



# Asian School of the Environment

## Newsletter

September 2021

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ASIAN SCHOOL OF THE  
ENVIRONMENT

Welcome to the September Newsletter! Highlights this month include 2 new faculty, 3 new Tier 2 grants, poetry from the recent ASE freshman orientation, and interviews with MSO Nur Fadhila Binte Abdul Latiff and Sung Mei Yee, alumni from the first batch of ASE graduates.

## Staff turnover - Welcome to ASE!



Dr Yim Hung-Lam Steve

**Dr Yim Hung-Lam Steve** has joined ASE as an Associate Professor. His research interest is to assess the interaction of climate change and air quality, and the resultant health impact. Before joining ASE Dr Yim served as an associate professor in the Department of Geography and Resource Management at the Chinese University of Hong Kong. To the question how he likes Singapore so far he says: *"The most impressive aspect in Singapore is the nice environment with a lot of greenery. Before coming, I thought it would be very hot. However, there are a lot of measures in Singapore that can improve our thermal comfort i.e. covers along pedestrian roads, and vegetation for shading, etc."*



Dr Yun Sang-Ho

**Dr Yun Sang-Ho** has joined ASE as an Associate Professor and Director of [the Remote Sensing Lab](#). His expertise is synthetic aperture radar (SAR) remote sensing and geophysical modelling. He is interested in using satellite observations to produce maps for humanitarian assistance and precisely measure ground deformation to study earth system. For the past thirteen years he worked for NASA's Jet Propulsion Laboratory (JPL) on various projects such as algorithms and system development for rapid disaster response in the Advanced Rapid Imaging and Analysis (ARI) team, performance analysis for the upcoming NISAR (NASA – ISRO SAR) mission, and making moon topography. This is how he finds Singapore so far: *"Having come from California, I admire the true deep greenery, ever-changing clouds, and decisively pouring tropical rains."*



Bernie Wee Wei Ken

**Bernie Wee Wei Ken** has joined ASE as Research Assistant working with the [Isotope Geochemistry Lab](#), headed by Assoc Prof Wang Xianfeng.



## Awards and Recognition



David Mah won two (!) medals for his excellent academic achievements.



Leow Si Lei won a medal for her excellent academic achievements.



Poster award winners Roy Tan and Christaline George.

Recent ASE graduate **David Mah** has been awarded the [Lee Kuan Yew Gold Medal](#). The medal is presented to NTU graduates who have demonstrated academic excellence and emerged top in their respective programmes.

**Keppel Environmental Studies Gold Medal AY 2020-21** has been awarded to **Leow Si Lei** and **David Mah**. The medal is awarded to a graduating student who has obtained the highest cumulative grade point average (CGPA) for the degree of Bachelor of Science in Environmental Earth Systems Science.

Two poster awards was awarded to ASE students from the [SLIME Lab](#) at [JAMS10 Symposium](#) which took place 23 – 34 August:

- **Roy Tan** et al. won the Jeff Powell Perpetual Student Award for his poster "Singapore, Nanopore and the Microbial Galore within the Tropical Sea Surface Microlayer". Roy is an undergraduate student conducting research on microplastic pollution in Singapore with the Explore! Grant. Read about his research [here](#).
- **Christaline George** et al. won the Best microbial dynamics poster prize sponsored by NPJ Biofilms and Microbiomes for "Long-read Nanopore metabarcoding: the future of algal bloom detection & environmental monitoring". Christaline is a PhD student, her research has been featured in the [Straits Times](#).

CONGRATULATIONS AND WELL DONE ALL!! 😊



## Updates from the Jedi Committee

The ASE/EOS JEDI committee has an active Slack group with materials and chats. Please contact any of the JEDI committee members if you want to know more! Contact info can be found on the: [JEDI web page](#)

### The first JEDI Town Hall

On 11 August, the JEDI committee held our very first town hall, in which around 60 students, staff, faculty, and researchers tuned in. During this town hall, we introduced the committee and reiterated our goals and missions for Academic Year 21/22. We also announced upcoming activities and concluded with an insightful Q&A session with the audience. The feedback collated from the town hall was positive and encouraging — a big thank you to all who tuned in, and for those who did not get a chance, see you in the next one!



