



2022 YEARLY ACTIVITY REPORT



Report prepared by Professor Benoît Goossens and John Robertson

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www.danaugirang.com.my

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INTRODUCTION

The Danau Girang Field Centre (DGFC) was established in 2008 through a formal partnership between the Sabah Wildlife Department (SWD) and Cardiff University (UK). The Centre continually contributes to and supports long-term conservation strategies in Sabah, undertaking scientific research to develop a better understanding of how wildlife survives in a degraded, fragmented landscape that is also impacted by human pressures such as hunting, agriculture, and climate change.

Ground-based, targeted data is used to inform and shape Sabah's conservation strategies, such as the State's five species action plans, and our work continues to support the reforestation of the surrounding area by establishing new forest reserves and wildlife corridors.



We provide higher education opportunities to Malaysian and international students (up to PhD level), host university field courses and support an in-house Education Team who actively promote the conservation of our wildlife and their habitats to our schools, communities, learned societies and at public events throughout the State of Sabah.

VISITORS TO DANAU GIRANG FIELD CENTRE 2022

Distinguished Guests

Visit from the US Ambassador

On the 9th–10th of March, DGFC and SWD, received a visitation from the United States Ambassador from the Kuala Lumpur Embassy, Mr Brian Mcfeeters. The visit aimed to renew partnerships between Sabah and the embassy, especially regarding environmental and climate crisis issues.

Cardiff and Wyoming Delegation

In October, DGFC welcomed a joint visit from Cardiff University (CU) and the University of Wyoming (UW). UW (AMK Ranch) jointly manages the University of Wyoming-National Park Service Research Station in the Grand Teton National Park, USA.



Cardiff University and Wyoming University staff on the way to the Field Centre

Visiting from UW were their Vice Provost for Global Engagement Dr Isadora Helfgott, Director of the Biodiversity Institute Professor Brent Ewers, and Dean of the Haub School of Environment and Natural Resources Professor John Koprowski. CU was represented by the Pro Vice-Chancellor for International and Student Recruitment Professor Rudolf Allemann, and Head of International Partnerships, Ms Anne Morgan.

Pro Vice-Chancellor Allemann commented “Universities often provide students with education and a piece of paper, but they should do more than that in terms of experience, innovation and include the whole issue of doing things in a sustainable way.” With this ethos in mind, Wyoming and Cardiff are keen to work together.

Vice Provost Isadora Helfgott said “I think we definitely are going to see more people from Wyoming here, I really hope we will see some collaborations on the teaching and research front. I would love for us to see some folks from Cardiff and Malaysia coming to UW and bringing what they know to us so that we learn from them while also allowing us to be part of the global network that Benoit and his team have established here”.

Ruth Padel



L-R: Emma Burnyeat and Ruth Padel

In September, the centre welcomed British poet, novelist, and author, Ruth Padel and her daughter Gwen Burnyeat, a post-doctoral anthropologist at Oxford University. Ruth is the great-great-granddaughter of Charles Darwin, a former trustee of the Zoological Society of London and a current trustee of New Networks for Nature.

During their stay they took part in research project work and looked for signs of the Bornean elephants, which was one of the reasons for her visit.

Field Courses

Miami University

In June and July, two field courses were held in partnership between Miami University, Ohio and Project Dragonfly. The students spent 5 days respectively, experiencing the jungle and undertaking various research projects relating to tropical jungle ecology.

Cardiff University



Seventeen students from Cardiff University's School of Biosciences, stayed at the centre for two weeks learning about tropical biodiversity assessments. During their time they were involved with Regrow Borneo, tracking pangolins, observing orangutans, and getting hands-on experience in many other aspects of tropical biodiversity research.

Royal Holloway

A two-week field course from Royal Holloway, University of London, was hosted for the first-time during late August and early September. The students experienced some of the various ongoing research programmes, and spent time tracking pangolins, observing orangutans and other primates.

The students presented their own projects to their peers and tutors which included: the territoriality of carpenter bees, the reaction of ants to different predation threats, gecko behaviour and millipede uncurling latency. The projects provided a taste of tropical biodiversity research, as well as some of the challenges that can be faced while conducting research in a tropical forest.

