

Springleaf Nature Park: A Green Corridor for Both Wildlife and People

Text by Cybil Kho and Ryuta Teo
Images as credited

Project Credits
Location 1218 Upper Thomson Road,
Singapore 787136 Client/Owner
National Parks Board Completion Date
27 Oct 2014 Landscape Architect
Plantwerkz Pte Ltd Architects CPG
Consultants Structural Engineer CPG
Consultants Mechanical & Electrical
Engineer CPG Consultants Civil &
Structural Engineer CPG Consultants
Main Contractor Frontbuild Engineering
& Construction Pte Ltd Landscape
Contractor Teck Eng Pte Ltd
(contracted under the main contractor)
Site Area 6ha GFA 530sqm



About the Park

With an area of six hectares, Springleaf Nature Park might be considered small to some, but its ambition exceeds its physical proportion. The first of four Nature Parks to be developed around the Central Catchment Nature Reserve in 2014, Springleaf Nature Park was initially conceptualised as a nature buffer that conserves more critical green areas, while managing the high visitor numbers coming from the nearby Central Catchment Nature Reserve. It plays the role of a natural green corridor between the Central Catchment Nature Reserve and the surrounding green areas. As Singapore's natural landscape becomes increasingly fragmented, developing a network of smaller green pockets or park spaces—which are physically compatible to the environment—is fast becoming an important strategy.

As an example of Cranz and Boland's (2004) new urban park model—the Sustainable Park—Springleaf Nature Park integrates both ecological and social values into its design. Besides acting as a green corridor to Singapore's biodiversity, the nature park also plays an important social role in improving public access to natural green spaces. Springleaf Nature Park also supports human well-being by increasing the opportunities available for people to be exposed to nature. The importance that green spaces have towards people's technology-added brains in today's society has been strongly supported by research.

Located along Upper Thomson Road and sandwiched between the residential areas at Springleaf Avenue, Thong Soon Green, and Springside Drive; Springleaf Nature Park's improved accessibility reduces the barrier to park visitation, especially for those lacking the inclination to travel. In addition, its links to the Parks Connector Network via Nee Soon Road and Lentor Avenue provides a greater connection for the general public.

Today, amidst an urbanised city, Springleaf Nature Park is a thriving biodiversity ground and a natural green corridor for Singapore's wildlife—a space where visitors can spot up to 80 bird species. In the 1850s, the area was once home to the Chan Chu Kang village, along with a gambier, pepper, and oil palm plantation. Interestingly, the river which flowed through the reservoir was not freshwater like it is today. Instead, the waters used to be brackish, until the mouth of the Sungei Seletar River was dammed in in 1846.



Wildlife Conservation Efforts

Birds are one of the most commonly sighted wildlife in the area. Small to medium-sized bird species such as the Rufous-tailed Tailorbird (*Orthotomus sericeus*) and the Pin-striped Tit-Babbler (*Mixornis gularis*) rely on green corridors to travel from one forested area to another. Larger birds such as the Grey-headed Fish Eagle (*Ichthyophaga ichthyaetus*) and Changeable-hawk Eagle (*Nisaetus cirrhatus*) have also been spotted flying through and perching on the taller trees in the nature park.

Special efforts have been made by the National Parks Board (NParks) in practising sensitivity when restoring the landscape during the park's development. For example, native plant species, matched with those already in Singapore's native forests, were selected for planting at the park. The choice of local species would reduce the park's reliance on exotic species. The plant species were also picked to ensure diversity; a selective planting list consisted of trees and shrubs that would make up different layers of vegetation. Some of the plants selected included the Jelutong (*Dyera costulata*), a tree that can potentially grow to 60 metres in height; and the Singapore Rhododendron (*Melastoma malabathricum*), a flowering shrub often visited by carpenter bees (*Xylocopa latipes*) and whose fruits are a favourite of birds like the Orange-bellied Flowerpecker (*Dicaeum trigonostigma*).