The ASE JEDI committee

## Upcoming Jedi activities

JEDI Friday Seminars will shortly resume. Upcoming we have:

- 17 Sep (Fri, 4pm) - Ethics of field-work in post-disaster contexts (Sanjana, David, Christina; NTU, SG)
- 15 Oct (Fri, 2pm) - Systematic review and meta-analysis of depression, anxiety, and suicidal ideation among Ph.D. students (Emily Satinsky; Massachusetts General Hospital, USA)
- 29 Oct (Fri, 4pm) - Decolonization in Science (Liesbeth Frias; NTU, SG)

**Sexual Harassment**  
NTU and ASE takes a zero tolerance stance towards harassment.

**What is it?**  
Sexual harassment can be subtle and indirect, or blatant and overt. It may be spoken or written words, or non-verbal communication expressed in an intimidating or non-intimidating manner. It can take many forms:

- Unwelcome and persistent sexually explicit advances;
- Usage of sexually explicit, sexual or sexual overtones, sex-related jokes, innuendos, etc;
- Usage of suggestive or sexually-explicit or degrading words, sounds or gestures to describe the recipient;
- Unwelcome and persistent unnecessary touching, patting, hugging or other forms of physical contact;
- Unwelcome and persistent advances that do not involve touch;
- Unwelcome and inappropriate letters, calls, emails, texts, gifts;
- Persistent and unwelcome requests for favors;
- Usage of electronic means to transmit sexually explicit pictures or objects;
- Inappropriate comments about someone's body;
- Inflame responses;
- Direct proposition or subtle pressure that leads the recipient to believe an invitation to sexual harassment is required during what is or her research, education, advancement or working within the University will be affected;

**Multiple reporting channels**  
Report to anyone who has been involved (self, colleague, supervisor, friend, etc). Reports can also be given to:

- Campus Security (tel: 6795 5200) or Security Office (tel: 6795 5201);
- University Whistleblowing Office (email: [UWOD@ntu.edu.sg](mailto:UWOD@ntu.edu.sg))
- University Anti-Harassment Committee (Faculties: 6795 5789)
- Immediate professor or school officer;

**About confidentiality**  
Appropriate measures are taken to protect your privacy and confidentiality of information.

It is always a good idea to ask about your options regarding confidentiality before sharing details of your concerns.

**Guidelines** All disciplinary cases will be handled up to relevant authorities in the university

**Full NTU policy**  
Learn more and access the full [NTU anti-harassment policy](#) on NTU internet.

**Counselling** Confidential counselling services are available at the University Counseling Centre (tel: 6795 4462, [www.ntu.edu.sg](http://www.ntu.edu.sg))

**Need to consult?**  
Members of the ASE community can contact ASE Student Care Managers:  
Nur Faizah ([nurfaizah@ntu.edu.sg](mailto:nurfaizah@ntu.edu.sg))  
Christina Lee ([CKT10@ntu.edu.sg](mailto:CKT10@ntu.edu.sg))  
ASE Gender Harassment Resource Officer:  
David Laiemann ([daiemann@ntu.edu.sg](mailto:daiemann@ntu.edu.sg))  
Brene Hill ([ehil@ntu.edu.sg](mailto:ehil@ntu.edu.sg))

**Asian School of the Environment  
Nanyang Technological University**

ASE anti-harassment pamphlet, click to read.

The JEDI coffee breaks will start in September. They will be held one Monday afternoon per month in person, plus one Thursday morning per month over Zoom. Watch your e-mail for details!

## Faculty updates



What happens to terrestrial carbon in the sea – Patrick Martin will find out. Photo: shutterstock 16643896

Three ASE faculty have been awarded Tier two grants in the latest round. Congratulations to Caroline, Xianfeng, and Patrick! These are their proposed research projects:

- **Caroline Bouvet de la Maisonneuve:** Magmatic and structural controls on caldera formation
- **Xianfeng Wang:** Investigating triple oxygen isotopes in precipitation over Southeast Asia
- **Patrick Martin:** Decomposition and environmental impacts of terrestrial organic carbon in the Sunda Shelf Sea, Southeast Asia



Caroline will study caldera formation.  
Photo: Mt Rinjani, Shutterstock 241127296.

Janice Lee shared some updates from her research on tropical peatland restoration in Southeast Asia in a talk hosted by Institute of Water Policy and Lee Kuan Yew School of Public Policy. Access the talk here: [Socio-ecological restoration of Southeast Asia Peatlands](#)

Adam Switzer has been appointed as the new Director of the Undergraduate Research Experience on CAmpus (URECA) from 1 September.

