process lost 25 percent of Swazi's air fleet. In this scenario, South Africa would have given Swaziland a route to the sea as compensation for their silence about South Africa's role in the mission.

It still remains unclear how significant the possibility of a harbor at Kosi Bay was in immediately precipitating the South African government's decision to cede Ingwavuma in 1982. However, it does seem that a route to the sea was at least one of the draws in this deal for Swaziland, whatever South Africa sought to achieve.[68] While I fervently pursued the reasoning behind the land deal in my research, I am only able to speculate on the evidence available. Given South Africa's concerns at the time, it is likely that the deal was spawned by a constellation of factors. Looking at a map of the territories constituting the land deal, ceding both Ingwavuma and KaNgwane to Swaziland would have created a formidable buffer with newly independent (and socialist) Mozambique. This was one of the reasons international news sources cited as the

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[66] "American plan to build base at Kosi Bay denied," *Daily News*, 7 July 1982, 2. Press Cuttings, 1 April – 30 September 1982 not related to NPB. EKZNW Archive.
[67] Hughes, *Between the Tides*, 133-134.
[68] This is supported by various media reports at the time, including Allister Sparks, "S. Africa Blacks, Whites Fight Cessation Plan," *The Washington Post*, 17 July 1982, A15 and Robert I. Rotberg, "South Africa's Swaziland Scheme," *Christian Science Monitor*, 6 July 1982, 23, ProQuest Historical Newspapers.

impetus behind the deal, in addition to reducing the country's black population.[69] Furthermore, it was suggested that the offer of land to Swaziland could have leveraged Swazi co-operation against South Africa's opposition.[70] A few months before the land deal was announced, Swaziland signed a secret non-aggression pact with South Africa and began to quash ANC activity.[71]

Rather than elaborate excessively on the possible factors that immediately precipitated the land deal, in this chapter I focus instead on the political climate in which the deal was born, the debates about citizenship that ensued, and the response from wildlife conservationists. Political and media discourse at the time show the importance of citizenship, sovereignty, and conflicting ideas of the nation embedded in discussions around the Ingwavuma issue. As various scholars have asserted, ethnicity, like identity, is not a fixed concept. It changes over time alongside mutable affiliations, interests, and motivations. Discussions surrounding the Ingwavuma Land Deal involving various government officials, newspapers, and conservationists demonstrate the importance of the concept of belonging, linking citizenship and ethnicity, people and place.

The Hansard account of one afternoon's parliamentary debates that took place six weeks before the ceding of Ingwavuma was announced provides remarkable insight into the political context in which the decision took place—at the height of the Cold War, amidst regional instability, and during increasing international condemnation of apartheid policies.

After saying a prayer on the afternoon of Wednesday, May 5, 1982, Parliament heard a motion by Harry Schwarz of the Progressive Federal Party to appoint a committee of inquiry into the relationship of the South African Defense Force (SADF) to the failed Seychelles coup attempt six months earlier.[72] Through various calls of the House to order, Speaker J.P. du Toit contended that he would adhere to the *sub judice* rule as he had in response to Schwarz's prior broaching of

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[69] See for example Joseph Lelyveld, "South Africa Tells Tribe of Transfer," *New York Times*, 18 June 1982, A3; Robert I. Rotberg, "South Africa's Swaziland Scheme," *Christian Science Monitor*, 6 July 1982, 23. ProQuest Historical Newspapers.
[70] "American plan to build base at Kosi Bay denied," *Daily News*, 7 July 1982. Press Cuttings, 1 April – 30 September 1982 not related to NPB. EKZNW Archive.
[71] Hugh MacMillan, "A Nation Divided? The Swazi in Swaziland and the Transvaal," in *The Creation of Tribalism in Southern Africa,* ed. Leroy Vail, ed. (Berkeley: University of California Press, 1989), 313 and Kenneth W. Grundy, *The Militarization of South African Politics* (London: I.B. Tauris & Co., Ltd., 1986), 82.
[72] Harry Schwartz's son Allan is an architect living in Mozambique's Sofala province and has been involved in the Gorongosa restoration project for many years.

the Seychelles issue, concluding that no discussion or inquiry could be commenced while a criminal trial was under way. Schwarz argued that if taken up in the context of a Select Committee, the issue could be regarded as confidential and hence could not prejudice the criminal trial. Du Toit would not be persuaded, Prime Minister P.W. Botha told Schwarz he was swayed by "petty gossip," and the issue was closed.[73]

The House then debated various topics, including the possible independence of South West Africa,[74] improving relations with the United States, and the urgent need for development on the continent. Graham McIntosh of Pietermaritzburg North then asked the House to respond to two issues. The first was a rumored land deal with Swaziland.[75] Two days earlier Buthelezi, Chief Minister of KwaZulu, had been summoned to Cape Town to meet the Ministers of Foreign Affairs and Co-operation and Development on the issue, and McIntosh demanded to know the nature of the deal and its purpose. He stated

> We understand that it concerns the corridor from Swaziland to Kosi Bay. Apparently Swaziland has the same urge the old South African Repulblic had to have a port of its own. Apparently this land is to be handed to Swaziland and thus Swaziland will be given the Ndumo Game Reserve in exchange for which – this is apparently what Chief Buthelezi said in the KwaZulu Legislative Assembly yesterday – he would be given the Umfolozi Game Reserve, the Hluhluwe Game Reserve and 300 000 ha of land.[76]

Pre-empting a Ministerial response that the people of Kangwane and Ingwavuma are "all Swazi and that Swazis should be together," McIntosh argued that the Tonga of Maputaland were neither Swazi nor Zulu, and instead this was "actually an attempt to move millions of South African Blacks into a country which has OAU [Organization of African Unity] and UN recognition."[77] A fellow MP responded to this conjecture by telling McIntosh that he should be ashamed of himself.[78] In addition to raising points about ethnicity and territorial sovereignty, Vause Raw, leader of the New Republic Party, reminded the House that the tract of land now due to be given to Swaziland in KwaZulu Natal, was already selected to be handed over to the Natal

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[73] "Appointment of Select Committee on Attempted Coup in the Seychelles," Wednesday, 5 May 1982, Debates of the House Assembly (Hansard), Republic of South Africa, Second Session, Seventh Parliament, vol. 102, 6070-6071. WCL.
[74] Now Namibia.
[75] "Business of the House," 5 May 1982, Debates of the House Assembly (Hansard), Republic of South Africa, Second Session, Seventh Parliament, vol. 102, 6109-6110.
[76] Ibid., 6110.
[77] Ibid., 6110-6111. At the time, the homelands received no international recognition.
[78] Ibid.

Parks Board from KwaZulu the following July.[79] Another member noted, "They are selling the cow three times."[80]

The second issue McIntosh raised that day was Natal's power outages due to RENAMO attacks on the Cabora Bassa dam. McIntosh incited various insults from his fellow members when he deduced by process of elimination that RENAMO must be supported by South African sources.[81] In response, fellow MPs called him a traitor and the "most *aanstootlike* (obnoxious) member in this House." Both were forced to withdraw their remarks.[82]

The House then descended into a lengthy debate about the "psychological onslaught" on South Africa, specifically manifested in the overseas press, of which McIntosh was accused of "venting his spleen for consumption."[83] "Left-wing" speakers like McIntosh were accused of "playing into the hands of our enemies" and hampering "our information effort abroad."[84] This discussion about media representation soon devolved into a debate about appropriate racial and linguistic content of South African television, a medium that had only been available in the country since 1976. One MP outlined the plot of a program where a young black boy ends up sleeping in the same bed as a young white boy. This program had provoked criticism from viewers, although in this particular case, the MP judged it to be "healthy bed-sharing."[85] Broadcast television was clearly a contested space, and its content polemical, especially with regard to interracial interactions. Thankfully, the session convened soon after Mr. Page of Umhlanga asked the chairman to reflect on the fact that a Parliament convening in the year 1982 could spend 20 minutes discussing "*Suikerkaskenades*" (a sports game show) and "*twee outjies in 'n bed*" (two boys in a bed).[86] The issue of Swaziland's border adjustments was only taken up again the next morning by Minister of Foreign Affairs and Information, Pik Botha (not to be confused with Prime Minister P.W.) who conceded that the land deal was a possibility. In responding to the criticism that there had been no consultation with the people living in Ingwavuma, Botha confirmed that Minister Dr. Koornhof was in the process of consulting Chief

[79] Ibid., 6126-6127.
[80] Ibid., 6127.
[81] Ibid., 6111.
[82] Ibid., 6113-6114.
[83] Ibid., 6115
[84] Ibid., 6132.
[85] "Evening Sitting," 5 May 1982, Debates of the House Assembly (Hansard), Republic of South Africa, Second Session, Seventh Parliament, vol. 102, 6206.
[86] Ibid., 6207.

Minister Buthelezi, head of the KwaZulu homeland, though said nothing at the time about consulting residents that would be affected by the decision.[87]

The following month the deal was publically announced, not as a possibility, but as an inexorable certainty, inciting harsh criticism from both the foreign press and Natal's provincial papers. Condemnation of the land deal came from various factions including the Swazi people, the ANC, and opposition parties.[88] In an open letter to Chief Buthelezi, acclaimed South African writer Alan Paton apologized on behalf of "many white South Africans for the treatment to which you have been subjected," contending that Buthelezi's people are "fellow South Africans whose opinions and aspirations are of vital importance to our future."[89] This apology suggests a concept of collective national citizenship on the part of prominent liberals like Alan Paton obviously absent from the National Party's agenda.

Gatsha Buthelezi, chief minister of the KwaZulu homeland, was perhaps the strongest public opponent of the land deal, suggesting in *Newsweek* that

> It is a deliberate punishment because of my refusal to allow KwaZulu to become independent and a part of Pretoria's so-called constellation of states. We Zulus are determined to remain South Africans. For this we are now being stripped of part of our territory, and thousands of our brothers and sisters are being handed over to another country. We believe the South Africans have received undertakings in return for this land that the Swazis will not allow their territory to be used by the African National Congress guerillas.[90]

Both Buthelezi and Enos Mabuza, Chief Minister of KaNgwane, had refused to accept the proposed independence of their respective homelands before the land deal was announced, citing a desire to remain part of South Africa. While the official line from the South African government emphasized ethnic unification rather than the excision of land from South Africa or KwaZulu, Chief Minister Buthelezi claimed Ingwavuma's residents not only as South Africans, but also specifically as Zulus, and Ingwavuma as Zulu land. Chief Mzimbe Tembe echoed

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[87] 6 May 1982, Debates of the House Assembly (Hansard), Republic of South Africa, Second Session, Seventh Parliament, vol. 102, 6257-6258.
[88] See for example, "Swazi Land Deal Widely Condemned," *Daily News,* 15 June 1982 and "Zulu Fury at Ingwavuma Swop," *Natal Witness*, 16 June 1982, Press Cuttings, K-N, 1 April – 30 September 1982 not related to Natal Parks Board. EKZNW Archive.
[89] "We apologise for their action…" *Sunday Tribune*, 20 June 1982, Press Cuttings, K-N, 1 April – 30 September 1982 not related to Natal Parks Board. EKZNW Archive.
[90] "A Man for…All Seasons: Dr. M.G. Buthelezi: President of Inkatha." The Bureau of Communication, Ulundi, December 1982, 11. WCL.

Buthelezi's grievances citing the unfortunate historical continuities of the land deal. Where his father was forced by the Portuguese into Ingwavuma when it was a British territory, he and his subjects were now being forced out to "follow the Swazi."[91]

Frederick Tomlinson, who in 1954 had written a 17 volume report on homeland policy that was largely ignored by the South African government, was recalled by the Ministry of Co-operation and Development to chair a commission of inquiry into the ethnic history of Ingwavuma.[92] The committee's report was submitted in August 1982, and due to the fact that the issue "emotionally politicizes" people, it drew primarily on historical and state documents rather than interviews with Ingwavuma or Swaziland's residents. While the commission concluded that the "Transpongola" (on either side of the Pongola River in Swaziland and KwaZulu) were of a common tribe, the Tembe of Tongaland (located east of the Transpongola, including Kosi Bay), on the other hand were deemed to be independent from both the Swazis and the Zulus with links in both South Africa and Mozambique. Furthermore, the committee concluded that since the development of the KwaZulu homeland in 1970, an artificial unity of tribes had been created, resulting in the largest population of the Zulu kingdom that had ever existed.[93] They suggested that any border adjustments could result in a chain reaction of other tribes wanting to incorporate into other areas.

In December of that year, another commission was appointed to investigate and make recommendations regarding Swaziland and KwaZulu's conflicting claims to Ingwavuma, with explicit instructions to take the views of Ingwavuma's inhabitants into consideration.[94] This commission, chaired by retired chief justice F. L. H. Rumpff submitted a memorandum on the 18th of January, 1983, based on a publication of the University of Witwatersrand's South African Research Service.[95] This brief laid out the chronology and key players of the Ingwavuma Land

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[91] As quoted in "Swazi Land Deal Widely Condemned."
[92] Swart Owerhed. *Komitee van Ondersoek. Etniese en Historiese verbintenisse can bevolking van die Ingwavuma – distrik met KwaZulu en Swaziland* [Black Government. Committee of Investigation. Ethnic and Historical Relationships of the People of Ingwavuma—district with KwaZulu and Swaziland], SAB BAO Vol. 8/303, Ref. X53/14/5. NASA, Pretoria.
[93] Ibid., 81.
[94] "Commission by the State President of the Republic of South Africa," *Government Gazette* Vol, 210, No. 8473, 10 December 1982. *Uitsnyding van die distrik Ingwavuma uit Kwazulu* [Annexation of the District of Ingwavuma in Kwazulu]. SAB BAO Vol. 13/1118, Ref. J76/138/8. NASA, Pretoria.
[95] *Kwazulu Wetgewende Vergadering. Kommissie van Oondersoek na Ingwavuma* [KwaZulu Legislative Meeting, Commission of Investigation on Ingwavuma], Part 1. SAB BAO Vol. 8/421, Ref. X218/28. NASA, Pretoria

Deal prior to the commission's appointment. It does not give the South African government's immediate motivations for proceeding with the deal so swiftly. However, it does list the reasons that had been proffered for the land deal by various sources, including the media, as follows:

1. Unification rather than incorporation[96]
2. Restoration of lands 'stolen' during the 19th Century colonial history
3. A step in the strategy to ensure the survival of the Republic of South Africa as a racially dominated capitalist centre in Southern Africa
4. The problem of unemployment among workers thrown off white-owned farms
5. Dumping ground for population superfluous to the needs of capitalist production
6. Re-settlement of population removed from Black townships demolished in White South Africa, or Black spots.
7. Creation of a class of Black functionaries or beneficiaries to control Homeland system and to maintain the status quo (e.g. officials, police, soldiers, etc.)
8. Incorporation of Swaziland in to the Constellation of States
9. Creation of a buffer zone and the removal of an Angola or Lebanon from the South African borders.
10. The avoidance of the cost of setting up another Homeland in KaNgwane.
11. The wishes of King Sobhuza [of Swaziland] to correct historical wrongs, the evils of colonialism, and the recovery of stolen territory.
12. Provision of access to a potential harbor at Kosi Bay.
13. USA participation in an Indian Ocean naval base.[97]

In the brief's conclusion, the authors confirm that with the appointment of the Commission of Inquiry, the issue was removed from the public and made sub judice.[98] It was then the commission's responsibility to carry on investigating the issue in order to make recommendations to the government regarding the land deal's viability and validation.

In January 1983, leader of the opposition Van Zyl Slabbert moved a motion of no confidence in the Government before the House.[99] In his motion, Slabbert noted

> Nothing better illustrated the arrogance and callousness of this Government during a growing conflict situation than its handling of the Ingwavuma/Kangwane incident. Behind the scenes, repeated pleas were made for this matter to be handled with great circumspection. We discussed it at length. Then the announcement was made quite baldly: the Government, the Cabinet, has decided. That is all. The Cabinet has decided. What did this decision mean?

[96] This was a rhetorical response to criticism that the historical basis for the land deal was precarious.
[97] Ibid., Part 5.
[98] Ibid., Conclusion (no page numbers).
[99] "Motion of No Confidence," 31 January 1983, Debates of the House Assembly (Hansard), Republic of South Africa, Third Session, Seventh Parliament, vol. 105, 16.

> This decision taken by the Government in respect of Kangwane and Ingwavuma had three consequences. Firstly, it was a flagrant contradiction of the government's own declared policy in respect of homeland development…Secondly, it was a confirmation of the Government's standpoint that whatever their policy, Blacks would not become South African citizens. Thirdly it was an indication that the government would seize upon any opportunity to get rid of as many Blacks as possible. This reminds me of the following jingle – As I was going up the stair I met a man who wasn't there. He wasn't there again today. I wish, I wish he'd go away – That is more or less the attitude of the Government towards the Blacks in this Ingwavuma/Kangwane debacle. Fortunately, however, this decision could not be implemented, although I believe that irreparable harm has been done to intergroup relations as a result of the way in which this decision was handled. It is actions such as these that give rise to resentment and polarization in our country.[100]

On the 1st of February, Prime Minister P.W. Botha responded to the Ingwavuma issue, declaring it "a step in the direction of the realization of a long-cherished ideal of the Swazis who a long time ago were deprived, through historical error, of their Swazi citizenship."[101]

Ethnicity, race, and citizenship were not the only issues at stake in the Ingwavuma land deal. Conservationists voiced their objections to the deal on the basis of its threat to the ecological integrity of the area, particularly in the Kosi Bay region, broadcasting strong opinions regarding the nation to which this region's natural assets ought to belong. The Natal branch of the Wildlife Society of Southern Africa[102] issued an urgent release in its July 1982 newsletter.[103] This release highlighted the superlatives of the region such as "Ndumo Nature Reserve, the best and richest bird area in the entire Republic of South Africa"and "Sihangwane Forest – the best example of tropical sand forest in the Republic of South Africa and the only place in Natal where elephants still occur as wild and free animals." It also mentioned the area's coastal attributes such as Kosi Bay, turtle nesting beaches ("the only ones in Southern Africa where both Loggerhead and Leatherback turtles breed" and one of the few places where their numbers have been steadily increasing) and the only coral reef system in the country. The Society admonished against giving up one of the richest areas of South Africa's natural heritage, which includes hundreds of species not occurring anywhere else in the country.

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[100] Ibid., 29-30.
[101] Ibid., 145.
[102] Previously the Natal Society for Wildlife for the Preservation of Wild Life, which organized the first expedition into Tongaland in 1947.
[103] "Urgent Release!! Conservation and the transfer of the Ingwavuma district to Swaziland," *Natal Wildlife* 23, No. 7 (July 1983): 3. Johannesburg Public Library (JPL).

Before the Ingwavuma land deal was announced, the Natal Parks Board's biggest threat had been the transfer of many of some of its reserves to the KwaZulu Bureau of Natural Resources (KBNR), created earlier in 1982.[104] As part of the land deal, Buthelezi and the KwaZulu homeland were reported to have been offered some of the Natal reserves that did not fall within the homeland's boundaries.[105] In return for the loss of some of its game reserves, Natal was rumored to have been offered some land from the Department of Forestry.[106] There were even allegations that animals were being relocated out of Umfolozi at the time of the land deal "because the people of KwaZulu were not responsible enough to look after them."[107] Despite their reservations, the Natal Parks Board found an ally in Buthelezi, who also headed the KBNR, as he fervently supported the need for conservation and the protection of KwaZulu's reserves. Where the Natal Parks Board had been concerned about the transfer of conservation authority in the region to the KwaZulu homeland government, the transfer of the entire region to Swaziland posed a bigger threat, uniting the Natal Parks Board and KwaZulu against a common cause.

The Wildlife Society of Southern Africa released a special double-issue of its magazine *African Wildlife* on the Maputaland region, which was distributed, in both English and Afrikaans, to a host of government officials in the hope that it might persuade them to "make thoughtful ecological appraisals before they take decisions affecting the natural environment of South Africa."[108] In a guest editorial, the society's president, Dr. E.A. Zaloumis, condemned the Ingwavuma Land Deal, not only on the basis of its ecological consequences, but also because Zulu people regarded the area as theirs and "intend to cherish it, just as any country would its national treasures or its natural cultural heritage."[109] Going on to call the Ingwavuma District, "our natural heritage," Zaloumis showed solidarity with the Zulu opponents of the land deal on the basis of a shared right to the region as collective citizens. Where white conservationists had once shown concern over the consequences of the transfer of responsibility to the KwaZulu Bureau of Natural Resources, they now fully backed the KBNR, suggesting "the loss of

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[104] KwaZulu had been granted self-governance in 1977.
[105] "Natal may get land as compensation," *Natal Mercury*, 17 June 1982; "Buthelezi lashes out at 'white baasskap,'" *Natal Mercury,* 7 May 1982; "MEC: Land offer won't sway Natal," *Natal Witness* 28 June 1982; and "Govt's land decision stuns Zulus," *Natal Mercury*, 15 June 1982. Press Cuttings, K-N, 1 April – 30 September 1982. EKZNW Archive.
[106] Ibid.
[107] "Game Movement 'Only Culling'," *Natal Mercury*, 22 June 1982. Press Cuttings, K-N, 1 April – 30 September 1982. EKZNW Archive.
[108] J. Comrie Greig, "Think Ecologically," *African Wildlife* 36, No. 4/5 (1982): 183.
[109] E. A. Zaloumis, "Guest Editorial: The Ingwavuma Debate," *African Wildlife* 36, No. 4/5 (1982): 127.

Ingwavuma would be a cruel blow to this forward-looking department" and that it would be a "conservation tragedy" if Ingwavuma were taken away from the "Zulu nation."[110]

Furthermore, the response from Natal's conservation community raised important questions regarding not only who had the right to determine the area's future, but what belonged in the area. Where the backlash against the land deal from Buthelezi and other opponents focused on the falsity of the national government's claims regarding ethnic belonging, conservationists directed attention to the importance of the region's non-human attributes, suggesting its ecosystems, including its floral and faunal populations had a right to exist in the region.

As the Kosi Bay harbor threat weighed heavily on the public conscience, the population of turtles that nested annually on Maputaland's shores roused particular attention. In 1963, the Natal Parks Board began a research and protection program of the leatherback and loggerhead turtles that came to nest there. George Hughes, an expert on marine turtle conservation and an integral part of the program, included a piece in the *African Wildlife* issue entitled, "A Beacon Fades at Bhanga Nek," outlining the successes of this project and emphasizing the importance of place in the turtles' nesting instincts, where they use the scent in the sand to be drawn "home." In 1979, the World Congress on Sea Turtle Conservation recognized turtle nesting beaches as an international asset, calling for the protection of Maputaland's beaches.

> The dream dims now as the vision of Bhanga Nek becoming the south breakwater of a harbor appears; the clear beautiful beaches of Maputaland will foul, if not with oil and waste, then with the pressure of too many people, too much concrete and too many buildings. And the turtles dim too, bewildered by the strange odours of the harbor water and the coal dust. They won't know where to go; the hatchlings that emerge for a few more years will be drawn towards the powerful harbor lights and perish on the sand and a hundred million years of evolution will die. A bit of every South African will go with it…[111]

In response to the threat of the harbor and to mitigate against the long-term effects on the sea turtles who would be affected by its development, Hughes actually translocated several turtle nests southward down the coast in the hope that would help future generations survive.[112]

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[110] J. C. Grieg, "The KwaZulu Bureau of Natural Resources," *African Wildlife* 36, No. 4/5 (1982): 137.
[111] George Hughes, "A Beacon Fades at Bhanga Nek," *African Wildlife* 36, No. 4/5 (1982): 134.
[112] Hughes, *Between the Tides* and George Hughes, 23 April 2013.

Discussions around the land deal also pitted different ideals of conservation and development against each other. The year before the land deal was announced, Ken Tinley and Willem van Riet had produced a plan for the Tongaland (Ingwavuma) region which included provisions for human habitation and sustainable exploitation of the area's resources.[113] However, Tinley feared that the land deal would facilitate the introduction of large scale cash crop agriculture which would upset the alleged balance between the region's humans and the natural environment. He is quoted as saying, "Sugar and cotton are not food crops. They are 'colonial' crops which would not bring money to the local population and would destroy their unique lifestyle which still depends largely on the wise exploitation of their natural environment."[114] This quote suggests that while Tinley would support the production of subsistence crops that would directly benefit the local population, he believed that cash crops would only destroy the local environment whilst bringing no revenue or benefit to local people. His identification of these crops as "colonial" suggests they are not only exploitative but also foreign to the way that local people have been sustainable managing the land in this area.

Included in the files for the Committee of Inquiry into Ingwavuma in South Africa's National Archives is a ten-page plea for the conservation value of Ingwavuma from the Natal Parks Board, written on February 12, 1983.[115] Written by R.S. Crass, this document also emphasized the distinctiveness of the region as a transition zone between the tropical biodiversity of East and Central Africa and the subtropical biodiversity of the south, resulting in outstanding species richness and unique floral and faunal communities.[116] Regarding human communities, Crass contended that if Ingwavuma's conservation values were to be used for the benefit of "indigenous communities, and South Africa as a whole" a feasible land-use plan will need to be enacted under "a stable political system that accords with the rights and aspirations of the people concerned."[117] While he did not address the land deal directly, he certainly implied his disapproval of it, suggesting that any planning developments should only be done in the case of absolute economic necessity and with minimal disturbance to the ecosystem. He wrote, "A

[113] This is discussed in Chapters 1 and 2.
[114] "Leading ecologist condemns swop," *Natal Mercury*, June 28 1982. Press Cuttings, K-N, 1 April – 30 September 1982. EKZNW Archive.
[115] R. S. Crass, "Conservation Value of Ingwavuma District," 3 January 1983. E2/1 Kos file. EKZNW Archive.
[116] Ibid., 4.
[117] Ibid.

harbor, for instance, should not be contemplated unless its economic necessity is beyond question."[118]

Perhaps in response to the threat of a port on the Ingwavuma coast, Crass paid particular attention to the aquatic features of Ingwavuma, including the Kosi estuary and lakes, which he determined to be "the only large virgin estuary system in South Africa."[119] Furthermore, he described the research and protection of the sea turtles that bred on Maputaland's beaches to be "one of South Africa's great conservation success stories."[120] Operating since 1963, at the time of writing this brief, this initiative had ensured that around 500 loggerhead turtles and 70 leatherbacks were successfully nesting on Ingwavuma's shores just south of Kosi Bay each season. Crass suggested that if this success were to continue, turtle products might eventually be available to local people. He posited this program as an example of effective cooperation between the Natal Parks Board and the KwaZulu Bureau of Natural Resources.[121] However, he later contended that establishing a single socio-economic and ecological unit and removing political uncertainty would be essential to effective conservation in the region.[122] This suggestion prefigured the merging of the KBNR and NPB into Ezemvelo KZN Wildlife after South Africa's 1994 democratic elections and recognized the importance of centralized governance in order to ensure policy alignment across protected areas within the same ecological domain. This understanding of the need to broaden the administrative scale of protected area management in this area could have even been representative of a shifting attitude toward protected areas that heralded transboundary initiatives in the following decade.

The uncontested creation of the Tembe Elephant Park in October 1983 within the Ingwavuma borders shows that the possibility of the land deal going through had likely already subsided by that time. By 1984, media around Ingwavuma had mostly died out, and in June, two years after first declaring the incorporation of Ingwavuma into Swaziland, Minister of Co-operation and Development, Piet Koornhof, dissolved the Rumpff Commission.[123] This was supposedly due to excessive intimidation in KaNgwane and Ingwavuma limiting the accuracy of

[118] Ibid., 8.
[119] Ibid., 6.
[120] Ibid., 8.
[121] Ibid.
[122] Ibid.
[123] Allister Sparks, "S. Africa Abandons Plan to Cede Tribal Lands," *The Washington Post,* 21 June 1984, A33.

information about their inhabitants' wishes with regard to the land deal.[124] Only months before the Ingwavuma plan was shelved, the public had been made aware of a non-aggression pact between South Africa and Swaziland that had been signed around the time the deal was announced, in which Swaziland agreed to prevent anti-apartheid ANC activity within its borders.[125] Since the announcement of the land deal, over 100 ANC members had been expelled.[126] In March 1984, Prime Minister Botha and Mozambican president had signed another non-aggression pact, perhaps factoring into the abandonment of the land deal. In the Nkomati Accord, each country agreed not to support armed rebellion in the other, ostensibly ending South Africa's need for a geographical buffer from its neighbor in the form of KaNgwane and Ingwavuma.[127]

Conclusion: Citizenship, Territorial Rights, and the "Afterlife" of Colonial Development Projects

In his book *Rule of Experts,* Timothy Mitchell raises the question of "what kinds of hybrid agencies, connections, interactions, and forms of violence are able to portray their actions as history, as human expertise overcoming nature, as the progress of reason and modernity, or as the expansion and development of capitalism."[128] In Maputaland, several complex networks worked to promote and resist the development of these two harbor protects, each an example of late-colonialism or late-apartheid assertions of power over territory. The planned port at Ponta Dobela represented a merging of government agency interests toward the economic development of the Portuguese province, which was slipping out of the grip of the metropole's economic and political control. However, the potential impact of this port on the Maputo Special Reserve, and the detrimental effects it would have on its elephant population in particular, eventually halted this project. The conservation lobby, whose individuals were embedded in state agencies, advocated for non-human rights to territory and resources, allowing the reserve's elephants to

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[124] Ibid.
[125] Ibid., See also Hugh Macmillan, "A Nation Divided?" 313.
[126] Ibid.
[127] Newitt, *History of Mozambique,* 567. A raid of RENAMO leader Dhlakama's base at Casa Banana in Gorongosa in 1985 would show that South Africa had continued to support the faction after the signing of the Nkomati Accord.
[128] Timothy Mitchell, *Rule of Experts: Egypt, Techno-politics, Modernity* (Berkeley: University of California Press, 2002), 53.

stall and "ruin" this modernization initiative. Through the Ingwavuma land deal, the apartheid government sought to broker territorial rights and, in turn, denaturalize both human and non-human citizens. The discursive violence of denationalization and false assertions of ethnic identity that the South African government sought to impose on the people living in the Ingwavuma district was tied to its desire to consolidate and maintain power in the region. Territory and people became a currency for political exchange. However, as this chapter has also shown, the state and its representative actors did not respond unanimously to this decision. Several dissident MPs voiced their opposition, representatives of the government agencies overseeing wildlife conservation in Natal and KwaZulu lobbied staunchly against the land deal, and Chief Minister Mangosothu Buthelezi of the KwaZulu homeland used history (selectively) as a tool to locate the identities of Ingwavuma's inhabitants firmly on South African soil. These examples demonstrate the heterogeneity of the state and the multiple ways its diverse representatives have used history to claim land and resources. Furthermore, a variety of human and non-human factors were at stake in the discourses and developments these potential harbor projects at Ponta Dobela and Kosi Bay. The process of place-making in these areas rested not only on human designs on the land but also non-human uses and historical connections, as is the case both with the elephants of the Maputo Special Reserve and the sea turtles of the coast south of Kosi Bay.

These proposed projects demonstrate that notions of "development" are entangled in power relations regarding conflicting claims to land and what belongs in it, as well as competing claims of different species, nations, and states to territory. They also show that conservation areas are not only purported to be threatened by local people, as has been one of the common challenges of the conservation/development conundrum. They can also be threatened by the very states tasked with managing and protecting them. Furthermore, these case studies demonstrate the fluidity of citizenship, which was discursively extended to non-human actors as a means of advocating against these harbors. Far from being a fixed, or "natural" attribute, it is designated or claimed at different times, to different places, and for different purposes.

These contestations between government agendas and the rights of citizens (including non-human citizens) can re-emerge in similar guises. The harbor at Ponta Dobela was upended in the early 1970s by claims to the ecological integrity of the Maputo Special Reserve and the rights of its elephant population to one of its main water resources. Plans for the port were then further deferred with Mozambique's independence from Portuguese rule in 1975 and the ensuing armed

conflict. However, in the 1990s a similar project was resurrected, and a similar debate on the relative merits of conservation and development arose.

