

MORE THAN A GARDEN:

Singapore Botanic Gardens' Journey Towards Becoming Singapore's Inaugural UNESCO World Heritage Site

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The iconic Bandstand at the Singapore Botanic Gardens. All colour photographs in this article were taken by the late Kwek Leng Joo (1953-2015) as part of a series commissioned for the first promotional exhibition of the Singapore Botanic Gardens at the 37th World Heritage Committee Meeting in Phnom Penh, 2013.



A group of Chinese men posing at a pavilion the Botanic Gardens. Image courtesy the National Museum of Singapore, National Heritage Board.

A World Heritage Site designated by UNESCO, the United Nations Educational, Scientific and Cultural Organisation, conjures images of well-known tourist attractions that are described as monumental, if not as stunning wonders of the world. The likes of the man-made Taj Mahal, Great Wall of China and the natural beauty and plant diversity of Mount Fuji and the Amazon Basin come to mind. With such lofty comparisons, some Singaporeans were in

mild disbelief that the humble, albeit well-loved Botanic Gardens qualified for inscription as a UNESCO World Heritage Site.

What many people may not be aware of, however, is that the process of deciding what qualifies as a UNESCO World Heritage Site is not about inscribing a place that has potential touristic and commercial value. Instead, it is about identifying a structure or site that has in some way made a significant contribution to World Heritage, as well as to its own community that wants it preserved for the future. As is often said, size is relative – Singapore is a city state of just 718.3 sq km with the Singapore Botanic Gardens occupying 0.74 sq km in Tanglin, just a few minutes away from the shopping hub of Orchard Road.

Sites of “Outstanding Universal Value”

UNESCO's World Heritage Centre recognises “... cultural and natural heritage (as) priceless and irreplaceable assets, not only of each nation, but of humanity as a whole. The loss, through deterioration or disappearance, of any of these most prized assets constitutes an impoverishment of the heritage of all the peoples of the world. Parts of that heritage, because of their exceptional qualities, can be considered to be of “Outstanding Universal Value” and as such worthy of special protection against the dangers which increasingly threaten them.”¹

This principle was the firm basis upon which the National Heritage Board (NHB) of Singapore embarked on the journey to nominate the Singapore Botanic Gardens as Singapore's first UNESCO World Heritage Site. To be awarded UNESCO World Heritage status, sites must be of “Outstanding Universal Value”. This means that sites must meet at least one out of ten assessment criteria, such as exhibiting an important exchange of human values over a span of time, and being an outstanding example of a place that illustrates a significant stage in human history. Beyond the need for the site to be intuitively and recognisably outstanding, UNESCO places tremendous emphasis on how well the site is preserved as well as its evolving

changes over time. UNESCO also looks out for the authenticity of the nominated sites and monuments, the presence of a buffer zone that ensures adequate protection of the site, as well as a sustainable site management plan. These work together to protect the integrity of the site



The Palms in the Botanic Gardens.
Image courtesy the National Museum of Singapore,
National Heritage Board.



Palm Valley, Singapore Botanic Gardens.
Photo by Kwek Leng Joo.



Para rubber Plantation, Singapore. Image courtesy of
National Archives Singapore.

especially in the face of future developmental plans and other negative encroachments to the site.

In 2010, a study was commissioned by the then Ministry of Information, Communications and the Arts (MICA) to identify sites in Singapore that would potentially fulfil UNESCO's criteria. Consultations were also done with members of the Singapore Heritage Society, academics, heritage advocates and heritage experts. It was important that the shortlist of potential sites not only clearly illustrated their outstanding universal value, but included choices of sites that would resonate well with Singaporeans for good support. The list was eventually whittled down to three potential sites – the Botanic Gardens, the Civic District and the combined historic enclaves of Little India, Chinatown and Kampong Glam.

After much deliberation, the Civic District, with nearly eight national monuments in close proximity, as well as the three enclaves soon fell out of the running. Clearly, the requirement to impose a buffer zone would severely limit the amount of development that could take place in these districts.

