

“Our Beautiful and Useful Allies”: Aspects of Ornithology in Twentieth Century South Africa

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Interrogating the nexus between science and society is a growing field in the social sciences because it can be useful in illuminating national and group identity as well as showing how scientific thought mirrors society's concerns and contours.¹ This article discusses aspects of ornithology in South Africa during the first half of the twentieth century that may contribute to this discussion, in particular to environmental thinking. How people relate to birds is a particularly appropriate lens through which to investigate the interface between society and the environment because the avifauna impacts on humanity in so many ways. Birds are aesthetically beautiful and mobile creatures with attractive sounds and habits and they are celebrated by artists and writers as well as studied by scientists and experts. Widely distributed in all habitats and observable daily, birds are more familiar to most people than are larger mammals and are less threatening than rodents, insects and reptiles. Birds provide food, they are hunted for subsistence and sport, and many species impact on agricultural productivity. Perhaps for these reasons, ornithology was one of the earliest specialist independent sciences to fragment from natural history, yet it has never alienated its amateur base.²

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1 See for example, F B Golley, *A History of the Ecosystem Concept in Ecology* (Yale University Press, New Haven, 1997); P Anker, *Imperial Ecology* (Harvard University Press, Cambridge MA, 2001); B Lightman (ed), *Victorian Science in Context* (University of Chicago Press, Chicago, 1997); H Ritvo, *The Platypus and the Mermaid and Other Figments of the Classifying Imagination* (Harvard University Press, Cambridge MA, 1997), many issues of the *Journal of the History of Biology*, etc.

2 See the following: P L Farber, *The Emergence of Ornithology as a Scientific Discipline, 1760-1850* (D Riedel, Dordrecht, 1982); L Robin, *The Flight of the Emu: A Hundred Years of Australian Ornithology 1901-2001* (University of Melbourne Press, Melbourne, 2001); M V Barrow, *A Passion for Birds: American Ornithology after Audubon* (Princeton University Press, Princeton, 1998); L Mayo, "Birds and the Hand of Power: A Political Geography of Avian Life in the Gansu Corridor, Ninth to Tenth Centuries", *East Asian History*, 24, 2002, pp 1-66.

In 1923, Dr F.W. Fitzsimons, then director of the Port Elizabeth Museum, published the volume entitled *Birds* in his four-part series *The Natural History of South Africa*. There, he referred to birds as humanity's beautiful and useful allies.³ This was written at a time when economic ornithology was at its height in South Africa and birds were considered vital for agricultural health in a "war" against insects. Over the decades ideas of beauty and utility have altered and currently both the number and species of birds are valued as vital indicators of environmental health and sustainable ecosystems. In addition, moreover, birds have symbolic and cultural value and often feature on heraldic devices. South Africa's new national coat of arms (April 2000), for example, is dominated by a secretary bird, *Sagittarius serpentarius* (a species of terrestrial eagle that originated in Africa but that is not confined to South Africa,⁴ described at the turn of the century as "among the most extraordinary birds to be found in South Africa, having the habits, and some of the appearance, of a Crane, with many of the distinguishing features of a bird of prey"⁵) with wings spread in flight. According to the official heraldic description, this is "a powerful bird whose legs ... serve it well in its hunt for snakes symbolising protection of the nation against its enemies. It is a messenger of the heavens ... emblem of the ascendance of our nation ..."⁶

Sketches of South African Bird Life

In 1908 the first book on South African birds aimed at the general public and backed by the authority of a specialist society – the South African Ornithologists' Union (SAOU) – was published. Entitled *Sketches of South African Bird Life* by South African authors Alwin Haagner and Robert H. Ivy, this was (despite the title) not a collection of paintings or sketches of birds, but proudly "Illustrated by the camera" in 121 accompanying photographs.⁷ This book was a collaboration between a professional museum ornithologist and amateur bird-watcher and photographer. Haagner was employed by the Transvaal Museum and Zoological Gardens as ornithologist. While he had no formal degrees in natural history, Haagner had spent his youth at Modderfontein near Johannesburg observing nature in general and birds in particular, and had made his ornithological reputation by contributing articles to *The Ibis*, the journal of the British Ornithologists' Union. Ivy was a keen amateur from Grahamstown who also had contributed to *The Ibis*.⁸ The frontispiece of the book shows the two authors in the field with a typical South African flat-topped Karoo koppie in the background, Ivy depicted with his cumbersome photographic equipment (see Figure 1).

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- 3 F W Fitzsimons, *The Natural History of South Africa, Birds I and II* (Longmans Green, London, 1923), p 2
- 4 G L Maclean, *Ornithology for Africa* (University of Natal Press, Pietermaritzburg, 1990), pp 84, 86, 89
- 5 H E Harris, *Some Birds of the Canary Islands and South Africa* (R H Porter, London, 1901), p 95
- 6 Government Communication and Information System, *A New Coat of Arms for South Africa* (GCIS, Pretoria, s a), p 3
- 7 The first edition of Haagner and Ivy's *Sketches of South African Bird Life* was published in London by R H Porter, whose company, together with Witherby, was the major publisher of bird books in Britain, and subsequent editions in 1914 and 1923 were published by Maskew Miller in Cape Town. The first bird book illustrated with photographs was published in 1868 with pictures by 16-year-old A W M C Kennedy; see P Tate, *Birds, Men and Books: A Literary History of Ornithology* (Henry Sotheran, London, 1980), p 124
- 8 See for example *The Ibis*, 8, 1, January 1901, A Haagner, "Birds'-nesting Notes from the Transvaal"; and R H Ivy, "Notes on the Nesting and Other Habits of Some South African Birds"



Figure 1: Ornithologists Alwyn Haagner and Robert Ivy in 1908 **From:** A Haagner and R W Ivy, *Sketches of South African Bird Life* (Maskew Miller, Cape Town, 1923), frontispiece

The timing of this interesting little book was not coincidental. It was written as the four colonies (the Cape, Natal, Orange Free State and Transvaal) were about to become the Union of South Africa and the book's tone was overtly nationalistic. Its aim was explicit: "increasing the love for bird study in South Africa" because knowledge about the country's "own" fauna and flora was lacking. This state of affairs, so the authors believed, had come about because white South Africans were extremely ignorant about their bird-life, comparing it unfavourably with Britain and Europe and often even claiming that the subcontinent harboured "very few" birds. It was time for a change in attitude. Indeed, argued Haagner, the reverse was true: it was Britain that had so few, while South Africa, a country with far greater biodiversity, geodiversity and climate, literally "teemed" with birdlife.⁹ A further purpose of *Sketches* was to promote ornithology as a scientific discipline because the authors thought that the biological sciences in South Africa lagged behind engineering and mineralogy, those distinctly

9 Haagner, *Sketches of South African Bird Life*, p ix

materialist icons of colonial technology and scientific modernisation.¹⁰ The thrust and timing of Haagner and Ivy's *Sketches of South African Bird Life* accords with what Saul Dubow has identified as an overtly nationalistic cusp after the end of the South African War that galvanised and hastened the process of unification. As Dubow explains, the sciences were poised not only to control the "native other" but also "to proclaim and shape the self-image of the colonisers themselves ... promoting colonial dignity and status in the eyes of the European metropole ... [advancing] national pride and worth".¹¹ Ornithology was to play a role in this regard.

Sketches of South African Bird Life certainly reflected South Africa's emerging nationhood, but it also articulated some of the underpinnings of ornithology at the time. Part of its purpose was to promote bird-watching as an applied science and to show that birds were "useful" to society and ought to be better taken care of. More than that, however, because its approach was to discuss live, not dead, birds in their natural, national habitat, it dealt with aspects of ecology – the emerging scientific discipline of the twentieth century – which museum workers and taxonomists did not. Prior to the appearance of Haagner and Ivy's *Sketches*, there was a book by the Woodward brothers on *Natal Birds*, published locally in 1899, which also emphasised field biology rather than collecting,¹² but *Natal Birds* was regional in scope, not national, and in this and in other respects, *Sketches* marked a departure from the traditional South African ornithological literature up to that date. One might suggest that one reason why this pioneering field biology book emanated from the Transvaal rather than from the Cape was because the museum tradition of taxonomy and collection was far stronger in the south and that a more vibrant "amateur", popular or field base existed in northern South Africa comprising local knowledge, well established Dutch common names and farmers' observations, although much work on this topic still needs to be done.