In July 1999, the Mozambican government signed an agreement with CFM, the country's parastatal ports and railroads company, and a private company registered in the Isle of Man for the development of a deep water harbor at Ponta Dobela to transport minerals out of the country.[129] When it was first announced, the project drew the same criticism from conservationists as its predecessor had in 1973, with environmental organizations arguing that the accompanying railway line would cut across the Maputo Special Reserve, as well as the Futi Corridor, which by then had been earmarked for the TFCA.[130] Furthermore, "The world's highest vegetated dunes would suffer. So would the sand forest, home to unique butterflies, birds and plants. Pollution could kill the 7 kilometer-long coral reef, one of the southernmost in the world. Two species of turtles nest on the beaches. Wildlife habitat would be drastically reduced."[131]

As a result of the environmental lobby, the plan was redrafted to move the port to Ponta Techobanine, the point just south of Ponta Dobela and the Maputo Special Reserve. In 2003, international companies began bidding on the tender to build, develop, and manage the port.[132] While ground as still not broken on this development, the Mozambican government continues to forge ahead with its development, with a feasibility study due to begin last year.[133] Conservationists continue to battle against this development, not only on the basis of its impact on Mozambique's natural resources, but also in relation to the inevitable effects of this harbor on South Africa's side of the marine TFCA.[134] Paul Dutton, former Natal Parks Board ranger who spent several years working in conservation in Mozambique before and after independence, is one of the figures voicing the most vocal opposition to the project, stating simply, "The ecological repercussions of a project like this would be incredible and it has to be stopped."[135] The

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[129] "French businessmen discuss new port," AIM Reports, Mozambique News Agency 248, 19 February 2003. http://www.poptel.org.uk/mozambique-news/newsletter/aim248.html.
[130] Mercedes Sayagues, "Greens Battle to Save Port," *Inter Press Service*, 23 November 1999. http://www.ipsnews.net/1999/11/environment-mozambique-greens-battle-to-save-port/.
[131] Ibid.
[132] "French businessmen discuss new port."
[133] Tshiamo Tabane, "Post, Botswana-Moz rail feasibility study set to start this year," *Mining Weekly*, 30 May 2014. http://www.miningweekly.com/article/port-botswanamoz-rail-feasibility-study-set-to-start-this-year-2014-05-30.
[134] Tony Carnie, "Mozambique harbours ill intent," *The Mercury,* 24 May 2012. http://www.iol.co.za/mercury/mozambique-harbours-ill-intent-1.1303862#.VAB_wfm1ZbU.
[135] Tony Carnie, "R54bn harbour 'has to be stopped'," *The Star*, 26 September 2011. http://www.iol.co.za/the-star/r54bn-harbour-has-to-be-stopped-1.1144350#.VACEevm1ZbU.

resurrection of this deep water harbor in Maputaland illustrates how the "hybrid agencies, connections, interactions, and forms of violence" used to justify economic development and capitalist extraction can persist over time, in different guises, and across the colonial/postcolonial divide. The capital for this project has been earmarked from China, where the 1973 port would likely have been funded by a combination of South African and Portuguese funds, demonstrating that "the expansion and development of capitalism" in this case is not simply a linear continuation of a development project but rather has been molded and influenced by changes in the global economic and geopolitical landscape.

In the following chapter, I explore two more examples of these hybrid agencies and complex networks that have used history (and capital) to make claims to territory. I explore the ways that Gorongosa and Maputaland were remade in the imaginations of the authors of two different restoration projects in post-conflict Mozambique. Each demonstrates how the prioritization of tourism as an economic benefit to the country shaped the way in which these landscapes were envisioned and informed decisions regarding what should belong in them.

Chapter 4

Remaking Eden in Post-Conflict Mozambique

> Once it seemed Africa had outdone itself at Gorongosa with its riots of wildlife. It was known as the place where Noah left his ark, an African paradise teeming with amazing creatures. Years of war took a toll here. Now, new Noahs with new arks are fighting to bring back the magnificent titans of Gorogosa. The plan: To reinvigorate the genetic pools and populations of all of Gorongosa's major species. They're not hoping to save just a few animals here. They're embarking on perhaps the most ambitious park restoration ever attempted – to save Africa's Lost Eden.
>
> - Trailer for *Africa's Lost Eden*, National Geographic, 2010

By the mid-1990s, much of Mozambique's wildlife population had been destroyed. Forces on both sides of the armed conflict had used the country's protected areas as repositories for animal products, supplying meat to soldiers and ivory, horns, and tusks to foreign entities in exchange for arms and assistance.[1] During the armed conflict, which lasted from 1977 to 1992, the area around Gorongosa had become the headquarters for RENAMO, and Mount Gorongosa, in particular, became a key symbolic and political site of power contestation. Southern Mozambique, including the area around the Maputo Special Reserve, was largely depopulated during the 1980s as people sought refuge across the South African border. As the conflict escalated, the administration of these areas also fled to safety, leaving these territories open to plunder.[2] Amidst weak state governance and increasing foreign intervention after the armed conflict ended, the Mozambican government sought support for wildlife conservation programs from external parties. Seeking to develop a thriving post-colonial and post-conflict economy in the mid-1990s, the government prioritized tourism as a potentially profitable industry and hoped protected areas would help to entice foreign currency. International organizations and foreign individuals were key in forging this link between economic development and wildlife conservation. In attempting to develop the country's protected areas as attractive destinations, protected areas were marketed as "lost Edens," saved by foreign benefactors and ripe for tourist

[1] See Chapter 2.

[2] However, many game guards, or scouts, stayed in the vicinity throughout the armed conflict. Due to the nature of their conflict, their focus was more on their own survival than safeguarding species. Pereira Charles, for example, began working in Gorongosa National Park in 1972 and remained throughout the armed conflict (and afterwards). Pereira Araujo Charles, interviewed by the author, Gorongosa National Park, 30 July 2010.

exploration. As indicated in the quote above, these Edens were resurrected through restoration projects seeking to overturn the devastation wrought by years of war. These initiatives demonstrated contestations not only over land, but also landscape, as divergent visions of these territories and what belonged in them materialized.

Much of the recent literature on conservation has critiqued this field as being embedded in capitalist or neoliberal processes. Where once colonial forces were driving resource management agendas, these authors argue it is now foreign capital, market forces, profit incentives, and celebrities.[3] Richard Grove located the origins of conservationist imperatives in the early expansion of European colonization, where the opening of territory and trade routes to capital accumulation coincided with exposure to threats to environmental security and the survival of species.[4] Since that time, capitalist agendas have been intricately entwined with conservation initiatives, including the development of protected areas.[5] Furthermore, the spread of neoliberal policies, generally aimed at limiting the reach of the state and facilitating economic liberalization, which gained traction in the 1980s, correlated with a distinct increase in the designation of protected areas around the world, which peaked between 1985 and 1995.[6] Tourism represents a clear juncture between the agendas of capitalism and conservation and "is often identified as a potential solution to the problem of how to achieve economic development whilst conserving the environment."[7] The commodification of wildlife and protected areas for tourist consumption is posed as a resolution to the challenge of maintaining economic growth whilst managing finite natural resources.[8] Tourism, and ecotourism in particular, has been posed as a means of deriving value from species and ecosystems for the benefit not only of the state but also

[3] James Igoe and Dan Brockington, "Neoliberal Conservation: A Brief Introduction," *Conservation and Society* 5, no. 4 (2007): 432-449; Bram Büscher, Wolfram Dressler, and Robert Fletcher, eds. *Nature™ Inc. Environmental Conservation in the Neoliberal Age* (Tuscon: University of Arizona Press, 2014); Dan Brockington, Rosaleen Duffy and Jim Igoe, *Nature Unbound. Conservation, Capitalism and the Future of Protected Areas* (London: Earthscan, 2008); and Dan Brockington, *Celebrity and the Environment: Fame, Wealth and Power in Conservation* (London: Zed Books, 2009).
[4] Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1995).
[5] Brockington et al., *Nature Unbound.*
[6] Ibid., 1.
[7] Ibid., 134.
[8] Rosaleen Duffy, "Nature-based Tourism and Neoliberalism: Concealing Contradictions," Tourism Geographies (2015).

local communities.[9] Furthermore, nature-based tourism attributes value to wildlife by reproducing colonial tropes of exploration of conquest, creating opportunities for tourists to discover and save African Edens.[10]

In this chapter, I look at two restoration projects in Mozambique spearheaded a decade apart by two different American investors. The first, led by James Blanchard in the area around and including the Maputo Special Reserve, aimed to "revitalize" this protected area in order to stimulate foreign tourism. The second, directed by Greg Carr in Gorongosa National Park, proposed a full ecosystem restoration that would expand the boundaries of the protected area, reviving ecologist Ken Tinley's pre-conflict plans to incorporate Mount Gorongosa into the park.[11] Each project sought to remake these places according to particular visions of what these areas should include and what they should exclude. Each ostensibly aimed at some level to promote community involvement or ownership, though these intentions were realized with varying degrees of success. Each also sought to not only refashion these landscapes for the benefit of local people, or even the nation, but also with the aim of luring foreign tourists. In projecting their respective versions of the landscape that each protected area should be restored to, Carr and Blanchard selectively engaged with these areas' histories, rewriting their pasts in an effort to influence their futures.

In claiming and remaking these protected areas, both Blanchard and Carr relied to some extent on a perception of these places as *terra nullius*, unmade during the civil conflict and open for development. Centuries earlier, white settlers and colonial powers had used variations of this "empty land" myth to legitimate claims to territory in South Africa and the rest of the continent.[12] In her analysis of Kruger National Park as a heritage site, Lynn Meskell describes how the privileging of "biodiversity" over human histories has revived this myth:

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[9] Martha Honey, *Ecotourism and Sustainable Development: Who Owns Paradise?* 2nd ed. (Washington D.C.: Island Press, 2008) and Anna Spenceley, ed., *Responsible Tourism: Critical Issues for Conservation and Development* (London: Earthscan, 2008).
[10] Elizabeth Garland, "The Elephant in the Room: Confronting the Colonial Character of Wildlife Conservation in Africa," *African Studies Review* 51, no. 3 (2008): 51-74.
[11] These are outlined in Chapter 1.
[12] Shula Marks, "South Africa: 'The Myth of the Empty Land,'" *History Today* 20, no. 1 (1980): 7-12; Clifton Crais, "The Vacant Land: The Mythology of British Expansion in the Eastern Cape, South Africa," *Journal of Social History* 25, no. 2 (1991): 255-275; Jörg Fisch, "Africa as *terra nullius:* The Berlin Conference and International Law," in *Bismarck, Europe and Africa: The Berlin Africa Conference 1884-1885 and the Onset of Partition*, ed. Stig Förster, Wolfgang Justin Mommsen, Ronald Edward Robinson (Oxford: Oxford University Press, 1988), 347-375.

> The now discredited discourse has become sutured to the celebratory discourses of conservation and biodiversity: both pertain to global desires for pristine wilderness, minimal human intensification, the erasure of anthropogenic landscapes, the primacy of non-human species, sustainability and so on.[13]

She goes on to argue that this privileging of flora and fauna resonates with the visions and agendas of international conservation organizations and serves to displace the interests of people as much as it does their histories. Fairhead and Leach have echoed similar sentiments, illuminating the risks of "misreading the landscape" by excluding local voices in investigating an area's past and relying instead upon long held assumptions about human-induced environmental degradation.[14] With so many different and often competing visions of protected areas' pasts, in his dissertation on the restoration of Gorongosa, Todd French rightly asked "to what past condition is the landscape to be restored."[15]

Historian Peter Alagona and others have pointed out that "conservation almost always involves nostalgic claims about the past—along with calls to return to that past or recapture some aspect of it."[16] While historical targets are necessary for ecosystem restoration, it is also necessary to interrogate how those targets were determined and the circumstances surrounding the historical record on which they are based in order to assess their merit and utility.[17] Furthermore, because ecosystems are in constant flux, choosing a single moment in time as a target for restoration is not only difficult but also incredibly fraught, as one must not only take into account the ecosystem's inevitable future mutability but also the full spectrum of historical change.[18] Selecting baselines for ecological restoration is thus a value-laden process in which particular versions of the past are prioritized over others. Protected areas are not and never were timeless Edens; before and after these areas received special status and were geographically bound, they were, and continue to be, "constantly changing kaleidoscope[s] of…physical and living components in different

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[13] Lynn Meskell, "The Nature of Culture in Kruger National Park," in *Cosmopolitan Archaeologies*, ed. Lynn Meskell (Durham: Duke University Press, 2009), 89-90.
[14] James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-savanna Mosaic* (Cambridge: Cambridge University Press, 2006).
[15] Todd French, '"Like Leaves Fallen by Wind": Resilience, Remembrance, and the Restoration of Landscapes in Central Mozambique,' (PhD diss., Boston University, 2009), 12.
[16] Peter Alagona, Yolanda F. Wiersma, and John Sandlos, "Past Imperfect: Using Historical Ecology and Baseline Data for Conservation and Restoration Projects in North America," *Environmental Philosophy* 9, no. 1 (2012): 49.
[17] Ibid., 65.
[18] Ibid., 50.

rhythms…,"[19] impacted by dynamic economic, political, environmental, and cultural circumstances.

In this chapter I argue that through their restoration initiatives Carr and Blanchard promoted selective versions of the past for revival in post-conflict Mozambique. Furthermore, their projects demonstrate how ecological restoration depends upon a notion of temporal belonging, tied to geographical belonging, wielded in different ways in different political circumstances. The ability of American philanthropists to claim so much power in directing the restoration of an area to a particular past (sometimes one that most certainly never existed) was a product of a particular political context, as contingent on temporally-bound conditions as the landscapes they wished to restore. Furthermore, in directing the revival of historical landscapes, each "gardener of Eden" reflects shifting ownership of these territories from the independent Mozambican state to global conservation entities, bodies, and interests. In both initiatives, tourism was a critical driver of remaking territory as Carr and Blanchard sought to sustain their conservation initiatives through tourism revenue. As such, these areas were packaged not only as emblems of the Mozambique but as harbingers of global heritage.

Revitalizing the Maputo Special Reserve: James Blanchard and the TFCA

When Mozambique's armed conflict ended in the early 1990s, there was a growing sentiment that southern Mozambique was "up for grabs."[20] When the conflict escalated in the early to mid-1980s, several residents of the territory south of Maputo had fled further south to KwaZulu Natal, drastically depopulating the area on the northern side of the border.[21] After the peace accord was signed in 1992, the government began granting agricultural concessions on the east bank of the Maputo River and concessions for holiday homes and ecotourism ventures along

[19] Ken Tinley's phrase. From Kenneth Tinley, "Framework of the Gorongosa Ecosystem" (PhD diss., University of Pretoria, 1977), 183. Tinley presents this kaleidoscope under the constant influence of the ecosystem's edaphic [soil] properties, but I use this kaleidoscope metaphor more broadly.
[20] J.C. Hatton et al., "A Status Quo Assessment of the Maputo TFCA," Report to DNFFB. January 1995, xiii. IUCN Library, Maputo.
[21] Roelof Kloppers, "Chapter 4: Desperate Crossings" in "Border Crossings: Life in the Mozambique/South Africa Borderland" (PhD Diss. University of Pretoria, 2004), 68-87.

the coast, some to South Africans.[22] Thus, many refugees returned home to find these concessions on the land they previously occupied.[23]

Just as the armed conflict had left tracks of land open to procurement from foreign entities, a lack of institutional and financial capacity in the state left many public functions open to operation by private individuals and international donor organizations.[24] One of these was the conservation of Mozambique's natural resources. At the time, the country had been identified as the world's poorest, and both the government and international organizations saw tourism as one of the best industries to support economic growth. The development of transfrontier conservation areas (TFCAs) linking Mozambique with South Africa was seen as part of this economic goal, which might link "biodiversity conservation and sustainable development" through the tourism industry and also act "as a testing ground for collaboration between the private sector, communities, NGOs and the Government at all levels."[25]

In 1990, Anton Rupert, president of the Southern African Nature Foundation (which would become WWF South Africa), business leader, and patriarch of one of Africa's wealthiest families,[26] met with Mozambique's President Joachim Chissano regarding the creation of permanent links between protected areas on either side of the South Africa/Mozambique border, specifically focusing on the area adjoining South Africa's Kruger National Park.[27] As a result of this meeting, Rupert's foundation commissioned Ken Tinley and Willem van Riet to write a feasibility study the following year.[28] The idea of a transfrontier park joining South Africa's Kruger National Park with land across the border in Mozambique was officially broached in

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[22] Hatten et al., "Status Quo Assessment," xii-xiii.
[23] Judy Oglethorpe (British ecologist who worked in Gorongosa in the early 1980s and also worked for the DNFFB after independence), interview by the author, Skype, 6 May 2013.
[24] David N. Plank, "Aid, Debt, and the End of Sovereignty: Mozambique and Its Donors," *The Journal of Modern African Studies* 31, no. 3 (1991): 407-430. On Mozambique's transition from interventionism to privatization see M. Anne Pitcher, *Transforming Mozambique: The Politics of Privatization, 1975-2000* (Cambridge: Cambridge University Press, 2002).
[25] Global Environment Facility (GEF), *Mozambique: Transfrontier Conservation Areas Pilot and Institutional Strengthening Project*. Report No. 15534. World Bank, December 1996, 3 and Appendix 6-1. http://documents.worldbank.org/curated/en/1996/12/695082/mozambique-transfrontier-conservation-areas-pilot-institutional-strengthening-project.
[26] Ebbe Dommise, *Anton Rupert: A Biography* (Cape Town: Tafelberg, 2005).
[27] Ross Douglas, "Parks, Peace and Prosperity," *Africa – Environment & Wildlife* 5, no. 4 (1997): 31.
[28] K. L. Tinley and W. F. van Riet, "Conceptual Proposals for Kruger/Banhine: A Transfrontier Natural Resource Area" (1991); "Origins," *Peace Parks Foundation.* http://www.peaceparks.org/story.php?pid=1&mid=2 and "First Map Ever of Great Limpopo Transfrontier Park," *Peace Parks Foundation.* http://www.peaceparks.org/news.php?pid=1093&mid=598.

discussion between President Chissano and South Africa's President de Klerk in 1991, leading the Government of Mozambique to request the assistance of the World Bank's Global Environment Facility (GEF) in undertaking preparatory work for the project.[29] The GEF's first Preparatory Mission for the "Transfrontier National Parks and Institution Strengthening Project" identified three potential transfrontier areas crossing South Africa and Mozambique's borders: Kruger Park/Gazaland, Chimanimani, and Maputo – Tembe/Ndumo.[30]

The Maputo – Tembe/Ndumo TFCA was envisioned as a territory that would join the Maputo Special Reserve with Tembe Elephant Park and Ndumo Game Reserve via an elephant corridor along the Futi River, reestablishing the migratory routes of these and other large mammals.[31] The second GEF preparatory mission reported upon in January 1994 led to the revision of transfrontier spaces from "national parks" to "conservation areas," with greater emphasis placed on resource access and management by local communities.[32] By the following year, this corridor was not only seen as a wildlife thoroughfare but also as a tool for integrating benefits to local communities within this conservation project.[33] In January 1995, southern Africa's IUCN office, funded by the World Bank, reported to Mozambique's Direcção Nacional de Florestas e Fauna Bravia (National Directorate of Forests and Wildlife – hereafter DNFFB) on the status quo of the Maputo TFCA.[34] The team recommended securing the Futi elephant corridor with a core protection area and a buffer zone where some farming activities would be permitted. They went on to imply that the freedom to implement this project was under pressure, and action must be taken quickly. "Since the East bank of the Maputo River is becoming progressively and rapidly occupied [by agricultural concessions] this option may soon be foreclosed thereby reducing the chance of creating an Elephant corridor along the Futi valley."[35] In their report on the feasibility of the Futi Corridor completed in October of 1995, Ed Ostrosky and Wayne Matthews of the KwaZulu Bureau of Natural Resources remarked, "It is clear that any moves to

[29] GEF, *Mozambique: Transfrontier Conservation Areas Pilot and Institutional Strengthening Project*, 5.
[30] J. C. Hatton et al., "A Status Quo Assessment of the Maputo TFCA."
[31] Ibid., xi.
[32] Ibid., x.
[33] Ibid., xi.
[34] Ibid.
[35] Ibid., 23.

create additional conservation areas without the problems associated with massive removals or re-locations is rapidly slipping away."[36] This empty land was filling up fast.

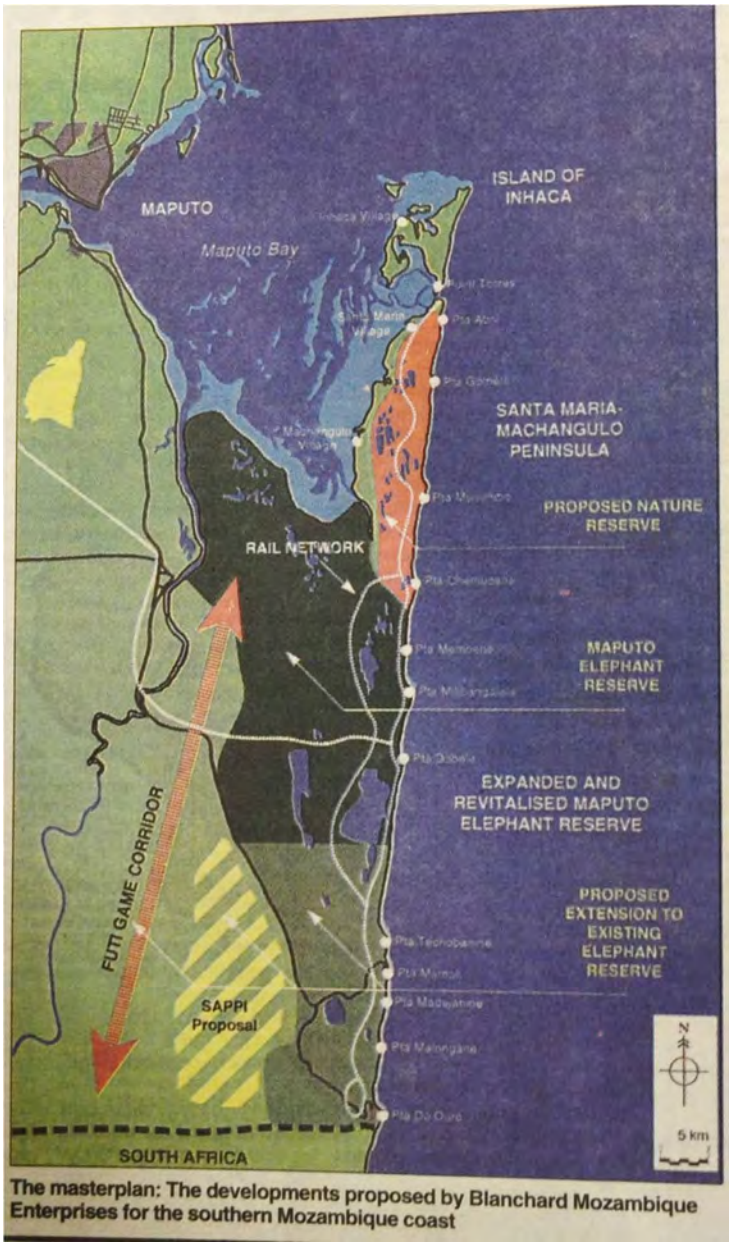

Figure 23. *The Masterplan: The development proposed by Blanchard Mozambique Enterprises for the southern Mozambique Coast*. From Edie Koch, "US millionaire plans Indian Ocean dreampark," *Mail & Guardian*, January 19 to 25, 1996, p. 20.

[36] E. W. Ostrosky and W. S. Matthews, The Transfrontier Conservation Initiatives in Southern Maputo Province, Mozambique, Comments on Feasibility of the Futi Corridor. Prepared for DNFFB. October 1995. IUCN Library, Maputo.

In February of 1995, James Ulysses Blanchard III, a gold dealer from New Orleans, had met with President Chissano regarding the possible development of the Machangulo Peninsula, the tract of land north of the Maputo Special Reserve. As a result of this meeting, the Governor of the Maputo province "froze" all other tourism developments on those 16,000 hectares pending a proposal from Blanchard's team.[37] Blanchard had been a backer of RENAMO during the armed conflict, reportedly contributing as much as $75,000 between 1986 and 1988 alone.[38] According to Blanchard's project manager, John Perrott, Blanchard's desire to invest in a FRELIMO-governed Mozambique rested on the shift of the party away from its Marxist principles.[39] Described by Perrott as "a true Africa aficionado," who is "especially in love with wildlife," Blanchard sought to create "a WORLD CLASS [sic] tourist destination stretching from Inhaca to Ponta Do Ouro with the heart of the tourist draw being the expanded Elephant Reserve, along the lines of the Trans Frontier Conservation Area philosophy and more."[40] His addendums to the TFCA plans would incite criticism from some potential supporters. However, before he could pitch them properly, he had to compete with other entities vying for territory in the region.

In addition to other tourism concessions, Blanchard took on the South African Pulp and Paper Industry (Sappi), which had initiated an agreement for the tenure of land south-west of the Maputo Special Reserve, stretching to the South African border, in 1987.[41] At the time, FRELIMO had provisionally approved Sappi's development of 32,000 hectares of eucalyptus forest as a means of opposing RENAMO's influence in the region by supporting South Africa private investment.[42] The armed conflict had stalled the project until 1994 when the cabinet reapproved the project, which was by then called Mosa Florestal, joining Sappi's investment with two smaller Mozambican companies.[43] In 1994, Professor Abraham van Wyk had identified this larger region as the Maputaland Centre for Endemism. That same year Mozambique ratified the

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[37] Letter to Sergio Chitara, 27 September 1995. In Gouws, Uys, White, *Expansion and Rapid Revitalization of the Maputo Elephant Reserve.* September 1995, Prepared for Blanchard Mozambique Enterprises. MICOA Library.
[38] Robert Pear and James Brooke, "Rightists in U.U. Aid Mozambique Rebels," *The New York Times*. 22 May 1988. http://www.nytimes.com/1988/05/22/world/rightists-in-us-aid-mozambique-rebels.html?src=pm&pagewanted=1
[39] Rachel Waterhouse, "Billionaire takes on SA timber giant over wetlands," *Sunday Times*, 17 December 1995.
[40] Letter to Sergio Chitara.
[41] Waterhouse, "Billionaire takes on SA timber giant."
[42] Ibid.
[43] JoAnn McGregor, "Staking Their Claims: Land Disputes in Southern Mozambique," LTC Paper 158. University of Wisconsin-Madison. January 1997 and Sapa-AFP, "Locals may have last say on wilderness area," *Saturday Star*, 30 December 1995.

Convention of Biodiversity, launched at the 1992 Earth Summit in Rio de Janeiro, through which the country committed to the responsible management of its biodiversity.[44] The fragility and uniqueness of this area thus became a talking point amidst those opposed to Sappi's plans. This put the Mosa Florestal project in a precarious position, and pressure from environmentalists forced Sappi to finance an environmental impact assessment (EIA). The study concluded that despite the social and economic benefits, potentially amounting to R80 million annually, the geographic scale of the Mosa Florestal project represented too great a threat to the natural environment.[45] The EIA thus recommended that the forestry area be reduced by a third, excluding the coastal lakes and creating a kilometer buffer to the east of the Futi River as well as allowing for the creation of natural corridors to support animal migrations that the forest would otherwise impede, all of which Sappi ostensibly agreed to.[46]

Blanchard's 200,000 hectare "world-class resort" purported to protect the region's natural resources while garnering economic benefits from tourism, pitting this fast growing global industry against commercial forestry.[47] Although Sappi looked for grounds on which the two proposals could be compatible, Blanchard would only pursue the project on the condition that Sappi's plans were wholly rejected.[48] In order to turn local people against the Sappi project, which would have created around 1,200 jobs, Blanchard and his team handed out T-shirts emblazoned with, "Say no to water-guzzling gums," along with small American and Mozambican flags and promises of future employment.[49] Even regional conservation NGO the Endangered Wildlife Trust (EWT) got on board with Blanchard. In the EWT's annual publication, *Vision,* director John Ledger describes flying over southern Mozambique with representative of DNFFB[50] and the World Bank at the time.

> We knew that this unspoilt paradise was partly the product of Moçambique's long civil war, yet the prospect of a huge plantation of eucalyptus trees right in

[44] Ministério para a Coordenação da Acção Ambiental [Ministry for the Coordination of Environmental Affairs] (MICOA), First National Report on the Conservation of Biological Diversity in Mozambique, Maputo, 1997. https://www.cbd.int/doc/world/mz/mz-nr-01-en.pdf
[45] Eddie Koch, "Sappi 'will heed' ecological report," *Mail & Guardian*, 8 December 1995 and Michael Moon, "Sappi's planned project 'too large'," *Business Day,* 7 December 1995.
[46] Ibid.
[47] Eddie Koch, "Sappi adds fuel to environmental fire," *The Star*, 4 December 1995.
[48] Sapa-AFP, "Locals may have last say on wilderness area," *Saturday Star*, 30 December 1995.
[49] Douglas, "Parks, Peace and Prosperity," 39.
[50] Including former Natal Parks Board ranger Paul Dutton, who at that time was working in Mozambique's Bazaruto Archipelago.

> the middle of it seemed to us to be a desecration of nature in a country which had already been violated in so many ways.[51]

Furthermore, EWT saw the Mosa Florestal project as a threat to the TFCA and other land use options, including ecotourism, and therefore backed Blanchard in response.[52] As Blanchard's team concluded, "People will come around the world to see elephants, they won't go across the street to look at a eucalyptus tree."[53]

Blanchard's team had originally looked solely at developing the Machangulo Peninsula for tourism. However, their feasibility study, written by Bechtel International, a global engineering and project management firm, relayed some doubt about this proposal, citing concerns about the small tourist market in Mozambique as well as the lack of infrastructure to support tourism development.[54] Despite these challenges, the study suggested that were the Maputo Special Reserve to be "up and running" as a regional tourist attraction, pensinsula development would have an increased chance of succeeding. Thus, Blanchard hired South African landscape architects and environmental planners Gouws, Uys, and White to write a plan for the Maputo Special Reserve's "Rapid Revitalization and Expansion." If this larger proposal and their accompanying plan for developing the Machangulo Peninsula were to be realized they estimated that the complementary developments would bring as much as $200 million in investment to Mozambique in the construction phase alone.[55] Furthermore, it would "optimize the sustainable use of the eco-tourism potential of the area" through the provision of a "unique combination of Indian Ocean coast and major African wildlife."[56] Emphasizing a concern that the large number of displaced people returning to the area would both "stress natural resources in the short term" and "jeopardize the tourism potential of the area by foreclosing development options in the long term," they hoped that this proposal would be realized as soon as possible.[57]

Gouws, Uys, and White been had involved in the development of Pilanesberg National Park in South Africa (under the guise of Farrell and van Riet) in the 1980s. (Pilanesburg was originally designed by Ken Tinley and Willem van Riet.[58]) Located next to the tourist park, Sun

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[51] John Ledger, "The Endangered Wildlife Trust and the MOSA Florestal project," *Vision* 22 (1996): 7.
[52] Ibid.
[53] Letter to Sergio Chitara.
[54] Ibid.
[55] Ibid.
[56] Gouws, Uys, and White, *Expansion and Rapid Revitalization of the Maputo Elephant Reserve,* 8 and 10.
[57] Ibid., 5.
[58] Jane Carruthers, "Pilanesberg National Park, North West Province, South Africa: Uniting Economic Development with Historical Design—A History, 1960s to 1984," *Koedoe* 53, no. 1 (2011): 10 pages.

