Dear Friends and Supporters,

I write this letter to you all from Yale University, where I am spending the fall semester as a Bass Distinguished Visiting Environmental Scholar. I'm honored to have been awarded this position at the Yale Institute for Biospheric Studies. I am building connections here with colleagues and gaining information that will help our efforts to study and conserve wild orangutans in Borneo.

I've written the first article this month about my time spent in West Kalimantan, Indonesia over the summer. It was a joy to be back in Gunung Palung National Park for the first time since 2019 and spend time with our research and conservation teams. Here, I share some of our experiences and photos, particularly our trip to visit some of the conservation activities that surround the National Park.

The second article comes from student researcher, Seno Wicaksono. Seno joins us from Universitas Nasional in Jakarta, and is currently conducting six months of research for his undergraduate senior thesis. He writes about his research objectives and a recent experience presenting to junior high school students about orangutan field research.

I wish you all a happy and healthy October!

Sincerely,

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

IN THIS ISSUE:

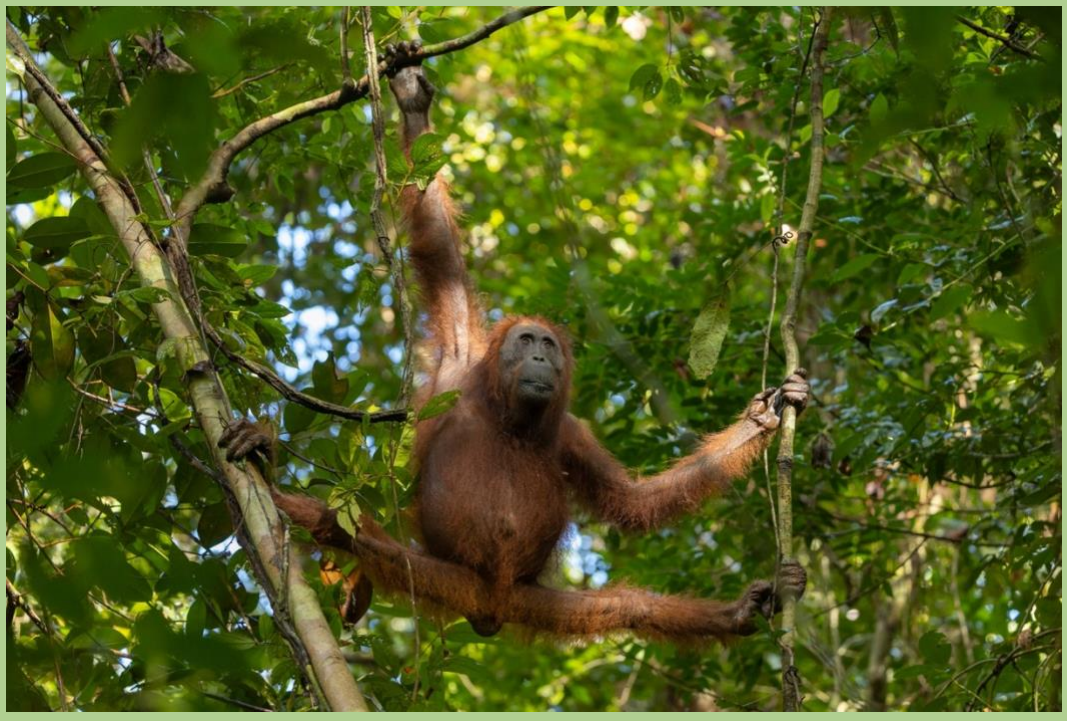
Back to Gunung Palung

By Cheryl Knott, Executive Director

A cacophony of Borneo's distinctive sounds, from the singing duets of the gibbons to the high-pitched whir of late afternoon cicadas. The damp, earthy smell of the rainforest cycling through its rapid phases of decomposition and regeneration. The light penetrating through the top of the canopy, revealing the soft orange fur of a juvenile orangutan following his mom along giant tree branches in search of fruit one hundred feet up. These are some of the senses and scenes that filled my days this summer as I visited the Cabang Panti Research Station in Gunung Palung National Park, accompanied by my family, students, and team members. This was a milestone year – my first visit in 3 long years because of the global pandemic, and the 30th anniversary of my first trip to the site in 1992. It was also our first time seeing the newly rebuilt research station at Cabang Panti, as well as the new Rangkong River area camp, in person. We were truly amazed at this investment in the research station's future and grateful to the National Park leadership and staff for their vision and allowing us to continue to be part of this most special of places.