In content and arrangement, *Sketches* was not a systematic list of species, but a series of essays. Each chapter explained an aspect of bird biology and the book was organised by biome and behaviour. In other words, it emphasised a broader ecology and appreciation for natural processes where birds could be studied and enjoyed in their natural habitat rather than from stuffed specimens in a museum.¹³ Certainly, the scientific status of birdlife in South Africa was provided and there was an index of scientific names, but chapters contained a variety of human and ornithological interest, including "Scavengers of the veld", "Friends of the agriculturalist", "Bird architects", "Ornaments of the veld" and the like. The illustrations included birds on their nests or sitting in natural poses on tree branches, but also more adventurous shots of, for example, Ivy hanging onto a precipitous cliff in order to get his photograph. Using a variety of local names for birds, the book encouraged groups of people to go out into the field, to look at living birds, enjoy the scenery and build up camaraderie and companionship while having fun and learning about nature. It was not a tedious treatise written by specialist museologists but a lively and inviting work.

10 Haagner, *Sketches of South African Bird Life*, p ix

11 S. Dubow (ed), *Science and Society in Southern Africa* (Manchester University Press, Manchester, 2000), pp vi, 3

12 R B Woodward and J D S Woodward, *Natal Birds (Including the Species belonging to Natal and the Eastern Districts of the Cape Colony)* (P Davis and Sons, Pietermaritzburg, 1899) The Woodwards were missionaries who collected extensively in Zululand and the Durban district, see P A Clancey, 'A One-time Mecca for Birds', *Natalia*, 5, 1975, pp 29-35

13 See A J F K Craig, "Stuffed Birds on Trees: An Historical Review of Avian Systematics in Southern Africa", *Transactions of the Royal Society of South Africa*, 54, 1, 1999, pp 157-165

Ornithology in the nineteenth century Cape Colony

Museums have been crucial agents in determining how ornithology has become embedded within the suite of biological sciences in South Africa. During the nineteenth century, the South African Museum in Cape Town dominated formal natural science. The fact that Haagner was based in the Transvaal and that the first national popular bird book was produced in that newly conquered colony marks a departure from the previous dominance of the Cape in matters of natural history. It also records a distinct change in slant from systematics to field biology and observation, beginning in the Transvaal.

Many accounts give Francois le Vaillant credit for founding South African ornithology but his claim is tenuous.¹⁴ His specimens (at least 2 000 bird-skins) were all removed to France and sold in Europe. Le Vaillant's work, published between 1796 and 1808, was lively and well-illustrated with more than 300 coloured plates.¹⁵ It has to be said, however, that nineteenth century southern African ornithology never attracted a person in the same mould as (or of the high calibre of) an artist and observer like the entrepreneurial John James Audubon (1785-1851), who introduced the birds of North America to the world with such aesthetic talent,¹⁶ or John Gould (1804-1881), "the bird man" as he liked to call himself, who together with his wife Elizabeth, immortalised the birds of Australia in print and paint.¹⁷ Unlike Audubon and Gould, Le Vaillant was not what might be termed a "scientist", even one of his time. He did not use Linnean nomenclature, preferring the idiosyncratic and descriptive French names and some of his work was fraudulent. Edgar Layard, director of the South African Museum in the mid-nineteenth century, pointed out for example, that 71 of the 284 species Le Vaillant described did not come from Africa at all but from other parts of the world.¹⁸

Perhaps better deserving of being considered to be South Africa's pioneering ornithologist was polymath zoologist, medical doctor, ethnographer and diplomat, Dr Andrew Smith who named 77 of the 838 species south of the Sahara that were valid in 1977 (see Figure 2). Smith was the first collector in the region who took the decision to house his specimens (which were illustrated by a number of artists, the most outstanding being George Henry Ford) in a South African repository rather than a metropolitan or European one. Even the type specimens were retained in the South African Museum that Smith founded.¹⁹ Smith's collections got the museum in Cape Town off to a good start

- 14 R K Brooke, "Historical Sketch of Afrotropical Ornithology", *Revue de Zoologie Africaine* 100, 1986, pp 7-12; R K Brooke, "Short History of Ornithology in South Africa" Unpublished manuscript, Percy Fitzpatrick Institute for African Ornithology (hereafter PFI/O), s 1, s a [1987]; J M Winterbottom, "Le Vaillant as an Ornithologist", in Library of Parliament, *Francois le Vaillant: Traveller in South Africa I and II* (Library of Parliament, Cape Town, 1973); W L Sclater, "Notes on the Early Sources of our Knowledge of African Ornithology", *Journal fur Ornithologie*, 2, 1929, pp 188-189
- 15 F le Vaillant, *Histoire Naturelle Des Oiseaux D'Afrique I to VI* (H J Jansen, Paris, 1796-1808 (1812))
- 16 See Barrow, *Passion for Birds*; A Blaugrund and T E Stebbins (eds), *John James Audubon: The Watercolors for The Birds of America* (Random House, New York, 1993)
- 17 For details on Gould, see I Tree, *The Bird Man: The Extraordinary Story of John Gould* (Ebury, London, 2003)
- 18 R E Levitt, "Two Travellers and an Artist: A Review of Some Bird Books Important as Africana", in C Pama (ed), *Bibliophilia Africana IV* (Friends of the South African Library, Cape Town, 1981), pp 40-41
- 19 Brooke, "Historical Sketch of Afrotropical Ornithology"; W F Lye (ed), *Andrew Smith's Journal of his Expedition into the Interior of South Africa 1834-1836* (A A Balkema, Cape Town, 1975); A Smith, *Illustrations of the Zoology of South Africa I to III* (volume II, *Birds*) (Introduction by R F Kennedy Second edition, facsimile reprint of first edition, published between 1838 and 1849) (Winchester, Johannesburg, 1977)

(he became honorary superintendent), but there was no special building for the purpose and no dedicated museum staff. It was therefore not surprising that when Smith left the Cape in 1837, the collections fell into disarray. Smith's work and material did not find a publisher at the time (his illustrations, however, were published in parts in 1849), and consequently the taxonomy of South African ornithology received attention only after the appointment of Edgar Layard as the second curator of the South African Museum.



Figure 2: The lesser Jacana *Microparra capensis* described under the name *Parra capensis* by Andrew Smith in 1839 **From:** A. Smith, *Illustrations of the Zoology of South Africa II* (Winchester, Johannesburg, 1977)

In 1867 Layard published the first systematic and complete account of South African birds.²⁰ As the Cape was a British colony and Layard himself was an Englishman, it is not surprising that he followed the classification of famous British Museum taxonomist G.R. Gray. In his book, Layard gave formal descriptions, synonymy and wherever possible the locality in which the bird was first collected as well as his own observations with assistance from various local collectors. But without any pictorial content or common names, this book lacked public appeal and was difficult to use. In the Brenthurst Library, for example, is a copy of Layard's book owned by E. Symonds, an amateur ornithologist in Kroonstad. In order to make better use of Layard's text, Symonds was obliged to paste in a number of additional pages in which he had listed the local names of

20 E. Layard, *The Birds of South Africa: A Descriptive Catalogue of all the Known Species occurring South of the 28th Parallel of South Latitude* (Juta and Longman Green, Cape Town and London, 1867)

birds in alphabetical order and to write common names next to the Latin ones.²¹ Soon after Layard's book appeared, however, ornithologists outside of the museum fraternity began to make their mark in southern Africa. One of these was the Swede C.J. Andersson whose book on Namibian birds appeared posthumously in 1872. Andersson's special contribution was to supplement some of his material with local ecological knowledge, for example, that rainfall was critical to breeding behaviour in arid environments rather than the change in seasons *per se* as was the case in Europe.²² Also in this early tradition of field biology and personal observation was Thomas Ayres, an enthusiastic amateur, who over the span of thirty years, between 1855 and 1886, published eleven papers on birds of Natal and fifteen on Transvaal birds in *The Ibis*.²³