Research Assistants, Professional Training Year Students 2022

In September, following the lifting of travel restrictions, the centre was once again able to welcome undergraduate students from Cardiff University who were undertaking their Professional Training Year. This year, they were joined by some students who,

although they had already graduated from Cardiff University, missed out on their DGFC placement in 2021 due to the COVID pandemic (*).



Left to right: Jess Bassett (), Rhys Davies, Jack Gibbon (*), Rhiannon Peacock (*), Zara Calvert, Hannah Shapland and Bryce Johnson*

Volunteers

Guillaume Verchère

Guillaume is studying for a master's degree in Ecology and Evolution at Paul Sabatier Toulouse III University, France. Authorised by his University to undertake this four-month study break, Gigi enjoyed supporting the various research projects exclaiming that “it is just an incredible experience”.

Beth Kynaston

Beth spent two months volunteering at Danau Girang Field Centre. From Australia, she graduated with a Bachelor's in Zoology and Animal Science and came to DGFC to gain fieldwork experience that she had missed out on due to the COVID pandemic. Highlights included seeing orangutans, hornbills, crocodiles resting on the banks, and capturing clouded leopards and elephants on the camera traps.

Zoé Detroz

Zoé is studying veterinary medicine at the Université de Liège, Belgium. She wanted to learn more about veterinary research and assisted projects such as the Pangolin Project which involved her working alongside the project's veterinarian, Dr Macarena Gonzalez.

Bryce Davey

Bryce graduated from Lancaster University with a degree in Sustainable Engineering in 2017. He visited DGFC to install and test air quality sensors designed for remote and harsh environments which could potentially be used to correlate changes in air quality with animal migration patterns. He enjoyed his time so much that he returned to DGFC as a volunteer in October, for three months to continue to help with ongoing projects and offer his engineering skills to the team.

EVENTS, CONFERENCES AND WORKSHOPS

INL Project–Malaysian Communications and Multimedia Commission Workshop

In January, members of the Wildlife Crime Interagency Working Group, comprising representatives from various State departments, law enforcement agencies and NGOs completed a two-day course.

The workshop explored techniques to monitor social media platforms to effectively seize digital equipment and gather evidence against those involved in wildlife trafficking and illegal trade.

Jointly organised by SWD, Malaysian Communications and Multimedia Commission (MCMC) and DGFC, the training provided an opportunity for the working group to share their knowledge and expertise in theoretical and practical aspects relating to information gathering, using open-source techniques, first responder activity and data preservation.

This course was one of a series of 14 funded by the US Department of State's Bureau of International Narcotics and Law Enforcement Affairs (INL). Coordinated by SWD and DGFC, the programme is designed to significantly enhance enforcement and the forensic capabilities to deter wildlife trafficking in Sabah.

INL Project –Training with Justice for Wildlife

During this INL training session, 32 representatives from 9 Malaysian State departments, law enforcement agencies and NGOs gathered to participate in the Justice for Silent Victims: Investigation, Prosecution and Courtroom training programme.



The event was organised by the Sabah Wildlife Department, US Department of Justice's Office of Overseas Prosecutorial Development Assistance and Training, Justice Wildlife Malaysia and the DGFC. The participants gained experience in

arrest and interview procedures, the prosecution processes and courtroom protocols and procedures.

Unfortunately, the illegal wildlife trade is an issue that continues to threaten native endangered species and remains the focus of the wildlife enforcement agenda. This series of interagency training is vital to ensure the effective gathering of information and to establish strong cases for the successful prosecution of wildlife criminals through international support and global collaboration.

2022 Borneo Bird Festival



The Borneo Bird Festival was held at the Rainforest Discovery Centre in Sepilok, Sandakan and is one of the largest nature festivals in Malaysia.

This annual event attracts both local and international participants and this year DGFC represented by our two PhD students, Research Assistant and a volunteer.

DGFC EDUCATION TEAM ACTIVITIES

In 2022, the Education Team held 12 events for students aged between four to twelve years throughout Sabah. One public event, entitled A Wild Weekend at Tanjung Aru State Library was attended by school children as well as university students, providing an opportunity to learn more about the incredible wildlife and forests of Sabah and to meet the researchers trying to protect them.



