Dear Friends and Supporters,

This month, I am thrilled to share a new publication in the journal, Plos ONE, entitled, Flanged Males have Higher Reproductive Success in a Completely Wild Orangutan Population. Led by our Project Scientist, Dr. Amy Scott, this paper was the product of her dissertation research at Boston University conducted in Gunung Palung National Park. By analyzing paternity from genetic material in fecal samples, we found that flanged male orangutans have higher reproductive success than unflanged males. This finding is fascinating and corroborates what we have observed behaviorally, that females prefer to mate with flanged males. This has implications for the evolution of male bimaturism (two different kinds of adult males) and sexual selection. It is open access, so check it out here!

I was excited to have some guest speakers in my Wildlife Conservation course this month. Our Research Director, Wahyu Susanto, and Hutan Desa Program Officer, Robi Kasionus, Zoomed in to discuss their experiences with conservation in Indonesia. Students loved hearing from these experts and will consider what they learned as they develop their course projects.

In this issue of Code RED, we hear from Hendri, our Hutan Desa Coordinator. He discusses one aspect of our passive monitoring efforts in our Hutan Desa (Village Forests) – camera traps. The wildlife we have detected on camera traps in these forests demonstrates their importance as biodiverse habitats that need to be actively monitored and protected to ensure

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Click here to read the February 2024 National Geographic article, Borneo’s Wild Green Heart, featuring Gunung Palung National Park and our work!
these animals have a home and that the ecosystem can thrive in perpetuity.

You will also hear from Tia Mottram, a volunteer research assistant that has come to us from the UK, as she navigates her new and exciting world at the research camp. It is always wonderful to hear how someone new experiences the forest for the first time.

Wishing you all a happy close to February and a warm entrance to March.

Cheryl Knott, PhD
Executive Director
Gunung Palung Orangutan Conservation Program (GPOCP)

Camera Trapping For Conservation in Village Forests
By Hendri Gunawan, Village Forest Coordinator

One of the main strategies GPOCP/Yayasan Palung uses for conserving orangutan habitat is the Hutan Desa, or Village Forest, initiative. We help local communities in the greater Gunung Palung landscape secure legal rights to the forest land they have traditionally tended to. Once this formal recognition is achieved, we work with the community to develop their capacity to sustainably manage the forest.

We do this by training the Village Forest Management Boards in SMART patrolling methodology, biodiversity surveys, and, starting in 2022, we have initiated passive monitoring of the village forests using technology. Yayasan Palung and Village Forest Management Boards have installed various types of monitoring equipment in village forest areas both in the Peat Protection Forest landscape of Sungai Paduan which consists of Padu Banjar Village Forest, Pulau Kumbang Village Forest, Pemangkat Village Forest and Nipah Kuning Village Forest. We have also installed these monitoring devices in the Production Forest of Sungai Purang, which consists of Penjalaan Village Forest and Rantau Panjang Village Forest. In all forests we installed camera traps, bioacoustic recorders, rain gauges and temperature loggers. In 2022, we installed the monitoring equipment in the Pemangkat Village Forest and Nipah Kuning Village Forest areas. In 2023 we added various types of monitoring devices in the Penjalaan Village Forest and Padu Banjar Village Forest areas and in 2024 it will be continued in the Pulau Kumbang Village Forest and Rantau Panjang Village Forest.
Jemi Bubarjo and Rizal, members of the Pemangkat SMART patrol team, check camera traps in the Pemangkat Village Forest.

The installation of camera traps in village forests has been especially successful for making observations of wildlife. Camera traps make it easy to assess presence of wild animals that typically avoid direct encounters with humans. The camera traps record videos that we use to determine species diversity and relative abundance of animals in village forest areas. A big advantage of using a camera trap is that observations can be done continuously every day and don't require the presence of people to make direct observations.

Before installing the various monitoring devices, we first provided training to the Village Forest Management Board (LPHD) in each village on how to install the various monitoring devices and then how to collect data after their installation. Our goal in providing training is to enable the LPHD members to directly monitor their own forests, creating additional pride and building their forest stewardship. This increased capacity means that camera trap installation and data collection can be directly carried out by LPHD and then passed to Yayasan Palung to process and analyze the resulting data.
Juhari, a member of the Nipah Tuning Management Board, and Robi, our Village Forest Field Officer, check a camera trap while Hendri looks on.

In January 2024, LPHD in Desa Pemangkat and Desa Nipah Kuning retrieved data on various monitoring devices within the village forest area. In the Pemangkat village forest, where two camera traps are installed, we captured videos of 2 adult orangutans, 2 sun bears, 1 marbled cat, 1 mouse deer and other animals. Meanwhile, in the Nipah Kuning village forest, we got videos of 4 orangutans, 2 sun bears, 1 marbled cat and various other types of animals.

An elusive clouded leopard caught on video in a Village Forest by our camera trap.