City-the Lost City, the landscape architects presented Pilanesberg as a revolutionary model in wildlife tourism in southern Africa as the first national park to allow hunting, to allow local communities to "participate in decision making and share in the tangible and non-tangible benefits of the park," and to develop tourism facilities in partnership with the private sector and, later, communities.[59] While Blanchard hoped to replicate this in the Maputo Special Reserve, he also planned to echo its adjoining tourist park on the Machangulo Peninsula, complete with exclusive hotels, casino, and golf course.[60]

The manner in which Gouws, Uys, and White presented this plan was very much in line with the development of ecotourism in the mid-1990s. Focusing on "up market, high income, low density facilities and activities," Blanchard Mozambique Enterprises (BME) purported that it would limit its eco-footprint.[61] The impact of individual vehicles on this "fragile ecosystem" would be minimized through the installation of an antique steam train, which would run along the coast and lakes, acting as a game viewing vehicle. Car traffic would only include 4x4 vehicles with sand tires driven by "environmentally sensitive and conscious employees of the tourist operators."[62] The "Machangulo Express" would cater for a luxury hotel train as well as a luxury day passenger train and allow for visits from other luxury trains like South Africa's Blue Train.[63] Eventually, Blanchard hoped this train would link Victoria Falls, Cape Town, Johannesburg, and Maputo with the park, adding an extra leg to the southern portion of Cecil Rhodes' early twentieth century vision for a Cape to Cairo route.[64]

According to Gouws, Uys, and White this "innovation in African wildlife reserve management," would eventually move not only tourists, but also food, fuel, refuse, relocated wildlife, and even culled animals out of the reserve. It would also follow the same track proposed by the harbor development team two decades before.[65] Linking Ponta Dobela with the completed track outside of the reserve via a line running straight across the reserve, north of Lake Xingute, this train revived the past in more ways than through it imagined antique façade. In the 1970s the

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[59] Gouws, Uys, and White, *Expansion and Rapid Revitalization of the Maputo Elephant Reserve,* 10.
[60] Karen Harverson, "Maputo bows to tourism over pulp and paper," *Mail & Guardian*, 22 February 1996.
[61] Gouws, Uys, and White, *Expansion and Rapid Revitalization of the Maputo Elephant Reserve,* 15.
[62] Ibid., 16.
[63] "Machangulo Express," in Gouws, Uys, and White, *Expansion and Rapid Revitalization of the Maputo Elephant Reserve,* Appendix.
[64] James U. Blanchard III, Blanchard-Mozambique Enterprises: An Executive Summary. IUCN Library, Maputo.
[65] This is discussed in Chapter 3.

notion of a train running through the middle of the Maputo Special Reserve was deemed incompatible with conservation goals. Here it was marketed as a "historic first" for tourism.[66]

Figure 24. *Marked for a tourist mecca: A lake on the staggeringly beautiful Machangulo Peninsula*, David Holt-Biddle. In Edie Koch, "US millionaire plans Indian Ocean dreampark," *Mail & Guardian*, January 19 to 26, 1996, p. 21.

As part of his mission to garner support for his "dreampark," Blanchard also hoped to implement the TFCA plan on the Mozambican side of the border as part of the Reserve's proposed expansion and revitalization. In the process he would enlarge the reserve from 70,000 hectares to around 200,000 hectares, extended all the way to Ponta do Ouro on the South African border.[67] He would begin with the fencing of the Futi Corridor. However, where the TFCA intentions had revolved around reuniting elephant populations, the Blanchard project was more concerned about providing an animal population adjacent to the Machangulo Peninsula, which would have become his hub of tourist activity.[68] This would thus improve game viewing opportunities and also ease the process of stocking game to enhance these opportunities in the future. As part of this process of bringing the Maputo Special Reserve back to life, Blanchard

[66] James U. Blanchard III, Blanchard-Mozambique Enterprises: An Executive Summary.
[67] Gouws, Uys, White, *Expansion and Rapid Revitalization*, 5.
[68] Gouws, Uys, White, *Expansion and Rapid Revitalization*, 12.

proposed an extensive wildlife restocking program over a four year period that would be so larger it would soon garner a harvestable yield. From the year 2000, Gouws, Uys, and White estimated the overpopulation of wildlife would be large enough to earn a $3 million annual return on their sale.[69]

This "revitalization" of the Maputo Special Reserve and it surrounding territory was driven more by profit under the guise of developing Mozambique's economy than it was on any motion of restoring a degraded ecosystem. Blanchard privileged tourism over conservation with marketability as his bottom line. Rather than its endemic species, high biodiversity, and unique ecosystems, Blanchard identified the region's distinctive features as follows:

> Coastal and scenic attractions, wildlife-beach combination, historical romantic aura, vegetation and soil component left reasonably unspoilt due to the absence of cattle brought about by the civil war and then finally the proximity of the area to Maputo and supplies as well as the population concentration in nearby South Africa. It is the nearest beach location to large population centers in Gauteng.[70]

The marketability of this project extended to getting the Government's support, and therefore Blanchard's team presented community inclusion as one of the project's key principles.

Figure 25. An image from the BME plan showing private luxury residences in the Maputo Special Reserve. Screenshot from Ross Douglas, "Mozambique Coast," *50/50,* Aired 3 March 1996, Beta Number SP60-24633. SABC Archive.

[69] Ibid., 23.
[70] Ibid., 6.

In their proposal for expanding and revitalizing the reserve, Gouw, Uys, and White contended that the following "golden rules" of community involvement should apply:

- The project must be financially viable overall and attractive to the local people in their participation through employment and other economic incentives
- 'Know' the community: factions, interest groups, political groupings, farmers, women and youth for example may all have different outlooks and views of the project…
- A formal, legal entity such as a trust or share company must be registered to manage the business of the partnership between Government Departments, Community and Private Sector Investment, BME in this case
- There must be full and open communication between all members of the partnership at all stages. This seems to be BME's modus operandi
- Expertise in local community development is essential GUW humbly submits that they have a significant track record of success in this area.[71]

Gouws, Uys, and White identified the major social issues that need to be addressed as "mass unemployment in this rural area, very low per capital income, near starvation subsistence living by area residents."[72] They therefore noted but did not describe plans to create agricultural centers within the expanded reserve or on its periphery, which would inevitably entail relocations. In response to local demands to re-introduce cattle to the area, the authors suggested that once the amalgamated "local community" saw the benefits of turning this area into the envisioned tourist destination, "the vast majority will opt for the significant improvement in their lifestyle with the projected tourist operations income to the area, and soon rethink any nostalgia for cattle, or the more predominant, futile 'slash-and-burn' agriculture."[73] Gouws, Uys, and White did not clarify how this "local community" would benefit from tourism operations beyond employment, which they estimate at 3,100 direct jobs in the reserve and 8,700 indirect jobs outside the reserve. The other exceptions were "economic incentives" through future options to buy shares in the company or benefitting from a non-profit fund, which would be managed by BME and garner 27 percent of land sales in the reserve.[74] They did clarify, however, what animals do and do not belong in the

[71] Ibid, 14.
[72] Ibid., 16.
[73] Ibid.
[74] This would become one of the major media criticisms against the Blanchard project as according to new land laws, all land was owned by the state, and his "sale" of the land he has leased from the state to investors misrepresented actual rights to territory. Regarding the relationship between the Blanchard plan and "Traditional land dwellers," see Appendix A, Gouws, Uys, and White, *Expansion and Rapid Revitalization*

reserve as "Tourist [sic] will not come halfway around the world to see cattle!"[75]

Blanchard's project manager, Texan John Perrott, was quoted in the *New York Times* suggesting that the project not only import wildlife, but also San people from the Kalahari desert. "People make fun of me for that…But I'm not talking about just a tourist attraction. I say let the little guys in and let them hunt. Their homeland in Botswana is being wiped out by cattle fences."[76] Blanchard tried to dismiss this idea stating, "I don't know how that got printed. That was a joke. A joke."[77] But other publications picked up on it as well. When asked by South Africa's *Mail & Guardian* if he has given up on the idea after being advised that this could discredit the whole project, Perrott responded

> Hell no! If I get my way, I'll bring some of them little guys out here. Can you imagine tourists on the steam train looking out of the window and seeing elephants and rhino? Then they'll look out of the other and see the little bastards running around with their loin clothes and poison-tipped arrows…The way I see it we'll bring them rhino here and save them from going extinct so why not bring the little guys who are also going extinct?[78]

Perrott had written a book about the Kalahari San entitled *Bush for the Bushmen: Need "The Gods Must be Crazy" Kalahari People Die?* in 1992 and founded Save the Kalahari San (SAVESAN), a "'low-overhead-action-orientated' effort to "save the San and their Kalahari habitat."[79] His misguided efforts to import San people, and the racist way in which he depicts them, speak to a connection between tourism and pending extinction. The more threatened or unique the place (and its residents), the more value it presents for tourism prospects.

Despite misgivings about some of the park's ideas, the Mozambican government elected to reject the Mosa Florestal project in favor of Blanchard's ecotourism paradise.[80] In February 1996, South African newspapers reported that the Sappi deal had been cancelled, and in the same

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[75] Gouws, Uys, and White, *Expansion and Rapid Revitalization,* 16.
[76] Donald G. McNeil Jr., "Maputo Elephant Reserve Journal; Thinking Big ($800 million) to Rescue Big Game," *The New York Times*, 7 March 1996. http://www.nytimes.com/1996/03/07/world/maputo-elephant-reserve-journal-thinking-big-800-million-to-rescue-big-game.html
[77] Bill Donohue, "Environment: A Man, a Plan, a Foursome of Kalahari Bushmen," *Outside*, June 1996. http://www.outsideonline.com/outdoor-adventure/Environment--A-Man--a-Plan--a-Foursome-of-Kalahari-Bushmen.html
[78] Eddie Koch, "US millionaire plans Indian Ocean dreampark," *Mail & Guardian*, 19 to 25 January 1996, 20-21.
[79] *Save the San*. Accessed 17 June 2014. http://www.savethesan.org/
[80] Karen Harverson, "Maputo bows to tourism over pulp and paper," *Mail & Guardian*, 22 February 1996.

week, Blanchard hosted a press conference in Johannesburg to unveil his plans for the region.[81] On October 1996, the Mozambican Council of Ministers approved the BME proposal.[82] According to Mia Couto, a biologist employed by the government to evaluate Blanchard's plan and one of the country's most celebrated literary figures, relayed that the government had reservations about the plan, but as "the area's vocation is eco-tourism," preferred this option to the alternative.[83] They therefore granted Blanchard a 50-year lease, renewable for 49 more, to develop this "untouched" and "pristine" 580,000 acre plot of land (which is "almost the size of Rhode Island").[84] After all, as it was summed up in a segment on a popular South African environmental television program, "This untouched, magnificent reserve has to be utilized – people need employment and government needs revenue."[85]

The Mozambican government was initially optimistic about Blanchard's plans. However, this optimism soon waned due to inactivity on the project. A lack of capital and specialists on the ground (their team was locally dubbed "the five muskateers") seem to have halted the project from the beginning, angering local people who were promised jobs. Furthermore, the partial erection of the electrified fence designed to prevent conflict between humans and elephants, one of the few projects the Blanchard team did initiate, blocked people's access to the Futi River and to the resources on which they depended within the Maputo Special Reserve.[86] In March 1999, Blanchard passed away, and by December that year the government terminated the project.[87] The TFCA project was taken over by the Lubombo SDI and then by the Peace Parks Foundation. In 2001, responsibility for protected areas in Mozambique was transferred from the DNFFB in the Ministry of Agriculture to the Ministry of Tourism in an effort to bridge environmental resource protection with the development of the tourism sector.[88]

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[81] Amanda Vermeulen, "Blanchard unveils resort plans on Sappi site," *Business Day,* 14 February 1996.
[82] James U. Blanchard III, Blanchard-Mozambique Enterprises: An Executive Summary. IUCN Library, Maputo.
[83] Donald G. McNeil Jr., "'Beach and Beast' Resort Planned for Mozambique," *The New York Times*, 15 June 1997, XX3.
[84] "Theme-park Tourism," *The Economist,* 3 May 1997, 62-63 and The Associated Press, "U.S. businessman developing huge game park in Mozambique," *Ellensburg Daily Record,* 9 December 1997, 5.
[85] Ross Douglas, "Mozambique Coast," *50/50,* Aired 3 March 1996, Beta Number SP60-24633. SABC Archive.
[86] Mercedes Sayagues, "Mozambique coastal park plan flounders," *The Star*, 8 June 1999.
[87] Colin McClelland, "Moz kills off eco-tourism project," *The Star*, 1 December 1999.
[88] Bartolomeu Soto, "Protected Areas in Mozambique," in *Evolution and Innovation in Wildlife Conservation: Parks and Game Ranches to Transfrontier Conservation Areas*, ed. Helen Suich, Brian Child, and Anna Spencely (London: Earthscan, 2009), 93-94.

"Save a Mountain to Save a Park"[89]: Restoring Gorongosa

As James Blanchard was starting to imagine southern Mozambique as a large ecotourism site, an emergency program was getting underway to restore order to Gorongosa National Park in the center of the country. After the peace accord was signed between FRELIMO and RENAMO in 1992, the government requested the assistance of the European Union in rehabilitating Gorongsa National Park and the nearby Marromeu Reserve.[90] This led to the initiation of an emergency program for both protected areas from 1994 under the leadership of Baldeu Chande. Chande began his career in conservation as a student in the late 1970s in a wildlife management program based at Gorongosa and went on to work in the Maputo Special Reserve until 1983.[91] Over the course of this 18-month emergency program, Chande's remit was to control illegal hunting, rid the park of landmines installed during the war, and work with communities and local authorities to gain their support and involvement in the future management of the area.[92]

Chande reported on his accomplishments in a management plan written for the northern Sofala region around 1996.[93] Chande and his team met with local chiefs, political representatives, and the heads of families to find out if these people knew they were living in a protected area and to exchange in a dialogue regarding the importance of nature conservation. By engaging in continuous dialogue through regular meetings and including local people in the restoration process, Chande managed to gain their support for and involvement in the oversight and control of the park's natural resources. He explained that this included not only convincing people to relocate from the center of the park but also gaining local collaboration to help identify species with traditional value that should be protected, as well as those that might be utilized sustainably by the community, and encouraging local participation in controlling the illegal killing of animals inside the park. Their contributions were compensated with special authorization to access fish, honey, and medicinal plants from within the park's boundaries, the construction of energy sources, and authorization to hold traditional ceremonies within the protected area. Chande

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[89] This is the title of a subsection about Gorongosa National Park in Allan C. Fisher, Jr., "African Wildlife: Man's Threatened Legacy," *National Geographic* 141, no. 2 (February 1972): 147-187.
[90] Baldeu Chande, "*O maneio do Parque Nacional da Gorongosa nos últimos 18 meses* [The management of Gorongosa National Park in the last 18 months]," *Recursos Florestais e Faunísticos do norte de Sofala* [Forest and Faunal Resources in Northern Sofala], Vol. 3: *Informação de Base* [Background Information]. IUCN Library, Maputo.
[91] Baldeu Chande (directed the Gorongosa National Park emergency program), Ministry of Tourism, Maputo, 10 April 2013.
[92] Chande, "O maneio do PNG."
[93] Ibid. My translation.

concluded in his report that this engagement of local people in the park's management facilitated the reduction of illegal activity and the gradual increase of wildlife in the park as the habitat improved. "It also created a climate with a low level of conflict between the Park's authorities and the communities living in the Park's interior and its surroundings."[94]

As part of the process of establishing a rapport with these community leaders, Chande reported that he and his team explained the following regarding the importance of conservation:

> The animals of the bush are Mozambican because they were born and live here in Mozambique. Because of this they also have the right to life and a place to live in peace. In order for this to happen, in the same way we organize a place for domestic animals, we must organize a place for these animals and this place is a national park.[95]

This phrasing connotes a sense of citizenship conferred on Mozambique's wildlife, a theme discussed in Chapter 3. It also suggests a sense of national responsibility in ensuring the survival of these species. The "national" park represents the role of the state in protecting its non-human citizens and requires consensus from human citizens living in and around the park on the need to uphold and sure this protection. As a newly democratic state, these invocations of "Mozambique" and "Mozambican" to confer the importance of wildlife conservation seems to be part of a process of post-conflict nation-building. Because Chande and the emergency program team understood the necessity of local support to the survival of the national park, they ensured that some of their rights to this territory continued as the park's management was reinstated.

The emergency program facilitated the further management of the park under the leadership of Roberto Zolho, another alumnus of the Gorongosa wildlife program, with the assistance of the African Development Bank. Zolho administered the park from 1996 until 2007, during which time he further consolidated the relationships that Chande had encouraged and continued to secure and protect the area. Furthermore, he and his team reopened roads and prepared the park to welcome tourists again. By managing the park and relationships with communities, wildlife numbers continued to increase as species moved back into the area and their numbers grew.[96] Both Chande and Zolho relied on Tinley's 1977 thesis on the Gorongosa ecosystem as a "bible" for managing the park.[97]

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[94] Ibid.
[95] Ibid. My translation.
[96] Roberto Zolho, interview by the author, WWF office, Maputo, 10 April 2013.
[97] Baldeu Chande, 10 April 2013.

One important feature of Tinley's work that remained central to the concerns of those working in this area was the incorporation of Mount Gorongosa into the protected area. In the mid-1990s, the IUCN, with the financial support of the European Union, produced a strategic plan for the forest and faunal resources of the northern part of the Sofala province for the period from 1997 to 2001, of which Chande's report was a part.[98] Judy Oglethorpe, a British ecologist who had worked at Gorongosa in the late 1970s after finishing her degree at the University of Edinburgh and went on to work for the DNFFB after the armed conflict, played a key role in drafting this strategic plan.[99] In a section dedicated specifically to Mount Gorongosa, Oglethorpe proposed the initiation of an integrated development plan for the mountain as well as the protection of the mountain above 700 meters.[100] This proposal based on Tinley's recommendations from the 1960s and 70s as well as the work of botanist José de Aguiar Macedo, who also called for the protection of the upper part of the mountain in 1970.[101] Expressing concern about the risk of soil erosion from subsistence agriculture and forest fires, Macedo recommended the prohibition of cultivation on the highest part of the mountain.[102] In various reports, Tinley the importance of protecting Mount Gorongsa, which is the perennial water source not only for the park but also for surrounding areas.[103]

In 1972, *National Geographic* published a photoessay entitled "African Wildlife: Man's Threatened Legacy," which included a subsection on Gorongosa entitled, "Save a Mountain to Save a Park."[104] In it Ken Tinley is quoted calling the mountain the "key to life," and the article's author distinguished Gorongosa as "another eden in peril" due to threats to the stability of the ecosystem[105] The article suggested that the government planned to protect nine-tenths of the

[98] Recursos Florestais e Faunísticos do norte de Sofala, 3 Vols. IUCN Library, Maputo.
[99] Judy Oglethorpe, 6 May 2013.
[100] Judy Oglethorpe, "Gorongosa Mountain," Recursos Florestais e Faunísticos do norte de Sofala, Vol 3. IUCN Library, Maputo.
[101] J. de Aguilar Macedo, "*Serra da Gorongosa: Necesidade e bases de sua protecção* [Mount Gorongosa: The necessity and background of its protection]," Comunicação no. 44, Instituto de Investigação Agronómica de Moçambique, Lourenço Marques, 1970. IICT.
[102] As paraphrased in Oglethorpe, "Gorongosa Mountain."
[103] K. L. Tinley, "*Parque Nacional da Gorongosa, Moçambique: Limites Ecológicos Manutenção da Natureza Bravia* [Gorongosa National Park, Mozambique: Maintaining Ecological Boundaries of Wild Nature," Report for the Direcção Provincial dos Serviços de Veterinária, August 1969, IUCN Library, Maputo.
[104] Allan C. Fisher, Jr., "African Wildlife: Man's Threatened Legacy," *National Geographic* 141, no. 2 (February 1972): 147-187.
[105] Ibid., 176.

mountain, relocating 16,000 people and spending at least $324,000 to rehome the displaced and provide them with land, schools, and healthcare.

Plans to incorporate the mountain became immaterial as Gorongosa became a critical theatre in protracted conflicts, first in the final years of Portuguese colonial rule and then more acutely during the violent conflict that followed independence. However, these plans were revived in this post-conflict management plan for the Sofala district written in the mid-1990s. In it Oglethorpe wrote

> It is recommended that the core area of the mountain above the 700m contour is gazetted as a protected area as soon as possible. This will provide national recognition of the outstanding biodiversity and water catchment values of the mountain, and will strengthen the conservation case in the face of external development pressures.[106]

This call for the mountain's protection not only invoked the importance of national recognition of this natural resource but also the importance of ensuring that rural people dependent on this resource for both spiritual and subsistence purposes should continue to have access to it and, to some extent, control over it.

> It is important that the traditional controls and uses of the area are not disrupted, but reinforced by the gazettement. The existing light use of the high area, for ceremonial purposes, hunting of small animals, collection of medicinal plants etc, will continue. There should be close consultation with the traditional authorities, including *regulos* [chiefs] and *curandeiros* [healers], before gazettement goes ahead.[107]

As in southern Mozambique, conservationists saw a small window in which to capitalize upon the displacement of people during the armed conflict. However, this did not correlate to a complete exclusion of local people from the management and resources of Gorongosa National Park and the mountain they hoped to incorporate into the park's boundaries.

In 2004, American entrepreneur Greg Carr first visited Gorongosa National Park on invitation from government officials hoping he would invest in the park's restoration and the development of tourism infrastructure.[108] The same year, he established a non-profit called the Gorongosa Restoration Project and entered into a memorandum of understanding with the

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[106] Oglethorpe, "Gorongosa Mountain."
[107] Oglethorpe, "Gorongosa Mountain."
[108] Edward O. Wilson, *A Window on Eternity: A Biologist's Walk through Gorongosa National Park* (New York: Simon & Schuster, 2014), 9.

Mozambican government. In 2008, Carr's involvement was formalized in a 20-year public private partnership and a commitment of $40 million to the park's restoration.[109]

The media surrounding Carr's involvement has largely eclipsed the restoration work undertaken in the 12 years between the end of the civil war and his arrival in the region; it garners him celebrity status as the sole purveyor of this project, depicting him as the savior of this "Once and Future Eden."[110] Carr recalled his first visit to Gorongosa in a *Smithsonian* article published in 2007: "Tourists were a distant memory, as were the great animal herds; of a buffalo herd that once numbered 14,000, for example, about 50 animals remain. When I came along, nobody talked about it, nobody remembered it, and people said to me, 'Don't bother, there's nothing there anymore.'"[111] An article in South African *Getaway Magazine* reaffirmed this account of Carr's first encounter with the park, describing how with the onslaught of civil war, Gorongosa had been "forgotten by the world" until Carr arrived to save it.[112] The *Financial Times* glossy luxury magazine, *How to Spend It,* described the dire situation of the park and the savior working to revive it: "Today, much of the game has been decimated – shot for the pot or traded during the desperate years of civil war. So Gorongosa isn't a pristine wilderness. It was badly battered during the war, poaching is still a problem but – and here's why it's now worth visiting – it's being brought back to life."[113]

The temporal implications in contemporary discourse of Gorongosa as an Eden "lost" and found have obscured the region's complicated history, while at the same time facilitating selective nostalgia for and reification of Gorongosa's past. In the panoply of recent travel articles written about Gorongosa, one piece suggests that the "nostalgic archive" of 1960s home movies miraculously preserved in the park's headquarters offer "proof of what Gorongosa could become again."[114] In considering the rhetoric surrounding Gorongosa's restorations, its inclusions,

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[109] "Timeline," *Gorongosa National Park*. http://www.gorongosa.org/our-story/timeline and Stephanie Hanes, "Greg Carr's Big Gamble," *Smithsonian Magazine*, May 2007. http://www.smithsonianmag.com/people-places/10024406.html.
[110] Kitt Doucette, "Paradise Regained," *Men's Journal*, May 5, 2009, http://www.mensjournal.com/paradise-regained; Ondine Cohane, "Once and Future Eden," *Condé Nast Traveler*, December 2007, http:www.concierge.com/cntravel/articles/11634; and J. Plácido Júnior, "O Salvador da Gorongosa," *Visão*, 9-15 November 2006, 128-134, GNP Archive.
[111] Hanes, "Greg Carr's Big Gamble."
[112] Alison Westwood, "Where Noah left his ark," *Getaway* (November 2008), 46.
[113] Lucia van der Post, "Where the Wild Things Really Are," *How to Spend It (Financial Times)*, 3 April 2010, 52.
[114] Ondine Cohane, "Once and Future Eden."

exclusions, and selective integration, it is useful to consider the imagery that is resurrected and perpetuated in this restorative process and how certain versions of the past come to shape visions for the future.

One travel journalist wrote that Gorongosa once "represent[ed] the best of Africa, a Garden of Eden teeming with wildlife."[115] Another recalled hearing stories about Gorongosa's old hunting days, "when it was so stuffed with game that hunters were able to shut their eyes, shoot three times, and be sure of hitting at least two plains game." She wrote, "It was an image so vivid, that conjured up such a Garden of Eden plentitude, that it has remained in my mind ever since."[116] Multiple travel articles have referenced a myth of Gorongosa as the place where Noah left his ark.[117] These renderings have perpetuated a timeless veneer over Gorongosa, eternally unpeopled and teeming with wild animals. They foster a "former glory" specifically linked to the period immediately preceding the armed conflict when it was reportedly "the most treasured in all of Africa."[118] An article published on the *Guardian's* website in 2009 portrayed this "glorified" state as follows:

> In the 1960s and 70s, Gorongosa was one of the continent's most famous game parks, attracting a who's who of international icons. Foreign dignitaries were feted on its sun-drenched savannah; presidents pampered; celebrities welcomed from every corner of the globe. Hollywood luminaries like John Wayne and Gregory Peck checked into the stylish Chitengo Camp, gazing out to plains crowded with the highest concentration of game on the continent.[119]

In some cases historical photographs from this period have been reprinted to foster a sense of this glorified past. For example, in 2008, the Portuguese newspaper *Diario de Noticias* used a photograph of automobiles surrounding two male lions that had first circulated during the visit of President Thomaz to the park in 1964.[120] The byline of the 2008 article informed readers that the Mozambican president sees saw Gorongosa as an essential instrument in attracting football fans who would be traveling to the region for the 2010 World Cup. Visual and literary

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[115] Doucette, "Paradise Regained."
[116] Van der Post, "Where the Wild Things Really Are," 52.
[117] See for example Van der Post, "Where the Wild Things Really Are," 52; Christopher Vourlias, "Life returns to Gorongosa," *The Guardian*, 13 May 2009. http://guardian.co.uk/travel/2009/may/13/mozambique-safaris-gorongosa-wildlife?page=all; Nicola Walker, "Return of the Wild Things: Destination Mozambique," *Sydney Morning Herald*, 21 March 2009, Traveler, first edition; and Alison Westwood "Where Noah left his ark."
[118] Stephanie Hanes, "Greg Carr's Big Gamble."
[119] Vourlias, "Life returns."
[120] "O novo fôlego da Gorongosa [The new breath of Gorongosa]," *Diário de Noticias,* 29 June 2008, 34.

images of Gorongosa's tourist heyday have been used to present examples not only of what was but of what could be. They represent possibilities for wildlife population expansion as well as a rebuilding of the country's tourism industry.

Figure 26. "O novo fôlego da Gorongosa [The new breath of Gorongosa]," *Diário de Noticias,* 28 June 2008.

In addition to resurrecting the past, these articles also resurrect the Edenic tropes that circulated in the park's publicity during this glorified period. In a 1964 *National Geographic* article, the author likened his first encounter in Gorongosa to discovering "a world as pure as the first dawn," riddled with wildlife and void of human inhabitants.[121] A monograph published that same year described the park as "an enchanted paradise that has not yet known the tragedy of original sin."[122] This Edenic conception of the park is precisely what encouraged tourists to visit it. In his photographic exposé on a Gorongosa safari published in 1964, João Augusto Silva wrote, "In this inviolable sanctuary the buffaloes may stroll by in the complete freedom of

[121] Volkmar Wentzel, "Mozambique: Land of Good People," *National Geographic* (August 1964), 230.
[122] José Maria d'Eça de Queiroz, *Santuario Bravo: Os Animais Surpreendentes da Gorongosa e Safaris em Moçamabique* [Wild Sanctuary: The astonishing animals of Gorongosa and safaris in Mozambique] (Lisbon: Empresa Nacional de Publicidade, 1964), 17.

bygone days and offering, to modern man, the most magnificent spectacle of peaceful harmony that is possible to enjoy on this troubled planet." [123]

Imagery of Gorongosa National Park in its early years served not only as a window into Gorongosa's landscape, but also a glimpse into the Mozambican colony. These images revealed swathes of untamed "wilderness" that remained, nonetheless, accessible to tourists. Director of the Veterinary Department of Manica and Sofala and administrator of the park from 1965 to 1968, Dr. Armando Rosinha, claimed that tourism became a dominant concern in Gorongosa in the early 1960s, contending, "The Park was made to be like a 'shop window' for the Colony, and not one official visitor to Mozambique passed through without a stop in Chitengo…"[124]

José Maria d'Eça de Queiroz published the monograph *Wild Sanctuary: The Astonishing Animals of Gorongosa and Safaris in Mozambique* and João Augusto Silva published his own pictorial treatise, *Gorongosa: Shooting Big Game with a Camera*, the very same year, both with translations in English and Portuguese.[125] Each book was introduced as a layman's contribution to natural history, each author distinguishing himself from professional zoologists and experienced hunters, each propelled by the mission of preserving wildlife for the future. Silva wrote

> The myth that wild animals are ferocious is a very old one and it is not merely in one book that it can be destroyed. To bring this about it would require many years of revision. But in the meantime the fauna would continue to disappear from the bush and the savannahs of this magnificent Africa that is being pitilessly swept by the winds of greed. This extermination under the growing occupation and extensive exploitation of the land could be checked by the formation of Nature Reserves and National Parks. However, throughout this continent, ruled by the law of the jungle, the reserves are at the mercy of the exterminating hunting raids by a people hungry for meat and incapable of understanding that the wild fauna represents a treasure of inestimable value; one worthy of preservation.[126]

Both of these books celebrated Gorongosa's attributes, described as "the most beautiful animal sanctuary, accessible to the eyes of civilized man, in the whole of Africa."[127] Each featured an extensive array of photographs, Silva's taken by the author; d'Eça de Queiroz's taken by his wife, Ludwig Wagner. The photographs in these books centered less on landscapes than on

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[123] João Augusto Silva, *Gorongosa: Shooting Big Game with a Camera*, (Lourenço Marques: 1964), 74.
[124] Armando Ròsinha, "Alguns Dados Históricos sobre o Parque Nacional da Gorongosa [Some Historical Facts About Gorongosa National Park]," *Arquivo* 6 (1989): 227.
[125] d'Eca de Queiroz, *Santuario Bravo* and Silva, *Gorongosa.*
[126] Silva, *Gorongosa*, 19-20.
[127] Ibid., 51.

individual animals and wildlife groups at close range, simultaneously illustrating the risks taken by the photographer and the wildlife bounty of Gorongosa. Others, such as the photograph below, demonstrate the close range at which each photographer was working, again emphasizing the risk involved in "shooting big game with a camera," posited as an optimal alternative, of course, to shooting big game with a gun. This photograph also suggested the ease with which one would encounter wildlife in Gorongosa, famed for its abundant plains.

> As far as the variety and beauty of the landscape, comfort and accessibility and especially as far as the ease with which one comes across the lords of the jungle, are concerned, this Park has no equal. There must still be, deep in Africa, magnificent regions for game and beauty of scenery, but they are not easily reached and some of the most beautiful have to-day probably been reduced to mere hunting grounds by uncontrolled and lawless populations.[128]

Figure 27. Image from João Augusto Silva, *Gorongosa: Shooting Big Game with a Camera*, (Lourenço Marques: 1964).

[128] Ibid.

