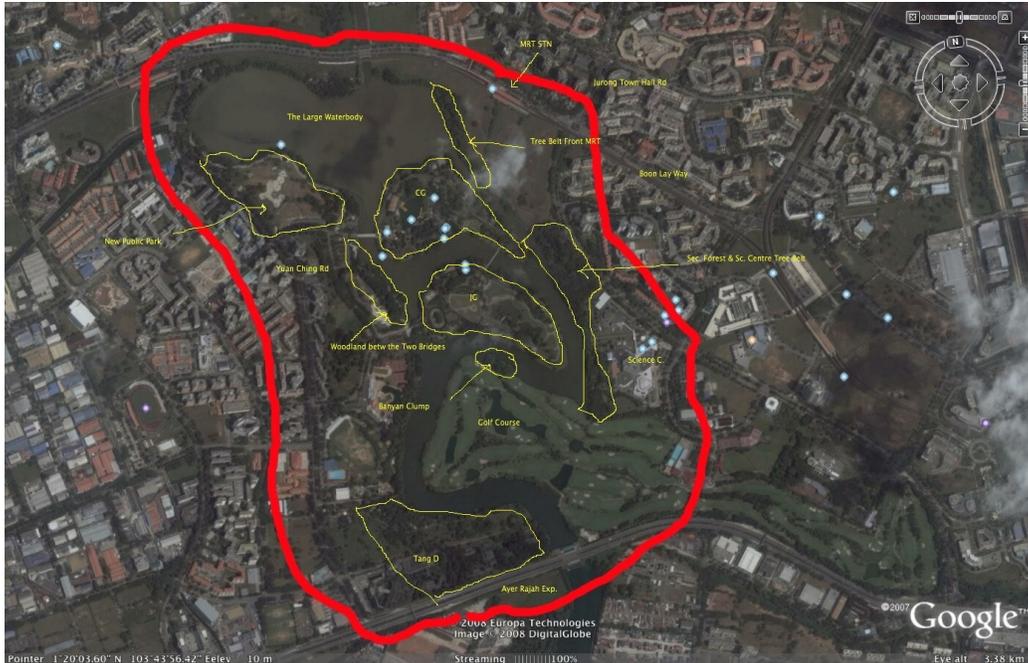


Feedback on the URA Jurong Lake Master Plan

Background



The URA Master Plan for this Lake and its surrounding areas is certainly an exciting one with its goal of galvanizing this relatively quiet portion of the western region into vibrant life --- generating a boost for the growth of business with its accompanying provision of leisure amenities. The Plan is well thought out in terms of leisure and business, but rather thin or devoid of an ecological underpinning to the planning and design.

The Lake is of course the handiwork of PUB, created by the damming up of Jurong River, while the Park, the Golf Course and the Gardens are created by JTC. But over the course of time, the trees have become mature, forming dense and widespreading canopies that are very attractive to the birdlife. Over the past five years or so, many Nature Society's members and other nature lovers and photographers have been gravitating to the Lakeside, lured by the presence of a very rich and interesting birdlife --- resident and migratory. Rare and Nationally Threatened Species have been found on the islands and around the Lake and these have caused an influx of nature-oriented visitors to an area that is usually used by residents for jogging and strolling.

The presence of this rich and interesting birdlife is an asset of the area in terms of enhancing the quality of life for the residents and extra pleasure for visitors and office workers. The Nature Society and contributors to this Feedback are presenting here the available information on the birdlife and the important bird sites with the view that they can be taken into account in the planning and design so that a more ecological Master Plan can be formulated

for the benefit of all. This feedback is based on the ornithological information collected over a period of three years, from 2005 to 2008.

Summary of the Birdlife Records

Please refer to Appendix 1 attached.

There are 120 species recorded for the Lakeside area --- along the shoreline and at the Chinese and Japanese Garden. Of this 120 species, 78 are residents (nesting & breeding in Singapore), 36 migratory (wintering species from the temperate zones) , 4 non-breeding visitors and 2 vagrants. This comes to 33 % of the total species recorded for the whole of Singapore --- a very impressive records indeed. The area is also important as a haven for the migratory species, which comprises 30 % of the total recorded in the area. These are present here within the period from September to April.

There are 14 Nationally Threatened Species and these are:

1. Violet Cuckoo (uncommon)
2. Spotted Wood Owl (rare)
3. Thick-billed Pigeon (uncommon)
4. Little Tern (common)
5. Grey-headed Fish Eagle (rare)
6. Crested Serpent Eagle (rare)
7. Crested Goshawk (rare)
8. Changeable Hawk Eagle (uncommon)
9. Great-billed Heron (rare)
10. Grey Heron (common)
11. Purple Heron (uncommon)
12. Black-crowned Night Heron (uncommon)
13. Oriental Magpie Robin (uncommon)
14. White-rumped Shama (rare)

There are 4 species that are Globally Threatened and these are:

1. Tanimbar Corella (common)
2. Long-tailed Parakeet (common)
3. Jambu Fruit Dove (uncommon)
4. Grey-headed Fish Eagle (rare)

Some of these species in particular the birds of prey such as the Goshawk and the Eagles, typically birds of the forest and large woodlands, are using the area in their hunt for preys --- in these cases rather regularly. The spectacular Spotted Wood Owl stays in the area but the nesting site is still unknown.