David Wardle gave the IAS@NTU Discovery Science Seminar, jointly organised by IAS, ASE & EOS Research Fellow Club and the Graduate Students' Clubs of SPMS and SBS at NTU. He talked about Long-term Drivers of Aboveground-Belowground Linkages and Ecosystem Functioning.

# MSO updates



To the rescue! 4/5 of the ASE Fire Fighting Team: Alistair, Kian Hua, Wei Kit and Heryani during their training. Photo: Alistair Ting



WFAR: CPR practice with real-time evaluation. Photo: Alistair Ting



WFAR: Stabilizing a fractured leg. Photo: Alistair Ting



WFAR: Simulated night evacuation exercise. Photo: Alistair Ting

## ASE's in-house firefighting team

Due to recent changes to the Singapore Fire Code, NTU has encouraged all Schools with laboratories and chemicals to have their own in-house firefighting team. A group of ASE MSOs were selected and went through the basic firefighting course 'WSQ Respond to Fire Emergency in Buildings' at COSEM, Singapore. The course included training of how to don firefighting personal protective equipment and how to navigate buildings when wearing breathing apparatus. The ASE firefighting team will stand ready to be the first responders for any fires within ASE laboratories, they are: Elaine Lee, Ting Alistair, Koh Kian Hua, Lee Wei Kit and Heryani Binte Ahmad.

## Wilderness First Aid Responder Course

ASE has also held another Wilderness First Aid Responder (WFAR) course for our staff and PhD students who are involved in field programs. Highlights of the course include CPR/AED, wound management in the field and field evacuation procedures. Please also note that as part of the safety management, there must be someone trained in first aid for any field programs. Please contact Alistair ([alistairting@ntu.edu.sg](mailto:alistairting@ntu.edu.sg)) if you need more information on the

## Monthly MSO mini interview

Every month we get to know one of the MSOs better through a series of mini interviews. This month we caught up with our Senior Assistant Manager for Undergraduate Matters, Nur Fadhila Binte Abdul Latiff.

### How long have you worked at ASE and what are your responsibilities?

I have been working at ASE since March 2015 and my responsibilities are mainly UG matters – from the point when they apply to ASE and up till they graduate and start working. I handle all matters related to their admissions, course reg, student activities etc and am also part of the pastoral care team!

### This time of the year must be busy for you with all the new students starting, what are some of the problems you help sort out?

Super busy! Some of the problems that students face includes not being able to register for the courses that they want or having clashes in their timetable. We also had to move Orientation virtually this year and last year due to the pandemic and so a lot of adjustment and planning were made to ensure that everything goes smoothly for our new batch of students. We did not want them to feel like they were missing out on anything and to still enjoy orientation as they join our ASE family.

### What are the best and most challenging parts of your job?

The best part is meeting new students yearly and forming a bond with them. I am still in contact with the very first batch of students that joined ASE as we had truly bonded over trying to figure out our way around as a new school back then. The most challenging part I would have to say,



Fadila

is trying to always be there for them when they are going through tough times or adjusting to school.

**Finally, what do you like to do in your spare time?**

With 3 boys in tow now, I do not have much spare time! But I would not have it any other way, truly. So my spare time is usually spent out with the boys either cycling or at the beach or just walking around a mall and eating ice cream. My me-time usually entails watching shows on Netflix – biiiiiig Greys Anatomy, Money Heist, Friends and TBBT fan here!

**Anything else you'd like to add?**

Nothing, other than that I love it here at ASE – this place is truly awesome, the ASE family is such a fantabulous community to be part of 😊



## Undergraduate students

First, a warm welcome to all 46 new ASE undergraduate students! Hope we get many reasons to feature you in the newsletter in the future 😊



### Diary from ASE's virtual freshman orientation

by Terese Teoh

*A soft flurry of voices erupts into a boisterous babble of laughter. A cacophony of colours flutters both in front of and behind us; these are our self-designed Zoom backgrounds. Unashamedly we hold it above our heads, all the time and for all to see, because our pride lies in that banner; it is our singular sign that no one can mess around with our OG.*



These were only snippets of ASE's virtual Transition Orientation Programme (TOP, themed *DAISYWORLD*), conducted from 3 August to 6 August 2021. Set in a dystopian landscape where the earth-like Daisyworld had already been 60% destroyed by evil scientists, freshmen raced to complete the mission of preventing Daisyworld from being further destroyed. Through the great variety of games, university talks and seniors' sharings, freshmen had a taste of the new life awaiting them in ASE. With such inter-level and inter-generational bonding of the student body and faculty, TOP is undoubtedly one of the best displays of the ASE spirit.

