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Animal Art

Advances Nature Awareness



Come to the Banquet: Feast of the Spiders (II)
Celebrating a Legacy of Conservation
Making a Difference at Earth Week





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NSS Exco's Message

TIME FLIES and we are now halfway through our milestone year in celebrating the 70th Anniversary of NSS. In the last seven decades, the Society has dedicated itself to the preservation and appreciation of Singapore's rich natural heritage.

Our work at Kranji Marshes, Sungei Buloh, the Green Corridor, and several other locations in Singapore is testament to our commitment and the impact we can create with our collective passion, hard work, and support from the nature community.

To commemorate our 70th year in Singapore, we are thrilled to announce a series of special events. First, we would like to invite you to join us at our 70th Anniversary Gala Lunch on Saturday 12 October 2024. The Gala event aims to bring together members, supporters, and partners who have been instrumental in our journey thus far. It also promises to be a time of reflection, gratitude, and inspiration as we look back on our collective achievements and look forward to all that still remains to be done. We are grateful that Professor Tommy Koh and Minister Desmond Lee have agreed to be our guests of honour at the Gala lunch. We are also indebted to our Advisory Council members Professor Lye Lin Heng and Dr Geh Min for serving as Chairs of the Gala Lunch Organising Committee. Do look out for updates on the event on social media and via email – and stay tuned to how you can help and register to attend.

In addition, NSS is proud to have been the main organiser and host of the 5th IUCN Horseshoe Crab Conference held in Singapore for the first time from 19 to 23 June 2024. Featuring esteemed speakers and experts, this conference provided a platform for sharing knowledge, fostering collaborations, and discussing innovative strategies for horseshoe crab conservation. This event reinforces our commitment to protect all of Singapore's biodiversity.

As your generous contributions have always been the backbone supporting our various initiatives, we look forward to your continued support this year. Tote Board has given their approval for the 'NSS 70th Anniversary Online Giving' programme, where we are working with Ray of Hope and Giving.sg to raise enough funds to expand our conservation efforts, conduct vital research, and enhance our educational outreach. For every dollar you donate for our 70th Anniversary, Tote Board will match with another dollar and you will also receive a receipt for a 250% reduction in taxable income. Kindly refer to the inside back cover page of this issue of *Nature Watch* for details on how to donate to us this year.

We are also constantly on the look out for dedicated volunteers in several areas and this is now your chance to help us move the needle even further in nature conservation. Please connect with contact@nss.org.sg if you have any questions around sponsorships, donations and volunteering with NSS. We remain deeply grateful for your steadfast support all these years and urge you to help make our 70th Anniversary a spectacular success!



Sincerely Yours,

Natasha Raina

Natasha Raina
Honorary Secretary

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EDITOR
Ms Gloria Seow

DESIGNER
Mr S T Leng

CONTRIBUTORS
**Mr Kenneth Chin, Mr David Court,
Ms Huang Ningxin, Ms Gloria Seow,
Ms Shreeyaa Subra, Ms Natasha Raina**

CONTRIBUTING TO NATURE WATCH

We welcome your articles, surveys, studies, observations, artworks and photo essays on biodiversity, natural history, conservation and related fields. Please email your story proposal to contact@nss.org.sg. Do include samples of your photographs (maximum 20 images per submission). We require high resolution JPEG images (ideally uncropped) in the largest size available, labelled with a descriptive file name.

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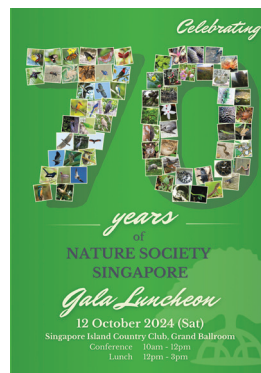
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ON THE COVER SONG OF THE SEA – A little girl hears the ocean from a conch, as painted by animal artist Kenneth Chin. See article on page 10.

BIODIVERSITY

COME TO THE BANQUET

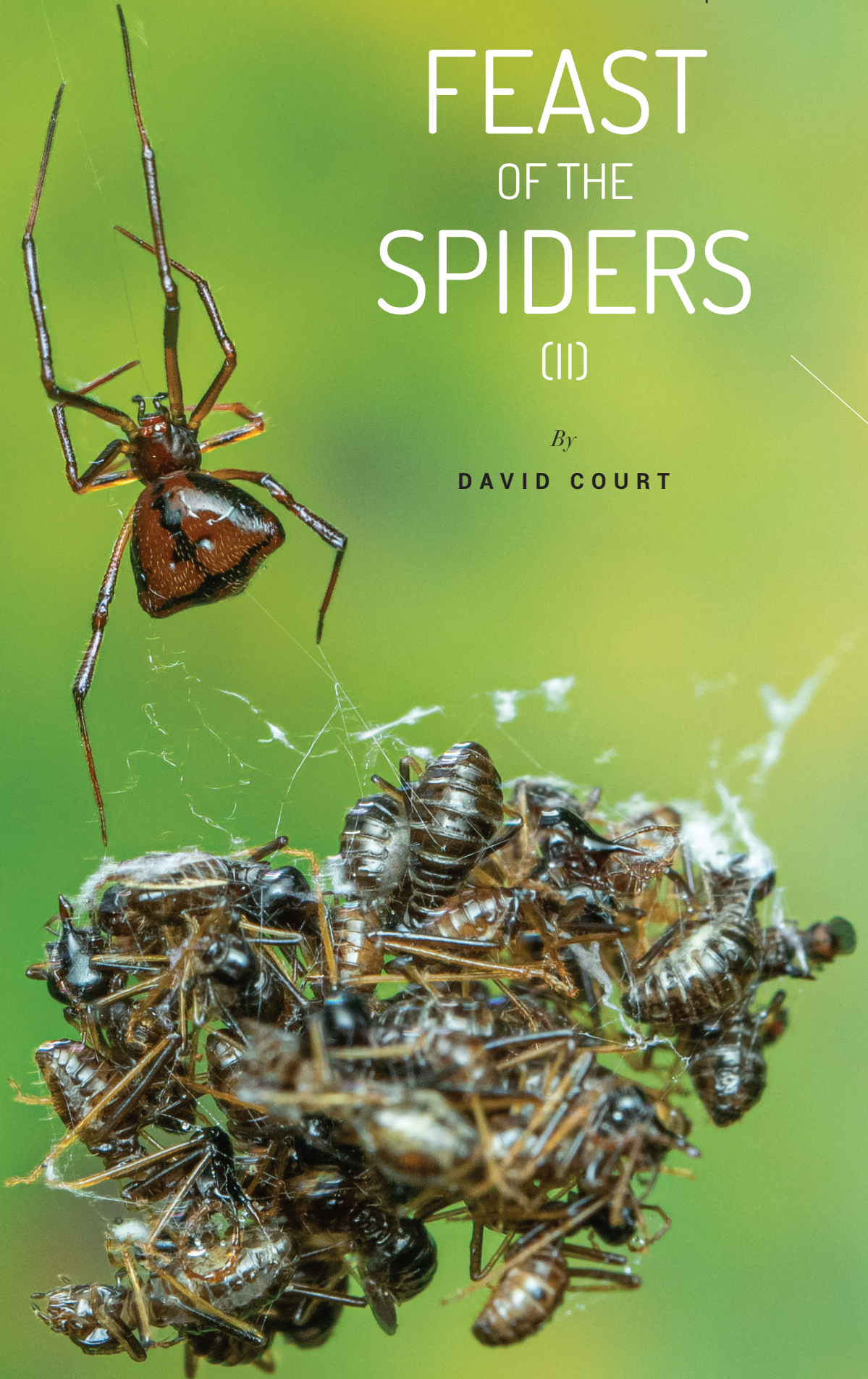
FEAST OF THE SPIDERS

(II)

By

DAVID COURT

The Samosa Red-eyed Spider (*Janula triangularis*) is dubbed the termite terminator – acquiring a massive food pack comprising up to 30 termites. Photo: Chris Ang.





David Court

elaborates on the many ingenious techniques that spiders employ in manipulating and disarming their prey. This is the second half of the two-part article, with Part I appearing in *Nature Watch* Q2/2023.



