

A GREENER PAST? AN ASSESSMENT OF SOUTH AFRICAN ENVIRONMENTAL HISTORIOGRAPHY¹

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Opsomming

'n Groener verlede? 'n Opgawe van Suid-Afrikaanse omgewingshistoriografie

Die doel met hierdie artikel is om 'n oorsig te verskaf van die bestaande literatuur oor Suid-Afrikaanse omgewingsgeskiedenis. Die opkoms van omgewingsgeskiedenis as 'n identifiseerbare sub-dissipline in historiografie kan wêreldwyd toegeskryf word aan die belangstelling in die natuurlike omgewing wat deur die omgewingskrisis en gepaardgaande omgewingsrevolusie in die 1960s gegeneer is. In teenstelling met hierdie algemene tendens het omgewingsgeskiedenis in Suid-Afrika aanvanklik in die loop van die tagtigerjare ontwikkel vanuit die revisionistiese historiografie se belangstelling in pre-koloniale swart gemeenskappe. Sedertdien het die fokus en omvang daarvan uitgebrei tot so 'n mate dat omgewingshistorici daarop kan begin aandring dat omgewingsgeskiedenis as 'n volwaardige sub-dissipline binne die Suid-Afrikaanse historiografie erken moet word.

1. Introduction

The general interest in and concern for the state and the future of the environment, brought about by the perceived environmental crisis and the corresponding environmental revolution in the 1960s, left its imprint on historical writing across the globe. It directly contributed to renewed historical interest in the processes of nature and the impact of humans on the environment over time: interest that was in part driven by the conviction that an understanding of the reciprocal impact between humans and the environment in the past would enable humankind to reverse the world-wide environmental degradation and thus ensure a healthy future for planet earth and its inhabitants.² Since the late 1960s, this historical interest in environmental issues has found expression in the publication of numerous environmental histories, the founding of environmental history societies (for example the American Society for Environmental

¹ A revised version of this article was presented at the annual conference of the American Society for Environmental History, 15-18 March 2000, Tocama, USA. The financial assistance in the form of a travel grant by the Division for Social Sciences and Humanities of the National Research Foundation towards my participation in this conference is gratefully acknowledged. I would like to thank André Wessels and Nico Combrink for commenting on some aspects of the article.

² According to Alfred Crosby the environmental movement that emerged in the 1960s was "the engine that drove environmental history" in the USA. A.W. Crosby, "The past and the present of environmental history", *The American Historical Review*, 100, 4 (October 1995), p. 1186.

History in 1976) and the division (in some countries) of this wide historical field into various streams.³

In the absence of television to bring the environmental crisis into people's homes, and due to the growing isolation of South Africa in the international political arena, the environmental revolution went by largely unnoticed by the general public and professional historians in this country.⁴ The emergence of the environment as a central character in some historical narratives from the late 1960s onwards therefore initially had limited influence on historians writing on the South African past. South African historiography at that stage was far more concerned with the emergence of a strong revisionist interpretation of the country's past.

The rise of South African revisionist historiography was stimulated by two factors, namely the publication of the *Oxford History of South Africa* in two volumes (in 1969 and 1971 respectively) under the editorship of liberal historians Monica Wilson and Leonard Thompson, and the socialistic academic character prevalent abroad with which numerous South African historical *émigrés* came into contact in the course of the 1960s.⁵ Revisionist historians took a critical view of the fundamental assumption of the *Oxford History* that the central theme in South African history is the interaction between the various racial groups in the country.⁶ The conclusions of the *Oxford History* that apartheid was the result of racist prejudices of the Afrikaners and that economic interests had no influence on the racial policies of the National Party government were also found to be unacceptable interpretations of the South African past.⁷

Revisionist historians, on the other hand, held the opinion that class interest was the dominant theme in South African history, and investigated the reciprocal relationship between apartheid and capitalism, concluding that apartheid as a political system was developed to serve capitalistic ends. A bitter debate ensued between liberal and revisionist historians for most of the 1970s, a debate to which Afrikaner nationalist historians (being the third most dominant historiographical school at the time) more often than not made limited contributions. By the late 1970s a shift occurred within the revisionist theoretical framework. Class interests as the sole determinant in South

³ See for example R. White, "American environmental history: The development of a new historical field", *Pacific Historical Review*, 54, 3 (1985), pp. 297-335 for the divisions within environmental history in the USA.

⁴ See Phia Steyn and André Wessels, "The roots of contemporary governmental and non-governmental environmental activities in South Africa, 1654-1972", *New Contree*, 45 (September 1999), pp. 77-80 for a discussion of the impact of the environmental revolution on South Africa.

⁵ S. Marks, "Towards a people's history of South Africa? Recent developments in the historiography of South Africa", in R. Samuel (ed.), *People's history and socialist theory* (London, 1981), pp. 300-301.

⁶ M. Wilson and L. Thompson (eds), *The Oxford History of South Africa*, 1 (Oxford, 1969), p. v.

⁷ C. Saunders, "Historians and apartheid", in J. Lonsdale (ed.), *South Africa in question* (Cambridge, 1988), p. 19.

African history were replaced by the view that racial relations, along with class interests, played an important role in shaping the South African society.⁸

The theoretical shift in South African revisionist historiography from the late 1970s onwards had important repercussions for the development of South African environmental history. While caught up in the argument that class interests were the only determinant in South African history, revisionist historians focussed predominantly on the state and its relationship with capital as well as on various aspects of the white working class. Once racial relations began to be taken into consideration (something that was in particular stimulated by the Soweto uprising of 1976), the revisionist historiographical agenda broadened considerably and came to include *inter alia* studies on the impact of capitalism and industrialisation on pre-colonial societies, the creation of the South African working classes, black resistance to white domination and the history of pre-colonial black ethnic groups.⁹

Increasing attention was also paid to various environmental issues such as ecological factors that enabled the rise of Shaka and the Zulu kingdom, which in turn opened up other environmental themes to revisionist historians. This development, coupled with the emergence of a general interest in the state of the environment in South Africa in the 1980s, directly contributed to the development of South African environmental history as an identifiable sub-discipline within South African historiography in the past two decades. Though initially limited mostly to revisionist historians, environmental history in South Africa has slowly caught on with historians in other historiographical traditions. The majority of environmental historians writing on the South African past, however, can still be labelled revisionist.

This article aims at providing an assessment of the existing body of literature on South African environmental history since the 1980s. Attention will be directed at the following: firstly, at some of the environment related histories that were published in the course of the twentieth century, and secondly, at South African environmental historiography since 1980. It is important to note that this article approaches South African environmental historiography from a thematic perspective and is therefore more concerned with the various environmental themes historians have addressed in the South African past than with the historiographical methods and paradigms employed by these historians.

⁸ Numerous studies provide detailed information on revisionist historiography as well as on the conflict between liberal and revisionist historians in the 1970s. See for example Saunders, "Historians and apartheid"; C. Saunders, *The making of the South African past: Major historians on race and class* (Johannesburg, 1988), pp. 165-191; Ken Smith, *The changing past: Trends in South African historical writing* (Johannesburg, 1988), pp. 155-228; G. Verhoef, "Die radikale geskiedskrywing oor Suid-Afrika" (M.A. dissertation, Rand Afrikaans University, 1982).

