ILLUSTRATIONS

OF THE

ZOOLOGY OF SOUTH AFRICA

by

Sir Andrew Smith

a facsimile reprint of the original work published in London during 1849

with an introduction by R F Kennedy

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INTRODUCTION — Sir Andrew Smith's Life & Work

by
R F Kennedy

An African explorer of the last century needed more than hardiness, courage, resourcefulness and a desire to see what was on the other side of the hill if his efforts were to be successful. He needed also an enquiring mind, powers of observation beyond the ordinary, a knowledge of natural history and more than a casual interest in ethnology and language. Further, if the leader of an expedition, the ability to control men under difficult circumstances was a prime requisite. Andrew Smith possessed all these qualities and, as a South African explorer, ranks second only to William John Burchell. Yet, until recently, to most educated South Africans he was known only for his *Illustrations of the Zoology of South Africa.* That he has become better known in recent years is largely due to the work of the late Professor P R Kirby, whose researches into the musical instruments of the native races of South Africa led him into other fields of Africana, including an intensive study of the life and work of Andrew Smith. The Van Riebeeck Society published *The Diary of Dr Andrew Smith,* edited and annotated by Professor Kirby, Volume one (V.R.S. 20) in 1939 and Volume two (V.R.S. 21) in 1940. The Society published *Andrew Smith and Natal,* also edited and annotated by Professor Kirby in 1955 (V.R.S. 36). The definitive biography, *Sir Andrew Smith, M.D., K.C.B. His Life, Letters and Works,* by Percival R Kirby, was published by A A Balkema of Cape Town in 1965. This readable book is so comprehensive and accurate that inevitably the following essay is largely based on it and Smith's own writings. Although Andrew Smith, as a doctor and administrator, became head of the British Army medical service and was knighted for his services and, as a scientist, was elected a Fellow of the Royal Society, he is neglected by modern works of reference. Surprisingly, his achievements do not feature in the new edition of the *Encyclopaedia Britannica.*

The Early Years

Andrew Smith was born on a farm in Roxburghshire, in the lowlands of Scotland, on 3 December 1797. His father was Thomas P Smith, a shepherd, who later moved to Hawick, near Edinburgh, where he established himself as a market gardener. His mother's maiden name was Grace Tait, said to have been "a woman of great mental power and Christian worth." Andrew was their eldest child — he had one brother and three sisters — and his parents, in true Scottish fashion, decided that their elder son should have an education that would enable him to become a professional man. On leaving school he was apprenticed to Dr Walter Graham of Hawick and in 1813 was enrolled as a medical student at Edinburgh University. As was the custom in those days he attended University during term-time and assisted Dr Graham in the long summer vacation. He spent only two academic years at Edinburgh and then, although not yet a qualified doctor, applied for admission to the medical staff of the army. In London he appeared before the Army Medical Board, acquitted himself well and was

appointed Temporary Hospital Mate on 15 August 1815. Smith was sent to Chatham for training but during his three years there was allowed to study in London to improve his qualifications and on 14 March 1816 he was gazetted Hospital Assistant. Sir James McGrigor, then Director-General of the Army Medical Department, was much impressed by Andrew Smith at his first interview and continued to watch his progress with interest and to help him whenever possible. Sir James ordered him to Edinburgh to join the 79th Highlanders in 1818, but his military duties were purely nominal and for the next two years he was able to attend lectures at Edinburgh University and so complete his medical degree. He received his MD degree in 1819, having written his thesis in Latin and defended it before the examiners in the same language. His military service now began in earnest and postings included short spells in Quebec, Nova Scotia and Malta.

Arrival in South Africa

Late in 1820 Smith was ordered to the Cape of Good Hope, arriving at Simonstown on 12 August 1821. After two weeks in Cape Town he was sent to the Eastern Frontier, arriving at Algoa Bay on 3 September. He reported to Captain Francis Evatt at Fort Frederick, who instructed him to proceed to Grahamstown, where he was to be attached to the Cape Regiment which, a few years later, became the Cape Mounted Riflemen. His medical duties were not restricted to Grahamstown and he travelled extensively on the Frontier, making many friends among the Settlers, notably Thomas Philipps and his family. Early in 1823 he was invited to act as District Surgeon in Grahamstown whilst continuing to carry out his military duties. Smith accepted the temporary post and immediately wrote to the Landdrost (Harry Rivers) asking that the Government supply him with medicines. Rivers supported the young doctor's application and in his letter to the Colonial Secretary wrote that some Settlers were unable to pay for attendance and medicines. He wrote "It can of course only be intended to afford medicine gratis to such as would not have the means of paying, and the issue would be made on my Order, at the same time the present supply might be made the foundation of a general Dispensary in Graham's Town where Medical advice might be given gratis at certain hours to all persons, and the medicine prescribed could be obtained on payment according to the established Table, which rate will possibly cover the expense of the gratuitous supply to the Poor." Thus Andrew Smith played a prominent role in the establishment of an official free dispensary in Grahamstown in 1823, probably the first in South Africa.

Smith acted as Grahamstown's District Surgeon until 5 December 1823 and shortly thereafter was sent to Fort Willshire, where he was present at the Fair in August 1824 and wrote an account of it. He was at the Fort for the greater part of 1824, attending to his medical duties among the soldiers, the few civilians in surrounding districts and the local Natives.

There was plenty of leisure for his scientific studies. When sent to Fort Willshire he was instructed to befriend the Native people, to study their customs and to observe their attitude to the Government. He found the manners and customs of the Xhosa people a fascinating study and entered on it with

enthusiasm. During the year he made copious notes on all aspects of their life — social structure, birth, marriage and death customs, witchcraft, medicine, attire — and many other subjects. These notes have been preserved and are now in the South African Musuem, Cape Town. He was very successful in obtaining the confidence of these peoples and told "The Select Committee on the Kaffir Tribes" in 1851 that "in 1824 and 1825, I had such an influence over the frontier Kafirs that I could have almost raised them against their Chiefs."

As a country boy Andrew Smith had acquired a love of nature and, being unusually observant, possessed a fund of knowledge of animal and plant life. At Chatham this interest was encouraged by Sir James McGrigor, who urged all young doctors and aspirant doctors under his command to study botany, zoology and geology. To this end he established a museum at Chatham to which army doctors were asked to send specimens. Sir James McGrigor's special interest in Andrew Smith was due in no small measure to the young man's keenness on natural history. His selection by McGrigor for service at the Cape was due to the fact that in addition to his personal and medical qualifications, he was a zealous and knowledgeable naturalist. Smith's years on the Frontier provided him with ample opportunity for the study of the strange animal life of the area and for the collection of specimens. While still in Grahamstown, several Hottentots were brought to him suffering from snake-bite. He told the friends of these patients that to effect a cure it was necessary for them to bring him specimens of the snakes that had caused the poisoning — by this means he obtained many specimens! He studied the habits and mentality of baboons and even dissected a whale that had been washed up near the mouth of the Great Fish River. Lord Charles Somerset, the Governor of the Cape of Good Hope, accompanied by the Secretary to the Governor, Sir Richard Plasket, visited Grahamstown early in January 1825 and stayed well into February. Andrew Smith met them and urged the establishment of a scientific journal and a museum for the preservation of specimens illustrating the natural history of the country.

Superintendent of the South African Museum

The two men were much impressed by Smith's proposals and soon after his return to Cape Town, the Secretary announced by a notice in the *Cape Town Gazette and African Advertiser* of 11 June 1825 that the Governor had decided to establish an institution to be known as "The South African Museum", for the reception and classification of various objects of the animal, vegetable and mineral kingdoms which are found in South Africa; that he had nominated Dr Andrew Smith to be Superintendent of the institution; and that it was to be accommodated in an apartment in the Public Library. Smith moved from Grahamstown to Cape Town early in 1825 and lost no time in starting work on the new museum. On 25 June 1825 he wrote in the *Cape Town Gazette*, appealing for support and donations of specimens, particularly living specimens, and stated that lists of donors would be published monthly in the *Gazette*. The first of these lists appeared on 8 July 1825 and included over nine hundred specimens. Among the donors were many well-known South Africans: His Excellency the Governor (1 quadruped and 4 various), the Rev George Thom of Caledon, Baron Ludwig

(547 specimens), Dr Fearon Fallows, the first Astronomer Royal at the Cape (who travelled on the same ship as Smith when coming to the Cape), who became a firm friend of the young doctor and of the Museum; and Alexander Jardine, a fellow Scot who was librarian of the South African Public Library, in which building the Museum was housed. Smith and Jardine seem to have got on well together and were associated in the proposed establishment of the Literary and Philosophical Society. In August 1825 the Governor appointed Fearon Fallows and Smith as additional members of the Committee of the South African Public Library.