The Common Two-horned Orb Weaver (*Parawixia dehaani*) can be found in wooded parks and well-vegetated roadsides. Photo: Chris Ang.

Spider silk is a vital part of the arachnid's arsenal to help it subdue and capture its prey whilst avoiding harm to itself. There are numerous ways of deploying this silky weapon. Many spiders have anatomical features or behave in ways that reduce the chances of them becoming another animal's food. A few may capture prey to present as prenuptial gifts to their partner.

CREATING DINNER PACKS

Orb Weavers of the family *Araneidae* usually target winged insects such as beetles, flies, moths, bees, and wasps. When prey is entrapped by the sticky silk, most often part of the spiral of the well-known orb web, the spider scurries over to carry out the attack. Some sink their fangs into the prey immediately. Others deliver the fatal bite only after disabling the prey. Using their forelegs, they spin their catch round and round while the hind legs pull out from the spinnerets a broad swathe of silk made up of

countless microscopic strands. After many rotations, the prey's wings and legs are thoroughly bound. Only then will such a spider apply a bite, injecting venom to finish off its victim.

An hour or so after dusk, in wooded parks and well-vegetated roadsides, the **Common Two-horned Orb Weaver** (*Parawixia dehaani*) can be seen constructing its web. Before long, several large moths or beetles are usually found neatly wrapped and hanging from the said web. The spider then consumes one of these dinner packs at

leisure. Some orb weavers like the **Silver-faced Spiders** (*Argiope species*) dine in daylight hours. Others take their food packs to retreats in the undergrowth or to a folded leaf nearby to enjoy their meal in peace.

Comb-footed Spiders (family *Theridiidae*) are also wrappers, specialising in attack-wrapping. **The Brown Widow** (*Latrodectus geometricus*) is a prime example. It is an introduced species and is seasonally common in dry sheltered places, feeding on crawling insects especially ants. It constructs a lattice web with numerous sticky threads fastened to the ground. When an ant bumps into one of these deadly threads, a single strand detaches and adheres to the ant. As the victim struggles, more threads stick to it and break away from the ground. The upward tension from the remaining pre-stressed threads lifts the ant off the ground. By this time, the Brown Widow has arrived on the scene. It then commences an attack-wrapping sequence. It initially uses its hind legs to fling swathes of gluey silk at the prey, then wrapping, biting, and further wrapping it. Finally, it carries the ant up to the main part of its lattice web by which time the prey has usually succumbed.

In the same family is the ultimate prey wrapper, the **Samosa Red-eyed Spider** (*Janula triangularis*) found in secondary forests. Dubbed the termite terminator, this predator has been observed with a massive food pack made up of 30 termites. However, its behaviour leading to the capture of the termites is not yet well understood.

Many **Feather-legged Spiders** (family *Uloboridae*) construct classic orb webs with a special kind of silk different from the webs of orb weavers. A tiny comb on each of the fourth legs draws a multi-strand thread from a special structure on their abdomen called the cribellum. The **House Feather-legged Spider** (*Uloborus plumipes*) does not



The Brown Widow's (*Latrodectus geometricus*) lattice web has threads with adhesive droplets at the base that cling on to a passing ant, eventually lifting it off the ground. Photo: David Court.



Once a prey is ensnared, the spider commences a vigorous attack-wrap sequence that results in a killer shrink-wrap.

The House Feather-legged Spider (*Uloborus plumipes*) wraps its prey so tightly that body juices are sometimes exuded through the silk casing.
Photo: David Court.



This Spitting Spider (family *Scytodidae*) spits through its fangs two zig-zag streams of glue into the air, pinning its prey onto substrate. Only then does the spider deliver its lethal bite.
Photo: David Court.

EAT OR BE EATEN

Even as predators, spiders are constantly at risk of ending up as prey. Whilst at rest or on the hunt, adaptations that prevent a spider from falling victim to another predator are most advantageous. Spiders have evolved an extensive array of fascinating strategies to elude attacks from predators such as other spiders, ants, bugs, mantids, wasps, centipedes, frogs, lizards, or birds:

A. Camouflage & Disguise

Many spiders sport cryptic colouration that enable them to blend in with their surroundings. Others employ pattern-matching to be unrecognisable as prey. The spiders listed here resemble various inanimate or innocuous objects allowing them to hide in plain sight. One species in this list incorporates a hiding place in its web.

- **Resembling Sticks** – The **Tall-bellied Orb Weaver** (*Polys elevantus*) and **Common Singapore Net-casting spider** (*Asianopis* sp) resemble twigs or sticks.

- **Resembling a Bump on a Branch** – While resting, the **Tree-stump Orb Weaver** (*Polys* sp) and **Wrap-around Orb Weaver** (*Talhybia depressa*) hunker down and appear to be a bump on a branch.

possess venom nor does it need to. Once a prey is ensnared, the spider commences a vigorous attack-wrap sequence that results in a killer shrink-wrap. Over and over for several minutes, the spider rotates and wraps its prey at high speed. The white silk compresses the victim so tightly that its body juices may be exuded through the casing.

Most spiders have eight eyes. But some like the **Spitting Spiders** (family *Scytodidae*) have just six eyes. They have enormous venom glands in their cephalothorax.

Each gland has two parts: a front segment producing venom, and a larger posterior segment secreting a gluey substance. Approaching its prey stealthily, the spider suddenly spits. Simultaneously its fangs are oscillated at high frequency and a double zig-zag stream of glue is squirted through the air. The targeted prey finds itself stuck fast onto a substrate like a leaf, rock, tree trunk or root. Once the prey is securely fastened and immobilised, the spider delivers its lethal bite and commences its feast.



The Common Singapore Net-casting spider (*Asianopis* sp) hides in plain sight by arranging its body to resemble twigs. Photo: Joseph Koh.



The Deeleman's Two-tailed Spider (*Hersilia deelemanae*) is camouflaged perfectly when it sits on a lichen or moss-covered tree trunk. Photo: Chris Ang.

- **Resembling Lichen or Moss** – With body colouration and texture similar to that of lichen or moss, the **Deeleman's Two-tailed Spider** (*Hersilia deelemanae*) is nearly invisible when it sits close to the surface of a lichen or moss-covered tree trunk.
- **Resembling Bird or Caterpillar Dung** – When resting on vegetation, the **X-wing Fighter Spider** (*Pasilobus bufoninus*) and **Horned Bird Dropping Spider** (*Phrynarachne tuberosa*) resemble bird or caterpillar droppings.
- **Hiding in a Dead Leaf** – The **Red Tent Spider** (*Cyrtophora unicolor*) incorporates a folded dead leaf into its large three-dimensional tent-shaped web. The folded leaf is the spider's refuge into which it retreats during the day or whenever it detects a threat.



When resting, the Wrap-around Orb Weaver (*Talthybia depressa*) hunkers down and looks like a bump on a branch, thereby avoiding detection by predators. Photo: Joseph Koh.

The X-wing Fighter Spider (*Pasilobus bufoninus*) resembles bird or caterpillar droppings when resting on vegetation.
Photo: Joseph Koh.



Even as predators, spiders are constantly at risk of ending up as prey. Whilst at rest or on the hunt, adaptations that prevent a spider from falling victim to another predator are most advantageous.

The Red Tent Spider (*Cyrtophora unicolor*) incorporates a folded leaf into its tent-shaped web. It takes refuge in the leaf whenever it detects a threat.
Photo: Chris Ang.





The Kerengga Ant Jumper (*Myrmaplata plataleoides*) mimics the Weaver Ant, deriving protection from the fierce ants while feeding on other insects in the vicinity. Photo: Joseph Koh.



The Long-waisted Ant-mimic Jumper (*Myrmarachne cornuta*) imitates the appearance of an ant species with a powerful sting. Photo: Chris Ang.



The Eight-spotted Crab Spider (*Platythomisus octomaculatus*) looks like a shield bug that deters predators by spraying an unpleasant and irritating secretion. Photo: Joseph Koh.

B. Mimicry

Several strategies involve mimicry, where the spider imitates the appearance or behavioural pattern of harmful organisms to put off predators.