A variety of activities were on offer such as the colouring of pictures of Sabah's incredible animals (Credit: DGFC Education Team)

The children listened to talks about the importance of conserving rainforests and the dangers threatening wildlife across the planet and what we can do to help. They took part in some interactive games, an animal identification quiz as well as a selection of hands-on activities and colouring.

The results of their artwork were very impressive, and many prizes were awarded! University students from Almacrest International College and Sabah Foundation University College were also welcomed. The students had the opportunity to engage with DGFC's wildlife researchers who live and work at the Centre. Presentations were given by Cardiff University PhD student Ms Jumail. Ms Jumail is a Sabahan whose research project is assessing the ecological impact of reforestation in Borneo as well as evaluating the carbon uptake of reforested areas.

The second presentation was given by Hong Kong University researcher Mr. Lim, who is working on the Pangolin Project studying the role of Sunda pangolins in the emergence of viruses such as SARSCoV-2 in humans.

Science, Technology, Engineering and Maths (STEM)

Our Conservation Planning Officer/GIS presented a talk on how GIS can be used in mapping the movement of wildlife. GIS or Geographic Information Systems, are computer-based tools used to store, visualize, analyse, and interpret geographic data. Geographic data (also called spatial, or geospatial data) identifies the geographic location of features.

The presentation was given to students aged between 10-12 years old, from 10 primary schools from 4 different districts in Sabah, Papar, Ranau, Sipitang and Tambunan.



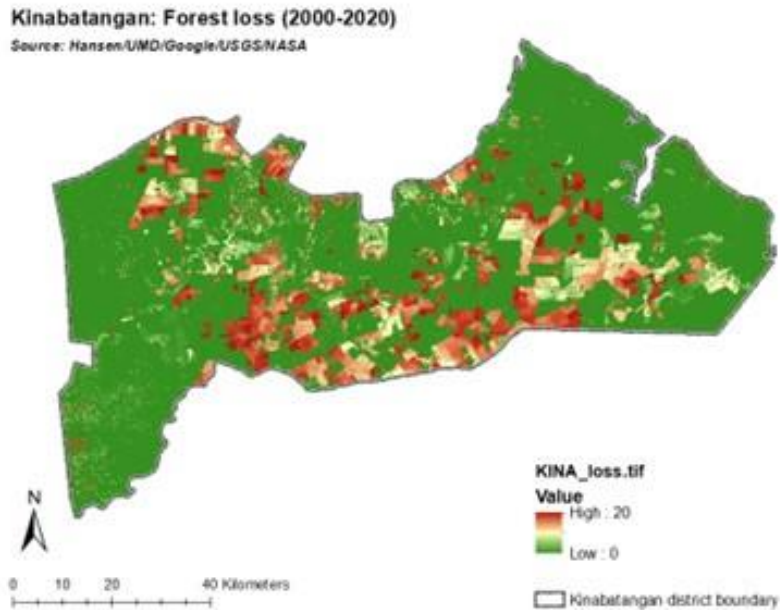
The programme emphasized the use of STEM in wildlife conservation as well as the adopted 5Rs (Refuse, Reduce, Reuse, Repurpose, Recycle) in wildlife protection with an aim to stimulate students' interest in science, technology, engineering and mathematics.

GEOGRAPHIC INFORMATION SYSTEMS

The DGFC Geographic Information Systems Facility supports many features of the work undertaken by the Centre, including the creation and development of habitat maps, tracking forest loss, tracking elephant movements, and plotting home ranges of focal species using drone images and Light Detection and Ranging (LiDAR) technologies. This work also plays a vital role in supporting the multi-agency antipoaching initiative, led by DGFC and Sabah Wildlife Department, funded by the US Department of State.

Mapping Deforestation in Kinabatangan (2000-2020)

Forest loss during the period 2000–2020 is defined as a stand-replacement disturbance, or a change from a forest to a non-forest state.



GIS Unit support for Rapid Response Team (RRT)

Mapping the Enforcement Hotspot in Tabin Wildlife Reserve: two types of illegal activities were mapped in the Tabin Wildlife Reserve consisting of illegal hunting and illegal access. Using Data Driven Pages, a total of 17 maps were prepared focusing on all the key trouble areas. The purpose of this mapping is to assist the RRT team to effectively carry out their field monitoring duties.