Despite the work of Andersson and Ayres, such field-based biological work was unusual in southern Africa and formal taxonomy was the more important area of formal ornithological study at that time. Much of it was done outside southern Africa. Layard's book, for instance, was extended and revised between 1875 and 1884 by Richard Bowdler Sharpe, Curator of the Bird Section of the British Museum's Department of Zoology.²⁴ In the early years of the twentieth century, a number of important scientific works on South African and African ornithology appeared. Most significant of these was A.C. Stark and W.L. Sclater's definitive *The Birds of South Africa*, published between 1900 and 1906. Stark was a medical doctor and keen ornithologist (he was killed during the siege of Ladysmith in November 1899) who had settled in Cape Town in 1885 and had travelled widely in southern Africa on collecting trips. Sclater (son of P.L. Sclater, eminent British Museum ornithologist, a founder of the British Ornithologists' Union and joint editor of *The Ibis*), became director of the South African Museum in 1896 and had asked Stark to collaborate on the ornithological work that was to form part of a comprehensive study of all the fauna of South Africa under Sclater's direction. Stark and Sclater's comprehensive account of 814 bird species is an impressive compilation based on the museum specimens in Cape Town, Grahamstown and Durban – the British colonies in South Africa. The divide between British colonies and those in the interior is demonstrated by the fact that if there was any assistance from or collections in the Boer Republics, these are not mentioned.²⁵ The authors referred to species by binomial names (in the European tradition of that time), there were numerous line drawings and a couple of photographs.²⁶ As well as regional South African coverage, continental ornithology was promoted by two surveys of African ornithology that were published in the first

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- 21 Symonds contributed his observations to the *Journal of the South African Ornithologists' Union*, see "Notes on some migratory visitants to Kroonstad, Orange River Colony", 11, 1, June 1906, pp 24-29
- 22 C J Andersson, *Notes on the Birds of Damaraland and the Adjacent Countries of South-West Africa*, arranged and edited by J H Gurney (John van Voorst, London, 1872)
- 23 A K Haagner, "A Short Account of the Study of Ornithology in General and of South Africa in Particular", *South African Ornithologists' Union, Popular Bulletin*, 2, February 1909; University of the Witwatersrand Manuscript Collection (hereafter UW): A 210, Thos Ayres, Fragment of a Hunting Diary, May 1839
- 24 E L Layard, *The Birds of South Africa. New Edition. Thoroughly revised and augmented by R. Bowdler Sharpe* (Bernard Quaritch, London, 1875-1884)
- 25 A more recent instance of Cape Town insularity appears in M Wren-Sargent's two-part "Fieldguides, past and present", *Bird Numbers* 7, 3, 1998, pp 23-27 and 8, 1, 1999, pp 26-31, in which she ignores the work of Haagner and Ivy, the Woodwards and even Fitzsimons
- 26 Arthur C. Stark, *The Birds of South Africa I*, in series entitled: The Fauna of South Africa, edited by W L Sclater (R H Porter, London, 1900); A C Stark (completed by W L Sclater), *The Birds of South Africa II* (R H Porter, London, 1901); W L Sclater (commenced by A C Stark), *The Birds of South Africa III* (R H Porter, London, 1903); W L Sclater (commenced by A C Stark), *The Birds of South Africa IV* (R H Porter, London, 1906)

decade of the twentieth century, one authored by G.E. Shelley²⁷ and the other by German, Anton Reichenow.²⁸

Ornithology at the turn of the nineteenth century: the Transvaal

Scientific endeavour takes different forms in different regions and countries and it is as well to recall that “one of the most central and provocative contributions made in recent years by the sociology of scientific knowledge ... is the simple recognition that all science is local”.²⁹ While that recognition underpins the central argument in this article that in analysing ornithology in the north and south of South Africa even the “local” requires dissection, Merrill’s distinction between the “hard sciences” and “natural history” also needs to be kept in mind.³⁰ But in some respects the distinction between “closet” or “cabinet” (museum and other collectors who did no observations from nature) and “field” naturalists was more blurred in the case of ornithology because museum scientists were so dependent on collectors in the field for their research material.

Basalla has argued that international science advanced in stages. In the first phase, people from Europe visited, collected and took specimens back to Europe, this being merely an extension of the imperial process of exploration that involved collection and classification – Le Vaillant would fit this bill as far as South Africa is concerned. The next phase was “colonial science” in which “colonial scientists” entered the picture and began to play a subservient role – Andrew Smith would be an example here. Finally, the colony “slowly develops a scientific tradition of its own”.³¹ Basalla’s typology has been criticised, for example by Krishna who contended that too many categories were lumped together under the rubric “colonial scientist”.³² Disaggregating that term is part of the aim of the present article, bearing in mind Mackenzie’s caution not to consider “science” too narrowly, because it can refer to any “knowledge” or “organised common sense” which, in the case of colonists, is generally self-taught, amateur and related to issues of development and modernisation.³³

British ideas about science were extended into the northern parts of South Africa after the end of the South African War. At this time the new British administrators prioritised the development of what had been the State Museum in Pretoria. Dubow has noted that the origins of the Transvaal Museum lie in the policy of Kruger’s Hollander civil servants to project the South African Republic as a “civilised” state with a museum designed to “promote the republican cause” even though it was primarily concerned with natural history.³⁴ Its collections were extensive, rivalling the longer and more professional

27 G E Shelley, *The Birds of Africa, Comprising all the Species which Occur in the Ethiopian Region I to V* (R H Porter, London, 1896-1912)

28 Anton Reichenow, *Die Vogel Afrikas I-IV* (J Neumann, Neudamm, 1900-1905)

29 W Chambers, book review of P Petitjean, C Jami and A M Moulin (eds), *Science and Empires: Historical Studies about Scientific Development and European Expansion* (Kluwer, Dordrecht, 1992), in *Historical Records of Australian Science*, 10, 1, 1994, p 84

30 L L Merrill, *The Romance of Victorian Natural History* (Oxford University Press, New York, 1989), pp viii, ix, 5-15

31 G Basalla, “The Spread of Western Science”, *Science*, 156, 1967, pp 614-617

32 V V Krishna, “The Colonial ‘Model’ and the Emergence of National Science in India: 1876-1920”, in P Petitjean, C Jami and A M Moulin (eds), *Science and Empires: Historical Studies about Scientific Development and European Expansion* (Kluwer, Dordrecht, 1992), pp 57-61

33 J M MacKenzie (ed), *Imperialism and the Natural World* (Manchester University Press, Manchester, 1990), p 5

34 S Dubow, “A Commonwealth of Science”, in Dubow (ed), *Science and Society*, p 75

tradition of the South African Museum in Cape Town. In 1909 Haagner calculated that there were 5 000 study skins and over 1 000 mounted birds in Pretoria, whereas the South African Museum at that time had 4 000 skins and 2 000 stuffed and mounted birds. In addition, the Transvaal Museum had an “unrivalled” egg collection.³⁵ But even more importantly, and unusually for a museum, there was a very large aviary and smaller aviaries containing specialist collections in the adjacent zoological gardens that formed part of the museum.³⁶ The collection of living specimens in the aviaries was very popular with visitors, and in 1905 there was a wildfowl-pond, swans, Stanley cranes, a variety of English, Indian and South American birds – even a collection of Australian birds, a “laughing jackass” (penguin), parakeets,³⁷ two emus, winking owls, magpie geese and six “moonies” (probably mallee fowl).³⁸ There was also a resident vulture at the zoo and a vulture nest in the museum.³⁹

It was the emphasis on live creatures that differentiated Pretoria’s museum from others in southern Africa at that time. The museum was actually integrated with the zoological gardens, the two institutions being separated only in 1913 when the new museum building was completed. Because of the link to the zoological gardens and the emphasis on the live animal, it is perhaps not surprising that initiative for the study of living birds and their ecology came from the Transvaal rather than from the Cape Colony. Individuals, of course, are also important drivers, and the Pretoria staff members were less narrowly “museum people” than they were in the Cape. The director of the State Museum (also responsible for the zoological gardens) was Dr J.W.B. Gunning, a Dutch-born medical practitioner without museum qualifications who had emigrated to South Africa in the 1880s.⁴⁰

It appears that there was a distinct north-south divide in southern Africa at that time with the Cape being the more “European” part of the region with an established bureaucracy and strong connections with the metropole which, of course, the republics did not have. In addition, while directors of the South African Museum, including Layard and Sclater, considered their employment in colonial Cape Town merely as a professional stepping stone to a more prestigious museum position in Britain,⁴¹ the Transvaal seems to have attracted people as attached to South Africa as they were to their discipline and keen to promote it within the local environment rather than abroad. Unlike the South African Museum directors mentioned above, neither Gunning nor Haagner had formal university or museum zoological training. It may well have been for this reason also that their interest in avian ecology and behaviour was heightened because it was in these applied areas that they could make a better contribution to ornithology than they could in matters of taxonomy. They were therefore not the same type of “colonial scientists” as those in the Cape, where the situation better accords with Basella’s argument (outlined above) that colonial scientists were extensions of an enterprise that was essentially based in the imperial heartland.