- **Ant Mimics** – Many invertebrates including spiders mimic the appearance of ants. The **Long-waisted Ant-mimic Jumper** (*Myrmarachne cornuta*) looks like an ant species with a powerful sting. Similarly, the **Ant-mimic Crab Spider** (*Amyciaea forticeps*), featured in Part I of this article, resembles the formidable Weaver Ant (*Oecophylla smaragdina*) which is feared for its nasty bite. This crab spider even waves its front legs to imitate the Weaver Ant's antennae. The **Kerengga Ant Jumper** (*Myrmaplata plataleoides*) is another mimic of the Weaver Ant, closely matching the ant's size, shape, and colour. The disguise is so good that the jumper can move inside the ant colony and remain unharmed. Unlike the Ant-mimic Crab Spider that associates with Weaver Ants to prey on them, the Kerengga Ant Jumper derives protection from the ants while feeding on other insects in the vicinity.

- **Caterpillar Mimics** – The comb-footed **Spiny Phoroncidia** (*Phoroncidia lygeana*) bears an uncanny resemblance to a caterpillar with long spines that will irritate our skin.

- **Shield Bug Mimics** – The **Eight-spotted Crab Spider** (*Platythomisus octomaculatus*) has a similar colour and patterning to the large Mangrove Shield Bug (*Calliphara nobilis*) and Ocellated Shield Bug (*Cantao ocellatus*). Both bugs deter predators by spraying unpleasant and irritating secretions from glands at the sides of their bodies.

EXCEPTIONAL WEDDING BANQUETS

Nursery Web Spiders belong to the family Pisauridae. There are 13 species in Singapore, some that roam freely, and others that build

a tangle web e.g., the **Four-spotted Nursery Web Spider** (*Sphedanus quadrimaculatus*). It would be interesting to know if the courtship of any of the local species resembles that of the remarkable **Nursery Web Spider** (*Pisaura mirabilis*) widespread in Europe and China. In *Pisaura mirabilis*, the fairer sex has a tendency to be aggressive towards courting males. Before commencing courtship, the male captures a fly and presents it as a wedding gift. The female usually accepts the bribe, feeding on the fly and allowing the mating to proceed.

Another interesting phenomenon is male sacrifice at the wedding banquet. The males of some species, for example the **Brown Widow Spider** (*Latrodectus geometricus*) mentioned earlier, behave sacrificially. As it begins copulation, the male may perform a somersault, allowing the female to bite and feed on its abdomen. This may kill the male outright or leave him vulnerable to further attack. Thus, a



The tangle web of a Four-spotted Nursery Web Spider (*Sphedanus quadrimaculatus*). Photo: Joseph Koh.

male's bride can become his widow. Nevertheless, the female would have received his genes and consumed part of his body, enhancing the reproductive success of the species.

Conclusion

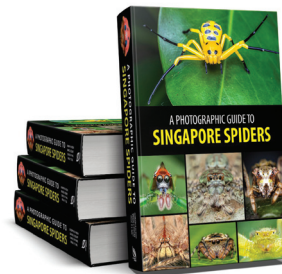
The various accounts in Parts I and II of this article provide a glimpse of the fascinating behaviour of spiders. There is much more to discover in the biology of the 900+ species of spiders in Singapore. When you are

in the field, do keep a lookout for spiders and document their incredible acts. You may well be the first to observe a particular predator-prey relationship or bear witness to a unique method of prey capture.

Please share your discoveries with Nature in Singapore: <https://lkcnm.nus.edu.sg/publications/nature-in-singapore/> or the Asian Society of Arachnology: <https://www.facebook.com/groups/143882822638600/> 🌿



The Spiny Phoroncidia (*Phoroncidia lygeana*) resembles a caterpillar with long stinging spines. Photo: Joseph Koh.



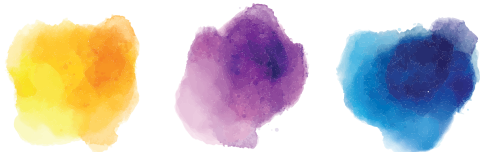
Learn more about Singapore spiders with the book *A Photographic Guide to Singapore Spiders*

authored by Joseph Koh, David Court, Chris Ang and Paul Ng, featuring 790 species. Buy it online @ <https://botanicgardensshop.sg/collections/books>.



Originally from New Zealand, **David J Court** is a retired biology teacher who taught at Raffles Institution from

1991 to 2006. He is now an Honorary Research Affiliate at the Lee Kong Chian Natural History Museum in the National University of Singapore, where he joins other spider research enthusiasts in biodiversity surveys coordinated by NParks.



Animal Art Advances Nature Awareness

By KENNETH CHIN



Versatile and evolving, **Kenneth Chin** is constantly incorporating new and exciting styles into his art. From creating original wildlife-themed merchandise to illustrating picture books on nature, he firmly

believes that creativity in animal art can impact local communities by raising nature awareness and inspiring people to protect biodiversity.





Sunbird with Fly the Frog, two characters I created for the picture book *Fabulous Flying Five* written by Gloria Seow about gliding animals.



Far left: Painting of the *Eophyllium* leaf insect based on a fossil specimen, done for research entomologist Dr Royce Cumming for his paper on the extinct genus.

Left: A large print of hornbills as Forest Farmers of Southeast Asia.



I have been drawing animals for as long as I can remember. Perhaps it started when I encountered them at the zoo and in stories like Noah's Ark. I wanted to pursue a career close to animals and explored the pathway to becoming a vet. So, I enrolled in the veterinary technology course at Temasek Polytechnic. But as a deaf person, I soon learned that I was not suited to work in a fast-paced environment. The odds would be against me in tasks that involve listening, such as taking medical instructions.

While studying at Temasek, I came across a manga *Children of the Sea* and became inspired to work in an aquarium. I fought hard and managed to secure an internship at S.E.A. Aquarium. It was during my intern days that I learned to care for marine life on a daily basis which deepened my love for them. My final year project was on manta rays in the aquarium. After graduation, I joined the aquarium full-time for two years, looking after and breeding sea jellies ('jelly-fish'). This proved to be a special period in my life, being so intimately involved with the complex life cycles of sea jellies. It was useful to gain some work experience before fulfilling my calling to be a freelance illustrator.

Right from the start, I have been struck by the beauty of animals. They come in all shapes, colours and patterns. Naturally, I drew inspiration from biodiversity to create my



As a deaf person, it is challenging for me to detect animals by sound such as tracking bird or frog calls. I focus on what I can spot without having to hear them.



Singapore Association for the Deaf nature walk theme: Illustrated for Singapore Association for the Deaf, a girl with a hearing aid listens to the symphony of the forest in a nature walk with her dad.



Flying Squirrel and Draco as seen in my picture book *Fabulous Flying Five*. For me, Draco is my standout character as his creation pre-dates the book.

art. It also sparked my curiosity to learn about wildlife, such as finding out how they adapt to niche habitats. Despite my interest in animals, I did not get a chance to go on nature walks as a child. My first exposure to wildlife romps began only in my polytechnic years. This was when I became intrigued with snake photos taken by a friend and posted online. Before that, I never knew that Singapore had such diverse and beautiful wildlife.

I then plunged headlong into herpetology, going on night walks to search for and photograph snakes, frogs and lizards. This went on for a while until I realised that I was missing out a lot on the other genera. When Covid-19 struck, I decided to go into invertebrates and eventually branched out to explore all

other life forms found at night. As a deaf person, it is challenging for me to detect animals by sound such as tracking bird or frog calls. I focus on what I can spot without having to hear them. Not surprisingly, I tend to find different amphibian species from my friends who largely rely on frog calls to locate them.

I have since become a conservation photographer. I am privileged to capture the images of rare and undescribed species to help advocate for their conservation. I have contributed my photos to conservation projects on Korean

Salamanders with the Laboratory of Animal Behaviour and Conservation at Nanjing Forestry University; Japanese Giant Salamanders with Sustainable Daisen; and Giant Clams with Singapore researcher Dr Neo Mei Lin. Under the auspices



Above: My picture book *Sunny Stopovers* highlights the challenges of bird migration including building collisions due to confusion caused by bright lights and reflective windows.