The case for the Gardens: Shared personal and social memories

The Gardens are undeniably well-loved and cherished in the social memory of many Singaporeans. Members of the public have shared stories of childhood walks with families, of visits to feed the swans at the lake as well as simply enjoying the generous shade of the landmark tembusu (*Fagraea fragrans*) tree which is featured on the reverse side of the Singapore five dollar note.

Other visitors have recalled musical performances with their school bands at the Gardens' bandstand, watching concerts or taking romantic walks through the grounds. Some others remembered that the Gardens was a "neutral" meeting place for families to introduce partners in arranged marriages. In 1959, an outdoor multi-cultural concert bringing together for the first time, Chinese, Malay and

Indian performers, took place in the Gardens. This performance was graced by the late founding Prime Minister Lee Kuan Yew (1923–2015).

The case for the Gardens: The birthplace of Southeast Asia's rubber industry

While personal histories were evident, many Singaporeans were less aware of the significant role that the Gardens played in transforming the landscape of Singapore and that of her Southeast Asian neighbours with the development of the rubber industry. The 156-year-old Singapore Botanic Gardens was in fact the birthplace of the global rubber revolution.

Rubber seedlings, originally from Brazil, were transported to the Singapore Botanic Gardens via the Kew Gardens in London. These seedlings were in fact the catalyst for the rubber industry's revolution in Southeast Asia and the resultant economic boom across the region. Subsequent directors of the Gardens took further the Gardens' research and development for rubber, which continued unabated even during the Japanese Occupation.

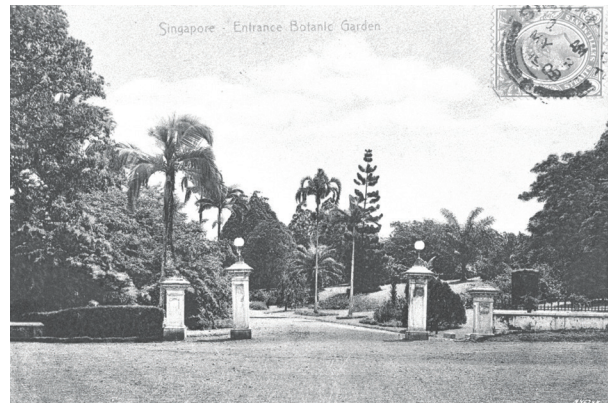
The case for the Gardens: A showcase of historic architecture

The Gardens also presents a humble architectural showcase of twelve historical buildings, including a colonial-style plantation bungalow and other smaller bungalows. These buildings served as residences for the directors of the Gardens, and some functioned as laboratories for research and development. Well-preserved examples include Ridley Hall (1882) and Burkill Hall (1867). The Swan Lake Gazebo (1850s) and the Bandstand (1930) are popular landmarks even till today.²

The original Potting Yard near the Gardens' Tanglin Gate, where newly introduced species were grown, and where the greening of Singapore's streets and cityscape took root, is still evident. Today, the Gardens' original



Swan Lake, Singapore Botanic Gardens.
Photo by Kwek Leng Joo.

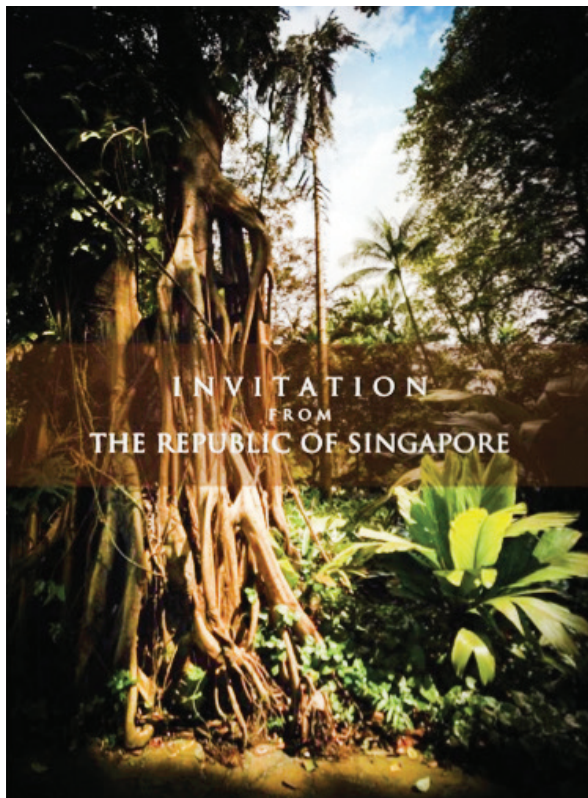


Singapore - Entrance Botanic Garden. Image courtesy of National Archives Singapore.

