

Discovering the Natal Flora

THE EIGHTEENTH century, thanks largely to the great Linnaeus, had seen the development of a satisfactory system of description, naming and classifying the flowering plants, so that with the opening up of trade routes, the settlement of colonies and the development of interest in the new lands of North and South America, Africa, Australia and the Far East, the stage was set for the exploration of the vast, and hitherto unknown, floras of the tropics and the whole southern hemisphere. The nineteenth century thus became, botanically, the era of the great plant explorers and collectors. A great flood of dried, pressed plant specimens flowed into Europe. Thus arose the great herbaria, such as those of Kew, the British Museum, Edinburgh, Brussels, Paris, Hamburg, Berlin, Dublin, Leyden, Geneva and Vienna. The contributions which the settlement of Natal made to this accumulation of material was by no means inconsiderable and the collection of the Natal flora must be considered as one of the great achievements of the Natal settlers.

The first plant collector to visit Natal was J. F. Drège. Drège and his brother C. F. Drège had established themselves as apothecaries at Port Elizabeth. Hearing that Dr. Andrew Smith, celebrated army surgeon and scientist, was about to conduct an expedition to Natal, they applied for and obtained permission to accompany the expedition as botanists. They equipped themselves with an ox-waggon and left Grahamstown in January, 1832. The late Professor Percival Kirby was able to establish the route of the expedition from Drège's note-books which still survive in the possession of descendants of the Drège family in Port Elizabeth. The route followed was close to that of the present main road as far as Umtata, reached the coast south of Port St. Johns and then followed the coast route to what was then referred to as the Bay of Natal. Whilst Smith proceeded to Dingane's kraal in Zululand, the Drège brothers remained at the Bay. It is apparent that C. F. Drège undertook the day to day management of their expedition, leaving his brother to concentrate upon his plant collections. The expedition arrived at the Bay at the end of February and left on its return on April 18th, arriving back at Grahamstown on June 29th. During this short period Drège amassed a huge collection of plants. He did not go beyond the Umgeni River, nor did he get far inland. From the fact that he gathered *Encephalartos natalensis* it is likely he got as far inland as Shongweni. Among the plants he collected at the Bay was the large tree *Trichilia dregeana*, commonly known as the Umkhuhlu, thunder tree or Natal mahogany. It is interesting to record that he gave as the habitat of the common ruderal grass *Elusine indica*, 'a coffee plantation at Port Natal'.! Drège's collection was sent to Professor Meyer at Hamburg. After another eight years of collecting in South Africa during which he gathered about 200 000 specimens, Drège returned to Hamburg where he was engaged in botanical activities for the remainder of a fairly long life.

The Trinity College Herbarium, Dublin, possesses a collection of plants made by Miss Owen and said to have been gathered at Port Natal and in the 'Zooloo' country. Miss Owen was the sister of Rev. Francis Owen who in 1837-1838 spent about four months near Dingane's kraal in a vain endeavour to establish a mission station. He and his family were forced to return to the Bay after the murder of Piet Retief and his followers in February, 1838. Miss Owen may have collected some plants at the Bay, but it is extremely doubtful whether she could have collected any plants under the unsettled conditions in which the Owens lived in Zululand. It is likely that her collection of 'Zooloo Country' plants was made at a later date when Owen was in Matabeleland at the kraal of the fugitive Zulu chief Mzilikazi.

The first resident Natal botanical collector was Dr. Gueinzus, who arrived at Port Natal in 1835. He took up residence in a part of the bush which was later to be referred to as Delegorgue's Bush, and engaged in the collection of plants, reptiles, birds and insects. Later he moved to Posselt's Mission in New Germany, where he lived as a recluse in an old wood and iron shed. Under the floor, which was broken through in places, he kept two tame pythons, which were allowed to come and go as they pleased fending for themselves in the surrounding bush. He sometimes took groups of schoolboys for walks, naming plants and animals for them. The boys, however, doubtless on account of the pythons, were somewhat scared of the 'tall, thin man with a long beard'. The pythons are said to have saved him from being disturbed by unnecessary visitors or robbers. He was an extremely active collector and many Natal plants bear his name.

In 1842, F. C. C. Krauss arrived in Natal aboard the S.S. *Mazeppa*. At this time the Voortrekkers under Andries Pretorius, who had established a camp at Congella, were besieging Captain H. Smith in the Old Fort. Krauss apparently joined Gueinzus (as also perhaps did the French naturalist Delegorgue) in Stella Bush, for Col. Cloete reported to the Governor at the Cape that after the Voortrekkers had withdrawn to Pietermaritzburg, he sent Dr. Gueinzus and others to convey to Pretorius a message setting out the conditions under which the Voortrekkers could continue to reside in Natal. Since in the same year, 1842, Gueinzus and Krauss collected jointly on Table Mountain near Pietermaritzburg it would appear that one of the men whom Cloete sent was F. C. C. Krauss, who, like Gueinzus, would be regarded as a German neutral and not concerned with the differences between the British troops and the Voortrekkers.