The threat of extinction that is part of the discourse underpinning both of these works is echoed in contemporary narratives perpetuated by the park's restoration project, with Carr at the helm. Perceived threats to the park center around the economic interests of local populations, and on Tinley's conception of a "mountain to mangrove" ecosystem. Tinley's proposed expansion of Gorongosa National Park was never realized during his tenure. It has been argued that his recommendations were ignored due to the expansion of FRELIMO's liberation war to a nearby district. Instead of expanding the park's boundaries, the colonial state proposed a villigization system on the park's periphery, which arguably advanced cultivation on the mountain.[129]

Gorongosa and the surround areas were claimed at different points by both FRELIMO and RENAMO in the 1970s and 1980s. In the final years of the liberation struggle, the Gorongosa district became a geographical focus for FRELIMO operations in the provinces of Manica and Sofala with Mount Gorongosa providing adequate concealment from which to launch attacks.[130] The park remained open to tourists, with troops installed to defend the region, which many saw as "a symbol of colonial sovereignty and prestige" in the face of liberation threats.[131] At various times during the subsequnt armed conflict "Gorongosa" became analogous with RENAMO in foreign and domestic press. In 1981, RENAMO launched its first attack on the park motivated by publicity aims. Crossing the Pungue River and entering Chitengo, soldiers kidnapped British ecologist John Burlison asserting that his release depended upon his parents getting a letter from RENAMO president Dhlakama published in the British press.[132] In 1983, Gorongosa National Park was abandoned by park administrators, and the Gorongosa district was claimed by RENAMO to be the "Capital of Free Mozambique."[133] This area was a strategic base for RENAMO operations due to spiritual affiliations in the region as well as its strategic location in the center of the country. Casa Banana, located on the edge of Mount Gorongosa became RENAMO's principal headquarters, from which it coordinated communications.

In his PhD dissertation, Todd French argued, "Restoration in Gorongosa and elsewhere in Africa is a product of the articulation of conflicting memories and modes of memorialization."[134] Questioning to which past Gorongosa might be restored, French illuminated how this type of

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[129] French, "Like Leaves Fallen by Wind," 231.
[130] Ibid., 236.
[131] Ibid., 240.
[132] Paul Fauvet and José Alves Gomes, "The 'Mozambique National Resistance,'" *Supplement to AIM information bulletin* 69 (1982), 9.
[133] Alex Vines, *RENAMO: Terrorism in Mozambique* (London: James Currey, 1991), 85.
[134] Ibid., 328.

conservation initiative spurs competing versions of history. Though his research focused mainly on local processes of livelihood restoration in a community on the outskirts of the park, French offers useful insight on the tenants underpinning Gorongosa National Park's restoration before and after Carr's arrival. Conducting fieldwork in 2001, French attended a workshop centered on planning for the park's future. Rather than attempt to recreate a particular historical moment or "former glory," the proposed management plan that emerged from this workshop would be adaptive to ecological fluctuations and was influenced, according to French, by a new school in ecological thought which emphasized non-equilibrium ecosystem dynamics and resilience."[135] The park's present-day mission statement remains committed to restoring and protecting the "the natural structure, functions, and processes of Gorongosa National Park," preserving a focus on restoring ecosystem processes rather than a particular ecological state.

Figure 28. "Man on a Mission," from Onhine Cahane, "A Once and Future Eden," *Condé Nast Traveler*, December 2007.

[135] Ibid., 12.

From the beginning of his involvement in the park, Carr prioritized the protection of Mount Gorongosa as part of the restoration of the Gorongosa ecosystem. In 2009, Philip Gourevitch published an article in the *New Yorker* with the deck "Can Greg Carr save an African ecosystem?" under its title.[136] This article brought to light the pressures faced by the restoration project in a context of diminishing resources as well as the exclusionary possibilities of working with an "ecosystem" rhetoric. Gourevitch's is one of the few articles published about the restoration project in the late 2000s that references the park's peopled past. "In establishing the park, the colonial authorities had driven out the African villagers who had lived there for as long as anyone could remember, and they were prepared to displace more people in the name of preserving wild land."[137] He later describes a visit to an elder in the vicinity who describes the negative connotations local people hold of the word "park" based on their displacement from Gorongosa. In the article Carr is quoted as saying, "I'm a human-rights guy and a conservation guy trying to do both at the same time."[138] However, Carr has been criticized for running each of these agendas in parallel to one another rather than entangling them in a holistic agenda.

In July 2010, the top of Mount Gorongosa was finally incorporated into the park, and administrators initiated plans to draw agriculturalists off its slopes.[139] Although the project claims to be concerned about the community, its lack of sensitivity toward people living on the mountain, and the failure of the restoration project's to engage local participation in management discussions, has been harshly criticized. Carr's restoration project and the media surrounding it was the subject of a heated discussion on H-Net[140] in 2010 and a subsequent panel at the African Studies Association annual conference that year.[141] Heidi Gengenbach, who had been working in the Gorongosa region since 2006, noted in the H-Net discussion the importance of drawing attention to the ignorance of the park's management with regard to indigenous farming systems and forest management practices, which many had given up since 2005 in protest against Carr's "high-handedness." Gengenbach wrote

> Cynically accepting the park's assertion that the park's land and wealth are no longer theirs to protect, local people fight back with resource neglect - deliberately abandoning traditional fire control techniques, hunting limits, and

[136] Philip Gourevitch, "The Monkey and the Fish," *The New Yorker*, 21 & 28 December 2009, 98-111.
[137] Ibid., 103.
[138] Ibid., 111.
[139] Decreto 78/2010, 31 December 2010, *Boletim da República de Moçambique*, I Série, No 52, 322-323.
[140] "Gorongosa Park on National Geographic Channel," H-Luso-Africa, March 2010.
[141] The ASA panel was entitled "Protecting an African Eden?: Conservationists, Communities and Collaboration in Mozambique."

> monitoring of valuable tree species because, they claim, "The land has a new owner now, doesn't it?"[142]

Christy Schuetze, an anthropologist who had spent several years living in one of the communities that would be affected by the incorporation of the mountain condemned a recent *60 Minutes* program, which she argued "is more like propaganda for the Carr Foundation than a balanced look at the situation in Gorongosa or the painful history of the creation of the park that is being re-produced in the present."[143] Participants in the ensuing ASA panel, which included Gegenbach (as chair) and Schuetze,[144] highlighted the militarization of the restoration project in working to claim the mountain as well as the incendiary rhetoric used to sway opinion against those residing on its slopes. They noted cultural insensitivities to local residents by restoration project team members, as well as a failure to effectively communicate policy change to local residents, let alone gain consensus in any meaningful way. Mateus Mutemba, Gorongosa National Park's Director of Community Relations who has since become the park's warden, also participated in the panel, pointing out some the inroads his team had made with communities living in the part and the buffer zone surrounding it. Although Mutemba had been invited in the spirit of fostering dialogue, this was more often an exercise in polarized camps speaking different languages than bridging conservation divides.

Since 2011, Gorongosa has had a new celebrity advocate touting the merits of its landscape and restoration project. Renowned biologist E. O. Wilson is now a scientific advisor to the national park, his E. O. Wilson Biodiversity Foundation has partnered with the restoration team, and he has become the park's new face and "saviour."[145] In 2013, Wilson published a *National Geographic* article entitled, "The Rebirth of Gorongosa," which celebrates Carr's achievements subsequent to the first decade following the armed conflict during which time he wrote, "Gorongosa remained in ruins."[146] He recast Mount Gorongosa as an "island" that has

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[142] Heidi Gengenbach, "Gorongosa Park on National Geographic Channel: reply," H-Luso-Africa, 18 March 2010. http://h-net.msu.edu/cgi-bin/logbrowse.pl?trx=vx&list=H-Luso-Africa&month=1003&week=c&msg=9/1oY6oGPib5lQ percent2BthkZPQQ

[143] Christy Schuetze, "Gorongosa Park on National Geographic Channel: reply," H-Luso-Africa, 13 March 2010. http://h-net.msu.edu/cgi-bin/logbrowse.pl?trx=vx&list=H-Luso-Africa&month=1003&week=b&msg=qSY7d81D percent2bdZAJrCNzVBTeg&user=&pw=.

[144] As well as myself, though my paper focused specifically on historical representations of the park. The other participants were Michael Walker and Rozenn Diallo.

[145] Howard W. French, "E. O. Wilson's Theory of Everything," *The Atlantic*, November 2011. http://www.theatlantic.com/magazine/archive/2011/11/e-o-wilsons-theory-of-everything/308686/.

[146] E. O. Wilson, "The Rebirth of Gorongosa," *National Geographic* (June 2013) http://ngm.nationalgeographic.com/2013/06/gorongosa-park/wilson-text.

been "largely unexplored" by biologists, and its fauna, particularly insects, ripe for discovery. The same year, Wilson was featured on the last in a six-part David Attenborough-narrated BBC series called *Africa.* In it, Gorongosa is hailed as a conservation success story, where the return of large mammals is dependent on the preservation of the insects that Wilson studies. According to Wilson, what makes this park unique is that people who visit the park "will see earth as it looked before the coming of humanity." Interestingly, Carr was written out of this narrative, replaced by the very well-known Wilson, assisted by Tonga Torcida, a young Mozambican biologist who grew up in the area and reads as a perfect protégé and successor to 83-year-old Wilson. Carr's prominence in the Gorongosa story, however, was revived last year when Wilson published both a book (with an accompanying 40-minute documentary) and a free digital textbook, which both heavily feature Gongosa and showcase the park as a model ecosystem, celebrating Carr's achievements regarding the park's ecology and human development.[147]

> In his seminal text on the Gorongosa ecosystem, Tinley wrote
>
> > The natural areas of the African continent must be seen in their geographical, ecological and cultural context. Their diversity in each region or locality should be used in accordance with their intrinsic properties for a variety of criteria – from near total protection (e.g., for endemics) to rural hunting areas. In this way natural areas and wildlife will be integrated as part of the whole man-land relationship.[148]

Carr and the restoration team have done significant work in conducting critical scientific studies, beginning to restore the ecological landscape, and publicizing their achievements to date with the purpose of encouraging tourist revenue that would help to sustain the park, and to a limitied extent, the local communities. However, for Carr to effectively restore Gorongosa, he would have to enact Tinley's vision of an integrated ecosystem that effectively engages with and benefits people as well as wildlife. Moreover, his story of the park's past and present should not elide those that made significant contributions to this restoration project before him. It also must effectively embrace the ecosystem as a dynamic and holistic entity. Through its management may require the privileging of certain resource needs over others, it must nonetheless attempt as much

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[147] Wilson, *A Window on Eternity* and Morgan Ryan, Gaël McGill, and Edward O. Wilson, *E..O. Wilson's Life on Earth* (E.O. Wilson Biodiversity Foundation). http://eowilsonfoundation.org/e-o-wilson-s-life-on-earth/.
[148] Tinley, "Framework of the Gorongosa Ecosystem," 178.

as possible to look at the needs of the entire ecosystem in connection to one another, as Tinley has, rather than in parallel.

In October 2012, RENAMO leader Afonso Dhlakama returned to the Gorongosa region and called for a revision of the 1992 peace accord, claiming that FRELIMO had failed to deliver participatory democracy. RENAMO's desire for more representation in the armed forces and on election bodies instigated fatal clashes between members of each party and the annulment of the 20 year old peace accord.[149] The ensuing tensions and violence between the parties had a significant impact on tourism to the country.[150] In August 2014, FRELIMO and RENAMO signed a ceasefire ahead of the country's 2015 elections.[151] Gorongosa has since begun its tourism drive once more and was depicted in a recent article for the UK's *The Independent* as "ever more resilient and inspiring. Now at peace again, Gorongosa is growing stronger and more beautiful by the day."[152]

Conclusion: Historical Restoration and Remaking Belonging

Like the two harbor projects discussed in the previous chapter, Carr and Blanchard's restoration projects also illustrate "hybrid agencies, connections, interactions, and forms of violence [that] are able to portray their actions as history, as human expertise overcoming nature, as the progress of reason and modernity, or as the expansion and development of capitalism."[153] In these cases, American philanthropists, donor agencies, and government bodies collaborated on the recreation of selective pasts to which these environments might be restored. Within the administrative void left by Mozambique's armed conflict, Carr and Blanchard had the opportunity to use their financial resources to remake these landscapes into their own visions of

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[149] "Mozambique peace deal unravels after attack," *Al-Jazeera*, 22 October 2013. http://www.aljazeera.com/news/africa/2013/10/mozambique-peace-deal-unravels-after-attack-201310212015143462 5.html.
[150] "Mozambique: Armed Conflict Severely Impacting On Tourism," *AllAfrica*, 27 May 2014. http://allafrica.com/stories/201405280943.html
[151] "Mozambique's government and Renamo sign truce," *Al-Jazeera,* 25 August 2014. http://www.aljazeera.com/news/africa/2014/08/mozambique-rebels-government-sign-truce-201482563950966537.html
[152] Sue Watt, "On safari in Mozambique's Gorongosa National Park: 'The most diverse park in the world,'" *The Independent*, 26 June, 2015. http://www.independent.co.uk/travel/africa/on-safari-in-mozambiques-gorongosa-national-park-the-most-diverse-park-in-the-world-10347639.html
[153] See page 160 in this dissertation, which quotes Timothy Mitchell, *Rule of Experts: Egypt, Techno-politics, Modernity* (Berkeley: University of California Press, 2002), 53.

what they had been or might have been. As such, the networks that allowed these visions to be validated or enacted not only portrayed these restoration projects as history, in the process of manipulating these environments, these actors wrote also new histories to serve as restoration models and entice foreign capital in the form of tourist revenue.

Attempts by Blanchard and Carr to revitalize and restore Mozambique's protected areas in the aftermath of the civil conflict demonstrate ecological restoration to be a subjective process. Each worked to enact his own vision of the landscape based on subjective views of what belongs within it. Blanchard prioritized the development of this territory for tourism in his unsuccessful effort to bring this area "back to life." Carr has sought to restore a glorified past by selling Gorongosa as "Africa's Lost Eden." In stark contrast to Blanchard, Carr has demonstrated a genuine interest in trying to figure out what is best for the ecosystem and has made some effort at honestly engaging the community. Whether his tactics have been appropriate or effective is a subject for another research project and probably another scholar. However, like Blanchard, Carr's work in Gorongosa demonstrates the critical role of extra-state investment in these areas after the end of the armed conflict as well as the role of particular conceptions of the past in shaping these areas' futures. Carr's restoration project also highlights the lasting trope of idyllic Edens in promoting Gorongosa in contemporary conservation publicity. Furthermore, both projects presented their benefactors as a savior of a threatened landscape – Maputaland from a degrading forestry project and Gorongosa from the degradation of human settlement on the mountain.

Blanchard's "dreampark" in southern Mozambique sought to make history with a variety of historical firsts, including the use of a steam train as a game viewing vehicle and offering visitors "beach and beast" in the same line of sight.[154] By contrast, Carr has sought to rehabilitate the Gorongosa ecosystem while benefiting local people, though with limited success. Restoration in Gorongosa has not just been a matter of recreating the pre-conflict landscape but also enacting pre-conflict plans for expanding this protected area, which ultimately proved successful with the incorporation of Mount Gorongosa into the protected area. However his success at effectively engaging local communities and gaining their support for this boundary change, which has been applauded in international media, has been challenged by scholars working in the area. It would be worthwhile comparing the effectiveness of Carr's approach with that of Chande and Zolho

[154] McNeil, "'Beach and Beast' Resort Planned for Mozambique."

before him as a means of determining which practices might be most effective at garnering local support and distributing the economic and natural resources of this protected area. Where Chande and Zolho's work during the emergency program and the early years of restoration seem to have encouraged participation from local people in the conservation process, Carr seems to be running conservation and local development as two separate spheres. Rather than engage local residents as partners (although unequal ones) in conservation, he seems to think of them as possible benefactors. This paternalistic approach seems to be one of the criticisms levelled against Carr by both academics and residents living in and around Gorongosa National Park.

While ecosystem protection requires an integrated approach to future planning dependent on dynamic processes and diverse actors, Carr's ecosystem emphasis seems to be on the restoration of a particular idea of the park, rather than diverse interactions with it. Unlike Tinley, Carr seems to maintain parallel visions of human and environmental development which do not quite intersect. On one hand, he purports to be preserving the Gorongosa ecosystem for the good of all things and people living in and around the park, but on the other, his tactics seem to exclude collaboration with those who have known the environment far longer than he has. He seems to be promoting fears of resource scarcity that instead serve to augment the division between the park and those living in and around it. By deepening divisions around access to Mount Gorongosa, excluding particular visions of the landscape, and failing to engage with alternative models, Carr seems to be working to restore an Eden rather than an ecosystem.

Like the journalistic portrayals of Gorongosa as an Eden, Carr's application of Tinley's model promotes a timeless ideal, excluded from the complex realities of the past and present. Tinley's work, by contrast, illustrates the Gorongosa ecosystem to be in constant flux and constituted by complex, interdependent factors. Because of the inevitability of ecological change, true restoration is impossible. As Rob Pringle, an American ecologist and lead researcher in Gorongosa's Department of Scientific Services has stated

> The best we can do is approximate some prior state of any given ecosystem, and the approximation we work toward will reflect both the values of the people directing the effort and the inevitable limitations of knowledge and capacity. On top of all that there is no guarantee of getting what we aim for…Some species will be winners, some will be casualties, and there will be surprises…We must recognize that restoration is really reimagination. Creation. Gardening…If what

> we are doing is imagining and creating, then we can be imaginative and creative. And that's exciting. How should our gardens grow?[155]

Blanchard's approach to restoring the Maputo Special Reserve and creating a "dreampark" in Southern Mozambique clearly used creative license in imagining what this area might have been and what it should be. His "revitalization" project was based on false impressions of the past and was more overtly situated within particular projections of what tourists do and do not desire in an "African" experience. The Eden he sought to make was one which would not only bring in revenue for the country, but also profits for himself. The government's privileging of his project over the development of the Sappi plantation revealed its determination to redevelop tourism in the aftermath of the armed conflict and its desire to develop protected areas as economic enterprises.

I do not draw on the examples of Carr and Blanchard's projects in order to conflate them as a matching pair of neoliberal or neocolonial initiatives perpetrated by outsiders. Nor do I mean to bring them together as part of a unified critique of post-conflict restoration projects. In fact, I believe the Carr project has done some important work, particularly regarding ecological restoration. Furthermore, if the Blanchard project had succeeded, it is possible that it may have been able to progress the TFCA agenda further than has occurred without him. I do bring these two case studies together, however, to demonstrate that both of these restoration attempts have resurrected particular visions of the past, while excluding others, and likewise have privileged and elided particular visions for the future. In so doing, these projects demonstrate how the Mozambican government has used foreign capital to promote tourism and its development agenda by bestowing on foreign investors the right to remake the histories of these territories by determining what or who belongs in them.

Where in this chapter I explored two examples of foreign investors that remade or reimagined protected areas after Mozambique's civil conflict, in the next chapter I look at the role animals have played in remaking places as they are translocated to and between these areas. I consider how individual members of species act as historical agents in the claiming and reclaiming of territory and how "wildness" is made and enacted in the territorialization of national parks and game reserves.

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[155] Robert M. Pringle, "How to Be Manipulative," *American Scientist* 100 (2012): 37.

Chapter 5

"To Get and Keep a Rhino"[1]: Wildlife Translocations and Other Border Crossings

On December 15th, 1961, the first rhino successfully reintroduced to Ndumo Game Reserve walked out of his pen, grazed briefly, and then threw himself over the boundary of his enclosure, charged to the reserve's fence line, and walked alongside it before heading back towards the rest camp and settling into his new home.[2] Mpandhlana ("the bald one" in Zulu), a 4,000 pound bull, had been transported from the Umfolozi Reserve, 100 miles south of Ndumo, as part of Operation Rhino, an initiative aimed at relocating white rhinos in an effort to save the species from extinction.[3] By the 1920s, big game hunting and tsetse fly eradication campaigns had severely diminished the number of white rhinoceros (*Ceratotherium simum*) in southern Africa, with the only viable population left in the vicinity of the Umfolozi Reserve in South Africa's Natal province.[4] Under the management of the Natal Parks Board, the white rhino population in this reserve grew from around 200 early in the 20th century to 437 by 1953, a number that was becoming unfeasible to maintain due to habitat degradation and a growing human population on the reserve's periphery.[5] Rather than selectively cull the animals, Umfolozi's conservators boosted the population and distribution of the species by translocating more than 1,100 rhinos to historic rangelands in Africa and zoos around the world between 1961 and 1972.[6] Celebrated as one of the continent's great conservation success stories, Operation Rhino provided the "founder stock" of all surviving Southern White Rhinoceros (*Ceratotherium simum simum),* now totaling over 20,000 and representing 80 percent of the global rhino population.[7]

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[1] From Letter from Mike McVey to the Natal Parks Board, received 7 July 1967, E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.
[2] Reports for the month of December 1961, Rangers' Reports, Ndumo, No.2, 1956-1961. EKZNW Archive.
[3] Ian Player, *The White Rhino Saga* (London: Collins, 1972).
[4] Kees Rookmaaker, "The Alleged Population Reduction of the Southern White Rhinoceros *(Ceratotherium simum simum)* and the successful recovery," *Säugetierkundliche Mitteilungen* 45, No. 2 (2000): 55-70.
[5] Player, *White Rhino Saga*¸ 9.
[6] Ibid., 249.
[7] Richard H. Emslie et al., eds. *Guidelines for the in situ Re-introduction and Translocation of African and Asian Rhinoceros*. First Edition. IUCN. 2009, 8 and Richard H. Emslie and Michael H. Knight, "Update on

In the second half of the twentieth century, indigeneity became a particularly significant concept as species were relocated to areas where they had previously become extinct in order to reestablish breeding populations. The first 10 years of Operation Rhino thus exemplifies a period in the history of wildlife conservation during which the movement of species into and between protected areas was becoming standard practice.[8] Wildlife threatened with extinction were relocated to historic rangelands in order to establish new breeding populations that would preserve the species. Geographer Bill Adams identifies the 1960s as "the heyday of costly and flamboyant capture-release programmes for individual species" and rhinos as "the classic group subjected to the indignity of salvation in this way..."[9]

This growing concern for protecting "native" species and habitats from those classified as "alien" became an organizing precept for conservation during this period.[10] Charles Warren offers the following definitions, which illuminate their use in conservation circles: "In simple terms, native species are those which have autocolonized an area since a selected time in the past...and alien species are those which have been introduced by humans, intentionally or otherwise."[11] In 1995, the International Union for Conservation of Nature (IUCN), a global membership body aimed at conserving biodiversity, defined reintroduction as "[a]n attempt to establish a species in an area which was once part of its historical range, but from which it has been extirpated or become extinct."[12] In the organization's most recent guidelines, published last year, the phrase

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African Rhino Status and Poachng Trends from IUCN SSC African Rhino Specialist Group (AfRSG)," Report to CITES Standing Committee 65th Meeting, 2014. Rhino Resource Center.

[8] Various publications during this period reflect the development of translocation technologies as well as its growing role in conservation management. These include A. M. Harthoorn, *The Flying Syringe: Ten Years of Immobilizing Wild Animals in Africa* (London: Geoffrey Bles, 1970); E. Young, ed. *The Capture and Care of Wild Animals: The Work of Eighteen Veterinary, Medical and Wildlife Experts* (Cape Town: Human and Rousseau, 1973); and B. L. Penzhorn, "A Summary of the Re-introduction of ungulates into South African National Parks (to 31 December 1970)," *Koedoe* 14 (1971): 145-159.

[9] William M. Adams, *Against Extinction: The Story of Conservation* (London: Earthscan, 2004), 133.

[10] This was spurred in large part by the publication of Charles Elton's *The Ecology of Invasions by Animals and Plants* in 1958. Matthew K. Chew, "Invasion Biology: Historical Precedents," in *Encyclopedia of Biological Invasions,* eds. Daniel Simberloff and Marcel Rejmánek (Berkley: University of California Press, 2011), 369. On pre-twentieth century understandings of non-human nativeness see Kenneth Olwig, "Natives and Aliens in the National Landscape," *Landscape Research* 28, No. 1 (2003): 61-74; Lesley Head, "Decentering 1788: Beyond biotic Nativeness," *Geographical Research* 50, no. 2 (2012): 166-178; and Matthew K. Chew and Andrew L. Hamilton, "The Rise and Fall of Biotic Nativeness: A Historical Perspective," in *Fifty Years of Invasion Ecology*, ed. D. Richardson (Oxford: Wiley-Blackwell, 2011), 35-47.

[11] Charles R. Warren, "Perspectives on the 'Alien' Versus 'Native' Species Debate: A Critique of Concepts, Language and Practice," *Progress in Human Geography* 34, no. 4 (2007): 428.

[12] Richard H. Emslie, Rajan Amin, and Richard Kock, *Guidelines for the in situ Re-introduction and Translocation of African and Asian Rhinoceros*, 8.

"historic range" is changed to "indigenous range,"[13] inferring a primordial claim to a place that is deeper than simply where it has lived in the past. Although scholars have begun to unravel the presumptions on which this dichotomy of native and alien are based,[14] conceptions of belonging remain embedded in practices of wildlife translocations, with preference given to species reintroductions over "assisted colonizations," in which humans help move species to areas where there is no record they ever existed.[15]

Despite the recent increase of wildlife translocations within conservation practices, the movement of wildlife is not a recent feat. Non-domesticated animals were captured as early as 1050 B.C. and relocated to Babylonian and Assyrian royal parks and gardens in Mesopotamia.[16] Roman emperors had large collections of animals, as did many Italians during the Renaissance.[17] The first rhino to arrive in Europe after the third century was an Indian rhinoceros transported from Goa by way of the Cape of Good Hope to Lisbon as a gift from Sultan Muzafar II of Cambaia to King Manuel I of Portugal in 1515. Since rhino had not been present on the continent for such a long period of time, this was considered a major event in the accumulation of natural history knowledge as well as an opportunity for testing assumptions about the species. Hoping to demonstrate the legendary hostility between rhinoceros and elephants, Manuel I staged a battle between one of the elephants of his menagerie and this recent arrival, only to find the two animals wholly uninterested in the other.[18] The following year, the Portuguese king gave the rhinoceros to Pope Leo X as a strategic gift to garner favor for the expansion of the Portuguese empire. The rhino never made it to Rome, drowning en route in a storm that sank its ship. It was immortalized however in various pictorial depictions, most famously in Albrecht Dürer's drawing held at the

[13] IUCN Species Survival Commission, *Guidelines for Reintroductions and Other Conservation Translocations*. Gland, Switzerland, 2013, 2.
[14] See for example Chew and Hamilton, "Rise and Fall of Biotic Nativeness" and Ian D. Rotherham and Robert A. Lambert, eds. *Invasive and Introduced Plants and Animals: Human Perceptions, Attitudes and Approaches to Management* (Washington D.C.: Earthscan, 2011).
[15] Anthony Ricciardi and Daniel Simberloff, "Assisted colonization is not a viable conservation strategy," *Trends in Ecology and Evolution* 24, no. 5 (2009): 248-253.
[16] Vernon N. Kisling, Jr. "Ancient Collections and Menageries," in *Zoo and Aquarium History: Ancient Animal Collections to Zoological Gardens*, ed. Vernon N. Kisling, Jr. (Boca Raton: CRC Press, 2001), 11.
[17] Nigel Rothfels, *Savages and Beasts: The Birth of the Modern Zoo* (Baltimore: Johns Hopkins University Press, 2002).
[18] Palmira Fontes da Costa, "Secrecy, Ostentation, and the Illustration of Exotic Animals in Sixteenth-Century Portugal," *Annals of Science* 66, no. 1 (2009): 59-82.

British Museum, and also in a small sculpture on the Tower of Bélem, near the site of the rhino's first landfall in Europe.[19]

Like the fate of the Lisbon rhinoceros, the more recent movement of wildlife has not always seen animals successfully supplanted to new locales. Exploring the outcomes of translocations allows for an investigation into how animals adapt to these so-called historic rangelands or reject them. As such, it presents an opportunity to look at wildlife not just as members of a species, but as individuals, who often act in unexpected ways. Furthermore, it allows for an investigation into the relationship between wildlife (as both species representatives and as individuals), the humans striving to protect them, and the places to which they are transported. Adams points out the "irony in the whole idea of capturing wild species in order to save them."[20] This echoes the larger irony in managing *wild*life in *protected* areas. However, one of my arguments is that animals are not simply managed subjects. They also respond to the new environments in which they are placed, or in which they sometimes place themselves. As part of the "animal turn" in the humanities and social sciences,[21] animal geographers have been particularly attentive to the role of animals in making and shaping places and imbuing them with meaning.[22] This has been highly influenced by Bruno LaTour's actor network theory, which considers actors, places, and agency to be constantly in process, or "in-the-making," where humans and non-humans are in perpetual relation to one another.[23] This, in turn, inspired the concept of hybridity, which broadens our understanding of who or what can be a social actor, disrupting perceived binaries between the human and the non-human, decoupling the

[19] T. H. Clarke, *The Rhinoceros: From Dürer to Stubbs 1515-1799* (London: Sotheby's Publications, 1986).
[20] Adams, *Against Extinction*, 137.
[21] Key scholars in this field include Erica Fudge, Donna Haraway, Linda Kalof, Harriet Ritvo, Nigel Rothfels, and Cary Wolfe. For a thoughtful discussion on methodology in animal studies see Etienne Benson, "Animal Writes: Historiography, Disciplinarity, and the Animal Trace," in *Making Animal Meaning*, eds. Linda Kalof and Georgina Montgomery (East Lansing: Michigan State University Press, 2011), 3-16. Sandra Swart has been a key animal history scholar in South Africa. See for example, *Riding High: Horses, Humans and History in South Africa* (Johannesburg: Wits University Press, 2010).
[22] Julie Urbanik, *Placing Animals: An Introduction to the Geography of Human-Animal Relations* (Plymouth: Rowman & Littlefield Publishers, Inc, 2012) and Chris Philo and Chris Wilbert, eds. *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations* (London: Routledge, 2000); and Henry Buller, "Animal Geographies I," *Progress in Human Geography* 38, no. 2 (2013): 308-318.
[23] Catherine Johnston, "Beyond the Clearing: Towards a Dwelt Animal Geography," *Progress in Human Geography* 32, no. 5 (2008): 637.

"subject/object binary," and allowing for multiple types of subjectivities, not only human ones.[24] These "more-than-human geographies,"[25] explore how place-making processes are enacted by multiple species.[26] The unexpected actions of translocated wildlife present an opportunity to explore how belonging is not only ascribed to wildlife but is also inscribed by non-human animals on particular places.

While suggesting that animals can be historical actors may seem to be a means of anthropomorphizing them, Philo and Wilbert caution us against the anthropocentric assumptions that generally accompany criticisms of anthropomorphism. In outrightly rejecting the projection of human attributes, actions, and emotions onto non-humans, there is a risk of overlooking that "*some* non-humans in *some* situations…could perceive, feel, emote, make decisions and perhaps even 'reason' something like a human being."[27] In allowing for the possibility that non-humans could act in ways that we might consider the exclusive purview of humans, it is possible to look at non-human actors beyond the "transhistorical constant" of species behavior and consider whether an individual animal is a "proper historical subject whose essence is contingent on the time and place of its being."[28] Resistance and collaboration have been major themes in illuminating the historical actions of African people during European colonialism, who had been deemed "ahistorical" by some historians as late as the 1960s. While I hesitate to make a parallel claim here, suggesting that translocated rhinos were resistors or collaborators in the relocation process, I do argue that these rhinos responded in specific and often unexpected ways, contingent on the time, place, and circumstances of their migration. Whether auto- or assisted colonizers of territory, animals have not just been passive objects of wildlife conservation projects; they have inhabited, traversed, transgressed, and settled into the protected areas they have been determined to belong to.