35 Haagner, “A Short Account of the Study of Ornithology”, p 10

36 R Bigalke, *The National Zoological Gardens of South Africa* (CNA, Pretoria, 1954), p 2

37 L V Praagh (ed), *The Transvaal and its Mines* (Praagh and Lloyd, London, [1906]), pp 140-141

38 *The Emu*, 2, 2, 1 October 1902, p 117

39 Haagner and Ivy, *Sketches of South African Bird Life*, p 3

40 Bigalke, *National Zoological Gardens*, pp 3-4, 9-10

41 Sclater, for example, who later in life was an extremely distinguished member of the British scientific academy, published his most important South African ornithological work after leaving Cape Town and while employed at the British Museum on the African collection. This was the *Systema Avium Aethiopicarum* (1924 and 1930)

Around the turn of the century therefore, a branch of South African ornithology was moving away from taxonomy to behavioural study and ethology and becoming more environmental in perspective. Of course the new direction was in many respects dependent on the former because identification was easier with improved species descriptions in accessible publications and greater acceptance of a more stable taxonomy. It also appears to have been a period in which grand schemata and scientific ideologies – even phylogeny – made way for more detail by way of observable facts.

Natural history societies

Important as the museums were, discovering more about behaviour and the living bird also took place through the work of people who joined special interest voluntary societies and institutions which were a feature of nineteenth century Victorian and European society. As Allen has pointed out, natural history “is an area of cultural behaviour rather than a network of ideas”.⁴² Major ornithological societies were founded in the nineteenth century: in 1858 the British Ornithologists’ Union (journal – *The Ibis*) and in the same year, the Deutsche Ornithologische Gesellschaft (journal – *Journal für Ornithologie*). Outside of Europe, the American Ornithologists’ Union began in 1883 (journal – *The Auk*) and the Australasian Ornithologists Union in 1901 (journal – *The Emu*). The South African Ornithologists’ Union (SAOU) was founded in 1904 and Alwyn Haagner of the Transvaal Museum, author of *Sketches of South African Bird Life* was the main initiative behind it.

The SAOU evolved from the interest in birds and birding expressed, for example, through membership of the Johannesburg Field Naturalists’ Club (JFNC). Like many other clubs for educated people of the time in South Africa and elsewhere, the JFNC offered a pleasant pastime, camaraderie, education, field trips, a sense of worth and contribution. The JFNC was a society for generalists in the natural history arena and this had positive and negative effects. While the broad focus encouraged wide membership, it also led to factions, and almost from the outset there were problems in this regard. For example, for some years the Club was dominated by butterfly collectors and there was very little botany – members began to be disquieted about such disequilibrium in interest.

The JFNC started in 1897 with 46 members,⁴³ its aim being to hold regular meetings on all branches of natural history, to arrange annual and weekend excursions, to form a library, to host an annual “*Conversazione*” and to publish its proceedings and possibly other works as well.⁴⁴ Membership of the JFNC appears to have been great fun and early minutes record that almost every meeting “dissolved into a *conversazione* and exhibition of specimens” as members boasted about and compared their experiences, observations and specimens. Members were predominantly from the English-speaking business elite of Johannesburg (who would have been familiar with clubs of this sort in England), at that time with a large cosmopolitan white population, but they were amateurs and they welcomed the input from the specialists from the museum in Pretoria who were also active in the Club. There was therefore a more serious side to the Club than just the friendly rivalry of collectors and the opportunity for gentlemanly conviviality, in that because of the “unlimited field of research ... in a country where comparatively little has been done ... no more specimens need to be sent out of the country for identification and

42 Quoted in J A Secord, “Natural History in Depth”, *Social Studies of Science*, 15, 1985, p 184

43 UW: A58, Records of the Johannesburg Field Naturalists Club (hereafter JFNC), *Johannesburg Times*, 3 September 1897

44 UW: JFNC, Minute Book 1, 26 February 1897

the naturalists of the Transvaal ought to commence to work out their own fauna".⁴⁵ The Club took an active interest in the appointment of Professor H. Lyster Jameson to the chair of Biology (Zoology and Botany) at the Technical Institute in Johannesburg in 1905 and expressed great regret when the government abolished this post.⁴⁶ By 1904 the Club was flourishing, to the extent that there were enough birders to encourage Haagner (a member of, and frequent speaker at the JFNC) to form a breakaway ornithologists' union that year, writing to the chairman of the JFNC, "I have 36 names already! Not bad, eh?"⁴⁷

The Edwardian period was the age of the natural history society and they burgeoned in South Africa as they did elsewhere in the British Empire. In 1905 East London had a Natural History and Scientific Society,⁴⁸ in 1908 a Biological Society was established in Pretoria and the following year Pretoria had its own Field Naturalists Club.⁴⁹ By this time, however, membership of the JFNC had fallen off considerably which, the committee believed, was because of the special characteristics of Johannesburg, rather than a lack of interest. Johannesburg was an extremely large city and it was difficult to get people together regularly each week. It has a less compact socio-spatial framework than a city like Pretoria or Durban for example, and the urban sprawl around Johannesburg had led to the deterioration of local collecting spots. New specimens were hard to find. There were other factors too, including the plethora of other societies that had come into existence and competed for members and also because the lepidopterists in the JFNC put people off whose interests went in other biological directions.⁵⁰ There was a hiatus in the Club's activities between 1910 and 1914, and after spluttering along for three years during World War I when many members were on active service, the Club was wound up in 1917.⁵¹

Although its start was so auspicious, the SAOU did not fare much better. It too began with a burst of enthusiasm and then petered out because of general apathy, or perhaps because amateur members had higher priorities. The SAOU was a pan-South African, not a local society (as was the JFNC), and the regional museum community was well-represented. Founder members were Sclater, director of the South African Museum, Dr J.W.B. Gunning, director of the Transvaal Museum, Dr S. Schoenland, director of the Albany Museum, and Dr E. Warren, director of the Natal Museum. Haagner was the honorary secretary. There were 40 members in 1904, a number which had grown to 120 by 1909. Of the 40 original members, 21 were from the Transvaal, 12 from the Cape, four from Natal and two from the Orange River Colony. A.B. Percival, an East African game ranger, joined from Nairobi. Honorary members included doyens of international ornithology, P.L. Sclater, R.B. Sharpe, A. Reichenow, G.E. Shelley and R. Trimen.⁵² The South African Museum's Sclater was elected president and he had great visions for the Union: "by its means ... our knowledge of South African ornithology – now, alas! in a very backward state – may be increased and furthered". In Sclater's opinion, South Africa needed to "bring our knowledge of our native South African birds up to the

45 UW: JFNC, Correspondence files: Gunning – Cohen, 22 April 1902

46 UW: JFNC, Correspondence files: A Graham Cook – Colonial Secretary Jan Smuts, 3 February 1908

47 UW: JFNC, Correspondence files: Haagner - JFNC, 19 March 1904

48 *Journal of the South African Ornithologists' Union*, 1, 2, December 1905, p 64

49 UW: JFNC, Minute book, 12 February 1908; Correspondence files: A. Graham Cook - Hon Sec Pretoria Field Naturalists Club, 10 July 1909

50 UW: JFNC, Minute book, 12 October 1908

51 UW: JFNC, Minute book, 31 March 1917

52 *Journal of the South African Ornithologists' Union*, 1, 1, 1905, p 11

standard of other civilised countries”.⁵³ As mentioned earlier, Sclater was a taxonomist and director of the South African Museum in Cape Town with his sights set on further scientific upward career mobility in Britain. The collections in metropolitan museums were probably his point of comparison, rather than the field observations and economic biology to which South Africans were contributing.