As the type locality of Delegorgue's pigeon is 'the forest at Port Natal' it may be that this bird was first collected in what is to-day referred to as Pigeon Valley, near Howard College. It would perhaps be an appropriate tribute to the pioneer naturalists of Natal to revive the former name of Delegorgue's Bush.

In 1846, Krauss published the first account of the vegetation of Natal in which he recognised three botanical regions, the coast belt, the midlands and the mountains. As the only mountains he visited were Table Mountain and other flat-topped hills, probably in the Botha's Hill area, his concept of the mountain region may have been very different from that of to-day. In the 1840s travel in the Drakensberg area of Natal was still a venturesome undertaking as the fastnesses sheltered Bushman bands, and Mpande's *impis* were apt to roam the area on cattle raids.

Dr. William Stanger arrived in 1844 to assume office as Colonial geologist, being promoted to surveyor-general in 1845. Before his arrival he had achieved fame as an explorer. After graduating M.D. at Edinburgh he visited Australia as a ship's doctor, and because of his knowledge of and interest in natural history he was, in 1841, appointed as member of an ill-fated expedition to explore the River Niger. As the expedition ascended the river by boat the members were struck down by fever, leaving Stanger and a seaman as the only survivors. Stanger managed to save the expedition's boats and to bring them back to the coast, but his health is said to have been permanently affected.

Stanger became an active collector of Natal plants, his specimens being sent to Kew Herbarium. Among plants named after him is the monotypic cycad genus *Stangeria*, a grassveld plant which is gradually becoming wiped out as a result of veld fires and overgrazing. Stanger's name is also commemorated in the north coast township of Stanger and in the name of a Durban street. He died in Durban in 1854. To relieve the fatigue brought on when he rode from Pietermaritzburg to Durban on a hot day, he submitted 'to the application of the wet sheet'. The next day 'inflammation of the lungs took place which carried him off in a week'.¹

The Natal Agricultural and Horticultural Society was established in 1848. The main object was the experimental introduction of crop and horticultural plants, for which purpose the Lieutenant-Governor granted a site for the establishment of a garden. The present Durban Botanic Gardens occupies most of this site. The various curators of this garden made notable contributions to gaining knowledge of the flora of Natal, since many became keen plant collectors and the herbarium, which was later established in a corner of the gardens, became a centre for botanical studies.

One of the early curators of this garden was Mark J. McKen, who arrived in 1850. He had received a horticultural training at Kew and had worked in a sugar estate in Jamaica before coming to Natal, bringing a large collection of living plants for the garden. Twenty kinds had not previously been introduced into Natal. McKen occupied the curator's post until his death in 1871, except for the period 1854-1860 when he served as manager of Chiappini's sugar estate at Tongaat. During this period he assisted with the first successful commercial production of cane sugar from Morewood's mill at Compensation.

* In addition to the collection of herbarium specimens, McKen made contacts with nurserymen and others in the United Kingdom and elsewhere as a result of which he was able to exchange and distribute Natal plants of horticultural interest. His journal containing details of this very considerable activity is still preserved at the Natal Herbarium. It is likely that McKen influenced J. Sanderson, W. T. Gerrard, Mrs. Katherine Saunders, R. W. Plant and J. Medley Wood to become interested in collecting Natal plants. His own collections, as also those of the persons just named, were sent to Kew. McKen's name is permanently commemorated in the names of a number of Natal plants, notably in that of *Cyrtanthus mackenii*, the Ifafa lily.

John Sanderson arrived in Natal in the same vessel as McKen in 1850. He had

written for several Glasgow newspapers before becoming an emigrant. In Natal he contributed to Jeremiah Cullingworth's newspaper, later establishing his own *Natal Colonist*. Sanderson became interested in plant collecting, his interest doubtless arising from his association with McKen. His newspaper published a number of articles on the Natal flora, including a series on the ferns written by the Rev. John Buchanan. Sanderson was apparently inclined to be somewhat cantankerous, being described by Lieutenant-Governor Keate as 'seldom agreeing with anyone about anything'.² In his disagreement with Keate, Sanderson seems to have had the last word. His paper in 1872 reporting the departure of the Lieutenant-Governor from Natal on R.M.S. *Natal* stated that 'the event passed off quietly without the slightest show of regret being manifested'.

