Kirstenbosch : the final victory of botanical nationalism

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The establishment of the national botanic garden

In July 1913 the Union government handed over to a five-person board of trustees 133 hectares of the old Kirstenbosch estate in the Cape peninsula. Five months later a further 61 hectares of the Klaassenbosch estate were added. The purpose of these grants of land, along with a meagre £2 500 foundation grant, was to establish a National Botanic Garden. The new institution, supported by a new Botanical Society of South Africa and under the honorary direction of Professor H.H.W. Pearson (1870-1916), was overtly nationalistic.

In his presidential address for Section C of the South African Association for the Advancement of Science, delivered on 10 November 1910, Pearson had proposed the foundation of an indigenous botanic gardens which would become a national symbol:

> The South African Botanic Garden cannot be merely an economic undertaking; it must also be an expression of the intellectual and artistic aspirations of the New Nation whose duty it is to foster the study of the country which it occupies, to encourage a proper appreciation of the rare and beautiful with which Nature has so lovingly endowed it.

The botanic gardens was to be a scientific institution with its own herbarium, library and museum: It would both preserve and study the flora of South Africa. It would be run by a government Department of Botany, have close ties with the South African College in Cape Town and would, like Peradenyia botanic gardens in Ceylon, receive a fixed percentage of state revenue.[1]

The proposal had the backing of the leaders of Cape Town society: Lord de Villiers, Sir Lionel and Lady Phillips and Sir David de Villiers Graaff. Pearson was the driving force, but he received support from the leading gardeners and botanists in the western Cape, Professor Rudolph Marloth of Stellenbosch, Neville Pillans and G.H. Ridley. Politicians such as Botha, FitzPatrick, Merriman and Smuts were lobbied and easily won over.

While the initiative had general support in the `new white South Africa', it was in reality in the hands of the English-speakers of the Western Cape. From the start, Pearson and his associates had assumed the site for the gardens would be in the Cape peninsula. This was their working base as it had been for most of the pioneers of South African scientific botany.[2] The richness of the Cape floral kingdom was undeniable. Besides, Cape Town also boasted both the Bolus herbarium and the herbarium of the South African Museum.

In fact, by 1910 the only surviving proper botanic gardens in South Africa was in Durban. But Durban botanic gardens was small (20 hectares); was, in keeping with its educational focus, filled with exotics; was in a sub-tropical region; and was under the direction of an able, but by now frail, John Medley Wood (1827-1915).[3] Besides, Natal - the junior partner in the Union - could not take precedence over the Cape. A last-minute appeal by the Royal Botanic Gardens, Kew, to maintain the Durban botanic gardens was ignored:

> It must not be forgotten before passing on to the consideration of the National Botanic Gardens at Kirstenbosch that in Natal South Africa has possessed a Botanic Garden for over fifty years where the true functions of such an institution have been ably maintained in spite of many difficulties. It is a matter of regret that the area of this Garden is so small, but small though it be its maintenance is as important now as ever it was, and its activities must not be suffered to be curtailed nor its functions abrogated owing to any change in its administration or to the establishment of the new National Gardens.[4]

More serious was the failure of Pearson and Lionel Phillips to accommodate in some fashion the Transvaal in their scheme. This was to have the disastrous consequence of dividing South African botany for three-quarters of a century between north and south.

But so it was that one February morning in 1911 Ridley, Pillans and Pearson arrived in a Cape cart at Rhodes' old estate in the shadow of Table Mountain's Castle Rock at the derelict farm of Kirstenbosch. Pearson simply said, "This is the place".[5] A hundred years before the traveller and botanist William Burchell noted that, `all the scenery around is the most picturesque of any I have seen in the vicinity of Cape Town."[6]

The site appeared to be ideal: it was nearer to Cape Town than Kew was to London; it was historic ground - known to Capetonians already for its wild flowers and as a pleasant picnic spot; it was suitable for growing most Cape plants -

though with time it was found to be rather too damp for the liking of some species; there was lots of space; and lastly, being part of Rhodes' Groote Schuur legacy to the nation, it was available.

