NATURE SOCIETY (SINGAPORE)

2020 ANNUAL REPORT

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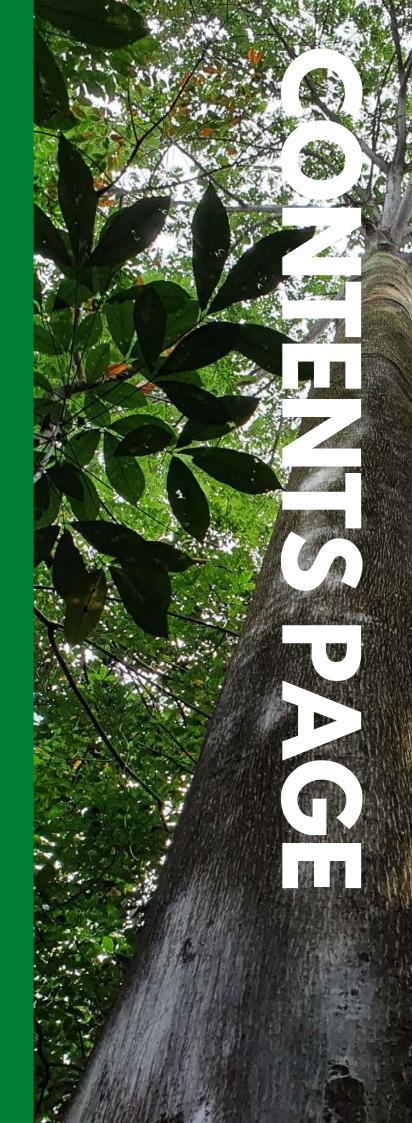
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PREFACE

Nature Society (Singapore) [NSS] has four main objectives in accordance with its constitution:

- To promote an interest in the flora and fauna of Singapore and the surrounding Southeast Asian region.
- To promote an awareness of nature and the environment and the conservation thereof.
- To encourage and promote responsible attitudes towards the conservation of our natural heritage and the environment.
- To initiate and support research projects relating to the study and conservation of nature and the environment

NSS has been a registered Society in Singapore under the Societies Act (Chapter 311) since 30 March 1961, and an approved charity under the Charities Act, Cap 37 since 19 February 2008; it has also been accorded Institutions of a Public Character (IPC) status since 1 September 2008.

The Society reports its compliance with the Charity of Commissioners' Code of Governance by completing the Evaluation Checklist for IPCs annually. The returns can be viewed on the Charity Portal (www.charities.gov.sg).

NSS's Unique Entity No is S61SS0142H.

The registered address of the Society is: 510 Geylang Road, #02-05 The Sunflower, Singapore 389466. The premises are held in trust for the Society by three trustees – Dr Geh Min, Prof Lye Lin Heng, Prof Ng Soon Chye – under a trust instrument dated 29 March 2000.

The Society's conflict of interest policy is stated in the following resolution passed at the 54th Annual General Meeting of the Society on 24 May 2008: "That at the first Executive Committee/Council Meeting after each Annual General Meeting all members of the incoming Executive Committee and of the Council declare and have minuted any general conflict of interest which they consider they may have, and that before any specific discussions and decisions at this or any other meetings of the Executive Committee and Council. members consider whether any conflicts of interest exist for any members and, where they are considered to exist, request that member to abstain from the vote or decision-making process".

The Society has a staff strength of 3 and none of the staff receives more than \$100,000 each in annual remuneration. None of the staff also serves as a governing board member.

NSS LEADERSHIP BOARD 2020

DAY - TO - DAY LEADERSHIP

EXECUTIVE COMMITTEE (ELECTED ANNUALLY AT THE AGM*):

PRESIDENT

DR. SHAWN LUM

VICE PRESIDENT

DR. HO HUA CHEW

HONORARY SECRETARY

MR. MORTEN STRANGE

HONORARY TREASURER

MR. BHAGYESH CHAUBEY

HONORARY ASSISTANT SECRETARY

MS. EVELYN NG

HONORARY ASSISTANT TREASURER

MR VEERENDRA PATWA

COMMITTEE MEMBERS:

MR. ALBERT LIU

MR. GOH TER YANG

MR. LESTER TAN

COMMITTEE & SPECIAL INTEREST GROUPS CHAIRPERSONS:

CONSERVATION COMMITTEE

MR. LEONG KWOK PENG

EDUCATION COMMITTEE

MR. GOH TER YANG

BIRD GROUP

MR. LIM KIM CHUAH (TILL DEC 2020) MR, TAN GIM CHEONG

(START JAN 2021)

BUTTERFLY & INSECT GROUP

DR. NGO KANG MIN

JALAN HIJAU GROUP

MR. TAN HANG CHONG

MARINE CONSERVATION GROUP

MR KUA KAY YAW

PLANT GROUP

MR. BIAN TAN

NATURE RAMBLERS GROUP

MR. PARTHASARATHY PANDIAN

VERTEBRATE STUDY GROUP

MR. TONY O' DEMPSEY

CO-OPTED COUNCIL MEMBERS:

