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WELCOME
FROM THE DIRECTORS

The last few years have seen significant expansion for the Borneo Nature Foundation OutTrip programme, particularly in the development and training of our local staff. We're proud that 2015 continued this success as we made even more progress in research and conservation.

However, our good work was threatened when large parts of Indonesian Borneo went up in flames in 2015. Thousands of hotspots were detected, with forests containing a third of the island’s orangutans at risk. All research stopped as our team joined the fire-fighting. With help from our new conservation drone, 15 blazes were extinguished and, although some forest was lost, an even larger area was saved.

This crisis reinforced how important our work really is. It’s why we entered 2016 with renewed vigour and a continued commitment to tackling the causes of these fires. And it’s why we’ll keep progressing and expanding our efforts, engaging more people and helping to protect Borneo’s forests, orangutans and other irreplaceable treasures.

We’re also pleased to announce that these expanded activities will take place under a new umbrella organisation – the Borneo Nature Foundation (BNF).

This will include a number of new programmes to assist our mission to help conserve Borneo’s rich biodiversity and, of course, OutTrip’s vital ongoing work in Sabangau. As we progress into 2016, BNF and its new programmes have now been formally launched, so please do check out our website and social media for all the latest info on all of our work, continuing and new!
WHEN DROUGHT CONDITIONS DRIVEN BY A STRONG EL NIÑO GRIPPED BORNEO IN 2015, HUGE AREAS OF PRECIOUS PEATLANDS WENT UP IN SMOKE.

A Devastating Disaster

In Kalimantan in 2015, nearly 50,000 hotspots were detected between August and October as devastating fires burned huge areas of forest and peatland — including our main site in Sabangau — and destroyed the natural habitat of orangutans and other wildlife.

All of BNF’s normal activities were stopped, and our efforts were directed towards helping the incredible local fire-fighting teams to control the fires. We’re now busy assessing their impact, which will no doubt be as damaging for the forests and apes as it is for Indonesian society itself.
The annual peat fires are the single biggest risk to the forests of Sabangau. Blazes break out every dry season, often sparked by neighbouring farmers using fire to clear their land or fishermen starting small bonfires on the river banks to cook fish. During El Niño events, the dry seasons are longer and more severe, meaning small fires can quickly get out of hand with devastating res...
AN INCREDIBLE EFFORT

As blazes raged across Borneo’s peatlands and forests in the second half of 2015, we worked with local fire-fighters to help tackle the flames and prevent them spreading wider.

Even though some forest was sadly burned in Sabangau, a lot more would have been lost without their incredible efforts, so we’re hugely grateful for everyone who provided funding and other emergency assistance.

A key part of the fire-fighting effort was our Quadcopter Drone. Equipped with a small film camera, it initially helped us spot smoke columns from afar, but really came into its own while flying high above the blazes during the fire-fighting itself. This helped us to assess their severity and direction, and better plan fire-fighting strategies.

At the end of September, we stopped all field research, cancelled our volunteer programme and evacuated non-essential team members. During October and November, the fires became our sole focus, with our research staff joining forces with the Community Patrol Team to search for and extinguish fires. Every day, we sent two teams up and down the Sabangau River, checking for fires in the sedge grassland along the banks. Using this tactic meant we spotted 10 large blazes, which took between 30 minutes and two days to put out.

At the same time, we used donations from across the world to buy equipment including pumps, hoses and safety gear. It also meant we could supply food and fuel, and distribute essential supplies such as masks, eye drops and rehydration drinks to 56 community fire-fighting teams in the Palangka Raya region.

Finally, the rains came in early November and extinguished all the remaining fires. We then began assessing the impact on Sabangau’s orangutans, gibbons, red langurs, felids, butterflies and other wildlife, and the potential damage to other key ecosystems.

Three large fires arose inside our research area — one 10 km deep inside the forest, another in the sedge swamp that destroyed our security entrance post, and a third that spread into a massive 3km-wide intern. Our team helped fight this terrible blaze tirelessly for three weeks, saving a large area of valuable forest.
LOOKING TO THE FUTURE

After the dramas and devastation of the 2015 fires, we’re now looking to the future and exploring how we can better combat fires in Borneo in 2016... and beyond.