Two and a half years after Pearson's speech, Sir Lionel Phillips proposed in the House of Assembly that a National Botanic Garden be established. FitzPatrick, Smartt, Merriman and several others spoke for the motion and the prime minister, who was also minister of agriculture, gave government support. The motion was passed unanimously.[7] After some negotiations, a settlement was reached between Botha and Phillips. Kirstenbosch would be controlled by a board of trustees, three of whom would be government appointees, one would be a representative of Cape Town municipality and one would be from the Botanical Society. A meagre annual government grant of £1 000 would be made.

The awakening of botanical nationalism

The realisation by South Africans that their flora was internationally significant came only late in the day. Until the nineteenth century, botany, anywhere in the world, was elitist; the preserve of the rich, the eccentric, book publishers and the handful of academics whose disciplines touched on what today is botany. From the early seventeenth century until well into the eighteenth century, Cape plants - usually bulbous plants - featured in a minor fashion in European herbals, florilegia, nurserymen's catalogues, and early floras.[8]

Though volumes containing woodcuts of Cape plants were produced a generation before Van Riebeeck's arrival at Table Bay, Cape plants were confined to European books describing rare exotics or catalogues of botanic gardens such as those at Leiden and Amsterdam.[9] Only in the first half of the eighteenth century did monographs specifically on Cape plants begin to appear, with such works as Burman's *Rarorium Africanarum Plantarum*.[10] This development was in part the outcome of the transformation of the Dutch East India Company's vegetable, herb, cereal and fruit garden into a quasi-botanic garden. This was achieved under Heinrich Oldenland (1692-*c*1697) and Jan Hartog (*c*1697-1715) and later, in the garden's heyday, under Johann Auge (*c*1750s-1778), `who exerted the utmost diligence to stock the garden with every sort of rare African plant so as to convert it into a true botanic garden.'[11]

The European interest in the Cape flora had begun. A number of professional plant hunters arrived to collect: Thunberg, Masson, Burchell and later Bowie.[12] The result was dramatic. Cape plants and particularly ericas became the craze of European society.[13] Between 1795 and 1816 a third of the hand-coloured plates in *Curtis's Botanical Magazine* represented the Cape flora, and in the 1802 volume of *Curtis's* 80% of the plates depicted Cape plants.[14] Despite the opening up of Australia and other parts of the globe to scientific botany, Europe continued to be interested by the Cape flora; as Table 1 illustrates.[15]

Later, 103 of the 360 plates in Wilson Saunder's *Refungium Botanicum* (1869-72 & 1882) represented South African species. And by the time Kirstenbosch was established, *Curtis's* had published 1045 South African plates.[16]

This European enthusiasm for the Cape flora slowly permeated through to South Africa. In the 1830s and 1840s for the first time there emerged a feeling of colonial pride in the Cape's flowers. This was consolidated by the existence of the first permanently resident professional collectors: Bowie, Ecklon and Zeyher; by influential amateur botanists: Pappe, Villet and von Ludwig; by lady botanical artists: Lady Herschell and Arabella Roupell; and by temporarily resident botanists of outstanding quality such as J.F. Drège and especially William Harvey.[17]

The revival of Kew gardens in the early 1840s helped the process and by the end of the 1840s, Cape Town and Grahamstown at the Cape, and Durban in Natal were enthusiastically planning the establishment of botanic gardens which would form a central point for the despatch

Table 1

Cape plants illustrated in British botanical periodicals, 1787-1850

TITLE	DATES WHEN PUBLISHED	TOTAL NO. OF PLATES	TOTAL NO. OF CAPE PLATES
CURTIS'S (78 vols to 1850)	1787-(1850)	4553	732
BOTANICAL REGISTER (33 vols)	1815-47	2703	222
BOTANICAL CABINET (20 vols)	1817-33	2000	469
BOTANIC GARDEN (13 vols)	1825-50	4988	46

of finds by local collectors to Kew and bring in examples of exotic flora to widen local understanding of the botanic world. The new botanic gardens would also serve for what were, in effect, agriculture crop research stations. Table 2 illustrates how this process of establishing botanic gardens took off in the ensuing decades.