PROF. P N AVADHANI MS. MARGIE HALL

DR. LIEW KAI KHIUN

MR. BEN SZETO

OTHER

BIRDLIFE INTERNATIONAL COORDINATOR

MR. LIM KIM KEANG

IUCN COORDINATOR

MS. NG BEE CHOO

RAIL CORRIDOR WATCH COORDINATOR

DR. LIEW KAI KHIUN

CHAIR, ENVIRONMENTAL LAW & POLICY WORKING GROUP ACTING; DR. SHAWN LUM

CHAIR, FUND - RAISING AND INTERNAL AUDIT COMMITTEES

MR. BEN SZETO

CHAIR. MEMBERSHIP & FUNDRAISING COMMITTEE MR. ALBERT LIU

ADVISERS & MENTORS

PATRON

PROF. TOMMY KOH

IMMEDIATE PAST PRESIDENT

DR. GEH MIN

FINANCE ADVISORY GROUP

MR. YIP YEW CHONG MR. PETER CONNELL

MR. DOUGLAS ELLIOTT

ADVISORY COUNCIL

MR. WARREN KHOO

PROF. KOH KHENG LIAN

MR. LIM JIM KOON MR. LIU THAI KER

PROF. NG SOON CHYE

MR. SIM WONG HOO MR. MASON TAN

ATTENDANCE FOR BOARD MEETINGS



S/N	BOARD MEMBER	DESIGNATION	NO. OF MEETINGS ATTENDED IN 2020
01	SHAWN K. Y. LUM	PRESIDENT	12/12
02	HO HUA CHEW	VICE-PRESIDENT	8/12
03	MORTEN STRANGE	HON SECRETARY	12/12
04	EVELYN NG	ASST HON SECRETARY	11/12
05	BHAGYESH CHAUBEY	HON TREASURER	9/12
06	VEERENDRA PATWA (FROM JUN 2020)	ASST HON TREASURER	2/7
07	ALBERT LIU	EXCO MEMBER	10/12
08	GOH TER YANG	EXCO MEMBER	12/12
09	GOH SI GUIM (TO MAY 2020)	EXCO MEMBER	3/5
10	LESTER TAN (FROM JUN 2020)	EXCO MEMBER	7/7

There was a total of 12 board meetings in the financial year ending 31 December 2020





President's Report for 2020

There is a good chance that 2020 will be remembered as the year of COVID-19. It will be associated with fear, stress, suffering, and great loss.

Nature Society (Singapore) activities were curtailed during 2020, but circumstances encouraged the Society to move to new platforms and to find ways to better connect with members and the general public.

The pandemic was also an opportunity to reassess the value of nature in our lives, from a very individual and local level, to a wider societal and regional context.

Achievements

The Charity Council completed its Charity Transparency
Framework Review in 2020 and the Nature Society was the only small charity represented in the Sub-Committee that helped draft the new transparency framework.

The hope for the new framework is that it will raise the standards of charity reporting and put charities in a better position to engage with stakeholders and donors.

The Public Service Medal that was conferred upon Shawn Lum on National Day 2020 was not so much individual honours as it was recognition of the work that the Nature Society has done over the years with the Public Utilities Board and other government agencies.

Conservation and Advocacy

Engagement with government agencies and corporations continued despite curbs on in-person meetings in 2020. Some of these agencies included the LTA (Cross-Island Line), HDB (Tengah and Ulu Pandan), NParks (One Million Trees; EIA Framework), URA, and Mandai Park Holdings. The LTA and Mandai discussions in 2020 were part of long-term dialogues, in the case of the Cross-Island Line dating back to 2013.

In October, a video of the Clementi Forest taken by NSS member Brice Li went viral and captivated a work-from-home populace like nothing before it on Singapore social media. This set the stage for a groundswell of public support for the retention of green spaces in Singapore's future development that continues to resonate.

NSS members continue to participate in national and regional conservation working groups for the Sunda pangolin, Straw-headed bulbul, and songbirds, among other species. Many thanks to Conservation Committee Chair Leong Kwok Peng and Vice-Chair Dr Ho Hua Chew, and to the many NSS members and friends who contributed to the critically important job of securing the future of our irreplaceable natural heritage.

Policy

The Wildlife Act was passed by Parliament in 2020. When proposed by Member of Parliament Louis Ng, he dedicated it to the memory of NSS Vertebrate Study Group founder and conservation icon Subaraj Rajathurai. The Wildlife Act supersedes the Wild Animals and Birds Act (WABA). Kerry Pereira of the NSS Secretariat made key contributions to the committee that worked to draft the Wildlife Act. In 2007, NSS members Dr Ho Hua Chew, Assoc Professor Lye Lin Heng, and Vina Dharmarajah, then-Environmental Law and Policy Advisor to NSS, submitted to the CEO of the Agri-Food and Veterinary Authority a proposed reforming of WABA. This 2007 document and the work that went into it laid the groundwork for the Wildlife Act endorsed by Parliament in 2020.

NSS members continue to serve both as members and in their personal capacities to many regional and global conservation initiatives. Karl Png plays a key role in the international Global Youth Biodiversity Network. Ms Ng Bee Choo is at the heart of IUCN and other efforts to protect hornbills, particularly the critically endangered Helmeted Hornbill. Marine Conservation Group members are active in the IUCN specialist group on Horseshoe Crabs.

Programmes

In 2020, Every Singaporean a Naturalist (ESN), the Nature Society's flagship outreach/citizen science programme, experienced a significant boost when it received support from the Wildlife Reserves Singapore Conservation Fund (WRSCF). The funding will allow the hiring of a second ESN officer and an expansion of the programme into additional schools and eventually into community groups as well.

The April to June 2020 "Circuit Breaker" posed challenges to the Society's outreach efforts, but volunteers and the Secretariat responded by creating a fun and innovative series of online talks and even virtual, real-time wildflower walks. Many thanks go to Ms Tan Beng Chiak, Bian Tan, Dr Anuj Jain, Ms Sung Mei Yee, and Dr Louise Neo for initiating this series.

The NSS Secretariat started "Circuit Breaker Sightings" on the newly created NSS Instagram account. Even after Circuit Breaker the reporting of wildlife in the vicinity of people's homes has continued, with the result that crowd-sourced reporting of plants and wildlife will likely become a key part of NSS citizen science and outreach efforts. NSS also started online programmes such as "Naturalist Chatter" and other talk series.

Partnerships

Despite the curtailment of travel to Malaysia, 2020 did not dampen our close working relationship with colleagues from our sister group the Malaysian Nature Society (MNS). NSS members could not carry out surveys of the Panti Bird Sanctuary after March 2020, but the first fruits of the expedition were released in a special edition of the Malaysian Naturalist, an important MNS publication.

