Creating Green Spaces

the state

In land-scarce Singapore, competing demands for real estate will always present a challenge as we seek to sustain and grow our green spaces. However, the high level of public engagement with NParks' infrastructure projects and the continued commitment of our partners have resulted in a proliferation of innovative ideas and fruitful collaborations, and attest to the enduring value that is placed on enhancing and enriching Singapore's green landscape.

Working with the community to shape our parks

Grassy river banks have replaced concrete bulwarks, and a sculpture takes pride of place on Recycle Hill. This is the **Bishan-Ang Mo Kio Park**, which was officially opened by Prime Minister Lee Hsien Loong on 17 March 2012.

Conceptualised by NParks and PUB and shaped through a process of public engagement, the park is a focal point for residents of both estates with its familyfriendly amenities such as picnic grounds, a dog run and kite-flying greens. One of the main highlights is a naturalised and meandering stretch of the Kallang River, which was restored and reshaped from a 2.7-kilometre-long concretised canal as part of a long-term initiative to rejuvenate Singapore's waterscape. Community ownership of the project was evident from the 2,000 residents and participants from community groups who were present at the opening ceremony, and who continue to be involved by conducting patrols within the park and along the waterway.

One of the exciting new developments that Singaporeans can look forward to as the City in a Garden takes shape is **Destination Parks**. Announced by PM Lee during the Bishan-Ang Mo Kio Park

"We should make more active use of our rivers rather than having them just as a backdrop or scenery. For example, we can use them to increase public interaction with animals and plants in the river ecosystem."

Joanne Chow

City in a Garden public engagement exercise

opening, Destination Parks are planned as large regional parks with their own distinctive themes to attract Singaporeans from all over the island. Three parks have been identified for development into Destination Parks – Admiralty Park, East Coast Park and Jurong Lake Park – based on their geographical locations in the Northern, Eastern and Western parts of the island respectively. These will be developed within the next five to 10 years.

To engage the public in the development of Destination Parks, roadshows and focus group discussions were held to garner feedback and ideas for the project. These will be evaluated and suitable ones incorporated into the development plans.





- 01 The completion of Bishan-Ang Mo Kio Park is part of a long-term initiative to rejuvenate urban parks and draw Singaporeans closer to nature and water. Here, an NParks guide introduced Prime Minister Lee Hsien Loong to the flora found in the park.
- 02 Cycling is a popular activity along the park connectors of the newly-opened North Eastern Riverine loop. At the official opening, Deputy Prime Minister Teo Chee Hean interacted with handcyclists leading a group of brisk-walkers at Punggol Promenade Riverside Walk.

Connecting Singaporeans through our green links

Breathtaking views and rich biodiversity frame the 26-kilometre **North Eastern Riverine Loop**, which was officially opened by Deputy Prime Minister Teo Chee Hean on 25 February 2012. The fourth loop of the Park Connector Network links Sengkang Riverside Park, Punggol Park, Punggol Waterway Park and Punggol Point Park. With 80 per cent of the loop running along waterways including Serangoon and Punggol reservoirs, it offers stunning views of the waterways and northeastern coastline, and is home to riverine residents such as dragonflies, butterflies, water birds and even otters.

The North Eastern Riverine Loop is part of a bigger picture that is being envisaged for Singapore's Park Connector Network. This involves the creation of a The North Eastern Riverine Loop enables about half a million residents living in Punggol, Sengkang, Buangkok and Hougang to enjoy the rustic charm of our waterways and have easy access to four parks in the vicinity.

150-kilometre **Round Island Route** which will connect more than 3.5 million residents, making it a recreational destination on a national scale. Announced by DPM Teo on 25 February 2012, the idea for the Round Island Route emerged out of over 4,000 suggestions gathered through a City in a Garden public engagement exercise. When ready, it will present a new recreation option for citizens and further enrich the experience of park users and tourists.



- 01 During the 20th World Orchid Conference preview, the Flower Dome at Gardens by the Bay featured a specially-curated display of 14,000 orchid plants consisting of about 150 hybrids and 30 species from around the world.
- 02 At Tampines Eco Green, dead trees are left alone to serve as important nesting sites for birds such as woodpeckers.
- 03 The Sultan (Camacinia gigantea), one of Singapore's largest dragonflies, is one of the 13 species seen and recorded in Tampines Eco Green.

Raising eco-awareness in the heartland

Seventy species of birds, 13 species of dragonflies, 12 species of butterflies and 32 species of spiders (including *Sphingius vivax* which had never been spotted in Singapore before) – this is a snapshot of the biodiversity that has been recorded at *Tampines Eco Green*, which opened on 24 April 2011. The event, which was attended by more than 700 students and residents from the East, was organised by NParks to commemorate the International Year of Forests and Earth Day. It featured interactive activities such as guided walks, invertebrate sampling and the building of hedges, which were aimed at promoting a deeper appreciation of the natural environment.