Important Bird Sites

Please refer to Appendix 2 & the Google Map attached.

These sites are highlighted because of either a high concentration of rare and uncommon as well as Nationally Threatened Species or that they harbour specifically Nationally Threatened as well as Globally Threatened Species.

They are altogether 9 sites listed, inclusive of the large waterbody of the Lake. The locations of these sites are shown in the Google Map attached and the list of species found in these sites are listed in the Appendix 2. Only the rare and uncommon as well as the Nationally Threatened species are listed.

The Chinese Garden & Japanese Garden

It is great that these two sites will be left as they are without being used at all for the new developments being planned.

The Chinese Garden has the most number of records for both the Rare and the Uncommon, having a total of 18 species --- of which half of them are migratory. Of particular note are the presence of five Nationally Threatened (Grey-headed Fish Eagle, Purple Heron, Thick-billed Pigeon, Asian Drongo Cuckoo & Oriental Magpie Robin) and one Globally Threatened species (Jambu Fruit Dove.)

Of particular note among the migratory species are Rare Large Hawk-cuckoo, Jerdon's Baza and the Grey Nightjar. The presence of the Uncommon Peregrine Falcon also adds excitement to the birdwatchers and nature lovers.

The Japanese Garden has less of the Rare & Uncommon species (total = 6), but it most important in being the roosting site of the spectacular resident Spotted Wood Owl.

The Tree Clump at the Golf Course

This is a small clump of trees with several Banyans by the edge of the water facing the Japanese Garden. It was at one time a nesting site for the Black-crowned Night Heron but there is now no sign that there are still doing so, although they are still using the site for roosting. Other herons using the site for resting/roosting are the Purple Heron, the Grey Heron and the Striated Heron. This clump of trees forms a picturesque and with the presence of these herons a lively scene along the lakeside. It should as such be preserved and the herons there be protected from disturbance. One regular source of disturbance is the parking of the PUB maintenance boat at the site.

The Forest & Tree Belt Behind the Science Centre

Most surprisingly, there is a small patch of secondary forest to the north-east of the Science Centre. Together with the thick belt of trees just to the back of the Centre along shore, it constitutes the only vegetated area that have a very natural feel and look in the whole Lake area. The forest consists of mature Albizias, Acacias, Ketapangs (Sea Almonds), etc. with a dense undergrowth of Fish-tailed Palms and ferns. Typical secondary forest plants such as the Terentang and Rattans are present. It is the haunt of the forest species such as the Grey-headed Fish Eagle (rare) , the Changeable Hawk Eagle (uncommon) and the Greater Coucal (uncommon.) Along the shore, uncommon wetland species such as the Stork-billed Kingfisher, the Black-crowned Night Heron and the Black Bittern are present. At the tree belt, there are many mature Banyans and Sea Hibiscus that are the foraging ground for many species of birds such as the Tailorbirds, Flycatchers, Woodpeckers, etc.

This is the only heavily vegetated area in the whole of the Lakeside. It would be most unfortunate if it is going to be curtailed or cleared for development. The high, tight and continuous wall of trees and other vegetations is a most picturesque and soothing sight for visitors going through the Chinese and Japanese Gardens. In the Master Plan, it is indicated that the belt of trees at the back of the Science Centre will be completely cleared for a manicured waterfront with a neat row of planted trees for the planned Village that will arise from the Science Centre ground. We advise that this be not carried out. We are not against the creation of the Village but only that this belt of trees should not be cleared at all. Several small gaps at the less dense stretches can be created with boardwalks designed with a T-shaped end running into water --- to provide views of the Lake. We urge strongly that a greater stretch of this wall of old Sea Hibiscus (shrubs) and magnificent Banyans should be left standing.

The plan to create a water-channel going in from the south-eastern edge of the forest to curve round the front of the Science Centre back to the Lake at the boundary of the Golf Course is not a good idea. The channel is a rather short and will run very close to the road --- not an exciting or pleasant prospect for water activities like canoeing. Also, it will open up drastically the small patch of forest and disconnect it from the tree-belt behind the Science Centre. Here again, we strongly urge that this feature be dropped completely from the Master Plan.