3 August 2021

This was the first day of TOP. It felt like I was in ASE for the first time; like I was in Year 1 all over again. As Group Leaders we had already gone through two rounds of dry run, but still, as new faces popped up on my laptop screen, memories of my first virtual ASE orientation came flooding back. All too familiar were the worries, the panic, the visceral fear of the very word 'Orientation'... Then as chatter and gentle music filled the air, these bittersweet memories faded away, replaced by an eager anticipation for the activities of the day. (Continued on the next page...)



TOP Screenshots



Screenshots from TOP

Phoebe, the Director of the TOP committee, gave a welcome talk and introduced the entire committee: the Welfare team, the Publicity team, the Programmers and the Group Leaders. After the introductions, we listened to a curriculum talk by Dr. Natasha Bhatia, a talk on Academic Honesty with Dr. Shawn Lum and a Code of Conduct Talk.

After the talks ended, it was finally time for everyone to meet our orientation groups. Little did we know that even this was not going to be easy: freshmen had to get through Farm Animals, an ‘animal herding’ game to identify fellow group mates. One person from each group was in charge of ‘herding’ a specific animal based on the sounds and calls that the rest of the group mates were making. Watching the freshmen speak on top of one another, and seeing the Zoom call devolve into absurdity and chaos, I grappled between the conflicting feelings of sympathy and amusement. To quote a freshman: “My mother is judging me.

In “Song of the Bird”, bird calls of seven birds were first played for freshmen, then they each imitated a given bird’s call and the others had to guess the bird. I could sit back and relax as my fellow group leader, a longtime Nature Guide, presented. There Cheryl goes again, describing the distinction between a bird’s screech and squelch. “This one sounds like a coppersmith tapping metal”, she said breezily of the coppersmith barbet.

To find out how the students got to know each other with ‘Spotify Guess-whose-favourite-song’, ‘Tauboo’, ‘Escape Room’ and much more, read the [full story by Terese Teoh on the ASE News Blog](#) and enjoy more poems [here](#).



## Election for the 7<sup>th</sup> Management Committee of ASE AY21/22



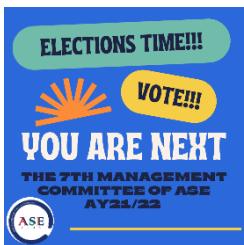
ASE Club on Instagram:  
<https://www.instagram.com/aseclub/>

ASE Club Web page:  
<https://ntuaseclub.wordpress.com/>

### Part 1: #whyaseclub!?

ASE Club is the official student management club of the Asian School of the Environment. ASEC aims to promote interaction, bonding and build up a common identity among members of the Club and promote their academic pursuits/aspirations. We also strive to promote interaction amongst members of the Club through welfare, social, cultural, educational and sporting activities. We are a student club by the students of the environment, for the students of the environment. That means that we cater to our students needs , for example planning environment related activities for our students, and celebrating important dates such as Earth Day together. We are not just a regular academic club – we are ASE Club!

## Part 2: Portfolios



**President:** Represents the school in meetings and discussions with other academic clubs and also SU council . The Chair of sustainability committee within NTU and have to make progress in sustainability efforts in NTU.

**Vice-President (Internal):** Leads and coordinates events team on internal events, either formal or informal, and is in charge of any matters within the student body.

**Honorary General Secretary:** The Honorary General Secretary has to convene all meetings of the Club and of the Management Committee, as well as meetings with the faculty advisors. He/she has to keep minutes of the meetings of the Club and of the Management Committee. He/ she has to document any official events for the club/s record and documentation purposes.

**Financial Controller:** Prepares and submits the provisional budget of the Club to the Office of Finance and keeps a record of the Club's account. Receives, on behalf of the Club, any funds that may be paid to the Club, signs and submits to the University's Office of Finance for payment of all bills of expenditure.

**Vice-President (External):** Leads and coordinates with events team on external events, formal or informal. In charge of any matters with regards to beyond the student body. Have to represent ASE when collaborating with external organisation to form public relationships on behalf of the school. Has to lead and coordinate external events such as Community Involvement Programmes (CIP).

