Exploring the Emerald of Singapore

When Marcus Chua rediscovered the Greater Mousedeer (Tragulus napu) previously presumed to be extinct from Singapore - on Pulau Ubin in 2008, he became highly interested in the island. Find out more about his Ubin discoveries and how he encourages others to experience Ubin's natural and cultural heritage.

1. Tell us more about yourself and how you came to join the Friends of Ubin Network (FUN).

As a biologist at the Lee Kong Chian Natural History Museum, which is part of the National University of Singapore (NUS), I do research on the evolution, ecology and conservation of mammals. My involvement with FUN began with the sharing of research data. Subsequently, I participated in meetings where I got to share knowledge and ideas, as well as collaborated with FUN members and agencies to realise the potential of Ubin as a cultural, heritage and biodiversity gem of Singapore. I am excited to be part of outreach activities during Pesta Ubin and other events to help more people discover Ubin's wildlife.



2. What sparked your interest in the ecology and conservation of mammals on Pulau Ubin?

I became interested in Pulau Ubin's ecology and natural heritage when I was doing a research project with N. Sivasothi (also a FUN member) in 2008 as a NUS final-year undergraduate. My research project was to find out what wild mammals are present on the island, and whether they can co-exist with human use of the island.

We found that the nationally Critically Endangered Greater Mousedeer and other mammals can do so, as long as the island is managed carefully to reduce human impact. The project also revealed the potential of the island as a wildlife refuge which is a rare thing for Singapore! That was also when I learnt about the rich natural and cultural heritage of Pulau Ubin. All these experiences really opened my eyes to how valuable the island is, and what we can do to preserve it.

3. What changes have you observed on Pulau Ubin over the past years, and what would you hope to see on Pulau Ubin in ten years?

I think the charm of Ubin is that it is a throwback to a bygone era. Despite the many changes over the years, Pulau Ubin feels like an old friend. I am most pleased to see the various habitat enhancement projects (especially those linked to the OneMillionTrees movement) being implemented to help nature recover from guarrying and other past human impacts. The island has also become safer, more accessible and sustainable, which is great for humans too.

Many people in Singapore gained a renewed interest in Ubin or explored Ubin for the first time during the COVID-19 pandemic. How lucky we are to have such an island to visit when international travel is limited! I hope that more people will be able to discover and enjoy the island in the decades to come as the nature we have nurtured on the island begins to thrive even more, and when many other heritage and educational FUN initiatives get implemented.

4. With reference to The Ubin Project vision, what would you like to say to future generations of Singaporeans about Ubin?

Ubin is truly Singapore's rustic emerald gem to conserve, learn from and enjoy. Let's use it carefully and not lose it!

Celebrating East Coast Ubin Day

On 25 November 2023, Pulau Ubin hosted 1,000 residents from the East Coast Group Representation Constituency (GRC) for the East Coast Ubin Day celebration. Participants were treated to activities such as a staged Malay wedding, traditional kampung games, batik painting, as well as captivating performances of silat (Malay martial arts), dance and dikir barat (Malay choral ensemble). The highlight of the event was the unveiling of the reconstructed Malay kampung house, No. 22-E, a significant landmark that marks efforts in preserving and showcasing Malay culture and heritage.



The excited visitors looked around No. 22-E.

Siti Rahmah, Chairperson of the Changi Village-Pulau Ubin Area Sub-Committee, shared more about No. 22-E with the Advisers to East Coast GRC.







The staged Malay wedding procession.

Groups of participants were briefed by OMT coordinators and volunteers at the planting site.







The reconstructed Malay kampung house, No. 22-E.

These festivities were also accompanied by another event highlight, which was the OneMillionTrees (OMT) Movement tree-planting event. Together with Advisers to East Coast GRC, Deputy Prime Minister Heng Swee Keat, Minister Dr Mohamad Maliki bin Osman and Ms Jessica Tan, some 200 people planted 150 trees from 18 native species, such as the Critically Endangered Singapore Kopsia (Kopsia singapurensis) and Vulnerable Bayam Badak (Strombosia javanica). These trees were planted along Jalan Batu Ubin, in line with the Green Pillar of the East Coast Plan.

Through the OMT coordinators and volunteers, the participants also gained insights into Singapore's transformation into a City in Nature, as well as how their tree-planting efforts contribute to this vision. All in all, it was an enjoyable day for East Coast GRC residents, who got to experience both Pulau Ubin's cultural and natural heritage.