The Cabang Panti Research Station Family, August 2022.

Among the most followed orangutans this summer was the habituated mother-offspring duo of Bibi and Bayas. This has been one of the most researched pair of orangutans at the site over the last decade. During non-invasive focal follows, the team was able to test novel orangutan surveying methods, and implement new sampling and laboratory techniques. Stay tuned over the comings months as we share new observations with you through the voices of our team of students and scientists.



Adult female orangutan, Bibi, shows her extreme flexibility. Photo © Tim Laman.

After spending several weeks at the research station, one of my main objectives of the summer was to visit some of the more remote areas surrounding GPNP where many of our most important conservation activities are being carried out by Yayasan Palung/GPOCP staff. As we prepared to leave the research station in mid-August, the river water level was high enough that we were able to take a small boat out of the forest, as opposed to walking out through the village – my first time in many years. Accompanying me was my daughter Jessica Laman, Program Coordinator Natalie Robinson and PhD students Zoe Albert and Frank Short, under the capable hands of boatmen Aceng (National Park Ranger) and Udin (Cabang Panti Camp Assistant). Traveling downriver in a small boat is a magical way to see the wildlife and botanical splendors that the Bornean rainforest harbors. We were not disappointed as we saw no less than 5 groups of proboscis monkeys and the silvered langur, rarely seen at this site. These are the types of sightings that we had 30 years ago – if we were lucky! After the scourge of forest fires and illegal logging in the 1990s that ravaged this river, it is so heartening to see these populations of proboscis monkeys thriving again. It is a tangible sign that the protection and conservation efforts that have targeted this region are paying off.

(Left to right) Pak Aceng, Zoe, Jessica, Natalie and Frank take a break during our boat journey down the Air Putih River, Gunung Palung National Park.

After a splendid trip downriver, we spent the night at our Bentangor Environmental Education Center in the village of Pampang Harapan. Almost the entire Yayasan Palung (YP) conservation staff was there to meet us and show us some of their projects. We headed out the next morning to the village of Pemangkat, in Simpang Hillir subdistrict, joined by YP Field Director Pak Edi Rahman, Customary Forest Coordinator Hendri Gunawan, Customary Forest Field Officer Robi Kasianus, and Sustainable Livelihoods Field Officer Pak Asbandi. We stopped first at the Pemangkat government office to pay our respects to the head of the village. After that we were off down a bumpy dirt road to the home of the Head of the Pemangkat Customary Forest Management Board (LPHD), Pak Hendra, to meet their SMART Patrol team. SMART (Spatial Monitoring and Reporting Tool) is a free software that enables local patrollers to track signs of both conservation threats and biodiversity.

Pemangkat field team in front of the official sign declaring this a Customary Forest (Hutan Desa).

The goal that day was to install a series of monitoring devices in the Customary Forest (Hutan Desa) Alam Hijau, Pemangkat to help the LPHD manage their forest. To get there, we rode motorbikes to the end of the small village road, then trekked an hour and a half into the forest, mostly along wooden planks previously used by illegal loggers. Once arriving at the first transect, we scouted out locations and installed two camera traps, one bioacoustic recorder, one temperature logger and one rain gauge. This will allow our project to passively monitor biodiversity and any illegal activity within the Hutan Desa. We saw many tree trunks bearing the claw scratch marks of Malayan sun bears and a plethora of pitcher plants – signs that this forest is an active home for endangered species. A recent SMART Patrol in the neighboring Hutan Desa of Nipah Kuning found a mother-infant pair of orangutans. Check out the video here. It's exciting to see orangutans and other wildlife living safely in protected Hutan Desa, and motivates LPHD members to continue safeguarding these important community-managed forests.

GPOCP/YP team with members of the Alam Hijau, Pemangkat, SMART Patrol team, and the new camera trap that will be used for monitoring biodiversity and illegal activity.

