
NATURE SOCIETY (SINGAPORE)

2019
ANNUAL
REPORT



Nature Society
(Singapore)

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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 Institution of a Public Character (IPC) status since 1 September 2008.

The Society reports its compliance with the Charity 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

2019

DAY-TO-DAY LEADERSHIP

EXECUTIVE COMMITTEE (ELECTED ANNUALLY AT THE AGM*):

PRESIDENT

DR. SHAWN K Y LUM

VICE PRESIDENT

DR. HO HUA CHEW

HONORARY SECRETARY

MR. PETER CONNELL (TILL MAY 2019); MR. MORTEN STRANGE (START MAY 2019)

HONORARY TREASURER

MR. BHAGYESH CHAUBEY

HONORARY ASSISTANT SECRETARY

MR. MICHAEL LEE (TILL MAY 2019); MS. EVELYN NG (START MAY 2019)

HONORARY ASSISTANT TREASURER

MS. GOO EE LAN

COMMITTEE MEMBERS:

MR. ALBERT LIU

MR. GOH SI GUIM

MR. STEPHEN BENG (TILL MAY 2019)

COUNCIL

COMMITTEE AND SPECIAL INTEREST GROUPS CHAIRPERSONS:

CONSERVATION COMMITTEE

MR. LEONG KWOK PENG

EDUCATION COMMITTEE

MR. GOH TER YANG

BIRD GROUP

MR. LIM KIM CHUAH

BUTTERFLY & INSECT GROUP

VACANT

JALAN HIJAU GROUP

MR. TAN HANG CHONG

MARINE CONSERVATION GROUP

MR. STEPHEN BENG

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

MS. VICKI GUTHRIE (TILL MAY 2019)

MS. NGO KANG MIN (START OCT 2019)

OTHER

BIRDLIFE INTERNATIONAL COORDINATOR

MR. LIM KIM KEANG

IUCN COORDINATOR

MS. NG BEE CHOO (START OCT 2019)

RAIL CORRIDOR WATCH COORDINATOR

DR. LIEW KAI KHIUN

CHAIR, ENVIRONMENTAL LAW & POLICY WORKING GROUP

ACTING: DR SHAWN K Y LUM

CHAIR, FUND-RAISING AND INTERNAL AUDIT COMMITTEES

MR. BEN SZETO

CHAIR, MEMBERSHIP WORKING GROUP

MR. PETER CONNELL

ADVISERS & MENTORS

PATRON

PROF. TOMMY KOH

IMMEDIATE PAST PRESIDENT

DR. GEH MIN

FINANCE ADVISORY GROUP

MR. ALBERT SIN (TILL MAY 2019)

MS. TRIXIE TAN

MR. YEW YIP CHONG

MR. PETER CONNELL (START MAY 2019)

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

Financial Year 2019

S/N	Board Member	Designation	No. of Meetings Attended (2019)
1	Shawn K. Y. <u>Lum</u>	President	10/10
2	Ho Hua Chew	Vice-President	7/10
3	Peter Connell (till May 2019)	Hon. Secretary	2/5
4	Morten Strange (from Jun 2019)	Hon. Secretary	7/7
5	Morten Strange (Apr & May 2019)	Asst. Hon. Secretary	2/2
6	Michael Lee (till Mar 2019)	Asst. Hon. Secretary	1/1
7	Evelyn Ng (from Jun 2019)	Asst. Hon. Secretary	6/7
8	<u>Bhagvesh Chaubey</u>	Hon. Treasurer	7/10
9	Goo <u>Ee</u> Lan	Asst. Hon. Treasurer	4/10
10	Stephen <u>Beng</u> (till May 2019)	Exco Member	1/5
11	Goh Si <u>Guim</u>	Exco Member	4/10
12	Albert Liu	Exco Member	7/10

There were a total of 10 board meetings in the financial year ending 31 December 2019. There were no meetings in February & March 2019.





PRESIDENT'S REPORT

DR. SHAWN LUM

Another year has gone swiftly by. Every year, my hope for the Nature Society is that it is doing better in every respect at the end of the year than at its start. Most importantly, has the Society become more effective at meeting its conservation priorities? Achievements, especially in an area such as nature conservation and outreach build over several (and sometimes over many) years, but as we look back on 2019 I

hope we'll find that the Nature Society is better placed than when I wrote the 2018 report a year ago.

I would like to focus on issues that are of perennial interest to the Society: Achievements, conservation and advocacy work, impacts on policy, partnerships, and fundraising. I'd like to close by looking ahead to 2020 and beyond, as well as making a few announcements.

Achievements

Nature Society (Singapore) received the Charities Transparency Award for 2019 by the Charity Council. Good disclosure is important for any charity to gain the trust and support of its stakeholders and benefactors. Practicing robust transparency measures also raises the organisation and professionalism of small charities such as ours, and for this we have our Secretariat, especially Joe Lim, and our Hon. Secretaries in 2019, Peter Connell and Morten Strange, and Hon. Treasurer Bhagyesh Chaubey for making this possible.

The Nature Society is also represented on the Charity Council's Charity Transparency Framework Review Sub-Committee.

Conservation and Advocacy

This is one of our core areas, and as in years past, the NSS has been active in promoting the protection of nature areas. Ongoing engagements include those for the Cross-Island Line with the LTA, Tengah (with HDB), and Mandai Parks. NSS members are also involved in many other discussions with various agencies (PUB, NParks, URA), and participate in national level species action groups (for example, pangolin, Raffles banded langur, songbirds, and more). One species-specific activity of note was the first straw-headed bulbul conservation planning workshop, co-organised by NSS and BirdLife International, and supported by Mapletree Investments. If this species can stay off the list of extinct birds, our members would have played a crucial role. Our Conservation Committee, led by Leong Kwok Peng and Dr Ho Hua Chew, and supported by all Special Interest Groups and dedicated members, leads on conservation issues, but across the

Society scores of members are devoted to advocacy and conservation outreach. They cannot be thanked enough.

Policy

Kerry Pereira, our senior outreach officer, was an active member of the group that worked to revise the Wild Animal and Birds Act. Kerry did this in addition to his many other duties, and I am confident that he will make key contributions to local and regional conservation policy in the years ahead. Ms Ng Bee Choo, assisted by Kerry Pereira, is our principal liaison with the IUCN, a role that I hope will grow in scope and stature as we translate our experience in wildlife monitoring and nature conservation into regional policy efforts. I am very proud that we have members who are making an impact at a global level as well. Karl Png, an NSS member and undergraduate in Biological Sciences at NUS, is an important member of the Biodiversity Youth Action Network. Through Karl's hard work, Singapore youth are central to helping shape conservation policy and awareness in Singapore and beyond.

Programmes

Many thanks to Ms Sung Mei Yee for coordinating the Nature Society's "Every Singaporean a Naturalist" citizen science and outreach programme. Thanks to Mei Yee, we have been gradually expanding the list of partner schools. More importantly, quite a number of teachers and students involved in the programme have become very good in wildlife spotting skills and have grown in confidence in their abilities. They are wonderful ambassadors for wildlife and nature conservation. Participating schools have also enthusiastically sent groups of students to participate in the

annual Bird Race, with the schools category becoming a major component of the Race. I must also thank Ms Huang Ningxin and Ms Tan Beng Chiak for their many contributions to Every Singaporean a Naturalist and to nature education in Singapore.

