

It's In Our Nature

TO NURTURE OUR CITY IN A GARDEN

Singapore's greening journey has been a community effort involving multiple stakeholders. In the latest initiatives to strengthen our green infrastructure, public agencies, corporate partners, students, residents and volunteers came together as we built our Nature Ways, shaped our Streetscape Gardens and introduced greenery in our high-rise buildings, exemplifying Community in Action.



One of the key pillars of the City in a Garden vision is pervasive greenery. From nature reserves, parks and park connectors to tree-lined roads, this green network is what makes Singapore an endearing and liveable home.





Singapore Chinese Girls' School (SCGS) is one of the schools participating in the Community in Action for Kheam Hock initiative. At the launch event, Minister for National Development, Mr Khaw Boon Wan, was introduced to the various plants growing in the school nursery.

Bringing Together a Community in Action

The first event held to commemorate 50 years of the greening of Singapore was the unveiling of a community-led initiative involving NParks, Nature Society (Singapore) (NSS), corporate supporters, community gardening volunteers, residents and schools.

Launched on 2 February 2013, Community in Action for Kheam Hock aims to bring biodiversity closer to the neighbourhood by encouraging the community to grow bird- and butterfly-attracting plants in homes, along the roads and within buildings. The initiative got off to a strong start with individual households,

private developments and schools participating in the effort. Corporate organisations also stepped forward to pledge support: City Developments Limited selected specific plants for its condominium which was undergoing construction to attract more biodiversity to the development, while UBS collaborated with residents to maintain the greenery in the neighbourhood.

Kheam Hock's location between two biodiversity-rich areas – the Central Catchment Nature Reserve and Singapore Botanic Gardens – made it an ideal candidate for NParks' Nature Ways programme, under which routes are planted with specific trees and shrubs to facilitate the movement of animals between green spaces.



A stretch of Bedok Reservoir Road, part of Tampines Nature Way, was planted with suitable shrubs to attract birds and butterflies.

Three other Nature Ways were also completed at Admiralty, Tampines and Yishun in FY2012. Pre-planting and post-planting surveys conducted by NSS along Tampines Nature Way and Kheam Hock Nature Way showed an increase in sightings of bird and butterfly species.

NParks is currently collaborating with NSS and schools along the Nature Ways to grow more plants and carry out biodiversity surveys. It is estimated that more than 60km of the Nature Ways will be planted up by 2015.

Creating an Unforgettable Garden Experience for our Visitors

Singapore Botanic Gardens won the inaugural International Garden Tourism – Garden of the Year Award presented by the Canadian Garden Tourism Council on 13 April 2012. The only Asian garden to be nominated for the award, it was lauded for its stunning verdant landscapes and for giving visitors an enjoyable and unforgettable garden experience.

In 2012, Singapore Botanic Gardens received more than 4.4 million visitors. New developments included the Fragrant Garden, which showcases fragrant plants such as the Chempaka and the Tembusu and the soon-to-be completed Foliage Garden, a sunken garden featuring plants with interesting leaf forms, shapes, textures and colours. Meanwhile, the National Orchid Garden continued to grow its collection with the creation of almost 800 new orchid hybrid crosses. To allow visitors to enjoy the beauty of the Gardens after nightfall, night lighting was introduced in selected areas, starting with the Visitor Centre in May 2012.

To broaden its engagement with children, NParks has announced plans to double the size of the Jacob Ballas Children's Garden to 4 hectares by 2014. The Children's Garden was opened in 2007 and attracts more than 200 000 visitors each year. To raise funds for the extension, a carnival was held during the fifth anniversary celebrations of the Children's Garden on 18 November 2012.

In December 2012, Singapore submitted its World Heritage Tentative List to UNESCO to indicate interest in inscribing the Singapore Botanic Gardens as a World Heritage Site.



Visitors to the Gardens were treated to the once-in-a-lifetime flowering of a stately *Corypha umbraculifera*, commonly known as the Talipot Palm, which had graced the lawn near Holttum Hall for years.



Researcher Vinita Gowda, who hails from India, is on a fellowship grant from the Singapore Botanic Gardens to study the pollination and dispersal biology of native ginger from Singapore.

Working with the Research Community

The Singapore Botanic Gardens continued to collaborate with the global research community in major studies in 2012. For example, the Singapore Herbarium is participating in the Global Plants Initiative (GPI), which seeks to create a platform for the sharing of taxonomic resources to support scientific research on plants and biodiversity. It is one of just six herbaria in Asia to participate in the GPI consortium. In October 2012, staff at the Herbarium began digitising its type specimen collections supported by a grant from the Mellon Foundation (USA). A batch of the images is now available on the JSTOR Plant Science website (<http://plants.jstor.org>).