Environmental education was GPOCP/YP's first program and still forms an important part of our vision to foster a human community that is aware and motivated to conserve orangutans, their habitat, and biodiversity. Thus, the next day we were excited to have a chance to visit an elementary school in the town of Sukadana. After meeting with the school's principal, we headed over to several joined classes of 5th graders to watch the YP Environmental Education Team in action as they performed a puppet show. We laughed along with the children at the antics of the mother orangutan, red leaf monkey, gibbon and hornbill as they answered the questions posed by the baby orangutan, "Pongo". The children ended the day with a sing-along to Yayasan Palung's original signature song *Si Pongo*.

School children enjoy a puppet show teaching them about why orangutans, and other endangered species, need forests and our protection.

After a meeting with the Environmental Education Team staff on the beach in Sukadana, we headed back to Bentangor for a weaving workshop. Artisans from the local district of Kayong Utara taught young children to weave *tikar* (mats) from *Pandanus* leaves as part of the “Goes to School” program. We also had our first peak into the newly rebuilt roadside gallery at Bentangor, selling the wide variety of handicrafts made by artisans that participate in our Sustainable Livelihoods program. We ended the day with a tour through our “mini forest” that showcases forest plants that are important sources for the non-timber forest products that form the basis of many of the Sustainable Livelihood artisans' work.

Pak Asbandi and Samad show off our newly rebuilt Artisan Roadside Gallery at Bentangor, selling products made by Sustainable Livelihood artisans. Our previous gallery was destroyed in the major flood that occurred last year.

Through our radio program we can bring our conservation message to thousands of local people. We were thus honored to join Sustainable Livelihoods Field Officer Abdul Samad as guests on the Kayong Utara Radio (Radio Lembaga Penyiaran Publik Lokal Radio Kayong Utara). The topic of the radio show was Nature Conservation Day (Hari Konservasi Alam Nasional), focusing on the theme "Restoring Nature to Build a Prosperous Society". Samad, Natalie and I answered questions posed by the radio host about the mission and vision of Yayasan Palung. Through an engaging set of questions and answers, we talked about the various activities YP carries out to help nature and wildlife through initiatives that support and work with local communities.

Samad, Cheryl and Natalie (left to right) prepare to go live in the Kayong Utara Radio broadcasting studio. Jessica Laman and Ranti Naruri (Sustainable Livelihoods Manager) provide a supportive in-person audience in the back.

Our next stop was to see Sustainable Livelihoods in action. Along with Samad and Sustainable Livelihoods Manager, Ranti Naruri, we visited the Meteor Garden Demplot (demonstration plot) in the village of Pampang Harapan, just down the road from Bentangor. We met with Pak Ishak (who goes by the name Dat), head of the Meteor Garden organic farming group, who told us how he had formerly participated in illegal logging to supplement his income but then was inspired, through his contact with Yayasan Palung, to form a sustainable agriculture group in 2017 with his friends and neighbors. We even enjoyed a delicious lunch full of eggplants, grown right on his land! Touring the gardens, in the shadow of Gunung Palung, we learned how Pak Dat and other farmers plan out their gardens, what kinds of crops grow best in this soil, and how they make organic compost and fertilizer.

Pak Dat stands in his field growing eggplants with organic fertilizer as a sustainable livelihood. The rolling "Sukadana Hills" of GPNP can be seen in the background.

The late afternoon brought us to the village of Tanjung Gunung to see the brand-new aquaculture ponds. This is our jumping off point for the long walk to the Cabang Panti Research Station. Yayasan Palung has supported this newly established fish farming group to build a large, above ground pond to raise and spawn tilapia. The group members, experienced fisherman, told us of their hopes to build additional ponds to further their ability to produce tilapia for the local market. It was impressive to hear about the continual work of the Sustainable Livelihood staff to introduce conservation initiatives, such as this one, to Tanjung Gunung, helping to alleviate pressure on the National Park from other activities.

Yayasan Palung staff and members of the Tanjung Gunung Aquaculture Cooperative examine newly built fish ponds.