The Superintendent of the Museum received no salary; he was still a full-time Army doctor (promoted to Assistant Surgeon 98th Foot, 27 October 1825 and Staff Assistant Surgeon on 23 February 1826), but he must have devoted practically all his time to the Museum. He not only organized and classified the objects in the Museum and made collecting excursions in the vicinity of Cape Town, but corresponded extensively with possible donors, including the Rev Robert Moffat at Kuruman. He wrote letters to the *Gazette* asking for information on scientific subjects, compiled a *Descriptive Catalogue of the South African Museum,* and *Instructions for Preparing and Preserving the Different Objects of the Animal, Vegetable and Mineral Kingdoms.* These were the first and second publications of the Museum. He sent papers embodying his research to the Zoological Society, the Linnean Society and to the *Zoological Journal.*

Lord Charles Somerset wrote to Lord Bathurst, Secretary of the State for the Colonies, asking permission to pay a salary of £200 per annum to the Superintendent of the Museum. This request was refused and Smith continued in an honorary capacity until 1837. Not only was he unpaid but his requests for paid assistance were always refused. He asked Government to appoint a taxidermist and suggested Joseph Donovan as a suitable person. Donovan was an 1820 Settler who, having failed at farming, was living in Grahamstown during Smith's stay. He was, wrote Smith, "well versed in the art of preserving objects of the animal kingdom in consequence of having for many years of his life been employed in such occupations as assistant to his father, an eminent English author and collector." Smith further stated that he possessed considerable zeal and enthusiasm and that he was "a very good Copper-plate Engraver, Carver, and Jeweller, etc." Another of his requests was for a museum artist to make drawings of specimens which he feared would lose something of their natural characteristics through preservation. It was suggested that young G H Ford be appointed Honorary Painter to the Museum, and that he be paid for his drawings. These two reasonable requests were turned down by the Government.

Dr E L Gill, a later Director of the Museum, published "A Short History of the South African Museum" in the issue of *SAMAB* for June 1940. He wrote that the Museum had "an early and promising start in the hands of a man of exceptional talent and energy." He continued: "Under Andrew Smith the museum started on excellent lines . . . in addition to being an exceptionally capable man of affairs, Smith was a gifted naturalist with a thoroughly scientific outlook, yet from the first he aimed at interesting and instructing the public and to that end began the publication of popular catalogues of the contents of his

museum . . . If he could have continued to preside over the museum it had a good chance of becoming a model institution of its kind. But even before he left South Africa in 1837 his official duties, and especially his long journeys into the interior, had interfered with his care of the museum . . . But most of us have seen the melancholy results of leaving a natural history collection to look after itself, without either a paid and responsible curator or the services of an amateur with the requisite knowledge, leisure and sustained enthusiasm." Gill said that after Smith, the Museum entered upon "a quarter of a century of obscurity." It was resuscitated in 1855 by that enlightened Governor, Sir George Grey, and E L Layard who was Curator from 1855 to 1872.

Smith was one of the principal founders of the South African Institution, established in 1829 to investigate the geography, natural history and general resources of South Africa, and at its first meeting was elected joint secretary. The Institution decided to publish a journal which would include the more interesting papers read at its monthly meetings. The first issue of *The South African Quarterly Journal* appeared in February 1830. No editor's name was given but it is generally assumed that Smith was its first editor. After the first four quarterly issues, there was a gap of a year and then number 5 was published for October 1831. Two years later, in October 1833, a new series started, which included four quarterly numbers and a final issue, for December 1836, which appeared in 1837. *The South African Quarterly Journal* was of great importance to South African science and has become a very rare item of Africana. Smith's major contributions were "A Description of the Birds inhabiting the South of Africa" (four instalments), "An Epitome of African Zoology" (ten instalments) and "Observations relative to the Origin and History of the Bushmen". His ornithological contributions were reprinted by the Willughby Society in 1880 in a volume entitled *Sir Andrew Smith's Miscellaneous Ornithological Papers*, ed. by Osbert Salvin, M.A., F.R.S. The editor wrote: "Few papers are less accessible to ornithologists than those published by the late Sir Andrew Smith prior to the issue of his great work 'Illustrations of the Zoology of South Africa'. The *South African Quarterly Journal* wherein most of them appear . . . has now become very scarce, and few complete copies are preserved in libraries at the present time." (There are complete sets in the South African Public Library and the Port Elizabeth Public Library.)

Diplomatic Duties

Although no negrophilist, Smith was a fair-minded man who would listen to both sides of a question. This he had proved in his dealings with Gaika, an important Xhosa chief, when he was on the Frontier and he did not hesitate to side with him in a dispute with the Colonial authorities when he thought that the chief was in the right. On the Frontier he had earned a reputation for being useful in negotiations with the Natives and accordingly, on several occasions, he was commissioned by the Governor to report on the attitudes of different tribes while on his scientific expeditions.

In 1828 the Acting Governor, Sir Richard Bourke, sent him to Namaqualand to obtain information about tribes beyond the Colonial boundary, to ascertain

their attitudes to the Colonial Government and to suggest any desirable alterations in policy. The expedition was really ethnographical and political, but as his instructions were secret it was ostensibly scientific and, of course, the collection of natural history specimens was not neglected. He was away for eleven months, from May 1828 to April 1829, travelled extensively in Little Namaqualand, crossed the Orange River and spent some time to the north of it collecting specimens and information about the Hottentots and Bushmen. On his return to Cape Town he submitted a report on the tribes to Sir Lowry Cole, who had succeeded Sir Richard Bourke as Governor. It is clear from the report that Smith favoured a policy of *detente*. In order to relieve tension on the border he advocated enlistment of the more enlightened chiefs to be allies of the Colonial Government and that a Commissioner be sent to represent the Government beyond the boundary, whose duty would be to explain the Government's policies and intentions to the chiefs .

A few weeks after his return from Namaqualand, Smith wrote a long, wordy letter to the Governor, urging that an expedition be sent to explore Africa south of the equator. He proposed that the expedition last for about ten years, offering to lead it or, if necessary, to undertake it single-handed! Sir Lowry Cole was impressed and is said to have given his support but nothing came of it.

Late in 1830, Smith was ordered to join his regiment, the 98th Foot, in Grahamstown. Instead of the customary sea voyage he travelled overland, enabling him to visit the Cango Caves. His military duties were light while stationed at Grahamstown and Algoa Bay, and he had plenty of time to devote to scientific studies and collecting. Although he had relinquished secretaryship of the South African Institution and no longer edited the Journal (the *South African Quarterly Journal),* he continued to take a lively interest in its work and affairs, corresponding with members on scientific matters. He wrote an article on the classification of animals and the naming of new species for the October 1831 edition, and in the same issue it was reported that "a collection of specimens sent by Dr Smith was presented, consisting of 828 articles, of which 119 were ordered to be added to the Museum."

Visit to Natal

Disturbing reports of events in Natal were received in Cape Town towards the end of 1830 but at the same time a message arrived from Dingaan, the Zulu chief, saying that he wished to live in peace with neighbouring nations, that he wanted to trade with the Cape Colony and would like to receive a missionary to instruct his people. Sir Lowry Cole wrote to the Government in London asking permission "to send some person in whose judgement I can place full confidence, and one who can have no interested motive for deceiving the Government, to ascertain the real wishes of Dingaan, the Zulu Chief, as well as the nature and capabilities of his country." Sir Lowry's request was granted and Andrew Smith was instructed to go to Natal. Again he was to undertake a diplomatic mission for the Governor, the overt purpose of which was scientific. To accompany him Smith chose Lieut William Edie of the 98th; Smith's batman, John Minton; and Edie's batman, James Terry. He also took with him two young

Albany farmers, William Parkins and Hermanus Barry. Before leaving, Smith was asked by the Drège brothers if they might join his party, to which he agreed. These young Germans were professional collectors who sold their specimens to museums in Europe. Carl Friedrich Drège had worked as a druggist in Cape Town but later joined his younger brother Johann Franz on collecting expeditions. J F Drège, who had been trained as an horticulturist in Germany became a well-known botanist, believed to have been the first to make a serious attempt at classifying the Cape flora according to geographical distribution.

