

Dear Friends and Supporters,

The holy fasting month of Ramadan, which the majority of our Indonesian staff will participate in, begins tomorrow. Throughout the month, our staff will continue to work hard in the field and at our office. Ramadan Mubarak to those who celebrate!

Our first article this month comes from Conservation Field Director, Edi Rahman. Edi writes about a recent workshop that took place in the Padu Banjar Customary Forest. He explains a series of trainings that were held to educate community members on agricultural land clearing without burning, and the production of liquid smoke and organic compost.

The second article, written by Research Director Wahyu Susanto, highlights a recent visit by our long-time counterpart and friend, Ibu Suci Atmoko. I first met Suci back in 1994 when we were both PhD students attending a conference on orangutans at Cal State Fullerton in California. We've been friends and colleagues ever since. Ibu Suci works at Universitas Nasional (UNAS) in Jakarta, and has been involved in many research projects throughout Indonesia during her career. Wahyu, who accompanied Suci on this trip, writes about their visits to the conservation office in Ketapang and to the National Park to visit our main research site at Cabang Panti as well as the new satellite camp at the Rangkong River.

Our team in the US just returned from Denver and the Annual Meeting of the American Association of Biological Anthropologists - held for the first time in two years. Current and former students and project staff made 5 presentations! Be sure to also check out the sidebar where we share links to some new publications. I wish you all a happy and healthy April!

Sincerely,

Cheryl moth

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

## IN THIS ISSUE:

### Production of Liquid Smoke and Organic Fertilizer as an Effort to Prevent Forest and Land Fires

### A Special Visit From Our Research Counterpart

#### **IN OTHER NEWS:**

A <u>new paper</u> by Santika et al. in the journal Current Biology, with contributions from our 20+ years of orangutan conservation work in GPNP, investigates the effectiveness of different conservation investments in protecting orangutans.

How does sociality influence the orangutan vocal repertoire? <u>This new article</u> by Lameira et al. explores this fascinating topic with data from GPNP. GPOCP's Executive Director, Dr. Cheryl Knott, is a co-author and the paper was published in Nature Ecology and Evolution.

# Production of Liquid Smoke and Organic Fertilizer as an Effort to Prevent Forest and Land Fires

By Edi Rahman, Conservation Field Director

Every year, Borneo faces devastating forest fires. Prevention of these forest and land fires is a shared responsibility and early prevention efforts have proven to be successful in reducing the amount of land burned each year. One of the efforts we make at Yayasan Palung (GPOCP) is to provide education to communities so that they understand the consequences of burning land to clear for agriculture or large-scale plantations.

Padu Banjar Village, one of the Customary Forests where we work, is an area that is prone to forest and land fires. On March 12th, we held a workshop in Padu Banjar Village, involving participants from the village as well as Pualu Kumbang Village.

During this workshop, one activity was to provide training on the manufacture of liquid smoke. This was run with the help of staff from Manggala Agni, an Indonesian Forest Fire Control Brigade which has worked in the region since 2003. Liquid smoke is made using a large furnace which burns waste from land clearing. This method of burning is safe and prevents people from burning excess vegetation which could cause forest fires. Also, by producing liquid smoke, people can sell the product and gain an alternative source of income for the community.



A workshop facilitator from Manggala Agni demonstrates how to use this barrel and condenser to produce liquid smoke.

The people of Padu Banjar and Pulau Kumbang have many rubber tree plantations, and liquid smoke can also be used as a rubber sap freeze. This is because liquid smoke contains cellulose, hemicellulose and lignin, and can lower the pH of rubber latex, stopping the sap flow by making it clot more quickly. The production of liquid smoke is also environmentally friendly and inexpensive. Additionally, liquid smoke is commonly used as a preservative for fish, meat and tofu. If liquid smoke is used to preserve these foods, it better maintains the levels of protein and fat when compared to other preservatives. Liquid smoke is also used to produce many cosmetics, disinfectants, pest repellents and soil fertilizers.

After the training on making liquid smoke, we began another training on making solid organic compost to be used as fertilizer on farms. This training was run by Pak Asbandi, a member for the Yayasan Palung staff. The materials needed for this are easily obtained and available around Padu Banjar and Pulau Kumbang villages. In addition to saving farmers the expense of purchasing fertilizer, the use of homemade organic fertilizer can also benefit human and environmental health. The raw materials used to make organic fertilizer consists of dry and wet grass, cow dung, husks, banana peels and more.