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[24] Sarah Whatmore, *Hybrid Geographies*: *Natures, Cultures, Spaces* (London: SAGE Publications, 2002), 4 and David Lulka, "The Residual Sense of Human Hybridity: Retaining a Sense of the Earth," *Transactions of the Institute of British Geographers* 34, no. 3 (2009): 378-393.
[25] This term is taken from Sarah Whatmore, "Materialist Returns: Practicing Cultural Geography in and for a More-than-Human World," *Cultural Geographies* 13, no. 4 (2006): 600-609.
[26] See for example Andrea K. Bolla and Alice J. Hovorka, "Placing Wild Animals in Botswana: Engaging Geography's Transspecies Spatial Theory," *Humanimalia* 3, no. 2 (2012): 56-82.
[27] Chris Philo and Chris Wilbert, "Animal Spaces, Beastly Places: An Introduction," in *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations,* eds. Chris Philo and Chris Wilbert (London: Routledge, 2000), 19.
[28] Benson, "Animal Writes," 7.

In this chapter I use rangers' reports, ecological studies, wildlife publications, archived correspondence from the Natal Parks Board, and management and restoration plans to uncover "traces" of animals as historical actors in this translocation process.[29] I also use these sources to track discussions and discourses of indigenous belonging amongst wildlife conservation practitioners and enthusiasts. It was not only animals that moved across the boundaries of protected areas and political territories; ideas and expertise traveled across these porous borders as well, within and between South Africa and Mozambique. Furthermore, on either side of the border, conservation managers faced challenges that tested the precepts of maintaining their residents' indigeneity as tourism interests influenced which history presided in determining which species to reintroduce at different times. As Mozambique's armed conflict progressed, with dire consequences for many large game species, safety trumped nativeness as a defining factor in determining where and to whom wildlife belonged. Finally, because the ecology, politics, and demography of these places have changed over time, past reintroduction decisions and species prioritizations have impacted possibilities for transfrontier conservation in the future.

Indigeneity, Belonging, and Wildness

The dispossession and displacement of indigenous people has been a critical theme in the writing of conservation histories in Africa and elsewhere.[30] Scholars have shown how the "myth of wild Africa" led to material depopulations of territory, reproducing an imagined division between humans and natural environments.[31] Elizabeth Lunstrum describes national parks as "constituted through an originary act that erases history" as they are remade as "wilderness."[32] The production of "wilderness" in the creation of protected areas is considered part of a larger process of Western imperialism and the exercise of power over territory and resources, including

[29] Benson, "Animal Writes."
[30] David M. Anderson and Richard Grove, eds. *Conservation in Africa: People, Policies and Practice* (Cambridge: Cambridge University Press, 1987); Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (Oxford: Oxford University Press: 1999); and Mahesh Rangarajan, *India's Wildlife History: An Introduction* (Delhi: Permanent Black: 2001).
[31] Jonathan Adams and Thomas McShane, *The Myth of Wild Africa: Conservation Without Illusion* (Berkeley: University of California Press: 1996) and Roderick Neumann, *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa* (Berkeley: University of California Press, 2002).
[32] Elizabeth Lunstrum, "The Making and Unmaking of Sovereign Territory: From Colonial Extraction to Postcolonial Conservation in Mozambique's Massingir Region" (PhD diss., University of Minnesota, 2007), 3.

wildlife.[33] In time, colonial administrators became self-appointed environmental stewards, labeling African hunters as poachers, while white hunters maintain privileged access to wildlife as "conservationists."[34] Scholars have demonstrated that post-colonial conservation has continued to exclude indigenous people from protected areas.[35] In producing spatial divisions between people and "nature," conservators of protected areas often laid clear boundaries between what belongs in these places and what does not.

The practiced politics of belonging in "wild Africa" is not confined to the curtailing of human activity and habitation. As humans moved around the globe, they both intentionally and accidentally transported plants and animals to new habitats, changing the global landscape and facilitating new relationships to the natural environment.[36] This movement, while actually physically moving plants and animals, also facilitated the production of conceptions about "indigeneity," as well as competing categories of "non-native," "alien," and sometimes "invasive," applied to both humans and non-human species.[37] While scientists have been making land management decisions on the basis of biotic nativeness since the 18th century,[38] scholars in the humanities and social sciences have only recently begun to pay attention to the connection between human ideas about race, nationality, and cultural identity and perceptions of native or invasive plant and animal species.[39] In South Africa, scholars have paid particular attention to the production of these categories with regard to the country's flora, demonstrating long standing

[33] William Beinart and Lotte Hughes, *Empire and Environment* (Oxford: Oxford University Press, 2007).
[34] John M. MacKenzie. *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1988) and Edward Steinhardt, *Black Poachers, White Hunters: A Social History of Hunting in Colonial Kenya* (Oxford, James Currey: 2006).
[35] Dan Brockington and James Igoe, "Eviction for Conservation: A Global Overview," *Conservation and Society* 4, no. 3 (2006): 424-470.
[36] Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*. 2nd ed. (Cambridge: Cambridge University Press, 2004) and Richard Grove. *Green Imperialism: Colonial Expansion, Topical Island Edens and the Origins of Environmentalism* (Cambridge: Cambridge University Press: 1995).
[37] Tom Griffiths and Libby Robin, eds. *Ecology and Empire: Environmental History of Settler Societies* (Seattle: University of Washington Press: 1998).
[38] Chew and Hamilton, "The Rise and Fall of Biotic Nativeness."
[39] Peter Coates, *American Perceptions of Immigrant and Invasive Species: Strangers on the Land* (Berkeley: University of California Press, 2006) and Dan Wylie, ed. *Toxic Belonging? Identity and Ecology in Southern Africa* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2008).

concerns about the threats of alien species to native ones as well as the ways that non-native species have been domesticated.[40]

Africa's fauna have also been imbued with notions of indigeneity, particularly in practices of wildlife conservation that have conceptually and physically grounded animals in particular territories. As colonial authorities in the first half of the 20th century began to recognize the dire consequences of sport hunting on species populations, protected areas were demarcated to safeguard threatened species native to those places.[41] But are representatives of wildlife species solely passive subjects of conservation initiatives that aim to reinstate them to where they belong?

The process of translocation, moving a wild animal from one place to another, reveals an inherent tension in the management of *wild*life. Whatmore and Thorne argue, "[t]he enduring coincidence between the species and spaces of wildlife as the antipodes of human society means that, to ask what is wild is, simultaneously a question of its whereabouts."[42] The category of wildlife not only implies assumptions about where such life exists but also where it should exist, or in other words, where it belongs. However, belonging to a place also implies some form of domestication, which seems at odds with the unruly or unmanaged "wild." Shirley Brooks contends that "the animal experience – not unlike that of marginalized groups of human beings – is one of having geographies imposed upon them."[43] Considering the various ways humans put wildlife in place, both figuratively and physically, makes us attuned to power dynamics between different conservation entities and between human and non-human species, embedded in the ways wildlife are perceived to belong in particular places. Looking at how a sense of belonging is not only ascribed to wildlife but also as it is inscribed by wildlife on territory presents an opportunity to rethink wildness, not as an imposed and contingent category but rather as a condition of

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[40] Simon Pooley, "Pressed Flowers: Ideas about Alien and Indigenous Plants at the Cape, c.1902–45," *Journal of Southern African Studies* 36 (2010): 599–618; Jane Carruthers et al., "A native at home and abroad: the history, politics, ethics and aesthetics of acacias," *Diversity and Distributions* 17, no. 5 (2011): 810-821; William Beinart and Luvuyo Wotshela, *Prickly Pear: The Social History of a Plant in the Eastern Cape* (Johannesburg: Wits University Press, 2012); and William Beinart and Karen Middleton, "Plant Transfers in Historical Perspective: A review article." *Environment and History* 10, no. 1 (2004): 3-29.
[41] William Beinart and Peter Coates, *Environment and History: The Taming of Nature in the USA and South Africa* (London: Routledge, 1995), 77.
[42] Sarah Whatmore and Lorraine Thorne, "Wild(er)ness: reconfiguring the geographies of wildlife," *Transactions of the Institute of British Geographers* 23, no. 4 (1998): 435.
[43] Shirley Brooks, "Human Discourses, Animal Geographies: Imagining Umfolozi's White Rhinos. *Current Writing* 18, no. 1 (2006): 12.

unpredictability, where individual animals either transgress the boundaries of protected areas, native territories, and the characteristics of their species, or settle into them.

The Origins of Operation Rhino and Early Relocations in Natal

According to Ian Player, the instigator and director of Operation Rhino, the rangeland of the southern white rhinoceros once extended throughout southern Africa "from the Orange and Umfolozi rivers in the south, to the Zambesi and Cunene rivers in the north."[44] By the late nineteenth century, white rhino populations had been severely depleted by big game hunting, and as early as 1895 the British gave the species special protection under colonial law, declaring them royal game and setting aside Umfolozi, one of their last strongholds, as a protected area.[45] Despite continued formal protection in the early 20th century under South African provincial control, campaigns aimed at eradicating the tsetse fly in the Natal province left the species under constant threat, as farmers and other lobbyists sought to extinguish wildlife populations believed to harbor the tsetse fly. American Herbert Lang thus instigated calls to experiment with relocations to other reserves or even into captivity.[46] It was not until the early 1960s that these proposed measures were realized, not because the species were threatened, but because their protection had been too successful, and Umfolozi's conservators need to reduce the number of rhinos in the reserve. At that time state-owned lands surrounding Umfolozi, which had been supporting the surplus white rhino population, were to be allocated to the Bantu Trust, which would facilitate human occupation.[47] Furthermore, limiting the rhinos to the reserve's boundaries would lead to risks of overpopulation and habitat destruction or disease, as had already been witnessed in the population of black rhinoceros (*Diceros bicornis*) in the nearby Hluhluwe reserve.[48] Rather than cull the excess animals, Ian Player initiated the translocation of these species, changing these animals' trajectory to one of "an expanding population recolonising parts at least of its once wide range."[49]

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[44] Ian Player, "Translocation of White Rhinoceros in South Africa," *Oryx* 9, no. 2 (1967): 137.
[45] Brooks, "Human Discourses, Animal Geographies," 9.
[46] Herbert Lang, "Threatened Extinction of the White Rhinoceros (*Ceratotherium simum*)," *Journal of Mammalogy* 5, no. 3 (1924): 173-180.
[47] NPB, Further Notes on Operation Rhino. E/8/5/2, Operation Rhino, F/3a, EKZNW Archive.
[48] Ibid.
[49] Player, "Translocation of White Rhinoceros," 138.

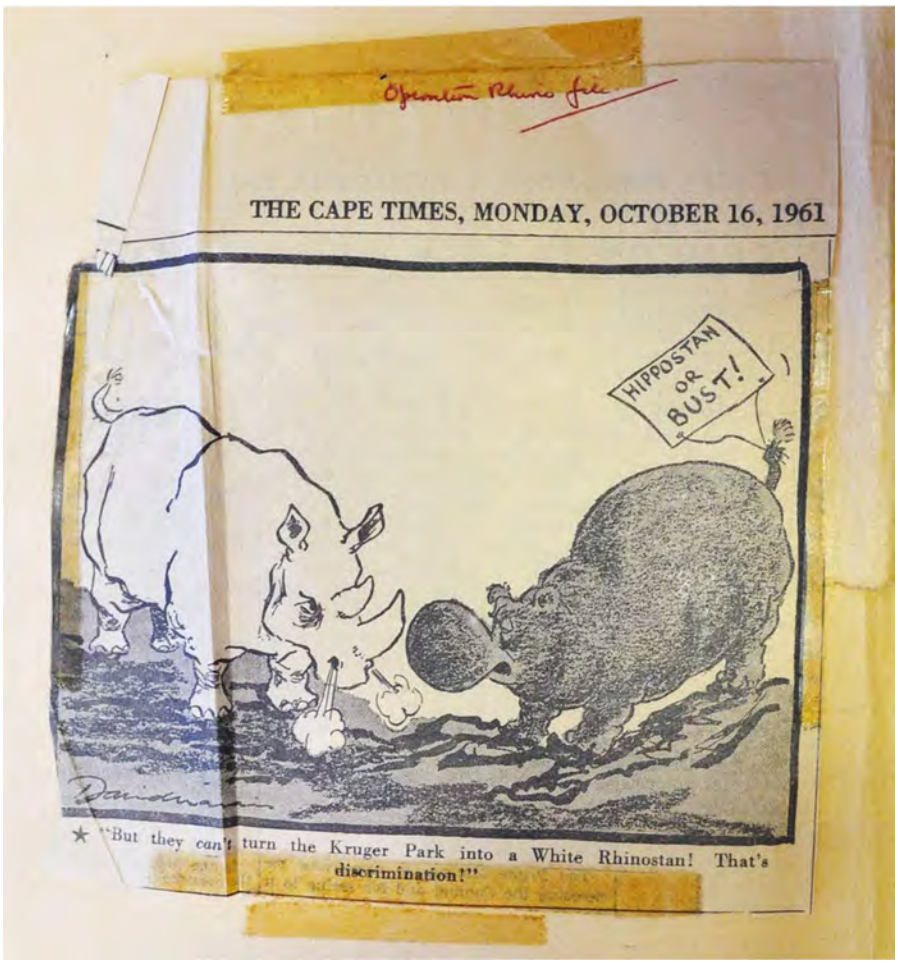


Figure 29. Cartoon, David Marais. Caption reads, "But they can't turn the Kruger Park into a White Rhinostan! That's discrimination!" Cape Town: *The Cape Times*, 16 October, 1961. E/8/5/2, Operation Rhino, F/3a, Ezemvelo KZN Wildlife Archive.

David Marais's cartoon, which I found taped inside a folder archived amongst other Natal Parks Board files, was aimed more at apartheid policies than conservation politics, but it nonetheless provides a useful illustration of the ways notions of belonging have been mobilized in the translocation of species. In 1959, Prime Minister Hendrik Verwoerd had announced his "New Vision" for South Africa which promulgated the Native Policy dating back to 1905 through total racial segregation and separate geographical, political, and economic development. By relegating black South African citizenship to ethnic "homelands," or "Bantustans," Verwoerd intended to denationalize this majority population from the South African state as a means of maintaining

minority rule.[50] Marais used Operation Rhino to mock the Prime Minister's Bantustan Policy, which was being implemented through forced removals. Three days before the cartoon was published, the first white rhinos were introduced to Kruger National Park (Rhino Capture Reports). Using the imagery of a relocated rhino (appropriately a "white" one), Marais capitalized on themes of race and relocation to satirize the bantustan policy, suggesting it is intimately bound with false notions of where particular races, symbolized here as species, belong. One can also contemplate whether the inverse association is appropriate. Is there utility in thinking of Operation Rhino as a process of removal as well as relocation? Did the subjects of this translocation play a role as collaborators or resistors? Were they passive conduits of the recolonization story Player identifies or active participants in the reclamation of territory?

Operation Rhino was essentially an experiment for all aspects of wildlife translocation. In December 1960, Toni Harthoorn, a vet based in East Africa, was asked to assist with the development of immobilization and capture techniques by Ian Player, who was in charge of the Umfolozi Reserve.[51] Harthoorn had been involved in Operation Noah earlier that year, in which he immobilized black rhino at risk from the flooding of the Kariba Dam.[52] In his report on Harthoorn's visit to Umfolozi that December, Player describes how they experimented with different combinations of tranquilizers and narcotics and two types of guns with which to dart the animals with loaded syringes as well as different immobilization dosages and varied methods of pursuing the animals and time lapses on administering the antidote.[53] Continued experiments over the next three years led to the development of M99, an immobilization drug which would become critical to Operation Rhino's success.[54] Player's Operation Rhino team also experimented with techniques for acclimatizing rhinos after capture, either for captivity in zoos or for release into new reserves, testing different periods of time in pens within Umfolozi and at the rhino's destination, and means of getting the rhinos to eat while in captivity. The earliest arrivals in Ndumo, for example, were first habituated in small *bomas* (enclosures), then in larger paddocks

[50] C. M. Tatz, "Dr. Verwoerd's 'Bantustan' Policy," *Australian Journal of Politics & History* 8, no. 1 (1962): 7-26.
[51] Report upon the Visit of Dr. A. M. Harthoorn and Research upon the Immobilisation of Square-lipped Rhinoceroses and other Animals. E/8/5/2, Operation Rhino, F/3a. EKZNW Archive.
[52] William Beinart, "The Renaturing of African Animals: Film and Literature in the 1950s and 1960s," *Kronos: Journal of Cape History* 27 (2001): 211.
[53] Report upon the Visit of Dr. A. M. Harthoorn and Research upon the Immobilisation of Square-lipped Rhinoceroses and other Animals. E/8/5/2, Operation Rhino, F/3a, EKZNW Archive.
[54] Player, "Translocation of White Rhinoceros," 146.

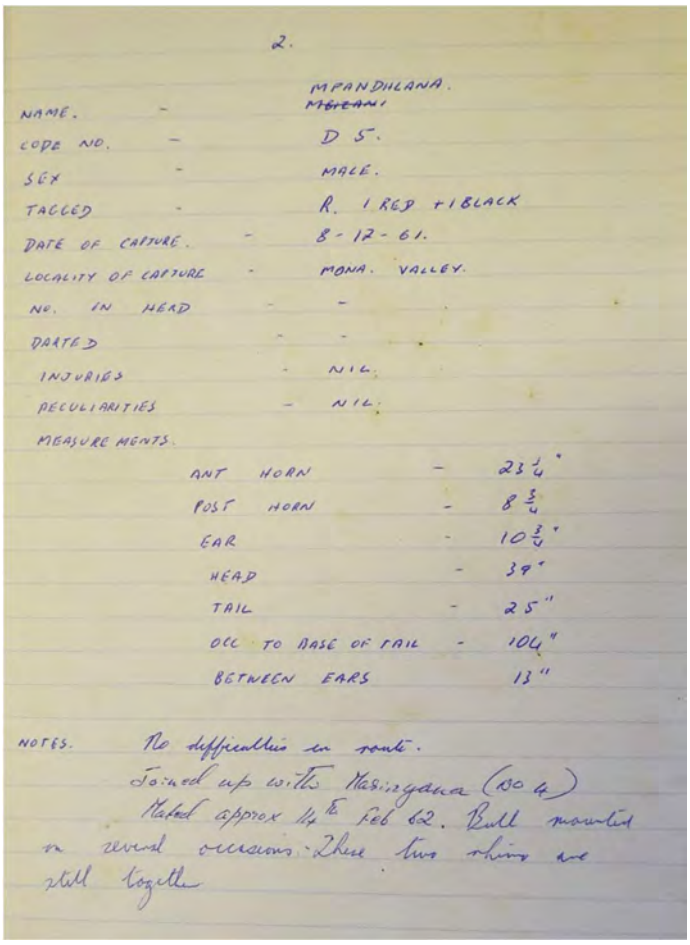
before release into the reserve, but this phased acclimatization was eventually deemed unnecessary, and animals were released directly from their transport crates into the reserve. Player noted that "each rhino has marked individuality" in how it responded to "taming after capture,"[55] revealing that this process of experimenting with rhino immobilization and habituation not only complicated the boundary between wildness and domestication but also between the collective traits of a species and the individuality of its members.

While the main aim of Operation Rhino was to save the species by restocking its former rangelands, many of the rhinos were exported to zoos around the world, revealing a clear tension in this mission to save "wild" animals. In addition to absorbing some of the costs of this large relocation program, transporting some of Umfolozi's white rhinos to zoos was purported to be a means of safeguarding individual members of the species that might later establish breeding units back in their former habitats.[56] In an interview regarding Operation Rhino Harthoorn stated

> Even if the remaining animals in Africa should be destroyed…it would be very nice indeed to have these animals safe in zoos and parks overseas, and I think that there is NO cruelty involved in this, because a rhinoceros seems to settle down in captivity much quicker than almost any other animal. They almost seem to enjoy being in captivity; all they want is a little bit of room and good food and they seem perfectly happy.[57]

Harthoorn's reflections on white rhino behavior contradicted Player's observations of rhinos' distinct responses to captivity in early stages of Operation Rhino experimentation. Furthermore, not all rhinos that were confined, even temporarily, as part of the translocation process displayed enjoyment with their condition or happiness when the simple demands Harthoorn described were met. Examining the outcomes of individual rhino translocation presents an opportunity to examine the limitations of species categories when representatives of the species act in unexpected ways.

[55] Ibid., 147.
[56] Operation Rhino, F/3a. EKZNW Archive.
[57] Further Notes on Operation Rhino. E/8/5/2, Operation Rhino, F/3a. EKZNW Archive.



2.

NAME. - MPANDHLANA. ~~MGEANI~~

CODE NO. - D 5.

SEX - MALE.

TAGGED - R. 1 RED + 1 BLACK

DATE OF CAPTURE. - 8-12-61.

LOCALITY OF CAPTURE - MONA. VALLEY.

NO. IN HERD - -

DARTED - -

INJURIES - NIL.

PECULIARITIES - NIL.

MEASUREMENTS.

ANT HORN	-	23 1/4"
POST HORN	-	8 3/4
EAR	-	10 3/4"
HEAD	-	39"
TAIL	-	25"
OCC TO BASE OF TAIL	-	104"
BETWEEN EARS		13"

NOTES. No difficulties en route.
Joined up with Masinyana (D0 4)
Mated approx 14th Feb 62. Bull mounted
on several occasions. These two rhino are
still together

Figure 30. "Mphandlana," Notes on Rhino Sent to Ndumu Game Reserve. EKZNW Archive.

Ndumo, about 100 miles north of Umfolozi, was the second game reserve in Natal to receive rhino.[58] Two months after Mphandlana's dramatic release, a 4,000 lb female named Masinyane (Zulu for "the one who hurries") arrived in Ndumo in estrus. According to ranger Tony Pooley's monthly report for February 1962, Masinyane squeezed between the cables of her enclosure and ran off with Mpandhlana within a few days of her arrival. He reported that the two rhinos were spotted "walking around together, talking in the peculiar way that they do, and apparently both very happy."[59] A record of these early transfers offers the following information

[58] The first was Mkhuze.
[59] Report for period 1-2-1962 to 28-2-1962 from Ranger A. C. Pooley. Rangers' Reports, Ndumo, No.3, 1962-1966. EKZNW Archive.

on their relationship: "Mated approx 14th Feb 62. Bull mounted on several occasions. These two are still together."[60] A year later, Masinyane gave birth to Ndumo's first calf.[61]

Not all of the migrant rhinos fared as well. Of the 18 white rhino translocated over the next two years, 14 survived. One died en route to the reserve from exhaust fumes blowing into his crate.[62] Another became paralyzed from injuries sustained in the crate and died soon after arriving in Ndumo.[63] One translocated rhino drowned and another was killed by poachers outside the reserve.[64] In January 1965, a rhino calf born in the reserve was killed by a crocodile. According to Ian Player, this was the only account on record of crocodile predation. [65] Rangers reported during the first year that local people would monitor where the rhino grazed and cut the boundary fence close to those areas so the animals might venture out and be more easily killed, dehorned, and eaten.[66] Ranger Tony Pooley noted the incredible reduction in poaching snares in Ndumo after rhino were introduced.[67] Before Mpandhlana's successful relocation, a female named Mbizana had been released into Ndumo but soon disappeared from the reserve and rangers presumed her dead.[68] However, the senior warden of Umfolozi reported to the head of the Natal Parks Board in January 1963 that a female rhino from Ndumo had been spotted 100 kilometers south in Mhkuze Game Reserve, so it seems Mbizana's fate may not have been so dire after all.[69]

Ndumo also received black rhinos from Umfolozi's vicinity, as increasing pressures in the reserve led some rhinos to venture outside its boundaries and into conflict with humans. Of the first pair sent to Ndumo in 1962, only the male survived.[70] The female lost her anterior horn en route to Ndumo, likely from hitting it against her crate in an attempt to escape, and died soon

---

[60] Notes on Rhino Sent to Ndumu Game Reserve. [Notebook located near Game Removal files.] EKZNW Archive. The date cannot be correct as this animal was only unloaded in Ndumo on the 18th of February. Perhaps the rangers preferred to think of this as a Valentine's Day romance.
[61] Player, "Translocation of White Rhinoceros," 145.
[62] 9. D58. Chesa-Sandhleni. Notes on Rhino Sent to Ndumu Game Reserve.
[63] 3. D10. Maqayisa. Notes on Rhino Sent to Ndumu Game Reserve.
[64] 7. D30. Mabili and 6. D29. Munya. Notes on Rhino Sent to Ndumu Game Reserve.
[65] Player, "Translocation of White Rhinoceros," 146 and Monthly Report of G. W. Schütte, Ndumu Game Reserve, for the month of April, 1968. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.
[66] Report for the period 1-10-1962 to 27-10-1962 from Ranger A. C. Pooley. Rangers' Reports, Ndumo, No. 3, 1962-1966. EKZNW Archive.
[67] Report for the month of May 1964 from Ranger A. C. Pooley. Rangers' Reports, Ndumo, No. 3, 1962-1966, EKZNW Archive.
[68] 1. D2. Mbizana. Notes on Rhino Sent to Ndumu Game Reserve.
[69] "Re: Rhino Counts," Letter from Senior Warden, Umfolozi Game Reserve to the Director [NPB]. 10 January 1963. E/7/3/1, White Rhino & Black Rhino to end 1968. F/3a. EKZNW Archive.
[70] Ibid.

after arrival with severe abscesses noted.[71] Six troublesome black rhino were successfully relocated from a Bantu Reserve near Umfolozi to Ndumo in 1968 after causing continuous crop damage and tarnishing relations between the local people and NPB staff.[72]

The warden of Hluhluwe Game Reserve, almost adjoining Umfolozi, reported on the immobilization of a black rhino located on inhabited land outside the reserve and selected for translocation in 1962. His record offers a striking example of how individual animals acted in unexpected ways.

> This animal has probably spent the whole of its life outside of the Game Reserve but owing to the rapid increase in the local bantu population during the past four years, complaints were continually being received by the bantu about damage to crops.
>
> During the last eight years the animal had frequently been driven back into the Reserve by means of blasting it with a shot gun loaded with bird shot. Despite this treatment invariably it would be found back in the Bantu Reserve the following day. Latterly the animal had taken to feeding on pumpkins and this was borne out by the number of pumpkin pips that were found in its faeces after being immobilized.
>
> The animal was found to be covered in old wounds caused from fights, assegai wounds and even wounds from a shot gun loaded with bush shot. There were, incidentally, no signs from the dozen or more times it was shot in the rear with bird shot. It was found to be blind in the left eye, the eye having been at some stage lacerated in some unknown manner, possibly by shot gun pellets. Both hind legs, just above the feet, bore scars consistent with those that one would expect to find in an animal that had been snared with cable.
>
> It is interesting that despite all the hazards of living in the Bantu Reserve, the animal still chose this area in preference to the Game Reserve where a more abundant supply of browse is available. I have no doubt that the main reason was that the population density of black rhino in that particular part of the Reserve is so high, that the aggressiveness of younger animals made him seek out the Bantu Reserve for protection.[73]

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[71] 10. B5. Mghoshaan. Notes on Rhino Sent to Ndumu Game Reserve.
[72] Letter from J. Vincent to Chief Conservator Zululand. 11 July 1968. E/7/3/1, White Rhino & Black Rhino to end 1968. F/3a. EKZNW Archive.
[73] N. N. Deane, Immobilisation of Black Rhino – Nomageja Valley. E/7/3/1, White Rhino & Black Rhino to end 1968. F/3a. EKZNW Archive.

The rhino was euthanized in its *boma* soon after its immobilisation and never made it to the safety of another reserve. Like Mbizana who migrated out of Ndumo soon after her release, this rhino determined its own home and risked injury to reside in the unlikely "protection" of human occupied lands.

There were still several hundred people living inside Ndumo when rhinos were being imported to the reserve in the early 1960s. Because these species had been absent for so long, Ndumo's human inhabitants were unfamiliar with them. Some took advantage of the white rhino's docile nature by monitoring their grazing habits and cutting down fencing to encourage them to venture out of the reserve's boundary to be more easily killed, dehorned, eaten.[74] However, more people were fearful of these animals and vacated the reserve in the years following their reintroduction.[75] Ranger Tony Pooley called the rhinos the "unpaid policemen of Ndumu" and noted a drastic reduction in animal snares upon their arrival.[76] By 1967, all homesteads inside the reserve were abandoned providing space to reintroduce other species to Ndumo.[77] This human depopulation was an unintended consequence of rhino immigration but one that was viewed positively by Ndumo's conservators.

In their monthly reports to the Natal Parks Board headquarters, Ndumo's rangers often recorded concern that rhinos would cross into Portuguese territory, and sometimes they did. The reserve was unfenced on its northern border, where the Usuthu River acted as a natural boundary. During the winter months both people and animals easily traversed this river into adjoining territories. In September 1965, Ranger Pooley reported on a rhino that followed the Usuthu River upstream all the way to Swaziland.

> Fortunately an *umfane* [boy] with dogs found the animal and succeeded in driving it downstream again. When we found the rhino it had smashed the Veterinary Dept. fence in several places and was standing against a Krantz, refusing to go any further downstream. There was a danger of the animal crossing over into Portuguese territory or back upstream into Swaziland. We tried every method, from firing shots, throwing stones, settling dogs onto it and eventually in desperation set fire to the reeds on the river bank, hoping that the smoke would panic the animal into running back into the river, downstream. To our amazement the animal was completely unworried by smoke or flames, and at

[74] Rangers' Reports, Ndumo, No. 3, 1962-1966. EKZNW Archive.
[75] Tony Pooley, *Mashesha: The Making of a Game Ranger* (Southern Book Publishers, 1992), 214.
[76] Chapter 16, "The Unpaid Policemen of Ndumo," in Pooley, *Mashesha.* 206-214.
[77] Ibid., 214.

> one stage, charged at a fiercely burning banana tree, smashed it over with its horn and rubbed the fire out.[78]

The following morning, the rangers found the rhino had ventured downstream of its own accord and was outside the reserve fence trying to get back in.

In 1968, a recent arrival to Ndumo traveled back and forth across the river, "causing some unrest among the local inhabitants" according to Ranger Densham.[79] After surviving these excursions into Mozambique, this rhino was shot by Ndumo's rangers back in South African territory after charging several members of a local community and tossing a child into a bush. In this case the rhino's home country proved more perilous than the places it visited across the border. In 1982, during a period when rhino poaching across the Usuthu was increasing, likely due to the escalating armed conflict, two white rhino ventured across the river into Mozambique. One was killed and eaten, and on inquiry about the other, Ndumo officials were told "all those who had eaten the Rhino meat had got sick so the other was being left alone."[80]

Eight years after arriving in Ndumo, Mphandlana was still referred to by name in rangers' reports, maintaining a presence in the archive as an individual and not just another member of his species. In March 1970, "the biggest white rhino bull in this reserve," was found bogged in an area of thick, black clay. In his monthly report, Ranger Schütte described in great detail the rescue mission to free him. With many hands assisting, this operation took an evening and the following morning, but Mphandlana was eventually on firmer ground. "He stood for about half an hour in one spot not quite believing he was out, and then walked off towards Nyamithi to drink and back into Mahemane [bush]. He has since been seen together with other rhino."[81]

In being referred to by name, Mphandlanda was an exception, as was "semi-tame" Mavis, constantly referred to as Meyrtle in Ranger Schutte's reports, which the Tongaland warden would then correct. Translocated from Queen Elizabeth Park in Pietermaritzburg, Mavis was notable for

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[78] Report from Ranger A. C. Pooley for September 1965. Rangers' Reports, Ndumo, No. 3, 1962-1966. EKZNW Archive.
[79] Monthly Report by Ranger W. D. Densham, Ndumu Game Reserve, for the period October 1968. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.
[80] C. O. Jackson, Ndumu Game Reserve. 1st Quarter, 82/83. Rangers' Reports, Ndumo, No. 6. EKZNW Archive.
[81] Report by Ranger G. W. Schutte, Ndumu Game Reserve, for March 1970. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.

her relative tranquility amongst the black rhinos. "Even when one comes across her lying in the wallow she just takes no notice and carries on with her mud bath."[82] While the first rhinos translocated to Ndumo were all named upon capture, few others were referred to by name in the ranger's reports that described their lives in Ndumo. However, this should not imply that these were the only rhino viewed as individuals. One of the most interesting aspects of the Ndumo rangers' reports are the behavioral observations recorded in them, which would provide fertile material for future analysis. These observations rest on viewing these translocated rhinos and their offspring, not only as a collective species, but also as individual beings who break out of their enclosures, test the boundaries of the reserve, or frequently graze near the ranger's house.