⁹ Saunders, "Historians and apartheid", p. 29; Verhoef, "Radikale geskiedskrywing", p. 17; Saunders, *Making of South African past*, pp. 183-184.

2. Prelude to the establishment of environmental history in South Africa

Alfred Crosby writes that American historians in the late nineteenth and early twentieth centuries "were fully, almost painfully, conscious of immense and accelerating change but did not yet think of it ecologically".¹⁰ The same argument is valid within the South African context. Even though historians dealt with a variety of aspects that directly and indirectly impacted on the South African environment, few historians ventured beyond the limitations of their historiographical paradigms to address the environment as a central character in their narratives.

One of the earliest examples of South African environmental history is the short historical essay on the influence of the tsetse fly on the South African past, written by B.H. Dicke in 1932.¹¹ Dicke offered some daring observations in his essay for the period in which he lived. This is especially true for his comments on the fate of the early Voortrekkers in the trek led by Johannes Hendrik Janse van Rensburg. The Van Rensburg group was one of the first groups of Voortrekkers to leave to the Cape Colony in 1835 in what became known as the Great Trek. Unlike most of their fellow Voortrekkers, with the exception of the Louis Trichardt trek, the Van Rensburg group did not trek from the Transgariep (present-day Free State province) to (KwaZulu-) Natal, but continued on the route northwards into the Transvaal in search of a route to Delagoa Bay (present-day Maputo). By the middle of 1836 the whole Van Rensburg trek had been wiped out by the Amatongas of the Makuleke and Mahlengwe clans.¹²

According to Dicke the role of the Amatongas in the massacre of the Van Rensburg trek had been overemphasised by historians and he held the opinion that they merely "administered the coup-de-grâce". Of more importance to him was the role played by the tsetse fly which destroyed the Voortrekkers' draught animals once they entered the fly belt in the Transvaal. The loss of animals compelled the Van Rensburg trek to leave their wagons behind, without which they were unable to follow the standard Voortrekker tactic of forming a wagon laager when faced with danger. With only ten guns and no wagons that could provide some form of protection, the Van Rensburg trek had no chance of survival against the onslaught of the Amatongas.¹³

Dicke's conclusion that the tsetse fly "killed" the Van Rensburg trek long before the Amatongas did, was a controversial statement given the Afrikaner sentiments regarding the Great Trek at the time. However, he was not the first historian to focus on the influence of the tsetse fly belt on the settlement patterns of white people in the South

¹⁰ Crosby, "Environmental history", p. 1179.

¹¹ B.H. Dicke, "The tsetse-fly's influence on South African history", *South African Journal of Science*, 29 (October 1932), pp. 792-796.

¹² C.F.J. Muller (ed.), *Five hundred years South African history* (3rd edition, Cape Town, 1987), pp. 159, 162.

¹³ Dicke, "Tsetse-fly's influence", pp. 795-796. Dicke repeated this argument in his unfinished work on the Northern Transvaal Voortrekkers that was published posthumously. See B.H. Dicke, "The Northern Transvaal Voortrekkers", in *Archives Year Book for South African History*, 1941, 1 (Cape Town, 1941), pp. 128-134.

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African interior in the course of the nineteenth century. Frontier history is a well-patronised field in South African historiography. Due to the far-reaching, and at times devastating, impact the environment in the South African interior had on the newly arrived Voortrekkers (and vice versa), frontier history has traditionally incorporated some environmental themes into the narrative. But, despite attention afforded to the environment in these histories, the environment rarely made it to the centre of the narrative and remained important only insofar as it provided explanations for the different trek routes and settlement patterns of the white settlers, as well as the economic basis of their newly founded societies.¹⁴

The first historical publication to consider in some depth the environmental impact of white settlement in the interior was F.J. Potgieter's "Die vestiging van die blanke in die Transvaal (1837-1886) met spesiale verwysing na die verhouding tussen die mens en die omgewing".¹⁵ Potgieter, as a historical geographer, not only investigated the environmental factors that influenced white settlement patterns, but also focussed *inter alia* on the exploitation of natural resources such as indigenous forests, wildlife, minerals, water resources and soil. He further addressed the environmental factors that motivated the seasonal migration of farmers between their winter and summer farms, and stressed the point that the government of the Transvaal (formally known as the Zuid-Afrikaansche Republiek) was in no position to make war on indigenous black groups whenever they chose to. The government first had to consider environmental factors such as the tsetse fly (harbouring the protozoal disease, *trypanosomiasis*, that causes sleeping sickness among humans and nagana among draught animals), horse illnesses and malaria, as well as the movements of farmers and hunting expeditions during the winter season. With most Transvaal burghers out of reach for at least three months of the year, the Transvaal's ability to defend itself during certain periods was extremely poor.

Historians also focussed their attention on other environmental themes such as C.F.J. Muller's study on the history of the fishing industry in the Cape until the mid-eighteenth century.¹⁶ Though Muller approached the subject from an economic position, he does focus *inter alia* on the way in which the exploitation of marine resources impacted on various aquatic species in terms of numbers and how it altered the distribution patterns of these species in the Atlantic ocean along the Cape coastline. While his focus remained predominantly economic, Muller afforded the marine environment a greater role in his narrative than most of his colleagues did when addressing agricultural

¹⁴ See for example D.W. Kruger, "Die weg na die see", in *Archives Year Book for South African History*, 1938, 1 (Cape Town, 1938); A.N. Pelzer, *Geskiedenis van die Suid-Afrikaanse Republiek*, 1: *Wordingjare* (Cape Town, 1950).

¹⁵ *Archives Year Book for South African History*, 1958, 2 (Cape Town, 1959).

¹⁶ C.F.J. Muller, "Die geskiedenis van die vissery aan die Kaap tot aan die middel van die agtiende eeu", in *Archives Year Book for South African History*, 1942, 1 (Cape Town, 1943).

history.¹⁷ Scant attention was paid to the environment in most of these histories, with environmental factors in most cases being downgraded as mere agricultural problems.¹⁸ Prior to the 1980s, professional historians, with few exceptions, equally neglected the history of nature conservation, which in most cases was written by authors with little regard for historical processes.¹⁹

As mentioned in the Introduction, the environmental revolution of the 1960s initially had limited influence on historians writing on the South African past. On the other hand, academics in other disciplines, especially the natural sciences and law, reacted positively to the world-wide "rediscovery" of the importance of the environment to humankind.²⁰ In the course of the 1970s and early 1980s these academics published a number of books and articles in which they also focussed on the historical development of a great number of environmental issues such as soil erosion and soil conservation.²¹ While historians have acknowledged these publications, they are generally criticised for being too technical in focus and for providing background information that lacks historical depth and analyses.²²

¹⁷ Exceptions did occur such as: W.R. Thompson, *Veld burning: Its history and importance in South Africa* (Pretoria, 1936); Charles van Onselen, "Reactions to the rinderpest in southern Africa, 1896-97", *Journal of African History*, 13, 3 (1972), pp. 473-488; J.P. Kotzé, "Die runderpest in die Transvaal en die onmiddellike gevolge daarvan, 1896-1899" (M.A. dissertation, Rand Afrikaans University, 1974).