When completed, all of the Herbarium's 8000 type specimens will be available online. This will greatly enhance the capacity of plant science researchers anywhere in the world to resolve queries about identification, taxonomy, and nomenclature, without the need to borrow these valuable collections or make a trip to Singapore to study them in person.

In continuing efforts to engage and support research partners, eight Research Fellowship Grants were also offered to botanists around the world to carry out studies at the Singapore Botanic Gardens in 2012 and 2013.



The 154-year-old Singapore Botanic Gardens is Singapore's first nomination as a UNESCO World Heritage Site.





I want to encourage other citizens to come forward, collaborate, and join hands to make our public facilities better for all to enjoy.



Han Jok Kwang

Cycling enthusiast and regular feedback contributor on the Park Connector Network



After five years of planning and construction, the Bay South Garden at Gardens by the Bay was officially opened to the public to experience unique features such as the vertical gardens of the Supertrees; the Flower Dome and Cloud Forest cooled conservatories; the Heritage Gardens and World of Plants; and the Dragonfly Lake.

With the opening of Gardens by the Bay, Singapore moved another step closer to realising its vision of a City in a Garden where communities, places and spaces are connected through parks, gardens, streetscapes and skysrise greenery.

Gardens by the Bay Opens its Doors

Five years of planning and construction culminated in the official opening of the iconic Gardens by the Bay on 28 June 2012, in a ceremony held at the Flower Dome conservatory.

The development of Gardens by the Bay was a collaborative effort by architects, designers, engineers, contractors and NParks, who worked together to create the Gardens' unique features and green innovations.

The Gardens also received strong corporate support with OCBC Bank sponsoring the Supertree aerial walkway and light and sound show; Far East Organization pledging S\$10 million to develop a dedicated play area for children to interact with nature and the environment; ExxonMobil contributing S\$2 million towards the development of educational resources around Dragonfly Lake for visitors; and Changi Airport Group and Woh Hup (Private) Limited donating S\$2 million each to support the operations of the Flower Dome and the development of the Sun Pavilion (display house for succulents) respectively.



Commemorating 50 Years of Greening Singapore

Singapore's journey to become a City in a Garden would not have been possible without community support. As we commemorate our 50 years of greening in 2013, many organisations have come forward to continue their support for the greening efforts. Seen here and on the following pages are highlights of some of these partnerships.

Commemorative Memorabilia

In collaboration with Singapore Post, commemorative stamps portraying Singapore's vibrant urban landscape nestled within a thriving garden with plants and wildlife were issued in June 2013. The stamps come in biodegradable paper, with seeds of the *Portulaca grandiflora* affixed to them for everyone to plant.



Between mid-June and mid-July 2013, McDonald's highlighted Singapore's greening story on more than 3 million trays. Their service staff also wore the "50 Years of Greening Singapore" commemorative badge.



For information on other partnerships, please visit www.nparks.gov.sg/50years.

Collaborating to Green the Heartlands and Skyrises

To extend Singapore's greenery into the residential heartlands, NParks continued to work closely with government agencies such as the Housing and Development Board, Land Transport Authority, People's Association and Town Councils, and grassroots volunteers to rejuvenate urban parks and enliven the streetscapes.

Works at the new Holland Village Park and the upgrading of Sembawang Park, Woodlands Town Park East and Yishun Park were completed. Streetscape Gardens were also created to enhance the greenery along Jurong East Central (Al-Mukminin Mosque), Bangkit Road and Geylang Lorong 36. Another two will be completed along Tampines Street 71 and Yishun Street 81 by the last quarter of 2013.

The Park Connector Network, a "go-to" venue for fitness buffs and families alike, continued to expand and link even more communities along its length. The completion of the Jalan Pelikat Park Connector, Tampines Loyang Park Connector and Pelton Canal Park Connector brought its total length to more than 210km as of March 2013.

The vertical greening of Singapore also continued to gain momentum, with up to 56.5 hectares of skyrise greenery implemented islandwide. An additional 29 buildings successfully applied for the Skyrise Greenery Incentive Scheme in FY2012. Since 2009, NParks has reached out to more than 25 schools, nine tertiary and four healthcare institution buildings to develop their rooftop gardens and vertical greenery projects.



Nanyang Polytechnic creatively transformed its grey concrete roof into a lush 720sq m eco-garden. This project was completed under NParks' Skyrise Greenery Incentive Scheme.

A woman with short dark hair, wearing a black and white striped jacket with a red collar and a black top, stands on a balcony. She is smiling and looking towards the camera. The background shows a cityscape with many high-rise buildings and lush green trees. A large white circle is overlaid on the top right of the image, containing text.

Good landscape
and lush greenery are
absolutely critical even as we
build in a high rise and high
density environment. Through
our work with nature, I want
to create a green and restful
sanctuary and home for
our residents.

Dr Cheong Koon Hean

CEO (HDB) & Deputy Secretary
(Special Duties), MND
Housing & Development Board