

Research Activity Report
Supported by “Leading Graduate Program in Primatology and Wildlife Science”

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Affiliation/Position	Primate Research Institute/D1
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1. Country/location of visit
Uganda/Kalinzu Forest, Queen Elizabeth National Park, Ngamba Island Chimpanzee Sanctuary
2. Research project
Field school, investigation for research collaboration
3. Date (departing from/returning to Japan)
2015. 08. 16 – 2015. 08. 31 (16 days)
4. Main host researcher and affiliation
Dr. Chie Hashimoto, Assistant Professor at Kyoto University Primate Research Institute
5. Progress and results of your activity

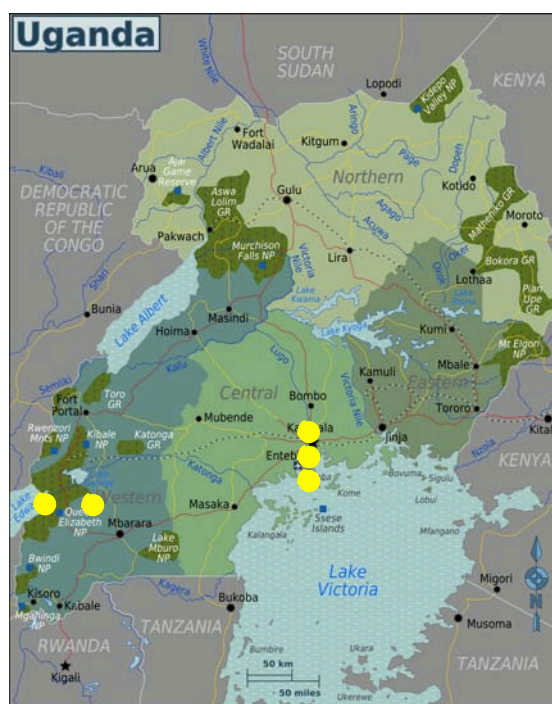


This field school was part of the Asia-Africa Science Platform Program, now called Core-to-Core Program, supported by the Japan Society for the Promotion of Science. The goal is to develop partnership and knowledge exchange between researchers/students from institutions in Asia and Africa. On this Uganda Primatology and Wildlife Science training program were two Congolese students from Kinshasa University, one Ugandan student from Makerere University and two Japanese students plus me from Kyoto University. None of us knew each other before. However, for the next couple of weeks, we would share “matoke” (mashed unripe bananas) morning, noon, and evening...

Matoke is what rice is for Japanese or what bread is for French

Kalinzu

Among diverse other primate species, Uganda has 2 of the great apes: the endangered chimpanzee, subspecies *schweinfurthii* and the critically endangered eastern gorilla, subspecies *beringei*. Uganda is also one of the countries that host the most long-term field sites for the study of primates. Kalinzu is among the young ones. In 1992, Dr. Chie Hashimoto started a chimpanzee population census in the forest by counting nests along line-transects. Twenty-three years later and numerous scientific papers published, the project is still running. So, there we went to spend a week with Dr. Hashimoto and other students. During this short amount of time, we had to decide of a small research project for which we presented the results at a private seminar on our last evening on site. As it was hard to identify and follow consistently chimpanzees within a week, I chose a rather easy project: terrestriality versus arboreality in Kalinzu chimpanzees.



Visited parts in Uganda

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Kalinzu is a young secondary forest of 137 km² dominated by Musanga, Parinari and Ficus tree species. The forest mainly served for timber extraction until 2000 and hosts 6 species of diurnal primates: *Pan troglodytes schweinfurthii*, *Cercopithecus ascanius*, *Cercopithecus mitis*, *Cercopithecus lhoesti*, *Colobus guereza*, *Papio anubis*. The forest counts about 230 chimpanzees distributed in 4 groups. The habituated group is named M group and counts about 100 individuals. For my study, I conducted 30-minute instantaneous sampling opportunistically on 21 individuals (13 adults; 7 adolescents; and 1 infant; 4 females; 17 males), recording the action and the substrate of individuals on sight every 5 minutes. I observed a strong preference for arboreality among my subjects during a 4-days period (substrate: tree 80% versus ground 19%). Then, when testing which factors associate with arboreality, neither sex, age category nor time was associated (GLMM, $p > 0.05$). If we dismiss the hypotheses that results have been influenced by the facts that the study was mainly conducted in the morning; that I had not enough data; or that the group is not very well habituated, then results might confirm the hypothesis that chimpanzees adjust their substrate use according to microclimate (i.e. more arboreal in cool or humid months; Takemoto 2003).