¹⁸ See for example J.I. Janse van Rensburg, "Die geskiedenis van die wingerdkultuur in Suid-Afrika tydens die eerste eeu, 1652-1752", in *Archives Year Book for South African History*, 1954, 2 (Cape Town, 1954); A.J. du Plessis, "Die geskiedenis van die graankultuur in Suid-Afrika tydens die eerste eeu, 1652-1752", in *Annals of the University of Stellenbosch*, 2 (Stellenbosch, 1933); D.J. Jacobs, "Landbou en veeteelt in die O.V.S., 1864-1888", in *Archives Year Book for South African History*, 1969, 1 (Johannesburg, 1969).

¹⁹ Exceptions include A.P.J. van Rensburg, "Die geskiedenis van die Nasionale Bontebokpark, Swellendam", *Koedoe*, 18 (1975), pp. 165-190; P.J. Venter, "An early botanist and conservationist at the Cape, the Reverend John Croumbie Brown, LL.D., F.R.G.S., F.L.S.", in *Archives Year Book for South African History*, 1952, 2 (Cape Town, 1952).

²⁰ M.S. Steyn, "Environmentalism in South Africa, 1972-1992: An historical perspective" (M.A. dissertation, University of the Orange Free State, 1998), pp. 72-73, 75.

²¹ See for example A.C. Brown (ed.), *A history of scientific endeavour in South Africa* (Cape Town, 1977); R.F. Fuggle and M.A. Rabie (eds), *Environmental concerns in South Africa: Technical and legal perspectives* (Cape Town, 1983). The numerous publications of André Rabie on environmental law contain a wealth of historical information. See for example M.A. Rabie, "Soil conservation and the law", *The Comparative and International Law Journal of South Africa*, 6, 2 (July 1973), pp. 145-198; M.A. Rabie, *South African environmental legislation* (Pretoria, 1976).

²² See for example the criticism in Jane Carruthers, "Dissecting the myth: Paul Kruger and the Kruger National Park", *Journal of Southern African Studies*, 20, 2 (1994), p. 264; W. Beinart, "Empire, hunting and ecological change in Southern and Central Africa", *Past and Present*, 128 (August 1990), p. 173.

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Despite the criticism from historians, the aforementioned publications are important to South African environmental history for a number of reasons. Firstly, in the absence of historical interest in numerous environmental issues, these scholars set out to provide historical background on which they could base their contemporary analyses of environmental issues such as soil and water management and pollution control. Though in no way professional history, these histories are essentially academic and not intended to amuse the masses in the popular market. Secondly, until historians get around to focussing their attention on neglected environmental issues such as the environmental consequences of industrial growth, these non-professional histories will remain the only historical arguments available. Thirdly, in the absence of historical publications these non-professional environmental interpretations of the past have become popular with environment-related academic disciplines. Publications such as that of André Rabie and Richard Fuggle, and that of A.C. Brown, have become standard reference material for non-historical academics when addressing the historical development of various environmental issues and problems.²³

3. South African environmental historiography since 1980

South African environmental historiography does not have a "true" beginning in the sense that its genesis can be traced back to a publication that sparked off the current historical interest in environmental themes in South Africa's past. South African environmental history rather seems to have slowly grown out of the broad revisionist historiographical agenda of the early 1980s, with revisionist historians such as Jeff Guy, Roger Wagner, Stanley Trapido and William Beinart bringing the environment to the centre of their narratives from which it had previously been absent. Jane Carruthers, on the other hand, focussed attention on the history of nature conservation and in turn has inspired a growing number of historians to embark on similar studies.

South African environmental history was further stimulated by the seminal conference on conservation in Africa (1884-1984) hosted by the African Studies Centre of the University of Cambridge in April 1985. A special conservation history issue of the *Journal of Southern African Studies* brought environmental history to the attention of a wider range of historians specialising on the Southern African region.²⁴ The popularity of environmental history among South African historians has grown tremendously in the past few years. Not only has the body of literature increased, but a growing number of history departments at South African universities, for example the University of Cape Town, the University of the Free State and the University of Zululand, have incorporated environmental history courses into their under and post-graduate programmes. With the environment included in the South African government's list of key issues in South African society that needs to be addressed, new opportunities have been opened for historians to participate in interdisciplinary research teams dealing with environmental issues such as water management, desertification and sustainable agriculture.

²³ Fuggle and Rabie, *Environmental concerns*; R.F. Fuggle and M.A. Rabie (eds), *Environmental management in South Africa* (Cape Town, 1992); Brown, *History of scientific endeavour*.

²⁴ *Journal of Southern African Studies*, 15, 2 (1989).

While South African environmental historiography can in no way be compared in volume and in scope with that of American environmental history, the field has diversified in recent years and is no longer predominantly concerned with aspects of conservation. Other broad focus areas include studies on the exploitation of natural resources, development and the environment, environment and disease, the environment in pre-colonial societies and, to a lesser extent, the modern environmental movement in South Africa (since 1972).

3.1 The history of nature conservation

The history of the conservation of South Africa's diverse collection of fauna and flora species is a major field in South African environmental historiography. Historical research on wildlife protection was pioneered in the 1980s by Jane Carruthers who has published widely on the history of wildlife protection in the Transvaal from the mid-nineteenth to the mid-twentieth centuries.²⁵

Carruthers' publications have a strong "corrective" character to them in that she sets out to deconstruct some of the popular myths regarding wildlife protection in the Transvaal, and especially in regard to the role played by Paul Kruger in the establishment of the Kruger National Park (eventually established in 1926) during his term as president of the Transvaal (1884-1902). Popular histories of nature conservation have promoted Kruger as a conservation-minded president who aspired to create a game reserve in the Transvaal from as early as 1884.²⁶ Though Kruger's government established two game reserves, namely the Pongola Game Reserve (1894)²⁷ and the Sabi Game Reserve (1898; in 1926 this small reserve became part of the Kruger National Park), before the outbreak of the Anglo-Boer War in 1899, Carruthers concludes that Kruger did not act out of a desire to see wildlife formally protected.²⁸ The reserves were rather established for political reasons, with Kruger responding to the appeals of officials, Volksraad (i.e. parliament) members and the public.²⁹

The consolidation of the Sabi and Singwitsi Game Reserves into the Transvaal Game Reserve in 1923 was the first step in the establishment of South Africa's first national park. In terms of the National Parks Act of 1926, the Transvaal Game Reserve was

²⁵ See for example E.J. Carruthers, "The Pongola Game Reserve: An eco-political study", *Koedoe*, 28 (1985), pp. 1-16; E.J. Carruthers, "Game protection in the Transvaal 1846 to 1926", in *Archives Year Book for South African History*, 1995 (Pretoria, 1995); Jane Carruthers, *The Kruger National Park: A social and political history* (Pietermaritzburg, 1995).

²⁶ Carruthers, "Game protection in Transvaal"; Carruthers, "Dissecting the myth"; J. Carruthers, "Creating a national park, 1910-1926", *Journal of Southern African Studies*, 15, 2 (1989), pp. 188-216; J. Carruthers, "Game protectionism in the Transvaal, 1900-1910", *South African Historical Journal*, 20 (November 1988), pp. 32-56.

²⁷ See Carruthers, "Pongola Game Reserve".

²⁸ See Carruthers, "Game protection in Transvaal, 1846-1926"; Carruthers, *Kruger National Park*.