The RRT focuses on addressing wildlife trafficking and poaching issues through collaboration with various agencies. This team, part of the SWD and supported by DGFC, engages in training aimed to enhance existing enforcement against wildlife crimes. These activities include practical training on arrest procedures, evidence collection, and courtroom presentation skills, to improve the prosecution of wildlife traffickers.

RESEARCH PROJECTS

Regrow Borneo Project

Regrow Borneo brings together the scientific expertise of DGFC and the local community-based reforestation organisation, KOPEL (Koperasi Pelancongan Mukim Batu Puteh Kinabatangan Bhd) based in the nearby village of Batu Puteh on the banks of the Kinabatangan River.



Restoring each site involves clearing invasive grass and vines and then planting local trees from the village's nursery. Each site is maintained for 3 years or until the planted trees create a canopy.

A new restoration site was opened in the Kaboi Lake area and 9 audiomoths (acoustic monitoring devices) were deployed to assess whether this additional monitoring technology can enhance the results of the more traditional biodiversity data collection methods.

Finally, as the Regrow Borneo project approaches the end of its third year, annual carbon sampling was completed, and above ground carbon sequestration calculations were made. We can report that 7.3 ± 6.7 Mg/Ha of carbon has been sequestered at Kaboi Lake, and 6.2 ± 3.4 Mg/Ha of carbon has been sequestered at Ladang. Biodiversity monitoring for the year was also completed.

For more detailed information please visit [Regrow Borneo Charity UK Annual Report 2022](#).

Small Carnivores

In October, the Small Carnivore project began identifying new study areas through conducting recces of potential sites by the placement of camera traps in Girang and

Patong lakes. They also undertook night boat surveys along the main river. This was followed by night walks in the Hillco oil palm plantation estate using LED red light where a leopard cat was spotted resting next to a palm tree.



Night walk in the Hillco oil palm plantation estate using red light LED

An official feedback meeting was held with the managers of Pontian Hillco and Pontian Pendirosa palm oil estates to present the data gathered from the previous years' study and the future plans for working on their estates.

The Pangolin Project

This research programme is a collaboration between DGFC and the School of Public Health at the University of Hong Kong. The study is exploring “The potential role of Sunda pangolins in the emergence of SARS-CoV-2 and other viruses in humans”. This research is a direct response to the seizure of smuggled Sunda pangolins, by the Hong Kong government, during a layover on their journey from Southeast Asia to China. A routine screening of the smuggled pangolin's body parts uncovered SARS-CoV-2 related coronaviruses in the carcasses. It is, however, unclear whether they are the source of these viruses or if they caught them from other animals smuggled with them. As a result of this finding, two research assistants came to DGFC: JiaZhen Lim and Dr Macarena Gonzalez, the veterinarian for the project. Their aim is to discover the source of the strain, as well as uncover the role of wild populations of Sunda pangolins in the transmission of coronaviruses or any other virus that may pose a risk to humans. Camera traps confirmed that pangolins share their sleeping sites with many forest animals but most significantly with bats. Bats are infamous as propagators of disease, although the Horseshoe bat (*Rhinolophus affinis*) is of particular interest because it is known to carry a strain of COVID that is closely related to the SARS-CoV-2 found in the samples of smuggled pangolins.

Blood samples are collected from animals that are known to share burrows with pangolins, including small mammals like mice, rats, shrews, and squirrels, as well as medium sized animals such as monitor lizards.

Investigating the relationships between these species will enable a better understanding of the viral transmission pathways in the community, with the ultimate aim of predicting any potential outbreaks in the future.

SENSOR Project Pilot Study

In mid-November DGFC welcomed a team of researchers from the SENSOR project (a 5-year collaboration between the University of Glasgow and Universiti of Malaysia Sabah (UMS)) for a week-long pilot study. From UMS there was senior lecturer and expert in medical entomology Dr Benny Obrain Manin. From Glasgow University there was PhD student Mesach Lee (who is studying the effects of reforestation on mosquitoes and diseases in Sabah) and research assistant and spatial epidemiology masters graduate Emilia Johnson. Also, part of the team was Oregon State University PhD student, molecular ecologist and DGFC friend Emily Dziedzic and Addy Samsudin, a local expert and project manager for the study.