The Cape government appointed a Colonial Botanist in 1858 and the following year a chair in botany was established in the South African College.[18] Yet all was not well and while botanic gardens continued to be founded, the botany fad at the Cape was abating. The chair of botany lasted only until 1864 and the post of Colonial Botanist was abolished in 1866. Having been in abeyance for 17 years, the chair of botany was revived and held by Peter MacOwan from 1881 to 1889 but once again it was not filled for a further 14 years.

The botanic gardens themselves were problematic: under-funded, starved of water, poorly staffed and unscientific, they served largely as public parks and state-sponsored nurseries for the growing and distribution of exotics such as the Port Jackson willow. Only in the Eastern Cape and in Natal did the spirit of enthusiasm survive. Cape Town

Table 2

Botanic gardens

Table showing dates of establishment, and government grants and running expenses in 1892 (Amounts given in £)

Botanic gardens	Date of establishment	Government grant (1892)	Expenses (1892)
1. Cape Colony			
Cape Town	1848	500	1910
Grahamstown	1850	400	2060
King Williams Town	1865	300	580
Graaff-Reinet	1872	350	670
Queenstown	1877	150	630
CAPE TOTAL		£1700	£5850
2. Colony of Natal			
Durban	1849/52	350	1400
Pietermaritzburg	1874	350	500
NATAL TOTAL		£700	£1900
3. Transvaal Republic:			
Pretoria botanic gardens	1874	(£100 to establish)	
(Became Burgers Park)	c. 1890		

Table 3

INSTITUTION	BOTANY FIRST TAUGHT	CHAIR OF BOTANY
South African College		1859-64
(University of Cape Town from 1918)		1881-89
		1903
Gill College, Somerset East	(Science; 1869-)	
Huguenot College, Wellington	Late 1890s	
Rhodes University College		1905
Victoria College, Stellenbosch	1902	1921 (U.S.)
Grey University College, Bloemfontein	1905	1912
Transvaal University College, Pretoria	1910	1917
SA School of Mines and Technology		1917

found itself without a botanic gardens from 1892 until Kirstenbosch was set up 21 years later.[19] This despite suggestions in 1856, 1880 and 1890 that a new large botanic gardens be established outside Cape Town.[20]

Revival

The revival of botanical nationalism came in part due to the adoption of botany as a subject taught at college level. This development is illustrated by Table 3.[21]

In particular, the appointment of Pearson to the chair of botany in Cape Town was significant. A Lincolnshireman, Pearson was a Cambridge graduate, a kewite with field experience in Ceylon and with a deep interest in cycads.[22] On the one hand, he was an ardent advocate of South African botanical nationalism. The concept of South African plants being sent to Europe for study was an anathema: "This is surely not in harmony with the traditions of South African patriotism?" But convert though Pearson might be, he was steeped in the Kew imperial ethos of a network of botanic gardens throughout the empire. India had Calcutta and Sahadapur botanic gardens; Ceylon - Peradeniya; Australia - Sydney and Melbourne; Jamaica - Bath. There were over a hundred such botanic gardens. Imperial patriotism as well as local nationalisms required South Africa to have such a botanical flagship.

The early years of Kirstenbosch's existence as a botanic gardens were fraught with problems. Indeed, Smuts is reported to have said of Kirstenbosch: "This place was born out of criticism." In 1916 Pearson died at the age of 46. His successor, appointed after World War I, R.H. Compton, directed the institution for 34 years. Like his predecessor, Compton was English and Cambridge-trained and, in colonial fashion, arrived at the Cape specifically to take over Kirstenbosch and occupy what was now called the Pearson chair of botany at the University of Cape Town.[23] In his tweed suits Compton was very much the gentleman-botanist.