Over this week, we were also lucky to attend 2 hunting attempts of the chimpanzees toward the black-and-white colobuses. As Kalinzu doesn't have red colobuses (the main prey for chimpanzees in other field sites), chimpanzees here hunt black-and-white colobuses. However, few attempts are successful and those, which are, are rather opportunistic.

Queen Elizabeth National Park

After Kalinzu, we went for two days to Queen Elizabeth national park, the most visited national park among the ten that Uganda has. The park is famous for its climbing tree lions. On this trip we were lucky to spot: warthogs, elephants (I counted 85 in 2 hours!), baboons, hippos, Nile crocodiles, buffaloes, waterbucks, Ugandan kobs, zebras, black-and-white king fishers, marabou storks, and cormorants among many others! On our way out to QENP, we also stopped by Kyambura gorge, a surprising rain forest gorge in the middle of the savannah. Moreover, there are chimpanzees in Kyambura...

Makerere University

As part of the program, we also had the opportunity to visit the largest university of Uganda, Makerere University, and its primatologists.



Viviane (undergraduate student from DRC and future leading primatologist of her country) posing in front of the main building at Makerere



Kyambura gorge

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Top: The Lion King scenery at sunrise in Kalinzu forest camp; bottom: nesting tree for weaver birds (male Vieillot's black weaver at top right) in the middle of the camp

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From left to right and top to bottom: Dr. Ihobe observing the black-and-white colobuses; red-tailed monkey (*Cercopithecus ascanius*); black-and-white colobuses (*Colobus guereza*); caterpillar eaten by chimpanzees

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Chimpanzee foraging in a *Ficus sur* in Kalinzu forest

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Top: Matoke workshop in Kayanga village; bottom: presentation of “How to become a scatologist?” at Kalinzu Forest Education Center (Who knows? We might inspire one of them...)

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From Top to bottom and left to right: view on Queen Elizabeth National Park from our lodge; warthog; Ugandan kobs; Nile crocodiles and buffaloes; gathering of birds (marabou storks, cormorants, pelicans, African sacred ibis, yellow billed storks); hippos; elephant

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Top: Feeding time at Ngamba island chimpanzee sanctuary; bottom: monitor lizard on Ngamba island

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Chimpanzees present for feeding at Ngamba island chimpanzee sanctuary

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Kids waiting for their mom to come back on Koome island (one of the neighbouring island of Ngamba)

Ngamba island chimpanzee sanctuary

I met Lilly Ajarova, director of the Chimpanzee Trust (NGO working on all aspects of the chimpanzee sanctuary at Ngamba island) at the annual PWS symposium last March in Kyoto. When I knew I was going to Uganda, I contacted her. She arranged my visit so, that I could spend two nights at Ngamba, meet the wonderful staff, the 48 chimps, and the veterinarian of Chimfunshi chimpanzee sanctuary in Zambia, who was here as part of an exchange program between the two sanctuaries. I was lucky to get the opportunity to introduce my research interests by giving a seminar to the staff, all very interested in hygiene in non-humans and asking many questions. I could also visit some of the humanitarian projects that Ngamba runs with the fishing communities living in the neighbouring islands (some of those communities were living on Ngamba island before the creation of the sanctuary). On Koome island, the Chimpanzee Trust managed to get clean water for the people, and helped to establish toilets, school, and hospital facilities. They also engage in some fair trade projects with the women of the communities, who make some crafts sold at the sanctuary and at their office in Entebbe. I also went to Ngamba for potential research collaboration, and a project is hopefully on the way. If you want to learn more about Ngamba island chimpanzee sanctuary, stay tuned with The PrimateCast, a podcast of my visit to Ngamba should come out soon: <http://www.cicasp.pri.kyoto-u.ac.jp/news>.

Mwebare mununga: Dr. Hashimoto and Dr. Ihobe for supervising Kalinzu and QENP; Natsumi and Hodaka for receiving us in Kalinzu; Lilly Ajarova and the Chimpanzee Trust staff for organizing my venue at Ngamba and for sharing their passion for Conservation; the students for sharing great moments; and PWS for supporting me in this program.