The MNS Johor Branch put NSS in touch with the MNS Negeri Sembilan/Melaka Branch in 2020, and soon NSS members were regular attendees and contributors to the MNS-Negeri Sembilan/Melaka Branch's series of online talks entitled "Nature Heroes." We are grateful to Abbott Chong (Chair, MNSJ), Belinda Wong (Hon Sec., MNSJ) and Vuthy Taing (Chair, MNS-NS/M) and their respective Branch Secretariat colleagues, for being such welcoming and generous friends and collaborators.

Through Every Singaporean a Naturalist, NSS worked closely with the wider school community in 2020. For this we thank Ms Sung Mei Yee, Ms Tan Beng Chiak, and Ms Huang Ning Xin.

Fundraising and Membership

The physical limitations imposed by COVID-19 control measures fortunately could not contain the support and benevolence of the donor community. We received a major grant from the WRS Conservation Fund. NSS also benefited from the generous matching donation scheme of the Bicentennial Community Fund that was extended to donations received until the end of 2020, nearly a one-year extension from the original date.

The Singapore government assisted companies and charities in 2020 by contributing to staff salary payments. Internships that assisted those seeking employment and experience benefited the organisations that applied for these internship grants. Nature Society (Singapore), like so many others in our community, is grateful for government assistance during a year heavily impacted by the global COVID-19 pandemic.

Much gratitude goes to the NSS staff and members who helped in fundraising and membership efforts in 2020, particularly Albert Liu, Ben Szeto, and Bhagyesh Chaubey.

Governance

As reported to members in November 2020, there was a data breach via the NSS server. We have de-linked the Nature Society's website to our databases and have completed initial investigations into the nature and extent of the data breach. Joe Lim, Albert Liu, Liew Kai Khiun, Morten Strange, Evelyn Ng, and Bhagyesh Chaubey steered

us through a very worrying and difficult time for the NSS Exco and Secretariat. Joe Lim deserves special mention for his efforts. We intend to take lessons learned from this incident to improve our data systems and governance. We deeply regret the worry that this may have caused to our members.

Looking Ahead

On the perennial question of the Nature Society's leadership succession plans, which regular attendees of the AGM will have heard before, we feel that we are closer to realising a more robust transition to new – and better – leadership. In 2021, we will implement a more systematic mentorship plan so that future leaders will be introduced to the higher-level conservation engagements, donor meetings, and policy forums that senior NSS Exco and Council members are involved in.

The NSS renewal will go beyond leadership, to look at the skills required to take the Society forward in conservation science, policy, and technical and administrative aspects of overseeing a Charity/NGO. We need to nurture a new generation that will raise the scientific capacity of the Nature Society and to better position the NSS in the context of the broader conservation landscape at regional and global levels. By doing more as a member of the IUCN and as a Country Partner of BirdLife International, for example, we can not only make greater contributions to conservation, but we will do better justice to the conservation expertise and potential of the NSS membership and Singapore in general. This may include working more closely with others in our community, such as Mandai Nature, the Asian Species Action Plan, WRS, and the Asia-Pacific Centre for Environmental Law at NUS.

As is custom each year during this report, I hope that Nature Society members see the broader civil society ecosystem in which the NSS exists. A thriving, happy home is possible when every one of us feels that we are able to help create and maintain a better, happier, and better fulfilled community of fellow citizens and residents.

Thank Yous

The Nature Society (Singapore) cannot function without its dedicated Secretariat, its capable and inspirational Exco and Council members, and most importantly its membership. Without any of these elements, it will not be possible for us to make good on the belief that that a Singapore with thriving nature is a better home for all. As always, I extend my sincerest thanks to our wonderful Secretariat (Joe Lim, Kerry Pereira, and Sung Mei Yee) my wonderful colleagues from the NSS Exco and Council, and to our many partners and incredible donors. You believed in us and supported us despite the difficulties we all faced during a difficult year.

I was very fortunate to work with and to get to know Bhagyesh Chaubey, who has served out his term as Hon Treasurer. Bhagyesh did so much more than manage the Society's funds. His insightful and strategic mind that made him an important contributor to the NSS's nature conservation strategies. It was an honour for me to work with Bhagyesh Chaubey, and I hope his many contributions to Nature have only just started.

Dr Ho Hua Chew is one of the most influential and dedicated nature conservationists that I have had the privilege of learning from and working with. He is stepping down as Vice-President of the Nature Society but he will not be stepping away from nature conservation anytime soon.

Dr Ho is in my opinion a National Treasure, a champion for Nature when doing so was not only unfashionable, but when it might have been viewed in some quarters as controversial. His bravery and unyielding advocacy on behalf of nature – for the benefit of biodiversity and for people – is the source of inspiration for many. Thank you, Dr Ho, for your contributions to the Nature Society Exco, to Nature, and to Singapore. We will build on your good work and endeavour to do you and your fellow pioneering nature conservationists proud as we enter a pivotal decade for the future of Nature.





2020 Activities Summary

Key highlights and finance related accomplishments in 2020:

- Unqualified external audit report
 - Accounting books properly kept in accordance to regulations
 - No non-compliance observed relating to requirements as an IPC and fund raising.

- 2) At the end of 2020, the net income and expenses resulted in
 - A Net surplus of \$\$
 128,641/-

This increased the Total asset value to **\$\$ 1,383,537/-**

3) In 2020, no dedicated fundraising event was organized, and our core operations were impacted due to pandemic restrictions.

We were the beneficiary of generous donations and government support schemes.

4) Continued financial prudence.