Exactly what Sclater had in mind in terms of the ornithological output of a “civilised” country was not clarified, but publishing an authoritative journal along the lines of *The Ibis* or *The Auk* was a priority and this was raised at the inaugural meeting of the SAOU. It was decided to begin production as soon as possible and to call it *The Ostrich A Journal of South African Ornithology*, its object “to promote and foster the study of a branch of science which, perhaps more than any other, combines pleasure and physical and mental exercise with practical and scientific utility”. Somewhat surprisingly, a large number of members took exception to the title and on 5 November 1904 a special general meeting was held to reconsider it. The decision was made to change the title to *The Journal of the South African Ornithologists’ Union*, although the matter was again reconsidered in June 1906 when another group of members wanted something more distinctive and suggested *The Paauw*, *The Ostrich*, *The Falcon* or *The Eagle*. There was no consensus on these alternatives and thus *The Journal of the South African Ornithologists’ Union* it remained.⁵⁴

Early annual general meetings were festive and fun, with speeches by the mayor or some other dignitary and with the celebratory “excellent collation” creatively arranged on the dinner tables in the shape of various birds.⁵⁵ But slowly the level of attendance at meetings dropped off and interest began to decline. By 1912 the leisurely lunches and dinners were things of the past and replaced by briefer gatherings. In 1913 the annual general meeting even had to be postponed because a quorum was not present. Haagner made frequent appeals for contributions to the Journal and complained that he was running the Union virtually single-handedly.⁵⁶ The outbreak of war in 1914 spelled the end of the SAOU although it did not disappear entirely, but was subsumed within the South African Biological Society and ornithological papers appeared from 1923 onwards in the *South African Journal of Natural History*. In his overview of ornithology in South Africa, R.K. Brooke, at the Percy Fitzpatrick Institute for African Ornithology at the University of Cape Town, argued that only after 1930 – with the inception of the South African Ornithological Society and its journal *Ostrich* – did South African ornithology come under the control of “local” people.⁵⁷ It is difficult to support this point of view. Certainly a number of the professional museum scientists of the nineteenth and early twentieth centuries were professional international scientists, but many locally born or permanently resident South Africans were involved in museums as well as in the JFNC, the Pretoria Field Naturalists Club and the SAOU, among them Haagner, Gunning, Roberts, Ivy, Fitzsimons and Warren. If “local” includes indigenous African communities and Afrikaans and Dutch-speaking South Africans, then even today these groups (as groups) are not major contributors to formal ornithology. But this does not mean that formal representation in learned societies, museums and universities indicates an absence

53 Inaugural address, W L. Sclater, *Journal of the South African Ornithologists’ Union*, 1, 1, 1905, p 2

54 *Journal of the South African Ornithologists’ Union*, 1, 1, March 1905, p vi; *Journal of the South African Ornithologists’ Union*, 2, 1, 1906, p 45

55 *Journal of the South African Ornithologists’ Union*, 2, 2, 1906

56 *Journal of the South African Ornithologists’ Union*, 8, 1, 1912; *Journal of the South African Ornithologists’ Union*, 9, 2, 1913

57 Brooke, “Short History of Ornithology”, p 10

of the “common sense” or the organised “knowledge” to which Mackenzie refers.⁵⁸ The dichotomy between “amateur” and “professional” is even more complex in ornithology than in some of the other natural sciences, as others have observed.⁵⁹

Conserving indigenous birds

Learning about birds or collecting them was certainly important but interest (as seen above) could not always be sustained through education and collection alone. Conservation issues were also critical to ornithological thinking. In 1654, merely two years after the foundation of the VOC settlement at the Cape, the devastation to the offshore penguin populations that were killed to be salted and consumed like herrings, was so extensive that station commander Jan van Riebeeck issued a decree that penguins were only to be eaten twice, not three times, a day in order to sustain the food supply.⁶⁰ Later, a number of birds were included in the game protection legislation of 1822, 1886 and 1909 in the Cape Colony and of 1866 in Natal because they were suitable for sport.⁶¹ Ostrich were accorded special protection on account of their value in the lucrative feather trade which was second only to ivory in terms of economic significance in the interior.⁶² In 1892, though, the Transvaal *Volksraad* enacted legislation that protected a bird species because it was of value to farmers and to humanity at large. This was the secretary bird (see Figure 3), today so prominent in the South African coat of arms. The *Volksraad* debate of 1892 illuminated a number of issues around the state and discourse of ornithology in the Transvaal. Aesthetic or scientific considerations were not paramount but human interests were. Some *Volksraad* members argued that the secretary bird was an “ally” of humanity, eating insects and snakes that were harmful to people and crops. Others countered that it was useless to humans because it provided neither feathers nor food. No “scientists” were involved in this ecological debate, and *Volksraad* members with the loudest voices – many of them farmers – and most numerous anecdotes, won the day. Two years later, other louder voices with other anecdotes lobbied that far from being allies, secretary birds preyed on lambs, small game and game birds and ought to be shot on sight. They were “harmful”, almost “vermin”. Without verifiable evidence, there was no neutral means of settling the matter and *Sagittarius serpentarius* lost its protected status.⁶³

58 Mackenzie (ed), *Imperialism and the Natural World*, p 5

59 See Farber, *Emergence of Ornithology*; Barrow, *Passion for Birds*; Robin, *Flight of the Emu*

60 H B Thom (ed), *Journal of Jan van Riebeeck I* (Van Riebeeck Society, Cape Town, 1952), pp 229-230

61 H H Curson and J M Hugo, “Preservation of Game in South Africa”, *South African Journal of Science*, 21, 1924, pp 400-424 See also B Horsburgh, *The Game-Birds and Water-Fowl of South Africa* (Witherby, London, 1912) This was a book for sportsmen and was illustrated by Claude Gibney Finch-Davies whose biography is an interesting aspect of South African ornithological history

62 F J Potgieter, “Die Vestiging van die Blanke in Transvaal (1837-1886) met Speciale Verwysing na die Verhouding Tussen die Mens en die Omgewing”, *Archives Year Book for South African History*, 21, II (The Government Printer, Pretoria, 1958), pp 146-148

63 National Archives of South Africa, Transvaal Archives (hereafter TA): Minutes of the *Volksraad*, Article 429, 13 June 1892; Minutes of the *Volksraad*, Article 742, 9 July 1894 See also J Carruthers, “Game Protection in the Transvaal, 1846 to 1926”, *Archives Year Book for South African History*, 58 (The Government Printer, Pretoria, 1995), p 15



Figure 3: The secretary bird *Sagittarius serpentarius*. The original caption read: “The noble Secretary Bird (*Sagittarius serpentarius*) stalks majestically over the veld in search of rats, mice, snakes, locusts, caterpillars, and other vermin which retard human progress.” **From:** F W Fitzsimons, *The Natural History of South Africa II, Birds* (Longmans Green, London, 1923), p 175

Wild birds could not be confined like mammals in game reserves and national parks in order to protect them, so arguments for their conservation focused on their economic value to humanity, especially to agriculture. Field data and behaviour studies were needed in this regard and migration research added impetus to the ecological thrust of twentieth century ornithology. In 1907 the SAOU established both a “Migration Committee” and a “Protection Committee”.⁶⁴ At the time, the SAOU expressed concern about the indiscriminate importation of foreign birds (such as the European house-sparrow *Passer domesticus* and European starling *Sturnus vulgaris*) that extended their ranges, displaced native birds and had other unintended ecological consequences.⁶⁵ Some twenty years earlier there had been an effort to acclimatise foreign birds at the Cape, as had been done with trout. The role of acclimatisation societies has still to be told, and in South Africa they received considerable government support. The Cape’s Western Districts Game Protection Association (WDGPA), founded on 3 December 1886, focused on “game”, but at its 1890 annual general meeting the issue of species that spoil the huntsman’s pleasure came under the spotlight and the secretary bird, despite its snake-killing reputation, was deemed to be one, with its tendency for “ravaging young broods of partridges”.⁶⁶

What birds ate was an important object of study in the early twentieth century because there was a need to modernise the agricultural economy of South Africa and birds could

64 *Journal of the South African Ornithologists’ Union*, 3, 2, 1907, p 210

65 *Journal of the South African Ornithologists’ Union*, 2, 2, 1906 Both these introduced species were also troublesome invaders in other parts of the world. See “The English Sparrow Question” a report from the President Cooper Ornithological Club of California, *Journal of the South African Ornithologists’ Union* 4, 2, 1908, p 131; C C Kent, “The Indian Mynah”, *South African Journal of Natural History*, 6, 2, 1927, p 127 In this article, the author is undecided as to whether, on balance, the Indian myna *Acridotheres tristis* did more good than harm in South Africa