Partnerships

Working with other organisations and government agencies helps the Nature Society extend its efforts, but it also creates synergies and impacts that would not have been otherwise possible.

Examples of active partnerships start with BirdLife International. Ms Sung Mei Yee and Kerry Pereira attended a workshop on environmental education organised by the Malaysian Nature Society (MNS), a fellow Partner in the BirdLife network. The workshop was also attended by other BirdLife Partners in the region. During 2019, the wildlife and plant survey of the Pantii Bird Sanctuary commenced. The survey is led by the MNS Johor Branch. NSS participants have been assisting with vertebrate, bird, butterfly, and plant surveys, and I hope that this very promising and fruitful collaboration will last beyond the Pantii Bird Sanctuary study. Kerry Pereira and Shawn Lum worked with PUB staff to develop nature watching trails at the Marina Barrage and at a new ABC Waters feature where the Kallang River flows past the eastern edge of Bishan. Long-term partnerships with NParks at Pulau Ubin, Bukit Timah, Rail Corridor, and Marine Parks continue apace. NParks once again provided invaluable help with our Bird Race.

Fundraising and Membership

The Nature Society continues in its attempts to create an improved, more sustainable platform for fundraising and growing

our membership. Enhanced funding can increase the effectiveness of our programmes and broaden their scope and duration. With stable funding, we can expand and maintain a larger secretariat and make larger contributions to conservation. A larger membership will increase visibility, extend our effectiveness, and add to our advocacy work. Many thanks to Bhagyesh Chaubey for leading this effort, with support from Albert Liu, Ben Szeto, and Morten Strange.

Thanks to the generous support of HSBC, the Wildlife Reserves Conservation Fund, the Bicentennial Community Fund, Mapletree Investments, and many kind individuals, 2019 was a good year for the Nature Society.

Catching up

At last year's AGM, I forgot to acknowledge the help of Gemma Koh, Margie Hall, and Gloria Seow with our publications Nature Watch and Nature News. In 2019, Nature News came out in a more abbreviated format; reporting on events and other short articles that were traditionally published in Nature News would be transferred to a new section in Nature Watch devoted to NSS events, and also to our website. Gloria Seow oversaw the production of Nature News for many years and I wish to thank her for making Nature News a platform around which the entire membership could rally.

Looking Ahead

The urgency of the biodiversity crisis means that we must expand our capacity if we are to successfully deliver meaningful conservation outcomes. In addition to adding to our Secretariat,

and the fundraising infrastructure needed to support it, there are other key areas that need to be addressed. These include improvements to our science and IT capabilities, communication, volunteer engagement, and much more. We have the potential to have a bigger voice in conservation policy and to increase our ability to make Singapore part of larger regional and global conservation landscape. We are a part of a wider civil society community, and my hope is that we will continue to be a proud and active part of civil society in Singapore and to continue on the legacy of pioneering NSS members such as Dr Ho Hua Chew and Dr Geh Min.

This leads nicely to the issue of succession and leadership. While Dr Ho Hua Chew and I have exceeded the recommended 10 year tenure for Board members of Singapore charities, we are working hard to ensure that the NSS will be guided into the future by a more effective leadership team. I hope that additions to the 2020 Exco show that we are headed in the right direction.

Thank You

The Nature Society (Singapore) cannot function without a capable and dedicated Secretariat, a visionary team of Exco and Council members, and most importantly a membership that believes that a Singapore with rich nature areas and thriving biodiversity is a better Singapore for all. In addition to our wonderful Secretariat (Joe Lim, Kerry Pereira, and Sung Mei Yee) and extraordinary Exco and NSS Council, I wish to thank our many partners and generous donors without whose support we could not have achieved in 2019 the many things we did.

I would like to single out the contributions of two very important Nature Society members. Stephen Beng is stepping down as Chair of the Marine Conservation Group (MCG). Under Stephen's dynamic leadership, the MCG was central to many marine related conservation initiatives in Singapore. His importance to the marine conservation community was underscored by his appointment as Chair of the Friends of Marine Parks, SG. Stephen will continue to be a major driver of marine conservation initiatives in Singapore for years to come.

Mr Goh Si Guim is stepping down from the NSS Exco this year, but I assure everyone that he will continue to be central to NSS conservation and outreach efforts. Si Guim was one of the first people I got to know when I came to Singapore in 1990. He was, and remains, a teacher and inspiration to me. Thanks to Si Guim I was able to explore many nature areas in Singapore and Johor that I might otherwise never have gotten to know. To me, Si Guim will forever remain the Kampung Kid, adept at fashioning simple but incredibly cool toys and games out of rubber pods, Thunbergia fruit, twigs and twine, lalang leaves and clothes pegs. He was the guiding force behind an NSS Kampung Carnival we once organised. Si Guim was, and still is, in my opinion, Singapore's finest nature guide – knowledgeable, enthusiastic, inclusive, caring, and my gosh so much fun. Thank you for your incredible and continuing contributions to NSS and to Singapore, Si Guim.

2020 is proving to be a vexing year for humanity but I hope that at the end of it NSS will be better positioned than ever to contribute to nature conservation.



FINANCIAL YEAR 2019

TREASURER'S REPORT

MR. BHAGYESH CHAUBEY

2019 Activities Summary

Key highlights and finance related accomplishments in 2019:

1. Received Charity Transparency Award 2019
2. Unqualified external audit report.
 - a. Accounting books properly kept in accordance to regulations.

- b. No non-compliance observed relating to requirements as an IPC and fund raising.

3. Total Income less expenditure:
Net surplus of S\$ 106,320/-
4. No dedicated fund-raising event organized but did receive some significant donations.
5. Continued financial prudence.

FINANCIAL POSITION SUMMARY

Below table provides a summary of financial position and use of funds in 2019:

Funds	1-Jan-2019	Income	Expense	31-Dec-2019
General	1,042,790	384,731	(270,353)	1,155,493
Restricted	105,786	276	(8,335)	99,403
TOTAL	1,148,576	385,007	(278,688)	1,254,932

Balance Sheet	
Current/Cash	757,751
Property (fixed assets)	414,447
Receivables & Deposits	7,649
Less Liabilities	(31,271)
Net Assets	1,148,576

Net Surplus
S\$106,320/-

Balance Sheet	
Current/Cash	874,510
Property (fixed assets)	404,784
Receivables & Deposits	4,646
Less Liabilities	(29,008)
Net Assets	1,254,896

(all numbers in Singapore \$)

In 2019, NSS's total income less total expenditure was Net Surplus of S\$ 106,320/- and total funds increased accordingly to S\$ 1,254,932.

Cash and Deposits increased by S\$ 116,759 to \$874,510.

Property (fixed assets) decreased by S\$ 9,700 to S\$ 404,784.