We’ve already focused on expanding our support for local fire-fighting teams, giving more teams the equipment and personnel they need. We’ll also work hard to increase their technical capacity to detect and fight fires, including the use of our special Quadcopter Drone and new fixed-wing (plane) drone.

We’ve already seen this technology in action, and how invaluable it can be for identifying and surveying fires. We’ve now started training CIMTROP’s Community Patrol Team about safety, handling, mapping techniques, camera settings and software use. Once they’re proficient, they’ll use it in future fire-fighting seasons to spot and tackle blazes quickly, efficiently and safely. This will help us reduce risks as team members will be able to better assess any fire before attempting to tackle it.

Set up in 2002, the Community Patrol Team is made up of local villagers. Thanks to a new boat provided by Borneo Nature Foundation, they’ll travel the length and breadth of the Sabangau River, searching for fires and the people who start them, as well as raising awareness of blazes in the villages. They’ll also continue to monitor and minimise other threats such as illegal logging, dam destruction and electric fishing.

Meanwhile, we will focus on developing and refining techniques for burned forest restoration. This will include:

- Restoring natural flooded hydrological conditions in swamp forests to prevent fire
- Replanting hardy tree species in burned areas
- Targeted research to identify the effects of the 2015 fires
- Tackling the many land management and social issues surrounding these fires

To do this successfully, we’ll need the continued backing and help from all our supporters, both local and international.

During 2016, we’ll continue to investigate the causes behind Borneo’s peat fires. Most blazes are started deliberately in degraded forest areas, sedge swamps, farmland and smallholder plots. By raising awareness, we hope to reduce the number of fires and protect the country’s unique biodiversity.
2005 TO 2015
GIBBON CONVERSATION RESEARCH

NEGATIVE
IMPACT SMOKE FROM FIRES

PUBLISHED
GIBBON RELEASE GUIDELINES

STORYBOOK
ABOUT WILD GIBBONS

16 COMPLETED
POPULATION AND HABITAT ECOLOGY SURVEYS

IDENTIFIED
KEY FACTORS INFLUENCING GIBBON POPULATION DENSITY

WRITTEN
STANDARD OPERATING PROCEDURES

MONITORING POPULATION AT 8 SITES IN SABANGAU

POPULATION INCREASING FROM 2004 NUMBERS SLOWLY GOING UP

2015 FIRES DESTRUCTION

PROTECTING GIBBONS

SPREADING OUR MESSAGE THROUGH EVENTS & SOCIAL MEDIA

HABITATS ARE DESTROYED
A MILESTONE REACHED

As well as being the IUCN Year of the Gibbon, 2015 was an important milestone for us too, as we marked our 10-year anniversary of dedicated gibbon conservation research.

To celebrate, we ran a series of productive events throughout the year, raising our profile and delivering our key messages on social media and on the ground in Palangka Raya.

We wanted to let the world know that, unfortunately, the threat to gibbons in Indonesia remains as high as ever — and that the gibbon population of Sabangau was particularly at risk by the forest fires that raged through the region in 2015.

Dr Susan Cheyne, who directs our gibbon research, explained: “Our research demonstrates that, while gibbons can tolerate some degree of disturbance, forest quality does affect gibbon abundance and there will be thresholds beyond which a forest becomes unsuitable for gibbons. We must understand more about their behavioural ecology in order to determine this threshold to help protect gibbons.”

Threats to population

As part of our gibbon research over the last decade, we’ve monitored the primates’ population density at eight sites in Sabangau. We’ve also kept a keen eye on another site in the former Mega Rice Project area, which is both heavily degraded and prone to fires.

Dr Cheyne explained: “Following past logging disturbance until 2004, the Sabangau gibbon population was slowly increasing. Unfortunately, the 2015 fires destroyed large areas of gibbon habitat, highlighting the seriousness of the threats faced by gibbons and the importance of our continued research and conservation efforts for gibbon protection.”