Left: Sunbird the protagonist befriends four migratory birds in the picture book *Sunny Stopovers*, the second title in the *Awesome Asian Animals* series.





A selection of original wildlife merchandise designs under my brand canlaken.

of Davao State University, I was lucky to go on a photographic expedition to Mount Hamiguitan in the Philippines, a UNESCO World Heritage Site boasting pygmy forests that host numerous endangered, endemic and rare species. Indeed, my photography has taken me to far-flung places that few have visited.

Working with animals through the lens has also moulded my art. I now combine scientific accuracy with playful artistic license to portray animals in ways that would attract people to come forward to learn about the natural world. I am always on the lookout for new and interesting styles, incorporating some of these into my art to better share with the public the wonders of wildlife. Some of my art pieces have been exhibited locally.

Since October 2023, I have been producing wildlife-themed products such as prints, posters, stickers, pins, badges, scarves, lanyards, microfibre cloth and more. I am passionate about creating original merchandise designs geared towards the younger generation.



I am passionate about creating original merchandise designs geared towards the younger generation. I firmly believe in exposing them early to shape their mindset towards nature.

A large print of Carnivores of Southeast Asia used by Pardicolor for fundraising.



I firmly believe in exposing them early to shape their mindset towards nature. By showcasing and selling my merchandise on my website canlaken.com and at various retail and art fairs in Singapore and the region, I aim to inspire curiosity and ignite a sense of wonder on the rich biodiversity in our backyards. My merchandise has proven to be good conversation starters to share about the little-known creatures that inhabit our rainforests and other habitats. My outreach efforts at these markets reflect my dedication to fostering appreciation of the natural world.

I have cultivated a number of artistic styles, each tailored to capture the essence of specific subjects such as marine megafauna, frogs, and birds. As I mature into a naturalist, I find myself delving into new taxa and coming across intriguing species that I readily incorporate into my body of work. These branching pathways have broadened my knowledge and greatly enriched my experience.

I have always wanted to reach out to children through pictorial storytelling. My opportunity came when author Gloria Seow approached me to illustrate the *Awesome Asian Animals* picture book series she was publishing with Marshall Cavendish International. In our first book *Fabulous Flying Five* set in a rainforest, I chose traditional watercolour to depict the verdant forest backdrop, giving it a loose and fluid effect that worked well. For the animal characters, I used digital painting techniques, enabling me to swiftly adjust their poses to reflect and enhance the narrative.

Rendering certain animals as 'cartoons' can be challenging due to their distinctive appearance. For this, I am particularly proud of my portrayal of a flying lizard called Draco. Draco is a standout character for me as its creation pre-dates the book and I am thrilled that it has taken on a new life in *Fabulous Flying Five*. I am proud that four of the book's picture spreads were selected for physical and online exhibition in the Book Illustrators



Working with animals through the lens has also moulded my art. I now combine scientific accuracy with playful artistic license to portray animals in ways that would attract people to come forward to learn about the natural world.



Print of leaf motifs across a range of wildlife.



A card on Philippine begonias, longhorn beetles, spiders and weevils.

Gallery at the Asian Festival of Children's Content in May 2024. The Gallery showcased the best picture book illustrations in Asia. I am honoured that my work is only one of two from Singapore chosen.

I have since gone on to illustrate *Sunny Stopovers*, the second book in the series, where I had fun bringing four migratory bird species to life in my character depictions.

My journey as a wildlife

artist and conservation photographer has stretched a decade. During this time, I have continued to hone my skills and techniques to produce the best images of animals, always with the goal of sparking action towards their conservation. In the coming years, I aim to elevate wildlife conservation in Southeast Asia through the arts and photography. I hope that people will come to



Microfibre cloth featuring gliding animals.

see that creativity in wildlife art can greatly impact our local communities beyond science, to raise awareness and inspire us to protect biodiversity. I want to encourage all wildlife lovers to be naturalists, to find wonder in everything we see, and to protect important habitats beyond specific groups of animals. 🌿



Kenneth is a deaf but speaking award-winning conservation photographer and wildlife illustrator with roots in Southeast Asian herpetology. He actively contributes to guidebooks, science papers and conservation groups around the region. Learn more at canlaken.com. Here, Kenneth is painting a mural of the critically endangered Raffles Banded Langur and other native animals in his own home.

Celebrating a Legacy of Conservation

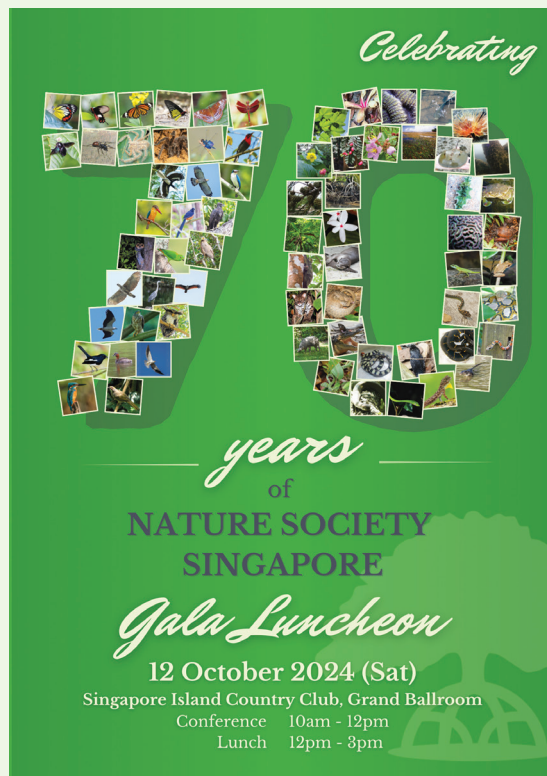
By **HUANG NINGXIN**, Assistant Director & Head of Secretariat (NSS)

NATURE SOCIETY SINGAPORE celebrates its 70th birthday this year. Established in 1954 as the Singapore Branch of Malayan Nature Society, we came into existence even before Singapore's independence. Ours has been a colourful and rewarding journey, especially in championing the conservation of Singapore's habitats and biodiversity.

For our very first Gala celebration, NSS will host donors and members to a sit-down meal as well as a slide-show of our achievements over the past 70 years, both in Singapore and the region. With our evidence-based approach and strong partnerships with government agencies, local and regional peers as well as corporates, we have been playing a leading role in nature conservation since our inception. Through engagement, education, advocacy, and research, we inspire and empower people to take action towards a sustainable and biodiverse planet. We are committed to be Singapore's chief advocate of biodiversity and habitats, so that future generations may inherit a world teeming with life, wonder, and possibilities.

The good news is that we recently received approval to be on Tote Board's Enhanced Fund-raising Programme. For every dollar raised in the Gala, we will get dollar-for-dollar matching funds. Indeed, we depend largely on your generous donations to continue all that we do. We hope to encourage more members, volunteers and nature lovers to support our cause wholeheartedly with your giving. Our target is to raise S\$250,000 through this Gala.

The last decade has been particularly fulfilling, where we have developed and sustained several key initiatives with the help of donors and volunteers. In 2007, the Marine Conservation Group started a conservation effort to rescue and monitor horseshoe crabs. In 2009, we attempted our first census to map the two species of horseshoe crabs in Singapore. As an IUCN member, NSS is honoured to host the 5th IUCN Horseshoe Crab



Conference in June 2024 with the generous support of Resorts World Sentosa and other donors.

In 2018, we launched the 'Every Singaporean a Naturalist (ESN)' programme in collaboration with BirdLife International and HSBC. Today, ESN is co-funded with Mandai Nature. This flagship citizen science programme has been growing non-stop and is now established in 62 schools, impacting over 3,000 students. We have equipped these young naturalists with the knowledge and skills to observe wildlife in and around their school compounds. In turn, they have contributed over 7,600 observations across 435 species on the iNaturalist platform, where they can share and discuss their findings with others.

With fresh funds, we aim to go beyond schools, reaching also grassroots communities in every neighbourhood within the next five years.