Smith and his party left Grahamstown on 8 January 1832, and two days later was joined by the Drège brothers near present-day Peddie. Carl Drège, who kept a journal, gives details of the personnel and transport. There were Dr Smith and his servant, Minton, a good shot and a taxidermist; Lieut Edie; Terry and five Hottentots; Parkins and Barry and four Hottentots; the two Drèges and four Hottentots. Smith had two wagons and twenty-four oxen, Barry and Parkins a wagon and fourteen oxen and the Drèges a wagon and fourteen oxen. Smith had five horses and the Drèges two. There were also several dogs. They left their meeting place (Peddie) on 11 January and the next day crossed the Buffalo River near Brownlee's mission station, later King Williams Town. They remained there for three days and then went on to the Kei River, which they crossed at the old drift and found themselves in Tembuland. At this halt a Native stole a brake-shoe from Smith's wagon. He commented on the begging and thieving propensities of the Natives. Smith, as leader, set guards and there were four watches of two hours each night, from 10.30 pm until daybreak, comprising "one Christian and 2 Hottentots", as Carl Drège expressed it, Smith taking his turn with the rest.

Near Butterworth, the mission station of the Rev John Ayliff, who was away at the time, Smith visited Hintza, the Xhosa chief, with whom he discussed relations between the Xhosa and the Colonists. Smith recorded that Hintza "has 8 regular wives and several concubines; 30 children. He is an elderly man and rich in cattle." The party continued its journey as far as the Bashee River, then in flood, where they were forced to wait three days before crossing. "The Caffers here", wrote Smith, "are very troublesome and great thieves." After negotiating many steep hills and rivers they arrived at Bunting, the mission station of the Rev William Boyce, who was away in Grahamstown. Smith visited the nearby kraal of Faker, the chief of the Pondos, to ask permission to travel through his country (thereby enabling him to carry out the diplomatic part of his mission). He made notes — mainly ethnographical — on the Pondo. Approaching the Umzimvubu River the country became mountainous and the road difficult and dangerous for wagons. For three days, because of storms and rain, they remained outspanned on the heights above the Umzimvubu and then made the perilous descent to the flooded river. Here the crossing was opposed by the Pondos but Smith armed his party and forced his way through, with the Pondos looking sullenly on. The crossing was made at the Ebb and Flow Drift. "When we crossed", wrote Smith, "the oxen had all to swim, the water reached considerably above the sides of the wagons, and the strength of the stream nearly carried one away." The route continued through the Lusikisiki country and they outspanned at the Mateku Falls, the "Waning Fall" of Allen Gardiner, who visited and sketched the waterfall a few years later.

In Professor Kirby's biography of Smith he wrote "On 27 February (1832), when the party had reached the Umtamvuna River, now the boundary of Natal, Smith wrote to the editor of the *Graham's Town Journal:* 'We have been much kept back by the rains, and you will be surprised when I tell you that for the last six days we have had occasion to cross a large stream almost every half hour while travelling. Indeed there is certainly in this part of the country too much water, for many places are nothing but extensive marshes, which neither cattle nor wagons can pass. We calculate on being at Natal in six days, and then, after a delay of a few more, we shall proceed towards the residence of Dingaan.'

Kirby continues "Smith was far out in his estimate of the time that it would take him to reach Port Natal, for it actually took him another 30 days. They had to depend exclusively on their own efforts during this difficult part of their journey, for the whole country from the Umzimvubu to Port Natal had been completely devastated by the Zulu despot Shaka, the predecessor of Dingane, to such an extent that Smith and his men did not encounter more than 50 Natives on their way through it."

When they reached the Umzimkulu it was flooded and, wrote Smith, "after waiting for eight days we were forced to convey our baggage, etc., over upon a raft, and then drag the empty wagon across by means of two spans of oxen . . . The empty wagons were drawn through early in the morning. Two capsized in the water without being damaged. The loads were taken over on a raft, the oxen swimming through. A sick ox of Barry's was drowned." Not many miles from Port Natal they met Henry Francis Fynn and James Collis, both of whom were fluent in Zulu and offered to accompany Smith to Dingaan's kraal.

Meeting with Dingaan

On 28 March 1832, Smith, accompanied by Edie, Minton and Terry (with Fynn and Collis acting as interpreters and guides), left Port Natal for Dingaan's kraal at Umgungundhlovu, not many kilometres from present-day Eshowe. Dingaan, who had been kept informed of their approach, welcomed them warmly and treated them hospitably during the six days they spent with him. He was anxious to make a good impression on the emissary of the Governor of the Colony and, at first, Smith was favourably impressed. However, while at the kraal he saw much evidence of the brutality of the Zulu ruler. From what he had seen and from his discussions with Dingaan, Smith became a strong advocate of Britain settling Natal as a colony and in his reports and correspondence advanced arguments in favour of this course. Smith wrote: "From various conversations I had with Dingaan himself, whilst residing in his kraal, I am firmly persuaded that he would be ready and willing to enter into an alliance with the Colony· for, if he is to be believed, he wished nothing so much as that he could continue to enjoy the advantages of our trade. He requested me to inform the Governor on my return to the Cape that he hoped nothing would occur that would interrupt the existing connexion; and, as an earnest of his respect and regard for the white people, he promised that he would never interfere with any of the tribes which enjoyed the friendship of the colony." These sentiments were not to be believed for of Dingaan as a person, Smith wrote: "It is impossible for men to feel attachments

to such a monster; and it appears to me an act of great inhumanity to permit his murdering, torturing and destroying even hundreds of his own subjects in the course of a day, when only the most trifling exertion would be required to effectually restrain him. As characteristic of this system of proceeding I may only mention that when I was in his Kraal I saw portions of the bodies of his own wives which he had only a few days previously put to death merely for having uttered words which happened to annoy him."

After leaving Dingaan's kraal Smith and his companions return to Port Natal, where he spent four days collecting specimens and obtaining from Fynn information on the manners and customs of the Zulu people. The return to Grahamstown followed much the same route as the northward journey.

Shortly after returning, Smith wrote to Sir James McGrigor detailing some of his scientific experiences. Among other things he wrote: "I lose no time in making you acquainted with my successes during a late journey to Port Natal and the Zoolah Country. On the expedition I was absent about six months, and though constantly surrounded with difficulties and dangers, yet I have been more than compensated for all, by the great additions I have been enabled to make to my natural and geographical knowledge . . . Every department of both the animal and vegetable Kingdom offered much to attract attention, and I did not return without making an addition of many new species, particularly of reptiles and fishes . . ."

Andrew Smith and Natal : documents relating to the early history of that Province, edited and annotated by Professor P R Kirby, includes Smith's and Drège's combined itinerary of the 1832 journey, notes on the Native peoples made by Smith at the time and much else relating to Natal and Andrew Smith. This is an important source-book. In addition, two chapters of Kirby's biography of Smith are devoted to the Natal journey.

Smith was not long in Grahamstown before his military duties included a visit to Cape Town. While there he obtained permission to return to the Frontier by road. He was accompanied as far as Knysna by Lieut T H Duthie, a keen ornithologist, who was courting one of George Rex's daughters, whom he later married. They set off on horseback on 10 October 1832 and kept to the coast as far as possible. Near Caledon they called on Major C C Michell where Smith gave medical attention to Michell's wife. At Knysna, Smith stayed a few days with George Rex and then continued his journey to Algoa Bay without Duthie.