Advisers to East Coast GRC planted three Bayam Badak (Strombosia javanica) saplings along Jalan Batu Ubin.





As part of the Nature Conservation Masterplan, NParks works closely with the community on habitat enhancement projects, such as reforestation, mangrove restoration and freshwater wetlands restoration, to conserve and enhance the island's biodiversity. These efforts help to strengthen the ecological resilience of Pulau Ubin's habitats, thereby safeguarding our rich natural heritage.

Pulau Ubin continues to support a diverse and unique range of biodiversity including rare birds. Here are some interesting avian finds on the island!

Green Broadbill (Calyptomena viridis)

The Green Broadbill was believed to be extinct in Singapore, with its last sighting officially recorded in December 1941. This was probably due to the loss of suitable habitat in Singapore as forested areas gave way to urban development. The species, however, reappeared more recently in 2014, with a sighting of juveniles at East Coast Park in November 2014 and at Pulau Ubin in December 2014.

Many birders were pleasantly surprised when an adult bird was recorded on Pulau Ubin from April to August 2021. This adult individual was identified as a male Green Broadbill as it had black markings behind its eyes, as well as on its wings – traits which are absent in females of the species. These three records are believed to have been of visitors from outside of Singapore.



Photo credit: Jacky Soh

Photo credit: Ken Tan

Black-and-red Broadbill (Cymbirhynchus macrorhynchos)

Considered extinct from Singapore, the Black-andred Broadbill is a colourful forest bird that feeds mainly on insects and builds pendulum-like nests over waterbodies. This species was first spotted in Pulau Ubin in 2004 at the Sensory Trail. Since then, it has been seen a few times at Pulau Ubin and Sungei Buloh Wetland Reserve over the past decade. In 2017, staff of Outward Bound Singapore (OBS) found a dead Black-and-red Broadbill in the western part of Pulau Ubin. In July 2019, another bird was sighted within OBS premises, and later that same month, a bird crashed into a window within the same premises. The dazed bird was passed to NParks, and subsequently ringed and released at the Sensory Trail.

In 2022, there were two sightings in Pulau Ubin – once in May at Chek Jawa Wetlands and subsequently in July at the Sensory Trail. More recently, from April to July 2023, a bird at Chek Jawa Wetlands was observed to have a ring on its right leg. This means that it could be the individual that was previously ringed by NParks in 2019. All these birds are believed to be visitors from nearby countries.

Red Knot (Calidris canutus)

The Red Knot is a migratory shorebird that travels up to 20,000 km from North Asia (where it breeds) to South Asia and Southeast Asia during winter. Stopping at different coastlines along the way to fuel up for its long journey, this bird uses its beak to probe and pick up food such as clams and marine invertebrates.

Globally, the Red Knot population is under threat due to loss of feeding grounds, climate change and hunting. It has only been spotted six times in Singapore, including a sighting at Chek Jawa Wetlands in April 2022.



Photo credit: Ken Tan

White-crowned Hornbill (Berenicornis comatus)

The White-crowned Hornbill is found from southern Myanmar to Peninsular Malaysia, Sumatra and Borneo. It is a threatened species because it is hunted for its casque and poached for the illegal pet trade. An individual that was recorded at the Singapore Botanic Gardens in 1987 was believed to have been an escapee from the pet trade.

A female bird was recently spotted at Chek Jawa Wetlands from April to September 2023. Believed to be a visitor from one of our neighbouring countries, it was observed to be feeding on the fruits of the Small-leaved Nutmeg (Knema corticosa) as well as snakes, frogs and large insects.

Photo credit: Adrian Silas Tay

Oriental Darter (Anhinga melanogaster)

The Oriental Darter is found in lakes, marshes and rivers from South Asia to Southeast Asia. This long-necked bird swims with its body submerged and dives underwater to catch fish. Considered a visitor to Singapore, it was first sighted in Sungei Buloh Wetland Reserve in 2006. In February 2014, the Oriental Darter made its first appearance at Ketam Quarry, Pulau Ubin, and has since been regularly spotted there as well as at Pekan Quarry. Presently, up to six Oriental Darters have been found on Pulau Ubin. Perhaps Ubin will have a breeding population of Oriental Darters soon!



Photo credits: Francis Yap