Previously in 2023 in these two village forests, several camera trap checks in Pemangkat Village Forest caught 2 orangutans, while in Nipah Kuning village forest, 10 orangutans, hornbills, partridges and other
animals were identified. Orangutans’ habit of descending and walking on the ground can be caused by factors such as forest destruction which directly affects tree density and canopy connectivity, forcing orangutans to use the ground to travel.

Looking at the results of our camera traps so far, the important takeaway message is that these forests do in fact harbor some incredible biodiversity. This just confirms that all of us need to protect the forest area from illegal activities such as logging, forest fires, and hunting. Sustainable area management needs to be carried out to maintain the function of the Village Forests and maintain healthy animal populations so that forest ecosystems remain balanced. With the proper level of energy invested in these Village Forests, rare and iconic critically endangered species can persist, all while meeting the needs of local communities.

![An orangutan travels on the ground in a Village Forest, captured on our camera trap.](image)

**Cabang Panti: A Wild but Welcoming Beginning**

*By Tia Mottram, Volunteer Research Assistant*

It has forever been a goal of mine to be involved in orangutan conservation. Travelling over 7000 miles from Liverpool, England, I am now lucky enough to call Gunung Palung National Park my current home. My trip to the forest began with a 2 hour car journey to Sukadana. As each mile passed by, the breathtaking views of the mountains became closer and closer. At that moment I was filled with gratitude and excitement for what was to come. Little did I know, I was in for a rather long journey ahead of me. The sky was clear and it felt like a great day to head to camp by boat up the river. Around 1.5 hours into the journey, we were faced with an engine fault which meant we could no longer travel and were isolated on the boat. Whilst we waited for help, I was introduced to the tranquil sounds of nature surrounding me which put me into a comfortable nap.

After 5 hours of being stuck, we were finally rescued and continued our journey in the darkness with the help of our headlamps and the stars above. The atmosphere transformed with the presence of nocturnal beings surrounding us and felt as though we were on a night safari excursion with various species hopping on the boat for a ride. At one point, I counted 6 different species of spiders on my body along with other insects. The field of conservation isn’t always smooth sailing and despite the obstacles we faced, the experience created a great story to tell whilst also preparing me for the unpredictability of forest life.
My camp cabin is situated directly facing the river with soothing sounds of the waterway flowing, helping me sleep peacefully at night. In the morning, the gibbons take the role of a natural alarm clock where they sing a series of song-like vocalisations, reminding me of whom I share my new forest home with. The team at the Cabang Panti Research Station consists of welcoming, hard-working individuals who always have big smiles on their faces. In my first week of joining the team, I was also greeted by a frog at my camp who returned for a second night in the same spot to make sure I settled in.
The friendly frog who welcomed Tia to her camp.

There are many flying friends in the forest that differ in morphology. Throughout the daytime, butterflies surround the fragrant smelling laundry and flutter around camp offering great photo opportunities if you are prepared to be patient. During my time in Cabang Panti, I have developed a strong curiosity about the moths. Almost every night I witness a different species, which sparks my interests further. I have been fortunate to see extremely large individuals who are friendly enough to sit on my hand for me to observe. GPNP is extremely diverse when it comes to winged insects and I am constantly amazed at the abundance of such species in the forest.
So far, I have spent 6 weeks in Cabang Panti learning new skills every day. The duties of my role involve different tasks between the lab and the field, which share equal importance. Field days include orangutan search missions, a series of orangutan follow days and phenological monitoring. My favourite moment during an orangutan follow day was when we were monitoring Mother Bibi and juvenile offspring Bayas. I sat on the forest floor leaning against a tree taking GPS data with a perfect view of Bibi eating leaves, whilst Bayas was building confidence nearby in the trees practising his swinging techniques. Occasionally, he would appear to be intrigued by our presence and would look right at us. Noticing how the young ape appeared to be interested, reminded me of how similar we are to the species. I had a moment of realisation where I thought “wow, I am really here studying wild orangutans in Borneo”. For many years of my life I would dream of such experiences, and now it’s my day-to-day reality.
Tia’s view of Bibi foraging for her next meal while she observed taking GPS data.

Witnessing special moments in the forest with orangutans and other wildlife makes all the lengthy paperwork, 4 flights, delayed boat journeys and countless hours in the humid forest worth it. Each day I feel extremely grateful that I can experience living amongst unique flora and fauna in GPNP. Already in my short time here I have experienced sightings of incredible species including red leaf monkeys. I may be far from my comforts back home in England but like the forest, we learn to adapt to change. When we put ourselves in situations where we are able to evolve, we allow ourselves to transform into better versions of our old selves. I find myself doing this by learning new skills, experiencing unique moments, and meeting new friends at camp and in the forest along the way. This is only the beginning of my time here with the Gunung Palung Orangutan Conservation Program and I look forward to my remaining months of learning and adventures in GPNP.
Management of Cabang Panti Research Station is conducted by the Gunung Palung National Park Office (BTN-GP) in collaboration with GPOCP/YP. Scientific research is carried out in conjunction with the Universitas Nasional (UNAS) and Boston University.
Nature is not a place to visit. It is home.

-Gary Snyder