Smith's period of service on the Frontier was now drawing to a close. Recalled to Cape Town, in April 1833, he left Port Elizabeth and travelled to Cape Town by ox-wagon, calling on Colonel Cuyler at Uitenhage.

Expedition to the North

The South African Institution did not prosper after Smith left Cape Town in 1831 and it was amalgamated in July 1832 with the South African Literary Society under the title "The South African Literary and Scientific Institution". Smith attended his first meeting of the newly-constituted Society on 1 June 1833, when it was resolved that an expedition be sent to the north and that Dr Andrew Smith be made Director of the Expedition. However, as the Institution was unable to finance it, it was proposed that a company be formed, whose

shareholders would provide the necessary money. The fourteen gentlemen present at the meeting all agreed to take shares, priced at £3 each, Smith taking ten and Lieut Edie six. The fourteen members were constituted a provisional committee, with J H Neethling as Chairman and J C Chase as Hon Secretary. A prospectus was written, printed and circulated and a meeting of the company, to be known as "The Cape of Good Hope Association for Exploring Central Africa", was called for 24 June 1833. At this meeting presided over by the Governor, Sir Lowry Cole, it was reported that the names of 141 subscribers, who had taken 179 shares, had been received. There was some difficulty about Smith being given leave but Dr J W Fairbridge, District Surgeon, offered to carry out Smith's duties in town during his absence, and Dr John Murray, senior military doctor in the Colony, agreed to undertake his duties in the country areas: thus his leave was granted.

The Rev Dr Burrow and John Centlivres Chase were elected joint-secretaries of the Committee of Management and a sub-committee was appointed to make preliminary arrangements for the expedition and for a Finance Committee to collect more money. The latter was successful in its effort; more subscribers were enrolled and a donation of £300 received from Mr Robert Jameson of Liverpool, who was interested in African exploration. The sub-committee worked very hard, particularly Smith and Chase, and by February 1834 its work was so far advanced that it was able to lay its proposals before a general meeting of subscribers, at which the new Governor of the Cape, Sir Benjamin D'Urban, took the chair. The objects of the expedition were set out as being "to enlarge our Geographical Knowledge of the extensive and unknown regions to the northward of this Settlement; to obtain Scientific Information, especially as regards the branches of Meteorology, Geology and Magnetism; to collect Botanical Specimens and those of Natural History; and to ascertain what prospects the productions of the country and the disposition of the Native Tribes hold out to Commercial Enterprise." Arrangements were made for the personnel (to total about forty), for transport and for stores, weapons, etc. Particular attention was given to scientific instruments, with which the expedition was particularly well equipped, thanks to the expert assistance of the astronomers, Dr Thomas Maclear and Sir John Herschel, both of whom were members of the Committee of Management. The goodwill and active interest of the Governor smoothed the path for the Committee.

Professor Kirby in his Introduction to *The Diary of Dr Andrew Smith*, v.I, p. 39, writes: "Before he left Cape Town, Smith received a letter from Sir Benjamin D'Urban's secretary, instructing him to do all in his power to obtain the goodwill of the principal chiefs, inviting him to enter into negotiations with them on behalf of the Government, and giving him a number of presents which he might distribute to deserving chiefs. These presents consisted of twelve ornamental cloaks, twelve medals with chains and twelve large looking-glasses. With a few exceptions, details of the distribution of these presents are not given in the Diary. According to Theal, Smith gave medals to the chiefs Moshesh, Sikonyela, Moroko, Lepui, Peter Davids, Carolus Baatjie and Gert Taaibosch, which they regarded as 'assurances that the colonial government recognied them as the rightful rulers of their respective communities.' In order to make a distinction

between the more and less powerful chiefs, Dr Smith presented to Moshesh, Sikonyela and Moroko each an ornamental cloak. To Mzilikazi, however, he gave a medal, two mirrors and two cloaks."

It had been decided that the assembly place should be Graaff-Reinet and that the expedition start from there on 15 July. Unavoidable delays kept Smith at Graaff-Reinet until 12 August when at last a start was made. The personnel of the expedition comprised:

Dr Andrew Smith, Director.

Captain William Edie of the 98th Foot, Deputy Director. (He had been with Smith on his journey to Zululand).

John Burrow, Surveyor and Astronomer.

Benjamin Kift, a trader, who had been on an expedition to Bechuanaland with A G Bain in 1825.

George H Ford, an artist who had been associated with Smith in Cape Town and who made most of the illustrations for this book.

Charles D Bell, an artist who later became Surveyor-General of the Cape, and who made a magnificent series of drawings of places and events on this expedition. (These are now in the Africana Museum, Johannesburg).

John Minton, Dr Smith's batman, who went with him to Zululand.

James Terry, Capt Edie's batman, who was with him in Zululand.

Corporal George McKenzie, of the 72nd Foot, who was drowned in the south-eastern part of present-day Orange Free State on 25 September 1834.

H Cockkrell C Hastwell, H Lowe and E Tennant, all British soldiers.

Five Hottentots, some of them members of the Cape Corps.

About 22 Hottentots recruited in Graaff-Reinet.

While in Graaff-Reinet, Smith made the acquaintance of the Rev Andrew Murray and Andrew Geddes Bain, both of whom travelled with the expedition for part of the way, Bain as far as Philippolis and Murray to Colesberg. A G Bain was an experienced traveller, who had already been on two hunting and trading journeys into Bechuanaland and in 1829 had penetrated deep into the Transkei in an unsuccessful effort to reach Natal. When he left Smith at Philippolis he was on his way to Mzilikazi's country to obtain live animals and skins for American buyers. As a result of his Griqua guides stealing cattle from Mzilikazi, he was attacked by a Matabele impi and lost all his goods and wagons but managed to escape with his life. When Smith visited Mzilikazi he tried, unsuccessfully, to persuade him to return Bain's wagons. On his return to Graaff-Reinet, Bain wrote a long letter to "J C Chase Esq., Secretary to the Association for exploring Central Africa" dated 18 December 1834, in which he described his journey with Smith and his later perilous adventure. Chase published this in *The Cape of Good Hope Literary Gazette* for February 1835 and it was included as an appendix in Andrew Steedman's *Wanderings and Adventures in the Interior of Southern*

Africa. 1835. V.2, pp. 225-53. Of Smith's expedition Bain wrote: "You are aware that I accompanied the Expedition under Dr Smith as far as Philippolis, and if the testimony of such a humble individual as myself could avail any thing, I can scarcely let this opportunity pass of congratulating the Committee on the happy and judicious choice they have made of the persons composing the party. Every one, from the highest to the lowest, seemed to know his duty, and to do it. Dr Smith is the most indefatigable man I ever met with; nothing comes amiss to him; he sees every thing done himself, and trusts nothing to others. He seemed sometimes even to be ubiquitous, and seldom went to bed before one or two o'clock in the morning. He is, I think, in every respect the very man fitted to lead such an Expedition. Captain E(die) would have a good deal to do to drill all the party, and teach them their various military evolutions. K(ift) is a most useful fellow, and a great favourite of the Doctor. The graphic and Cruickshankian labours of Mr. B(ell), with the delicate and minute products of Mr. F(ord)'s pencil, were the subject of daily admiration to us all. The astronomer, by which familiar appellation that promising young gentleman, Mr. B(urrow), was known, had no sinecure situation. He will, I think, be a bright fellow. The men also, in more subordinate grades, are an orderly, well-behaved set of people, and some of them very clever and well educated. Indeed, nothing can surpass the good order and harmony that prevails throughout the whole party; and if they do not ultimately succeed in all their undertakings, I do not think it will be the blame of any one composing the Expedition.

"Their manner of living was also exceedingly simple, 'Nae kickshaws, or puddins, or tarts, were seen there!' but at ten o'clock, when the bell rung for breakfast, we entered the tent, each armed with his knife and fork, where we found the table (I beg pardon, the mat, I mean) spread on the floor, on which was placed a hearty meal of beef or mutton, or what game the day produced, cooked in the plainest manner; which, with bread or rice, and a tin pint of tea, baled out of a camp kettle, formed the homely but substantial repast. Around the inside the tent we all squatted in the true oriental style, and every one ate with an excellent appetite. At sunset we had a repetition of the same fare, and sometimes (let not the Temperance Society startle) when there was nothing particular doing, we indulged in a cup of punch, and songs and glees frequently concluded the labours of the day."

