



Dear Friends and Supporters,

Happy Halloween! Orangutans don't have any trouble getting into the Halloween spirit with their signature orange hair!

We are thrilled to announce the recent publication of an article in the American Journal of Primatology on using parallel laser photogrammetry to measure growth in wild orangutans. Former GPOCP/YP Research Manager, Ella Brown, was the lead author on this paper. These lasers (which are not a threat to wildlife or humans) are affixed to a DSLR camera at a known distance apart, so when projected onto an object, they can help us measure that object within the photograph. Not only do we share an accessible method using commercially available cameras and parts, but also explore questions about orangutan growth, presenting on preliminary findings. See the link in the sidebar to learn more.

Our first article this month comes from Sustainable Livelihoods Manager, Ranti Naruri. Ranti writes about a recent workshop on the "ecoprint" method, run for handicraft artisans in the Kayong Utara Regency. Artisans learned to create beautiful cloths and shirts from natural plant dyes, and Ranti explains how this new method can help spruce up some artisans' products and generate more income for this alternative livelihood.

The second article was written by Field Research Assistant, Yogi Saputra. Yogi, who has worked at Cabang Panti since March 2018, shares some of his day-to-day activities and reflects on some of his best memories from following orangutans.

I wish you all a happy and healthy November!

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IN OTHER NEWS:

New paper out now! Authors Ella Brown, Tim Laman, Erin Kane, Faye Harwell, Wahyu Susanto & Cheryl Knott published an article on "Application of a parallel laser apparatus to measure forearms and flanges of wild Bornean orangutans." Read the article [here](#).



Sincerely,

Cheryl Knott

Cheryl Knott, PhD
Executive Director
[Gunung Palung Orangutan Conservation Program \(GPOCP\)](#)

Providing "Ecoprint" Training to Incorporate Natural Fabric Dye in Handicrafts

By Ranti Naruri, Sustainable Livelihoods Manager

GPOCP/Yayasan Palung supports nine Sustainable Livelihood groups in the Kayong Utara Regency, surrounding Gunung Palung National Park. We motivate people to transition to forest friendly livelihoods, such as creating traditional handicrafts, organic farming and aquaculture. Handicraft artisans use weaving techniques to create *tikar* mats, baskets, bracelets and more.

A newer method in the region, which is environmentally friendly, and has a relatively high sale value, is called "ecoprint", which dyes fabrics beautiful colors produced from natural materials. Together with Ibu Chatarina Kusuma Wardhani from Deara Ecoprint, we held a training for weaving artisans in Sukadana District and Simpang Hilir District. This training workshop was carried out over two days, from October 12th-13th at the Bentangor Environmental Education Center in Pampang Harapan Village, and was attended by 16 handicraft artisans.



Ibu Chatarina, from Deara Ecoprint (back-center, wearing a white shirt), explains the process of ecoprinting to a group of handicraft artisans.

Ecoprints can be made two ways. One technique is called pounding, which is the simpler method. Leaves and flowers are artistically arranged on a fabric (in this case, a large cloth or t-shirt), and then pounded with a small hammer over the surface of the entire plant material. The plant dyes are extracted from the leaves and flowers, and transferred on to the fabric. For the pounding method, plants which contain high levels of tannins (a plant compound that is bitter tasting but can contain rich colors) work the best. After drying in the sun for a few days, this stain becomes permanent.



The group works together to arrange locally-sourced leaves and flowers atop a cloth, to prepare the cloth for the steaming ecoprint method.

The second technique is to steam the plants and fabric together, in a standard kitchen steaming pot. This process is more complicated, as it requires several steps. First is scouring, the process of removing any excess debris from the fabric in the form of oil, wax or dirt. Scouring is done using a sulfated castor oil solution (TRO) or a natural detergent. Next, a mordant or special natural chemical is used as a color reinforcement, which will make the ecoprint more durable, and not fade. The mordant is a fixative to help form a chemical bridge between the natural dye and the fabric fibers. After this process, the next step is to prepare the ecoprint with materials such as leaves and flowers, that will be used to transfer colors to the fabric. This is done over a base of plastic, laid beneath the cloth where the plants are placed. All three layers get rolled up together and bound with rope to prepare for steaming. Then the steaming process is carried out for two hours. After steaming, the cloth is unrolled and left to dry.