²⁹ Carruthers, "Dissecting the myth", pp. 266-271.

elevated in status and was renamed the Kruger National Park. According to Carruthers, Kruger was honoured in this way not because of his conservation efforts, but rather to invoke support for the need to establish a national park among Afrikaners who at the time were not inclined to support wildlife conservation measures. Within the political context of South Africa in the 1920s, characterised by a strong Afrikaner nationalism which manifested *inter alia* in the adoption of Afrikaans as an official language together with English, as well as the adoption of an own flag and anthem for the country, the naming of the national park after Kruger ensured the support of the majority of Afrikaners.³⁰

Carruthers also traces the history of protectionist legislation and policies and demonstrates how they evolved in the Transvaal as emergency regulations to counter the over-exploitation of wildlife resources through excessive hunting by white settlers.³¹

Not willing to acknowledge their part in the extermination of game in the Transvaal, white people laid the blame on the hunting practices of black indigenous groups. As a result, black access to free-ranging wildlife was severely restricted by denying them legal access to weapons, making them non-eligible for hunting licences and prohibiting their ownership of hunting dogs.³²

Carruthers' focus on black alienation from land and wildlife resources through the establishment of game reserves and national parks forms part of the broader debate regarding the role of these institutions since 1994 in the new democratic South Africa. Since the late 1980s, the prevailing belief that people (especially black people) were the enemies of conservation and that they should be kept out of protected areas, has been severely criticised. Starting with the Purros Project in Namibia, neighbouring communities have begun to demand a greater share in the management of protected areas and to date a number of such arrangements have been negotiated with the National Parks Board.³³ The traditional white conception of black people being

³⁰ Carruthers, "Dissecting the myth", pp. 271-275. Carruthers' view on the role played by Paul Kruger in conservation in the Transvaal has met with strong resistance from Hennie Grobler. For details of his position and Carruthers' reply see H. Grobler, "Dissecting the Kruger myth with blunt instruments: A rebuttal of Jane Carruthers's view", *Journal of Southern African Studies*, 22, 3 (1996), pp. 455-472; J. Carruthers, "Defending Kruger's honour? A reply to Professor Hennie Grobler", *Journal of Southern African Studies*, 22, 3 (1996), pp. 473-480.

³¹ For environmental histories on the exploitation of wildlife resources through hunting, see for example R. Wagner, "Zoutpansberg: The dynamics of a hunting frontier, 1848-67", in S. Marks and A. Atmore (eds), *Economy and society in pre-industrial South Africa* (London, 1980), pp. 312-349; S. Trapido, "Poachers, proletarians and gentry in early twentieth century Transvaal." Paper presented at the African Studies Institute, University of the Witwatersrand (March 1984).

³² Carruthers, "Game protection in Transvaal, 1846-1926"; J. Carruthers, " 'Police boys' and poachers: Africans, wildlife protection and national parks, the Transvaal 1902-1950", *Koedoe*, 36, 2 (1993), pp. 11-22.

³³ For more information see D. Fig, "Flowers in the desert: Community struggles in Namaqualand", in J. Cock and E. Koch (eds), *Going green: People, politics and the environment in South Africa* (Cape Town, 1991), pp. 118-121; Association for Rural Advancement, "Animals versus people: The Tembe Elephant Park" in Cock and Koch (eds), *Going green*, pp. 223-227; E. Koch, D. Cooper and H. Coetzee, *Water, waste and wildlife: The politics of ecology in South Africa*

squanderers of nature and the denial of their right to enjoy nature in protected areas during the apartheid era, have stimulated Farieda Khan's interest in the history of black conservation efforts in the twentieth century.³⁴ Khan's work therefore has a strong corrective character aiming at, and succeeding in, correcting the distorted view that black people have made no effort to conserve the South African environment.³⁵

Due to the presence of nagana, nature conservation in Natal, despite some similarities, has developed somewhat differently from that in the rest of the country.³⁶ The history of nature conservation in Natal, and in particular Zululand, has attracted a greater number of historians than that of nature conservation in other parts of the country.³⁷ Of particular importance is the Masters' degree dissertation of Shirley Brooks entitled "Playing the game: The struggle for wildlife protection in Zululand, 1910-1930".³⁸ Brooks, in what seems to be an emotive quest to correct popular or "coffee-table" publications on the history of nature conservation, sets out to place the conservation initiatives in Zululand between 1910 and 1930 within the context of colonial conquest, ecological disruption and the failure of development in Zululand. Central themes in her study include the transition from idealistic preservationism in 1910 to a more pragmatic approach by 1930 in which game outside game reserves were excluded from official protection, the lack of understanding on the part of white people of the hardships black people in Zululand had to endure because of the loss of their cattle to nagana, and the ignorance about the disease and its causes prevalent among white farmers and the administrators in the region.³⁹

(London, 1990), pp. 17-22, 27-30.

³⁴ Interview with Farieda Khan, 30 March 1998, Cape Town.

³⁵ See for example F. Khan, "Rewriting South Africa's conservation history: The role of the Native Farmers Association", *Journal of Southern African Studies*, 20, 4 (1994), pp. 499-516; F. Khan, "Soil wars: The role of the African National Soil Conservation Association in South Africa, 1953-1959", *Environmental History*, 2, 4 (1997), pp. 439-459.

³⁶ After the 1896-1897 rinderpest epidemic eradicated nagana from the Transvaal lowveld, this disease only occurred in the north-eastern corner of Natal in Zululand where it affected only draught animals and not humans.

³⁷ See for example A.E. Cubbin, "An outline of game legislation in Natal, 1866-1912", *Journal of Natal and Zulu History*, 14 (1992), pp. 37-47; A.E. Cubbin, "The history of Mkhuze Game Reserve." Paper presented at the History Workshop on Natal and Zululand since the 1890s, University of Natal, Pietermaritzburg (October 1993); B. Ellis, "Game conservation in Zululand, 1824-1947: Changing perspectives." Paper presented at the History Workshop on Natal and Zululand since the 1890s, University of Natal, Pietermaritzburg (October 1993); S. Kotzé, "Conservancies in Natal: The origin and application of informal conservation in Natal, 1978-1993." Paper presented at the History Workshop on Natal and Zululand since the 1890s, University of Natal, Pietermaritzburg (October 1993).

³⁸ Queen's University, Kingston, 1990.

³⁹ See also S. Brooks, "'Ropes of sand': Soldier-settlers and nagana in Zululand", in A. Jeeves and J. Crush (eds), *White farms, black labour: The state and agrarian change in Southern Africa, 1910-1950* (Portsmouth, 1997), pp. 243-264; S. Brooks, "Save the game: Conservationist discourse in early twentieth century Natal." Paper presented at the biennial conference of the

Another aspect of the Natal environment that has received historical attention is the development of botanic gardens. Donal McCracken has done extensive research on this theme focussing *inter alia* on the economic impact and function of botanic gardens, the management thereof and the plant-hunting craze in colonial Natal.⁴⁰ The link between the botanic gardens in Natal and the Royal Botanic Gardens at Kew is a central theme in his work, and he focuses in particular on the plant exchanges that took place between these two institutions. Kew played a leading role in introducing plant species to Natal through the many wardian cases sent to the colonial botanic gardens. These wardian cases contained specimens of guava, litchi, mango, queen pineapple, camellias, magnolias and trees such as blue-gums, black wattles and jacarandas to name only a few. The Natal plant hunters also sent large quantities of flora specimens from Natal to Kew where they formed an important part of their imperial collections.⁴¹ McCracken has also researched the history of the Kirstenbosch Botanic Gardens in Cape Town, focussing in particular on the difficulties of this botanic gardens to establish itself as the leading botanic gardens in South Africa.⁴²