66 Archives of the Wildlife Society of South Africa (Wildlife and Environmental Society of Southern Africa), Pietermaritzburg, Western Districts Game Protection Association, Correspondence file

assist. But this was also in line with an international trend towards economic ornithology, indeed towards economic biology generally. J.A. Bucknill, joint editor of the *Journal of the South African Ornithologists' Union*, had correctly identified the fact that “the side of ornithology which perhaps enlisted the widest sympathy was the practical side relating to the harm or utility of birds in their relation to agriculture”.⁶⁷ Just the year before, Gunning had contributed a series of articles to the *Transvaal Agricultural Journal* on this subject,⁶⁸ because whether avifauna were farmers’ “friends” or “foes” was a matter of economic significance. As a supplement to the *Journal of the South African Ornithologists' Union* of 1905, Haagner authored “The South African birds of prey: Their economic relations to man”.⁶⁹ As has been mentioned, Haagner and Ivy’s book of 1908, *Sketches of South African Bird Life*, contained chapters on “Friends of the agriculturalist” and “Farmer’s foes”. The following year Haagner wrote a paper explaining that research on agriculture and the “domestic economy” of birds was becoming urgent.⁷⁰ In 1911 Austin Roberts published “Economics of Ornithology in South Africa”.⁷¹ How economically useful birds were to agriculture added to their value and determined many aspects of ornithological and ecological research.

After Haagner and Ivy’s *Sketches*, the next popular detailed bird book to appear in South Africa was the two-volumed *Birds* in F.W. Fitzsimons’s series *The Natural History of South Africa* (from which the title of this article is taken). If one uses this book as evidence, Fitzsimons had little conception of an ecological web or even the “balance of nature”. A total anthropocentrist, he projected humanity as being in a permanent state of war for survival with almost all the orders of the class *Insecta*. It is perhaps somewhat surprising these days to encounter intemperate language from a museum scientist, usually better known for flat and lifeless prose. Fitzsimons wrote:

There is much spade work and great battles yet to be fought by the human race against the adverse forces of Nature which retard the spread of the human race over earth’s fair surface. Our most formidable and ruthless opponents are the insects. It is now almost an even fight for supremacy a little weakening of our offensive will bring disaster, sure and certain, upon our race.⁷²

In this offensive, birds were vital. “The birds alone can turn the scale in our favour”.⁷³ Fitzsimons cited examples. “The wanton destruction of wild birds in one of the inland districts of Australia ... brought its punishment swift and sure. Caterpillars and beetles swarmed over the land and succeeded in converting wide areas of pastureland into a barren waste ... A similar calamity befell the New Zealand farmers...”⁷⁴ All of Volume I dealt with the question of how birds could assist food and timber production and in the general taming of nature. Only in Volume II did Fitzsimons provide a catalogue of South African birds, giving descriptions, distribution and habits.

67 *Journal of the South African Ornithologists' Union*, 2, 2, p iii

68 Mentioned in the *Journal of the South African Ornithologists' Union*, 1, 2, 1905

69 A K Haager, “The South African Birds of Prey: Their Economic Relations to Man”, supplement to the *Journal of the South African Ornithologists' Union* of 1905, Pamphlet Number 1 of the Bird Protection Committee of the SAOU

70 Haagner, “Short Account of the Study of Ornithology”, *South African Ornithologists' Union – Popular Bulletin*, 2, February 1909

71 *Agricultural Journal of the Union of South Africa*, April 1911, pp 352-369

72. Fitzsimons, *Birds I*, pp vii-ix

73 Fitzsimons, *Birds I*, pp vii-ix

74 Fitzsimons, *Birds I*, pp 80-81

South Africa was part of a world-wide trend in espousing and promoting economic ornithology. In Australia, Robin notes its importance in shaping policy around this time,⁷⁵ and in the United States the American Ornithologists' Union proposed the establishment of a federal Division of Economic Ornithology as early as 1884.⁷⁶ In addition, international ornithological conversations were growing. The first International Ornithological Congress had been convened in Vienna in 1884 and by 1902 a *Convention for the Protection of Birds Useful to Agriculture* had been concluded among the European powers in Paris.⁷⁷ In 1905, there was a session on "Economic ornithology" at the Fourth Quinquennial Congress of the International Ornithological Committee, held in London.⁷⁸

The early twentieth century was a period of considerable discussion on nature conservation generally. The "preservation" versus "conservation" debate raged in the United States, non-governmental organisations grew in support and the national park movement took shape. Without an over-arching ecological paradigm at that time, saving South Africa's larger wild mammals in game reserves and national parks for the purposes of tourism and sport made sense. But what rationale could be used for saving birds? Ideas about nature protection in South Africa at the time were teased out in a number of articles about nature conservation.⁷⁹ Haagner wrote about "Game and bird protection" in 1916, giving the Transvaal Game Protection Association credit for much conservation legislation in that province. Generally, however, he argued that education was preferable to legislation and that the major task was to teach people about the different species of birds and empower them with the ability to distinguish "good" from "bad". The article concluded with comments about "usefulness", but also cautioned that "useful" and "noxious" were human terms, and that nature ought to be respected intrinsically.⁸⁰ Writing in 1925, Haagner again stressed the value of comparing experiences across national boundaries, and listed science, sentiment, recreation and economics as factors that all played a part in the protectionist initiative.⁸¹ In 1923 Austin Roberts (based at the Transvaal Museum and later to become South Africa's premier ornithologist⁸²) went into print. The battle lines were drawn between rationalists and emotionalists and are redolent of similar debates about current issues such as global warming, genetically modified foods and the like. Roberts felt that there was too much sentimentality involved in the conservation lobby, and that practical common sense ought to be the only guide. Believing that the bird protection laws were appropriate and sufficiently stringent, he criticised as a "fetish" the emotional lobby for more legislation. The question was, "were

75 Robin, *Flight of the Emu*, pp 91-94 See also L. Robin, "Birds and Environmental Management in Australia, 1901-2001", *Australian Journal of Environmental Management*, 8, 2, 2001, pp 105-113 The SAOU took special note of an "interesting paper by A G Campbell, on insectivorous birds and their economic utility" that appeared in *The Emu* in July 1904, *Journal of the South African Ornithologists' Union*, 1, 2, 1905, p 65

76 Barrow, *Passion for Birds*, pp 59-61, 16

77 The treaty can be accessed at [sedac.ciesin.org/pidb/tests/protection_of_birds_1950.html; eelink.net/~asilwildlife/ss.html](http://sedac.ciesin.org/pidb/tests/protection_of_birds_1950.html;eelink.net/~asilwildlife/ss.html)

78 *Journal of the South African Ornithologists' Union*, 2, 1, 1906, p 46

79 A K Haagner, "The Conservation of Wild Life in South Africa: A Discussion of the Salient Features, Including the Economic Point of View", *South African Journal of Industries*, December 1925, pp 761-775; F Vaughan-Kirby, "Game and Game Preservation in Zululand", *South African Journal of Science*, 13, 9, 1917, pp 375-396

80 A K Haagner, "Game and Bird Protection in South Africa: A Short Comparison with Some Other Countries", *South African Journal of Science*, 12, 11, 1916, pp 519-529

81 Haagner, "The Conservation of Wild Life in South Africa", p 761

82 See C K Brain, *Austin Roberts: A Lifelong Devotion to South Africa's Birds and Beasts* (John Voelcker Bird Book Fund, Cape Town, 1998)

birds useful?" and, if so, then protect them. Some species were indeed useful, destroying locusts, insects in general, ticks, rodents and snakes. Some produced guano, provided food and were "ornaments of nature". These were rational approaches to bird conservation, sentimentality was not, and "the outcry to 'save our birds' is nothing but rank hypocrisy" and an absence of "commonsense".⁸³ It is against this background that Fitzsimons's books must be evaluated. Neither of these men, nor their publications of the time, discussed ecology, the "web of life" or the "balance of nature" in their arguments for nature or bird protection – it was strictly utilitarian.

