

Gunung Palung Orangutan Conservation Program



July 2019

Issue: 79

Code RED

An e-newsletter from your friends in West Kalimantan

Dear Friends and Supporters,

July has been the amazing whirlwind that is my annual trip to Indonesia - lots of meetings, catching up with familiar faces and connecting with new ones - this refers not just to the humans!

This issue of *Code Red* features an article by Simon Tampubolon, as he joined the One Forest Project 12-day Field Course at Cabang Panti Research Station. Our second article features Amy Scott, who writes about long-term behavioral data in regards to orangutan sociology and how our extensive database has challenged our preconceived ideas of how orangutans may interact. We recently published a journal article in the [International Journal of Primatology](#) looking at

In This Issue:

One Forest Project Field Course

-

Historical Data Leads to New Discoveries

-

Specially Designed for GPOCP 20!

-

Community Leaders Influencing Land Management Policy

-

male orangutan threats to infants.

On our sidebar we have a special treat from a fantastic London illustrator, made just for GPOCP. We also highlight Gunung Palung National Park's award in the Indonesian National Parks festival recently held in Bali!

Sincerely,



Cheryl Knott, PhD
Executive Director

[Gunung Palung Orangutan Conservation Program \(GPOCP\)](#)

One Forest Project Field Course

By Simon Tampubolon, GPOCP Environmental Education Field Coordinator

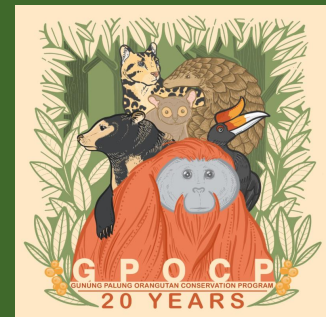
Held annually at Cabang Panti Research Station since 2014, One Forest Project, in collaboration with Gunung Palung National Park (GPNP), have just led a fantastic and much beloved field course where they taught applied research design and analysis, field techniques, ecology, and botany. The course is intended for local and regional capacity building and included participants from ASRI, IAR, Titian, Planet Indonesia, Orangutan Foundation, staff from Gunung Palung National Park, as well as representatives from five other protected areas in Borneo and throughout Indonesia. GPOCP was also honored with an invite, where we sent Simon Tampubolon, our Kayong Utara Environmental Education Coordinator, and Erik Sulidra, our Database & Animal Protection Coordinator.



GPNP Wins 3rd Place at
National Parks Festival

Specially Designed for GPOCP 20!

[Natelle Quek](#) is a London-based illustrator and has kindly designed a series of beautiful images to celebrate GPOCP 20 years as an *in situ* conservation organization!



*GPOCP 20 design by
Natelle Quek.*

"I'm so excited to have this opportunity to illustrate for GPOCP's 20th year anniversary! I believe that art is a powerful tool to bridge that societal gap between the natural world and our appreciation for it, and I hope that these illustrations will not only bring joy, but also awareness for the wonderful wildlife and GPOCP's important conservation and education programs. The animals illustrated for this project are close to my heart, as I was born in Malaysia, on the island of Borneo.

The 2019 field course group at Cabang Panti Research Station.

The course presenters (and organizers) were Professor Andrew Marshall (One Forest Project) from the University of Michigan teaching in biological anthropology, tropical ecology and conservation biology, Mr. Endro Setiawan from GPNP and head of Cabang Panti Research Station, teaching para-taxonomy and botany, and Mr. Kiki Prio Utomo, from Tanjungpura University, who teaches in environmental engineering specializing in hydrology and limnology conservation.



Lectures from hydrology expert Mr. Kiki Prio Utomo about the water, by the water.

The course kicked off at the GPNP office in Ketapang with two lectures; an Introduction of Tropical Rain Forests by Dr. Marshall and Capturing Biodiversity through Photography by Endro Setiawan. The following day we set off towards the Cabang Panti Research Station in the heart of GPNP. After a 2-hour car journey from Ketapang to the small village of Tanjung Gunung, we started our 5 hour hike - making pretty good time for such a large group! What greeted us first was the amazing suspension bridge above crystal clear water - somewhat like a Tarzan bridge that preludes to the adventures that surround this rainforest research station.

The forests in Southeast Asia are one of the oldest forest systems on earth, and is home to incredibly unique wildlife and plants. We must never forget that we share our home with millions of species, and that biodiversity is what makes nature so wonderful and awe-inspiring, an invaluable resource we cannot afford to lose."