The historiography of conservation in the Cape has, in contrast to that in the Transvaal and Natal, concerned itself largely with discourses on colonial environmentalism.⁴³ In his publications on the environment in the Cape Colony in the nineteenth century, Richard Grove places the environmental discourse present in the Cape within the broader context of British imperialism in the 1800s and the remarkable contributions made by a great number of Scotsmen to environmental discourse and the development of the conservation movement. In "Scottish missionaries, evangelical discourses and the origins of conservation thinking in Southern Africa 1820-1900" he explores the origins of conservationism in the Cape Colony as a product of the way in which evangelical missionaries such as Robert Moffat and Dr John Croumbie Brown viewed the Cape environment.⁴⁴ In a later work he expands on his research by focussing on

Economic History Society of Southern Africa, Pietermaritzburg (July 1992).

⁴⁰ See for example D.P. McCracken, "The economic impact of botanic gardens in the Victorian British empire with special reference to colonial Natal." Paper presented at the biennial conference of the Economic History Society of Southern Africa, Pietermaritzburg (14-17 July 1992); D.P. McCracken, "Colonial botanic gardens in the Victorian British empire." Paper presented at the 23rd International Horticultural Congress, Florence, Italy (September 1990); D.P. McCracken, "The Victorian colonial botanic gardens curator." Paper presented at the South African Association of Botanists conference, Durban (February 1992).

⁴¹ D.P. McCracken and P.A. McCracken, *Natal: the garden colony. Victorian Natal and the Royal Botanic Gardens, Kew* (Johannesburg, 1990).

⁴² D.P. McCracken, "Kirstenbosch: The final victory of botanical nationalism", *Contree*, 38 (1995), pp. 30-35. See also D.P. McCracken and E.M. McCracken, *The way to Kirstenbosch* (Cape Town, 1988).

⁴³ An exception is L. van Sittert, "Keeping the enemy at bay: The extermination of wild carnivora in the Cape Colony, 1889-1910", *Environmental History*, 3 (July 1998), pp. 311-332.

⁴⁴ R. Grove, "Scottish missionaries, evangelical discourses and the origins of conservation thinking in Southern Africa 1820-1900", *Journal of Southern African Studies*, 15, 2 (1989), pp. 163-187.

the social context of Scottish immigrants to South Africa, linking the critique of Brown on the social and the ecological impact of white settlement in the Cape to a nascent Scottish environmentalism that was nurtured by social response to post-1707 colonial rule in Scotland.⁴⁵

Historians have largely neglected the history of nature conservation in the Free State, with the first historical work on the theme only being published in December 1999.⁴⁶ Charl le Roux's interest in the theme was stimulated by the publications of Jane Carruthers and Shirley Brooks, and he sets out to explore the relationship between humans and wildlife in the Free State, the reasons for the near extermination of wildlife in the region by 1890 and wildlife protectionist policies of the Boer republic of the Orange Free State and its successor, the Orange River Colony. He concludes that the near extermination of wildlife in the republican era was due to the lack of interest in nature conservation displayed by the government and private interest groups. After Britain took over the control of the region (and renamed it the Orange River Colony) in 1900, game legislation was enforced on a regular basis. Proper conservation of the region's small wildlife resources was however severely hampered by natural disasters, physical drawbacks (such as bad roads) and the strained relations between Afrikaners and the British administrators of the colony in the aftermath of the Anglo-Boer War (1899-1902).

3.2 The exploitation and conservation of natural resources

Another major field in South African environmental historiography deals with the exploitation and conservation of natural resources. To date attention has mostly been directed at soil erosion, resistance to soil conservation measures, indigenous forests, water issues and marine resources. These represent only a small fraction of the natural resources present in South Africa, the result being that environmental historians have as yet hardly touched this wide field.

William Beinart's initial interest in soil erosion and soil conservation evolved out of his research into the changes within black rural political movements in South Africa. In his article "Soil erosion, conservationism and ideas about development: a southern African exploration, 1900-1960", he considers the methods of and reactions to schemes to combat soil erosion and degradation in South Africa, Southern Rhodesia (Zimbabwe)

⁴⁵ R. Grove, "Scotland in South Africa: John Croumbie Brown and the roots of settler environmentalism", in T. Griffiths and L. Robin (eds), *Ecology and empire: Environmental history of settler societies* (Pietermaritzburg, 1997), pp. 139-153. See also R. Grove, "Early themes in African conservation: The Cape in the nineteenth century", in D. Anderson and R. Grove (eds), *Conservation in Africa: People, politics and practice* (Cambridge, 1987), pp. 21-39; D. Anderson and R. Grove, "The scramble for Eden: Past, present and future in African conservation", in Anderson and Grove (eds), *Conservation in Africa*, pp. 1-12.

⁴⁶ C. le Roux, "Game protection in the Orange Free State 1848-1910", *Historia*, 44, 2 (November 1999), pp. 390-408.

and Nyasaland (Malawi).⁴⁷ Beinart traces the development of soil conservation thinking and policies, focussing in particular on the shift away from white farming practices towards those of black peasant farmers within the colonial governments.

From the 1920s onwards attention was increasingly directed at black peasant agriculture, black attitudes towards cattle (which as a symbol of prosperity has led to overstocking in certain areas) and the methods in which crops were cultivated. Among white officials there existed the perception that soil erosion in black regions was the result of what they considered inadequate peasant farming methods. Officials therefore not only set out to combat soil erosion in these areas, but also to change the character of peasant farming. In South Africa the government constructed the policy of betterment planning that, on an environmental level, aimed at combatting erosion, conserving the environment, and changing the agricultural and land-use methods of black communities. On a political level it was believed that the successful implementation of betterment planning would curtail black urbanisation to what the government considered "white" cities by keeping more black people in reserves.

Central to the aim of changing peasant farming practices was the perception that black land-use patterns had to be altered radically (this involved the division of land into grazing land, land for cultivation and the establishment of villages to counter the scattered homesteads), the implementation of contour farming and the culling of cattle to reduce their numbers (this involved enforced sale rather than actual slaughter). Betterment planning did not succeed in the way the South African government had envisaged and by the 1960s not only had soil erosion increased, but numerous rural communities had resisted state attempts to control their environment. Beinart's work on colonial conservation has been followed by studies by P.A. McAllister, Chris de Wet, Fred Hendricks and S. Beerstecher, who have focussed on reactions and resistance to betterment planning in specific areas, and by J. McCann who has dealt with soil conservation in the Free State.⁴⁸

Given the insufficient water resources available in South Africa and its impact on farming and industries in the country, it is surprising how little has been written about water use in South African history. In the article "Landscape of conquest: frontier water alienation and Khoikhoi strategies of survival, 1652-1780", Leonard Guelke and Robert Shell re-examine the decline of the Khoikhoi, after the permanent settlement of white

⁴⁷ *Journal of Southern African Studies*, 11, 1 (1984), pp. 52-83. See also Chapter 4, "Agriculture: Exploitation unlimited and limited", in W. Beinart and P. Coates, *Environment and history: The taming of nature in the USA and South Africa* (London, 1995), pp. 51-71.