- Depreciation of S\$ 13,092 expensed per year for NSS- owned office with net book value of S\$ 397,324, however we believe that market value of property is significantly higher than the book value.
- Depreciation of S\$ 4,462 for items like copier; projector; laptops.
- Increase of S\$ 7,857 in value of fixed assets due to procurement of new laptops for staff and binoculars for ESN project.

The table below provides more insights of the audited 2019 income and expenses numbers for internal management control purposes:

Details	Income	Expenses	Notes / Comments
Donations (excluding SIG)	209,634	-	QBE insurance; Bloomberg; NSS member Anonymous; PK events; Peter Kong; Prudential; Giving.sg
Membership	44,833	-	Roughly the same as last year.
Contract(excluding SIG)	14,302	(3,662)	Mainly income/expense from Trips & Talks; Sale of Books & Field Guides
Interest and Other income	10,429	-	Bank Interests; Wage credits; ICT grant
Staff, Facilities, Admin, Audit	-	(207,879)	Includes ESN (Every Singaporean a Naturalist) Resource
Publishing & Other expense	-	(26,207)	Nature news/watch;
TOTAL General	279,197	(237,747)	
TOTAL Designated	69,135	(202)	HSBC funding for ESN; expenses are under General
TOTAL SIG/Committee	36,399	(32,403)	Mainly from SIG activities i.e. Bid Race; Kayaking;
TOTAL Restricted Funds	276	(8,335)	Interest income and adjustments; Green Rail Corridor Book
GRAND TOTAL	385,007	(278,688)	
Net surplus		106,320	

(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.

In conclusion, 2019 has been a year of normal operations with continued financial prudence. Income went up by ~130K to S\$ 385,007 due to some significant donations. Expenses went up by ~13K to S\$ 278,688 and were mostly of standard nature. Year ended in a net surplus of S\$ 106,320.

Although the Strategic Plan, the Fund-raising Committee and the Membership Committee were formed in 2015, we have not been able to make significant progress in memberships or fundraising efforts due to manpower shortages in these committees. Additional budget has been allocated to ramp up focused fund-raising efforts in 2020.

We take this opportunity to welcome all members and volunteers to join our Fund-raising and Membership Committees.

Thank you!

A photograph of a mangrove forest with prominent prop roots. A dark teal rectangular box is overlaid in the center, containing the text 'COMMITTEE REPORTS' in white, bold, uppercase letters.

**COMMITTEE
REPORTS**

CONSERVATION COMMITTEE

MR. LEONG KWOK PENG & DR HO HUA CHEW

The conservation committee participated in the following engagements with the government agencies and organisation:

1. HDB/URA/LTA

a) Bidadari

An engagement session on 18 Apr 2019 to update on the plan for Bidadari. Items discussed include the hillock park, land bridge and the 10ha Bidadari Park.

Planting themes were also discussed.

A site visit was organised by Nparks & HDB to discuss the development plan for some of the existing trees and the lake within Bidadari.

b) Pasir Ris

At the same meeting, the EIS for the extension north of Pasir Ris MRT station was also discussed. This area is adjacent to Sg Api Api/Sg Tampines - Pasir Ris Park.

The EIS consultant briefed on the EIS findings and recommendation for Pasir Ris Site A & B that included the following:

- 50m-wide buffer between nature area and Site B.
- 20-m wide buffer between Pasir Ris Park and Site A & C.
- Linear parks along Sg Api Api and Sg Tampines.
- Landscaping and building height control.



c) Bukit Batok West

An engagement session on 29 Aug 2019 for the study area in Bukit Batok West at HDB Hub. The focus was on the Bukit Batok Hillside Park and the Environmental Impact Study that was conducted.

A conservation area was proposed around the hillside stream area.

d) Brookvale Park Condominium at Sunset Way

At the same meeting, URA discussed the Brookvale Park condominium redevelopment plan.

The focus was on the proposed new road that will be constructed through Maju Forest to serve

the increase in traffic during construction and after the redevelopment.

An Environmental Impact Study was done by the developer - Hoi Hup Sunway Clementi Pte Ltd.

We send our feedback on 6 Sep 2019 to HDB/LTA/Nparks stating our concerns on this new proposed road and suggested an alternative route through Maju Drive.

The reply from URA in Nov 2019 was that it was not possible to accede to our proposal.

e) Tengah

An engagement session on 13 Mar 2019 was held on Tengah at HDB Hub.

This was to update on the plans for Tengah and a briefing of the baseline survey by their consultant.

The Tengah Environmental Baseline Study was made available for view by HDB in Aug 2019. Several of the committee members had arranged to view the hard-copy report.

A briefing session on 7 Sep 2019 by the consultant was held on the environmental baseline survey that include the flora, fauna, topography, hydrology and recommendations of the Tengah development.

2. URA

a) Pre-Master Plan Exhibition

A sharing session was held on 19 Mar 2019 to brief the planning for greenery, nature and key changes in the draft Master Plan 2019.

Areas covered include interim park at Sg Khatib Bongsu, Springleaf-Tagore-Lentor, Paya Lebar Airbase, Amoy Quee, Pasir Ris, Bidadari, Bukit Batok West and Keppel Club.

b) Springleaf area (off Upper Thomson and Mandai Rd)

A sharing session was held on 24 May 2019 by URA on the findings of a biodiversity baseline study done in this area.

c) Keppel Club

A sharing session was held on 30 Sep 2019 by URA to discuss the scope of an environmental study with regard to the Keppel Club study area.

Alan Owyong arranged a site visit together with URA on 4 Nov 2019 - courtesy of Keppel Club.



3. PUB

Tengah Service Reservoir

An engagement meeting on 26 Nov 2019 to discuss the EIS of the proposed service reservoir

ABC project for Sg Ulu Pandan
A site meeting on 22 Aug 2019 with PUB contractor on the proposed PUB ABC project to discuss the look out decks, habitat cells and rain gardens.

4. LTA

Cross Island Line (CRL)

Engagement meeting was held on 25 Feb with SMOS Dr Lam and 16 May 2019 to update on the findings of the EIA phase 2 study on both direct and skirting alignments.

This was followed by a series of deep dive sessions focusing on the worksite locations and vibration assessment in June/July 2019.



LTA release to the public the CRL phase 2 EIA report on 2 Sep 2019.

Shawn Lum on behalf of the CRL nature groups send a collective response on the CRL phase 2 EIA to LTA in Oct 2019.

LTA shared the summary of public feedback at a meeting on 5 Nov 2019.

Ministry of Transport announced the decision for the direct alignment option on 4 Dec 2019. This was after 6 years of public engagement.

5. Nparks

Rifle Range Nature Park

Restoration Works for the park was launched on 25 Jan 2019.

PCN Project at Sungei Ulu Pandan

A meeting with Nparks on 26 July 2019 for update on the status of work of the new PCN under construction at Sg Ulu Pandan.

A letter was send to Minister Desmond Lee and Nparks expressing our concerns of this



construction on 27 Aug 2019.

Thomson Nature Park

The park was officially opened on 11 Oct 2019.

6. OBS Coney Island

A discussion session by OBS on 24 Jul 2019 on the development plan for OBS@Coney Island project - in particular the design for biodiversity enhancement, landscape strategy and planting scheme by their consultant.