English Landscape design, with 34 heritage trees – the oldest of which is over 200 years old – and the Palm Valley which has more than 200 species of palms, together present an interesting counterpoint to the urbanised densities of Singapore's premier shopping district, Orchard Road, located a mere five minutes away.

A timely bid

Initially, many government agencies were either modest in their projections of the outcome, or unfamiliar with the history of the Gardens. There was also the question of “why now?”. What would this international accreditation or recognition be for? Did turning fifty (2015 being Singapore's Golden Jubilee Year as an independent nation) present an opportunity for Singapore to profile her heritage preservation efforts, or was it also about recognising sites of social memory for



Singapore's invitation to the delegates of the 37th UNESCO World Heritage Committee Meeting in Phnom Penh, 2013.

what they really are? Should the inscription be successful, what would future expectations be? Would national pride at securing Singapore's first UNESCO World Heritage Site raise stronger awareness of heritage values?

The National Heritage Board (NHB) and National Parks Board (NParks) had to work closely together to convince everyone that the Gardens was a strong candidate and affirm the historical role played by the Singapore Botanic Gardens. The NHB and NParks also relied on Singapore's Ministry of Foreign Affairs' wide network of missions and international contacts to assist in promoting the idea of the Singapore Botanic Gardens as a worthy candidate for consideration. It was an important time for all concerned to understand the international playing field and how things worked functionally as well as by way of protocol. Helpful advice from UNESCO's World Heritage Centre, The International Council on Monuments and Sites (ICOMOS) based in Paris, as well as experts in the field allowed the team the opportunity to build friendships with diplomats and

heritage experts around the world. At some point, the team started to think of themselves as salespersons with a cause and took full advantage of the subsequent UNESCO World Heritage Committee Meetings to showcase the heritage values of the Singapore Botanic Gardens.

Telling the story of the Gardens

After rallying all relevant government agencies for support, the next step was to work on the legislative and administrative provisions to submit Singapore's bid. In September 2012, Singapore ratified the 1972 World Heritage Convention, the most universal conservation instrument overseeing the inscription of sites that have cultural and natural importance onto the World Heritage List. Three months later, the Singapore Botanic Gardens was placed on the Tentative List³ of UNESCO World Heritage Sites, a prerequisite for nominations to the World Heritage List to be considered.

UNESCO World Heritage Sites must demonstrate that they have Outstanding Universal Value (OUV) based on ten identified criteria. For the Singapore Botanic Gardens, the focus was on criteria ii and iv, namely:

- (ii) to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design
- (iv) to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history

Beyond this, what would be of concern would be the unique heritage values of the landscape, its authenticity as well as adequacy of measures in place to protect the site for the long term. There was also the need to be very thoroughly acquainted with the specific timelines to be met, as the NHB and NParks had only one bite of the cherry if they were to make the bid as part of the celebrations for Singapore's Jubilee in 2015. This meant that Singapore had a year to put together a comprehensive dossier for submission to UNESCO by 28 February 2014, in order for it to be considered for inscription at the meeting of the UNESCO World Heritage Committee in 2015.

As the agencies involved prepared the nomination dossier, a draft was made available online for public feedback. There was also a published call to invite members of the public to submit their reflections and memories about the Gardens as well as personal photographs. Throughout this process, the team were grateful to receive a tremendous amount of support and encouragement from the public, which affirmed that the Gardens was also the People's Choice as Singapore's first UNESCO World Heritage Site.