His task was formidable. The gardens were starved of funding and were reduced to selling wood, soil, gravel and acorns to survive. Attempts to grow plants of possible economic value such as buchu merely met with criticism. With no regular bus service from Cape Town until 1938, public attendance was not great. Some plants did not like the damp environment and began to die. And as the following table shows, compared to other prominent botanic gardens in 1924, Kirstenbosch was very poorly funded.[24]

Table 4

Botanic gardens	Annual government grant
Kew	£55 000
Brooklyn	£16 900
Sydney	£16 000
Singapore	£ 8 670
Kirstenbosch	£ 1 400

The lowest ebb for Compton and his small staff came in the late 1930s. Since 1924 the University of Cape Town's Bolus herbarium and library had been housed at Kirstenbosch but in 1938 the university removed the Bolus collection back to Cape Town.[25] Kirstenbosch was still a long way from being a national symbol.

In 1921 Compton had approved a scheme to establish a special satellite garden, the Karoo Garden, at Whitehill, Matjiesfontein. Here plants of semi-arid type could be grown. In 1945 this garden was moved to Worcester. That this idea of satellite gardens was not pursued was unfortunate for by the Second World War Kirstenbosch had become, in reality, Cape Town's indigenous botanic gardens.

Division of botany

The situation of Kirstenbosch was not improved by rival developments on the highveld. The very year in which Kirstenbosch was established, the Union government amalgamated its various botanical sections into a Division of Botany and Plant Pathology under the Department of Agriculture. "Let there be no local jealousies in this matter," was Percy FitzPatrick's rather naive comment in parliament. This new government botany division soon outpaced Kirstenbosch. In 1918 it started issuing *Memoirs of the Botanical Survey of South Africa* series. In 1920 came the *Flowering plants of South Africa* series and in 1921 publication of the largely taxonomic journal *Bothalia* commence. By 1919 the division had established a formal link with Kew through its `botanical assistant for the Union of South Africa at Kew.' In 1923, when Kirstenbosch had no herbarium, the government established the National Herbarium in Pretoria. The inevitable suggestion of this herbarium having its own `National Botanic Gardens' came in the mid-1940s.

First in 1953 came a separate Division of Botany, renamed the Botanic Research Institute (BRI) in 1961. Then in 1958, over a decade after it was first laid out, a Pretoria National Botanic Garden of 77 hectares was opened to the public.[26] Satellite herbaria of the BRI were to be found in Durban, Grahamstown, Kimberley, Stellenbosch and Windhoek.

This unfortunate division between north and south in one sense reflected the divide between the old Cape and the old Transvaal. But it should not be seen as a division between Cape liberalism and Afrikaner nationalism. The stalwarts of Transvaal botany in the pre-1970s were men like Burtt Davy (born in Derbyshire); Pole Evans (born in Wales); Phillips (born in Cape Town) and Dyer (born in Pietermaritzburg). This is not to say, of course, that botany was not a facet of Afrikaner nationalism. But the division of South African botany was caused partly due to the early failures of Kirstenbosch and partly to the early successes of botanists conveniently under the eye of government administration in Pretoria.

Kirstenbosch's final victory

Kirstenbosch became a national symbol because it recovered from its early setbacks. Under such gardeners as Joseph Mathews, Frank Cartwright, Frank Thorns and board-member Duncan Baxter, the gardens began to take the shape and the character of the modern Kirstenbosch. The lawns were developed, the cycads and silver trees grew up, irrigation was improved.[27] A new herbarium, the Compton Herbarium, was built up from scratch. In 1956 Kirstenbosch, in a coup, outmanoevred the National Herbarium to gain the old South African Museum herbarium, though the National Herbarium did acquire the Transvaal Museum Herbarium the same year. By then Kirstenbosch had a new director, Professor Brian Rycroft. He served for 29 years as director, assisted by Jack Marais and Alec Middlemost, and with Dr John Rourke as curator of the Compton Herbarium.