Changing landscapes and environments can increase the risk of disease transmission between wildlife, insects and people. For example, malaria is spread by the transmission of single celled parasites known as plasmodium. In Malaysia, the predominant malarial parasite *Plasmodium knowlesi* (Pk) is usually found in macaques, but in 2004 it was discovered to pose a risk to humans. The disease ecology of Pk was previously investigated by the MONKEYBAR project, in which DGFC was involved. The aim of the SENSOR project will be to build upon previous



L-R: Emily Dziedzic, Emilia Johnson, Benny Obrain Manin, Mit Zuraimi, Bryce Davey, Mesach Lee, Addy Samsudin (Credit: Amaziasizamoria Jumail)

research and continue to understand the pathways of emerging infectious diseases and suggest solutions for protecting and monitoring human and environmental health. The attraction of the forest around DGFC for the study is because of the reforestation gradient that has been established, with several reforested plots up to 20 years old. Explained by PhD student Mesach “As

reforestation happens, we predict the species composition of mosquitoes will change. So, areas recently reforested should have a different species composition to the earliest reforested areas”.

By looking at the differences we can assess the risk of humans catching disease. During their stay the team tested out mosquito collecting traps at the various reforestation sites with the aim of eventually being able to sample mosquitoes at the canopy level. This is important because the mosquitoes which would usually feed on macaques (who are natural hosts of Pk) can be found at this level.

PROTECT

The Sabah Forestry Department’s special tactical enforcement team, the PROTECT Unit, has been highly successful in battling wildlife poaching and trafficking in the region, resulting in the arrest of 53 suspects. The project was supported by DGFC with a grant from the Sime Darby Foundation.

SABAH WILDLIFE HEALTH, GENETIC AND FORENSIC LABORATORY

Established in 2013 by SWD and DGFC, many government departments, forensic agencies and researchers use the laboratory’s facilities which provide valuable genetic information collected from potential wildlife crime scenes, unexplained wildlife fatalities, and support a range of DGFC research projects.

For the last three years, the facility has also been playing a key analytical role in supporting DGFC’s inter-related, and multi-agency projects, including significant work relating to the US Department of State’s funding to support SWD’s anti-poaching and trafficking activities, collecting, preserving and analysing wildlife forensic evidence in support of the State’s prosecution service.

SCHOLARLY ACHIEVEMENTS

PhDs

BURGER R, 2022. Ecology of the reticulated python (*Malayopython reticulatus*): life in an altered landscape. PhD thesis. Cardiff University, UK, 224 pages.

Masters

BEARMAN O, 2022. The influence of different home range estimation models on inferences of habitat selection by reticulated python (*Malayopython reticulatus*) and Asian water monitor lizard (*Varanus salvator*). Master of Science thesis. Cardiff University, UK, 32 pages.

DUGAR B, 2022. A comparison between arthropod diversities of dipterocarp forests and oil palm plantations in Sabah, Malaysia. Master of Science thesis. Cardiff University, UK, 29 pages.

VAN KEMPEN S, 2022. Examining stakeholder perceptions of high conservation value areas to reduce future human elephant conflict in and around palm oil plantations. Master of Science thesis, Wageningen University and Research, The Netherlands, 61 pages.

WILSON A, 2022. Home range, movements and activity patterns of leopard cats in the Kinabatangan Floodplain. Master of Science thesis, Universiti Malaysia Sabah, Malaysia, 110 pages.

PUBLICATIONS

1. BERNARD H, LIEW NYS, **WILSON A**, TANGAH J, TUUGA A, MATSUDA I, 2022. Inventorying terrestrial mammal species in mixed-mangrove forest of the Lower Kinabatangan, Sabah, Borneo, Malaysia, with special reference to a new locality record of otter civet, *Cynogale bennettii*. *Mammal Research*. 67: 31–38.
2. **GUERRERO-SANCHEZ S**, **MAJEVSKI K**, OROZCO-TERWENGEL P, SAIMIN S, **GOOSSENS B**, 2022. The effect of oil palm-dominated landscapes on the home range and distribution of a generalist species, the Asian water monitor. *Ecology and Evolution* 12: e8531.
3. SCHEUMANN M, ROPER K, NATHAN SKSS, **GOOSSENS B**, 2022. Third-party vocal intervention in the proboscis monkey (*Nasalis larvatus*). *International Journal of Primatology* doi: 10.1007/s10764-021-00273-9.
4. CHOO SW, CHONG JL, GAUBERT P, HUGHES AC, **PANJANG E**,..., AZIZ MA, 2022. A collective statement in support of saving pangolins. *Science of the Total Environment* 824: 153666.