It was such a rewarding trip to be able to see the hard work of our conservation teams in action, some of which I've only been able to hear about since my last visit in 2019. It was especially gratifying to be able to talk to so many local people. Observing their commitment to conservation and hearing them voice their desire to protect their forests, and the orangutans that live in them, reinforced my own resolve to continue our work. I can see that these program are having long-term impacts that change people's lives, which gives me hope that humans can co-exist alongside wildlife and wild places.

Studying Forest Structure and Orangutan Nests

By Seno Wicaksono, Student Researcher

My name is Seno Wicaksono. I am a student researcher from Universitas Nasional (UNAS) in Jakarta, Indonesia. Thanks to support from the Gunung Palung Orangutan Conservation Program/Yayasan Palung, I am conducting research for my senior thesis in Gunung Palung National Park. More precisely, I am conducting research in two areas in the Park, namely at the Cabang Panti Research Station and the Rangkong River research area. I have been very proud and lucky to see orangutans in their natural habitat on the island of Borneo.

Gunung Palung National Park is an area with high biodiversity. The area surrounding Cabang Panti Research Station is an area that has many types of habitats. There are eight habitats which include peat swamp, freshwater swamp, alluvial bench, sandstone, lowland granite, upland granite, montane and heath forest. Meanwhile, the Rangkong River area is made up of peat swamp, heath, and alluvial forest. This area was formerly illegally logged.

Seno, holding an iPad in the center, with the orangutan project team learning how to survey for signs of illegal logging.

The topic of my research is about the characteristics of these orangutan habitats and patterns of new orangutan nests that are constructed. My aim is to assess the habitats' tree profiles using a software called SexI-FS (Spatially Explicit Individual-based Forest Simulator). Data collection is carried out in the field and then data is entered into this program. I collect information such as tree height, tree diameter (>20 cm), tree canopy (height and width of the canopy), and location coordinates. After the tree data collection is carried out, I begin the process of sampling leaves, fruit and flowers. This helps with species identification. I do this in forest plots that are 20 x 1000 meters, with the aim of seeing the total density of trees within the area. This field work is carried out by two people, myself and a GPOCP/YP research assistant who can help me with the field sampling process. The field research assistants at Cabang Panti have had so much experience and have really helped me in the process of identifying tree species. The extraordinary knowledge that the assistants have has made it easy for new researchers like me to learn about plant characteristics and morphology. I've learned about plants' family, genus, and species.

Seno collecting data for his undergraduate senior thesis project.

The second part of my research is to collect data on new orangutan nests in the Rangkong research area. I am taking data on orangutan nests along 8 transects, representing several habitat types (peat swamp, alluvial and heath). Each transect is 1 km. While surveying, we look for new nests and my assistant friends also check old nests, where they've collected data in previous months. We usually collect this data at the end of each month, over the course of about 5 days, depending on weather. When looking for new nests, I take data on nests with categories of class A and B. These categories, which researchers use as a standardized way to characterize nests across various studies, are usually not that much different. For class A, nests are made up of leaves that are all still green, meany it is very new. Class B has several leaves that have undergone changes, like turning brown, indicating that they have been in place for a bit longer.

Seno measures out a plot where he will collect tree data.

Besides my own research, I have also worked to help with other research at Cabang Panti. I am very happy to be able to contribute to the various activities here because it adds to the knowledge that I have. I often help to process orangutan fecal samples in the lab. Before my time here, I never knew how much you could research just from orangutan feces! Specifically, I was surprised to learn that orangutan feces contains many seeds and orangutans can be considered seed dispersers. This is because orangutans eat lots of fruits. However, not all of the seeds remain intact. Some people even refer to orangutans as "forest farmers," helping to disperse seeds and make new trees grow. I have also learned about the processing of orangutan urine samples. Orangutan urine can help us understand the condition of the orangutan, such as knowing whether it is healthy. We can also learn if female orangutans are pregnant.

In August, I also helped with education outreach in schools, along with my friend Tasya. Tasya is also a student researcher from UNAS. We presented at two schools, namely SMA PL Santo Yohanes and MAN 01 Ketapang. We presented on materials about orangutans and why they are important to research and conserve.

My time in Kalimantan so far has provided me with so much knowledge and new experiences. I am grateful for this opportunity!

Seno presents to a group of junior high schoolers in Ketapang, where our conservation office is based.

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