South Africa and international ornithology

The Carnegie Corporation of the United States became involved in South Africa in the 1930s and one of the initiatives included support for South African ornithology. Austin Roberts was given the opportunity to travel to Europe and America on a fact-finding mission and this resulted (in 1935) in the publication of his *Museums, Higher Vertebrate Zoology and their Relationship to Human Affairs*.⁸⁴ At the time, South African ornithology had passed firmly from the South African Museum in Cape Town into the domain of the Transvaal Museum where Roberts was employed. In the 1920s the local zoologist had crossed swords with the renowned Michael Oldfield Thomas (curator of the Mammal Section of the Department of Zoology of the British Museum between 1879 and 1923) on the naming of the groove-toothed rat *Pelomys australis*,⁸⁵ to the extent that Roberts refused to return the type specimen to the latter museum. On the question of the correct name (which Roberts had decided upon), Roberts had been bold enough to write to Thomas that, "In coming to my conclusions I have in many cases been materially assisted by knowing the species in nature", a disparaging comment to a prominent learned academician. Later, a friend in England wrote to tell Roberts that Thomas, clearly irked by this show of defiance and local knowledge from a colonial upstart, "asked me if you were Briton or Boer ... [and was] utterly perplexed when I told him you were a South African of Irish descent. He evidently thought you were a Boer and antagonist to all things British and therefore the British Museum ..."⁸⁶

Roberts was flexing his nationalist muscle in more than the naming of a rodent – he was attempting to re-order the general systematics of southern African species. Taxonomy was also being reconsidered in Australia and in the United States at this period as genus-splitting reached its peak,⁸⁷ but Roberts put a decidedly nationalist slant on his trinomial endeavours. In an attack on Thomas, Roberts recorded, "Thomas shows that he has very little knowledge of the conditions prevailing in South Africa, and like C.H.B. Grant, chooses to regard it as a region abounding in one great expanse of uniformity."⁸⁸ Trinomial nomenclature gave greater flexibility in dealing with clinal and other environmental variations, a matter less important in Europe than it was in the "New World". In 1922, Roberts had created a stir with the erection of three new bird families

83 A Roberts, "The Protection of Birds in South Africa", *The South African Journal of Natural History*, 4, 5, 1923, pp 317-333 See also TA: TPS 6 TA3052, Protection of Wild Birds

84 Published in Pretoria by the Carnegie Visitors' Grants Committee, 1935

85 Currently this species is *Pelomys fallax* Peters, 1852, the Creek rat or Groove-toothed swamp rat See G de Graaff, *The Rodents of Southern Africa* (Butterworths, Durban, 1981), p 177

86 Quoted in Brain, *Austin Roberts*, pp 144-145 Oldfield Thomas had been born in Cape Town where his father was a clergyman, but had returned to England as a youth to go to school See J C Thackeray, *A Guide to the Official Archives of the Natural History Museum* (Natural History Museum, London, 1998), pp 60-61

87 See Robin, *Flight of the Emu*, pp 49-70; Barrow, *Passion for Birds*, pp 96-100

88 Quoted in Brain, *Austin Roberts*, p 157

and 102 new genera in his “Review of the Nomenclature of South African Birds” comparing himself with the great Australian collector and ornithologist Gregory Mathews (with whom he corresponded) and suggesting that those in the “south” were no longer taking the word from Britain “for granted as correct”.⁸⁹ (In the event, a great number of Roberts’s species have not stood the test of time and many scientists, apart from Thomas, have been rightly critical of his efforts).⁹⁰

Roberts’s *Museums, Higher Vertebrate Zoology and their Relationship to Human Affairs* gives an interesting perspective on South African ornithology in the 1930s. Roberts defended the role of museums but argued that they needed to change their function, because “what satisfied the people in knowledge of natural history a century or even a generation ago does not satisfy people of to-day”.⁹¹ Economic ornithology was a case in point, because although studied by agriculturalists, ornithologists had not kept pace and they had not succeeded in having the status of their discipline raised to any great extent.⁹² Roberts was impressed by the United States Biological Survey and thought it a pity “some such bureau was not started in South Africa long ago”⁹³ to record and monitor environmental change in a scientific way. It was particularly important to do this, Roberts believed, because South Africa had such wide ecological variations and diverse avifauna. However, Roberts was not successful in getting a biological survey off the ground in South Africa and he later made his major contribution to ornithology with the publication of his detailed fieldguide, *The Birds of South Africa*.⁹⁴

Economic biology had revitalised interest in birds during the 1930s. In 1936, Leonard Gill, director of the South African Museum in Cape Town, published *A First Guide to South African Birds* in response to “one of the commonest inquiries addressed to us at the South African Museum ... for an introductory work on the country’s birds. Something in small compass, at small cost, and with abundant coloured figures ...”⁹⁵ In a troubled decade, Gill thought the world was dichotomising into ‘savagery and chaos on the one hand and the chase after pleasure on the other’, so he was pleased to acknowledge that there was also a greater interest in nature.⁹⁶ He and his sister, Marion, illustrated this book with a number of colour plates, Afrikaans names were provided where these existed, and there was a section at the end of the book indicating what specific bird-life might be found at various holiday destinations, such as Cape Town, the Kruger National Park, Namaqualand in spring and the Victoria Falls.

In the 1950s, South Africa became increasingly isolated on account of apartheid and involvement by institutions such as Carnegie tailed off markedly, but Roberts’s fieldguide had sparked considerable amateur interest in ornithology, tapping into the

89 Brain, *Austin Roberts*, p 149

90 Brain, *Austin Roberts*, pp 150-152

91 Roberts, *Museums, Higher Vertebrate Zoology*, p 5

92 Roberts, *Museums, Higher Vertebrate Zoology*, p 9

93 Roberts, *Museums, Higher Vertebrate Zoology*, p 10 Others in South Africa, particularly R Bigalke, were also calling for a similar initiative, see R Bigalke, “A Biological Survey of the Union”, *South African Journal of Science*, 31, 1934, pp 396-404

94 148 A Roberts, *The Birds of South Africa* (Witherby, London, and Central News Agency, Johannesburg, 1940), a book replete with trinomials On pp xx-xxi, Roberts explained that the systematics were not the same in Africa as they were elsewhere and that the system would have been quite differently arranged had it begun in Africa Subspecies were not distinguished from species by the British school of systematists until 1910, and Roberts himself followed Ridgway and Mathews J M Winterbottom, in *The Bird and its Environment: A Book for Naturalists, Nature-Lovers and Bird-Watchers* (Maskew Miller, Cape Town, 1965) also made this point

95 L Gill, *A First Guide to South African Birds* (Maskew Miller, Cape Town, 1936), p vii

96 Gill, *A First Guide to South African Birds*, p vii

enthusiasm for natural history that had found an outlet earlier in the century in societies such as the JFNC, the SAOU (reconstituted as the South African Ornithological Society – SAOS – in 1930) and others. With barriers between South Africa and the broad international community rising, Cecily Niven, daughter of Percy Fitzpatrick and a keen amateur ornithologist, made an attempt to showcase South African ornithology and integrate it into African continental ornithology more generally. Because of her efforts, the first Pan-African Ornithological Congress (PAOC) was held in Livingstone, Northern Rhodesia in July 1957. This African focus, initiated from pariah South Africa, created political ripples in the ornithological world. Niven was obliged to explain to Dom Serventy, a leading Australian ornithologist, that South Africa did not intend to create a rival organisation to the International Ornithological Congresses, but considered it important to isolate information about African avifauna and ornithological priorities for particular study.⁹⁷ The gulf between museum and amateur, so narrow in the early 1900s, had widened by this time. Although the South African Ornithological Society welcomed both amateurs and professionals as members, the conceptual gulf and disjuncture in expectations between them was extremely wide and had become destructive. Amateurs felt marginalised and “put down” by professionals, even though amateur recording data and observations were so helpful to trained scientists. Bunty Rowan, a knowledgeable ornithologist⁹⁸ and daughter of famous South African naturalist Dr S.H. Skaife, wrote to the Council of the SAOS, pointing out that the critical attitude of scientists could easily be misunderstood by laymen, who were inclined to resent the superior attitude of professionals and to take criticism personally. She appealed also to the non-scientists to “adapt themselves to the free, frank expression of opinion which is the essence of science” in order to maintain the work of the Society, as well as “good personal relations and mutual respect”.⁹⁹ The discipline was suffering generally.