It was also during this time that an inter-agency steering committee was formed to work out a strategy for local and international

engagement in the bid for the Singapore Botanic Gardens to be inscribed as Singapore's first UNESCO World Heritage Site. This steering committee was chaired by the Deputy Secretary of the Ministry of Culture, Community & Youth (MCCY), concurrently the Chief Executive Officer (CEO) of the NHB and Secretary-General of the Singapore National Commission for UNESCO, and the CEOs of NParks. The steering committee also comprised representatives from the Ministry of Foreign Affairs (MFA), Urban Redevelopment Authority (URA), MCCY, Ministry of Education, NHB and NParks, reflecting the high level of support and collective effort from the government to champion this bid.

The committee was a testament to the diverse nature of capabilities that went into supporting the bid. A crucial support came in when the land planners at URA ensured that the core and buffer zones were protected in the context of Singapore's development Master Plan. International engagement efforts were in the able hands of MFA, while the Arts and Heritage Division at MCCY and the NParks team were always present to pitch in for any related activities in support of the bid.

MCCY headed the Singapore National Commission for UNESCO, with the Minister of Culture, Community and Youth as Chairman, coordinating national engagements with UNESCO beyond the areas of culture and heritage. This was to demonstrate that Singapore is a committed and involved Member State to the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage. At the Preservations of Sites and Monuments Division in NHB, a three-member team played the role of taking the lead in the administrative aspects as well as coordinating all that was required to ensure the team met all of UNESCO's deadlines and oversaw the preparation of the nomination dossier.

On the side, the team also curated two exhibitions to promote the heritage value of the Singapore Botanic Gardens. The first one used the 37th UNESCO World Heritage Committee meeting in Phnom Penh, Cambodia, in 2013 as a platform to showcase the Gardens

as a well-preserved green lung just minutes from bustling Orchard Road. There would be about 1,500 international delegates, and there were opportunities to distribute books, brochures and postcards to highlight the value of the Gardens and establish that it was also one of the best preserved British Tropical Colonial Gardens left in the world and an important cultural site in view of its tremendous contribution to the development of the rubber industry globally.

Locally, the NHB's Preservation of Sites and Monuments Division conceptualised *More than a Garden*, which was planned as a travelling exhibition to highlight the worthiness of the Gardens as a candidate for inscription. The exhibition team went to great lengths to try and develop the smell of smoked rubber – a strong smell that used to pervade parts of Singapore where rubber factories had been located. The exhibits included rubber tapping equipment, latex sheets and a revolving model of the bandstand. Photographs and text panels explained the story of rubber research and development as well as referred to the critical if not symbiotic relationship of the Singapore Botanic Gardens as one of the 200 satellite gardens to the Royal Botanic Gardens at Kew in the United Kingdom. This network was formed during Britain's nineteenth century global expansion, exploration and colonisation in Southeast Asia. The rubber research and development pioneered in the Gardens provided the foundations for the rubber industry's success in the early twentieth century. The supply of seven million rubber seeds to the Malay Peninsula, and the promotion of their planting by one of the Garden's directors, Henry Ridley (1855–1956), led eventually to the economic success of rubber in the region.

A heart-stopping moment

Time was never on the team's side and new material had to be continuously added and edited and discussed. The team made decisions on how the nomination dossier would be framed as it was read and evaluated at UNESCO. Finally, the dossier – all 700 pages of it – coupled with numerous annexes, blueprints, photographs, and URA Master Plans, went to print. The best of plans still

go awry, and a heart-stopping moment came when the scheduled pick-up of the dossier from the printer did not happen. With their hearts pounding, the team members had to make frantic calls to the courier service to explain that this delivery was of utmost national significance and the three 700-page bound coloured copies had to be received at UNESCO's headquarters at the Place de Fontenoy in Paris by 28 February 2014. The Deputy Chief of Mission at the Singapore Embassy in Paris, who had warned about bad weather in winter and possible strikes, made doubly sure that the copies were safely delivered to UNESCO. Everyone sighed in relief that they still had their jobs.

What next? With the dossier submitted, the team's local and international engagement efforts continued. The Preservation of Sites and Monuments Division curated *More Than a Garden*, an exhibition that showcased the history and heritage values of the Singapore Botanic Gardens. This exhibition opened at the National Museum of Singapore in March 2014 and travelled all over the island to various malls and schools until end 2015.