FINANCIAL POSITION SUMMARY

The table below provides a financial position and use of funds in 2020:

Funds	1-Jan-20	+ Income	- Expense	+ B/S Adjustment*	31-Dec-20
General	\$ 1,155,493	\$ 293,820	\$ (204,456)	\$ 29,994	\$ 1,274,851
Restricted	\$ 99,403	\$ 108,160	\$ (68,883)	\$ (29,994)	\$ 108,686
TOTAL	\$ 1,254,896	\$ 401,980	\$ (273,339)	\$0	\$ 1,383,537

Balance Sheet	
Current/Cash	\$ 874,510
Property (fixed assets)	\$ 404,748
Receivables & Deposits	\$ 4,646
Less Liabilities	\$ (29,008)
Net Assets	\$ 1,254,896

(all numbers in Singapore \$)

Net Surplus S\$128,641/-

Balance Sheet	
Current/Cash	\$ 991,284
Property (fixed assets)	\$ 405,811
Receivables & Deposits	\$ 8,575
Less Liabilities	\$ (22,133)
Net Assets	\$ 1,383,537

^{*} Transfer of 2019 expenses relating to WRSCF Grant

The table below provides more insight into the audited 2020 income and expenses numbers for internal management control purposes:

Details	Income	Expenses	Notes / Comments
Donations (includes SIG)	187,589	-	~146 general; ~34K Bird; ~6K SAP BIG; 2k MCG kayak;
Membership	40,125	-	~30.5K renewals; ~9.5K new
Int and Other income	49,587		~6k interest income; ~30 job support, wage credits; ~12K WRSCF
Events & Activities / Contracts & SIG	16,519	(44,162)	guides; books; sundry sales exp; Bird Race; Panti survey ; Nature watch;
Staff, Facilities, Admin, Governance; Depreciation (excluding WRSCF)	-	(160,294)	Salaries & CPF; Maintenance; Utilities; Audit etc
Total (General, SIG, Designated)	293,820	(204,456)	
Restricted	108,160	(68,883)	WRSCF, MPOI, Capital Fund, TTG
GRAND TOTAL	401,980	(273,339)	
Net surplus		SGD 128,641/-	

(all numbers in Singapore \$)

CONCLUSION

Overall, NSS Exco believes that the NSS financial position remains healthy and prudent, and its key reserves (the freehold property and cash) are safeguarded.

We continued the year with financial prudence, income went up by ~16K to S\$401,980 due to some significant donations, grants and project commitments. Expenses came down by ~5K to S\$273,339 and were mostly of standard nature. Year ended in a net surplus of S\$128,641.

Though Membership and Fundraising committees were set up in 2015, we did not have much success due to resource shortages. Similarly, we also need to invest in strengthening and securing our archaic technology platform. To address these, the society has budgeted resources and funds in 2021 budgets.

Finally, we would like to take this opportunity to welcome all members and volunteers to join various committees / SIGs / Exco.

Thank you!





The conservation committee participated in the following engagements with government agencies and organisations.

Most of the engagements were virtual.

1. HDB/URA/LTA

Tengah

An engagement session on 25 June 2020 to discuss connectivity issues and development plans for Tengah.

Connectivity include animal crossings across (KJE), Warren Golf course, Bt Batok/Brickland Rd and Jalan Bahar.

2. URA

Springleaf area (off Upper Thomson and Mandai Rd)

Virtual meeting on 1 Jun 2020 for NSS to share with the masterplanning consultants taking part in the Springleaf precinct RFP competition.

Matters discussed include ecological connectivity to Nee Soon swamp forest and Khatib Bongsu.

3. PUB

Proposed Pipelines
Virtual meeting on 9 Apr 2020 to

discuss the EIS of the proposed twin 4.6 km 1800mm diameter potable pipeline along Island Club Road from Bukit Kalang Service Reservoir to Upper Thomson Rd.

Construction method is mainly by pipe jacking with open cut within the reservoir premise.

Meeting on 11 Dec 2020 to discuss the EIS on the proposed 1600/1200 diameter pipelines from Nanyang Reservoir to PIE.

4. LTA

Cross Island Line (CRL)

Engagement meeting was held on 25 Feb 2020 to discuss the CRL worksites optimisation and layout.





Engagement meeting was held on 30
Sep 2020 to update the worksites
optimisation for A1W1 and A1W2.
A1W1 worksite area will be halved rom
15,000m2 to 7000m2 and shifted 150m
away from towards SICC course.
A1W2 will be shifted out of Eng Neo
Woodland.

EIS report was presented for Eng Neo Woodland

A biological rich woodland of 39.2 ha with 480 flora species of the CCNR types of vegetation.

CRL infrastructure Work at Elias Area

Engagement meeting on 9 Mar 2020 to discuss the EIS findings of the construction site in particular upstream of Sg Taib.

Tengah (Jurong Region Line)

Engagement meeting on 25 Mar 2020 on the EIS & EMMP for the construction of Choa Chu Kang West - Tengah -Hong Kah Station line.

North South Corridor

Corridor

A briefing session on the EIS scope for the construction of the viaduct from Sembawang Rd to Lentor Ave crossing a patch of forested area.

5. HDB Choa Chu Kang Site along Rail

Virtual meeting on 17 Sep 2020 to discuss the Environmental Baseline study scope for the 1km x 190m site along the Pang Sua Canal between CCK and KJE that include Pang Sua Woodland.

Dover/Ulu Pandan Forest

Sharing by HDB on 17 Sep 2020 on the Environmental Baseline Survey report and preliminary concept plan for potential housing development on the site.

Findings include 3 clusters of large trees on the western sector, 159 fauna species and 4 earth streams.

Woodland North

Virtual meeting on 20 Nov 2020 to discuss the EIS of development plan for Woodland North in relation to Admiralty Park.

This include measures to avoid a proposed core conservation area and Sungei Cina mangroves.