5. SANTIKA T, SHERMAN J, VOIGT M, ANCRENAZ M, WICH S, WILSON KA, POSSINGHAM H, MASSINGHAM E, ASHBURY AM, AZVI TS, BANES GL, BARROW EJ, BURSLEM DFRP, DELGADO RA, ERMAN A, FREDRIKSSON G, **GOOSSENS B**, HOUGHTON M, INDRAWAN TP, JAYA RL, KANAMORI T, KNOTT CD, LEIMAN A, LISWANTO D, MARCH M, MARSHALL AJ, MARTIN JGA, MIDORA L, MILLER A, MILNE S, MORGANS C, NARDIYONO N, PERWITASARI-FARAJALLAH D, PRIATNA D, RISCH R, RIYADI GM, RUSSON A, SEMBIRING J, SETIAWAN E, SIDIQ M, SIMON D, SPEHAR S, STRUEBIG MJ, SUMARDI I, TIJU A, WAHYUDI R, YANUAR A, MEIJAARD E, 2022. Effectiveness of 20 years of conservation investments in protecting orangutans. *Current Biology* doi: 10.1016/cub.2022.02.051.
6. **GUERRERO-SANCHEZ S, WILSON A, GONZALEZ-ABARZUA M, KUNDE M, GOOSSENS B**, SIPANGKUI R, **FRIAS L**, 2022. Serological evidence of exposure of Bornean wild carnivores to feline coronavirus and other pathogens at the wildlife-human interface. *Transboundary and Emerging Diseases* doi: 10.1111/tbed.14549.
7. **BURGER R**, 2022. Ecology of the reticulated python (*Malayopython reticulatus*): Life in an altered landscape. PhD Dissertation, Cardiff University, 212 pages.
8. BOHNETT E, **GOOSSENS B**, BAKAR MSA, **ABIDIN TR, LIM HY**, HULSE D, AHMAD B, HOCTOR T, **GARDNER P**, 2022. Examining diversity of terrestrial mammal communities across forest reserves in Sabah, Borneo. *Biodiversity and Conservation* doi: 10.1007/s10531-022-02423-8.
9. DAVILA-ROSS M, POPLE H, GIBSON V, NATHAN SKSS, **GOOSSENS B, STARK DJ**, 2022. An approaching motor boat induces stress-related behaviors in proboscis monkeys (*Nasalis larvatus*) living in a riparian area. *International Journal of Primatology* doi: 10.1007/s10764-022-00277-z.
10. BROWN R, **SALGADO-LYNN M, JUMAIL A, JALIUS C**, CHUA T-H, VYTHILINGAM I, FERGUSON HM, 2022. Exposure of primate reservoir hosts to mosquito vectors in Malaysian Borneo. *EcoHealth* doi: 10.1007/s10393-022-01586-8.
11. **KOOROS SJ, GOOSSENS B**, STERCK EHM, KENDERDINE R, MALIM PT, **SALDIVAR DAR, STARK DJ**, 2022. External environmental conditions impact nocturnal activity levels in proboscis monkeys (*Nasalis larvatus*) living in Sabah, Malaysia. *American Journal of Primatology* e23423.
12. **WILSON A, BERNARD H, GONZALEZ-ABARZUA M, GUERRERO-SANCHEZ S, FRIAS L, KUNDE M, BURGER R, GOOSSENS B**, 2022. Use of accelerometer-informed GPS telemetry in mortality detection of tagged leopard cat. *CATnews* 75: 31-32.