Reading these recordings of the behavior of rhino and other species by Ndumo's rangers allowed me to investigate what geographer Henry Buller refers to as animal presences in the history of this reserve.[83] This archive thus illuminated aspects of their experiences, preferences, deviances, and mortality that are inaccessible in unadorned population statistics. Buller argues for methodologies that transcend the "collective and abstract categorizations of the non-human (such as orderings by species, function or location, common to both natural and social science approaches to the animal) to focus rather upon animals as 'embodied individuals living their lives entangled with humans and their own wider environment.'"[84] The reports of Ndumo's rangers – which reflect their naming practices and anthropomorphisms – also reflect this entanglement of the reserve's human and non-human residents, presenting the rhinos as dynamic and often unpredictable agents in the recolonization of territory.

Although many of the rhino that were translocated to Ndumo perished, the majority survived and thrived, making this translocation a great success. In 2008, before rhino poaching in South Africa began to escalate as described in the introduction to this dissertation, Ndumo's black rhino population was approximately 13, while its white rhino population was estimated to be 45.[85]

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[82] Report by G. W. Schütte, Ndumu Game Reserve, for the month of October 1970. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.
[83] Henry Buller, "Animal Geographies II: Methods," *Progress in Human Geograph* 39, no. 3 (2015): 374-384.
[84] Ibid., 376. Quoting N. Taylor, "Animals, Mess and Method: Post-humanism, Sociology and Animal studies," in *Crossing Boundaries: Investigating Human-Animal Relationships,* eds. L. Birke and J. Hockenhull (Leiden: Brill, 2012), 40.
[85] *Ndumo Game Reserve: Integrated Management Plan: 2009-2013.* Ezemvelo KZN Wildlife. Pietermaritzburg, 2009, 27. EKZNW Archive.

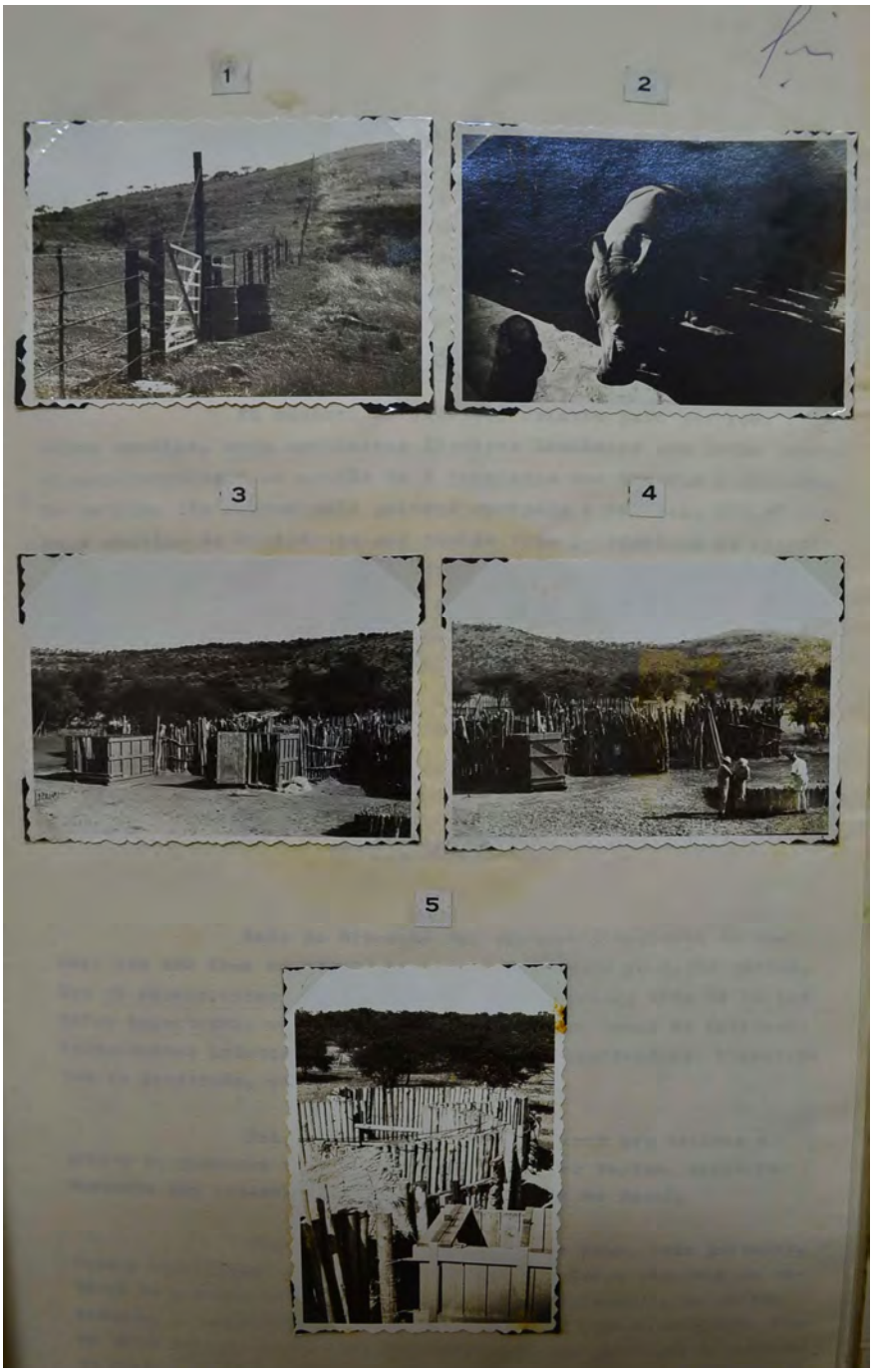
Due to the movement of poachers across the Usuthu into Ndumo, these numbers are now drastically reduced.

Operation Portuguese Rhino

By 1964, news of Operation Rhino had spread locally and internationally, and a team from Mozambique traveled to Natal to learn about wildlife capture and translocation. Consisting of two veterinarians and game ranger José Lobão Tello,[86] this team submitted a detailed report to Mozambique's Department of Veterinary Services on the process of immobilizing rhino, zebra, and buffalo in the vicinity of the Umfolozi reserve, illustrating these encounters with a series of photographs. [87]

The images on the following page show the enclosures where the rhinos spent their first weeks in captivity, "during the period of adaptation to their new life."[88] During the first two weeks, the animals were under constant observation, with their temperature, breathing rate, urination and defecation closely monitored while they were kept in secure three compartment paddocks. [89] After two weeks, the rhinos were then moved to single enclosures before they were transported to a variety of destinations around the world, at a rate of 1,500 pounds sterling each.[90] In each habituation phase, the enclosure opened onto the crate in which the animal would be transported as part of its acclimatization.

[86] He would later be instrumental in conservation activities in Gorongosa and the Maputo Special Reserve.
[87] Alexandre Herculano Garcia de Sousa Dias and Amadeu Candido da Silva e Costa, Captura de Animais Selvagens: Relatório de uma viagem de estudo a algums reservas de caça do Natal (Africa do Sul) [Wildlife Capture: Report on a study trip to some game reserves in Natal (South Africa)], 1964. In "Fauna" files. Located in Relatorios. Veterinary Faculty Library, UEM.
[88] Ibid., 5.
[89] Ibid.
[90] Ibid., 6.



1. One of the boundary fences of the [Umfolozi] Reserve 2. A previously captured rhinoceros
3 & 4. Corrals with three compartments (1st phase) 5. Single corrals (2nd phase)

Figure 31. Fences and Corrals, Alexandre Herculano Garcia de Sousa Dias and Amadeu Candido da Silva e Costa, *Captura de Animais Selvagens: Relatório de uma viagem de estudo a algums reservas de caça do Natal (Africa do Sul)* [Wildlife Capture: Report on a study trip to some game reserves in Natal (South Africa)], 1964.

The authors of this report provided significant detail on the process of capturing rhinos for relocation, describing the pursuit and immobilization of two animals bound for South Africa's Kruger National Park. The team first went to the general area of capture to prepare the necessary materials, including a Palmer gun, syringes, needles, and medication, where two large trucks from Kruger waited to transport the animals.

> The pursuit of two rhinos begins with the car in which the shooter follows. Two Africans on horseback accompany the chase. From 20 meters the first shot is fired hitting one of the animals in the right buttock. The car stops and the horsemen continue to follow at a distance. Minutes later they return to indicate the site where the animal fell. From shot to fall lasted eight minutes.
>
> The cars follow to the [rhino's] location and the staff approach the completely immobilized rhino. They place it in a sterna abdominal recumbency. They proceeded to take measurements, including the size of its horns. On inspection a pronounced mydriasis [dilation of the pupils] is observed. They register 104 heartbeats per minute and 8 deep breaths in the same lapse of time. Blood is not taken to analyze.
>
> As the animals are destined for Kruger Park, where 34 [rhino] already exist from this same provenance, one of the two large trucks approaches, situating its rear at a distance from the animal equal to the length of the crate. This descends to the ground through the elevation of the bascule. The door opens and the animal's head is tied to a cord connected to the truck's winch, which is kept completely taut. The antidote is injected intravenously, and two minutes later, the half-wake animal is towed into the crate which is then immediately closed. A European guard enters from an opening at the top and, straddling the rhino, throws off the rope from its head and leaves through the same opening from which he entered.
>
> A steel cable from the winch is attached to the crate, which is towed on to the trailer with the assistance of two iron plates. The bascule goes down, the crate is secured to the poles of the truck, leaving it ready to continue to its destination…The staff proceeds with the capture of the other animal and everything occurs in the same manner as before.[91]

The authors note that the capture of white rhinos is much easier than that of black rhinos as the latter are more aggressive and more difficult to pursue by car. The following images illustrate the process of capturing the white rhino described above.

[91] Ibid., 10-11.

1. Preparing the syringe 2. Horseback riders to pursue the rhinoceros after the injection
3. Placing the animal in a sterna-abdominal position 4 & 5. In a sterna-abdominal position
6. Measurements

Figure 32. Operation White Rhino, Alexandre Herculano Garcia de Sousa Dias and Amadeu Candido da Silva e Costa, *Captura de Animais Selvagens: Relatório de uma viagem de estudo a algums reservas de caça do Natal (Africa do Sul)* [Wildlife Capture: Report on a study trip to some game reserves in Natal (South Africa)], 1964.

12. Crate completely open

13. Securing the head of the rhino to a cord attached to the truck's winch

14. Intravenous application of the antidote

15 & 16. Helping the animal enter the crate

Figures 33, 34, and 35: Operation White Rhino, Alexandre Herculano Garcia de Sousa Dias and Amadeu Candido da Silva e Costa, *Captura de Animais Selvagens: Relatório de uma viagem de estudo a algums reservas de caça do Natal (Africa do Sul)* [Wildlife Capture: Report on a study trip to some game reserves in Natal (South Africa)], 1964.

Three years after this study visit was completed, Fernando Paisana, Director of Veterinary Services in Mozambique, and Alexandre de Sousa Dias, head of the department's Fauna Division and co-author of the report on the study visit to Natal, spearheaded the introduction of white rhinos into Mozambique.[92] The initiation of "Operation Portuguese Rhino," as these translocations were branded by some Natal Parks Board staff,[93] took place both through diplomatic channels, by way of a formal request from the Portuguese consulate in Pretoria, and between the provinces' respective conservation agencies.[94] In April 1967, Ian Player and Natal Parks Board technical officer David Wearne[95] traveled to Lourenço Marques to discuss the 30 rhino requested by the Portuguese Consulate for reintroduction to Gorongosa and the Maputo Special Reserve. The meeting's participants agreed on the route of transport, as well as the costs of drugs and capture, with crates being supplied by Kruger National Park. In his report on the visit, Player noted that "should it ever become necessary to move any more surplus rhino, we will have no difficulty in getting rid of them to the Portuguese."[96] One of the consequences of the cross-border movement of expertise and personnel was the symbolic situation of wildlife populations as "national" property. Labeling the movement of rhinos to Mozambique as a "Portuguese" project clearly situated these rhino migrants as subjects (or objects) of the Portuguese colonial government. Furthermore, in reporting that the Portuguese would be willing recipients of any surplus rhino the NBP might need to "get rid of," Player reveals the Portuguese colony to be a desirable destination for cross-border movement at this time, a sentiment that would change drastically in the coming decades.

Although, the Mozambican authorities were hoping to relocate rhinos to both Maputo and Gorongosa in 1967, only the former received rhinos that year. Over the course of two periods, first between May and December 1967 and then between November 1969 and March 1970, 59

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[92] José L. P. Lobão Tello, "Reconhecimento ecológico da Reserva dos Elefantes do Maputo [Ecological Reconnaissance of the Maputo Elephant Reserve]," *Veterinaria Moçambicana* 5, no. 2 (1972): 106.
[93] Letter from M. E. Keep to the Accountant, NPB, 12 August 1967, "Re: Drugs for Operation Portuguese Rhino," E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.
[94] Letter from the Consul of Portugal to the Director of the NPB, 13 July 1967 and Ian Player, Report on a Visit to Portuguese East Africa to Discuss Rhino Translocation to the Maputa and Gorongosa Game Reserves, 6 May 1967, E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.
[95] Praised by Player for his Portuguese language skills, Wearne would go on to work in wildlife conservation in Angola.
[96] Ian Player, Report on a Visit to Portuguese East Africa to Discuss Rhino Translocation to the Maputa and Gorongosa Game Reserves, 6 May 1967, E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.

white rhino were captured and translocated to the Maputo Special Reserve.[97] In his book *The White Rhino Saga*, published in 1972, Ian Player wrote the following regarding the reintroduction of rhino into this area:

> Of all the areas we reintroduced rhino to, the greatest thrill was seeing a group of white rhino grazing on the undulating grass dunes of Maputa Elephant Reserve [Maputo Special Reserve]. Beyond them was the dark blue of the Indian Ocean and I could hear the breakers pounding on the reefs. It was over the long golden beaches that survivors from wrecks walked to Lourenco Marques. I imagined they would have seen the white rhino in similar surroundings. We had brought back life to this paradise that had slept for so long.[98]

Although the reserve's elephant population had been long recognized as an integral part of this landscape, Player saw the reserve as lifeless before rhino returned to it, linking the revitalization of this reserve to the process of species reintroduction.

While these translocations were successful in returning a lost species to this part of Mozambique, not all of the animals survived, and several migrated back out of the reserve. Of the 59 animals relocated to the reserve between 1967 and 1970, 21 had perished by 1973. Seven had gotten bogged in the reserve's swamps, five had suffered fatal reactions to tranquilizers or transport, three were killed by local people, two were found dead soon after being released from their bomas, one was killed in its boma by another rhino, and three drowned.[99] Two of these had been frightened by elephants breaking down their boma fences. Unaccustomed to sharing territory with these pachyderms, the rhinos ran all the way into the Maputo River to escape them.[100]

Of the surviving 38 animals, many moved out of the reserve through parts of the fence that had been pulled down by elephants, cattle, or people.[101] When the rhinos did leave, it was usually in the days following their release when they were disoriented and looking for an area to settle. Rather than push through the wire reserve fence, reports show that they left through parts of the fence that had been pulled down by elephants, cattle, or people.[102] Some of the Maputo Reserve's rhinos were reportedly seen back in South Africa. In September 1970, an Ndumo

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[97] Tello, "Reconhecimento," *Vet Moç*. 6, No. 1 (1973): 43.
[98] Ibid.
[99] Ibid.
[100] Ibid., 44.
[101] Ibid.
[102] Ibid., 44.

Ranger went to investigate reports of a rhino in Phelandaba, an area to the east of the future Tembe Elephant Park.

> I went out and found this Rhino bull staying with a herd of cattle in that area of open country Ilala-palm at Pelindaba [sic]. Apparently he had been with the cattle for three days. The local natives seemed very worried of this animal as they didn't know what it was. Since then it has moved into the bush country…A further white rhino is living along the International fence east of the reserve. Both these rhino probably came from the Maputo reserve.[103]

Another traveled south along the coast to Ponta do Ouro near the South African border. According to Ian Player, this rhino charged the local lighthouse, moving Player to call him "a rhino Don Quixote."[104] As with the rhinos relocated to Ndumo Game Reserve as part of Operation Rhino, those transferred to the Maputo Special Reserve did not always settle peacefully into their new surroundings. This historic rangeland boasted unfamiliar entities, like elephants (and lighthouses), and environments that quickly halted the habituation of some of its new residents. While the species was indigenous to this area, individual rhinos were not.

Those that survived and stayed within the Maputo Elephant Reserve's boundaries became an important tourist attraction for this protected area, which had previously been celebrated mainly for its elephant population. Two years after the first translocation of these animals into the reserve, it was officially designated the Maputo Special Reserve, to be more inclusive of its diverse residents.[105] Mozambique's weekly magazine *Tempo* touted the thrill of a photographic safari with these new inhabitants,[106] and travel agencies in Lourenço Marques began advertising day trips to this "elephants, hippos, and rhino's paradise."[107] The white rhino population continued to grow in this reserve after Mozambique became independent in 1975. In an interview, former ranger Baldeu Chande estimated that by 1983 the Maputo Special Reserve population had grown to 84 resident rhinos.[108]

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[103] Report for the month September 1970 by G. W. Schütte, Ndumu Game Reserve. Rangers Reports, Ndumo, No. 4, 1967-1972, EKZNW Archive.
[104] Ian Player, *The White Rhino Saga* (London: Collins, 1972), 239.
[105] Ostriches were also introduced to the park in 1969, on the recommendation of Travassos Dias. Tello, "Reconhecimento," *Vet Moc*. 5, no. 2 (1972): 106.
[106] Mota Lopes, "Na Reserva de Caça do Maputo a morte não é o fim [In Maputo Game Reserve death is not the end]," *Tempo* 15, 15 December 1970, 27-31.
[107] "Fauna" files. Located in Relatorios. Veterinary Faculty Library, UEM.
[108] Baldeu Chande, interview with the author, Maputo, 10 April 2013.

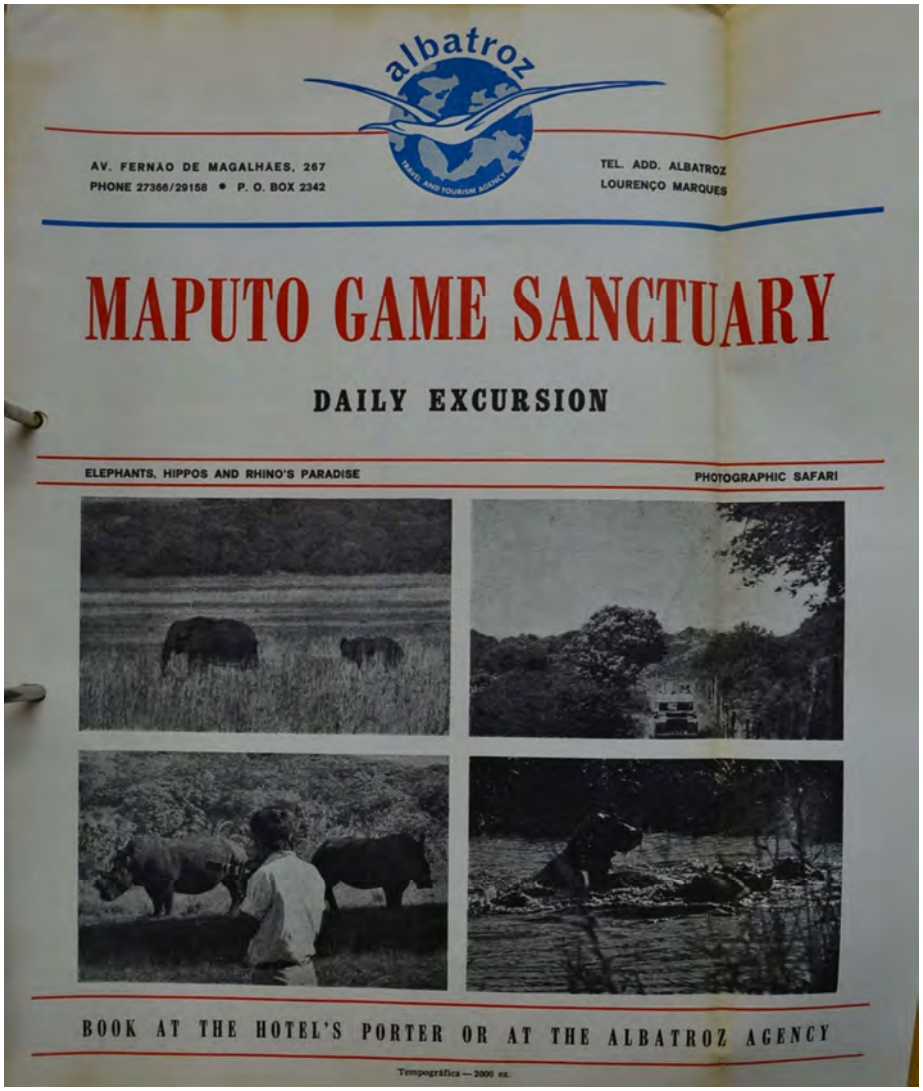

Figure 36. Advertisement. Albatroz Agency, Maputo Game Sanctuary, Daily Excusions. "Fauna" files. Located in Relatorios. Veterinary Faculty Library, Eduardo Mondlane University (UEM).

Media reports of rhino relocations into Mozambique evoked strong opinions from some South Africans regarding the ethics of rhino relocation and standards to which this process should be held. One concerned South African wrote to the Director of the Natal Parks Board after hearing a false report that only one rhino had been transported to Mozambique.

> Dear Sir, We were very distressed to hear, on the radio, that there is a solitary white rhino, which was given to PEA [Portuguese East Africa]. He has had several fights with others, and now he's to live alone, down by the sea, near a lighthouse.

> It must be misery for the poor creature. I don't think one should ever be sent away by itself.
>
> Can nothing be done, now, to get this rhino back, or to send another down, and take some very definite steps to see that they are properly settled?
>
> I shouldn't think the Portuguese care a [rap]. It was a pity that this animal should have been sent alone, as a gift. I would be very grateful to hear the sequel to this news.[109]

In prodding for this animal to be "properly settled," this concerned citizen assumed a certain level of intervention in ensuring the rhino's well-being. Furthermore, he connected this quality of care to national standards, implying that the Portuguese would not share South African interests in the rhino's welfare. As a gift to the Portuguese, this rhino was not seen as returning to its former rangeland but as displaced from where it belonged … in South Africa. The best interests of the rhino in this case seem to be more aligned with the protection afforded by a particular government than by a historic rangeland, or diplomatic goodwill.

In 1969, two years after the first translocation of rhino into the Maputo Special Reserve, it was reported in southern African wildlife magazine *African Wildlife* that rhino would finally be moved into Gorongosa National Park.[110] Dr. Havenga from Bloemfontein wrote to the editor of the magazine expressing his concern that the white rhino may have never occurred as far north as in the Gorongosa region, which he characterizes a "bush forest," with wetter savannahs and more tropical features than the more temperate "bushveld" found further south.[111] He mentioned two other species, the giraffe and tsessebe, which are common in bushveld areas but not bush forest, that he fears might also be introduced to Gorongosa.[112] He wrote, "[t]he introduction of alien species to this wonderful 'Nature Park' can only tend to change it into a large Zoo."[113]

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[109] Letter G. Stanford to Director, NPB. 10 August, 1967. E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.
[110] "White Rhinos for Mozambique," *African Wildlife* 24, no. 4 (1969): 343.
[111] "White Rhino," Letter to the Editor from Dr. M. J. Havenga. *African Wildlife* 24, No. 2 (1970): 171.
[112] Dr. Havenga subsequently wrote a letter to the magazine expressing his concern that black rhinoceros had not yet been reintroduced to Kruger National Park, to which the National Parks Board responded, "The black rhino is the only species of large mammal which used to occur in this portion of the Transvaal Lowveld at present lacking in the mixed community of large mammals in the Kruger Park. It is not only our intention but our duty to reintroduce them…The sad fact is that we have for many years now been unsuccessful in finding someone prepared to donate black rhinos." *African Wildlife* 24, No. 3 (1970): 257-258.
[113] Ibid.

Attempts had been made to introduce giraffe to Gorongosa from Kruger National Park in 1952, however none ever arrived at Gorongosa.[114] From 1948, the park's administrators were developing plans to improve its infrastructure in order create a tourist destination that might rival Kruger.[115] The failed attempts of Colonel Sandenburgh, Kruger's warden, to send giraffes to Gorongosa were more likely driven by the desire of drawing tourists than ecological interests, though it was hoped "they would find a natural habitat in that part of Southern Africa."[116] In assessing these attempts 16 years after they failed, Gorongosa's warden Armando Rosinha, concluded that the park probably did not have a suitable habitat for giraffe and further introductions should not be attempted.[117] Between 1949 and 1951, ten ostrich were successfully translocated to Gorongosa, but all were either eaten by leopards or drowned during extreme rains.[118] In 1968, it was suggested that ostrich might be reintroduced to Gorongosa but "to areas with higher elevations and less susceptible to flooding."[119]

In response to the letter about Gorongosa's rhino, W. F. H. (Frank) Ansell of the Game Department of Northern Rhodesia[120] and Rudolph Bigalke, former director of the National Zoological Gardens of South Africa, wrote their own letters to the editor citing a rhino photographed in 1935 as evidence that white rhino did in fact exist in Gorongosa National Park's vicinity, though neither could confirm that it was ever resident inside the park's present-day boundaries.[121] The rhino they cited was perhaps the last photographed before Mozambique's white rhino were extirpated for the first time in the twentieth century during the 1940s.[122] This bull was shot between Gauveia and Macossa at the foothills of the Gorongosa Mountains. South African ecologist Ken Tinley, who had already begun his ecological research in Gorongosa by the time the rhino reintroduction was planned, noted that the Macossa area has similar "sand rivers" and hill and valley terrain to Umfolozi, the white rhino's "last stronghold," and that the species

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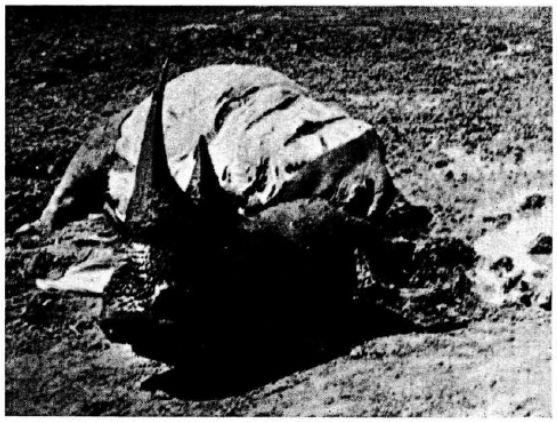
[114] Armando Rosinha, "O Parque Nacional da Gorongosa [Gorongosa National Park]," *Anais dos Serviços de Veterinária de Moçambique* 16, 1968 (1970): 169.
[115] "Mozambique's new national game reserve," *Pretoria News*, 23 September 1948. Located in "Caça: Reservas e parques de caça," Governo Geral cota 178, pasta C/3. AHM.
[116] Antonio Fajardo, "Gorongosa National Park," *African Wildlife* 7, no. 4 (1953): 332.
[117] Rosinha, "O Parque Nacional da Gorongosa," 169.
[118] Ibid, 168.
[119] Ibid., 169.
[120] Now Zambia.
[121] "Distribution of White Rhino," Letters to the Editor from R. Bigalke and W. F. H. Ansell. *African Wildlife* 24, no. 3 (1970): 258-259.
[122] Jasmine Sidney, "The Past and Present Distribution of Some African Ungulates," *Transactions of the Zoological Society of London* 30 (1965), 61.

had occurred throughout central Mozambique prior to its extinction from the area.[123] In his letter to the editor of *African Wildlife,* Ansell noted that although Dr. Havenga was incorrect regarding the past distribution of white rhino in Gorongosa, he was "of course quite right to deplore the introduction of exotic wild animals into national parks, which should provide for the perpetuation of the indigenous fauna and flora," indicating the prevailing discourse on the importance of preserving native and indigeneity in protected areas.[124]



10. White rhinoceros, *Ceratotherium simum simum*. The remains of a bull, shot circa 1935, indicate that the White rhinoceros survived in Mozambique recently.

Figure 37. "White rhinoceros, The remains of a bull, shot circa 1935…" From Jasmine Sidney, "The past and present distribution of some African ungulates," *Transactions of the Zoological Society of London* 30 (1965), 61.

There are conflicting reports on the number of rhino that were actually reintroduced to Gorongosa in 1970, as well as their fate on arrival, though there is consensus that none lasted very long. Reports deviate as to whether six or 12 rhino were introduced to Gorongosa in the early part of the year.[125] Gorongosa has never been fenced, so it is possible that they could have walked out of the national park and been killed by local people. Drowning is another possibility – as occurred in Ndumo and Maputo Special Reserve. While I could find no official record of how these animals met their end, Paul Dutton, an ecologist whose career, like Ken Tinley's, spanned the Natal Parks Board and Mozambique's Veterinary Services, is certain that at least some of the

[123] Kenneth Tinley, "Framework of Gorongosa Ecosystem" (PhD diss., University of Pretoria, 1977), 136.
[124] Letter to the Editor from W. F. H. Ansell, *African Wildlife* 24, no. 3 (1970): 259.
[125] Tinley, "Framework of Gorongosa Ecosystem," 136 and J. Vincent, "Movement of Square-Lipped Rhinoceroses: Ceratotherium Simum Simum," *Lammergeyer* 12 (1970): 73.

white rhinos brought to Gorongosa were eaten by lions. [126] Gorongosa's lions were the park's principal attractions, particularly the pride that had claimed an abandoned house and presented a picture of domestication to Gorongosa's visitors. According to Paul Dutton, they may have taken advantage of the docile nature of the imported white rhino and relative inexperience with large predators, as the lion population in Umfolozi at the time only numbered in the tens.[127]

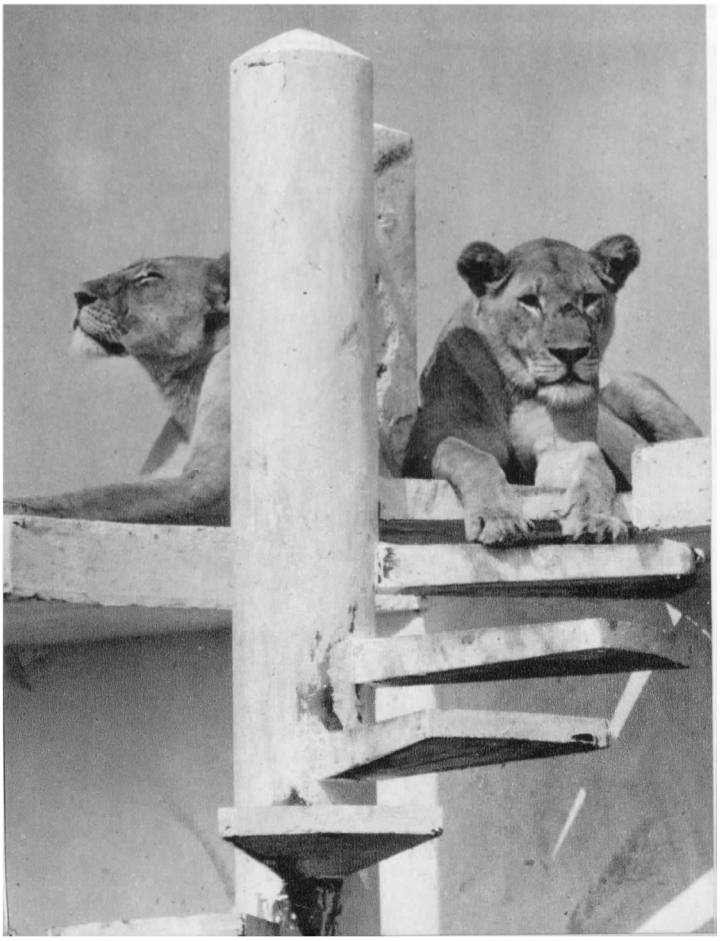


Figure 38. Gorongosa's lions, from José Maria d'Eça de Queiroz, *Santuário Bravio* (Lisbon, 1964).