The park was designed and developed according to the guidelines for Green Mark for Parks as well as the Principles and Guidelines of Water Sensitive Urban Design. Structures such as the signage, benches, bird hides, earth mounds and hedges were made using recycled materials, and the park itself features an ecotoilet, vegetated swales (a natural drainage system that traps particulate pollutants), and green roofs on all the shelters and toilets.

To enhance biodiversity, NParks has also included some unique touches to the 36.5-hectare park. It has introduced trees and plants that produce abundant nectar and fruit, as well as tall grass, to attract more birds, butterflies and other animals. At night, it is "lights out" at the park in order to minimise disturbance to sensitive wildlife.



Catching a sneak preview of a new Singapore icon

Singaporeans and guests from overseas, young and old, thronged *Gardens by the Bay* and its Flower Dome during a sneak preview on 14 to 20 November 2011, when the doors were open to ticket holders attending the 20th World Orchid Conference (20WOC). Over the seven-day period, some 300,000 visitors were wowed by the spectacular display of plants within the cooled conservatory, one of two, in Bay South Garden.

About 1.2 hectares in footprint, the Flower Dome replicates the cool-dry climate of Mediterranean and semi-arid subtropical regions, enabling the display of habitats and plants from regions in South America, the United States, South Africa and Madagascar, Western Australia and the Mediterranean Basin. Designed with the environment in mind, it also incorporates cutting-edge technologies that provide energy-efficient solutions in cooling.





Spearheading new initiatives with corporate partners

Corporate partnerships have played an important role in seeing many of NParks' projects to fruition. The *Healing Garden* at the Singapore Botanic Gardens, for example, was launched with the support of Thong Chai Medical Association and Japan's Makino Botanical Garden.

The 2.5-hectare garden, which showcases 500 species of plants from Southeast Asia with healing properties, is the largest of its kind in the region. Launched on 21 October 2011, the garden took three years to set up and is designed to be a tranquil retreat with medicinal plants as its main focus. An iPhone application is also available for visitors to find out more about the various plants in the garden.

To celebrate the launch of the Healing Garden, Makino Botanical Garden put up a three-week exhibition of botanical paintings by renowned natural history illustrator Untei Sekine from the Edo era. Other corporate collaborations included ExxonMobil Asia's continued support for the Singapore Botanic Gardens calendar and Singapore Press Holdings' \$1.2 million pledge towards the development of outreach programmes for the SPH Walk of Giants within the Gardens' Learning Forest.

Even as these initiatives were being ramped up, NParks continued to engage the public to fine-tune ideas for the Singapore Botanic Gardens. Between August and November 2011, it conducted a City in a Garden public engagement exercise, seeking public input to guide the detailing of upcoming plans for the Gardens. Areas where it is seeking public opinion on include activities for visitors to the Jacob Ballas Children's Garden and the Learning Forest, as well as ways to showcase the Gardens' rich heritage and to enhance the visitor experience, especially at night.



- 01 The new Healing Garden adds to the many upcoming horticultural attractions developed to strengthen Singapore Botanic Gardens' position as a key botanic institution. President Tony Tan Keng Yam officiated at its launch.
- 02 The Labrador Nature & Coastal Walk connects the Southern Ridges to the Southern Waterfront and enables visitors to get closer to nature and learn more about the rich biodiversity in the area.

Singapore Botanic Gardens now sees more than 4 million visitors yearly, the highest garden attendance in the world.

Collaborating with public sector partners on new lifestyle projects

A new leisure playground has opened in the southern part of Singapore – the result of close collaboration between the Urban Redevelopment Authority (URA) and NParks. The *Labrador Nature & Coastal Walk* was conceptualised and developed by URA under its 2008 Leisure Plan and is managed by NParks. It was officially launched by Minister for Trade and Industry Mr Lim Hng Kiang on 2 January 2012, at a community event which involved over 800 participants. The 2.1-kilometre walk comprises three distinct segments – Alexandra Garden Trail, Berlayer Creek, and Bukit Chermin Boardwalk. With its opening, visitors can now enter mangrove and coastal areas which were previously inaccessible to pedestrians.



"Trees for Life" Art Competition

The art pieces on this and the following pages were created for the "Trees for Life" Art Competition, which received more than 2,500 entries from the pre-school, primary and secondary levels. Organised by NParks, the competition aimed to raise awareness of our trees as well as the greenery and biodiversity around us.



Chair Tree Evangeline Teo Jia Xuan, 7 Nanyang Academy of Fine Arts



Trees Are Tall Nguyen Lan Chi, 4 Holy Grace Kindergarten