The nature park also held surprises for the conservation team from NParks as they discovered a natural pond in the nature reserve adjacent to the park. Such habitats are easily overlooked or mistaken as "water ponding" areas. However, daily observations by the team found a diverse form of wildlife such as birds, frogs, dragonflies, damselflies and monitor lizards using the pond as a shelter. Animals such as the Oriental Swamp Eel (*Monopterus albus*) and Malayan Box Terrapin (*Cuora amboinensis*) were also found to be living in the pond in subsequent surveys. As a result, the initial plan to fill the pond and build a footpath through it was shelved. The footpath at Springleaf Nature Park has been diverted from its original path, saving the pond and maintaining it as a habitat for wildlife.

1. Springleaf Nature Park
(Photo: Jeremy Ang).

2. The Oriental Swamp Eel (*Monopterus albus*) is able to survive long periods of drought by burrowing in soil or muddy banks (Photo: Ryuta Teo).



3



4

3. Bird observation deck, a spot where one can catch wildlife in action (Photo: Cybil Kho).

4. Fresh timber from felled Senegal Mahogany trees (*Khaya senegalensis*) which are now unique pieces of art (Photo: Cybil Kho).

5. An NParks officer conducting a bird count survey (Photo: Ryuta Teo).

6. Bird ringing is important in wildlife conservation efforts as it allows for individual identification and tracking of birds' movement (Photo: Ryuta Teo).

“

To recreate an experience of being amongst nature, Springleaf Nature Park was designed with the intent of leading people through the forest and then along the Sungei Seletar River.



5



6

Designing with Nature in Mind

To recreate an experience of being amongst nature, Springleaf Nature Park was designed with the intent of leading people through the forest and then along the Sungei Seletar River. People are encouraged to explore nature and hike through the network of footpaths meandering through the park. For nature lovers and avid wildlife photographers, a bird observation deck provides a spot to capture the wildlife in action as well as serves as a shelter on rainy days.

Another design sensitivity incorporated into the development of Springleaf Nature Park—which received the Gold Awards from the Building and Construction Authority for Universal Design Marks for Parks and Public Spaces in 2015—include the use of natural materials. A cluster of Senegal Mahogany (*Khaya senegalensis*) trees posed a safety risk and had to be removed. Instead of going to waste, the trees found a new lease of life: its trunks were sent to a carpenter to be fabricated into benches—pieces specially designed by the project’s architect and the team. The initiative eschewed fresh timber for unique pieces of art that will also serve as functional seating within the park.

Yet, the work of the conservation team does not stop at the opening of the park. Monitoring the wildlife at the nature park remains a long-term endeavour, which the team maintains by conducting biodiversity surveys like bird counts and bird ringing. Through these surveys, birds such as the Brown Shrike (*Lanius cristatus*) and Common Kingfisher (*Alcedo atthis*) have been spotted during the migratory season. The nature park is also a suitable habitat and breeding ground for some of the resident bird species, with new, previously-unrecorded species also spotted within the grounds. Birds in breeding plumages and breeding pairs have been observed collecting nesting material in the nature park, while juvenile resident birds emerged during the post-breeding season. Some of the resident birds include the Scarlet-backed Flowerpecker (*Dicaeum cruentatum*), the Yellow-bellied Prinia (*Prinia flaviventris*) and the Yellow-vented Bulbul (*Pycnonotus goiavier*).




Monitoring the wildlife at the nature park remains a long-term endeavour, which the team maintains by conducting biodiversity surveys like bird counts and bird ringing.



7. A female Scarlet-backed Flowerpecker (*Dicaeum cruentatum*) eyeing her meal, the fruit of Singapore Rhododendron (*Melastoma malabathricum*) (Photo: Ryuta Teo).

8. In contrast to the usually duller looking females, the male Scarlet-backed Flowerpecker (*Dicaeum cruentatum*) are endowed with beautiful plumage (Photo: Ryuta Teo).

Work also continues when it comes to the plants. The Common Tree-vine (*Leea indica*), and the Malva Nut (*Scaphium macropodum*) have been planted to add diversity and enhance the different layers of vegetation in the park. This would help attract a wider variety of biodiversity such as bees, butterflies, birds and mammals to the ecosystem. 

Acknowledgements

The authors would like to thank their colleagues Vanessa Preechakul and Jeremy Ang for their contribution to this article.