⁴⁸ P.A. McAllister, "Resistance to 'betterment' in the Transkei: A case study from Willowdale district", *Journal of Southern African Studies*, 15, 2 (1989), pp. 346-368.; C. de Wet, "Betterment planning in a rural village in Keiskammahoek, Ciskei", *Journal of Southern African Studies*, 15, 2 (1989), pp. 326-345; F.T. Hendricks, "Loose planning and rapid resettlement: the politics of conservation and control in Transkei, South Africa, 1950-1970", *Journal of Southern African Studies*, 15, 2 (1989), pp. 306-325; S. Beerstecher, "Witzieshoek: Women, cattle and rebellion" (Ph.D. thesis, University of Cape Town, 1996). See also M. Rakometse, "Environmental issues underlying the Witsieshoek Rebellion, 1940-50." Paper presented at the biennial conference of the Economic History Society of Southern Africa, Pietermaritzburg (14-17 July 1992); J. McCann, *Green land, brown land, black land: an environmental history of Africa* (Portsmouth, 1999).

people in the Cape of Good Hope in 1652, from an environmental perspective.⁴⁹ They conclude that the central factor that led to the decline of the Khoikhoi was not the smallpox epidemics of the seventeenth and eighteenth centuries, but the alienation from land and water that accompanied white expansion in the Cape. White trek farmers in general sought the best grazing land with ample local water resources during their eastern and northern expansions which brought their land needs in direct conflict with those of the Khoikhoi communities in the interior. In the conflict that ensued, white settlers more often than not ended up victorious (either through violence or through obtaining title deeds to the land). The curtailment of the Khoikhoi's access to water and grazing land, meant that the Khoikhoi lost political control over their land, which in turn led to the economic and social disintegration of their society in the course of the eighteenth century.

In his work on environmentalism in the Cape, Grove has touched on Moffat's initiative to develop an irrigation system at Kuruman in the Northern Cape.⁵⁰ The management of the water source of this irrigation system, the Eye (i.e. spring) of Kuruman is the focus of Nancy Jacobs' article "The flowing eye: Water management in the Upper Kuruman Valley, South Africa, c. 1800-1962".⁵¹ Jacobs considers the importance of this water source to the local Tswana-speaking Tlhaping chiefdom, and the way in which the development of an irrigation system from 1818 onwards influenced agricultural production in the community. Ownership of the eye became an issue once the area came under colonial rule in the 1880s. Although the British authorities failed to grant individual title to the Tswanas, the irrigation system remained open for use by all races. The creation of the Union of South Africa in 1910 and the implementation of apartheid, after the National Party came to power in 1948, led to segregation of the environment in Kuruman in which local black people were systematically alienated from their traditional water source and from land, through relocations. The whites-only irrigation system that was put into place in 1918 never expanded after the eviction of the black cultivators at the eye in 1919 and did not develop into a commercial success.⁵²

The over exploitation of groundwater resources by gold mines in the Oberholzer district (Carletonville area, Gauteng) and its impact on irrigation farmers in the district have been the focus of Elize van Eeden's research into water issues.⁵³ The two eyes in the

⁴⁹ *Journal of Southern African Studies*, 18, 4 (1992), pp. 803-824.

⁵⁰ Grove, "Scottish missionaries".

⁵¹ *Journal of African History*, 37, 2 (1996), pp. 237-260.

⁵² See also N.J. Jacobs, "Environment, production and social difference in the Kalahari Thornveld, c1750-1830", *Journal of Southern African Studies*, 25, 3 (1999), pp. 347-373 for a discussion on the food production activities of the Tlhaping and Tiharo chiefdoms (Tswana-speaking) in the Northern Cape.

⁵³ E.S. van Eeden, "Waterkwessies, met spesifieke verwysing na die uitwerking van wateronttrekking op die landboubedryf in die Oberholzerdistrik (Carletonville-gebied), 1959-1972", *New Contree*, 39 (August 1996), pp. 78-91.

area, Wonderfontein Eye and the Eye of Wonderfontein, had served irrigation farmers from the establishment of the Oberholzer Irrigation Council in 1925 until gold mining in the area from the 1950s onwards impacted negatively on water levels and water quality. The gold mines gradually dewatered most of the groundwater compartments which led to the lowering of the water table and the eventual drying up of these two eyes. With limited dry-land agriculture practised in the area, the water shortages as well as the situation of sinkholes which altered agricultural patterns, forced a great number of farmers in the district to sell their land and resettle in areas that were not close to mining activities. Though sympathetic to the grievances of the farmers, the government of the day placed a higher premium on the gold mining industry and the profits thereof, and they consequently allowed the gold mines to over exploit and, at times, to pollute the limited water resources that were left in the area.

The exploitation of forests has been a key issue in the history of South African society due to the fact that they remained the main source of fuel until the end of the nineteenth century and in some communities well into the twentieth century. Though white settlers in the interior of the country had been aware of the existence of large quantities of coal and had started to use it as an energy source in their houses and in smithies, lack of railways and industries in the interior ensured that wood remained in general consumption. A number of historians such as Johann Tempelhoff and Donal McCracken have conducted research into the exploitation of forests and wood resources in South Africa.⁵⁴

Tempelhoff, for example, notes that the development of the diamond and gold mining industries increased the demand for wood from the Transvaal. As a result wood resources had diminished to such an extent by the 1890s that the government had to impose restrictions in a desperate attempt to conserve what limited sources were left. However, the rapid population increase, the expansion of the mining industries and the rinderpest (1896-1897) which led to widespread poverty, compelled the government to lift most of its conservation measures in order to allow people to make a living as woodcutters.⁵⁵

⁵⁴ J. Tempelhoff, "Die ontginning van Noord-Transvaal se houtbronne in die negentiende eeu en vroeë bewaringsmaatreëls", *South African Forestry Journal*, 142 (September 1987), pp. 67-76. D.P. McCracken, "The indigenous forests of colonial Natal and Zululand", *Natalia*, 16 (1986), pp. 19-38; D.P. McCracken, "Qudeni: The early commercial exploitation of an indigenous Zululand forest", *South African Forestry Journal*, 142 (September 1987), pp. 71-80.

See also C. Sargent and S. Bass (eds), *Plantation politics: Forest plantations in development* (London, 1992); C.D. Storrar, *The four faces of Fourcade: the biography of a remarkable scientist* (Cape Town, 1990); H. Witt, "The development of the timber industry in Natal, 1910-1960: A socio-environmental study." Paper presented at the biennial conference of the Economic History Society of Southern Africa, Pietermaritzburg (July 1992); L. Woodward, "Some aspects of the destruction of indigenous forests for economic development: South Africa/Brazil." Paper presented at the biennial conference of the Economic History Society of Southern Africa, Pietermaritzburg (July 1992); Beinart and Coates, *Environment and history*, Chapter 3.

⁵⁵ Tempelhoff, "Noord-Transvaal se houtbronne".