Key gibbon project achievements:

- 10 years of population monitoring
- Population and habitat ecology surveys in 16 sites
- Identified key factors influencing population density
- Identified negative impact of smoke on singing behaviour
- Contributed to IUCN Population Viability Analyses and guidelines
- Wrote standard operating procedures for habituating and surveying gibbons
ORANGUTANS FORCED TO FLEE

The calamitous forest fires of 2015 were undoubtedly the single biggest disaster we’ve seen in Sabangau since our work began there in 1999.

Borneo Nature Foundation’s flagship orangutan research programme was quick to discover the consequences as part of our ongoing mission to study population density, behavioural ecology and social interactions, and the impact that human activity has on these beautiful creatures.

Director of Orangutan Research Dr Helen Morrough-Bernard explained: “Aside from forest area loss, preliminary observations suggest that there was an initial displacement of orangutans following the 2015 fires into adjacent unburned areas. This suggests that the availability of fruit in the forest may be lower than normal, resulting in a poorer quality diet for the orangutans and a decreased day range to conserve energy.”

Dr Morrough-Bernard added: “Using our long-term datasets for comparison, we’re now undertaking a more rigorous assessment of the impacts of the 2015 fires on the Sabangau orangutan population. These will be of great use in identifying the expected impacts of these fires on orangutans in peat forests across the island.

“Again, these fires highlight the urgency of the threats facing Borneo’s orangutans and the importance of ongoing conservation efforts to help mitigate these.”

A surprising discovery

On a lighter note, our PhD student Ben Buckley and field staff published the first known report of a Bornean orangutan scavenging meat. For the first time in more than 16,000 hours of observation in Sabangau, an adult flanged male orangutan was seen eating a horse-tailed squirrel. Apart from insects, Bornean orangutans are almost exclusively vegetarian, so this unique observation was very surprising — and gives us an important insight into an extremely rare phenomenon.

Protecting the Sabangau Forest in 2015:

- 90 new trees planted on top of dams at Canal Ari
- 22 new double-wall dams built in Canal Udang
- 16 new double-wall dams built in Canal Erman
- 15 new dams built and fixed in Canal Ari
- 1 metal fence built at Canal Baishan
TAKING OUR KNOWLEDGE GLOBAL

2015 saw us share our expertise and improve scientific knowledge through a wide range of assignments stretching to all four corners of the globe.

Our contribution ranged from supporting research projects on red langurs and reforestation to conducting a primate survey expedition to the Bawan Ulin Forest. Closer to home, in Sabangau itself, we continued to develop our research programmes and build local research capacity, with our flagship primate and cat research going from strength to strength.

But whatever we did, and wherever we did it, there was one common mission — to raise awareness of the threat to Borneo’s unique biodiversity and encourage its conservation.

We proudly supported a range of student research projects in 2015, including:

- An investigation into the biology and function of the loud call in the red langur, MSc student, Universitas Indonesia
- Orangutan mother-infant activity patterns and infant development, MSc student, University College London
- Inferring ecological factors from the singing behaviour of the southern Bornean gibbon, MSc student, Oxford Brookes University
- Acoustic surveys of frogs and impacts of human disturbance in Sabangau, MSc student, University of Exeter
- Development of a simple tick-list for monitoring peat-swamp forest habitat condition, MSc student, University of Leicester

Our other work included:

- Beginning a study of false gharial distribution in Sabangau, supported by Fundacion Bioparc and Chester Zoo
- Leading a two-week field module on peat-swamp forests for Masters students from the University of Leicester
- Contributing to the Arcus Foundation State of the Apes II book, with a case study on orangutans
- Supporting two six-week volunteer groups for 24 students from Australia, Canada, the USA and Europe

- Starting to draft a new Guidebook to the Mammals of Borneo
- Rebuilding the Bawan research camp to initiate long-term research and conservation
- Supporting an Exeter University herpetology expedition to Bawan Forest
- Undertaking an expedition to Bawan Forest to conduct primate surveys
- Contributing to the FORINA Central Kalimantan Orangutan Action Plan Workshop held in Palangka Raya