From 1972 Kirstenbosch asserted itself as Africa's leading botanic gardens. It was physically attractive and had become one of the western Cape's premier tourist attractions. For example, in 1984, the year after Professor Rycroft retired, Kirstenbosch had 583 000 visitors compared to the 400 500 tourists who entered the Kruger National Park.

Equally significant, under Rycroft it began to develop a network of satellite gardens. The Karoo garden was expanded and new gardens and wild flower reserves came under the umbrella of the National Botanic Gardens: the Tinie Versfeld Reserve (1957); the Edith Stephens Cape Flats Reserve (1957); the Harold Porter Botanic Garden (1959); the Orange Free State Botanic Gardens (1967); the Drakensberg and Eastern Free State Botanic Garden (1969); Pietermaritzburg Botanic Garden (1969); the Lowveld Botanic Garden, Nelspruit (1969) and the Transvaal Botanic Garden, Roodepoort (1985).[28]

Despite this development the National Botanic Gardens did not eclipse the Botanical Research Institute and its satellites of herbaria. Indeed, in 1976 a report noted, `research does not actually exist at the National Botanic Gardens.' This comment was made despite the taxonomic work done in the Compton Herbarium and the publication since 1935 of the *Journal of South African Botany*.[29] But to the South African public, the lack of laboratories or of a significant research output was of no concern if judged against the natural beauties of Kirstenbosch. And the invariable gold medal at the Chelsea Flower Show for the Kirstenbosch stand helped white morale in the last years of apartheid.[30] Indeed, the long overdue unification of South African botany in 1989, when the Botanical Research Institute amalgamated with the National Botanic Gardens to form the National Botanic Institute, passed largely unnoticed by the general public. By then the craze for indigenous plants was one of the sacred cows of South African political correctness and was epitomised by the renewed national symbol of Kirstenbosch.

ENDNOTES

1. D.P. & E.M. McCracken, *The Way to Kirstenbosch*, (A history of South African botanic gardens, 1652-1988), *Annals of Kirstenbosch*, vol. 18, (National Botanic Gardens, 1988), Section C. See also, *South African Journal of Science*, (November 1910), pp.37-54.
2. See Mary Gunn and L.E. Codd, *Botanical exploration of Southern Africa*, (Cape Town, 1981), part 1.
3. D.P. McCracken, `Durban botanic gardens, Natal, 1851-1913', *Garden History*, vol. 15, no. 1, (1987), pp.64-73; and B.D. Schire, `Centenary of the Natal herbarium, 1882-1982', *Bothalia*, vol. 14, no. 2, (1983), pp.223-236.
4. *Kew Bulletin*, (1913), p.309.
5. Conrad Lighton, *Cape Floral Kingdom*, (Cape Town, 1960), p.55.
6. W.J. Burchell, *Travels into the interior of southern Africa*, (1822), (reprint, London, 1953), vol. 1, p.51.
7. *House of Assembly Debates*, 6 May 1913, cols 2164-2179.
8. A.S. Kerkham, *Southern African botanical literature, 1600-1988*, (South African Library, 1988), pp.13-23.
9. See, for example, Charles de l'Ecluse, *Exoticorum Libri Decem* (Antwerp, 1605); Mathias de l'Obel, *Methodicam pharmaceuticam officinam animadversiones, (Rariorum aliquot stirpium appendix)*, (London, 1605); and Emanuel Sweert, *Florilegium*, (Frankfurt-am-Main, 1612).
10. Johannes Burman, *Rariorum Africanarum Plantarum* (Amsterdam, published in 10 parts, 1738-1739).
11. Mia C. Karsten, *The Old Company's Garden at the Cape and its superintendents*, (Cape Town, 1951), chapter 3.
12. See, P. MacOwan, `Personalia of botanical collectors at the Cape', *Transactions of the South African Philosophical Society*, vol. 4, no. 1, (1884-1886) pp.xxx-liii and V.S. Forbes (ed.), *Carl Peter Thunberg Travels at the Cape of Good Hope, 1772-1775*, (Van Riebeeck Society, 2nd ser, no. 17, Cape Town, 1986).
13. For example, of the 469 South African plants illustrated in Conrad Loddiges' *Botanical Cabinet* (1817-33) 227 or 48% were ericas.
14. I am grateful to the University of Durban-Westville for providing a grant to facilitate an analysis of the prevalence of South African flora illustrated in nineteenth century British botanical magazines.
15. The full titles of these periodicals were: *Curtis's Botanical Magazine*; *Botanical Register consisting of Coloured Figures of Exotic Plants*; *Botanical Cabinet consisting of Coloured Delineations of Plants from all Countries with a short Account of each, Directions for Management etc. etc. by Conrad Loddiges and Sons*, and *Botanic Garden consisting of Highly Finished Representations of Hardy Ornamendal Flowering Plants by B. Maund.*