We send our feedback to National Youth Council on the OBS' Coney Island Development Plan in Mar 2018.

7. Mandai Park Project at Mandai Lake Road

There were a series of nature community sharing sessions for this ongoing project which included representations from various nature groups and experts.

Items discussed include:

- update of the site environmental management
- boardwalk and camping update of wildlife mortality (road kill) and mitigation measures to be put in place
- landscape and connectivity
- environmental sustainability

design to animal collection.

An appreciation dinner was hosted in Nov by the Chairman Mr S Dhanabalan, for the nature community involvement, following a tree planting event on the Mandai Wildlife Bridge that was completed.

8. Green Corridor

The Green Rail Corridor book 500 cps of the books were published and printed in Nov 2019.

A soft launch was held in-conjunction the Annual Bird Race at MapleTree Business City on 17 Nov 2019.

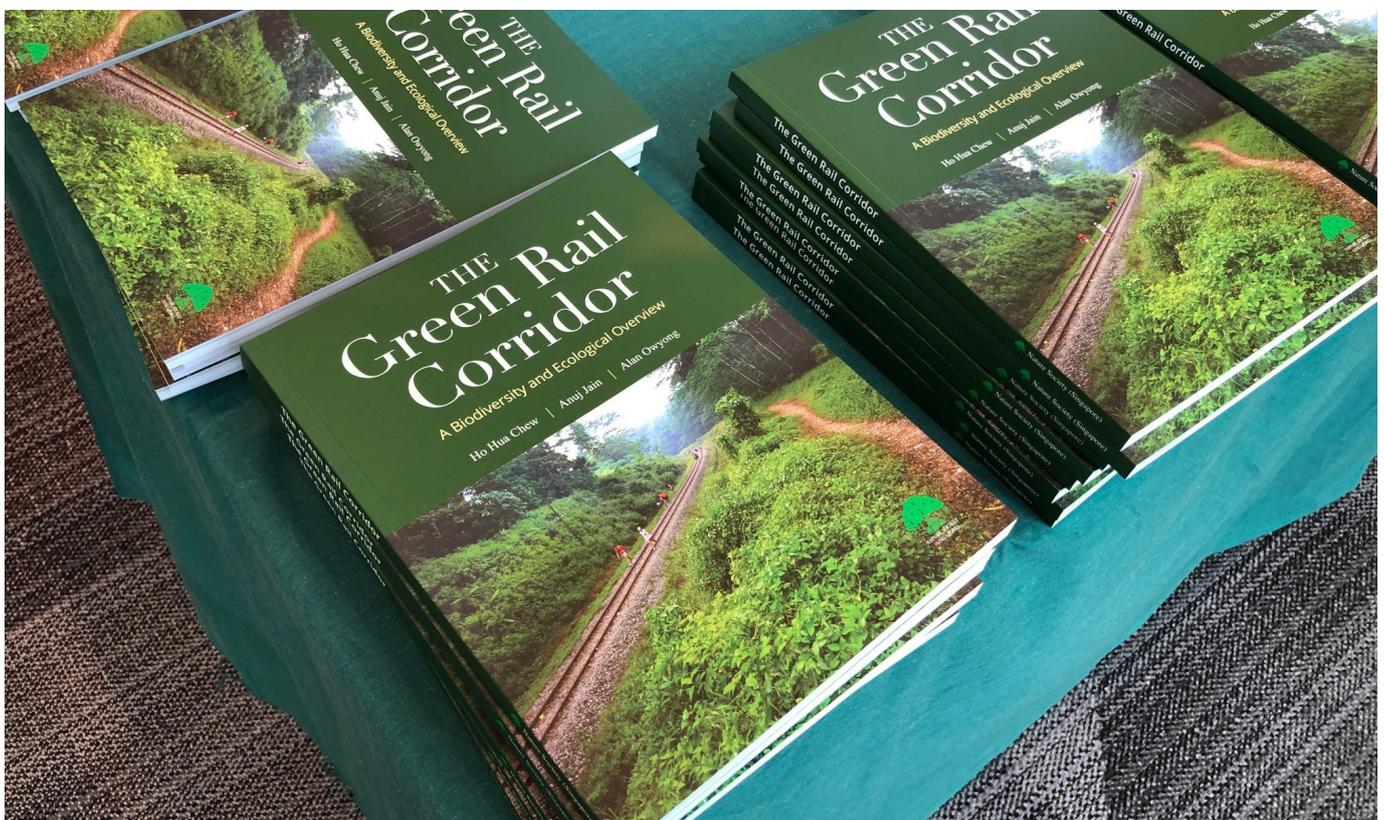
10 copies of the book were given to each of these Government agencies: PUB, HDB, URA, MND, Nparks, Parliament (Tan Chuan-Jin).

10 copies were given to our sponsor, John Tan (Tan Teck Guan foundation).

50 books were also distributed to various stakeholders including Friends of the Rail Corridor.

35 copies were donated to National Library Board (NLB).

A talk by the authors on the





book was held in-conjunction with the Volunteer Appreciation Lunch on 15 Dec 2019 at the SSA, City Square Mall.

b) Friends of the Rail Corridor (FORC)

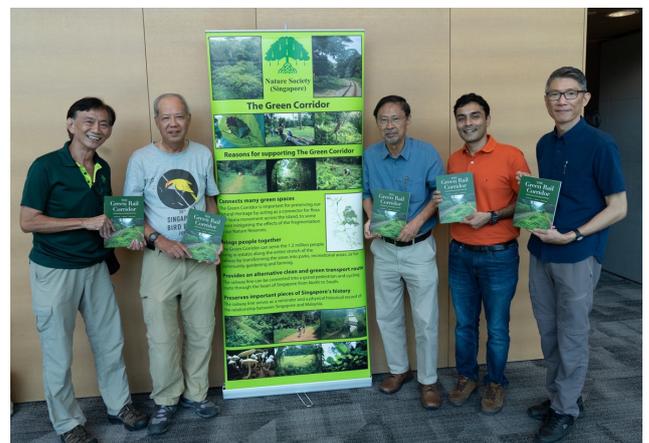
The 3rd FORC meeting was held on 28 Jan 2019 - updating on recent community initiatives, trail enhancement works at Rail Corridor (Central)

The 4th FORC meeting was held on 31 May 2019 - updating on enhancement work at Rail Corridor (Central) and future events.

Attended Nparks event 'Connecting Communities through Rail Corridor' at Bukit Timah Railway

Station on 31 Aug 2019. GOH Lawrence Wong announced the upgrading work for Bukit Timah Railway Station and Railway Station Staff Quarters.

Together with the Bird Group we participated in an event 'Remembering Rail Corridor' organised by Ulu Pandan CC Youth Executive Committee and Nparks on 22 June 2019.



Kwok Peng gave a talk on the Green Rail Corridor book at the FORC meeting at SBG on 13 Jan 2020.

c) Rail Corridor Watch Group (RCWG)

RCWG continued to watch over the Green Corridor and provided feedback reports to Nparks. We like to thank Ulf Remahl for his dedication in providing the feedback.