In 2022, we began the NSS Rewilding Project in collaboration with NParks under the OneMillionTrees movement. This Project seeks to create a continuous canopy over the Rail Corridor to improve habitat connectivity for animals. To date, we have engaged over 110 volunteers and several community partners to clear the land of elephant grass and plant 174 saplings across 26 native tree species. With your financial support, we aim to expand to other rewilding sites across the island and connect more green spaces.

Throughout the past 70 years, we have conducted countless walks, talks and workshops for members, students and the public. This outreach has brought people closer to nature and helped nurture the next generation of environmental stewards and nature lovers. In celebrating our 70-year milestone, we appeal for your contributions at the Gala fund raising. Your strong support will go a long way to take our nature conservation and outreach efforts to the next level. Kindly refer to 'Strategic Plans Update' on page 24 on how to contribute. 🌿



UPCOMING ACTIVITIES

Compiled by **GLORIA SEOW**


Applicable for all NSS Events

- Participants have to be well on the day of the event, and must wear a mask if you are coughing or sneezing. NSS reserves the right to turn away those who are unwell.
- Register early to avoid disappointment. Closing dates are generally one to two weeks before the event. Details will be emailed to confirmed participants after the closing date. For all enquiries, please contact Kerry Pereira at kerry@nss.org.sg unless stated otherwise.

19 May 2024, Sunday

70th Annual General Meeting

Members Only

 Nature Society Singapore warmly invites all members to the AGM and lunch held at the Singapore Sustainability Academy in City Square Mall. Details have been emailed to members. Time: 12 pm to 4.30 pm.

25 May 2024, Saturday

Festival of Biodiversity: The Fussy Juvenile Horseshoe Crab at Chek Jawa


Open to the Public

 Join us for a captivating storytelling adventure based on the beloved book *No Worms for Dinner*, designed for curious minds aged 5 to 12. We promise an unforgettable blend of fun and learning led by enthusiastic students from Dunman Secondary School. As the tale of sea creatures unfolds, you'll go on a quest. There will also be an interactive quiz and colouring activity. This workshop aims to ignite a passion for reading, fuel imaginative thinking, and nurture artistic talent. Time: 12.15 pm to 2 pm. Venue: One Punggol. Maximum: 20 pax. Please register at <https://tinyurl.com/NSSFOBWorkshop>.

25 May 2024, Saturday

Butterfly Walk at Pasir Ris Park


Members Only

 Pasir Ris Park is home to 60 butterfly species including the rare Spotted Black Crow and Striped Black Crow as well as the Plain Tiger and Blue Glassy Tiger. Join Mohammad Jusri to explore its mangroves and gardens for their butterfly diversity. This walk is in celebration of International Day for Biological Diversity. Time: 9 am to 11 am. Maximum: 15 pax. Please register at <https://tinyurl.com/nssbutterflywalk>.

25 May, 29 June & 24 August 2024, Saturday

NSS Rewilding Project

Open to the Public


 Join the NSS Rewilding Project to make the Rail Corridor a greener place. Get involved every step of the way, from the manual processing of grass to weed clearance and the planting of native trees. We aim to restore a continuous canopy cover to the Rail Corridor for it to be a better conduit for plants and wildlife. Participants need to be physically fit, including being able to lift at least

10 kg and withstand the hot sun. Time: 9 am to 12 pm. Venue: Rail Corridor opposite Jalan Bumbong. Please register at <http://tinyurl.com/NSSRewildingProject2024> for any of the dates offered. Contact Sylvia at HP: 9190 4849 for enquiries.

1 June 2024, Saturday

River Clean-up at Sungei Pang Sua


Open to the Public

 Sungei Pang Sua flows down to Kranji Mudflats, part of an Important Bird and Biodiversity Area where hundreds of migratory birds find nourishment. This river has become polluted with litter, which in turn affects the habitat and biodiversity downstream. Join us to maintain the health of this waterway. Participants must be at least 18 years old and be able to independently climb up and down a steep slope with no steps. Time: 10.30 am to 1 pm. Maximum: 15 pax. Please register at <http://tinyurl.com/NSSCleanup>.

7 June 2024, Friday

Colugo Walk at Bukit Batok Nature Park

Members Only

 Although Bukit Batok Nature Park is adjacent to housing estates, it hosts various vertebrate species including those active at night. Join us for a night walk to observe the Sunda Colugo foraging, grooming and gliding. We might even get glimpses of the Horsfield's Flying Squirrel. Time: 7.45 pm to 9.30 pm. Trip Leader: Dr Norman Lim, Vertebrate Study Group member. Maximum: 15 pax. Please register at: <https://tinyurl.com/NSSVSGWalk2>.

9 June 2024, Sunday

Pesta Ubin: Nature Macrophotography Workshop


Open to the Public

 Explore the intricate natural world in this macrophotography workshop. It will help you capture the hidden beauty of nature. Learn essential gear, field techniques and composition tips. There will be an outdoor practice session to sharpen your skills and connect with fellow enthusiasts. Suitable for DSLR, digital or phone cameras. Participants need to know how to access the aperture, speed and ISO dials. Trainer: Mohammad Jusri, Butterfly and Insect Group member. Time: 8.30 am to 12 pm. Venue: Pulau Ubin. Maximum: 10 pax. Please register at <https://tinyurl.com/NSSBIGWorkshop>.

16 June 2024, Sunday

Online Talk: Proposing Protected Areas for People & Turtles


Open to the Public

 Sea turtle biology and ecology can go a long way to inform how their conservation can be done. However, disregarding the needs and values of the people who live near turtles can have detrimental effects on livelihoods and turtle conservation. Sea turtle biologist Rushan bin Abdul Rahman will share how including people into protection plans improves conservation outcomes. They are a vital component in any management plan. Excluding them can spell disaster for the sustainability of conservation goals. This talk celebrates Sea Turtle Day. Time/Venue: 6 pm to 7 pm on Zoom. Maximum: 80 pax. Please register at <https://tinyurl.com/NSSMCGTalk1>.

16 & 22 June 2024

Pesta Ubin: Birdwatching at Pulau Ubin

Open to the Public

 Experienced NSS birdwatchers will guide the bird walk at Pulau Ubin, starting from the Nature Gallery and onward to the Sensory Trail and Pekan Quarry. We will look for island specialties including the Oriental Pied Hornbill, Red Junglefowl, White-rumped Shama and the critically endangered Straw-headed Bulbul. Time: 7.30 am to 10.30 am. Maximum: 15 pax. Kindly prepare \$8 per person for the two-way ferry ride. Please register at <https://tinyurl.com/NSSBGBirdwatching3> for 16 Jun walk and <http://tinyurl.com/NSSBGBirdwatching4> for 22 Jun walk. Contact Ee Ling at ellee1584@gmail.com or 9693-5870 for enquiries.

19 to 23 June 2024


5th International Workshop on the Science and Conservation of Horseshoe Crabs

 Hosted by NSS in association with the IUCN Horseshoe Crab Specialist Group, this meeting at Resorts World Convention Centre in Sentosa will include plenary speakers, oral presentations, and a poster session. There will be conservation workshops, with particular emphasis on developing a Conservation Action Plan for Asian horseshoe crabs. Please visit <https://www.iuchsc2024.org.sg/> for details.

29 June 2024, Saturday

Wild Echoes: Fun with Feathered Tales and Songs


Open to the Public

 Introducing Wild Echoes, an inspiring programme series by the Education Committee to celebrate nature's wonders. In our inaugural event, we go on an enchanting journey featuring melodies and stories inspired by birds. How does Chinese culture perceive the magpie compared to Western culture? Does the Malay children song *Bangau oh Bangau* refer to the heron or the stork? From timeless childhood rhymes to cherished folk melodies, we will immerse in a rich tapestry of heritage, birdsong, and folklore. We will also unveil stories behind bird-inspired names and reveal the varied habitats of birds. Our guest musician and animated educators will have you singing and learning in Mandarin, Malay and English. Time: 3 pm to 4.30 pm. Venue: Singapore Sustainability Academy Gallery at Kitchener Rd. Please register at <https://tinyurl.com/NSSedCommWorkshop1>.