6. Nparks Sungei Buloh Wetland Reserve

An update by Nparks on 23 Sep 2020 on a new bridge to be constructed to replace the old bridge.

1 Million Trees Initiative

Submitted on Oct 2020 a proposal for tree planting and reforestation within Clementi Forest to Nparks for consideration.

Proposal was put together by Ngo Kang Min with inputs from Ho Hua Chew, Anuj Jain, Amy Tsang and Leong Kwok Peng



Khatib Bongsu Nature Park

A networking cum engagement session at PAssion (Sembawang) on 14 Dec 2020 to discuss the ideas and suggestions for the nature park.





Villa Verde Park

A virtual focus group discussion was held on 5 Sep 2020 to provide ideas and suggestions for this park alongside the Rail Corridor.

7. JTC

Meeting on 6 Nov 2020 to discuss the offshore soil investigation work in the vicinity of Mandai Mudflat and Sg Cina.

8. MND

An engagement session on 21 Mar 2020 to review the Biodiversity Impact Assessment framework going forward.

9. Updated Master Plan for Nature Conservation in Singapore

Meeting on 31 Jan 2020 to discuss the preparation of the publication.

Sponsorship for the publication has been obtained.

10. Green Corridor

Friends of the Rail Corridor (FORC)
The 5th FORC meeting was held on 13
Jan 2020 - updating on enhancement
work at the Rail Corridor.

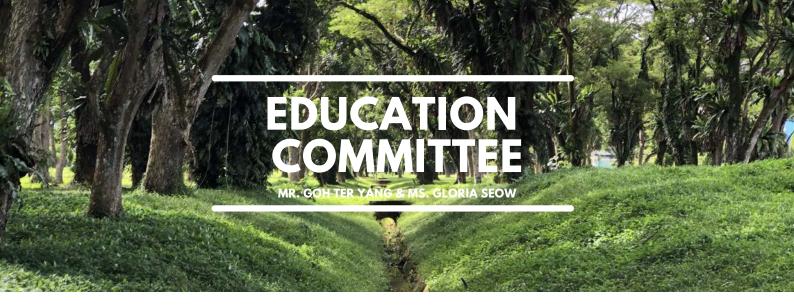
Leong Kwok Peng also gave a slide talk on 'The Green Rail Corridor' book.

11. Social Media

NSS Facebook page has over 21000 followers

NSS Facebook group has also over 36500 followers

We Support the Green Corridor Facebook page has over 14,000 followers



SUMMARY OF ACTIVITIES

S/N	ACTIVITY	DATE	REMARKS
01	ONLINE TALK: FUN WITH HORNBILLS	02-AUG-20	SPEAKER: NG BEE CHOO
02	ONLINE TALK: FUN WITH OTTERS	25-OCT-20	SPEAKER: BERNARD SEAH
03	FUN WITH BACKYARD BIRDS ONLINE WORKSHOP PART 1	21-NOV-20	SPEAKER: GLORIA SEOW
04	NATURE ART WORKSHOP: THE STRAW-HEADED BULBUL	12-DEC-20	SPEAKER: ALPANA AHUJA
05	FUN WITH BACKYARD BIRDS ONLINE WORKSHOP PART 2	12-DEC-20	SPEAKER: GLORIA SEOW
06	WORKSHOP: COMPOSING MUSIC INSPIRED BY NATURE	13-DEC-20	SPEAKER: SHIRLEY HO

ACKNOWLEDGEMENTS

A big thank you to all specialist guides and regular volunteers. If you are passionate about nature education and wish to volunteer, please email Gloria at gloria_seow@yahoo.com. All trips are covered in the Fun with Nature blog at http://funwithnature.blogspot.sg/, which continues to be ranked #1 on Google under the search terms 'Fun with Nature'.



Have you Renewed your Love for Nature?

More than ever, nature is a sanctuary and inspiration in our lives. As the enduring impacts of COVID-19 continue to be felt across the world, people rediscover the solace of nature as urban and crowded spaces become closed. In Singapore, the lack of hinterland and travelling opportunities have led to many of us turning to nature for well-being and harmony in life. But our natural spaces remain threatened and constantly under pressure for development. Conservation action and advocacy must continue. Please renew your love for nature by renewing your Nature Society (Singapore) membership.

Have you renewed your love for nature? Know anyone keen to join NSS?

Contact Joe at **joe@nss.org.sg**https://www.nss.org.sg/news.aspx?
id=og7N/gcSgAo=&group_id=rpJugaQ7
MUk=

Your Nature Society membership is important for Singapore's nature conservation and wildlife

Very simply, Nature Society (Singapore) needs your membership for 3 main reasons:

- 1) With little public funding, membership fees support the society's costs, outreach and advocacy.
- 2) Members lend us voices when we advocate and negotiate for nature (more members enable us to advocate with a stronger voice).
- 3) Members can volunteer and contribute to nature in various ways – on the ground or in the background.

Software Adoption for Better Engagement: Challenges and Opportunities

We have been studying options to adopt a cloud-based software to interact better with 3 important groups of people: members, donors and volunteers.

We aim to achieve:

- Ease of membership sign up and automated renewals
- Consolidated donations for individuals and families
- Matching volunteer interests with SIG activities

The software will also free up capacity of our staff, as many processes are handled manually today.

However, the software and implementation, is very costly for NSS. The average cost exceeds \$30,000.

We humbly ask for your generous donations. Any amount helps.