McCracken, on the other hand, focuses on the commercial exploitation of the indigenous forests in Zululand in general, and in the Qudeni forest in particular. He traces the development of the commercial exploitation of Qudeni from 1871 through its heyday in the 1890s and 1900s (when it was believed that Qudeni could supply all the timber demands of the authorities in Zululand and the northern part of Natal) until its demise in importance in the early 1930s. By 1934 Qudeni was so low on the priority list of the forestry services that they placed a forester in charge of the Qudeni and Nkandla forests who did not even know the names of the indigenous trees.⁵⁶

3.3 Environment and disease

Coping with both animal and plant diseases, and other environmental challenges such as locust plagues, have been part and parcel of agriculture in South Africa since its inception, and in recent years a number of historians have started to address these themes from an environmental perspective. In his article on the rinderpest epidemic of 1896-1897, Phule Phoofolo focuses on the social and political impact of this epidemic on black communities in South Africa.⁵⁷ While the rinderpest epidemic caused the cattle herds of both black and white farmers to be decimated, the predominant role cattle played in black society (as economic and political assets) meant that the epidemic radically altered the social and political structures within these communities. Lack of information on the rinderpest as well as the inability of the two colonial (Cape and Natal) and the two independent (Transvaal and the Orange Free State) governments in what is today South Africa to control the disease, in turn led to the general assumption among black communities that their cattle were being poisoned by the governments and the white people in their regions.⁵⁸

Lack of understanding of the origin, treatment and prevention of both animal and plant diseases on the part of governments and their subjects, is a central theme in histories that deal with diseases in South Africa. Literature on nagana in Zululand, for example, details many years of fruitless efforts by government officials and veterinarians to combat the disease, while white farmers in the area would have been perfectly satisfied to exterminate all wildlife in Zululand if the government had allowed such an action. Both black and white farmers in the region had to deal with recurrent nagana epidemics until 1950 when the mixture of benzene hexachloride (similar to DDT but cheaper to produce locally) and anticyde proved effective in combatting tsetse flies.⁵⁹

⁵⁶ McCracken, "Qudeni".

⁵⁷ P. Phoofolo, "Epidemics and revolutions: The rinderpest epidemic in late nineteenth-century southern Africa", *Past and Present*, 138 (February 1993), pp. 112-143.

⁵⁸ See for example Van Onselen, "Reactions to the rinderpest in southern Africa, 1896-97"; C. Ballard, "The repercussions of the rinderpest: Cattle plague and peasant decline in colonial Natal", *The International Journal of African Historical Studies*, 19, 3 (1986), pp. 421-450.

⁵⁹ See for example Brooks, "Playing the game"; Brooks, "Ropes of sand"; A. de V. Minnaar, "Nagana, big-game drives and the Zululand game reserves (1890s-1950s)", *Contree*, 25 (1989), pp. 12-21.

At the end of the nineteenth century Cape wine farmers were equally ignorant about the effects of the insect *Phylloxera vastatrix*.⁶⁰ *Phylloxera* was first recorded in France in 1861 where it arrived along with some American vines. While the American vines were immune to the insect, the vines in France proved very susceptible to it and in the end a large percentage of vineyards had to be destroyed. From France, the *Phylloxera* spread across Europe and to other parts of the world (for example Austria and Portugal, 1872; Switzerland and Hungary, 1875; Australia, 1878). In South Africa the first insects were discovered in a vineyard in Mowbray on January 1886 from where they spread rapidly to all the vine-growing regions in the Cape such as Stellenbosch and Paarl. It took the Cape authorities many of years to bring the situation under control, which in no small part was due to the unwillingness of wine farmers to remove and burn all affected vines.⁶¹

Other animal diseases that have been researched by historians include east coast fever and rabies, as well as the role of veterinarians in the Cape in the nineteenth century in the combatting of diseases.⁶² Charles Ballard and A. de V. Minnaar have also done interesting work on the destructive powers of locust plagues. Ballard, in his article "A year of scarcity: The 1896 locust plague in Natal and Zululand", focuses on the impact of the red locust plague on black people in the region.⁶³ The year 1896 in particular was a bad one for black farmers with the rinderpest killing off most of their cattle, and the clouds of red locusts devouring their crops. This in turn led to wide-spread hunger in the region; hunger which the colonial authorities in Natal were slow to address and which they tried to relieve by encouraging black farmers to enter the wage economy in order to earn money to buy food. A. de V. Minnaar, on the other hand, focuses attention on the government initiated campaigns to combat the 1933-1937 red locust "invasion" in Zululand which dealt a severe blow to white sugar cane farmers and black farmers in the reserves.⁶⁴

⁶⁰ *Phylloxera* is an almost microscopic insect of the *Phylloxeridae* plant aphid family, that attacks both the vine roots and leaves, thereby destroying the whole plant. The only way to combat this disease at the end of the nineteenth century was the removal and burning of all affected vines and the replanting of vineyards with *Phylloxera*-resistant American vines.

⁶¹ D.J. van Zyl, "Phylloxera vastatrix in die Kaapkolonie, 1886-1900: Voorkoms, verspreiding en ekonomiese gevolge", *South African Historical Journal*, 16 (November 1984), pp. 26-48.

⁶² See for example P.F. Cranefield, *Science and empire: East coast fever in Rhodesia and the Transvaal* (Cape Town, 1991), and S. Blendulf, "Rabies in Natal", *Natalia*, 20 (December 1990), pp. 43-49. W. Beinart, "Vets, viruses and environmentalism at the Cape" in Griffiths and Robin (eds), *Ecology and empire*, pp. 87-101.

⁶³ *South African Historical Journal*, 15 (November 1983), pp. 34-52.

⁶⁴ A. de V. Minnaar, "The locust invasion of Zululand 1933-1937", *Natalia*, 20 (December 1990), pp. 30-42.

3.4 Other themes: The environment in pre-colonial societies, development and modern environmentalism

Historians from all the historiographical traditions in South Africa have written extensively on the history of the Zulu kingdom during the various stages of its development. Depending on the historiographical paradigm, the focus of these studies shifted between the rise of Shaka, the murder of Piet Retief, the Anglo-Zulu War (1879) and the participation of Zulus in the Anglo-Boer War, to name but a few. In his study "Ecological factors in the rise of Shaka and the Zulu kingdom" Jeff Guy extended the focus of Zulu historiography to incorporate environmental factors in explaining the development of the Zulu societal structures under the rule of Shaka.⁶⁵

According to Guy, the social changes that took place within the Zulu society, especially the introduction of the regiment system by Shaka, were rooted in the environmental crisis that occurred in the region in the late eighteenth century, which was exacerbated by a disastrous famine in the first decade of the nineteenth century. Guy argues that the introduction of the regiment system should not be viewed as a military innovation but rather as a revolution in production in that it allowed the king to control labour and therefore production in his territory.

Both male and female members of Zulu society were placed in age regiments from the time they reached puberty until the king gave their whole age regiment the permission to marry (about fifteen to twenty years later). The male age regiments had many duties such as being soldiers, cattle raiders and labourers (herding royal cattle, sowing and reaping in the king's lands). Though female age regiments were not expected to perform royal duties to the extent that men had to, these age regiments were not allowed to marry until the king gave them his permission. This normally occurred when an associated male age regiment had obtained permission to take wives.

The power vested in the Zulu king to decide when the age regiments were allowed to marry, in turn gave the king the power to decide upon the rate at which the population under his control would increase. Since female age regiments were granted the right to marry several years after puberty, the potential increase in population was severely restricted. Because of population control, the king took control of the rate at which new production segments could be established within the Zulu society, which in turn gave the king extensive control over the intensity of environmental exploitation in his region and the rate at and direction in which production would expand.