Throughout this expedition Smith kept his diary meticulously. He recorded the distance travelled every day, described the country through which they passed, the vegetation, the geological formation, the climate, the animals and the tribes encountered. While he recorded many of the customs of the different peoples as he saw them, he was also interested in their history and collected much information on this subject from chiefs and missionaries. The diary shows that his interest was about equally divided between the Native tribes and natural history; he also records many of his diplomatic conversations with chiefs. All this is valuable but perhaps more interesting are the descriptions of everyday events and of the people visited or met with on the road. Sunday observance was strictly adhered to throughout the expedition and Sunday prayers read by missionaries, if they were available; if not, by Charles Bell or perhaps some other member of

the party. In the first few months Smith's diary records that Bell read the prayers, thereafter he makes no mention of which member of the party undertook this office but merely says that "service was performed as usual" or words to that effect. They did not travel on a Sunday, it being the day of rest; nor would they barter with Natives on the Sabbath. Neither was there hunting on this day, although on Sunday 6 September 1835 Smith wrote, "Rested today. Sent out Piet and Botha contrary to established custom to endeavour to get some game for the number of starving Caffers that were with us. They shot several rooyebok. Botha in crossing some reeds near the edge of the river after a wounded buffalo startled four lions, two females and two small cubs." George Ford made sketches of the birds and animals caught or observed: many of the plates in *Illustrations of the Zoology of South Africa* were drawn from sketches made by him while on this journey. Charles Bell made a very full pictorial record of the expedition, sketching people, places and events and the attire and customs of the Native peoples. One hundred and forty-nine of these original sketches are now in the Africana Museum, Johannesburg; sixty-one were reproduced in Kirby's edition of *The Diary of Dr Andrew Smith*.

During the first part of the journey Smith met many interesting people, both White and Native. A few days after leaving Graaff-Reinet he was accompanied to the top of the Compassberg by Andrew Murray and Charles Lennox Stretch. For part of the way from Graaff-Reinet, Lieut Donald Moodie, the Protector of Slaves and later compiler of *The Record,* travelled with them and became friendly with Smith, who later corresponded with him. Smith gives a vivid description of the Nagmaal at Colesberg and Bell made an interesting sketch of the scene. After a stay of a few days they left Colesberg on 26 August and arrived at Philippolis two days later, where they were kindly received by the Rev G A Kolbe, the missionary with the Griquas. They camped close to Philippolis and stayed there from 28 August to 10 September; here Smith met the Griqua leaders, Cornelis Kok, Adam ("Dam") Kok, and Hendrik Hendriks (Secretary to the Griqua government) and had discussions with the older men about the state of the district and neighbouring tribes. He also met young Adam Kok whom Rev Kolbe described as a firm and determined person who, during the short time he governed for his father, had accomplished more than for years before; that he administered justice most rigidly, and even went in opposition to his own relations. Smith described him as a sensible-looking man of about 24 years of age, rather taciturn and diffident. On 1 September 1834, Smith attended a meeting of the legislative council of the Griquas and addressed them on the understanding that should exist between their people and the Colonial Government. He wrote in his diary that Adam ("Dam") Kok "comprehended the tendency of the suggestions I offered more thoroughly than any of the others but was less ready with remarks than the others". Yet in a letter to Sir Benjamin D'Urban, written a fortnight later, he said that "Old Kok appears to me a very undecided and weak person." Continuing his description of the Griqua council proceedings, Smith recorded in the diary: "Hendrick Hendricks (who could read and write) was the most pertinent in making sensible remarks, and the most clear in stating objections. The others occasionally offered very fair arguments against measures I suggested, and I was struck with the great caution they evinced in considering

questions. They appeared as a body to be well calculated to manage a small community such as theirs is, and a very fair proportion of intellect and sagacity was displayed in their various observations . . . Not one seemed to believe that they could exist as a community without the succour of the Colonial (Govt.) and all seemed ready and willing to perform any duty which might be required of them . . . They complained bitterly of the farmers from the Colony being permitted to establish themselves upon their grounds, and dwelt strongly upon statements which had been made to them by the farmers touching their want of just claim upon the country, it having been the country of the Bushmen, on which account they wished it to be understood that they, the farmers, were as much entitled to use it as the Griquas."

From Philippolis a detour was made into Basutoland, which lasted from 10 September to 17 December 1834. Smith did not often mention the sketches made by Ford and Bell but on 30 August he wrote "Mr Ford exerted himself to finish drawings of toads and lizards" and on 19 November "Remained, in consequence of its being desirable to have representations of several lizards, frogs and snakes procured on the mountains previous to death." The observation and collection of animals continued throughout the journey and mention is made in the diary of many lions, eland, hartebeest, oribi, rietbok, rheebok, baboons, an abundance of toads and frogs, and many species of birds.

Moshesh

The party stayed for a week at the Verhuil Missionary Institution (now Bethulie) and Smith obtained much information about the tribes residing in the area from the Rev J P Pellissier of the Paris Evangelical Society. It was a mixed community, there being villages of Bushmen, Bechuanas and Basutos. Lepui, the chief of the biggest village (Bechuanas) was given one of the medals. Due to the drowning of McKenzie, and the bad weather, slow progress was made after leaving Bethulie on 23 September and they did not reach Morija until 12 October, where they were cordially welcomed by the Rev Eugene Casalis of the Paris Evangelical Society. At Morija, Moshesh, Paramount Chief of the Basuto, visited Casalis in order to meet Smith and there was much discussion of the affairs of the Basuto nation. On 16 October he records that Moshesh "with many of his people and some of our party went out to hunt elands but killed none." Bell made a sketch "A day's sport with Moshesh 1834" in which the animal run down and speared by a Native is a quagga. Two days later, accompanied by Casalis, Smith left for Thaba Bosigo to visit Moshesh in his mountain stronghold, where a medal for future good conduct was presented to the Basuto leader. After leaving, the party went in a northerly direction to Lishuane, a Wesleyan mission station, where Smith had discussions with the Rev J Edwards, and then on to Umpukani, another Wesleyan station where the Rev T Jenkins ministered to a settlement of Korana people. On 8 November they went to the kraal of Sekonyela (a Mantatee) near present-day Ficksburg, and presented a medal to him. They travelled a little eastwards and decided to return to Philippolis, calling at Thaba'Nchu where they met the Rev J and Mrs Archbell. The next day was spent with Archbell, who gave Smith information on the early history of the Baralong. They remained at Thaba'Nchu from 27 November to 4 December and had discussions with and

presented a medal to Moroka, chief of the Baralong. They reached Philippolis on 17 December, where Smith wrote a long report to Sir Benjamin D'Urban and sent to Cape Town specimens collected up to that time — 491 birds, 59 quadrupeds, 188 reptiles, 211 geological specimens, 131 drawings and over 120 domestic articles used by the various tribes encountered. Captain Edie, who had been wounded in the hand in a gun accident, returned to Cape Town and Benjamin Kift became second-in-command.

The expedition left Philippolis on 26 December and reached the Vaal River, in the region of present-day Douglas, on 6 January 1835. The river was in flood and they did not cross until the 16th, when they made a difficult crossing and one of the wagons overturned. Kirby, in his biography of Smith, says that it was Ford's wagon and that Ford was rescued from the river. Bell sketched this incident and also made a sketch of the pack-oxen crossing.

Robert Moffat

They arrived at Kuruman, the Rev Robert Moffat's mission station, on 30 January 1835, which became the party's headquarters for nearly four months. It was a very busy time for Smith, collecting natural history specimens, practising medicine and obtaining from Moffat a wealth of information about the tribes at the mission and in the surrounding country. On arrival he found Moffat suffering from a bilious attack for which he treated him. During the next few weeks he also treated several Natives who had contracted anthrax. His oxen became very sick and some of them died; he turned veterinarian and carried out post-mortems to discover the cause of death. At the end of February the party made a detour to the west of Kuruman, to Heuning Vlei, the Langeberg and to the edge of the Kalahari, visiting en route the French missionary Prosper Lemue at his station at Motito. They were there on a Sunday and Smith wrote: "Not yet having a church built the service is performed out of doors on one side or other of the dwelling house according to the position of the sun; in the evening with the light of a candle." Bell made a sketch of the evening service. Smith hurried back to Kuruman having been informed by a messenger that Mrs Moffat was very ill.