13. ABRAM NK, **SKARA B**, **OTHMAN N**, ANCRENAZ M, MENGERSEN K, **GOOSSENS B**, 2022. Understanding the spatial distribution and hot spots of collared Bornean elephants in a multi-use landscape. *Scientific Reports* 12: 12830.
14. DE LA TORRE JA, CHEAH C, LECHNER AM, WONG EP, TUUGA A, SAABAN S, **GOOSSENS B**, CAMPOS-ARCEIZ A, 2022. Sundaic elephants prefer habitats on the periphery of protected areas. *Journal of Applied Ecology* doi: 10.1111/1365-2664.14286.
15. MEIJAARD E, SHEIL D, SHERMAN J, CHUA L, NI'MATULLAH S, WILSON K, ANCRENAZ M, LISWANTO D, WICH SA, **GOOSSENS B**, KUHL H, VOIGHT M, RAYADIN Y, KURNIAWAN Y, TRIANTO A, PRIATNA D, BANES G, MASSINGHAM E, PAYNE J, MARSHALL AJ, 2022. Restoring the red ape in a Whole- or Half-Earth context. *Oryx* doi: 10.1017/S00306532200093X.
16. HOSHINO S, SEINO S, AZUMANO A, TUUGA A, NATHAN SKSS, **SALDIVAR DAR**, **GOOSSENS B**, **SALGADO-LYNN M**, MATSUDA I, YAYOTA M, 2022. Modifying the diets of captive proboscis monkeys in a temperate zoo to reduce weight loss and renal disease. *Primates* doi: 10.1007/s10329-022-01031-y.
17. **GUHARAJAN R**, ABRAMS JF, ABRAM NK, **LIM HY**, CLEMENTS GR, DEERE NJ, STRUEBIG MJ, **GOOSSENS B**, **GARDNER PC**, BRODIE JF, GRANADOS A, TEOH SW, HEARN AJ, ROSS J, MACDONALD DW, MOHAMED A, WONG ST, HASTIE AYL, WONG W-M, KRETZSCHMAR P, WONG ST, KOH SPH, WILTING A, 2022. Determinants of sun bear *Helarctos malayanus* habitat use in Sabah, Malaysian Borneo and its predicted distribution under future forest degradation and loss. *Biodiversity and Conservation* doi: 10.1007/s10531-022-02503-9.
18. BURSELL MG, DIKOW RB, FIGUEIRO HV, DUDCHENKO O, FLANAGAN JP, AIDEN EL, **GOOSSENS B**, NATHAN SKSS, JOHNSON WE, KOEPFLI K-P, FRANDBSEN PB, 2022. Whole genome analysis of clouded leopard species reveals ancient divergence and distinct demographic histories, informing conservation efforts for both species. *iScience* doi: 10.1016/j.isci.2022.105647.

IN THE PRESS & MEDIA

- 21 January: The Borneo Post: Unit's success in battling wildlife poaching, trafficking.
- 24 January: Daily Express: Tackling illegal wildlife trade online.
- 24 February: Daily Express: Dept. gets 4WDs for better enforcement.
- 29 August: Sin Chew Daily & The Borneo Post: Training to investigate, prosecute wildlife criminals.
- 12 March: The Borneo Post: US Embassy hopes to renew partnership.

- 12 March: The Borneo Post & Overseas Chinese Daily News: Sabah's beauty a certain draw for Americans, says ambassador.
- 12 March: The Borneo Post: One billion dollars not enough to halt orangutan decline.
- 11 & 12 July: The Star & See Hua Daily: 'Wrecking' spree brings joy- Research centre happy to get a visit from roaming elephants.

'Wrecking' spree brings joy



Travelling tuskers: Some of the 100 Borneo Pygmy elephants that went through the DGFC in Kinabatangan, Sabah.

Research centre happy to get a 'visit' from roaming elephants

By MUGUNTAN VANAR
vtnug@thestar.com.my

KOTA KINABALU: A herd of 100 Borneo pygmy elephants went on a "rampage", breaking the staircase of the Danau Girang Field Centre (DGFC), destroying a water tank and tearing down a wall, besides causing other minor damage.

But this time, there was none of the usual consternation or anger caused by such invasions.

Instead, conservationists here were smiling over the "rampage" in the heart of Sabah's conservation area in Kinabatangan.

In most cases, such a herd would have drawn anger among planters, farmers and villagers as the animals usually cause a fair amount of damage to crops and property.