Thank you Natelle for honoring us with your amazing illustrator skills!



*Stunning sunbear
Natelle designed for
GPOCP fundraising!*

Natelle's designs and others will soon be available as T-shirts to support our projects-stay tuned!

**GPNP Wins 3rd in
National Parks
Festival**

This year the Indonesian National Parks Festival was held in Bali. Gunung Palung National Park (GPNP) was there to showcase the area and their conservation efforts, which includes their collaborations with GPOCP! We are very



Applied plant ecology and identification lectures by Mr. Endro Setiawan, from Gunung Palung National Park.

The field lectures included plant ecology and vertebrate tropical rainforest ecology, an introduction to vertebrate surveying, camera trapping, tracking animals and footprints, evolution and taxonomy of plants, plant characteristics, plant photography, introduction to scientific research, orangutans, sampling design and statistical basis, hydrology and water conservation.

The most challenging aspect to learn was the botany. We were introduced to 15 plant families and learned their general characteristics. We were taught to identify plants by looking at the types of leaves, the location of leaves, stipule, sap, and smell. At the end of that module, a plant identification quiz was held. The staff prepared a variety of plant samples by taking stalks and leaves and placing them on a table. Each participant was given time to determine the family of each plant. Most of the participants were able to identify 10 of the 15 plants, with the highest score being 13.



Tropical rainforest ecology field lecture by Dr. Marshall

happy and proud to hear that GPNP won 3rd place for best informational stand! Well done all!



GPNP stand at the Indonesian National Parks Festival in Bali, 2019.

GPOCP has worked with GPNP for over 30 years, so we provided two info-graphics highlighting our conservation goals, along with brochures, stickers, artisan Non-Timber Forest Products such as mats, bags and bracelets, and Customary Forest products such as coffee, honey and fish crackers.



GPNP festival team with their award at the National Parks Festival in Bali.



The next module that was very new for us was on the topic of hydrology delivered by Mr. Kiki Prio Utomo from Tanjungpura University Faculty of Engineering. The biggest take away from that course material was that forests greatly affect rainfall in and around all forest areas. Based on the results of a 2015 study, when large fires occurred throughout Kalimantan, rainfall recorded at Cabang Panti Research Station was very high in contrast to other regions, thus preventing catastrophic damage to our area.

Learning about tropical rainforests whilst literally in the midst of one of the last wildlife strongholds in Borneo was beyond inspiring and provided a relaxing atmosphere to learn and and build great camaraderie with the other participants. The main focus of the field course was about scientific research. We were taught research design from formulating a research question, making a hypothesis, and collecting and analyzing field data. During the last few days, we were given an assignment and broken into 4 groups with different research topics in order to apply our newly gained skills and knowledge. First, each group discussed research topics and presented research proposals to the lecturers. One project was about moths, one about epiphytes, another on butterflies, and one about hydrology. The following two days we put our field techniques to the test by collecting samples and analyzing the data obtained. Next, we presented the results of our mini research projects. The projects demonstrated the complexity of fulfilling a project from theory to data collection to a final presentation. And though we had to consult Dr. Marshall on numerous occasions, we all learned so much about applied research design, including field techniques, teamwork, and adaptability.



Tree identification training using leaves and tree structure.

amazon smile

Choose GPOCP as your Amazon Smile recipient and 0.05% of your sales will go directly to us.

Forward to a Friend

*"A small body of
determined spirits,
fired by an
unquenchable faith
in their mission, can
alter the course of
history."*

Mahatma Gandhi

To our surprise and delight, we got to see some of the more unorthodox inhabitants of Cabang Panti as well, such as Edi, the wild boar. Edi lives in the forests around the research station and we saw him moving around the edges of camp, and sometimes even under the main building at night to shelter from the rain! Another friendly inhabitant was the monitor lizard, named Hugo, who came by at night. We were also joined by bigger-than-expected fish and even some turtles when we swam in the river!



*Group presentations on mini research projects. Photos
© Simon Tampubolon*

In our spare time (usually at night) we were never without things to do. We learned from some of the field assistants how to weave bracelets from raw materials and to carve *canarium* fruit seeds into necklace charms. We played jenga, chess, and table tennis, as well as sang and played the guitar when we weren't helping the kitchen staff prepare food. We forgot about our gadgets and stress from the cities, and enjoyed being present in the simple beautiful life of the forest and each other's company.