Renew and Pledge your love for Nature now – for Memberships or Donations - PayNow and PayLah:

Kindly scan the QR code. S61SS0142H

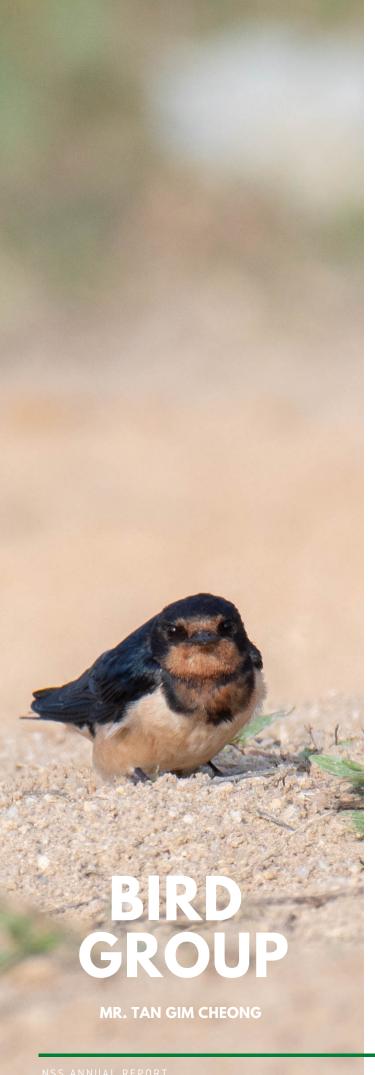


- Corporate Account Name: Nature Society (Singapore)
- Unique Entity Number or UEN: S61SS0142H
- Please indicate your Name or Comments in the Reference field.

Acknowledgements

I would like to thank volunteers Kang Min for leading the software adoption as well as Lester Tan for his invaluable time brainstorming. Sincere gratitude to our staff Joe Lim, Kerry Pereira and Casey Chia for all the additional workload and meetings in this exploration process.





The Bird Group's usually busy calendar of activities was scaled back for the safety of our members, participants and volunteers due to the COVID-19 pandemic.

Birding Activities

Two bird walks were conducted in January 2020 – at Rifle Range and Kranji Marshes. Subsequently, bird walks were suspended for the rest of the year due to COVID-19.

Bird Censuses

We continued our bird censuses, which were mostly conducted solely by the site leaders. These included the Asian Waterfowl Census, Parrot Count, Annual Bird Census, Mid-Year Bird Census, Fall Migration Bird Census, and Raptor Watch.

Collaborative Surveys

The Bird Group collaborated with the Malaysian Nature Society (Johor Branch) on three bird surveys from January – March 2020 as part of the Comprehensive Survey of Panti Bird Sanctuary.

We also collaborated with NParks for the conduct of shorebird surveys at Chek Jawa, Pulau Ubin.

Webinars

Two webinars were conducted: (1)
Shorebird Identification, Ecology and
Conservation in Singapore, and (2)
Pesta Ubin: The importance of Pulau
Ubin for Bird Conservation with Nature
Society (Singapore) Bird Group.

36th Singapore Bird race

The 36th Singapore bird race held in December 2020 was the biggest bird race ever, with nearly 250 participants who formed 79 teams, and competed in six categories. Registration, race briefings, bird log submission, and closing were done online or through webinars. Thanks to Mapletree Investments for their sponsorship, and to Birdlife International (Asia) and NParks (SBWR) for their support.

36th Singapore Bird Race Closing Webinar MC - Geoff Lim NSS President - Shawn Lum Minister Desmond Lee Webinar Mapletree Chairman Vinayagan Dharmarajah Mapletree Chairman - Edmund Cheng Mapletree Group CCO - Wan Kwong Weng

International Events

The Bird Group participated and supported the 1st Asian Birdlife Festival & Nature Expo 2020, held in Thailand from 18-19 Jan 2020, networking with other Asian Birdlife partners as well as the Oriental Bird Club.

Publications

Seven articles in Nature Watch originated from, or were co-written by Bird Group members, including Counting Asian Waterbirds in Singapore, The 35th Singapore Bird Race, and My Big Year, amongst others

Communications - Blog & Facebook

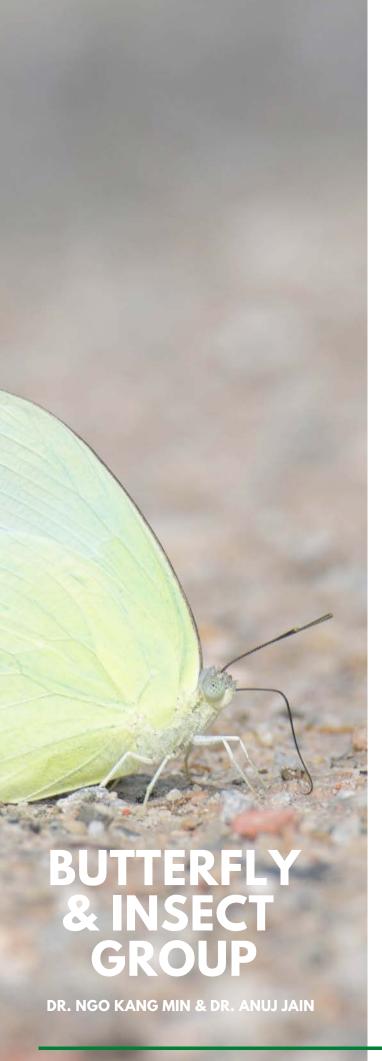
The Singapore Bird Group blog continues to be an important platform to communicate with the birding community.

In addition to our monthly bird reports, periodic raptor reports and census reports, 20 articles were published on the blog. The Singapore Birders Facebook continues to be a hive of activity with many postings on birds.

Support for Mandarin TV bird programs

The Bird Group provided expert support, including personnel and rare bird videos, to two Mandarin TV channels for their bird-related programs: (1) Singtel TV's Jia Le Channel, and (2) Channel 8's Tuesday report: The Migratory Birds.

The Bird Group would like to thank all our members, volunteers and participants for their support for our activities.