29 June 2024, Saturday

Go Green SG 2024: River Clean-up at Sungei Pang Sua


Open to the Public

 Sungei Pang Sua flows down to Kranji Mudflats, part of an Important Bird and Biodiversity Area where hundreds of migratory birds find nourishment. This river has become polluted with litter, which in turn affects the habitat and biodiversity downstream. Join us to maintain the health of this waterway. Participants must be at least 18 years old and be able to independently climb up and down a steep slope with no steps. Time: 9 am to 12 pm. Maximum: 15 pax. Please register at www.nss.org.sg.

29 June 2024, Saturday

Go Green SG 2024: Forest Clean-up at Pulau Ubin


Open to the Public

 Pulau Ubin is a Key Biodiversity Area with various healthy habitats rich in animals and plants. Make a difference by helping to clean up its forest while learning about a variety of conservation issues and how you can become a better steward of nature. Time: 9 am to 1 pm. Maximum: 15 pax. Please register at www.nss.org.sg.

6 July 2024, Saturday

Online Talk: Protect Tigers Through Citizen Conservation


Open to the Public

 The Malayan Tiger (*Panthera tigris jacksoni*) once lived in Singapore. Locally extirpated since the 1930s, they are present in Peninsular Malaysia but at precariously low numbers. Citizen Action for Tigers (CAT Walk Plus) is a project to protect tigers and restore critical habitat for wildlife organised by the Malaysian Conservation Alliance for Tigers (MYCAT). CAT Walkers enjoy a jungle adventure in Pahang while assisting MYCAT to look out for signs of poaching activities and assist in retrieving camera trap images of wildlife including tigers. Learn more about CAT Walk Plus and how you can help save the Malayan Tiger from extinction from speaker Dr Vilma D'Rozario. Time/Venue: 10 am to 11 am on Zoom. Please register at <https://tinyurl.com/VSGTalks>.

13 July 2024, Saturday

Birdwatching at Jurong Lake Gardens


Members Only

 Jurong Lake Gardens is a sprawling park laid out around Jurong Lake. We will explore the southern shore for its birds, found in various waterside habitats including a freshwater swamp, naturalised streams, grassland, and planted gardens. Trip Leader: Wing Chong. Time: 7.30 am to 10.30 am. Maximum: 15 pax. Please register at www.tinyurl.com/NSSBGbirdwatching5. For enquiries, contact Ee Ling at ellee1584@gmail.com or HP: 9693-5870.

21 July 2024, Sunday

Storytelling, Talk, Craftwork & Art Jamming: Creating Wil & Wyn's Wild World from Scratch


Open to the Public

 How did *Wil & Wyn's Wild World* spring to life from a humble story idea into a beautiful picture book series? The first two books *Fantastic Forest Adventure* and *Fantastic Forest By Night* were launched at the Asian Festival of Children's Content in May 2024. Join author Gloria Seow as she shares the trade secrets behind creating terrific tales for the little ones to inspire them to explore and protect the wild world. There will be interactive storytelling, live demonstrations, forest specimens, and craftwork to make and take home. Illustrator Zinnira Bani will shed light on her digital creations, from charming characters to forest wildlife. Join her to learn how to draw one of the cute animals in an art jamming session. Fifty percent of the net proceeds of book sales will be donated to NSS for its conservation work. Please visit lorisowl.wordpress.com/books for book previews. Time: 3 pm to 4.15 pm. Venue: NSS Office. Kindly register at <https://tinyurl.com/NSSedCommActivity1>. For enquiries, contact Gloria at gloria_seow@yahoo.com.

27 July 2024, Saturday

Butterfly Walk at Woodlands Botanical Garden

Members Only

 Join Steven Chong in a butterfly walk at Woodlands Botanical Garden, winner of the prestigious Garden of the Year award. The garden was featured in *Nature Watch* Jan-Mar 2024 issue. We hope to spot butterflies like the Common Birdwing, Julia Longwing and Leopard Lacewing here. Time: 9 am to 11 am. Maximum: 15 pax. Please register at <https://tinyurl.com/NSSBIGwalk>.

17 August 2024, Saturday

Birdwatching for Beginners at Bishan-Ang Mo Kio Park


Members Only

 Bishan-AMK Park offers an interesting mix of birdlife, from sunbirds, orioles, munias, to kingfishers and herons. The open vegetation makes it easy to spot birds, ideal for novice birders. Trip leader Lee Ee Ling will share tips on birdwatching such as identification, habitats, and equipment. Time: 7.30 am to 10.30 am. Maximum: 15 pax. Please register at <https://tinyurl.com/NSSBGbirdwalk1>. For enquiries, please contact Ee Ling at ellee1584@gmail.com or HP: 9693-5870.

15 September 2024, Sunday

Fun with Migratory Birds at Sungei Buloh Wetland Reserve


Open to the Public

 Waders from as far as Siberia stopover at Sungei Buloh to refuel during their autumn migration. Catch them as they feed in flocks out on the mudflats in this walk led by Education Committee Vice Chair Gloria Seow. We will learn about the dangers these brave birds face while traversing cities, mountains and coastlines, and peer through telescopes to observe them up close. Gloria will also point out the cool denizens of Sungei Buloh – from the mighty Saltwater Crocodile to the wily Archer Fish. Time: 8 am to 10.15 am. Maximum: 20 pax. Kindly register at <https://tinyurl.com/NSSedCommActivity2>. For enquiries, contact Gloria at gloria_seow@yahoo.com.

29 September 2024, Sunday

Birdwatching at Gardens by the Bay

Members Only

 The water features and plant life at Gardens by the Bay have proven attractive to local and migratory birds. Interesting sightings include the Red-legged Crake, Common Kingfisher and Stork-billed Kingfisher. Join NSS Bird Group Chair Veronica Foo in this walk which starts at Kingfisher Wetland and ends at Marina Barrage. Time: 7.30 am to 10.30 am. Maximum: 15 pax. Please register at <https://tinyurl.com/NSSBGbirdwalk2>. Contact Ee Ling at ellee1584@gmail.com for enquiries.





Making a Difference at Earth Week



NSS Outreach Manager Kerry Pereira introducing participants to conservation concepts like invasive species, forest fragmentation, and climate change. He also pointed out the forest's flora and fauna. Photo: Shreeyaa Subra.

Earth Week is dedicated to the environment, reminding us of its importance and the need to protect it. It is an extension of Earth Day celebrations held on 22 April each year. NSS organised a few meaningful activities to mark Earth Week.

By SHREEYAA SUBRA, NSS intern

Forest Clean-up at Pulau Ubin

NSS held a forest clean-up at Pulau Ubin on 26 April 2024 to raise awareness of human impact on the environment and how we can make a difference. As part of their Corporate Social Responsibility (CSR) efforts, AIG staff joined us to pick and document the

litter collected for some insights on the trends in human usage of the island. This is one of the ways we help companies who are our supporters get hands-on experience in caring for the environment.

During the session, participants were surprised with the litter found. These included glass cups and a wide array of drink cans. Some even made it their mission to see how many different brands of canned drinks they could recover. They also cleared away larger items and rubbish in difficult to reach places. Litter data was recorded manually on a datasheet. Over the 2 km route, participants filled seven trash bags with 550 pieces of debris.

This exercise showed them just how much small litter goes unnoticed, accumulating rapidly to

AIG staff picking up and documenting the litter collected at a secondary forest in Pulau Ubin. The top three trash items were plastic pieces, food wrappers and cigarette buds. Photo: Shreeyaa Subra.



negatively impact the forest habitat. The top three trash items collected were plastic pieces, food wrappers and cigarette buds.

Besides sprucing up the forest, we incorporated a learning journey for AIG staff led by NSS Outreach Manager Kerry Pereira. Participants were introduced to various conservation concepts including invasive species, forest fragmentation, and climate change. Key takeaways included how to be better stewards of nature and nature etiquette in wild spaces. AIG staff also learnt about the simple actions and changes to their daily habits they could adopt to improve the environment.