9. Social Media

NSS Facebook page has over 18000 followers.

NSS Facebook group has also over 20000 followers.

We Support the Green Corridor Facebook page has over 13,000 followers.

10. Road Show

The exhibition 'Bringing Nature to the Heartland' was held at the vacant ground outside Aljunied MRT 8-23 June, Sengkang MRT 7-22 Sep and Punggol MRT from 9- 24 Nov 2019 with photo exhibits and sales booth.

The roadshow ran concurrently with a food fair event.

We like to thank the NSS secretariat Joe and Kerry for coordinating with the organiser PK Events.



EDUCATION COMMITTEE

MR. GOH TER YANG

SUMMARY OF ACTIVITIES

S/N	Activity	Date	Remarks
1	NSS Kids' Fun with Marine Life at Changi Beach	8-Jun-19	Guides: Marcus Ng and Lena Chow
2	Talk: #Youths_in_ Biodiversity	21-Jun-19	Speaker: Karl Png
3	NSS Kids' Fun with Butterflies at Ubin Butterfly Hill	14-Jul-19	Guides: Lena Chow
4	NSS Kids' Fun with The Bigfoot Leaves No Trace Challenge	5-Oct-19	Guides: Tan Hang Chong
5	NSS Kids' Fun with Birds at Lorong Halus	28-Dec-19	Guides: Lee Ee Ling

ACKNOWLEDGEMENTS

A big thank you to all specialist guides and regular volunteers Timothy Pwee & Lena Chow. 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'.

FUNDRAISING & MEMBERSHIP COMMITTEE

MR. ALBERT LIU

Have you Renewed your Love for Nature?

In Jun 2019, I was asked to work on strengthening our membership. “Membership? So, no cute critters and no muddy boots?” I wasn’t sure how to contribute.

Membership is not the first thing that comes to mind about nature conservation, but now I realised I can renew my love for nature by renewing my membership.

Have you renewed your love for nature? Know anyone keen to join NSS? See steps below or contact me at awfullyalbert@gmail.com.

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.

MEMBERSHIP STRATEGY & INITIATIVES

A membership strategy was set out with 3 key thrusts:

Increase
enrolment of
new members

Retain existing
members

Enhance value
of membership

1) Increase enrolment of new members – Every activity is an enrolment opportunity

- NSS needs to be bold and seek new members at every activity – indoor and outdoor. Every birding, ramble, clean-up, biodiversity survey and talk is an enrolment opportunity.

- To do this, we have developed a membership pitch. Short and sharp, telling people why they should join us

as members. So short we could do it outdoors without melting away.

- To facilitate sign-ups, we have also designed a QR code. Try it!





2) Retain existing members – Making renewals easy

Many members do not renew their membership not because they no longer love nature, but because they forget to renew. We will make renewals easier for members and our team.

We have been working to adopt a membership software to help automate processes. Unfortunately, COVID-19 has slowed down the software support for the initial setup.

In the meantime, we have revamped a renewal email to encourage members to renew.

We have also simplified renewals

online through our website - now easy as ABC!

https://www.nss.org.sg/membership_renewal.aspx

**See step-by-step guide below!*

3) Enhance value of membership – stay tuned!

Fundraising

After years of planning and budgeting, we decided to hire our first Marketing and Fundraising Manager in 2020. We received a heart-warming response for applications, but had to pause the hiring process due to COVID-19 situation and measures. We look forward to our new Marketing and Fundraising Manager in due time!

Summary of Key Thrusts, Membership Strategy & Initiatives

	Membership Strategy		
Key thrusts	 Increase enrolment of new members	 Retain existing members	 Enhance value of membership
Initiatives	Developed membership pitch	Adopt membership software (WIP)	WIP
	Designed a QR code 	Revamped a renewal email	
		Simplified renewals online	

Acknowledgements

I would like to thank volunteers April Lim and Lester Tan for their invaluable time brainstorming and performing complex website editing. My sincere gratitude to our staff Joe Lim for all the additional workload while trialling new methods and processes.

Step-by-Step Guide to Renew Membership

Step 1: Login with your username & email at https://www.nss.org.sg/membership_renewal.aspx

Membership Renewal

Membership Renewal	
Username	<input type="text" value="albert"/>
Email	<input type="text" value="awfullyalbert@gmail.com"/>
Forget Username? <input type="button" value="SUBMIT"/>	

*if you forgot your username, click “forget username” and check your email (spam folder too!)

Step 2: Select Type of membership (e.g. Single, Family) and Payment Option (Paypal preferred!)

Renewal Confirm

Type of membership	<input checked="" type="radio"/> Single <input type="radio"/> Family <input type="radio"/> Junior <input type="radio"/> Corporate <input type="radio"/> Institutional			
Membership Fees	S\$ 40			
Oversea member Fees	S\$ 0			
PAYMENT OPTIONS *				
<input type="radio"/> <u>Cheque</u> Cheque No.: <input type="text"/> Bank: <input type="text"/> Amount: S\$ <input type="text"/>				
<input checked="" type="radio"/> <u>Paypal & Credit Card</u>				
				<input type="button" value="RENEW"/>

Step 3: Login to Paypal and you’ve renewed your love for nature!
Thank you!


🛒 \$40.00 SGD

Pay with PayPal

With a PayPal account, you're eligible for free return shipping, Purchase Protection, and more.

Forgot password?

Stay logged in for faster checkout ?



**SPECIAL
INTEREST GROUP
REPORTS**

BIRD GROUP

MR. LIM KIM CHUAH & MS. LEE EE LING

This has been a year (June 2019 – May 2020) of two halves. The first ‘half’ up to Jan 2020, was another exciting and eventful period for the Bird Group (BG).

We conducted our usual busy calendar of activities as well as a number of special events.

However, we started to cut back on activities from Feb 2020 due to concerns for safety of our members, participants and volunteers with the ongoing Covid-19 outbreak.

So, while we are all now staying safe at home and only meeting virtually, we would like to look back on happier times in the past year and share them with you:

Birding Activities

Bird walks and talks continue to

remain the core Bird Group activities. A total of 11 walks were conducted including two walks for students from schools on the ESN programme.

In addition to this, we continue to partner NParks to conduct four birdwatching trips to Kranji Marsh.

We also hosted two talks.

Straw-headed Bulbul Conservation Planning Workshop

We organised a one-day workshop on conservation of the Critically Endangered Straw-headed Bulbul, in collaboration with the Oriental Bird Club and BirdLife International. Bringing



together interested stakeholders from over ten organisations, the workshop reached a consensus to create a Straw-headed Bulbul Working Group to develop a conservation strategy.



35th Singapore Bird Race

The 35th edition of the Singapore Bird Race was an even bigger event than the previous year. Over 160 birders took part and our ESN schools responded enthusiastically fielding 17 teams from 10 schools.

BirdLife International was again our supporting partner.

Singapore Birds on the Brink Exhibition

We also collaborated with BirdLife International on a photo exhibition to spotlight the threatened birds of Singapore. The exhibition featured excellent



visuals from some of the leading bird and nature photographers in Singapore.