The group admires one large cloth after it finished the steaming process.

This training workshop specifically aimed to introduce natural dyeing methods to this group of handicraft artisans so that they will be able to combine ecoprint fabrics with products they weave from *Pandanus* leaf, such as bags, wallets, pencil cases, and tissue boxes. Because these artisans live close to the Gunung Palung National Park area, they will have access to a wide variety of natural raw materials. Ecoprinting is in line with our conservation and environmentally friendly principles, as materials are sustainably sourced and all the products used are natural.

We are grateful that Ibu Chatarina took the time to pass on her knowledge of this unique craft and excited to see what new product designs the Sustainable Livelihoods artisans will come up with!



The final products from the two-day ecoprint workshop.

Life as a Field Research Assistant at Cabang Panti Research Station

By Yogi Saputra, Field Research Assistant

Hello my name is Yogi Saputra. I come from Sedahan Jaya Village, which is one of the villages directly adjacent to Gunung Palung National Park, in West Kalimantan. I am one of the field assistants for the Orangutan Project from the NGO Yayasan Palung (GPOCP) which is directed by Dr. Cheryl Knott.

Before I worked at Cabang Panti Research Station, for two years I worked freelance for a variety of non-permanent jobs. Then I received information that there was a vacancy to work as a field assistant on an orangutan research project. I joined the orangutan assistant team in March 2018. The team then consisted of 6 people, namely Hassan, Toto, Sabta, Sahril, Dang and myself. Since then, we have also welcomed Herman, Landha, Jaka and Dika to our team.



The author, Yogi, records video of an orangutan during a focal follow.

My daily work at Cabang Panti includes looking for orangutans, and following and observing orangutan activities. The activities of the orangutans that we observe include eating, resting, social activities and travel behaviors. We also observe urination and defecation, and collect samples. When the orangutan eats, we collect samples of the food, including fruit, seeds, termites, leaves, bark and more. Usually, the orangutans are followed by 2-3 assistants to collect data on an iPad, on a GPS (to collect data on the orangutan's location and travel patterns), and to collect samples. We conduct phenology, where we survey the fruiting patterns of trees that orangutans feed from around GPNP. We also survey orangutan nests along transects located in the Rangkong river area, to collect data on new nests built each month, which helps us estimate orangutan populations.



Yogi uses binoculars to observe an orangutan eating and collect data on the rate at which it feeds.

One experience I will never forget is the first time I found orangutans in the forest without any other assistants around me. At that time, my GPS unit was low on battery and I had not yet memorized the trail system to easily navigate back to camp after the orangutan nested at sundown. When I was returning to camp, I took the wrong path and walked to a very far trail in the wrong direction. Eventually, I arrived at camp very late that night. Now I look back on that experience and can appreciate how much I have learned since then!

The research aspect that interests me most is my time spent following orangutans from the time they wake up until they go to sleep at night (after building their nest). There are so many activities I have observed that are amusing to me when I follow the orangutans all day. For example, I once followed a juvenile orangutan named Bayas. At that time Bayas was traveling with his mother, Bibi, and she traveled so fast that Bayas got left behind and cried. Bibi then came back to Bayas, but then he seemed to sulk all day. I thought that Bayas' behavior was funny because it was very similar to that of a human child of his age.



Bayas, a juvenile orangutan, rests on his mother Bibi's side.

I really like my job because apart from being able to work, I also gain a lot of knowledge while being here. I've enjoyed learning many things about plant morphology and memorizing the scientific names of all of the plants that orangutans eat. I hope the project will continue to grow, and that more Indonesian and foreign researchers will come to Cabang Panti so that I can continue to learn more things.

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.

"The idea of wilderness needs no defense, it only needs defenders."

– Edward Abbey