Naturally, we pointed out the flora and fauna along the way. Participants were greeted by the calls of Straw-headed Bulbuls, encountered a flock of Oriental Pied Hornbills, four native lizards, and Singapore's largest butterfly the Common Birdwing. Some were mildly shocked to learn that bamboo is a type of grass and certain common birds were actually introduced species such as the Javan Myna and Rock Pigeon. All were fascinated to see a Giant Mudskipper clinging onto a mangrove root and greatly enjoyed their encounters with local biodiversity.

Rewilding the Rail Corridor

On 27 April 2024, 18 volunteers joined us at the Rail Corridor (north) for some rewilding action. This was part of the NSS Rewilding Project, a ground-up community initiative in collaboration with NParks' OneMillionTrees movement.

We aim to restore the habitat

by clearing the existing vegetation, planting native saplings, and doing site maintenance. The ongoing rewilding sessions will help instil a sense of ownership for the natural environment in our participants.

For the day, volunteers were tasked with weeding, a key component of site maintenance to protect the planted saplings from being crowded out. After a safety and site briefing, horticultural warfare began. Participants chose their battle weapons and got right into removing the weeds. They also had a go at



As part of rewilding, volunteers do a round of weeding at the Rail Corridor (north), a key component of site maintenance to protect the planted saplings from being crowded out.

Photo: Shreeyaa Subra



mulching to support the growth of saplings. To do that, they cut up leaves of the removed Elephant Grass into pieces and laid them down in a donut shape around the young trees. Volunteers also took the initiative to clear trash from the site.

Our youngest participant was just four years old. Even he played his part by removing the smaller weeds while entertaining everybody with his antics. After two hours of hard work under the sun, our participants left feeling fulfilled in contributing to the greening of Singapore. New NSS member Surya Bagchi was a first-timer. While his primary interest lies in birds, he recognises the importance of connectivity in our greenspaces. At the end of his maiden rewilding experience, he felt that he had made a difference in a cause he cares about. He looks forward to volunteering regularly and promises to bring his daughter along the next time. 🌱

Our youngest participant was just four years old, seen here with NSS Rewilding Assistant Manager Sylvia Tan. He contributed by removing the smaller weeds.

Photo: Huang Ningxin.



Snapshots of Past Events

By GLORIA SEOW

KALEIDOSCOPE

NEWS AND HAPPENINGS AT NATURE SOCIETY SINGAPORE



1
NSS Rewilding Project, 27 January 2024. To prepare the stretch of the Rail Corridor near Jalan Bumbong for the planting of native trees, seven volunteers cleared away the elephant grass. They were guided by the Society's Rewilding Assistant Manager Sylvia Tan. Photo: Sylvia Tan.



2
Birdwatching at Kranji Marshes, 28 January 2024. Led by experienced birders Wong Chung Cheong and Lee Ee Ling, 21 participants enjoyed the birdlife at the restricted-access site of Kranji Marshes with highlights being the Little Bronze Cuckoo, Changeable Hawk Eagle, and Lesser Whistling Duck. Photo: Lee Ee Ling.



3
Biking for Biodiversity, 4 February 2024. Two passionate conservationists Hanna and Jonas began their cycling trip in Germany on April 2022. Some 20,000 km and 20 countries later, they arrived in Singapore and joined up with 18 participants to present what they had learnt from meetings with over 200 conservationists along the way, including the most pressing issues and solutions in local biodiversity protection. The session was hosted by Kua Kay Yaw, Jimmy Tan and Dave Lommen at Mud Rock Ceramics. Photo: Jimmy Tan.



4
Birdwatching at Kranji Marshes, 18 February 2024. NSS President Dr Yeo Seng Beng and Lee Ee Ling pointed out the hidden birdlife thriving in this green oasis to 20 participants. Aside from the easily-observed Lesser Whistling Duck and Red Watted Lapwing, they located the seldom-seen Rufous Woodpecker and White-browed Crane. Photo: Lee Ee Ling.



5
Leopard Cat Campaign Exhibition, 18 February 2024. Some 18 participants visited the Love Our Leopard Cats Campaign exhibition by the Singapore Wildcat Action Group and Catmosphere's seven big cats of the world featuring the tiger, leopard, snow leopard, jaguar, lion, cheetah and puma. They also attended a guided tour of the Sustainable Singapore Gallery.



6
NSS Rewilding Project, 24 February 2024. Held on a monthly basis, this session attracted participants from Cicada Tree Eco-Place thanks to co-founder Teresa Teo Guttensohn's coordination. Rewilding guides Sylvia Tan, Dr Ngo Kang Min, Eric Gilbert, Kua Kay Yaw and Lee Kwang Boon demonstrated to the 21 volunteers present the most efficient method of clearing the elephant grass to make way for reforestation. Photo: Sylvia Tan.



7
Birdwatching at Thomson Nature Park, 25 February 2024. The 17 birders who came were split into two groups to seek out the forest birds here. Bird Group Chair Veronica Foo assisted by intern Anusha Kundargi took one group while the other was helmed by Lim Kim Keang assisted by Florence Lian. In all, they saw and heard 31 species with the star bird being the Red-crowned Barbet, a lifer for many.



8
Birdwatching at Lorong Halus Wetland, 2 March 2024. To commemorate Singapore World Water Day, guides Jimmy Lee and Lee Ee Ling took 14 bird enthusiasts on an avian romp at the former landfill site of Lorong Halus right by the Serangoon River which has since been converted into a reservoir. They encountered 30 species including the Brown Shrike, Common Kingfisher and Oriental Honey Buzzard. Photo: Lee Ee Ling.



9
Storytelling, Talk and Art Jamming: Bringing the Fabulous Flying Five to Life, 17 March 2024. There were many books on Asian animals when Gloria Seow was growing up, prompting her to pen the *Awesome Asian Animals* picture book series for children 4 to 8 years old published by Marshall Cavendish International. Some 32 attendees enjoyed the storytelling for the series' first title and Amazon #1 Best Seller *Fabulous Flying Five*. They also learnt to draw two of the book's gliding animals, the colugo and draco, from its talented illustrator Kenneth Chin.



10
Plant Walk at Berlayer Creek-Labrador Nature Reserve, 23 March 2024. Starting at Berlayer Creek, 11 participants learnt from trip leader Sia Sin Wei about the area's mangrove and secondary forests. Held to celebrate International Day of Forests, this informative walk ended at the picturesque Labrador Nature Reserve. Photo: Sia Sin Wei.



11
River Clean-up at Sungei Pang Sua, 23 March 2024. Sungei Pang Sua empties out at the Kranji Mudflats, an Important Bird and Biodiversity Area supporting hundreds of migratory birds. To mark Singapore World Water Day, 22 participants joined facilitators Kua Kay Yaw, Lester Tan, Bryan Leong and Kerry Pereira to clear the river of its litter and help protect the biodiversity downstream. Photo: PUB.



12
Birdwatching at Kranji Marshes, 24 March 2024. In another sterling outing to this watery haven, a group of 18 birders guided by Jamie Chan and Lee Ee Ling heard and saw 39 species including three types of woodpeckers – Banded, Laced and Common Flameback, as well as the Ashy Minivet and Red Wattle Lapwing. Photo: Jamie Chan.



13
NSS Rewilding Project, 30 March 2024. This rewilding session proved special as Director of the Biodiversity Foundation in Korea, Kim Sanha, was there to film the 37 volunteers doing site maintenance. The video will be presented at the Asian Rewilding Forum in September 2024. The session was coordinated by Teresa Teo Guttensohn of Cicada-Tree Eco-Place, and guided by Sylvia Tan, Dr Ngo Kang Min, Eric Gilbert, Kua Kay Yaw, Lee Kwang Boon and Dr Yeo Seng Beng. Photo: Sylvia Tan.



14
Dragonfly Walk at Lorong Halus Wetland, 31 March 2024. The wetland here treats water passing through the former landfill of Lorong Halus and stops it from going into the reservoir. It doubles up as habitat for dragonflies, the targets of this walk attended by 12 participants. Trip leaders Robin Ngiam and Lena Chow pointed out 15 species in one morning, including the Sapphire Flutterer, Orange-faced Sprite and Water Monarch. Photo: Dr Yeo Seng Beng.