* * *

The permanent settlement of white people in South Africa not only impacted on indigenous societies such as the Khoikhoi and the Zulus, but more importantly, in terms of the scope of this article, it radically altered the environment in the country. In their efforts to build communities that closely mirrored those of Europe in terms of physical structure and social, political and economic organisation, white people became masters

⁶⁵ In Marks and Atmore (eds), *Economy and society in pre-industrial South Africa*, pp. 102-119.

of the Southern African environment.⁶⁶ The establishment of white political control over the whole of the country at the end of the nineteenth century in turn meant that white people also came to control the environment with all its resources, possibilities and limitations.

One such way in which white people extended their influence over the natural environment was through the development of road networks. Tim Goetze has done pioneering work on the way road building impacted on both human and natural environments. The road building and mountain pass constructions of Thomas Bain (1830-1893) have received special attention from Goetze. He emphasises the environmentally friendly techniques employed by Bain in the nineteenth century to build mountain passes such as the Passes Route between George and Knysna in which the roadway was built up and a dry stone pack retaining wall used.⁶⁷

Goetze further addresses road building in South Africa in the second half of the twentieth century, noting that while the country lagged behind the USA in terms of environmental legislation from the 1960s till the 1980s, people involved in road building in fact were already conscious of environmental considerations in the 1960s. As early as 1967 the National Transport Commission appointed a landscape officer to look into environmental aspects of road building along the Garden Route, while the Environmental Planning Professions Interdisciplinary Committee (EPPIC) was established in 1974 to advise engineers, architects and planners on the management of conflict between development and conservation. Special attention is directed at the role of civil engineers in promoting environmentally friendly road building such as restoring disturbed vegetation and removing of debris from building sites with limited environmental disruptions.⁶⁸

The environmental awareness showed by road building projects in South Africa from the 1960s onwards is not remarkable when placed within the context of the emergence

⁶⁶ For environmental histories on the impact of white settlement in South Africa, see for example B. Ellis, "The impact of white settlers on the environment of the Durban area, 1845-1870." Paper presented at the biennial conference of the Economic History Society of Southern Africa, Pietermaritzburg (July 1992); J. Pridmore, "The impact of the European traders on Port Natal 1824-1834: A look at environment and society." Paper presented at the biennial conference of the Economic History Society of Southern Africa, Pietermaritzburg (July 1992); M.C. Snell, "The impact of human settlement on the ecology of East Griqualand, 1862-1962." Paper presented at the University of Natal History Workshop on Natal and Zululand since the 1890s.

⁶⁷ T.M. Goetze, "Thomas Bain, road building and the Zwartberg Pass, c. 1843-1862 (with special emphasis on socio-economic and civil engineering aspects)" (M.A. dissertation, University of Stellenbosch, 1994).

⁶⁸ Tim Goetze, "Towards an assessment of roadbuilding, environmental impact and South African historical writing." Paper presented at the biennial conference of the South African Historical Society, Grahamstown (1995). See also Tim Goetze, "Re-creation, tourism and historical presentation: The cases of Georgetown, Colorado (USA), and Gamkaskloof, Western Cape (South Africa) considered", *New Contree*, 42 (November 1997), pp. 181-193.

of the environment as a global political issue in the same period. However, when placed within the context of South African environmentalism between the 1960s and the Earth Summit in 1992, it is remarkable that such considerations took place at all. In her Masters' degree dissertation, Phia Steyn traces the developments within the South African environmental movement between the United Nations Conference of the Human Environment (Stockholm) in 1972 and the Earth Summit (Rio de Janeiro) in 1992.⁶⁹

She concludes that South African environmentalism developed differently from its counterparts in other countries in the period owing to limited participation of both governmental and non-governmental role-players in the global environmental movement, and because of the political situation within South Africa in the same period. The environment never made it on to the government's list of top priorities and because of economic and political sanctions, they were more interested in pursuing policies that allowed unbridled economic growth than policies that would in some way limit development to incorporate environmental considerations. This resulted in the South African government being by 1992 as much as twenty years behind other governments in terms of environmental management and legislation.

The non-governmental sector of the South African environmental movement also responded differently to the challenges of the environmental revolution. Whereas the environment became a political issue for a large number of environmental non-governmental organisations (NGOs) in other countries, South African NGOs opposed this trend until the establishment of Earthlife Africa (ELA) in 1988. NGOs in general also failed to address the environmental problems of an industrialised society, and continued to focus predominantly on issues that involved the conservation of fauna and flora. However, the founding of ELA in 1988 marked the beginning of radical changes in the South African environmental movement, and in less than three years it succeeded in establishing the environment as a political issue by directly linking the widespread environmental degradation in South Africa with the government's domestic policy of apartheid.

4. Conclusion

The recognition of environmental history as an identifiable sub-discipline in South African historiography is long overdue. The developments in this field in the past two decades challenges the conventional classification of most of South African environmental histories under the broad label of economic history, with the environment and the reciprocal impact between humans and the environment replacing economic determinants as the focal point of the narrative.⁷⁰ It is therefore important that the broad historical community in South Africa not only starts taking notice of these developments, but also starts acknowledging the existence of this new sub-discipline.

⁶⁹ M.S. Steyn, "Environmentalism in South Africa, 1972-1992: An historical perspective" (M.A. dissertation, University of the Orange Free State, 1998).

⁷⁰ See for example B.J. Liebenberg, K.W. Smith and S.B. Spies (eds), *A bibliography of South African history 1978-1989* (Pretoria, 1992).

The time has also come of South African environmental historians to rid themselves of the ideological constraints of the historiographical traditions in which they find themselves at home. A startling characteristic of South African environmental history is, with few exceptions, the near total absence of a historiographical perspective that is strongly influenced by environmental philosophy. Instead, South African environmental historians tend to ground their environmental narratives in the ideological foundations that characterise South African historiography in general. While Alfred Crosby could observe that American environmental historians tend to be conservationists, the same can not be said of South African environmental historians.⁷¹ With few exceptions, such as Tim Goetze, our environmental historians have not yet taken in positions within environmental philosophy and their work are, more often than not, so focussed on human interaction that they at times seems to loose sight of the environment.⁷²

On 10 March 1971 John Jordi, the editor of *The Star*, made the following observation in his Editor's Letter:

In this particular part of the globe we have subdued the land, fenced in its creatures and harnessed its wild rivers. It was a massive task at first - foolhardy almost - but now we have emerged totally victorious. And it might be our trouble: our victory was too total. In places nature has capitulated leaving behind poisoned, lifeless streams; exhausted infertile soil; and each spring becomes more silent.⁷³

As we enter the new millennium the big challenge for South African environmental historians will be to address nature's capitulation in this part of the world by broadening the scope of the investigation to include issues such as the environmental impact of industrial growth and the domestic policy of apartheid. Not only will this lead to the growth of environmental history in South Africa, but their work will also make valuable contributions to the national debate on what the priorities should be in the "development versus conservation/preservation" dilemma that the South African government has tried to come to grips with since 1994.

⁷¹ Crosby, "Environmental history", p. 1189.

⁷² Goetze, "Assessment of road building", pp. 18-19.

⁷³ *The Star*, 10 March 1971.