[126] Paul Dutton, interview with the author, Salt Rock, KZN, 21 September 2012.
[127] J. L. Anderson, "The Re-establishment and Management of a Lion *Panthera Leo* Population in Zululand, South Africa," *Biological Conservation* 19 (1981): 111, Figure 2.

Figure 39. "1st Operation Rhino for Gorongosa National Park," dated 7 April 1970. From the archive of Armando Ròsinha, former warden of Gorongosa National Park. Courtesy Dr. Samuel Bila, Veterinary Faculty, University of Eduardo Mondlane.

The black rhino survived the big game hunts that had exterminated white rhino from central Mozambique in the first half of the twentieth century, and herds were still likely located in the vicinity of Gorongosa in the 1960s when white rhino were reintroduced. However, they were sparsely populated, and some rangers believed they were already extinct from the park but living in its vicinity.[128] In 1969 Ken Tinley's report on the ecological limits of the park was presented to the government with a bulletin from the Department of Veterinary Services, which illuminated that one of the proposed boundary alterations in Tinley's report was intended to include an area "where rhinoceros are said to have been seen, a species we certainly wish to include in the park's faunistic heritage."[129]

Whether or not there were black or white rhino in the vicinity of Gorongosa that survived in the early 1970s, none were ever seen again. All of Mozambique's rhino were killed during the

[128] Ròsinha, "O Parque Nacional da Gorongosa," 168.
[129] Armando Ròsinha, "Alguns Dados Históricos sobre o Parque Nacional da Gorongosa," *Arquivo* 6 (1989): 229.

armed conflict that followed independence from Portugal. And although the Maputo Special Reserve population grew to 84 by 1983,[130] soon after they were all casualties of the armed conflict or opportunists looking to take advantage of the lawlessness of these areas. Paul Dutton saw the last one shot from a helicopter by a Cuban in the mid-1980s while he was taking school children on a tour of the reserve.[131]

Where Mozambique had once been seen as an ideal destination for Natal's surplus rhino, from the 1980s it became a dangerous place for errant animals crossing the border. Even after the armed conflict officially ended in 1992, conservation staff in KwaZulu Natal remained concerned about animals crossing the Usuthu River into Mozambique, specifically black rhinos. Since the 1980s, the KwaZulu Department of Nature Conservation had been holding informal meetings with Mozambican officials across the border in Catuane regarding cross-border conservation matters.[132] Ed Ostrosky, the Principal Nature Conservator for the Tembe-Ndumo Complex, used these networks to launch a rescue campaign in 1994 to retrieve at least one black rhino that had crossed into southern Mozambique from Ndumo. This rhino had been spotted on a reconnaissance mission, but the department was acting on reports of more than one in the area. After finally gaining clearance from the Mozambican government to pursue these rhinos, Ostrosky, an American Vietnam War veteran, executed this operation with military precision, as well as military assistance. Using multiple aircrafts, including and Oryx helicopter on loan from the South African Air Force, the operations used aerial observations as well as ground teams to spot and follow recent tracks. After three days of fruitless searching, Ostrosky decided to end the operation. He attributed the mission's failure to the long delay in gaining permission from Mozambican officials, which correlated with vegetation changes reducing aerial visibility and perhaps also gave rhino time to move out of the authorized operation area, as well as increasing indications that local people had provided false or misleading information regarding rhino tracks and sightings.[133] Despite further attempts to launch rescue operations, these stray rhino were never reclaimed, and Ostrosky heard through game guards that poachers had come from Maputo

[130] Baldeu Chande, 10 April 2013.
[131] Paul Dutton, interview with the author, Salt Rock, KZN, 28 August 2013.
[132] Request for Permission to Cross the International Border Between R.S.A. and Mozambique. Letter from N. Steele to the Department of Home Affairs, Undated. 11/14/64. Mozambique: Dept. of Forest and Wildlife, Volume II, Nature Conservation. TEP Archive.
[133] E. W. Ostrosky, Capture Operation to Recover Black Rhinoceros, Escaped from Ndumo Game Reserve, in the CAtuane Area of Southern Mozambique, 18 November 1994 to 20 November 1994, KwaZulu Department of Nature Conservation. Game Capture folder. NGR Archive.

to find them. Due to the presence of landmines remaining from the armed conflict, which would have posed a danger to search teams, their carcasses could not be recovered.[134]

The reason such a costly operation would be launched for even one solitary black rhino was the species' dire population statistics, believed to be around 2,300 at the time.[135] A year before the operation took place, Ostrosky issued a memo entitled, "Endangered Species Recovery from Mocambique [sic]," in which he suggested

> In the event that black rhino cross into and establish territories in Mocambique [sic] it may be necessary to mount a rescue operation in order to return the animal to a protected area.
>
> The area north of Ndumo in Mocambique is comparatively densely settled. Large, potentially dangerous animals will not only be hunted for food or their horn, but will also be viewed as a problem animal causing crop damage and danger to human life.[136]

This black rhinoceros recovery operation demonstrated that although Ndumo was failing to contain the species, protected areas were still considered to be the safest spaces for endangered species.

Forced and Unforced Relocations: Non-rhino Cross-border Movements

Rhinoceros were not the only animals to be relocated into or out of Ndumo during the 1960s and 1970s. In some cases, Operation Rhino precipitated the translocation of other species. In his book *The White Rhino Saga,* Ian Player writes, "[i]n Natal game reserves the white rhino has helped enrich the fauna through a series of exchange agreements involving the introduction of cheetah and red hartebeest, for decades extinct in Natal."[137] In 1971 six cheetah were translocated into Ndumo.[138] Former ranger Paul Dutton suggests that as many as 30 may have been brought

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[134] Ed Ostrosky, interview with the author, Midmar, KZN, 24 April 2013.
[135] "Bid to track stray rhinos," *Natal Mercury*, 18 November 1994. Game Capture folder. NGR Archive.
[136] E. W. Ostrosky, Endangered Species Recovery From Mocambique. 11/14/64. Mozambique: Dept. of Forest and Wildlife, Volume II, Nature Conservation. TEP Archive.
[137] Player, *White Rhino Saga*, 243.
[138] Report by Ranger R. Physicz, August 1971. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.

from Namibia around that time.[139] Two years later, they were breeding.[140] However, by the early 1980s, there was no record of cheetah in Ndumo, and they likely had all ventured out of the reserve.[141] In 1981, giraffe were introduced to Ndumo, and they were reportedly quite popular with visitors.[142] These are now some of the most easily spotted animals in the reserve.

Not all translocations were formalized. Starting in 1969, Paul Dutton, who was working as a ranger in Ndumo, decided to transport some of the reserve's excess nyala and impala to the Maputo Special Reserve.[143] Rather than cull the animals, Dutton transported them 100 kms up the Maputo River on a boat called Ndumark on three different trips. He had done this without the consent of senior warden Hancock, who only found out that Dutton was managing this translocation after the boat crashed on one of the trips and the team needed assistance getting back to Ndumo.[144] The 80 nyala transported to the Maputo Special Reserve, which augmented a rarely seen existing population, fared well prior to the armed conflict.[145] The impala were less fortunate as the warden of the Maputo Special Reserve had a predilection for their meat, and many were eaten on arrival.[146]

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[139] Paul Dutton, 26 April 2013.
[140] Report by G. W. Schütte for the month of January 1973. Rangers' Reports, Ndumo, No. 5, 1973-1977, EKZNW Archive.
[141] Population Estimates, Ndumo Game Reserve. Conservation Division Yearbook 1983-1984. EKZNW Library. Cheetahs had also been unsuccessfully introduced to Gorongosa and the Maputo Special Reserve. See Tinley, "Framework of Gorongosa Ecosystem," 136 and the Summary of Tello, "Reconhecimento Ecológico da Reserva dos Elefantes do Maputo."
[142] J. A. Mitchell and A. Jackson, Ndumu Game Reserve, 4th Quarter 1981/82. Rangers' Reports, Ndumo, No. 6. EKZNW Archive.
[143] Paul Dutton, interview with the author, Salt Rock, KZN, 21 September 2012. Due to veterinary restrictions they could not have been translocated south to other parts of Natal. 21st Annual Report, Natal Parks, Game and Fish Preservation Board, 1 April 1968 – 31 March 1969, 17. EKZNW Library.
[144] Interview Paul Dutton, 28 August 2013, Salt Rock, KZN.
[145] José Luís Pessoa Lobão Tello, "Reconhecimento Ecolólogico da Reserva dos Elefantes do Maputo," *Veterinária Moçambicana* 6, no. 1 (1973): 47.
[146] This was Manuel João, a former bull fighter. Paul Dutton, 28 August 2013.

Figure 40. The Ndumark transporting impala and nyala from Ndumo to the Maputo Special Reserve. © Paul Dutton, c. 1970.

Other animals, like many of the rhinos mentioned above, moved in and out of areas of their own accord. In the late 1960s, buffalo began moving into Ndumo. This caused great excitement amongst Ndumo's rangers, but they hoped to keep this movement a secret, as the border also acted as a barrier for foot and mouth disease.[147] As one ranger observed, "Unfortunately the Veterinary Department got to hear about these buffalo, and now these innocent animals have been condemned to death, from which they more than likely fled on the Portuguese side."[148] Ian Player, who by that time was the Director of the Natal Parks Board, responded to Ranger Schütte's remarks with the following

> Whereas I quite agree that it would be nice to have buffaloes at Ndumu, particularly in the long grass near the fever tree forest, we have agreed to keep the Veterinary Stock Inspector covered by permit to destroy any buffalo in the Ingwavuma District apart from the Ndumu Reserve. The reserve is excluded

[147] Paul Dutton, 28 August 2013.
[148] Monthly Report of G. W. Schutte, Ndumo Game Reserve, for the month of July, 1967. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.

> because we have assured the Veterinary Division that we shall destroy any buffalo seen within the reserve in future, as an anti-foot and mouth measure.[149]

Despite this death sentence, these buffalo, which Paul Dutton believes may have come from as far as Kruger National Park, stayed in Ndumo and thrived for decades inside the reserve.[150] By 2008, there were 135 counted in the reserve.[151] However, after local people tore down the boundary fence in 2008, 14 buffalo close to the boundary were destroyed to prevent the spread of foot and mouth disease to their cattle.[152] Before the fence was re-erected some of these buffalo must have escaped, causing an outbreak of foot and mouth in the province.[153]

In the early 1970s, a number of kudus broke through the boundary fence to get into the reserve. After relaying that the Ndumo team had reinforced the fence to try to keep the kudu in, Ranger Schütte wrote, "How these survive outside the reserve is amazing. It is a pity that we couldn't introduce another dozen of these animals to form a breeding nucleus."[154] By 1984 there were 70 kudu in the reserve.[155] I am not sure whether these derive solely from that rogue population or if others migrated in or were translocated.

A number of other animals entered the reserve of their own accord. A lone male warthog make sporadic appearances in the rangers' reports between 64 and 73.[156] On first sighting, a ranger noted a lone warthog boar, which was unlikely to have come from either Portuguese East Africa or Mzuki, concluding, "Where it has come from remains a mystery."[157] In January 1965, Ranger Schütte observed, "He's fat and not very old yet."[158] In 1974, Schütte again relayed an encounter with the warthog, "which must have been here for years now." He wrote, "He seemed quite inquisitive and he kept coming closer until he was within 40 meters of us before he gave a

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[149] Re: Monthly Reports. Letter from Director [NPB] to Mr. Schütte. Rangers' Reports, Ndumo, No. 4, 1967-1972. EKZNW Archive.
[150] Paul Dutton, 26 April 2013.
[151] *Ndumo Game Reserve: IMP: 2009-2013,* 27.
[152] Tony Carnie, "Ndumo Crisis Peaks," *The Mercury*, 13 November 2008. Available: http://www.iol.co.za/news/south-africa/ndumo-crisis-peaks-1.424133?ot=inmsa.ArticlePrintPageLayout.ot.
[153] "Foot-and-mouth viruses in KwaZulu-Natal 'isolated'," *Mail & Guardian*, 11 May 2011. Available: http://mg.co.za/article/2011-05-11-footandmouth-viruses-in-kwazulunatal-isolated.
[154] Report by G. W. Schütte for the month of June 1973, Ndumu Game Reserve. Rangers' Reports, Ndumo, No. 5, 1973-1977. EKZNW Archive.
[155] *Ndumo Game Reserve: IMP: 2009-2013,* 27.
[156] Report for the month of February 1965 from Ranger A. C. Pooley, Rangers' Reports, Ndumo, No. 3, 1962-1966. EKZNW Archive.
[157] Report for the month of December 1964 from Ranger A. C. Pooley. Rangers' Reports, Ndumo, No. 3, 1962-1966. EKZNW Archive.
[158] Monthly Report for the month of January 1965, G. W. Schütte, Rangers' Reports, Ndumo, No. 3, 1962-1966. EKZNW Archive.

grunt and ran away. His face is actually wrinkled from old age already."[159] Carnivores like leopard, hyena, and jackal also moved into the reserve, which may have correlated with increased numbers of antelope, particularly impala and nyala.[160]

Zimbabwean Zebras and South African Lions: The Political Limits of Wildlife Translocation

The large scale reintroduction of wildlife was one of the initial plans of Greg Carr's restoration project in Gorongosa.[161] Using data from Ken Tinley's 1977 doctoral thesis as a baseline, the restoration team hoped to reestablish the pre-conflict grazing succession of Gorongosa's ungulates.[162] This would reduce the height of Gorongosa's grasses, minimize the threats of grass fires and allow grazing access to different types of feeders, in turn increasing the diversity of species.[163] Tinley himself noted that the population numbers he was recording in the 1970s likely represented the largest concentrations of wildlife in Gorongosa's recent history due to the then recent imposition of stricter conservation measures.[164] The authors of Gorongosa's reintroduction strategy also recognized the dynamic nature of wildlife populations and the importance of maintaining healthy proportions, noting that the high numbers of certain species during Tinley's study negatively impacted their own physical conditions and wiped out other species altogether.[165] This raises a problem noted by historian Peter Alagona in using ecological baselines to recreate past environments: "all such targets are arbitrary for ecosystems that are constantly changing and have always been doing so."[166]

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[159] Report by G. W. Schütte for the month of January 1973, Ndumu Game Reserve. Rangers' Reports, Ndumo, No. 5, 1973-1977. EKZNW Archive.
[160] Report by G. W. Schütte for the month of April, 1966. Rangers' Reports, Ndumo, No. 4, 1967-1972; Report by G. W. Schütte, Ndumo Game Reserve, November 1967. Rangers' Reports, Ndumo, No. 3, 1962-1966; and Report by G. W. Schütte for the month of July 1974, Ndumo Game Reserve, Rangers' Reports, Ndumo, No. 6. EKZNW Archive.
[161] Carlos Lopes Pereira (former Head of Conservation at GNP), interview by the author, Maputo, 12 April 2013.
[162] Jeremy L. Anderson et al., *Proposed Strategy to Reintroduce and Supplement Wildlife Populations in Gorongosa National Park, Moçambique*. Gorongosa National Park, 2006. GNP Archive.
[163] Carlos Lopes Pereira, 12 April 2013 and Anderson et al., *Strategy to Reintroduce Wildlife*, 8.
[164] Tinley, "Framework of the Gorongosa Ecosystem," 80.
[165] Anderson et al., *Strategy to Reintroduce Wildlife*, 16.
[166] Peter S. Alagona, Yolanda F. Wiersma, and John Sandlos, "Past Imperfect: Using Historical Ecology and Baseline Data for Conservation and Restoration Projects in North America," *Environmental Philosophy* 9, No. 1 (2012): 65.

This problem of historical distribution also connects to the complexity of determining which species are native or indigenous to an area. One of the principles on which Gorongosa's mass reintroductions would take place was that "only species naturally occurring in the [Gorongosa National Park] would be introduced."[167] The authors of this reintroduction strategy use the giraffe as an example, stating that although Gorongosa's habitat seems suitable "this species is not under consideration as it has never been documented during historical times as occurring north of the Save River."[168] In trying to enact a historical basis for animal reintroductions, park officials would "strive to source animals from the most suitable gene pool and in most cases the closest available population."[169] The species that proved most difficult on this account was the zebra, as scientists and park officials held conflicting views over the question of which subspecies Gorongosa's zebras belonged to.

Both Ken Tinley and Paul Dutton believe Gorongosa's zebra to belong to the subspecies *Equus burchellii selousii*, or in layman's terms, the Selous zebra. Although it would perform the same function as other zebra in the grazing succession, it was determined that this "morphologically-distinct" population, of which around 30 were still present, should "not be lost through the introduction of another subspecies or population that may interbreed."[170] The authors of the reintroduction strategy note, "Our wildlife reintroduction efforts will thus aim to conserve this distinct relict population of zebra while restoring the large zebra component of the grazing succession."[171] The relic population of Selous zebra would be captured and relocated to a protected enclosure where they would breed, while 2000 more easily attainable Chapman's zebra would fulfill their role as bulk grazers.[172] The restoration team did locate populations of zebra in Zimbabwe that were genetically closer to Gorongosa's population of Selous zebra, but after several attempts they were unable to overcome the administrative bureaucracy necessary to get the animals out of the country.[173] This conundrum not only demonstrates the value placed on genetically specific populations within particular places but also raises the question of what is prioritized in wildlife reintroductions: form or function?

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[167] Ibid., 8.
[168] Ibid.
[169] Ibid., 13.
[170] Ibid.
[171] Ibid.
[172] Ibid., 22-23.
[173] Carlos Lopes Pereira, 12 April 2013.

In addition to arguing for keeping the large number of introduced animals as local as possible, the restoration team proposed that this mass reintroduction occur relatively quickly, with an aim to complete herbivore reintroductions within the first ten years. Some populations would be translocated more quickly than others. Zebra and wildebeest populations, for example, were planned to be augmented by 2000 new animals over a six-year period. There were multiple reasons for this rapid reintroduction of large herbivores. In addition to the desire to reinstate the grazing succession as soon as possible, the team members were eager to put Gorongosa back on the map as a tourist destination so that the "park can play a meaningful role in the socio-economic advancement of local communities and in the development of the province."[174] Furthermore, the authors of the reintroduction strategy argued that a slow reintroduction of herbivores might be met with a corresponding rise in the lion population and increased predation. As the principal intention was to increase herbivore numbers absolutely, it would be more strategic to "swamp" the predator population, ensuring the survival of a larger number of these introduced animals.[175] This large-scale rapid reintroduction was not realized as planned, probably for a variety of reasons that may include changing priorities and personnel in the restoration project. Nonetheless, Carlos Lopes Perreira successfully translocated a number of animals to the park while he was director of Conservation Services, including around 150 buffalo from Kruger National Park, 200 wildebeest from South Africa's Limpopo province and some hippopotamus from KwaZulu Natal.[176]

The Gorongosa restoration team showed an acute awareness of the possible threats of carnivores to this planned reintroduction process. They cited evidence regarding the naiveté of introduced animals unfamiliar with predators and their corresponding vulnerability to predation.[177] Although the populations of lions, leopards, wild dogs, and hyena were greatly reduced during the armed conflict and the years that followed, the restoration team chose not to introduce carnivores in this initial ten-year period. Instead, they planned to monitor carnivore populations as prey species increased, hoping that the populations would recover on their own. If necessary, predator reintroductions would be considered only after a large number of herbivores were introduced to the park.[178] If predation became a problem in the meantime, the authors

[174] Anderson et al., *Strategy to Reintroduce Wildlife*, 15.
[175] Ibid., 9 and 14.
[176] Carlos Lopes Pereira, 12 April 2013.
[177] Anderson et al., *Strategy to Reintroduce Wildlife,* 13.
[178] Ibid., 9 and 25.

suggested that the growth of the lion population might be slowed through contraceptive methods.[179] Despite the recommendations of this report, three cheetah were later relocated to Gorongosa from Mountain Zebra National Park in South Africa; none of them survived, suggesting the translocation of predators is not always only a threat to prey species, but sometimes to the predators themselves.[180]

Plans to translocate species to Ndumo and the Tembe Elephant Park in northern KwaZulu Natal reflect the growing interest in expanding the scale of protected areas, which would lead to the designation of the Lubombo TFCA. From the 1980s, several animals had been transported to the reserve, many of which had come from Ndumo including zebra, giraffe, and black and white rhino (which by that time had increased to around 55[181]).[182] In 1998, Wilderness Safaris, a luxury ecotourism operator which ran a lodge in Ndumo, requested that some elephants be translocated into the Ndumo Game Reserve.[183] As plans were already underway (though never realized) to link Tembe and Ndumo by obtaining the Mbangweni corridor and to eventually link this Tembe-Ndumo complex to the Maputo Special Reserve as part of a Transfrontier Conservation Area, this request for elephant reintroductions was denied.[184] The KwaZulu Bureau of Natural Resources, by that time managing both Tembe and Ndumo, saw the movement of elephant between these reserves, and the accompanying alleviation of pressure to Tembe's habitat, as an important bargaining point for the acquisition of the Mbangweni corridor, which would be lost if reintroductions were made. If elephant were to be introduced, however, Ndumo's Conservation Manager insisted they would have to come from Tembe or the Maputo Special Reserve in order "to maintain this population's genetic exclusivity as well as foraging habits, which are quite different from other populations such as those from Kruger National Park."[185] Furthermore, Ndumo's northern boundary with Mozambique remained unfenced. Although plans for a TFCA

[179] Ibid., 14.
[180] Carlos Lopes Pereira, 12 April 2013.
[181] "Proposed White Rhino Capture; Ndumo Game Reserve," Letter from SNC Myburgh to SNC Mostert, 9 February 1996. Game Translocations. KwaZulu Government Service folder. NGR Archive.
[182] Game Translocations, Vol. 1 (Tembe), 11/2/8, Natural Resources Department. TEP Archive.
[183] K. F. Mkhize, Memorandum. Subject: Introduction of Elephants: Ndumo Game Reserve. 30 September 1998. Tembe/Ndumo folder. Tembe Ndumo Complex box, stacked with old KBNR files. EKZNW Archive.
[184] D. H. Archer, Memorandum. Subject: Introduction of Elephants: Ndumo Game Reserve. 11 December 1998. Tembe/Ndumo folder. Tembe Ndumo Complex box, stacked with old KBNR files. EKZNW Archive.
[185] Ibid.

were proceeding, authorities were not yet prepared to allow elephants to wander freely into the neighboring country.

The decision to reintroduce lions to Tembe Elephant Park in 2002 would halt the possibility of realizing a TFCA altogether. Two years after the Lubombo TFCA agreement was signed, two breeding pairs, one from Pilanesberg and another from Madikwe, were relocated to Tembe. Lions had been recorded in the region by Denys Reitz, the protagonist in Ndumo's proclamation as a protected area in 1924,[186] but had not been seen in the Maputaland region since the 1950s.[187] The principal reason for the reintroduction was to make Tembe Elephant Park an attractive tourism destination. According to regional ecologist Wayne Matthews, "The primary objective is to make Tembe a genuine Big Five destination."[188] At the time of the introductions, it was clear that this might hamper the TFCA agenda. The CEO of KZN Wildlife stated, "Some concern was expressed by the Mozambican government because of the proposed Transfrontier Park, that some of their people are still living in the protected area. Our stance is that the [transfrontier park] is a long-term thing in years to come, and we need to elevate Tembe and put it on the tourism map. When it was formed our commitment was to [produce] economic returns for the community. The introduction of lions is part of this."[189]

The team at Tembe Elephant Park was either less attuned to the unpredictable consequences of predator reintroduction than the Gorongosa Restoration Team had been or more willing to take this risk in light of their interests in promoting tourism. In 2011 14 wild dogs, representing "South Africa's most endangered carnivore," made their home at Tembe Elephant Park.[190] Although most fared well, "several of the adult males" were killed by the park's lions.[191] There were concerns when introducing both lions and wild dog that they may have a negative impact on the reserve's population of Suni Antelope, a priority species for the reserve, but neither

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[186] Deneys Reitz, *No Outspan* (London: Faber and Faber, Ltd, 1943), 40.
[187] Jill Gowans, "Lion king brings regal cargo home to roam," *Cape Argus*. 1 June 2002. Available: http://www.iol.co.za/news/south-africa/lion-king-brings-regal-cargo-home-to-roam-1.87523?ot=inmsa.ArticlePrintPageLayout.ot.
[188] Ibid.
[189] Ibid.
[190] "Tembe Elephant Park," *Wild Dog Advisory Group South Africa*. Accessed 13 August 2014. http://www.wagsa.org.za/tembe.html
[191] Brendan Whittington-Jones, "Reintroduction Tembe Wild Dog Pack Doing Well," *Endangered Wildlife Trust Blog*. 29 July 2011. http://endangeredwildlifetrust.wordpress.com/2011/07/29/reintroduced-tembe-wild-dog-pack-doing-well/

species proceeded to pose a significant threat.[192] A bigger threat resulting from the lion translocation was inbreeding due to the dramatic rate at which the four migrants bred. By 2013 their progeny numbered nearly 50, and Ezemvelo KZN Wildlife, the authority responsible for the park, decided to auction five of these lions and donate several others to reserves to make way for new males at Tembe that might diversify the gene pool.[193] Three of Tembe's lionesses were translocated to nearby iSimangaliso Wetland Park, where a wildlife veterinarian is performing partial hysterectomies on the animals to limit the size of their litters in an effort to control their population.[194] Thus, when reintroductions are too successful and species breed too quickly, notions of nativeness, indigeneity, or genetic specificity seem to be sacrificed for the sake of overall protected area management.

This is particularly true when human populations are involved, as in the case of the Usuthu-Tembe-Futi TFCA. Although the Futi Corridor has been established as a protected area, the presence of lions in Tembe Elephant Park will prevent the Mozambican government from signing off on the removal of the border fence separating those predators from human communities residing on the other side. A recently agreed Joint Operational Strategy between the Tembe Elephant Park and the Maputo Special Reserve includes plans for the increased monitoring of lion activity as a precursor for a "fence dropping strategy."[195] However, for the foreseeable future it seems the transfrontier agenda will be realized through shared objectives, species translocations, and administrative cooperation rather than a spatial union through fence removal.[196]

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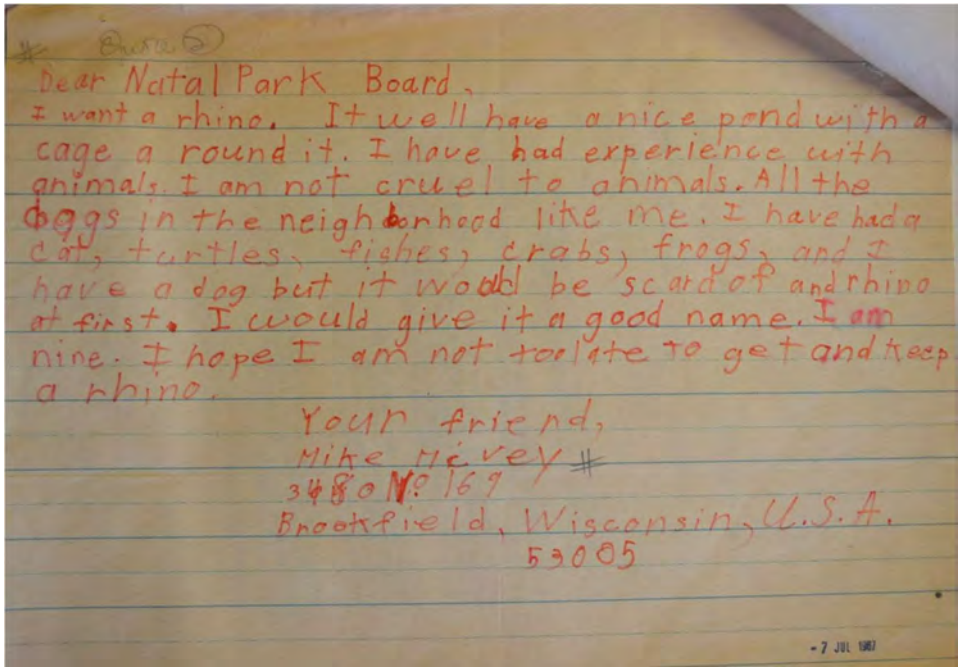
[192] Wayne Matthews, "Hot Dogs," *Wild* (Winter 2012): 8-9.
[193] Tony Carnie, "Lion sale to make way for new genes," *The Mercury*, 16 September 2013. http://www.iol.co.za/scitech/science/environment/lion-sale-to-make-way-for-new-genes-1.1577992#.U9osg_mSxFg
[194] Kamcilla Pillay, "Novel solution for lion pregnancies," *Daily News*, 29 July 2014. http://www.iol.co.za/dailynews/opinion/novel-solution-for-lion-pregnancies-1.1727192#.U-tmiPmSxFg
[195] Usuthu-Tembe-Futi Transfrontier Conservation Area Task Group, *Joint Operational Strategy for the Maputo Special Reserve-Tembe Elephant Park Core Area,* Peace Parks Foundation. 2013, 21.
[196] Usuthu-Tembe-Futi TFCA Task Group, *Joint Operational Strategy* and Lubombo Transfrontier Conservation Area Commission, *Integrated Development Plan for the Combined Lubombo Conservancy-Goba and Usuthu-Tembe-Futi Transfrontier Conservation Area*, Peace Parks Foundation. 2014.

Conclusion: Making New Rhinostans?



Dear Natal Park Board,
I want a rhino. It well have a nice pond with a cage a round it. I have had experience with animals. I am not cruel to animals. All the dogs in the neighborhood like me. I have had a cat, turtles, fishes, crabs, frogs, and I have a dog but it would be scard of and rhino at first. I would give it a good name. I am nine. I hope I am not too late to get and keep a rhino.

Your friend,
Mike McVey
3480 No 169
Brookfield, Wisconsin, U.S.A.
53005

Figure 41. Letter from Mike McVey to the Natal Parks Board, received 7 July 1967, E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.

In response to a misleading article suggesting that the Natal Parks Board was giving rhinos away for free in the 1960s, the NPB received several requests for these animals, including one from a 9-year-old boy living in Brookfield, Wisconsin.[197] After describing how well he would not only look after his rhino, but also furnish it with a "good name," Mike McVey concluded his letter by stating, "I hope I am not too late to get and keep a rhino." In imparting the unfortunate news that rhinos were not actually being conferred so freely, the NPB public relations officer sent the young Wisconsin resident "a copy of a booklet though [sic] which will give you some idea of the type of country in which these animals live."[198] This response reveals a clear preference for keeping rhinos in environments that resemble their native habitats, even though some of the zoos to which rhinos were moved may not have been too different from the habitat this rhino enthusiast was hoping to create. While other entities, including Ndumo, Gorongosa,

[197] Letter from Mike McVey received 7 July 1967, E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.
[198] Letter from Public Relations Officer to Master Mike Vicvey [sic], 11 July 1967. E/8/5/4, Applications for Rhino (NOT ZOOS), Correspondence to end 1967. F/3a. EKZNW Archive.

and the Maputo Special Reserve had an easier time getting a rhino than young Mr. McVey, I hope this chapter has shown that keeping a rhino was no easy feat. Some wandered outside the boundaries of these protected areas, others succumbed to unfamiliar aspects of these environments, others to illegal poaching.