Rowan attempted to broaden the southern African base by establishing and nurturing southern hemisphere ornithological connections¹⁰⁰ and she corresponded regularly with Serventy in Western Australia, finding him a kindly and sympathetic person with whom she could tease out her thoughts. She felt that Australian-South African links would be productive, even including an exchange of scientific personnel.¹⁰¹ Australia could become a special partner because there were so many similar ecological niches that would reward closer examination from an ornithological point of view.¹⁰² South Africa was establishing itself as a country with a strong ornithological focus and the interest shown by the 1957 PAOC in Livingstone had been encouraging for Cecily Niven. She therefore decided to establish the Percy Fitzpatrick Institute of African Ornithology (based at the University of Cape Town) that came into being in 1959 with a large endowment from the Percy Fitzpatrick Trust. A director was required, and in corresponding with Serventy on this issue, Bunty Rowan, then chairman of the SAOS and editor of *Ostrich*, opened her

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- 97 National Archives of Australia (Perth) (hereafter NAA): K1347/1 Item 202, Niven - Serventy, 9 October 1956 I am indebted to Libby Robin for these Australian references
- 98 See M K Rowan, *The Doves, Parrots, Louries and Cuckoos of Southern Africa* (David Philip for the John Voelcker Bird Book Fund, Cape Town, 1983)
- 99 NAA: K1347/1, Item 202, Rowan - SAOS Council, ca June 1953
- 100 C J Skead, author of *The Sunbirds of Southern Africa, also the Sugarbirds, the White-eyes and the Spotted Creeper* (A A Balkema for the South African Bird Book Fund, Cape Town, 1967) corresponded with Serventy on the relationship between the Australian Honey-eaters Meliphagidae and Dicaeidae and this was briefly explored in *The Sunbirds* on pp14-15 NAA: K1347/1, Item 202
- 101 NAA, K1347/1 Item 202, Rowan - Serventy 1 May 1955; 3 March 1956
- 102 NAA: K1347/1 Item 202, Skead - Serventy, 20 March 1963; Skead - Serventy, 11 May 1964; Serventy - Skead, 20 May 1964

heart.¹⁰³ Initially, she asked Serventy whether an Australian might be interested in the post of director, but he replied that there was no suitable candidate in Australia, adding that people in Australia generally thought that there was “little future for the non-Afrikaans community” in South Africa. After this reaction, Rowan felt more confident about putting in an application for the post herself and asked Serventy if she might give his name as a referee. She could not, she explained, ask South African colleagues to act as referees, because two of the most appropriate were also after the post. She added tellingly,

A curious feature of recent South African appointments to ornithological posts is that most have gone to non-biologists. In two museums, for instance, our ornithologists are (a) an ex-farmer, and (b) an ex-business man, while our only two important bird sanctuaries have been running under the care of (c) an ex-Army officer, and (d) an ex-journalist. All these people are extremely able and competent, and I would be the last to decry their excellent work. I do hope, however, that the establishment of the Percy Fitzpatrick Institute may bring about a change in the current attitude that ornithology is a second-class science, to be pursued only by amateurs, beginners in biology, or persons retired from other fields of endeavour!¹⁰⁴

Rowan did not get the post, it went to J.M. Winterbottom. She had been correct in her assessment that she would not be a likely candidate owing to “the matter of my sex” and her lack of overseas experience.¹⁰⁵

Conclusion

In the event, the establishment of the Percy Fitzpatrick Institute (PFIAO) in 1959 has focused on the large collaborative and cooperative projects that Rowan and others had in mind, many of them on seabirds, not surprisingly given the Institute’s location in Cape Town (a reversion to the influence of the “south” in ornithology).¹⁰⁶ At present, the enormous task of revising the standard fieldguide, *Roberts’ Birds of Southern Africa*, into its seventh edition, is under way.¹⁰⁷ Although the Institute has dominated scientific ornithology since the 1960s, it has not, however, stifled all other ornithology. Certainly its research journal *Ostrich* appears regularly but the amateur birding community, generally comprising urban white South Africans and international tourists, has grown exponentially in the last decade or so with increased leisure time and destinations, the popularity of off-road vehicles, educational courses and the dynamic management of Birdlife Africa, which, since 1996, has been the name of the former South African Ornithological Society.¹⁰⁸ Considerable scientific work is done outside the PFIAO, or in partnership arrangements, the most significant of which has been the two-volumed work, *The Atlas of Southern African Birds*, published in 1997 by Birdlife South Africa and the Avian Demography Unit at the University of Cape Town. While in the early 1900s Haagner and the SAOU struggled to get members to complete their migration and distribution cards, James Harrison and his team had no such trouble with their *Atlas* – the response from birders all over the subcontinent was overwhelming. Thus, while the split between amateur and professional still exists, indeed, it has even been institutionalised, the level of collaboration among all ornithologists has actually grown, as ecology, distribution records, behaviour and similar field-work are contributions which a wide variety of ornithologists can make.

103 NAA: K1347/1 Item 159, Rowan - Serventy, 8 May 1959

104 NAA: K1347/1, Item 202, Rowan - Serventy, undated [mid-1959]

105 NAA: K1347/1, Item 159, Rowan - Serventy, 10 July 1959

106 See Scientific Publications of the PFIAO at <http://uct.ac.za/depts/fitzpatrick/docs/pub90.html>

107 See The Roberts VII Project <http://uct.ac.za/depts/fitzpatrick/docs/roberts.html>

108 It has been estimated that birding contributes 0.03 per cent to South Africa’s Gross Domestic Product, some R220 million. See J. Turpie and P. Ryan, “What are Birders Worth?”, *Africa – Birds and Birding*, February/March 1999, pp 64-68

As has been shown in this article, ornithology has reflected aspects of national consciousness in South Africa and has evolved in tandem with other scientific and agricultural research, wildlife management and nature conservation paradigms. In some respects, however, studying the history of ornithology has a more substantial contribution to make than other sciences because birds cannot be confined for study purposes within bird parks or reserves. Their conspicuousness, their mobility and their beauty means that they are an indicator group in many biomes and habitats and their ecological importance is very great. These characteristics are those that also draw more people to ornithology than to other natural sciences. But birds also link other disciplines – entomology, botany, parasitology, ecology – and thus act as facilitators and windows on a cross-section of biological sciences.

Abstract

The historiography of the cultural history of science in South Africa is growing and much of it has an environmental focus. Using certain points in the 1910s, 1930s and 1950s, this article identifies and explains certain aspects of twentieth century ornithology in South Africa and attempts to highlight important general themes. Discussion centres around local versus international knowledge structures and institutional power (the periphery and the metropole), whether the role and discourse of amateurs competes with or complements the endeavours of professional scientists and to what extent it might be difficult to sustain local non-governmental conservation and scientific organisations. The article also suggests relationships between South African ornithologists and the United States of America, Africa and Australia. While not solely biographical in focus, the role of some leading South African figures in ornithology is explored.

Opsomming

“Ons Mooi en Nuttige Bondgenote”: Aspekte van Ornitologie in Twintigste-eeuse Suid-Afrika

Die historiografie van die kultuurgeskiedenis van die wetenskap in Suid-Afrika is tans aan die groei en toon 'n sterk omgewingsfokus. Deur gebruik te maak van bepaalde punte in die 1910's, 1930's en 1950's, identifiseer en verduidelik hierdie artikel sekere aspekte van twintigste-eeuse ornitologie in Suid-Afrika en poog dit om belangrike algemene temas uit te lig. Die bespreking fokus op plaaslike teenoor internasionale kennisstrukture en institusionele mag (die periferie en die metropool), die kwessie of die rol en die diskoers van amateurs in kompetisie met, of komplementêr tot die werk van professionele wetenskaplikes staan en in watter mate dit moeilik mag wees om plaaslike bewarings- en wetenskaplike organisasies wat nie regeringsgeïnisieerd is nie, in stand te hou. Die artikel dui ook op verhoudinge van Suid-Afrikaanse ornitoloë met die Verenigde State van Amerika, Afrika en Australië. Hoewel die fokus van die artikel nie slegs biografies is nie, word die rol van sommige leidende Suid-Afrikaanse figure in ornitologie verken.

Key words

ornithology, birds, natural history, museums, Transvaal, ecology, taxonomy.