As an active and committed member of UNESCO, Singapore also continues to contribute to UNESCO's capability building efforts by convening several platforms that facilitate the sharing of best practices on heritage preservation, such as a supporting event on heritage challenges and sustainable solutions at the World Cities Summit 2014 and the Future of Preservation Conference held in collaboration with the Association of Southeast Asian Nations (ASEAN) in September 2014. In the long term, Singapore hopes to continue to build up her capacity as a thought leader for heritage preservation issues in the region and ensure that the site management developed for the Gardens is not just sustainable, but a good model in practice.

To raise awareness of the Gardens at the international level and show Singapore's support for UNESCO's important mission, Singapore named a new variety of orchid – the *Dendrobium* UNESCO – after UNESCO at the 38th Session of the World Heritage Committee in Doha, Qatar, in June 2014.

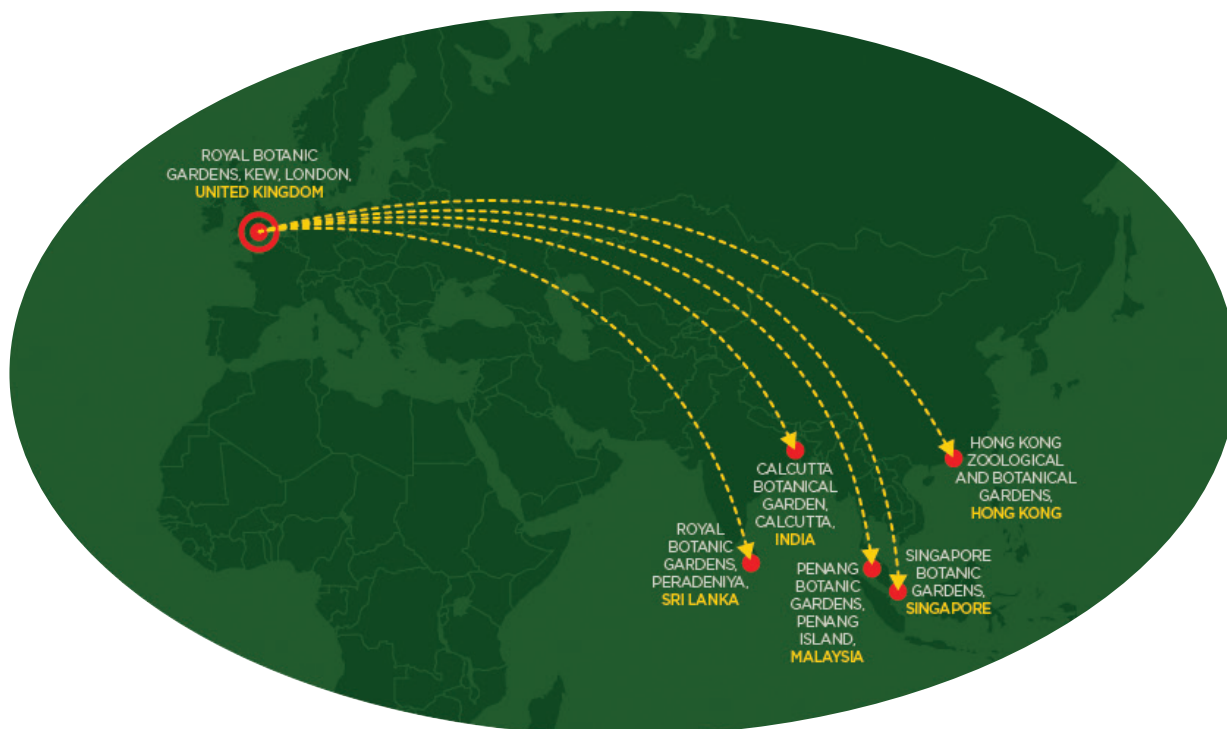


Diagram to illustrate the connection of Singapore Botanic Gardens, one of the 200 known satellite colonial gardens, to Kew Royal Botanic Gardens, London.