Robert W. Plant arrived in Natal in 1852. He had been trained in horticulture at Kew and brought with him tea plants which he established on his farm at Umhlali. He collected chiefly seeds, bulbs and other propagules, which he sent for cultivation at Kew. For this purpose he travelled fairly widely. In 1852 he published in *Hooker's Journal of Botany* an account of a collecting excursion to Lake St. Lucia. This is apparently the earliest botanical paper published in a scientific journal by a resident Natalian. For this excursion Plant sent ahead an ox-wagon, following a few days later on a riding ox accompanied by a pack-ox and native servants. His plans went awry when the wagon failed to appear at the intended meeting place, which was, apparently, somewhere near the present-day Empangeni. It is clear from his comparison of St. Lucia with Durban Bay that he actually reached Richards Bay and not St. Lucia. This conclusion is confirmed by his failure to mention any crossing of the Mfolozi River, though he mentions smaller rivers south and west of Richards Bay. He decided to return by an inland route, during which he met with many misadventures, having to hide from Mpande's *impis* which were raiding in the area, being forced to kill his oxen for food and having periodically to abandon his plant collections. He claimed to have got near the source of the Tugela River, but this is also doubtful in view of his failure to mention the Drakensberg mountains. He did, however, arrive back with a collection of plants which the Director of the Kew Gardens acknowledged in publishing Plant's paper.

Plant also visited Madagascar, East Africa and the Seychelles, returning to Natal as he thought the prospects in Natal were better. Finally he undertook a lengthy expedition through Zululand to Portuguese East Africa. During the course of this expedition he was stricken with fever, and on his return died at a native kraal near Lake St. Lucia. His loyal servants returned to Umhlali with his possessions and collections to report the tragedy.³ Mrs. Plant continued to farm at Umhlali and in 1872 tea from plants grown on her farm was exhibited in London.⁴

In 1854, the Rev. E. Armitage published a small booklet entitled 'Lecture on the Botany of Natal', in which he compared the flora of Natal with that of the Cape. He was in Natal only a few months and it is likely that he obtained most of his information about the Natal flora from McKen and Sanderson.

William T. Gerrard was apparently a very keen collector, especially of trees, as he is commemorated in the names of more Natal plants than any other

collector, except possibly McKen and Medley Wood. He arrived in Natal in 1856, remaining for eight years. He and McKen collected together in the Tugela Basin and Zululand. In 1864 he left for Madagascar, where he continued collecting until his death from blackwater fever in 1872.

Dr. P. C. Sutherland was appointed surveyor-general in succession to Stanger. Like Stanger, he too had made a name for himself as an explorer. As a student he had visited the west coast of Africa and had twice accompanied whaling expeditions to Greenland as medical officer. In 1850 he became a member of Captain Penny's expedition in search of Sir John Franklin.⁵ He was the author of a two-volume account of the expedition. His activities as plant collector to the expedition had brought him into contact with Kew Herbarium, a contact he maintained after his arrival in Natal. In the course of his duties he travelled to all parts of Natal and his plant collection was, therefore, from a wide area. His name is commemorated in the well-known Drakensberg tree *Greyia sutherlandii*. Sutherland had considerable influence in encouraging the cultivation of plants, being a committee member of several bodies interested in such activities and also of the Executive Council. He was probably responsible for the encouragement of the planting of trees at magistracies, police and railway stations, hospitals and schools. In 1884 he persuaded the Executive Council to assume responsibility for a herbarium which had been established by the Natal Botanic Society. This is now the well-known Natal Herbarium which is still housed where it began at the corner of St. Thomas' and Botanic Gardens roads in Durban. On his retirement in 1887 Sutherland was elected a member of the Legislative Assembly, serving as a member until his death in 1900, having devoted forty-six years of his life in service to Natal.

Other Natalians who contributed collections of Natal plants to overseas herbaria include Mrs. Katherine Saunders, who was also an accomplished botanical artist, her son Sir Charles Saunders, Mrs. Rathbone, Rev. W. Hewitson, Mr. and Mrs. George Fannin, W. Keit, Dr. W. B. Grant, T. Williamson, Captain Garden, W. Collins, Miss Wheelwright, Dr. and Miss Armstrong, Rev. John Buchanan, W. Tyson and J. Thode. Travelling collectors included Thomas Cooper, Thomas Baines, Frank Oates, A. Rehmann, F. Bachmann and R. Schlechter. The names of nearly all are commemorated in some names of our flora.