Members of Padu Banjar and Pulau Kumbang villages learn to compost readily sourced materials to create organic fertilizer.

Later, we followed up on this training by creating demonstration plots of horticultural crops in Padu Banjar Village. This was coordinated by the Padu Banjar Customary Forest Management Board (LPHD). Later in the month we continued to support Padu Banjar with sustainable land clearing for farming and seedlings have now been planted, including chilis, eggplants, long beans and more. We will continue to support Padu Banjar throughout this entire process, from monitoring the land clearing up through the time that community members generate income from these newly planted horticultural crops. It is quite rewarding for our staff to see this successful process, from start to finish.



Villagers from Padu Banjar clear land to prepare farming plots where seedlings were later planted.

# A Special Visit From Our Research Counterpart

By Tri Wahyu Susanto, Research Director

In March 2022, we received a visit from an Indonesian orangutan researcher who is quite well known among world orangutan researchers – Sri Suci Utami Atmoko, or better known as Suci. Ibu Suci is a lecturer in the Department of Biology at the National University (UNAS) in Jakarta, and is also a founding member of the Yayasan Palung Governing Board. Ibu Suci's visit to Gunung Palung National Park (GPNP) was to review the orangutan research activities at the Cabang Panti Research Station (CPRS) and Rangkong River. This is necessary because our research is a collaboration between the National University and Boston University that needs to be monitored so that research can run well. Ibu Suci's activities in GPNP were carried out for 10 days.

The first day Ibu Suci came to Ketapang, where our conservation office is located, she had a meeting with the Head of Gunung Palung National Park, Pak Ari Wibawanto. During the meeting, we discussed a lot about planning research activities in the National Park in the future.



Ibu Suci sits outside the main building at Cabang Panti Research Station.

Ibu Suci first visited CPRS in 2003, and this was her first time back! When she came in 2003, she was at GPNP to help with a film about orangutan culture with a crew from a Japanese broadcasting company. Ibu Suci was very excited to be able to come back to CPRS, and during her visit this time, she came with two of her students from UNAS. These students will join the research team of Endro Setiawan, M.Si (National Park Bureau staff) for 6 months to study herpetofauna diversity and the abundance and distribution of primate feeding tree species at CPRS.

During the visit, the first location we visited was the research site along the Rangkong River. While at the Rangkong, we participated in phenology data collection and orangutan nest surveys (nest decay research) along 4 transects. While we were collecting data on two of the transects (47 and 48), Ibu Suci saw some very interesting conditions, because the difference in habitat types was very clearly visible between the two transects. Transect 47 is in the Kerangas (heath) habitat, while transect 48, which is only 250 meters away, is in the alluvial habitat. Here, there are also a lot of remnants of trees that were previously illegally logged. This is part of the reason that the Rangkong River area is so interesting for long-term research.



Ibu Suci (second from left) stands with Wahyu (far right) and other members of the research team at the newly constructed Rangkong Camp.

Next, we went to the main camp at Cabang Panti, and Ibu Suci participated in many other aspects of the research project. She observed the data collection that the 2 students began helping Mas Endro with, and discussed with research assistants and National Park staff about the orangutan research activities that go on at other research stations in Indonesia.



Ibu Suci and Field Assistant, Jak, take data on orangutan nests in the Rangkong research vicinity.

After these various discussions, Ibu Suci made some suggestions for short-term and long-term research topics that could be carried out in the Rangkong and Cabang Panti research areas, as well as other locations such as the Customary Forests or the local orangutan rehabilitation center. We will plan to incorporate some of these ideas into the research "road map" within the GPNP area, so that future researchers, especially Indonesian students, may consider these topics when planning research in Gunung Palung.



Ibu Suci (second from the right) stands alongside members of the field research team.

After her visit to Cabang Panti and the Rangkong, Ibu Suci came back to our office in Ketapang to attend a monthly meeting with all the Yayasan Palung Staff. As a member of the Yayasan Palung board, she discussed directly with the staff about all of the activities they carry out, and provided input and ideas for other activities they can apply to orangutan conservation.



Ibu Suci sits with members of the conservation team during the monthly meeting at our office in Ketapang.

It was great to join Ibu Suci on this trip, and we are so grateful for all the support and expertise she has provided all these years!

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.