After our time in the forest, and our spirited hike back down the mountain - we had to say good bye to our new found friends and colleagues. It was bittersweet and nostalgic, as the field course had felt a little like summer camp with lots of laughs, learning and fun! We can't wait for next year, and we are very thankful to One Forest Project and Gunung Palung National Park for hosting this great field course!

Historical Data Leads to New Discoveries

By Amy Scott, PhD Candidate at University of Boston

Our lab investigates how reproductive strategies impact the sociality of orangutans by utilizing long-term behavioral data from the orangutans in Gunung

Palung National Park. Because primates tend to be highly social mammals, they are ideal for studying how ecological and social factors impact the size and structure of groups. Reproductive strategies, such as searching for mates or avoiding potential infanticidal males, can impact grouping patterns. Infanticide is the purposeful killing of an infant of the same species. It is a common reproductive strategy by male primates in which a male kills another male's infant, resulting in that mother being able to conceive again sooner than she would have if her offspring had lived. This behavior can lead to more offspring by the infanticidal male because he will be able to mate with that mother sooner than he would have if the infant lived. By our standards, this may seem harsh, but an important principle in natural selection is that genetically inherited behavioral traits that lead to more offspring will be passed on to the next generation at a higher frequency and therefore spread through a population.



Three-year-old Bayas watches her mother, Bibi, eating termites. Mother orangutans with younger offspring spend less time with male orangutans than mothers with older offspring or females without offspring.

Female primates employ a variety of strategies to reduce infanticide risk. For example, chimpanzees exhibit a 'maternity leave' behavior in which mothers with new offspring spend more time alone than usual. This behavior can serve to protect new offspring. Because orangutans are semi-solitary, only spending about 10% of their time in a social encounter with another orangutan, a female with young offspring could employ a similar male-avoidance behavior in order to protect her offspring. Orangutans are hypothesized to be vulnerable to infanticide for a variety of reasons and we suspect that there was an infanticide event at Cabang Panti in 2015 (See [Code](#)

[Red vol. 40](#) for more details). So, we decided to analyze long-term social data in order to investigate whether mothers with young offspring avoid males.

We examined all of the social interactions between male and female orangutans in the Cabang Panti database from 1994-2003 and 2008-2016. (The break in data collection is because the field site was closed due to regional safety concerns, including the threat of illegal logging.) We found that mothers with infants younger than 6 years old interacted with males less frequently than did mothers with offspring over 6 years old and females without offspring. Likewise, when an interaction between a female and a male did occur, mother with offspring under 6 years old spent less time with males than did mothers with offspring over 6 and females without offspring. Finally, the average distance between mother and offspring was closer when they were interacting with a male than when the mother and offspring were alone or interacting with a non-related female. These three pieces of evidence indicate that females alter their social interactions in order to protect offspring from males. These findings add to our understanding of orangutan sociality, and more broadly, contribute to a deeper understanding of how social and reproductive factors influence primate sociality.



In this more relaxed moment of following orangutans, Dang (field assistant) is able to take a moment to sit and get off his feet, while still collecting feeding data on an Ipad. Can you spot the two orangutans eating mangoes in this photo? Photos © Amy Scott.

In scientific research, the strength of your finding is hugely dependent on the amount of data you analyze. Because orangutan interactions are infrequent, it takes a long time to amass enough data on social interactions to systematically study them. For this study we

analyzed 20 years of data collection - and collecting this data was no small feat!

This research is only possible because teams of field assistants, volunteers, students, post-docs and managers have been collecting and organizing this data day in and day out for 20 years. Many others are involved in the logistics that have enabled the project to run in this remote rainforest location. And even more individuals and organizations have donated funds to support the conservation and research of GPOCP. This exciting finding that female orangutans are indeed avoiding males when they have younger offspring is only possible because of the long-term nature of the project's database. We can only imagine what more we will learn about this endangered ape in the next 10 or 20 years as continued data collection enables us to answer more questions about their cryptic lives.

Gunung Palung Orangutan Conservation Program (GPOCP)

<http://saveGPorangutans.org>

savegporangutans@gmail.com



Orangutan Photographs © Tim Laman
All other photographs © GPOCP