Jubilation at the announcement of Singapore Botanic Garden's inscription as Singapore's first UNESCO World Heritage Site, 5 July 2015, Bonn, Germany.

Upon the team's return from the Doha meeting, the Singapore Botanic Gardens set about preparing for the all-important visit by the ICOMOS appointed assessor. The evaluation of any UNESCO World Heritage Site nomination comprises the desk evaluation and the on-site visit to assess the site management plan. Following this evaluation process, the advisory

bodies make a recommendation that will then be deliberated by the UNESCO World Heritage Committee (WHC) members at the subsequent WHC meeting. The on-site visit by the ICOMOS assessor was the one and only opportunity to showcase the Singapore Botanic Gardens and demonstrate Singapore's capability to ensure the continued protection of the site. This highly

anticipated on-site visit however, was not going to be the sole determiner of the final outcome. The timing of this visit took place at a time when the massive construction of a new Mass Rapid Transit (MRT) subway station would be most apparent. Staff members of the Gardens worked with the LTA to do their utmost to camouflage and mitigate the above-ground chaos. Everyone put in their best effort, and the assessor left the team feeling comfortable about future outcomes.

What was left at this point was to discuss the communication plan in the run-up to the 39th Session of the UNESCO World Heritage Committee meeting on 5 July 2015 in Bonn, Germany, where Singapore's inscription would be announced. While the team was careful not to over-calculate the chances even though feedback from UNESCO seemed very positive, it was SG50 – and the team wanted to make sure it would be something to bring everyone together in celebration and that everyone would be able to share almost immediately once Singapore got clear word of her success.

The moment everyone had spent the last couple of years waiting for finally came. Representatives of the 21-member UNESCO World Heritage Committee congratulated Singapore on her inaugural inscription and effort. The Minister for Culture, Community and Youth reciprocated with a speech that conveyed Singapore's thanks and gratitude for UNESCO's support as well as to express continued commitment.

Beyond this successful inscription is a hope that the site management of the Singapore Botanic Gardens will be a testimony to Singapore's commitment to cultural preservation and that the site where the greening of Singapore was test-bedded will be an enduring one in that regard. Perhaps in the future, when a Singaporean is asked to name a UNESCO World Heritage Site, he or she will instantly reply, "the Singapore Botanic Gardens."

Notes

1. Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage. *Operational Guidelines for the Implementation of the World Heritage Convention*. United Nations Educational, Scientific and Cultural Organisation. February 1997. From <http://whc.unesco.org/archive/out/guide97.htm>. Retrieved 24 April 2016
2. Singapore Botanic Gardens. *Burkill Hall*. From www.sbg.org.sg/bukittimahcore/burkillhall.asp. Retrieved 7 February 2009
3. A Tentative List is an inventory of natural or cultural properties that a State has compiled in consideration of outstanding universal value and may be considered as suitable candidates for inscription on the UNESCO World Heritage List.

The Gardens Through Time

A PLEASURE PARK FOR THE AGRI-HORTICULTURAL SOCIETY

It is believed that this piece of land was gifted to the Society as part of a deal that member Hoo Ah Kay (Whampoa) made with the British authorities when he sold land he owned on Dempsey Hill for the creation of army barracks.



Cattle likely being used to cut grass shown in an early postcard c. 1910. IC De Vos Collection. Courtesy of the National Archives of Singapore.

ZOOLOGICAL ADDITIONS

The Gardens was home to some large animals (there was a bear, a rhinoceros, leopards and tigers) and several small ones, until the early 1900s.



Map of the zoo in the Gardens. R is where the Rhinoceros' enclosure was; Q, the deer enclosure; M, the monkey house; K, the Kangaroo and Emu pens; A, the old Aviary; C, the first Camero house; O, Merton's (Superintendent of the Gardens) office. Courtesy of the Singapore Botanic Gardens.

SINGAPORE'S NURSERY

The Gardens produced hundreds of thousands of trees for planting alongside Singapore streets and in parks. The roadside trees you see today may have had origins at the Gardens!



Gardens staff tidying up the landscape. Courtesy of the Singapore Botanic Gardens.