### Part 4: How to vote?

ASE members are encouraged to join in on the E- rally that will happen on 3<sup>rd</sup> September (Friday) at 5pm to listen on all of the Candidates' pitches. This would be one of the deciding opportunities for members to hear the Candidates and motivation, and decide on which individuals are convincingly fit to lead the 7<sup>th</sup> Management Committee, and also the School.

To join the E-rally on 5<sup>th</sup> September at 5pm, sign up here: <https://tinyurl.com/asecrally>

Thereafter, ASE members have to vote for the candidates on Union Day , 10<sup>th</sup> September. On this day, there will not be any lessons as the entire student body would be given the chance to consider their options and vote wisely.

To vote, visit this page on Union Day 10<sup>th</sup> September:  
<https://www.ntusu21unionelections.com/>

### Part 2: Why vote?

This is the 7<sup>th</sup> management committee of ASE Club. This particular batch of ASE Club management committee members is especially important because they represent the resilient face of the school, especially in this period when the society is transitioning away from the turbulent and everchanging COVID period. The 7<sup>th</sup> Management Committee has to bring members back together so to retain and if not strengthen our bonding within school, and create an environment of togetherness especially since we are more remote than ever before. Members are highly therefore highly encouraged to vote for their desired individuals to lead and serve the school, in hopes for a stronger and more resilient ASE all together.

# PhD student updates



Ahmad Taufiq Bin Mohamed Mohtar, Dini Nurfiani, Sri Budhi Utami, and Rishav Mallick. Four of the 11 PhD students who have submitted their theses.

## Eleven submitted theses!

Congratulations to Sri Budhi Utami, Yap Wenshu, Rishav Mallick, Ahmad Taufiq Bin Mohamed Mohtar, Shi Qibin, Yang Liudongqing, Dini Nurfiani, Olivier Bernard, George Williams, Robert Scott Nichols, and Zhou Yongli for submitting your thesis recently. You are so close to the finish line! 😊

## New PhD representative

Nicolo Ivanovich has kindly volunteered to substitute George Williams as the new PhD representative in ASE. We want to thank George for his hard work helping students during the last years and welcome Nicolo to his new role. Remember that our job is to bring any issues, concerns, and proposals to the faculty and ASE, so don't hesitate to contact us ([burg0001@e.ntu.edu.sg](mailto:burg0001@e.ntu.edu.sg) or [nicolo001@e.ntu.edu.sg](mailto:nicolo001@e.ntu.edu.sg)) to check if we can do anything for you.



Nicolo and Vanesa are your PhD representatives.

# ASE/EOS Research Fellows



The Research Fellows representatives encourage research fellows/post docs from ASE to participate in the **Singapore National Post Doc symposium** coming up 14 – 16 September 2021. More information on the post doc symposium can be found here: <http://sgpdssymposium.com/>

## Studying the impact of wild boar on Singapore's forests

**Kenny Png** is a Research Fellow with the [NTU-Smithsonian Partnership](#). One of his projects involves studying the effects of wild boars on Singapore's forests. ASE comms asked him to tell us more about it:

I am currently working to understand the impacts of wild boars on the forest vegetation and soil properties in Singapore together with our collaborators at Nparks and the University of Queensland. In forest ecosystems without a natural apex predator - like tigers – boars are likely to be abundant. Boars could damage vegetation, but on the other hand, their soil diggings can also create a patchwork of soil microhabitats to allow other plants and smaller organisms to thrive which, in turn, promotes biodiversity. A recent study in Malaysia showed that wild boars can promote plant diversity by eating smaller plants of the dominant tree species, giving less dominant plant species a better chance. As such, we are interested to see if we can detect some of these benefits here.



Field work in a wild boar enclosure plot. Photo: Kenny Png



*Wild boar. Photo: Kenny Png*



*A sparsely vegetated research plot in Singapore. Photo: Kenny Png*

To do so, we are currently building fenced wild boar enclosures across Singapore to compare differences in ecosystem properties with paired unfenced plots. These enclosures are about 9m x 12m, and the fences are about 2m tall. We started scouting for 30 suitable pairs of forest plots to fence across Singapore in November 2020. Finding similar pairs of plots based on vegetation properties was somewhat challenging as tropical forests tend to show high plant species richness and heterogeneity; but on a positive note, we got more exercise hiking the forests! The construction of the fences commenced in April this year and we have recently completed all the paired plots on mainland Singapore. Since then, we have begun carrying out baseline surveys (vegetation, soil and invertebrate, camera trapping) across these plots and hope to complete this soon if, fingers crossed, the weather stays consistently nice.