The venue was a popular shopping mall so it helped to bring awareness of our

imperilled birds and their habitat to the public.

We wish to thank Mapletree Investments for generously hosting/sponsoring the Straw-headed Bulbul Workshop,

Singapore Bird Race and the Birds on the Brink Exhibition.

World Migratory Bird Day

The Bird Group also participated in a number of outreach activities. We took part in the World Migratory Bird Day organised by NParks at Sungei Buloh in Oct and we were also involved in the annual Festival of Biodiversity.

Bird Surveys

Citizen science based censuses are a core activity. Besides the regular bird census conducted by Bird Group across the year, we collaborated on two major studies.

The first was Comprehensive Ubin Biodiversity Survey

(CUBS) with NParks on Pulau Ubin which completed in Dec 2019.

The second is the Comprehensive Survey of Panti Bird Sanctuary with MNS (Johor).

Communication Channels

Our main communications channels to the public, the Singapore Bird Group blog and Singapore Birder Facebook, continues to receive good response.

The Bird Group blog is a critical platform to publish our census reports, the monthly Bird Report and periodic Raptor Report, as well as updates to the Singapore Birds Checklist.

Thank you for supporting our activities and we hope everyone will stay well and safe.

BUTTERFLY & INSECT GROUP

DR. ANUJ JAIN & MS. AMY TSANG

1st Swallowtail and Birdwing Butterfly Race in Singapore

The most significant event for the Butterfly & Insect Group (BIG) in 2019 was its successful conduct of the first ever Swallowtail and Birdwing Butterfly Race in Singapore on 29 June in partnership with Wildlife Reserves Singapore. The event was conceived in response to the call by UK's Swallowtail and Birdwing Butterfly Trust (SBBT) to conserve these most spectacular and well-loved species, many of which face serious threats to

their survival.

In Singapore, we have 18 of these butterfly species in the Papilionidae family of which 4 are listed in the Singapore Red Data book. Under the 'vulnerable' status (first level of threatened butterflies) are the Common Rose (*Pachliopta aristolochiae asteris*), winner of the online vote for National Butterfly of Singapore in 2015, Common Birdwing (*Troides helena cerberus*), Singapore's largest butterfly, and Blue Helen (*Papilio prexaspes*





prexaspes).

The 4th butterfly is Common Jay (*Graphium doson evermonides*) which is critically endangered (third and final level/status before extinction) and found only in Pulau Ubin.

Nine (9) teams participated in this one-day race event to find and photograph as many as possible of the 18 swallowtail and birdwing butterflies found in Singapore. Each team comprised 3 to 4 members.

Teams with the highest number of sightings backed by discernible photographic evidence, and those with captivating photo captures, won prizes. Further outreach to participants and their supporters was achieved through the provision of informative talks by local butterfly experts and experienced managers / supporters of butterfly gardens when everyone waited for the race results to be computed. We received good feedback from

participants on both their race experience and the inhouse talks given, with many expressing their interest to take part again if the BIG should organize another race in 2020.

In terms of public awareness of our Race event, we managed to work with Straits Times of Singapore to enjoy a good publicity spot on its back page titled 'The Big Picture'. This was a half-page size space. Our 'Best Photo' of the Race showing 2 Mime butterflies in flight filled two-thirds of this space and running alongside it was ST's report on our 1st Swallowtail and Birdwing Race headlined 'Rare Butterflies Still Flying High'.



Articles written by BIG on Singapore's 1st Swallowtail and Birdwing Butterfly Race and published in NSS News were:

May 2, 2019

World Swallowtail Day

Focus on cherishing and conserving the world's most beautiful butterflies. Singapore will conduct a Butterfly Race to spot our Swallowtails in June 2019. Find out more...by Amy Tsang.

Aug 15, 2019

Activity Report

The first Swallowtail and Birdwing Butterfly Race in Singapore was held on 29 June at Singapore Zoo. Read about what started the initiative and the results of the event by Anuj Jain and Amy Tsang.

Aug 16, 2019

Singapore's 1st Swallowtail and Birdwing Butterfly Race

Read about Simon Chan's exciting experience at Singapore's 1st Butterfly Race.



Butterfly and Insect Walks

Last year was also an active year in terms of butterfly and insect walks conducted by BIG for NSS Members with occasional allowance for their friends. One walk to KTPH was opened to the public.

All butterfly walks are led by experienced Butterfly leaders of the BIG, whilst the insect walks are helmed by leaders of the Entomological Network of Singapore (ENSING). There were a total of 6 Butterfly Walks held in 2019 to various green locations in Singapore, most of which were at established sites like the Singapore Botanic

Gardens (SBG), Upper Seletar Reservoir (USR) and Khoo Teck Puat Hospital (KTPH) with its high rise and ground gardens. There was one Insect Walk to Windsor Nature Park led by Sean Yap of ENSING which saw a good turnout of 28+ members. It was a fruitful and fascinating walk as Sean pointed out a range of insects from beetles to damselflies and explained their activities.

For butterfly walks, there was one green site which we had not explored previously - 'Alexandra Woodlands'. Seeing how close it was to a section of the Green Corridor, most of which was

closed to the public due to the construction of new water pipes there, we had hopes of sighting rarer butterflies such as the Common Rose, Common Birdwing, Flashes and Arhopalas in the area! Despite its small and dispersed greenery, the site was found to be quite rich in butterfly and caterpillar life. It is hoped that 'Alexandra Woodlands' will not be disturbed in the near future and will be preserved as a little haven for butterflies, moths, insects and birds too.

On our butterfly walk at SBG, we discovered that the host plant of two iconic butterflies, Common Rose and Common Birdwing, namely the vine called *Aristolochia acuminata*, was missing from the fence alongside the tarmac road called the Evolution Garden Walk. As SBG is known to be a stronghold for these two butterflies, we felt it was imperative that NParks and SBG regrow this vine. Despite our urgent written appeal to NParks' Sr Director of International Biodiversity to do



so, no action was taken for the whole of 2019.

[Fortunately, this April past, 2020, the new Director of SBG, Dr Tan Puay Yok, responded to our President, Shawn Lum's appeal to replant and there are now plans to regrow *A. acuminata* in SBG as well as at Jacob Ballas Children's Garden (JBCG) after the COVID-19 'circuit breaker' lockdown ends.]

For the butterfly walk to Bukit Brown, we had a request from a group of about 15 NUS students to join in. Only 1 NUS student was an NSS member. We saw it as an outreach opportunity to get younger people into our society and welcomed them. As this would mean a much higher than normal turnout of participants, we decided to conduct 2 separate walks and roped in 3 BIG leaders to guide participants.

List of Butterfly & Insect Walks

1. Butterfly Walk at Singapore Botanic Gardens* (SBG) on 27 Jan (Simon & Amy)
2. Insect Walk at Windsor Nature Park on 23 Mar led by Sean Yap from the ENSING.
3. Butterfly Walk at Telok Blangah Hill and Mt Faber on 6 Apr (Simon & Amy)
4. Butterfly Walk at Khoo Teck Puat Hospital* on 25 May (Simon)
5. Butterfly Walk at Alexandra Woodlands* on 7 Jul (Simon & Amy)
6. Butterfly Walk at Upper Seletar Reservoir* on 15 Sep (Simon)
7. Butterfly Walk at Bukit Brown on 20 Oct (Simon, Gan, Amy)



NSS News Articles

Mar 1, 2019

Unforgettable Encounters with Iconic Butterflies of Singapore (at SBG) by Ngo Kang Min.