BNF’s directors were also busy in 2015:

- Mark Harrison and Susan Cheyne attended the European Federation of Primatology annual meeting in Rome
- Bernat Ripoll Capilla visited Malaysia for the International Conference on Rainforest Ecology, Diversity and Conservation in Borneo, along with primate scientist Carolyn Thompson
- Helen Morrogh-Bernard began a new Research Fellowship at the University of Exeter at Falmouth, examining orangutan social networks
- Susan Cheyne co-authored the IUCN Best Practice Guidelines for the Rehabilitation and Translocation of Gibbons.
A TOP CLASS EDUCATION

Developing local education initiatives was a key area for BNF in 2015 as we aimed to increase community engagement and raise support for conservation in Sabangau and beyond.

To do this, our first step was to appoint a new Education Team. Next came a series of strategy meetings to establish a clear direction, goals and target audience.

The result was fruitful new relationships with a wide range of local schools and universities, and two clearly defined objectives:

• To increase awareness of Borneo’s forest and biodiversity, as well as the need to protect them
• To communicate the importance of ecosystem services and their benefits to local communities, and promote respect for wildlife and forests by showing the threats they face, focusing mainly on fires and hunting

Our Education Programme will continue to rapidly expand its activities and outreach in 2016, so watch this space!
LESSONS IN CONSERVATION

Some of the many highlights of our educational activities in 2015, included:

- Assisting an education workshop in Palangka Raya, presenting our objectives and networking with Roots & Shoots Indonesia
- Establishing contacts with other organizations to create an environmental education network
- Presenting to 700 students at Universitas Muhammadiyah in Palangka Raya about environmental awareness and conservation
- Hosting a Rainforest Live event in June, using social media to raise awareness about our work
- Supporting English lessons for students at the University of Palangka Raya
- Producing a new video about our research and conservation work
- Hosting a family day for the OuTrop programme team and their families to celebrate 10 years of the Gibbon Research Project

Other notable highlights were:

Joint school camp
In April, we hosted a five-day camp for SMAN 1 Palangka Raya and Cleveland District High School from Brisbane, Australia. Seven teachers and 29 students immersed themselves in biodiversity and experienced conservation at first-hand. Highlights included a cultural trip to a Dayak village, workshops and field demonstrations.

International Orangutan Day community event
On August 19th, we threw a fun party in Kereng Bangkia village, with all OuTrop programme staff and their families taking part. As well as crafts, traditional games and puppet shows, there was educational activity to raise awareness about orangutans, plus a chance for people to share their conservation messages on Facebook.

The Global Initiatives Networking (GIN) Youth Conference
Held in Bali last year, GIN brought together young people from across the world to discuss key environmental issues. We played a major part, holding sessions on tropical forest conservation using OuTrop programme as a case study. It was such a success, we’re now planning to host the 2016 conference in Palangka Raya.
EMPOWERING LOCAL TEAMS

Building a skilled team of local staff is a vital way to help Indonesia empower its people to protect its rich natural resources. It’s also crucial for the long-term success of our research and conservation activities, and is therefore a key Borneo Nature Foundation project focus.

In 2014, we developed our Staff Development Programme concept, which we then rolled out across our local field staff in 2015. This concept has already helped us identify a number of skill gaps among our staff — enabling us to develop more targeted and effective individual training programmes.

In 2015, we appointed two new Research Coordinators from the local village of Kereng Bangkian.

Azi, OuTrop Orangutan Research Coordinator

Azi is one of our most experienced orangutan research team members. He started work for Borneo Nature Foundation in 2010, since when he has worked mainly on our orangutan behaviour project. He explained: “I’m happy to become a Research Coordinator as it gives me more opportunity to learn about all aspects of the project, from data collection and entry into electronic databases, to developing monthly objectives, coordinating research schedules and report writing.”