Once the baseline survey is completed this year, we will return to survey the plots next in a couple of years to measure the changes between the fencing treatments. As with most research, patience is a much-needed virtue with long-term ecological experiments such as this as differences in these fencing treatments may only be more discernible beyond two, five or even 10 years. As such we hope to secure long-term funding to be able to continue to monitor shifts in ecosystem properties and maintain the fences as trees naturally falling over and breaching the fence structure is a common occurrence. Findings from this long-term study will inform long-term conservation efforts of the tropical forests of Singapore and the region.



## ASE Alumni Association

### Monthly ASE Alumni interview

This month we catch up with Sung Mei Yee, an alumni from the first batch of ASE graduates working for Singapore Nature Society.

#### Where have you been since your graduation?

I am still in Singapore and have been working at Nature Society (Singapore), also known as NSS, since my graduation in 2018. As one of the two project officers in charge of NSS's flagship citizen science project and nature education programme, my work involves nurturing the hearts and minds of the next generation and the wider public for nature and nature conservation!

#### What do you miss about ASE, if at all?

Of everything, the camaraderie! I miss being around and seeing my ASE coursemates and friends almost every other day. Even though assignments could be challenging and deadlines



*ASE Alumni Sung Mei Yee.*



Sung Mei Yee works for Singapore Nature Society.



Mei Yee misses the camaraderie during her time at ASE.

could be stressful at times, they made everything better and possible. I was really fortunate to have studied with many encouraging and supportive coursemates and friends.

#### Tell us some lifestyle changes you have experienced since graduating and starting work!

Gone were the days when I could burn the midnight oil and still be fully functional the next day! Without much choice, I have started living a healthier lifestyle of sleeping and waking early. I am also consciously making an effort to live a more active lifestyle - birdwatching, hiking, and jogging - to stay healthy. Last but not least, ensuring work-life balance and spending quality time with family and friends!

#### Famous last words for this interview?

My four years of undergraduate studies in ASE were one of the highlights of my education, and I hope it will be yours too, so enjoy and make the best out of it!

Micro-networks in AA
Environment & Environmental Consulting
Academic Research & Education
Geoscience Consultancy
Corporate Sustainability & Governance
Business, Entrepreneurship & Technology
Public & Civil Service

#### ASE Alumni Association

*On LinkedIn:*

<https://www.linkedin.com/in/aseaa/?originalSubdomain=sg>

*On the NTU website:*

<https://www.ntu.edu.sg/alumni/associations/school/aseaa>

*On the ASE website:* <https://www.ntu.edu.sg/ase/alumni>

*Email:* [ase\\_alumni@ntu.edu.sg](mailto:ase_alumni@ntu.edu.sg)

## Some recent publications and outreach from ASE

ASE/EOS authors are in bold. The list is not in alphabetical order and does not aim to include all published papers from ASE/EOS, but to give a taste of the incredible diversity of topics we publish on with some recent examples.

Have a recent publication or outreach we could include? Please let Anna know: [alagerstroem@ntu.edu.sg](mailto:alagerstroem@ntu.edu.sg)



Molly Moynihan and co-authors published on stony corals, like *Pocillopora acuta*.

Molly A. Moynihan, Nathalie F. Goodkin, Kyle M. Morgan, Phyllis Y. Y. Kho, Adriana Lopes dos Santos, Federico M. Lauro, David M. Baker & Patrick Martin. (2021) [Coral-associated nitrogen fixation rates and diazotrophic diversity on a nutrient-replete equatorial reef](#). *ISME J*

Dhrubajyoti Samanta, Nathalie F. Goodkin, Kristopher B. Karnauskas (2021) [Volume and heat transport in the South China Sea and Maritime Continent at present and the end of the 21st century](#). *Journal of Geophysical Research: Oceans*

Tharaka S. Priyadarshana, Myung-Bok Lee, John S. Ascher, Lu Qiu, Eben Goodale (2021) [Crop heterogeneity is positively associated with beneficial insect diversity in subtropical farmlands](#). *Journal of Applied Ecology*.