Andrew Smith was a tough, austere man, with a brusque manner, but it seems he had a good bedside manner. After Mary's illness Robert Moffat wrote: "Most providentially Dr Smith just returned . . . and it is impossible for me to give you an idea of his unwearied attention to her. Had she been his own daughter he could not have watched her apparently dying pillow with more affection and care. He cheerfully took a share with me in the night watches when her case seemed almost beyond hope." And Mary Moffat, after her recovery, wrote of him: ". . . how kindly he exercised his skill for our benefit. We found him in all respects an affectionate Brother; tenderness such as his I never experienced before from any but the dearest relatives, and while memory retains her seat the name of Andrew Smith will awaken peculiar emotions in my breast."

Mzilikazi

On leaving Kuruman for Mzilikazi's country the party was joined by David Hume and Robert Scoon, experienced hunters and traders who had been in the

western Transvaal previously. They wished to visit Mzilikazi (Scoon had met him before) and then continue northwards. On the second day they were joined by Robert Moffat, who was highly respected by Mzilikazi and whose presence smoothed Smith's path in his approach to the Matabele king. Moffat remained for two months with the expedition and then returned to Kuruman. On 20 May 1835 they reached the Great Choai, near the present-day Stella Post Office. Here Bell made a sketch of the encampment, which shows eleven wagons (six for the Expedition, two each for Hume and Scoon, and Moffat's one), a cart and four tents. On Sunday, 24 May, they halted at Maritzani, about 100 kilometres north-east of present-day Vryburg, where the morning service was held in Dutch, in English at midday, and Sechuana in the evening!

There were no roads; they trekked across the veld from water-hole to water-hole. Smith continued his collecting and spent much time gathering information on the Native tribes, most of which he entered in his diary. The party travelled along the Molopo River and then turned east to Mosega, past the former Kurrichane and over the Marico River until they reached Mzilikazi's Kraal. Moffat had gone on before to greet the great chief, who said he would welcome Smith. The expedition established its camp close to Mzilikazi's Kraal and remained there from 9 to 16 June 1835. On the first day Smith, accompanied by Moffat, Hume and Scoon, paid a formal call on Mzilikazi who received them cordially in the open. Smith wrote in the diary that when they were seated "a servant carrying a large wooden bowl filled with beef steaks arrived . . . and placed it in front of the king. He asked us to eat, which we all did, and it tasted very well. I asked for a little water. He ordered some beer and it was brought by the same man in a great tin pot. Masalacatzie first drank of it and then handed it to me . . . In the meantime we sent down for Messrs. Kift, Burrow, Ford and Bell and just as we had finished eating they arrived and attacked what remained of the meat." Bell made an interesting sketch of this scene. Mzilikazi visited their camp later in the day and made frequent visits during their stay. He was much interested in the tents and asked that one should be sent to him later; he asked for medicine and Smith gave him "8 doses of salts" which pleased him very much. Smith presented to Mzilikazi the gifts sent by the Governor and the medal which signified that he was an ally of the Colonial Government.

They left Mzilikazi's kraal on 16 June, with guides supplied by the chief, and proceeded east to the Cashan (Magaliesberg) Mountains. For thirty-nine days they explored this area, continuing through the country now occupied by Rustenburg, Hekpoort, Hartebeestpoort, Brits and Saulspoort; they hunted on the banks of the rivers now known as the Magalies, the Crocodile and the Marico, and got nearly as far as present-day Pretoria. Having made a circular tour the party arrived back at their starting point and then went north as far as the tropic of Capricorn, near the Limpopo River where they turned round and started the homeward journey on 4 September 1835. During the tour of the Magaliesberg region Charles Bell made many landscapes, probably the first pictures of the Transvaal. Smith's diary at this period includes much zoological information; for instance on 23 June he wrote: "Required to halt yesterday to prepare the young rhinoceros, etc." and then goes on to describe the dissection of a crocodile.

Return to Cape Town

On the journey south they again called on Mzilikazi, who placed his ambassador and retinue in Smith's care until such time as he reached Cape Town and was able to present them to the Governor. The route from Kuruman to Graaff-Reinet was more direct than the outward journey and they reached Graaff-Reinet on 4 January 1836. Smith recorded: "Towards evening some of the people drunk, but to an extent far short of what I expected." Smith, with his Matabeles, travelled by ship from Algoa Bay to Cape Town, arriving about the end of January 1836. For the next few months he was very busy preparing his reports, attending meetings and working on the specimens. The Governor asked Smith to provide hospitality for the Matabeles who remained for several weeks and he furnished accommodation, bought them clothes and took them to see the sights, his expenses being reimbursed by the Government. He was also instructed to purchase presents to be sent to Mzilikazi. During this time he drafted the treaty of friendship between the Government and Mzilikazi and eventually was present at the signing of the treaty, to which he and Capt J F Alexander, (who later became a famous traveller), were witnesses. He prepared a report on the expedition for the Association, dealing mainly with zoological and other scientific discoveries, which was presented at a meeting of subscribers held on 19 March with Sir John Herschel in the chair. Smith did not consider that trade with the Natives in the north would prove very profitable. *The Report of the Expedition for Exploring Central Africa . . .* Cape Town, Government Gazette Office, 1836, 68 pages, was published for subscribers only and has become an exceedingly rare item of Africana. An exhibition of the huge collection of zoological specimens and Native costume, utensils, weapons, etc., was held in the Museum from 24 to 30 March 1836, and at the same time, in another building, the drawings of Ford and Bell were displayed. In this year Smith became friendly with Captain William Cornwallis Harris, about to start on his hunting expedition to the north, and Charles Darwin who, while in Cape Town as a member of the *Beagle* expedition, had taken some long geological rambles with Smith.

England

On 1 February 1837 Smith sailed for England and did not see South Africa again. In London he unpacked the specimens brought with him. He showed Ford's drawings at a meeting of the Zoological Society and at a later meeting displayed some new and rare species of small quadrupeds. A public exhibition of the collection was on display in the Egyptian Hall, Piccadilly, from 3 July 1837 to June 1838. According to *The Athenaeum,* 8 July 1837, it contained "an extensive and most interesting collection of new, or little known, Quadrupeds, Birds, Reptiles, etc, from the Interior of Southern Africa; together with numerous specimens of the Arts, Manufacturers, etc, of the Natives; and about 400 drawings, illustrative of the Character of the Country, and of the Costumes, Manners, Social Condition, and Religious Ceremonies, of the Inhabitants." At the end of the exhibition the specimens were sold by auction for the benefit of the Association. The sale was not a success and Smith wrote in a letter to Thomas Maclear "I am fearful the proceeds will merely cover the expenses which have

been incurred since I left the Cape, and only then after my own collection was added to it."

Andrew Smith was promoted to the rank of Staff Surgeon on 7 July 1837 and posted to Fort Pitt, Chatham. In 1841 he was further promoted Staff Surgeon (1st Class) and appointed Principal Medical Officer at Fort Pitt where he was responsible for the hospital, the Army Medical School, and the Museum. Although official duties now occupied him almost exclusively, he continued his scientific studies energetically in such leisure time as was available. Sir William Jardine, the eminent zoologist, visited him and in a letter dated 25 May 1842 wrote: "My object at Chatham was to see Dr Smith and the Fort Pitt Collection . . The Cape Doctor (esteemed by those who know him as an eccentric character) after a little search was found in undress, cap, jacket, white (loose) trousers and drab slippers, hands in pockets, picking up some hay which may be a perquisite of the fortress and which the warm weather was slow to make. The Dr is tall, countenance rather sallow and marked by climate, but expressive and showing that energy was at least present, whether always well directed or not is another question. Extremely kind and affable to me . . ." When Smith left Fort Pitt in May 1845, Garrison Orders included the following eulogy: "The Commandant (Col. Sir Thomas Willshire) cannot allow Dr Smith to leave the Garrison without placing upon Record his sense of Dr Smith's zealous and successful exertions to promote the efficiency of the Department over which he has presided for five years, all the duties of which important situation he has fulfilled with so much advantage to the Public Service, so much benefit to the Sick and Invalid Soldier, and so much to Colonel Sir Thomas Willshire's satisfaction, without offering Dr Smith his thanks for the valuable aid he has received from him throughout the recent revision of the mixed duties of the General Hospital and the Invalid Depôt, and his best wishes that the Medical Department and the Army generally may long retain the advantage of Dr Smith's zealous and valuable active services."