By far the most active and most important of Natal's botanical pioneers was John Medley Wood. He was born at Mansfield in Nottinghamshire in 1827. He showed an early interest in botany, but upon leaving school decided to go to sea, making several voyages to Australasia and other places in the Pacific Ocean. His father, J. R. Wood, who had arrived in Natal in 1847 and had set up practice as accountant and attorney in Durban, was responsible for persuading his son to give up the sea and to settle in Natal. Copies of the letters of father to son are in the Killie Campbell Library, Durban.

Medley Wood arrived in Durban in 1852. He purchased a farm, Otterspool, near the mouth of the Umhloti River, where he experimented with various crops such as arrowroot, castor oil and citrus. He also fitted out an ox-wagon with which he undertook trading trips to Zululand, in the course of which he had a number of exciting adventures. Having decided that the climate at Otters-

pool did not suit his health, in 1872 he purchased another farm and a store site at Inanda, where he resided until 1882. In 1879 he obtained a valuable contract to carry the military mails as far as Stanger.

Soon after Medley Wood's arrival in Natal, McKen had married his sister, and there is little doubt that this relationship with McKen was important in determining Wood's botanical work. His botanical career, however, only started in earnest in 1875, when Wood commenced correspondence, which was eventually to become voluminous, with botanists at Kew and elsewhere. By 1877 he published his first book, a small popular book on Natal ferns. He had by this time become the prime mover in the formation of a Natal Botanic Society and in the establishment of a herbarium. By 1882 he had become so engrossed in botanical activities that he was persuaded to accept appointment as Curator of the Durban Botanic Gardens, the post having become vacant upon the retirement of W. Keit who had succeeded McKen. Wood accepted the appointment on condition that he could develop a herbarium. He remained in charge of the Herbarium until his death in 1915, the work of the Botanical Gardens devolving upon J. S. Wylie.

It was Wood's custom to undertake annual collecting trips to various parts of Natal, during which he amassed an enormous collection of Natal plants. When in 1884 Sutherland persuaded the Executive Council to assume control of the Herbarium it contained about 3 000 sheets. When Wood died in 1915 it contained over 45 000, mostly of his own collections. He distributed duplicates of his collections generously to other herbaria and especially to Kew. In addition to the voluminous correspondence which he maintained with other botanists, he issued lengthy annual reports on progress at the Herbarium and in the Botanic Gardens, and information pamphlets on various botanical and agricultural subjects. Larger publications include a flora of Natal, several check-lists of Natal plants and a six volume illustrated work in which 600 species were illustrated and described. The illustrations were chiefly the work of his assistant Miss Franks, though W. Haygarth and Miss Lauth had contributed illustrations to some of the earlier volumes. Medley Wood was consulted on all kinds of botanical and horticultural matters and he made the Herbarium the centre of botanical work in Natal and a port of call for all travelling or visiting botanists who passed through Natal. In 1912 the University of the Cape of Good Hope conferred upon him the degree of D.Sc. *Honoris Causa*, the first award of this kind to a Natalian.

Medley Wood stated in writing that once when he visited the Durban Point customs shed to clear some parcels of plants, he was shown an unclaimed packet of sugar cane sticks on which the label had been destroyed, except for the three letters UBA. The customs officer suggested that Wood might as well take the packet as the sticks would only die in the shed. This Wood did. In due course some of the sticks produced healthy plants and this was the first establishment of what became known as Uba cane in Natal. It proved to be the cane best adapted to Natal conditions, soon replacing all other varieties. The discovery of this cane probably contributed as much as any other factor to the prosperous development of Natal's early sugar industry.

Wood could well be proud of his association with Natal and of his contri-

bution to the study of its flora. In his old age he expressed pride in the fact that after his arrival in Natal he never left the Colony except once, when he crossed the border at Van Reenen during a collecting expedition. No one worked harder or did more for Natal botany and Wood well deserved the sobriquet given him by Professor J. W. Bews of 'Father of Natal Botany'.

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Notes:

1. *Athenaeum*, June 7th, 1854. Quoted in Holden, *History of the Colony of Natal*. pp. 159-160.
2. Hattersley, A. F., *The Natalians*.
3. Account in the Old Durban Museum.
4. Hattersley, A. F., *The British Settlement of Natal*.
5. *Ibid.*,

REFERENCES

- HATTERSLEY, A. F. *The Natalians*. Shuter and Shooter, Pietermaritzburg, 1940.
 HATTERSLEY, A. F. *The British Settlement of Natal*, Camb. Univ. Press, 1950.
 HOLDEN, W., *History of the Colony of Natal*, London, 1855.