Rishav Mallick, Roland Bürgmann, Kaj Johnson, Judith Hubbard (2021) [A unified framework for earthquake sequences and the growth of geological structure in fold-thrust belts](#). *Journal of Geophysical Research: Solid Earth*



Tharaka Priyadarshana published on crop heterogeneity and insect diversity. Right: Pied paddy skimmer (*Neurotmesis Tulia*; Shutterstock).



Chiu Jing Hua and co-authors published on invasive species in the tropics. Water hyacinth (*Eichornia crassipes*) is an invasive species in Southeast Asia.

Irwan Meilano; Rino Salman; Suchi Rahmadani; Qibin Shi; Susilo Susilo; Eric Lindsey; Pepen Supendi; Daryono Daryono. (2021) [Source Characteristics of the 2019 Mw 6.5 Ambon, Eastern Indonesia, Earthquake Inferred from Seismic and Geodetic Data](#) *Seismological Research Letters*

Karoline Magalhãesa, Adriana Lopes dos Santos, Daniel Vaulot, Mariana Cabral Oliveira (2021) [Hemiselmis aquamarina sp. nov. \(Cryptomonadales, Cryptophyceae\), a Cryptophyte with a Novel Phycobiliprotein Type \(Cr-PC 564\)](#). *Protist*

Drinkwater R, Williamson J, Clare EL, Chung AYC, Rossiter SJ, Slade E. 2021. [Dung beetles as samplers of mammals in Malaysian Borneo—a test of high throughput metabarcoding of iDNA](#). *PeerJ*

Wei Lin Lee, Maxim Imakaev, Federica Armas,... Janelle Thompson, Eric J. Alm (2021) [Quantitative SARS-CoV-2 Alpha Variant B.1.1.7 Tracking in Wastewater by Allele-Specific RT-qPCR](#). *Environmental Science & Technology Letters*. See also: [https://www.sciencedaily.com/releases/2021/07/210721120714.htm?utm\\_medium=Socia...+media&utm\\_campaign=MadeinSG](https://www.sciencedaily.com/releases/2021/07/210721120714.htm?utm_medium=Socia...+media&utm_campaign=MadeinSG)

Kwek Yan Chong, Richard T. Corlett, Martin A. Nuñez, Jing Hua Chiu, Franck Courchamp, Wayne Dawson, Sara Kuebbing, Andrew M. Liebhold, Michael Padmanaba, Lara Souza, Kelly M. Andersen, Songlin Fei, Benjamin P.Y.-H. Lee, Shawn Lum, Matthew S. Luskin, Kang Min Ngo, David A. Wardle (2021) [Are Terrestrial Biological Invasions Different in the Tropics?](#) *Annual Review of Ecology, Evolution, and Systematics*.

## Media Outreach



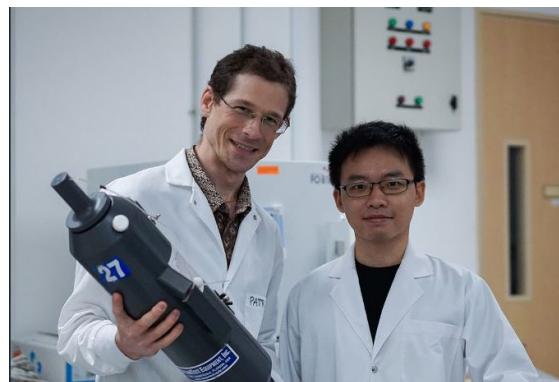
### Climate Change Comment

Adam Switzer and Benjamin Horton commented on the recent record high rainfall and flash floods in Singapore in Today Online. Read the story here: [Flooding in tropics expected but brace for more ‘extreme weather’, even prolonged dry spells in Singapore, experts say](#)

### Seasonal Ocean Acidification in Singapore

Seasonal ocean acidification linked to monsoon in Singapore, is what Patrick Martin and Zhou Yongli found. Read the story on the [ASE News Blog](#).

“...long-term monitoring of seawater chemistry is important, and ... Singapore is a very interesting location for studying coastal carbon cycling” says Patrick Martin.



This newsletter was put together by Anna Lagerstroem. Have some news to share? Please let me know at [alagerstroem@ntu.edu.sg](mailto:alagerstroem@ntu.edu.sg). Feedback on the ASE webpage to the same address, please.