Last weekend's visit by the troop is, however, being seen as a good sign that the pachyderms are thriving in the conservation area.

DGFC director Dr Benoit Goossens said that his staff had enjoyed the presence of the elephants even though there was

some damage to their office.

"We love having them around even if they can create some damage. This is the price to pay for living in the elephant kingdom," he said when contacted over DGFC's quirky post about the incident on Facebook last week.

Goossens said it was normal for elephants to pass through the centre, situated at the Lower Kinabatangan Wildlife Sanctuary.

"We are surrounded by the forest, we are in the middle of the jungle... they eat whatever the jungle offers them - grass, vines and rattan, among others.

"The elephants are very playful, so they enjoyed playing with our water tanks, wires, water pipes and so on.

"They also like to scratch their bodies against walls, which they did, and one of the walls broke," he added.

Goossens said the herd of about 100 elephants was quite a large group compared with the usual herds that pass through the area.

"It happens two or three times a year. They travel along the



Minor damage: The elephants caused some damage after their visit to the centre in Kinabatangan.

Kinabatangan (river), sometimes in small units, sometimes in a large herd. Usually, July is the month they pass through DGFC," he added.

When asked about the cost of damage, he replied: "I don't really know. Maybe around RM1,000, nothing that can't be fixed. The pleasure of seeing elephants around us is priceless."

DGFC is a research and training

facility co-managed by the Sabah Wildlife Department and Cardiff University.

The centre carries out a variety of research on Sabah's wildlife and provides feedback to the state government on steps to be taken for conservation while also working with various stakeholders and NGOs in carrying out conservation measures.

- 01 August: The Borneo Post: Protecting forests, abandoning project crucial for elephants.
- 29 August: Sin Chew Daily & The Borneo Post: Training to Investigate, prosecute wildlife criminals.
- 19 October: Asia Times & The Borneo Post: Asian elephants prefer living at the edge.
- 17 October: Asia Times & Sin Chew Daily: Half-Earth doubles gains for orangutans.
- 20 October The Borneo Post: Orangutans

Media

Agents4Change Collaboration

DGFC's Regrow Borneo Project was featured in a Agents4Change video starring a cartoon representation of Ms. Amaziasizamoria Jumail (Maz), DGFC's Scientific Officer and PhD student. Maz explained to Agents4Change's Utti and Elly the importance of the Regrow Borneo project in combatting climate change.

Agents4Change is an online educational program being piloted in Malaysian schools. The series is produced by Siung Films in collaboration with UNICEF, the Malaysian Ministry of Education, the Environment Protection Department Sabah, and the Institut Pendidikan Guru Sabah.

YouTube: <https://www.youtube.com/watch?v=bwnG6iqIEN8>



Utti, Elly and Maz (Credit: Agents4ChangeClub Youtube Channel)

GRANTS AWARDED

1. Orangutan Appeal UK for the Regrow Borneo project, 1 year, MYR 5,856
2. One Tree Planted for the Regrow Borneo project of forest restoration in the Kinabatangan, 3 years, MYR 368,320
3. EcoMatcher for the Regrow Borneo project of forest restoration in the Kinabatangan, 1 year, MYR 101,288
4. Sime Darby Foundation for the project “Rapid Response Teams: Sabah Wildlife Department’s targeted reaction to wildlife crimes”, 3 years (July 2022 to June 2025), MYR 3,800,000
5. Panthera Corporation for the project “Ecology of small sympatric felids in the fragmented landscape of the Kinabatangan Wildlife Sanctuary”, 1 year (July 2022 to June 2023), MYR 46,040
6. U.S. Department of State for the project “Improving wildlife seizure management and DNA analysis to increase effectiveness of investigations in Southeast Asia”, 2 years (October 2022-September 2024), MYR 838,490
7. Regrow Borneo (UK Charity), for the Danau Girang Field Centre’s Regrow Borneo Project, MYR 88,338

Total MYR 5,248,332 (USD 1,074,596)

ACKNOWLEDGMENTS

We would like to express our sincere thanks to Cardiff University, Sabah Wildlife Department and all our sponsors who continue to support us.

If you would like to learn more about how you can help support DGFC, please contact us via email at: enquiry@danaugirang.com.my