16. The only modern history of any of these periodicals is Ray Desmond's *A celebration of flowers : two hundred years of Curtis's Botanical Magazine*, (Kew, 1987).
17. See, for example, Frank R. Bradlow, *Baron von Ludwig and the Ludwig's-Burg Garden*, (Cape Town, 1965) and; Brian Warner, *Lady Herschell letters from the Cape, 1834-1838*, (South African Library, 1991).
18. See P.J. Venter, `An early botanist and conservationist at the Cape, the Reverend John Croumbrie Brown', *Archives Year Book*, vol. 2, (1952), pp.279-291.
19. See *The Cape Argus*, 18 November 1891; and *Kew Bulletin* (1895), pp.49-53.
20. See *Cape Monthly Magazine*, vol. 2, no. 9, (1857), pp.173-180; W.T. Thiselton-Dyer, *The botanical enterprise of the empire* (Paper read at the Colonial Institute, May 11, 1880), (London, 1880), p.32; and *Kew Bulletin*, (1892), p.10.
21. See E. Percy Phillips, *A brief historical sketch of the development of botanical science in South Africa*, (Presidential address to Section C of the South African Association for the Advancement of Science delivered July 9th, 1930), pp.26-27.
22. *Annals of the Bolus Herbarium*, vol. 2 (1917), pp.131-147; and *Transactions of the Royal Society of South Africa*, vol. 3, (1918), pp.139-145.
23. In 1965 Compton's book, *Kirstenbosch: Garden for a Nation* was published by Tafelberg. For an obituary written by his successor, see *Veld and Flora*, vol. 65, (1979), pp.74-75.
24. *House of Assembly Debates*, 21 August 1924, cols 755-758.
25. That damp was a serious problem in the Kirstenbosch herbarium in the 1920s is beyond doubt. See University of Cape Town, Jagger Library, Fourcade diary, 15 October 1925.
26. For these developments in the Transvaal, see R.A. Dyer, `The opening of the Pretoria National Botanic Garden', *Bothalia*, vol. 7, no. 2, (1960), pp.391-401.
27. For an account of these years, see W. Duncan Baxter, *Turn back the pages*, (Cape Town, 1954).
28. Jacobus N. Eloff, *Botanic gardens : Victorian relic or 21st Century Challenge*? (Inaugural lecture, University of Cape Town, 13 March 1985), p.5.
29. Mention should also be made of the *Journal of the Botanical Society* which was produced from 1915 and which in 1975 changed its name to *Veld and Flora*.
30. See, for example, J.N. Eloff, `Special Report: Kirstenbosch : quo vadis,' *Veld and Flora*, (December 1984).