THE FOUNDATION OF THE COMMERCIAL ORCHID INDUSTRY IN SOUTHEAST ASIA

This period began when Eric Holttum was appointed Director (1925), and worked to improve the quality of the ornamental flowering displays at the Gardens. Holttum's orchid-breeding programme commenced in 1928.



The research laboratory in Holttum Hall, used for the growth of orchid hybrids. The man in the suit is a colonial official, the man to the right is Director Humphrey Burkill. Photo from 1958. Courtesy of the Singapore Botanic Gardens.

A PEACEFUL GARDEN

During the Second World War, the Japanese allowed scientific research to continue in the Gardens.



Benevolent Japanese directors with some of the Gardens' staff. Courtesy of the Singapore Botanic Gardens.

FIRST 'PEOPLE'S CONCERT' OPENED BY MR LEE KUAN YEW, PRIME MINISTER

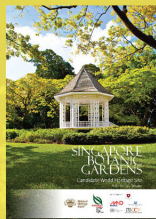
These concerts were organised for the purpose of bringing together a nation of different races to create a national culture.



Mr Lee Kuan Yew opening the first multi-racial *Aranya Ragam Rasyat* (People's Variety Show) at the Gardens. Courtesy of the National Archives, UK.

SINGAPORE'S FIRST WORLD HERITAGE SITE

The Singapore Botanic Gardens becomes Singapore's first UNESCO World Heritage Site in July 2015.



The cover of the nomination dossier submitted to the UNESCO World Heritage Centre. Courtesy of the Preservation of Sites and Monuments.

1859

1875

1877

COLONIAL BOTANIC GARDENS

With debts piling up from land purchases and developments, the Agri-Horticultural Society gave up ownership of the Gardens to the colonial government. From this time, the Gardens began to have a more scientific and economic function, with a herbarium and library.



Map of extent of Gardens when the colonial government took over. Courtesy of the Singapore Botanic Gardens.

FIRST ECONOMIC GARDEN

Cash crops began to be experimented with, to increase the economic strength of the British Empire.

FIRST RUBBER SEEDLINGS ARRIVE

Coming from Brazil through Kew Gardens (London) to Singapore, these rubber seedlings would have a great impact on Singapore, Southeast Asia, and the world.



Bandstand Hill in 1877. Courtesy of the Singapore Botanic Gardens.



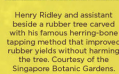
Rubber plantation in Economic Gardens (1890s). Courtesy of the Singapore Botanic Gardens.

1880s

1888

FIRST DIRECTOR OF THE GARDENS

Henry Ridley, latterly known as the 'father of Malaya's rubber industry', had the honour of this appointment.



Henry Ridley and assistant beside a rubber tree carved with his famous herring-bone tapping method that improved rubber yields without harming the tree. Courtesy of the Singapore Botanic Gardens.

THE ICONIC BANDSTAND

This was built on Bandstand Hill, which had already been used for musical performances.



Musical performances were commonly held under the gentle gaze of the moon. Courtesy of the Singapore Botanic Gardens.

1942 - 1945

1956

FIRST VIP ORCHID

Aranthera 'Anne Black' was named after Lady Black, wife of a former governor of Singapore.



This red orchid is named after Lady Black. Courtesy of the Singapore Botanic Gardens.

1959

2015

THE GARDEN CITY MOVEMENT

The Gardens' role changed to support this new Movement, inaugurated by Mr Lee Kuan Yew's planting of a tree at Farrer Circus.



Mr Lee Kuan Yew planting a tree. Then, everyone just looked on. Today, tree planting is done by the community. Ministry of Information and the Arts Collection. Courtesy of the National Archives of Singapore.

This timeline illustrates key historic events that contributed to the eventual inscription of Singapore Botanical Garden as a UNESCO World Heritage site.

Apart from the significance of rubber, the history of the Gardens is intertwined with the Greening of Singapore led by the late Mr Lee Kuan Yew.

This timeline was developed for the *More than a Gardens* travelling exhibition to remind the public that the SBG was really more than a garden.

Image courtesy of National Heritage Board.