Jul 2, 2019

Enjoying Butterflies & More at Singapore's Greenest Hospital by Simon Chan and Amy Tsang.

Aug 14, 2019

Uncovering Butterfly Life in Alexandra Woodlands by Simon Chan.

Nov 8, 2019

Butterflies of Upper Seletar Reservoir – Unfazed by Haze by Simon Chan.

Other BIG Articles

Published in Nature Watch, Vol. 27, No. 4, Oct – Dec 2019:

1. Butterfly Gains and Losses in Singapore by Anuj Jain & Gan Cheong Weei.

2. The Common Rose and Common Birdwing – A Race Against Time? by Anuj Jain and Amy Tsang.





Green Rail Corridor Book Publication

With NSS Green Rail Corridor book launched on 17 November, we would like to thank several BIG members who helped conduct field surveys along the railway corridor over the years and collect valuable data on butterfly populations. The data not only formed the basis of the book but provided NSS the foundation to develop a strong case to conserve the Green Rail Corridor.

Moth Red List Assessment Several BIG members have

agreed to participate in the moth red list assessments for Singapore's Red Data Book (3rd version). A briefing session was organized by NParks which was attended by Anuj Jain who is coordinating the assessment on behalf of BIG.

Moth surveys in Pulau Ubin

BIG conducted 3 moth surveys in Pulau Ubin (led by Gan Cheong Wee and assisted by NParks staff) which are part of NParks coordinated Ubin's biodiversity surveys. The surveys were conducted on 6 July, 31 August and 28 September.

Significant sighting of Virachola Malaya, an extinct butterfly

This butterfly was seen and photographed by BIG member, KC Tsang, on 7 Aug 2019 at Upper Seletar Reservoir forest.

It was considered an extinct butterfly as it had not been seen in Singapore's forests for many years. Dr Seow, a butterfly

expert who is active in iNaturalist, identified the butterfly and said that it was a great re-discovery for Singapore.

Acknowledgements

We would like to thank all our regular BIG members and volunteers for their continuous support



JALAN HIJAU GROUP

MR. TAN HANG CHONG

SUMMARY OF ACTIVITIES

S/N	Activity	Date	No. of Participants	Remarks
1	Forest Clean-up at Pulau Ubin	15-Mar-19	22	Exclusive for SAP
2	Forest Clean-up at Pulau Ubin	20-Jul-19	20	Exclusive for Bloomberg
3	Forest Clean-up at Pulau Ubin	19-Oct-19	13	Exclusive for QBE Insurance
4	Forest Clean-up at Pulau Ubin	2-Nov-19	30	Exclusive for QBE Insurance
5	Forest Clean-up at Pulau Ubin	16-Nov-19	22	Exclusive for Bloomberg
6	Forest Clean-up at Pulau Ubin	18-Nov-19	21	Exclusive for DBS
7	Forest Clean-up at Pulau Ubin	28-Nov-19	33	Exclusive for DBS
		Total	161	

ACKNOWLEDGEMENTS

A big thank you to Ms. Sung Mei Yee and Ms. Christal Tang for generously helping out without whom our activities would not have been possible.

MARINE CONSERVATION GROUP

MR. STEPHEN BENG

Please bear with me on this, my last report as I deviate from my usual format and instead recount some milestones in the short time I served at NSS. It is through this account that I hope the energy of MCG will remain spent on protecting life in our blue spaces, with mindfulness for the people who rely on them.

After years of Horseshoe Crab Rescue and Research, we discovered in 2015 that the *Tachypleus gigas* occurred almost as frequently at Mandai Mudflats as the *Carcinioscorpius rotundicauda*. In 2016, encroachments of mussels were noticed that added to the changing landscape of the mudflats.

The constant washing in of marine trash that trapped the seasonal ulva algae had then provided the mussels a substrate. Soon enough they had smothered the mudflats and hindered movements of horseshoe crabs and other native inhabitants. Scientists subsequently confirmed that the mussels were an invasive alien species. It motivated a biosecurity project in 2018, between TMSI, NParks and NSS, to monitor the species island-wide. This marked the significance of our citizen science contributions to scientific research that informs policy and management.

Together with Kayaking Mandai Mangroves and monthly Coastal Clean-ups,



these four NSS MCG programs concentrated in one area helped to raise awareness for Mandai Mudflats and Mangroves. We interlinked our conservation messages that drove home the plight of biodiversity in this area, the importance of these wetland habitats and their roles that complete a wider ecosystem. The area is now protected.

Relationships with various stakeholders locally and globally were built and strengthened. In 2017, we rekindled the Blue

Green Alliance (a partnership between Raffles Marina, UW360 and NSS).

The following year we conducted joint surveys at our Southern Islands that fielded experts from NSS Bird Group, MCG and our partners. Our field leaders participated in international events and had opportunities to be a part of national level projects and partnerships. Programs were created for students and interns that allowed them exposure to our attitudes and approaches. We developed a strategic plan that has guided our

actions and can continue to do so.

The Sisters' Islands Marine Park is more than a marine sanctuary for many of us. It represents the aspirations of our community, past and present. It provides us hope for generations to come. Initiated by Minister Desmond Lee, the Friends of Marine Park community came together in June 2017.

When I accepted the responsibility as first chair of this network, it gave NSS the opportunity to help encourage other users to adopt a more

conservation-centric mindset. As a main contributor to BluePlan08, NSS benefitted from this platform that allowed us to shape the marine protected area that we proposed in 2008.

Our request for open engagements with the government was also met through this platform but building trust must take precedence. As a supporter of BluePlan18, NSS can contribute to the efforts of this network where many stakeholders are already collaborating to help





fulfill the requests of the community's proposals.

In doing so, we recognize the foundations laid by those before us, and we build upon this grounding in science and structures of strong community bonds.

Our strategic communications were effective and outreach efforts swelled year on year. Our social media sites on Instagram and Twitter provide accounts of our activities and local views to global marine conservation issues. Our voices for our seas and shores were raised through

regular interviews by mainstream media, like the Straits Times, and our talks and participation in regional events reached audiences from 30 to 3000, at times more.

Stewarding our finances well has been a priority. We ensured funds were sufficient for our activities to continue and planned for capacity building of our younger leaders through their participation in international events. We optimized our budgets as we grew our funds through corporate events and donation drives.

For biodiversity to continue playing its essential role in our well-being, we must all be rooted in the cause of placing our natural environment at the heart of all sustainability considerations. As advocates for nature we speak up on issues, both externally and within, that hinder that cause.

Our goals for nature would be met far quicker if we cared not for who gets the credit, but rather placed our purpose before our profit.

Acknowledgements

I'm beholden to all who have supported our work during my service at NSS. Speaker Tan Chuan-jin, my heartfelt gratitude for your support and enthusiasm to participate in groundwork, even after leaving the Ministry.