The New Public Park

This patch of sparse woodland consisting of planted trees that are now mature is another surprise in terms of the birdlife. It is the haunt of many interesting migratory species --- like the Ruddy Kingfisher, the Black-backed Kingfisher, Asian Drongo Cuckoo, the Chestnut-winged Cuckoo, the Yellow-rumped Flycatcher, the Brown-chested Jingle Flycatcher, which is a Globally Threatened species. It is also the haunt of the resident Spotted Wood Owl (Nationally Rare & Threatened) and the Oriental Magpie Robin (uncommon & Nationally Threatened). The plan to plant more trees here is a good move --- for enhancing the birdlife.

Tang Dynasty Area

This is another quieter part of the Jurong Lake area --- the other being the forest patch mentioned above. There many Banyan trees scattered along the shoreline and these are very attractive to the birdlife --- for both migratory and resident species. This is the regular haunt of the resident Changeable Hawk Eagle (Uncommon) and the Crested Serpent Eagle (Rare.) Both are Nationally Threatened species. There are also two Uncommon non-breeding visitors sighted here --- the beautiful Jambu Fruit Dove and the Malaysian Hawk Cuckoo. Uncommon migratory species seen here are: the Black Bittern, the Von Schrenck's Bittern, the Mugimaki Flycatcher and the Yellow-rumped Flycatcher.

The Master Plan has indicated that this area will be used for creation of an eco-tourism hub that will abut right up edge and into the water of the Lake itself. Chalets or hotel accommodations sited in the Lake is one of the

features projected. For the sake of the interesting birdlife that haunts the water such as the bitterns and the herons, we advise that this be not carried out at all. The trees along the shoreline should be preserved and the eco-tourism project be shifted further inland to the confines of the defunct Tang Dynasty.

The Woodland Between the Chinese and the Japanese Garden Bridge

This a broad belt of planted trees that have provided a pleasant and cooling shades to joggers and strollers. The birdlife is not as interesting as those found in the areas above but Ruddy Kingfisher and the Spotted Wood Owl have also been sighted here. However, the rare Saturn butterfly and an uncommon species of dragonfly --- the beautiful *Pseudothemis jorina* – have been sighted here.

The Shoreline Tree-belt to the Front of the Chinese Garden MRT Station

There are many wetland species that haunt this belt of trees with a thick growth of grasses and ferns along the north-eastern shore of the Lake. The uncommon wetland species regularly seen along this stretch are the Stork-billed Kingfisher, the Slaty-breasted Rail & the Purple Heron among the residents and the Black Bittern & the Black-capped Kingfisher among the migrants. For the sake of these wetland species this thin belt of trees and grasses should be preserved. The trees also provide shades for the joggers and strollers on the newly created path.

The Large Waterbody at the Lake's Northern Section

This large waterbody is also interesting in terms of the birdlife --- most of which are conspicuous and whose presence in the water makes the Lake lively and interesting. The Grey-headed Fish Eagle and the White-bellied Sea Eagle and the Opsrey can be seen circling above and diving into the water for fish --- a spectacular sight indeed. In the shallows --- on both the eastern and western flank --- large wading birds like the Grey Heron, the Great Egret, the Little Egret and most surprising for a waterbody that is far away from the sea-coast, the Great-billed Heron, a Rare and Nationally Threatened species. To preserve this wonderful sight, we propose that the shallows should not be dredged and that aquatic plants like the Cat-tails be allowed to grow to some extent to create a marshland habitat. Also, no dragon boat activities and motorized cruises be allowed in the Lake. This will give a natural look to the waterbody.

General Recommendations

1. We recommend that there should be a green belt from the northern boundary of the golf course to the AYE. This belt will be left as its is --- with no new development to impinch on it. It will include the public park area.
2. Apart from the large waterbody, we also recommend that along the edges of the Lake, aquatic plants should be allowed to grow to create marshy habitats and to make the Lake more scenic --- especially at the channel on

the eastern side of the Chinese & Japanese Garden. Also, all along the water-edge of the Golf Course.

3. Only canoeing activities be allowed in the Lake with a control on the routes and numbers permissible at any one time. And this should be nature-oriented activities. This is necessary as the Lake is very small. Too many canoes will be make the Lake to be unsightly and the hubbub will be disturbing to the birdlife foraging or hunting for food in the water.

4. Here we would like to emphasize that the existing greenery around the Lake whether inside or outside the Gardens and the Public Park should be left as they are. This greenery have generally provided habitats for many species of birdlife (as is shown above for many of this green sites) --- as well lending scenic beauty and charm to the landscape of the Lake. In particular, we would like to re-emphasize that the clearance of the belt of trees and shrubs at the Science Centre as well as the creation of the water-channel in that area should not be implemented.

5. Any plans for new plantings --- as in the new Public Park --- is laudable. Native species should be preferred.

Contributors

Alan Owyong, Alfred Chia, C. Kim, Cyril Phang, Ellen Tan, Ho Hua Chew, K. P. Teh, Leong Kwok Peng, G. Sreedharan, Gloria Seow, Margie Hall, Stephen Lau, Sutari Supari, Timothy Pwee, Tsang Kwok Choong, Willie Foo.