Smith remained a bachelor until his mid-forties when he was married in London on 6 March 1844 to Ellen Henderson *(née* Phillips), an Irish lady and a Roman Catholic, widow of an army officer who had died in India. G H Ford, the artist, was one of the witnesses at the wedding, Kirby has little to say about their domestic life, except that when his wife died in 1864 Smith suffered an irreparable loss and embraced her religion. They had no children.

Promotion to Director-General

Sir James McGrigor, still head of the Army Medical Department, appointed Smith to be his Professional Assistant and six months later, on 19 December 1845, he was gazetted Deputy-Inspector-General, a post which he held until 1851. During this period he completed his *Illustrations of the Zoology of South Africa,* particulars of the writing and publication of which will be found elsewhere in this volume. In 1846 he was present at the inaugural meeting of the Hakluyt Society and proposed the motion for the foundation of the Society. Sir James McGrigor, shortly before his retirement, wrote to the Secretary for War: "Before finally leaving office I feel it strongly my duty to make known to your Lordship the qualities of one of the very ablest Officers I have met with in the Department. Several able Medical Officers in succession filled the situation which Dr Smith has

held for last Five years, viz. That of my Assistant in Office, but in none of them have I found a combination of the high qualifications which Dr Smith possesses, his talents and high professional acquirements command the respect of the Body of Medical Officers of the Army, while withal he is a ready and acute man of business habits in whom from my knowledge of his high principle and integrity I could place the utmost confidence. In gratitude to Dr Smith for the able assistance which he has rendered to me, I feel it but justice to him to say this much. I ought not to omit informing Your Lordship that he has never requested me to write you in his favor and I do so now without his knowledge." The War Office abolished the post of Director-General, and Smith was gazetted Inspector-General, as head of the Army Medical Department, on 7 February 1851. On 25 February 1853 he was appointed Director-General. Apart from his medical duties, he gave valuable evidence before the Select Committee on the Kafir Tribes in 1851.

Crimean War

The Crimean War broke out in March 1854 and Smith was the senior officer responsible for medical services during that campaign. He was a superb organizer and acted with admirable foresight but his efforts were frustrated by the lack of co-ordination between the various branches of the army and by inefficiency in some of them, such as transport, on which the Medical Department depended. Nevertheless, criticism of the inadequacy of supplies and appalling conditions in the hospital at Scutari was directed at Smith. Florence Nightingale and *The Times* newspaper were particularly bitter in their attacks on him and his Department. He appeared before the Select Committees set up to enquire into the medical services in the War and his verbal and documentary evidence convincingly exonerated him from the charges against him in the press. After the Committees' reports were made public, most leading newspapers acknowledged that he had acted with efficiency and foresight. *The Morning Post,* referring to the correspondence he had placed before one of the Committees, wrote: "That correspondence . . . not only completely exonerates Dr Smith from the charges which have been so repeatedly and so strongly urged against him, but show that he possessed and exhibited no common share of forethought, sagacity, and systematic arrangement; and that had his representations met with the attention they merited, a great portion of the unnecessary misery and suffering to which our soldiers were exposed would, even under our present defective system, have been avoided." The medical profession showed its appreciation of his work by the award of honours in 1855 and 1856: Honorary Fellow of the Faculty of Physicians and Surgeons of Glasgow, Honorary Member of the Medico-Chirurgical Society of Aberdeen, Honorary Fellow of the Royal College of Surgeons of Edinburgh, and an honorary MD of the University of Dublin. In 1857 he was elected a Fellow of the Royal Society, on the proposal of Charles Darwin; and in 1858 he received an honorary Doctorate of Law from the University of Edinburgh. His two-volume work *Medical and Surgical History of the British Army which served in Turkey and the Crimea,* was published in 1858. A Royal Commission to Inquire into the Regulations affecting the Sanitary Condition of the Army was appointed in 1857. Among other things it was instructed to report

on the condition of army hospitals, the rank, emoluments of army medical personnel, and the efficiency of the Army Medical Department. Smith was a member of the Commission and also gave evidence; many of his proposals were adopted. Florence Nightingale gave evidence in writing. She wrote: "We have much more information on the sanitary history of the Crimean campaign than we have on any other. It is a complete example — history does not afford its equal — of an army, after a great disaster arising from neglect, having been brought into the highest state of health and efficiency." A generous and telling tribute to Smith from his former adversary.

Retirement

Dr Andrew Smith tendered his resignation from the post of Director-General in May 1858, retired on full pay, and the Queen appointed him a Knight Commander of the Bath (Civil Division). Notwithstanding that he had suffered indifferent health for some considerable time, on retirement Smith prepared notes for a work on the ethnology of the peoples of Africa. Although never completed he left five thick volumes of notes, now in the South African Museum. He died at the age of seventy-five on 11 August 1872 and was buried next to his wife in St Mary's Roman Catholic Cemetery at Kensal Green in London.

With his multiplicity of talents as explorer, zoologist, organizer and administrator, medical doctor, and negotiator with Native peoples, Andrew Smith is regarded by many as without peer. As a naturalist he was held in high regard by the foremost scientists of his time; and more recently, when Professor Kirby asked Dr V F M Fitzsimons, then Director of the Transvaal Museum, for his opinion on Smith's work his reply was: "I can say that all workers in systematic zoology hold him in very high esteem and generally regard him as the father of South African Zoology."

Andrew Smith : an appraisal of his contribution to South African Zoology.

No one has studied the life and work of Sir Andrew Smith with more diligence and devotion than the late Professor P R Kirby, who held him in the highest esteem and who said ' . . .his work reflects great scientific precision, combined with keen insight and observation resulting in the most reliable accounts of the fauna of his time' (Kirby, 1965). He also refers to the text in *Illustrations of the Zoology of South Africa* as 'being of a most accurate and exhaustive character' deservedly earning for Smith the designation 'the father of South African Zoology'.

In contrast, there have been acclaimed naturalists whose observations are notoriously inaccurate, among them Le Vaillant, who published his impressive six-volume work *Histoire naturelle des Oiseaux d'Afrique* from 1796-1808. Of the 284 species illustrated, ten are figments of the author's imagination, being unknown to science and 50 are birds which do not occur in Africa (Winterbottom, 1973). Le Vaillant certainly collected birds in Africa but wrote the work long after his return and with inadequate field notes — hence the confusion.

Illustrations comprises some 248 text descriptions with 279 plates and is the end-product of an acute mind, methodical research and an active pen. Smith's first records were published in the *Cape Town Gazette and African Advertiser* during the latter half of 1825 and comprised six lists of zoological and mineralogical specimens which had been donated to the South African Museum shortly after its inception (Kirby, 1942), while his earliest work in taxonomy (now a rare item) was *A descriptive Catalogue of the South African Museum: part I of Mammalia* published in Cape Town by W Bridekirk in 1826. Smith issued an extensive questionnaire in the *Gazette* of December 1825 so that contributors to the museum could give comprehensive information regarding specimens, bearing testimony to his ardour, resourcefulness, thoroughness and insatiable desire for data.

Smith's first zoological description was of a Tree Dassie and appeared in the *Transactions of the Linnean Society* of 1827. He submitted papers to other overseas journals but some of his most important contributions appeared in the *South African Quarterly Journal;* notably "A description of The Birds inhabiting the South of Africa" which appeared in 1830, 1833 and 1835 and which was intended as a definitive work on South African birds but never proceeded beyond the instalments featuring the raptors (Layard and Sharpe, 1875-84). It was also his ambition to write a synopsis of South African zoology but he only completed 10 instalments of 'An epitome of African Zoology' in the *Quarterly Journal* of 1835. Smith's zoological writings culminated in the publication of *Illustrations*, his greatest work, in 1849, shortly after which he was promoted to Inspector-General of the British Army medical department, leaving him little time for zoology.