70th Annual General Meeting

By NATASHA RAINA, *Honorary Secretary*

THE 70TH ANNUAL GENERAL MEETING (AGM) took place on 19 May 2024 at the Singapore Sustainability Academy. We had the largest member turnout post-Covid with over 90 people present. Members enjoyed a thank you lunch in appreciation of their active participation and support of the Society. NSS President Dr Yeo Seng Beng introduced himself and the team. He then walked us through the constitutional changes requested by the Ministry of Culture, Community and Youth. These changes were mandatory for the reapproval of the Society's IPC (Institutions of a Public Character) status which is re-issued every two years.

We received more than 60 'yes' votes to effect the proposed changes. Hence the revised 2024 NSS Constitution was approved by the majority of the membership present at the AGM. This is a significant achievement for the Society as it enables us to continue to issue 250% tax rebates for all donations made to us. As per previous years, the AGM also saw the presentation of the financial report and the yearly



reports from the various special interest groups and committees. We also had a lively discussion prior to the close of the event. We thank all members who took the time to attend. It was good to catch up with old friends and meet new ones.

Strategic Plan Updates

By NATASHA RAINA, *Honorary Secretary*

THE NSS G30 TEAM, made up of Executive Committee, Council and invited members, met up on 16 March 2024 at the Singapore Sustainability Academy. Our consultant Tay Kae Fong of Binomial Consulting took the team through the first year review of the NSS Five Year Strategic Plan. We then discussed the team's response to a poll done prior to the meeting on areas of focus in the year ahead. For 2024/2025, we identified three key focus areas:

1. To increase the fundraising initiatives for NSS so that we can continue to expand our outreach and programmes
2. Ways to nurture the next generation of conservation leaders and create a talent pipeline for NSS staff and Council
3. How to connect ESG (Environmental, Social and Governance) initiatives and schemes with NSS programmes

NSS President, Treasurer and Secretary updated the team on significant upcoming events and fundraising initiatives including the 5th IUCN Horseshoe Crab Workshop from 19 to 23 June 2024 and the 70th Anniversary Gala Lunch on 12 October 2024. They also highlighted that the Tote Board has agreed to NSS's proposal for the 70th Anniversary Gala Celebrations.



For every dollar raised by NSS, the Tote Board will match the donation with another dollar, up to a cap of \$250,000. Donations to the 70th Anniversary Gala Celebrations can be sent to:

1. **A dedicated NSS account** for the event as per this PayNow QR code:
2. **Giving.sg** <https://www.giving.sg/donate/campaign/celebrating-70-years-of-nature-society-singapore>
3. **Ray of Hope** <https://rayofhope.sg/campaign/nss70thanniversaryfundraising/>



For donations via Giving.sg and Ray of Hope, please ensure that you copy the full link to paste into your browser.

For more information on the 70th Anniversary Gala celebrations and fund-raising drive, kindly refer to the article 'Celebrating a Legacy of Conservation' on page 17 and the NSS Exco Message on the inside front cover of this issue of *Nature Watch*.

NATURE SOCIETY SINGAPORE

Planet | People | Partners



NATURE
SOCIETY
SINGAPORE

VISION To be Singapore's leading advocate of biodiversity and habitats.

MISSION With our evidence-based approach and partnerships with agencies, peers, and corporates, we lead habitat and biodiversity conservation in Singapore and with partners in the region. Through engagement, education, advocacy, and research, we inspire and enable people to take action towards a sustainable and biodiverse planet.

Why Join NSS?

Nature Society Singapore or NSS is dedicated to the study, conservation and enjoyment of the biodiversity and natural heritage of Singapore, our neighbouring countries and the wider world. The Society is a non-profit, non-government organisation. Our members work with commitment and altruism to conserve Singapore's remaining nature areas such as forests, mangroves, wetlands and reefs.

NSS was formerly known as the Singapore Branch of the Malayan Nature Society (MNS), formed in 1954. In 1991, we became independent as Nature Society Singapore. Both NSS and MNS continue to maintain strong links with each other.

NSS organises guided nature walks, horseshoe crab rescues, nature surveys, clean-ups, talks, exhibitions, and overseas nature trips. Going on an NSS outing allows you to meet people from all walks of life with a common passion!

Join NSS Today & Receive *Nature Watch* for Free!

The values that NSS upholds are a bulwark against the excesses of an ultra-materialistic society. If you too feel that protecting our biodiversity and natural heritage are important, join NSS today and support the Society in our work. Members will receive four issues of *Nature Watch* (NSS quarterly magazine) and a regular e-newsletter for free. Members also get to participate in fascinating nature-based activities and events which enable one to forge friendships with fellow nature lovers.

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- www.nss.org.sg/

Nature Society Singapore Membership Categories

ANNUAL SUBSCRIPTION

- S\$40 **Ordinary Member**
Age 18 and above
- S\$75 **Family Member**
Husband, Wife & Children under Age 18
- S\$18 **Junior & Student Members**
Age 12-18 & Full-time Students Age 18-35 enrolled in a Singapore-based institution
- S\$1,000 **Life Member**
Applicable to Ordinary Members who have joined for 10 years or more
- S\$200 **Affiliate Member**
Non-Profit Organisations & Schools
- S\$4,000 **Corporate Member**
Nominal Fee of S\$200 + Annual Tax-Exempt Donation of S\$3,800

How to Join NSS

To join as a NSS member, please fill in this form <http://tinyurl.com/NSSmembershipform>. It allows you to settle the membership fees within the link. Once your membership is approved by the Executive Committee, you will receive *Nature Watch* and the e-newsletter for free, as well as be able to attend all member-only events.

How to Join NSS as a Volunteer or Intern

- To join as a NSS volunteer, please fill in this form <http://tinyurl.com/NSSvolunteerform>.
- To apply for internship, please fill in this form <https://tinyurl.com/NSSinternshipform>.

70th Anniversary Gala Donations

NSS has received Tote Board approval for the Enhanced Fundraising Grant (EFR) for the Society's 70th Gala Celebrations. Every \$1 donated will be matched by another \$1 up to \$250,000. This means that every dollar you give will be doubled. There are various ways to donate as detailed below.



- Scan the **PayNow QR code** for Nature Society Singapore's 70th Gala Donation account and enter your name, contact number or email address in the UEN/Bill Reference Number box.
- Fund transfers** can also be made via:
 - **NSS Giving.Sg**: <https://www.giving.sg/donate/campaign/celebrating-70-years-of-nature-society-singapore>
 - **NSS RayofHope**: <https://rayofhope.sg/campaign/nss70thanniversaryfundraising/>For donations via NSS Giving.sg and NSS RayofHope, please ensure that you copy the full link to paste into your browser.
- For other modes of payment, please get in touch with us via email contact@nss.org.sg.
- We also welcome individual and corporate donations to the Society. Please inform us via email contact@nss.org.sg of the amount you wish to donate, along with your name, title or organisation. Donations may be made by the payment methods mentioned above. Your generosity is much appreciated and all donations will receive a 250% tax-exemption receipt.



Let Singapore's Abundant Biodiversity Be Your Legacy

Have you loved nature all your life? Please consider helping our conservation work with a gift to Nature Society Singapore in your will.

How to make a gift to the Society in your will

You can choose to inform us if you have considered us in your will, but it is not strictly necessary. Please ensure that your solicitor writes in the full name of the Society. We suggest below suitable forms of words that can appear in your will:

*I give to Nature Society Singapore (hereinafter called NSS), **Unique Entity Number S61SS0142H**, _____ % of the residue of my estate*

OR

a specific gift of _____

and I direct that (i) the proceeds may be used for the general purposes of NSS and (ii) a receipt signed by a person for the time being authorised by the Executive Committee of NSS shall be a good and sufficient discharge to my executors.



EST. 1954

**NATURE
SOCIETY**
SINGAPORE



NSS works to protect creatures such as the Mangrove Horseshoe Crab (*Carcinoscorpius rotundicauda*), whose numbers are in decline due to habitat loss and anthropogenic activities.
Photo: Lester Tan