Summary

amidst the COVID-19 pandemic.
However, BIG managed to get involved in an online seminar, and towards the later part of 2020 and in 2021, we resumed our butterfly walks, surveys, and engagement with NParks, donors, and other partners. The preparation of the moth chapter for the Singapore Red Data Book is ongoing. Several of our members also wrote articles for Nature Watch and Malaysian Naturalist, We also mourned the passing of KC Tsang, a long-time NSS member, nature lover, and excellent nature photographer.

Butterfly walks

The latter half of 2020 permitted only small gatherings of 5 or less, and we only held a few butterfly walks with one BIG member and 4 NSS members. When gatherings of up to 8 were permitted, we held walks on a monthly basis. For this period we held walks at Bukit Brown, Pavilion Rise, Sungei Buloh Wetland Reserve, Kranji Marshes, Upper Seletar Reservoir and the Singapore Botanic Gardens.

Insect surveys

BIG continued moth surveys in Pulau Ubin as part of the Ubin biodiversity reassessment. Reporting to NParks and a publication will be ready in mid-2021.

Red Data Book

Anuj and Gan of BIG are coordinating the Red Listing for moths for the upcoming Red Data Book (version 3). They have assembled a team of moth enthusiasts, experts and researchers who are helping with species identifications and taxonomy. An introductory online group meeting was held in May 2020 to introduce the tasks. NSS intern Wan Teng worked over the summer break from May - July to assist with collation of iNaturalist data and past moth surveys in Singapore in a database.

Anuj wrote to Khew Sin Khoon of ButterflyCircle twice expressing interest in collaborating on the Red List for butterflies but received no reply. Khew is leading the national Red List assessment of butterflies.

Donor engagement

International software company SAP partnered with NSS and BIG to do six insect surveys at the Clementi Forest from October to December 2020. The surveys were led by Kang Min, Mei Yee and Kerry, and involved 30 SAP staff and their families. Surveyors were trained in the iNaturalist citizen science platform and were encouraged to upload all their findings. We made 460 observations of 136 species in total. SAP donated \$9500 to NSS for this collaboration. Kerry is in discussions with them about activities for 2021.

NParks engagement

In August 2020 we engaged with NParks managers at Yishun Park to plant the Common Rose host plant Aristolochia acuminata at the park. This was to expand the potential habitat area of the Common Rose and Common Birdwing, both of which depend on A. acuminata as host plant, because the nearby Khoo Teck Puat Hospital grounds had been a breeding area for the Common Rose before. thanks to our member Simon Chan's efforts. Our interactions with park managers Simon Soh and Dora Toh were very positive and they welcomed our ideas and let us sow seeds at Yishun Park.

After an initial seed sowing session in late 2020, we found that none of the seeds germinated, and we suspected it was because of the dry conditions after sowing them. Future efforts will focus on transplanting Aristolochia saplings into the soil.

We also engaged with the NParks managers at the Singapore Botanic Gardens regarding the planting of Aristolochia species at the gardens since July 2020. Amy has been meeting the managers regularly to give updates on sightings of the Common Rose at the gardens. Kang Min gave them Aristolochia acuminata saplings to plant in the gardens.

Steven Chong has been engaging with Parks South West branch since October 2020. A tree-planting event was held on 13 December 2020 with the residents of Bukit Gombak at a new playground. Butterfly host and nectar plants were planted as well, including Aristolochia acuminata.

Online activities

Anuj delivered an online webinar (<u>link</u>) on 3 Mar 2020 on Singapore's butterflies organized by R<u>hopalocera</u> and Odonata Association of Rajapalayam - ROAR. It brought together experts from India, Pakistan, Singapore, Sri Lanka and South Africa.

In August 2020, BIG did an online talk as part of the ESN Chatter series of seminars. Kang Min and Tian did a prerecording of the talk, which was played on the day of the seminar. The seminar ended with a Kahoot quiz in which the students participated.

Media and articles

Anuj & Simon published an article on butterfly dispersal in urban areas and forests in the journal Biotropica in April 2020. See <u>here</u>

BIG contributed one article in Nature Watch. YK Tea wrote an article on marine puddling butterflies in July 2020. Kang Min, Amy and Simon wrote articles for Malaysian Naturalist as part of the MNS-NSS Panti Bird Sanctuary surveys.

Kang Min was interviewed for an episode on Hello World, a Channel 8 documentary series. The episode was aired on 14 October 2020 and featured butterflies, caterpillars, and the people who rear butterflies in Singapore (<u>link</u>).

Anuj was featured in a Singtel's Garden City Explorers series on Jia Le channel on Singapore's butterflies representing NSS BIG. The broadcast was aired on 31 Oct 2020. Repeat broadcasts happened in Nov 2020.

KC's passing

KC Tsang, husband of Amy Tsang, passed away on 26 August 2020. KC was a long-time member of NSS and started on his nature journey with birds, followed by butterflies about ten years ago. Amy wrote an article about KC's life in the Jan-Mar 2021 issue of Nature Watch. All at BIG miss his company, humour, and keen love of nature.



NDP Sustainability feedback

Tan Hang Chong, Chair of Jalan Hijau, represented the society in engagements with the National Day Parade Executive Committees of 2020, by providing feedback on how to make the parades more environmentally sustainable.

The Breakfast Huddle: On Sustainable Singapore

Tan Hang Chong, Chair of Jalan Hijau, represented the society on a radio interview with MONEY FM 89.3. During the interview, he elaborated more on protecting the natural environment around us to lower the chances of a outbreak happening in the future.

The group would like to extend its heartfelt appreciation to all its dedicated volunteers and it wishes all members to stay safe during these trying times.



Summary

2020 had been a tough year for the group, due to the COVID-19 situation in Singapore. We managed to conduct a coastal cleanup and a horseshoe crab survey before the circuit-breaker kicked in. We didn't manage to organize any physical activities after that due to the restrictions to the number of participants for physical activities during the various phases of circuit-breaker.