Minister Desmond Lee, my warm appreciation for your unfailing support for nature conservation.

Prof Chou Loke Ming and Mr Francis Lee, I am indebted to your invaluable advice and moral support.

My deepest gratitude to Dr Karenne Tun and her team at NParks,

Dr Serena Teo and her team at TMSI, Mr Ray Perry and his team at Raffles Marina, the Sustainability team at Temasek Holdings, Mr Sivasothi and his team at ICC/ToddyCats, Mr John Thet and his team at UW360, Assoc Prof Dan Friess and his team at R.U.M./NUS Geography, Prof Irene Lye LH and Joseph Chun at APCEL, Audrey Tan at SPH, Mr Ang Eng Seng and the Police Coast Guard, Mr Julian Chang, Sandra and their team at SeaKeepers, Mr Edmond Wong at Kim Choo Kueh Chang, Ms Lim Kiah Eng and the team of 2018 final year students at BES-NUS.

Finally, thank you to the good people at MCG: Lisa Lim, Teo Say Chong, Vanitha, Lester Tan, Bryan Leong, Cher Huey at KayakAsia and all our passionate volunteers.

My best wishes to all at NSS. My admiration remains for Shawn Lum and the Council. I'm thankful for the opportunities to share and to learn.

Mr Kua Kay Yaw will take over the chair of MCG. I trust he has the experience to navigate the group through the challenges ahead and believe he has our reef's interest at heart.

NATURE RAMBLERS GROUP

MR. P PANDIAN

SUMMARY OF ACTIVITIES

S/N	Activity	Date	No. of Participants	Remarks
1	MacRitchie Reservoir to Treetop Walk	19-Jan-19	20	Theme for the Walk - Nature Reserve
2	Punggol MRT to Coney Island / Punggol Waterway	16-Feb-19	15	Theme for the Walk - Conservation (Plants & Animals)
3	Dairy Farm Nature Park @ Car Park B	16-Mar-19	3	Theme for the Walk - Litter Free
4	Dairy Farm Nature Park @ Car Park B	30-Mar-19	2	Theme for the Walk - Limitation
5	Changi Point Ferry Terminal / Pulau Ubin/ Changi Village - Route 1	18-May-19	25	Theme for the Walk - About Pulau Ubin & Chek Java
6	Changi Point Ferry Terminal / Pulau Ubin/ Changi Village - Route 2	1-Jun-19	4	Theme for the Walk - Pollution
7	MacRitchie Reservoir - Bukit Timah Visitor Centre	27-Jul-19	22	Theme for the Walk - Sustainability
8	Kranji MRT Station - Ten Mile Junction / Rail Mall via Green Corridor	10-Aug-19	169	Theme for the Walk - Rail Corridor / History
9	Botanic Gardens-Tanglin Gate	14-Sep-19	3	Theme for the Walk - Botanic Gardens and History (UNESCO)
10	Labrador MRT Station via Labrador Nature Reserve to Sentosa - Siloso Sky walk	12-Oct-19	112	Theme for the Walk - Green Walk
11	SMU Canteen / Bukit Laragan / Museum	27-Nov-19	12	Theme for the Walk - Bukit Laragan / Museum
12	Venus Drive - Venus Green Car Park / Casuarian Road	21-Dec-19	18	Theme for the Walk - Windsor / Thomson Nature Park
		Total	405	



ACKNOWLEDGEMENTS

A big thank you to all guides and regular volunteers without whom our activities would not be possible.

COMMITTEE

Committee Members

P. Pandian, Sutari Supari , Benjamin Ho, Ali Jaafar, See Swee Leng, Rehan Yusoff, Soh Lay Bee

Advisor: Dr Ho Hua

PLANT GROUP

DR. BIAN TAN

In the past year 2019, the following activities were conducted:

Festival of Biodiversity

Held at Toa Payoh Central on 25 and 26 May 2019, this was a combined effort by all NSS special interest groups. There were many plant items on interactive display such as

seeds, leaves, flowers, fruits, etc.

Biodiversity Surveys at Panti Bird Sanctuary

This is a collaboration between NSS and MNS-Johor. Plant surveys were conducted on 17 days from March to September 2019, many times together with the Vertebrate





Study Group.

Proposed Medicinal Plant Field Guide

The aim of this 2-volume field guide is to encourage an interest in a different dimension of plants other than as ornamental or edible, specifically in their medicinal qualities. It will provide quick and convenient field identification of the commonly encountered

medicinal plants in Singapore.

Acknowledgements

A big Thank You to all Plant Group members and volunteers. We are a small group and welcome new members.

Please contact Bian Tan (biantan@yahoo.com) or any Plant Group member to find out more.

VERTEBRATE STUDY GROUP

MR. TONY O'DEMPSEY

Sungei Yu Project

Vertebrate Study Group (VSG) has been working with the Malaysian Conservation Alliance for Tigers (MYCAT) to monitor wildlife in the Sungai Yu Ecological Corridor (Pahang) since 2015. VSG currently has 18 cameras dedicated to the Sg Yu project.

Our trail camera images give a good overview of critically endangered wildlife in the western Taman Negara forest complex and are used by MYCAT in their quarterly reports on the status of wildlife there. This year, images from our cameras helped MYCAT advocate for the closure to





vehicles of a trail rich in mammal diversity. VSG covers the cost of accommodation for volunteers, batteries and camera repair for the Sungei Yu project. Typically, two trips by VSG are made each year to check the cameras.

Dr Vilma D’Rozario is the lead person and point of contact.

Panti Bird Sanctuary Surveys

In conjunction with MNS Johor,

NSS has been engaged in a joint project to undertake fauna studies at the Panti Bird Sanctuary in Johor. VSG has been heavily involved with 12 diurnal and 8 nocturnal surveys having been undertaken at Panti Bird Sanctuary between 29 March 2019 and 15 March 2020. No surveys have taken place since 15 March 2020, due to Covid-19 lockdown. Mammals, Reptiles and Amphibians

are covered in detail, whilst records of Freshwater Fishes have been covered ad-hoc (MNSJ have a great deal of knowledge with regards to fishes). Once the lockdown is lifted, surveys may continue to end-2020, however this is not confirmed.

Dr Andie Ang is the VSG's lead person and point of contact.

Engagement with Government Agencies for Development projects

Members of VSG along with other SIG members and individuals representing other conservation groups have been involved in public engagement for a number of development projects in Singapore, these include:

- Cross Island Line
- Mandai Rainforest Park
- Tengah Forest Town
- PUB Solar Panels
- PUB Kalang Pipeline

Participation in Working Groups

VSG members have representation on the following working groups:

- Raffles Banded Langur Working Group, last meet 8th Jul 2019
- Singapore Pangolin Working Group, last meet 6 June 2019
- Urban Wildlife Working Group, no activity for 2019

New Revision of Wild Animals of Singapore

Revision work is underway for a 3rd edition of the Wild Animals of Singapore publication.

As stocks of the 2nd edition have almost sold out, we have taken the opportunity to make updates to the content.