ABDUL AZI, Orangutan Research Coordinator

After joining us in 2012, Azi initially worked on our red langur project — hence the ‘R’ for ‘red’; the species’ local name. He then widened his focus to assist across our research projects in Sabangau. His rapidly developing skill base, obvious potential and affinity for gibbons make him ideally suited to his new role.

ABDUL AZI K, Gibbon Research Coordinator

Responsible for coordinating all day-to-day aspects of specific research areas in the field, these new appointments mean we’ve now recruited seven local research coordinators from Kereng Bangkian.
SHARING OUR WORK

We published over 15 scientific articles in peer-reviewed journals in 2015. By sharing our findings with a wider audience like this, we can continue to help protect Borneo’s biodiversity and also contribute to conservation efforts further afield.


ACKNOWLEDGEMENTS

QuTrop’s work in Sabangau wouldn’t be possible without the support of our incredible network of collaborators – from Indonesia to all over the world.

Our research in Sabangau is conducted in collaboration with, and sponsored by, the Centre for International Cooperation in Sustainable Management of Tropical Peatland (CIMTROP: now UPT Laruboratorium Lahan Gambut) at the University of Palangka Raya in Central Kalimantan, Indonesia. We’re beyond grateful to CIMTROP-UPT – and in particular their late Director, the remarkable Dr Suswido Limin – for this support.

Words cannot express our thanks to the CIMTROP Community Patrol Team, who work to protect the Natural Laboratory in Sabangau. Together with our local research staff, they fought the devastating 2015 forest fires. Without their commitment and bravery, our research camp and a much larger area of forest would’ve been lost.

We’re linked to the following academic institutions, whom we thank for support in 2015:

- The Department of Geography, University of Leicester
- The Primate Research Group, Oxford Brookes University
- The Durrell Institute of Conservation and Ecology, University of Kent
- The College of Life and Environmental Science, University of Exeter

We’re extremely grateful to the following organisations for support in 2015:

- The SIOLT Foundation (Save the Orangutan and the Orangutan Land Trust)
- The Arcus Foundation
- The Orangutan Project
- US Fish and Wildlife Great Apes Conservation Fund
- Orangutan Appeal UK
- Ocean Park Conservation Foundation Hong Kong
- Orangutan Outreach
- SSE
- The Bioparcs Foundation
- Orangutan Conservancy
- Clouded Leopard Project/Point Defiance Zoo
- The Mohamed bin Zayed Species Conservation Fund
- The Gibbon Conservation Alliance
- Oklahoma Zoo
- Chester Zoo
- The AAZX Utah and Rocky Mountain Chapters.

Finally, we’re hugely grateful to the communities and administrations of:

- Kereng Bangkerai, Kecamatan Sabangau, Kotamadya Palangka Raya and Provinsi Kalimantan Tengah
- Dinas Kehutanan Kalimantan Tengah
- The State Ministry for Research and Technology (RISTEK)
- The University of Palangka Raya
- Nicholas Cliffe & Co.
- Our many scientific colleagues
- All the volunteers, interns, research assistants and students that contributed so much to our efforts in Kalimantan

GET INVOLVED

Join us

We offer challenging and exciting experiences of field research and conservation in Borneo during our annual restoration activities. We also have internship and studentship opportunities available on a competitive basis, for young Indonesian scientists.

Donate

Working with our partners CIMTROP, we restore and protect the Sabangau Forest, one of the most important rainforests left in Borneo. Donations make our conservation efforts a reality and we can’t help protect Borneo’s biodiversity without ongoing support. You can help support this work with a one-off or regular donation and help increase the impact of our conservation work.

Advocate

Help us share our conservation messages! We share regular updates on social media and the BNF blog about our research and conservation activities. By sharing posts from our Facebook and Twitter pages, you can help us reach more people around the world.

Follow us

Twitter: @BorneoNature
Facebook: BorneoNature.Fdn
Instagram: borneo.nature
Website: borneonaturefoundation.org

For more information on these opportunities, or if you have any questions, please email us at info@borneonature.org