Webinars & Talks

However, the group managed to conduct 6 marine-related webinars to reach out to a total of 300-400 members of NSS and the public. It had been a wonderful learning experience for the group to conduct these webinars, using this new tool to reach out to all.

A big shout-out to the speakers, committee members, the technical support team and volunteers who made this possible.

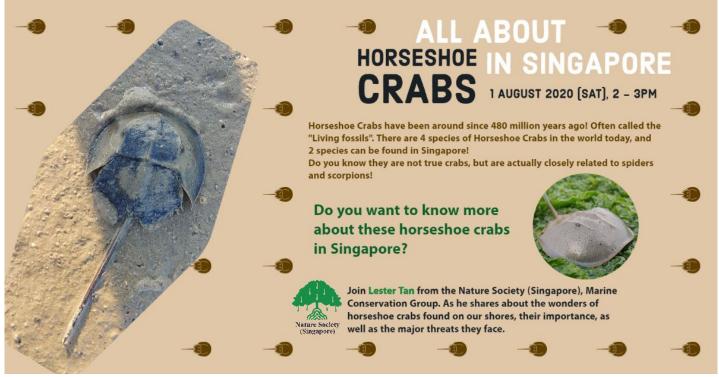
On top of the monthly webinars, Lisa, Cheryl and Shuyin did a great job organizing the Young Marine Biologist Week webinars for the primary school students over 5 days during the December holidays, whereby a specialist mentor would guide a panel of students to provide information on a particular marine animal or habitat. Committee members of the group were also invited to give online talks on marine-related topics.



Lester Tan gave 3 talks for the Lee Kong Chian Natural History Museum (LKCNHM), and Lisa Lim gave a talk organized by Chai Chee Community Club for their residents.

Conclusion

The Marine Conservation Group had done our best to promote the appreciation and conservation of the marine natural environment, amidst the unfavorable circumstances caused by the pandemic. The chairman of the group would like to express his thanks to the members for their unwavering dedication to this cause. Hopefully, 2021 would be a better year, and we can be out there to continue with physical conservation work.





Summary

In view of the COVID- 19 pandemic, the Nature Ramblers' Group has made the difficult decision to put a temporary halt on all activities till the situation tides over. The group would like to extend its heartfelt appreciation to all its dedicated volunteers and it wishes all members to stay safe during these trying times.

Plans for 2021

As the COVID-19 virus spread in the local community is increasing, we have to start our activities very cautiously. Therefore, we will start organising our activities once restrictions ease.

We would like to encourage our members to be vaccinated so that the risk of infection can be controlled and not create another cluster.

Stay safe and take care of all and self, everyone.



Activities in 2020

This report describes the activities of the Plant Study Group in 2020. Due to the advent of COVID-19, all activities were restricted to and took place in Singapore.

Aromatics Walk

A walk was conducted to help local brewers who were looking for unique plant flavourings for gin. On 25 October, members of the plant group conducted a botanical tour of Hort Park, exploring the aromatic possibilities of various plants.

Naturalist Chatter

Chair of plant group Bian Tan gave a zoom talk entitled "Get a Grip on Plants" for the Naturalist Chatter series of talks organized by the Every Singaporean a Naturalist programme.

The audience were students and teachers from schools participating in the ESN programme. Contents of the talk on 26 August included basic botany and how to look at plants by focusing on their salient features such as leaves and flowers. A dissection of the blue pea flower (Clitorea ternatea) was conducted to reveal the morphology of the petals, stamens, and pistils. The talk concluded with what the audience could do to help Nature and plants, such as joining and becoming a member of NSS.

Wildflower Walks

Due to the Circuit Breaker. NSS was not able to conduct public walks, so plant group member Tan Beng Chiak organized and facilitated a virtual Wildflower Walk on zoom. The aim was to highlight the beauty and diversity of plants and flowers in urban grass verges which had remained unmowed during the CB period. This first walk on 21 July was led by author and botanist Louise Neo, in conversation with Shawn Lum and Anuj Jain. Anuj shared fascinating insights into the relationship between the plants seen and their symbiotic pollinating insects. On 25 September, a second Wildflower Walk was led by Shawn Lum, in conversation with Bian Tan.

In addition to exploring wildflowers, Shawn's walk also focused on the effect of mowing frequency and how "weeds" are adapted to such disturbance. Both wildflower walks were very well received and can be found on Youtube:

Wildflower Walk 1

https://www.youtube.com/watch? v=Xlt2hsnl30c&t=435s

Wildflower Walk 2

https://www.youtube.com/watch?
v=6XLMIGKjRyM





Vertebrate Study Group reports the following:

The joint MNS-J-NSS Scientific expedition to the Panti Bird Sanctuary

has been completed. VSG members contributed to eight articles published over two issues of the Malaysian Naturalist, covering findings from our trail camera work, mammals including bats, flat-headed cat and primates; and nocturnal animals of Panti, both mammals and herpetofauna.

A coffee table book is currently in preparation by MNS-J.

The VSG would like to record thanks to all NSS members who did these surveys as well as acknowledge the strong support we received from the Malaysian team, especially during the trail camera campaign.

The trail camera study at Sg Yu
Ecological Corridor with the
Malaysian Conservation Alliance for
Tigers (MYCAT) has been suspended
due to border closure due to the
COVID-19 pandemic.

A new revision (3) of Wild Animals of Singapore is currently being prepared. Compilation of all content is targeted for completion by Q4 2021. The publication will then move into design/layout phase and eventually printing.



Members of VSG along with other SIGs conducted a fauna survey at The Ravine at Bukit Timah Turf Club. The final report including findings from all sub-groups will soon be published.

VSG members along with other SIGs have contributed to the content of a white paper currently being prepared to communicate NSS position on the Kranji Woodlands unauthorised clearing matter.

Mr Yeo Suay Hwee will be taking over as chair of the VSG after the AGM 2021.