As demonstrated in this exploration into the afterlives of Operation Rhino migrants, wildlife translocations have not always seen animals successfully supplanted in new locales. Exploring the outcomes of translocations allows for an investigation into how animals have adapted to historic rangelands or rejected them. As such, it presents an opportunity to look at wildlife not just as members of a species, but as individual entities, which often act in unexpected ways. Furthermore, it allows for an investigation into the relationship between wildlife (as both species representatives and as individuals), the humans striving to protect them, and the places to which they are transported. Adams points out the "irony in the whole idea of capturing wild species in order to save them."[199] This echoes the larger irony in managing *wild*life in protected areas. However, I argue that animals are not simply managed subjects. They are also historical actors that respond to the new environments in which they are placed, and in which they sometimes place themselves, often in unexpected ways. Categorical boundaries between wildness and domesticity become increasingly convoluted in investigating the ways that wild animals have either made themselves at home in these new (old) territories or have not.

In recent years, increasing demand for rhino horn from Asia has led to a significant rise in rhino poaching in southern Africa. This threat has engendered new initiatives to rehome the rhino. There is a project already underway to relocate some of South Africa's rhino to Botswana and some talk of creating a breeding population in Australia that would act as a genetic seed bank until African countries have the poaching problem under control. South Africa's Minister for Environmental Affairs recently announced a plan to relocate up to 500 rhinos from Kruger National Park to new "strongholds" that could take the form of other national parks, provincial reserves, communal areas, and private reserves in South Africa, as well as territories in nearby countries.[200] Where Operation Rhino emerged from the need to relocate animals because rhino

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[199] Adams, *Against Extinction*, 137.
[200] "Minister Mrs Edna Molewa leads implementation of integrated strategic management of rhinoceros in South Africa," *Department of Environmental Affairs*, 12 August 2014. https://www.environment.gov.za/mediarelease/molewa_integratedstrategicmanagement_rhinoceros and Ed Stoddard, "South Africa to combat poaching by moving Kruger rhinos," *Reuters Africa,* 12 August 2014. http://af.reuters.com/article/topNews/idAFKBN0GC1AD20140812

protection was too successful, these new calls to translocate animals stem from the opposite problem. Protected areas are failing to safeguard this species that Operation Rhino put in their care.

While Operation Rhino is considered one of the great success stories of wildlife conservation in Africa, it also illuminates the faults of the protected area model. Although the majority of migrants adapted to their new habitats, establishing new homes and herds, the protected areas to which they were transported have not succeeded in adequately protecting them. Mozambique's armed conflict in the 1980s and 1990s and the global demands of the rhino horn trade in the present have undermined the ability of these areas to shelter the species.

Over the course of Operation Rhino, Mozambique was seen as an ideal destination for surplus animals. Ian Player noted that should it be necessary to "get rid of" any "surplus rhino," they could easily be sent to their neighbor to the north. In his "Ecological Reconnaissance of the Maputo Elephant Reserve," published in three parts over 1972 and 1973, Lobão Tello noted that this reserve was not only invaluable for the species that existed within it, including the recently reintroduced white rhinos, but also because it could "be used for the reintroductions of those plant or animal species in danger of extinction in other areas."[201]

Where Mozambique was once seen as a repository for surplus rhino, the country is now considered a one of the species' greatest threats, facilitating the trade in illegal horn and supplying a tide of young, destitute poachers.[202] Last year, reports that the last rhino in Mozambique had been killed caused uproar in international media and amongst conservation groups.[203] With the destruction wrought by the armed conflict, which ended in 1992, it had been suggested that Mozambique had the "dubious distinction" of overseeing the extirpation of the same species twice in one century.[204] Last year's extirpation would make it thrice. However, it is important to note that last year's victims had probably not been born in Kruger, but instead were

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[201] José Luís Pessoa Lobão Tello, "Reconhecimento Ecológico da Reserva dos Elefantes do Maputo," *Veterinária Moçambicana* 5, no. 2 (1972): 102.
[202] "Environmentalists Call for Trade Sanctions Against Mozambique for Rhino and Elephant Poaching," *Yahoo News.* 2 July 2014. http://news.yahoo.com/environmentalists-call-trade-sanctions-against-mozambique-rhino-elephant-150900064.html
[203] "Killed by their Keepers – 300 Rhino Extinct in Mozambique side of Great Limpopo Transfrontier," *International Fund for Animal Welfare (IFAW)*. 26 April 2013. http://www.ifaw.org/united-states/news/killed-their-keepers- percentE2 percent80 percent93
[204] J. D. Skinner and R. H. N. Smithers, *The Mammals of the Southern African Subregion* (Pretoria: University of Pretoria, 1990), 568.

moved from Kruger National Park into Limpopo National Park in 2006 as part of the development of the Great Limpopo Transfrontier Park spanning both countries.[205] Even if they had been "Mozambican" rhino, they still would have descended from the same Umfolozi stock as those in neighboring Kruger. This is only one example of the complications involved in applying nativeness or indigeneity to species that move.

Although these categories are heavily embedded in the discourse and practices of wildlife conservation, the utility of these categories are being challenged from both the hard and social sciences.[206] Conservationists have begun to emphasize a species' functions in an ecosystem over its origins when making decisions about whether and where it should be reintroduced.[207] Simultaneously, the closer to extinction a species becomes, "belonging" is sacrificed in the creation of seedbanks or strongholds, which become more important than rangeland integrity. Zoologist Philip Seddon argues that "we are moving…away from the almost sole reliance on the rigid and often flawed dictates of historical species distribution records, toward the inclusion, where appropriate, of more aggressive and risky intervention that will be required to respond to…anthropogenic impacts."[208] Efforts to relocate rhinos as insurance against extinction reflects this shift from reintroduction to "assisted colonization."[209]

Translocations play a major role in wildlife conservation and are employed for a variety of reasons including improving genetic diversity, restoring populations, transporting animals to private land owners, and for relocating species when protected areas are failing to provide them with adequate protection. This exploration of wildlife translocations demonstrates the process of place-making in protected areas to entail a constant tension between political pressures, human ideas about non-human nativeness, and animals' behavioral displays of where they belong. Although the image of African rhinos grazing freely in the Australian outback may upset the sensibilities of some individuals, perhaps these animals will have no trouble making themselves at home there.

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[205] Peace Parks Foundation, "Limpopo National Park - correction on poaching statistics Limpopo National Park," *Club of Mozambique*. 24 May 2013. http://www.clubofmozambique.com/solutions1/sectionnews.php?secao=mozambique&id=28729&tipo=one
[206] See for example Chew and Hamilton, "Rise and Fall of Biotic Nativeness" and Rotherham and Lambert, *Invasive and Introduced Plants and*.
[207] Mark Davis, et al. "Don't Judge Species on their Origins," *Nature* 474 (9 June 2011): 153-154.
[208] Philip Seddon, "From Reintroduction to Assisted Colonization: Moving along the Conservation Translocation Spectrum," *Restoration Ecology* 18, No. 6 (2010): 796.
[209] Ibid.

Conclusion

Wildlife Out of Place: Making Animals Belong

This dissertation has focused on how protected areas have been designated, defined, and constituted in Gorongosa and Maputaland since the 1920s, with particular emphasis on the period from the 1960s through the 1990s. Over the course of tracking the histories of these protected areas, "belonging" emerged as a critical theme. Notions of belonging have influenced the designation of these areas and who or what should be included in them. Conceptions of indigeneity and nativeness, which tie belonging to place, have impacted protected area boundaries and scales. However, these categories of belonging are not inherent to the species or animals they have been attributed to. Instead, "belonging" is a condition that is made through a complex network of biocultural interactions. It is produced through dynamic constellations of political conditions, cultural values, economic interests, scientific ways of knowing, and animal behavior. Claiming the ability to determine what belongs in particular places, as well as the characteristics that constitute belonging, is an exercise of power over both territory and identity.

At different points in time government agencies, conservation bodies, philanthropists, and NGOs have claimed ownership over these protected areas and the authority to determine which practices and inhabitants belonged within their shifting borders. In making decisions regarding ecological restorations and wildlife translocations these actors have used conceptions of belonging grounded in historical understandings of these places. They have also relied on the cultural, economic, and biological capital of particular wildlife species (and other ecological entities, like Mount Gorongosa) to make decisions regarding conservation management. These various types of value, formulated through scientific knowledge production, media circulation, and policy-making, have facilitated and validated assertions of wildlife belonging or unbelonging.

One of the factors that has been particularly influential in the designation and development of belonging in southern Africa's protected areas is the perception of scarcity. In the early twentieth century, sociologist Georg Simmel identified relative scarcity as a "constitutive element of value."[1] The widespread desecration of large mammals by sport hunters in the nineteenth century and tsetse fly eradication campaigns in the twentieth attributed value to these

[1] Georg Simmel, *The Philosophy of Money* (New York: Routledge, 2004), 102.

species and in turn provided the impetus for their protection in wildlife sanctuaries. In the mid-twentieth century, as the field of ecology developed, conservationists became more attuned to the relationship between wildlife and the habitats in which they reside. This led to an increased sensitivity to unique ecological relationships and ecosystems, particularly those threatened by various forms of human encroachment on perceived "natural" spaces. Ken Tinley's work foreshadowed an ideological shift from an imagined division between humans and the natural world toward an understanding of humans as integral and interdependent parts of "natural" ecosystems in southern African conservation practices. However, Tinley still focused on the rare, unique, and distinctive qualities of the Gorongosa ecosystem in promoting its protection, utilizing the value of scarcity to argue for changes in its territory and management. Scarcity continues to be a powerful currency in the protection of wildlife, evidenced by campaigns to prevent the extinction of southern Africa's rhinos by transporting them to new homes or enclosures.

By physically bounding wildlife in place, the architects and advocates of protected areas have also symbolically and discursively confined these animals to "the wild," even though practices of conservation management have often curtailed the freedom of their movement. Categories of belonging thus not only serve to locate *wild*life in real and discursive terrain, they also critically influence our perception of what belongs within this category. However, animals have not simply been passive objects of manipulation and control. They have responded to conservation initiatives and territories in unexpected ways and have played integral roles in shaping of the identities of these spaces. Thus, the assertion of power over wildlife has been contested by the "wildness" protected areas' inhabitants.

In writing the histories of these protected areas, I have focused, in part, on the local, regional, and transnational migration of people and animals across borders. It may seem ironic that a study emphasizing how notions of belonging have grounded species in particular places features such a remarkable current of animals, ideas, and expertise within, between, and across territorial boundaries. However, this thematic tension between putting wildlife in place and the transgressions or transfigurations of political and protected area borders simply reflects the tension in designating specific territories for animate (and often migratory) species. The problem of bounding the movement of wild animals is one that is now highly recognized in conservation circles, and attempts, like TFCAs, to expand the scale of protected areas is one means to address it. By broadening the focus of this dissertation to a regional scale, I have been able to explore the

various projects, proposals, and principles that have guided developments in wildlife conservation both within and across the often soft borders of protected areas.

In this conclusion, I will first summarize the types of belonging highlighted in this dissertation that have served to support (or disrupt, as was the case with unruly rhinos in Ndumo and the Maputo Special Reserve) the development of protected area practices. After summarizing the different types of belonging marshalled in these protected areas' histories below, I then consider what happens when we perceive wildlife to be out of place and the consequences on particular animals. Because categories of belonging are so critical to the deployment of wildlife conservation, it is important to interrogate the historical foundation on which they are based and the physical and discursive consequences of their deployment. This dissertation has represented a preliminary attempt to broach those problems and to expose the process by which these categories are created and enforced. In thinking about wildlife out of place, I am interested in the unintended consequences of physically and discursively bounding wildlife to "the wild" on animals that reside outside the boundaries of protected areas or other "wild" spaces and suggest that categories of animal belonging continue to operate outside of these permeable confines. Species have been categorized as "wildlife" through historical processes that have created this category and attributed it with cultural value.[2] The moral and cultural taxonomy that has located wildlife within the discursive category of "wildlife," and largely within protected areas, was not inevitable but has resulted from perceptions of animal behavior, physiology, and interactions with humans influenced by particular political, economic, and scientific contexts.

Categories of Belonging in the Making of Protected Areas

Over the course of this dissertation, I have highlighted two major types of belonging that have operated in protected areas' histories: belonging *in* and belonging *to*. In exploring how different species have been contained within protected areas, I have argued that defining belonging has been as important as defining borders, and, in fact, these processes have operated in conjunction with each other. Protected areas have not only been instruments of exclusion (of human communities and alien species), they have also bound ecological communities together,

[2] See Susan Jones's argument about how prairie dogs came to be perceived as pests in "Becoming a Pest: Prairie Dog Ecology and the Human Economy in the Euroamerican West," *Environmental History* 4, no. 4 (1999): 545.

physically circumscribing belonging in mapped territories. Furthermore, the terrain these areas occupy has been claimed by different governments and conservation bodies over time for different purposes, revealing the impact of political, economic, and cultural circumstances on who directs the development of these spaces and who claims power over them.

Indigeneity

Throughout this dissertation, I have argued that the histories of protected areas in Gorongosa and Maputaland have been inextricably linked to notions of indigeneity, or belonging in place. Whether explicitly defined (as "indigenous," "native," or "endemic") or implicitly understood, this relationship between wildlife and place has been a driving force of wildlife conservation.

The expanding scale of protected areas reflects a shift from prioritizing indigenous species to indigenous, and often unique, ecosystems. Where early reserves were set aside to protect species habitant to particular areas, the development of ecological science in the second half of the twentieth century saw protected areas expand to preserve not only charismatic mammals but also all of the interconnected parts of the landscape. The creation, enlargement, and constriction of boundaries in these protected areas acted as tools of inclusion and exclusion, bounding ecological communities, while often segregating local people from land and resources.

The demarcation of protected areas not only enclosed species and ecosystems for posterity, it also defined what practices were possible in those territories. Conservationists (and scholars) gradually recognized the importance of including rural African people as stakeholders and beneficiaries of protected area resources. As such, ideas about what practices are suitable in protected areas changed from strict preservation to sustainable use. In thinking about and utilizing wildlife as a productive resource, conservation practitioners made decisions about what species and practices belonged within (and often outside of) protected area boundaries and how they should be used to the maximum economic benefit. As such, indigenous species became seen as indigenous resources, exploitable by and for the countries they are native to.

Conservation and development have not always been as compatible as the proponents of sustainable utilization might hope. In exploring the ways that categories of belonging were used to thwart the development of a deep water port at Ponta Dobela and the ceding of Ingwavuma to Swaziland (which would have likely resulted in a Swazi harbor at Kosi Bay), I argued that

conservationists lobbied on behalf of wildlife through the use of rights-based citizenship discourses. Where practices and philosophies of sustainable utilization largely privileged human needs over wildlife's "right to continued existence," a right on which the demarcation of protected areas was based, the resistance to these development projects reasserted the rights of wildlife to territory.

The restoration projects proposed by Carr and Blanchard after the end of Mozambique's armed conflict reveal further projections over what belongs in a given territory as well as an inflated belief in the power of capital to effect change. The armed conflict had decimated large swaths of the country's wildlife populations, and two philanthropists stepped in to try to restore the ecosystems of Gorongosa and the Maputo Special Reserve region. Their proposals were dependent on particular historical visions of what these landscapes should be restored to and contested ideas of what (or who) belongs in them. The notions of indigeneity espoused by Carr and Blanchard reveal the precarious relationship of this category to both place and time.

By focusing on wildlife translocations in the following chapter, I tried to further analyze how temporal factors are critical to the attribution of indigeneity to a species. In reintroducing species to historic or indigenous rangelands, conservationists have tried to put species back where they belong. The unexpected consequences of some of these reintroductions reveal that animals are not solely species representatives, they are also individual actors, often wholly unfamiliar with the indigenous rangelands in which they are placed.

One of the problems in applying "indigeneity" or "nativeness" to species is that these categories have changed over time, as have the species or animals to which they have been applied. The idea that species can be returned to their "native" land supposes the existence of a static landscape. In reality, there is no singular, appropriate "native" territory to which wildlife can be returned, or confined. Changing land use patterns by a variety of species have molded and shaped the terrain to which we imagine wildlife should belong and should be placed. The application of these elastic categories of "indigeneity" and "nativeness" to species have had taxonomic, discursive, and spatial consequences, making species seem as if they always belonged in particular places. These ideas continue to guide conservation policy and practice. It is therefore important to interrogate their specific construction and application in particular contexts to assess their utility and consider whether alternative grounds for species protection and protected area designation might be more appropriate for those circumstances.

Ownership

In this dissertation, I have also looked at changing conceptions of who wildlife belongs to and who has the power to manage wildlife species in protected areas, including which species are permitted to stay within their borders and which are not. As the scale of protected areas grew to include not only native species habitant to particular areas but also entire ecosystems or ecological processes, so too did the scale of wildlife protection. From provincial to national and transnational management, the expanding scale of conservation ownership has also, in some places, paralleled the expansion of conservation territories. An exception to this expansion is the recognition that local communities must somehow have a stake in or benefit from wildlife conservation if it is to be successful. Many sustainable use initiatives were thus aimed at offering economic or nutritional benefits to rural, African people on very small scales. In viewing wildlife as a usable resource, conservationists and governing bodies sought to maximize wildlife's benefits, demonstrating an implicit ownership over these animals and a right to their bodies as productive resources.

In analyzing the Ingwavuma land deal and Ponta Dobela project, I argue that these development projects represented contested claims to territory, with conservationists advocating for the rights of wildlife. Particularly with the foiling of the Ponta Dobela project, these advocates succeeded in convincing the government that non-human rights to territory were as important, if not more important than human ones. The proposed restoration projects of Blanchard and Carr revealed international actors in the conservation arena claiming the power to restore these areas through the capital they could invest. Finally, in exploring how rhinos and other species did or did not make themselves at home after being translocated to new territories, I argue that these animals also played a role in claiming partial ownership of these places, or at least the right to dwell within them.

The histories of these areas have revealed contested notions of property regarding wildlife and protected areas, which have been claimed by individuals, governments, nations, and regions as economic commodities or cultural heritage. Transnational conservation initiatives, like TFCAs, have demonstrated a concurrent expansion of scale and ownership. Political, economic, and scientific interests have coincided in the cross-border funding and management of these territories and the wildlife that reside within them. Furthermore, TFCAs have perpetuated earlier

designs on the economic benefits of wildlife in protected areas, which bestow symbolic property rights on local communities as well as nations and regions through sustainable utilization.

There is an incongruity in the dual mandate of conservation to simultaneously promote the inherent right of wildlife to territory while demanding that these species "pay their way" through sustainable utilization and economic exploitation. This concept of wildlife "paying for itself" essentially entails that individual animals are sacrificed for the good of the species or the specific population inhabiting a particular area, like a national park. The material gains garnered from the sale of live or dead animals ostensibly help pay for the continued protection of the remaining population. This rhetoric was employed by the winner of a controversial permit recently issued by Namibia's Ministry of Environment and Tourism and auctioned by the Dallas Safari Club to hunt an endangered black rhino in Namibia.[3] One of the problems with this approach to conservation is that it links a species' economic value to its rarity or scarcity. As Jeff Flocken of the International Fund for Animal Welfare wrote in response to this auction, "If an animal like the rare black rhinoceros is worth the most with a price on its head, what possible incentive does this provide range countries and local people to move the species toward recovery when the biggest buck can be made short-term by selling permits to kill them to the highest bidders?"[4]

Wildness

One of the principal tensions in the economic exploitation of wildlife is that it contradicts a perception of wildlife as "wild." The same is true for other forms of wildlife management. The category of wildness has created a moral imperative that shapes which types of ownership and management are considered acceptable and which are not. The development of sustainable utilization practices, where wildlife inside and outside protected area boundaries were hunted and culled for trophies and meat raises questions about the limitation of "wildlife" when applied to animals that are treated as productive livestock. By assigning and exploiting the economic value

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[3] Jason Morris and Ed Lavandera, "Texas hunter says he aims to save black rhinos by killing one in Namibia," *CNN*, April 18, 2015. http://edition.cnn.com/2015/04/07/us/texas-namibia-black-rhino-hunt/. The rhino was hunted in May this year. Ed Lavandera, "Texas hunter bags his rhino on controversial hunt in Namibia," *CNN*, May 21, 2015. http://edition.cnn.com/2015/05/19/africa/namibia-rhino-hunt/.
[4] Jeff Flocken, "Black Rhino Hunt Auction Won't Help Conservation," *National Geographic: Voices,* January 9, 2014. http://voices.nationalgeographic.com/2014/01/09/black-rhino-hunt-auction-wont-help-conservation.

of wildlife, one could argue that conservationists and policy-makers were taming and domesticating "wild" species.

A recent documentary film about the canned hunting of lions in South Africa reveals the material consequences of the discursive distinction between "wild" and "domestic" and the limitations of using and conceptualizing wildlife as a productive resource.[5] The film suggests that there are more than twice as many lions living in captive breeding facilities in the country than there are in "the wild" (meaning protected areas). These captive bred lions garner revenue from volunteer tourists who pay to raised "orphaned" cubs and international hunters who come to harvest trophies from these "domesticated" animals once they grow older. Private land owners garner profits from these operations and tout their work as "conservation" because they are increasing the numbers of this threatened species. However, the filmmakers argue that these captive bred lions have no conservation value because, produced and raised in small enclosures, these lions are likely to be inbred, genetically weak, and lacking the social structure of wild lions. Therefore, these animals could not be used to bolster "wild" populations in protected areas. The fine line these animals walk between "wild" and "domestic" has policy consequences and has prevented their effective protection in relevant legislation. Where the Department of Environmental Affairs would usually have responsibility for the protection of lions, because these animals are captive bred for economic exploitation, like livestock, the DEA suggests their welfare would fall under the Department of Agriculture. The division of these discursive categories has thus obstructed the development of a clear and enforceable policy for regulating this industry and making sure lions remain where they belong—in "the wild," where they can be protected and their welfare maintained.[6]

The development of protected areas, however, have also restricted the movement of wildlife, particularly migratory species, a failure that transfrontier conservation areas have sought to redress. In a sense, TFCAs have therefore aimed to reinstate wildness, allowing behavior impeded by the fencing of national parks and game reserves to proceed once more. One of the tools used to redevelop these historical rangelands or ecosystems has been wildlife translocation,

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[5] *Blood Lions*, directed by Bruce Young (2015; Regulus Vision and Wildlands).
[6] The recent hunting of Cecil, a famed lion from Zimbabwe's Hwange National Park, of course reveals the limitations of the ability of protected areas to protect their wild inhabitants. See "The Death of Cecil the Lion," *The New York Times*, 31 July 2015. http://www.nytimes.com/2015/07/31/opinion/the-death-of-cecil-the-lion.html?_r=0 and Knox Chitiyo, "Cecil did not Die in Vain—Rethinking Africa's Wildlife Conservation," *AllAfrica*, 11August 2015. http://allafrica.com/stories/201508130603.html.

transplanting animals from one protected area to another. In analyzing wildlife translocations into and between protected areas, I am not only interested in how wildlife have been seen as belonging in these areas but also whether and how they had a role in constituting this belonging through their (often unpredictable) actions, or in other words, through their wildness. The tension between wildness and domesticity evident in the act of "locating" and "homing" species in particular places and the actions of "wild" animals once in these new territories is an area that may warrant further consideration.

Where the suitability of particular species to dwell in particular places has historically been grounded in categories of indigeneity, this is changing. Because the global human population is increasing so dramatically and threats to the survival of wildlife are growing in tandem, protected areas remain an indispensable form of land use for ensuring that diverse species survive and thrive. However, the process of designating and maintaining places for the perpetuation of species deemed indigenous to a protected area continues to be fraught. Scholars have begun to challenge the use of "native" and "alien" as guiding principles in nature conservation, suggesting that we shouldn't "judge species on their origins."[7] Instead they are looking to other factors which might determine a species' suitability to place. I will briefly address the notion of suitability in the following section.

Wild Lives and Unsuitable Animals

In the early twentieth century, a female hippo moved out of the St. Lucia estuary on South Africa's Natal coast and traveled all the way to the Eastern Cape. Dubbed Huberta, this hippo caught the attention of the public, and South Africans followed her journey in person and through newspaper updates of her whereabouts. Although she was protected under Natal's game laws, she met an unfortunate demise when she was shot soon after her arrival in East London, outside the boundaries of the Natal colony. She is now memorialized in a museum in King Williams Town.[8]

Where the recently proposed emigration of several South African rhinos to Australia has been met with criticism on the basis of particular ideas about where these species belong,

[7] Mark Davis et al., "Don't Judge Species on their Origins," *Nature* 474 (June 2011): 153-154.
[8] Leslie Witz, "The Making of an Animal Biography," *Kronos* 30 (2004): 138-166.

Huberta's self-selected journey down the South African coast captured the public imagination and rendered her a hero in the view of several South Africans. Where Huberta's migration was unmanaged, rhino relocations represent an imposed initiative on these animals. In addition to aesthetic conceptions of where wildlife should or shouldn't be, people often express a preference for wildlife acting of their own accord. Whether a result of anthropomorphization or another means of empathizing with nonhuman species, this celebration of unpredictable behavior by "wild" animals seems to reflect a latent sympathy with species that have real or imagined boundaries imposed upon them. A few years ago, a German cow named Yvonne made international headlines when she "escaped" her enclosure just before she was due to be slaughtered. "On the run" for several months, the search was eventually called off, and Yvonne was permitted to continue to live freely, wherever she may be. A sanctuary that had already purchased her sister and calf offered to home Yvonne as well if she was ever found.[9] This preference for unpredictability applies not only to "wildness" but also to "domestication." For example, the habituation of wildlife species, particularly meerkats, is a tourist draw in southern Africa that allows "close encounters" with "wild" animals.[10] This affection for animals that challenge the status quo (and the desire for real or emotional proximity to them) represents a stark contrast to the practice of confining and managing wildlife in the development of protected areas.

Whilst writing this dissertation the death of a giraffe on South Africa's main highway, the N1, drew extensive media attention and harsh criticism.[11] The animal was one of two being transported in an open vehicle on this thoroughfare en route to live in an eco-estate on the outskirts of the Gauteng province. As it was blindfolded it was unable to see the overpass approaching, hit its head, and died. Another giraffe's death made global headlines last year when his Danish zookeeper fed him to ones of the zoo's lions.[12] Public outrage about both of these incidents demonstrate deeply held beliefs about the welfare of wildlife in the industrialized world. Furthermore, both incidents reveal that when wildlife is "out of place" (or not in the "wild") it can

[9] Bill Chappell, "Freedom for Yvonne, Germany's Runaway Cow: Search Called Off," *NPR,* 29 August 2011. http://www.npr.org/sections/thetwo-way/2011/08/29/140036762/freedom-for-yvonne-germanys-runaway-cow-search-called-off.
[10] Patrick McGroarty, "Dear Meerkats, Pay No Attention to the Human Stalking You," *The Wall Street Journal*, 29 April 2015, 1.
[11] "Giraffe hits head on highway bridge, dies," *News24*, 31 July 2014. http://www.news24.com/SouthAfrica/News/Giraffe-hits-head-on-highway-bridge-dies-20140731
[12] Lars Eriksen and Maev Kennedy, "Marius the giraffe killed at Copenhagen Zoo despite worldwide protests," *The Guardian*, 9 February 2014. http://www.theguardian.com/world/2014/feb/09/marius-giraffe-killed-copenhagen-zoo-protests

still be vulnerable to human encroachment. Marius, the Danish giraffe may still have been devoured by a lion if he had lived on an African savanna, but this would not have entailed a preemptory slaughter, nor is it likely that it would have been observed by several Danish schoolchildren. These two giraffes offer an alternative means by which to think about the contestation for territory between human and non-human animals. The giraffe on the N1 was on his way to live in a gated community where he would browse on trees situated on someone's front lawn. Marius resided in an establishment whose very foundation was based on an imagined distance between humans and wildlife, and perhaps predators and prey, and whose continuation is premised on the preservation of threatened species.

Initiatives aimed at preserving or conserving species, whether in zoos, eco-estates, or protected areas, are all a result of the drastic decline in non-human populations, usually due to human-driven causes. One of the processes proposed as a means to revert the decimation of species is through their de-extinction. Using cloning technology, scientists are trying to "revive and restore" species including the wooly mammoth and the passenger pigeon as long as a suitable habitat can be found. One of the questions raised by these proposals is whether or not these resurrected species can survive in "the wild." Of course, "the wild" of the present is not the same as "the wild" in which these species lived 10,000 or even 100 years ago. Moreover, what are the chances these species will survive the contemporary pressures of human activity if they could not survive those of the past? Finally, the development of cloning has been enmeshed in questions about whether the cloned animals would be "authentic," the purposes they were supposed to serve, and the ethics of scientists "playing God."[13]

As human demands for territory are increasing, protected areas remain necessary places in which to secure natural resources, maintain ecosystems, and ensure the survival of non-human species. It is therefore worth considering how they have been conceived, developed, practiced, stocked, and traversed over time. I argue that the making of protected areas in Gorongosa and Maputaland has been entangled with notions of belonging that transcend territorial, political, and species boundaries. The creation of their borders has been an elastic process, influenced by changing global and regional conservation ideologies, as well as changing state and regional politics. Ideas about protected areas have circulated through the movement expertise across national borders, as figures like Ken Tinley and Paul Dutton influenced the way that government

[13] Sarah Franklin, *Dolly Mixtures*: *The Remaking of Genealogy* (Durham: Duke University Press, 2007).

departments in Natal and Mozambique conceived of the purpose and practices of protected areas. Conservationists have employed a pliant concept of citizenship to extend land rights to "indigenous" species, just as such rights have been claimed by and conferred to indigenous people. The emergence of tourism as a central preoccupation in protected area management influenced the ways in which foreign investors imagined and recreated Mozambique's protected areas in the aftermath of the armed conflict when they saw the country as a place "up for grabs" and its wildlife populations in need of restoration. The selective movement of species into and between protected areas has further illustrated particular decisions regarding the politics of belonging in protected areas.

However, I hope this dissertation has also shown that the process of place-making is not solely produced through human perceptions, abstract constructions, and high-level politics; it is also a territorializing process enacted on the ground. I have elected to focus the materiality of this place-making process on wildlife residing in protected areas. Animals have played key roles in making these places beyond merely existing in them. Their movements and preferences have impacted the boundaries of these areas and have thwarted alternative land use proposals. The ways in which they have been conceived by policymakers and governments as sustainable resources have influenced their management and perpetuation in particular areas. Non-human animals have not just been the subjects of wildlife conservation and management but have also become citizens in the process of making and maintaining these spaces, bestowed with the rights of access to resources. Furthermore, they have occasionally thwarted the planning of ecologists, rangers, and park administrators, acting in unpredictable ways and selecting their own places to inhabit. However unwittingly, non-human animals have been participants in the process of creating their own *belonging*. This process reminds us that our histories of landscapes and the living things within them (including humans) are continually re-created by the interplay between social, cultural and material forces—forces that often create unpredictable results and interpretations of what or who belongs.

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Ezemvelo Kwa-Zulu Natal Wildlife (EKZNW) Library, Pietermaritzburg

Killie Campbell Africana Library (KCAL), Durban

Johannesburg Public Library (JPL), Johannesburg

Msunduzi Municipal Library (MML), Pietermaritzburg

National Archives of South Africa (NASA), Pretoria

National Library of South Africa (NLSA), Cape Town

National Library of South Africa (NLSA), Pretoria

Ndumo Game Reserve (NGR) Archive

SABC Archive, Johannesburg

Tembe Elephant Park (TEP) Archive

William Cullen Library (WCL), University of Witwatersrand, Johannesburg

Personal Archives:

E. Ostrosky, Howick

I. Player, Karkloof

Other

Rhino Resource Center (Online)

Websites

Department of Environmental Affairs (DEA) (South Africa). www.environment.gov.za.

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Gorongosa National Park Blog. http://www.gorongosa.org.

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