Between 1827 and 1849 Andrew Smith was responsible for naming and describing many new species in the animal kingdom, most of which descriptions have stood the test of time and have come to be regarded as examples of clarity and accuracy. In assessing his contribution we survey briefly the major classes of vertebrates he studied.

Mammalia. 350 species are currently recognised in Southern Africa of which 27 were described by Smith as being new to science. This record is bettered only by Thomas who worked at the British Museum between 1893 and 1911 and who described 38 species in the museum's collection (many of which do not occur in the Republic of South Africa), while W J Burchell, another famous early 19th century explorer and naturalist, described 4 species.

Aves. Andrew Smith named 77 of the 838 currently recognised species from Africa south of the Zambezi, Cunene and Okavango rivers. In addition he named 28 southern races of African species. Burchell described 5 and Linneaus 145 species, but of the latter only 26 are endemic, the remainder being European or Asian migrants.

Reptilia. Of the 112 currently recognised species of snakes and 196 lizards, Smith named 23 of the former and 33 of the latter — many more than any other systematist in either group. Hewitt named 26 South African lizards and Peters 9 snakes while Fitzsimons, an eminent South African herpetologist, regarded Smith as the real pioneer in the field.

Pisces. Of the 157 freshwater and 1243 marine fish species currently recognised, Andrew Smith named 4 and 9 species respectively — a reasonable proportion considering that barrel-loads of fish were sent to Europe by earlier collectors.

In the description of 173 Southern African vertebrate species Andrew Smith is unsurpassed and it is not surprising that on the proposal of Charles Darwin, the fellowship of the Royal Society was conferred upon him in 1857. The prestigious Willughby Society, under Professor Newton, honoured him in 1880 by selecting his 'miscellaneous ornithological papers' for their second publication. In South Africa Layard and Sharpe, eminent 19th century ornithologists, said in praise of Andrew Smith that his work was 'in every respect an important contribution to the avifauna of the South African region' and Dr L Peringuey, one-time director of the South African Museum, opined that his work ' . . . .shall never be surpassed even if equalled' (Kirby, 1942). More recently the systematists Dr V F M Fitzsimons and Dr K H Barnard paid high tribute to the work of their predecessor while his biographer, Professor Kirby, has left no doubt as to Andrew Smith's standing as a zoologist through his meticulous records and observations, indefatigable researches and authoritative publications. Present-day workers in systematic zoology constantly find themselves referring to Smith's scientific papers — conclusive evidence that Andrew Smith's work is basic to taxonomic zoology.

The re-printing of the *Illustrations of the Zoology of South Africa,* therefore, not only makes available an indispensable source for research but is also a fitting tribute to Andrew Smith and his work.

Historical note

The story of publication of *Illustrations of the Zoology of South Africa* is told partially by Andrew Smith himself in the Preface (p.39—42) where he outlines the history of the Association that sponsored his expedition and explains how the British Government, through the offices of Lord Glenelg — then Secretary of State for Colonies — came to subsidise the work to the sum of £1,800.

The *Illustrations* was originally issued in 28 parts. Part I, which consisted of 10 plates, appeared on July 1st, 1838, and cost ten shillings. Three other parts were completed that year, including Macleay's contribution in part III. At a price of sixteen shillings part III comprised 75 numbered pages of text and four plates. All other parts had 10 engraved plates which were numbered in the four divisions *Mammalia, Aves, Reptilia* and *Pisces,* whilst the descriptive pages were not numbered, so that subscribers could arrange them in an order to suit their individual requirement.

It was Smith's intention that the parts should appear at bi-monthly intervals. The first four were issued between July and December 1838. After this, however, they were published at irregular intervals varying from three to nine months. Smith explained the delay in his Preface, blaming ill-health in 1838 and also his commitments in the service of the British Army medical department.

The last part, part XXVIII, appeared in 1849 by which time subscribers had paid £15-16-0 for the set. In the same year Messrs Smith, Elder & Company of London published the complete work in five green-cloth bound volumes, the plates being arranged in general classified order under the divisions *Mammalia, Aves, Reptilia* and *Pisces,* with Macleay's contribution *Invertebratae* forming a separate volume. This edition sold for £20-0-0.

As *Illustrations* was first issued in twenty-eight separate parts one finds a variety of bindings and arrangements of text and plates, dependent on the whim of the owner. There are five-volume sets (similar to the 1849 edition), those of four volumes and also three-volume sets, as in the possession of the Johannesburg Public Library. An incomplete set of original parts is in the Library of the Transvaal Museum, Pretoria.

Whatever the arrangement, the lithograph engravings are the crowning glory of *Illustrations of the Zoology of South Africa,* nearly all of which were executed by George Henry Ford, principal artist to the 1834-1836 Expedition. Little is known about Ford; his first recorded work seems to have been a coloured drawing of *Anas madagascariensis* (Dwarf Goose) which Smith had listed with the donations to the South African Museum in November, 1825. This must have been completed at an early age, for Ford, third son of 1820 Settler James Edward Ford, was only eleven-years-old when the brig *Chapman* arrived in Algoa Bay. It is probable that he acquired his talent from his father, who is known to have painted miniatures.

On returning from Smith's 1834-1836 expedition to the North, Ford opened a studio in Cape Town where he taught drawing and painted portraits, one being of Sir John F Herschel, which hangs today in Cape Town's City Hall. He was very versatile, for not only did he paint landscapes for the Grahamstown publisher Thomas Slater but he also illustrated Roland Trimen's *South African Butterflies 1862-6*.

His association with Andrew Smith continued; he attended the latter's marriage in 1844 and was in England when Smith died in 1872. Smith had retained all Ford's zoological drawings and on his death they were returned to the artist, who presented them to Dr. Albert Günther, an eminent British zoologist. These were bequeathed to his son, from whom they were purchased by the University of the Witwatersrand, Johannesburg, in 1936.

Although G H Ford was responsible for most of the plates in *Illustrations,* six of them (*Aves* plates 7, 8, 24, 37, 73 and 94) were the work of Henry Lowe, who was one of four British soldiers on the 1834-1836 Expedition. It is of interest that plate 8 of *Aves* is the result of collaboration between Lowe and Charles Davidson Bell, the landscape artist of the Expedition – Lowe drew the bird and Bell the Hottentot figure! Bell is remembered chiefly for having designed the Cape of Good Hope triangular stamps.

Bibliography

This facsimile edition of *Illustrations of the Zoology of South Africa* is reprinted from a three-volume set in the Johannesburg Public Library: Mammalia & Pisces, Aves, and Reptilia & Invertebratae (zoologically an unconventional arrangement). It has been decided, therefore, that this reprint should follow a logical natural sequence, in that the parts dealing with the lower vertebrates are grouped with the invertebrates. Thus the order has been changed so that Volume I now comprises *Mammalia* alone (together with additional introductory material); Volume II is devoted to *Aves,* while Volume III includes *Reptilia, Pisces & Invertebratae* and the 'Errata', which did not appear in the 1849 edition.

Numbering of plates follows the original, but both pages and plates (in numerical sequence, not in order of issue) have been paginated in one sequence from Volume I through to Volume III and all additional material follows consecutively. Another point of difference is that all the coloured illustrations have been placed on left-hand pages so that the letterpress descriptions can appear on the right.

For easy reference, Andrew Smith's alphabetical indexes have been augmented by a list of plates for each volume giving the vernacular name, accepted scientific name, Smith's name in parenthesis, whether the species described is a type-specimen and the part with date of original issue. Each volume is also supplied with its own index, where entries include Andrew Smith's scientific and vernacular names, sub-classes (usually in Latin), personal names, place names (and their modern equivalents, were necessary) and currently recognised scientific names. These have been derived from the standard texts for each class or sub-class cited in the list of references following:

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