

Figure 1. The 2nd GRASP Council was held 6–8 November 2012 at UNESCO headquarters in Paris.

150 people gathered for this 3-day meeting.

There was a lot of exchange of information about the current situation of great apes and major threats to their survival including habitat loss, poaching and the bushmeat trade, as well as the illegal international trade and the risk of disease transmission. The core of the discussions and output documents are available on the GRASP website. Please visit the website (http://www.un-grasp.org/) for an update on GRASP activities. This report simply aims to publicize that the second GRASP council meeting was held in Paris to revitalize conservation efforts for wild great apes across their range.

There are many ongoing activities at different levels aimed at promoting conservation of great apes in the wild. In this context, it might be helpful to mention the different roles of three organizations: the International Primatological Society (IPS), IUCN, and GRASP.

IPS is the international academic society of primatologists. It holds biennial meetings. IPS 2010 was held in Kyoto, Japan, IPS 2012 was just held in Cancun, Mexico, and IPS 2014 will be held in Hanoi in Vietnam. The IPS comprises scientists across various disciplines who study non-human primates (NHPs). The IPS plays a key role in the scientific approach to conservation of NHPs, because the majority is either endangered or threatened. It is very important to acknowledge that there exists a wide variety of primate species, other than just great apes. IPS has a vice-president for conservation.

The IUCN species survival commission (SSC) also unites scientists, taxon experts whose role is, among others, to evaluate the conservation status of species and regularly update the IUCN Red List of threatened species. The IUCN SSC includes a Primate Specialist Group (PSG). The PSG has a Section on Great Apes (SGA). The IUCN-PSG-SGA consequently focuses on the conservation of great apes from a scientific viewpoint.

GRASP differs from IPS and IUCN-SSC in its ability for advocacy. As part of the United Nations organization,

GRASP can, for instance, help to influence policy-makers, to promote green economy strategies, and to improve law enforcement coordination worldwide to the benefit of great apes. This level of effort is essential if we are to resolve conservation challenges lying beyond national borders, producing a real impact on conservation through policymaking whilst balancing conservation and economic development.

I am writing this short note in Bossou, Guinea, West Africa, where the Kyoto University team has been carrying out a longitudinal study of chimpanzees in Bossou and Nimba. Among other tool uses and remarkable behaviors, Bossou chimpanzees are most well-known for their use of a pair of mobile stones to crack open oil palm nuts. However, in recent years, the Bossou chimpanzees have been declining in numbers, with only 12 individu-

als remaining today. If this community were to become extinct, its unique culture will disappear with it. Mount Nimba, 4 km away from Bossou, is the only natural World Heritage Site (WHS) in Guinea; however, this mountain range, which is rich in high grade iron-ore, continuously faces the threat of mining. We have, for many years now, been taking the initiative to plant trees between Bossou and Nimba to connect the two areas while also encouraging natural regeneration; this project is known as the Green Corridor Project.

Science in the field should accompany in situ conservation efforts, just like science in the laboratory should aim to support welfare of captive animals. In various places, field scientists are making their own grass-roots efforts. I hope that activities at all levels will complement one another to improve the conservation of great apes and ensure their long-term survival in the wild.

<NEWS>

Iyondji Community Bonobo Reserve: A Recently Established Reserve in the Democratic Republic of Congo

Tetsuya Sakamaki^{1,2}, Phila Kasalevo³, Mathieu Bolaa Bokamba⁴ & Lingomo Bongoli^{5,6}

- 1 Primate Research Institute of Kyoto University, Japan
- 2 Wamba Committee for Bonobo Research 3 African Wildlife Foundation
- 4 Ecosystem Restorate Associate (ERA-Congo)
- 5 Forêt des Bonobos

6 Centre de Recherche en Ecologie et Foresterie, D. R. Congo (E-mail: sakamaki.tetsuya.8v@kyoto-u.ac.jp)

INTRODUCTION

The Iyondji Community Bonobo Reserve (ICBR), established by the Democratic Republic of the Congo (DRC) Ministry of Environment in April 2012, encompasses approximately 1,100 km² of tropical moist forest that harbors bonobos (bilia; *Pan paniscus*). The ICBR is adjacent to the southeast border of the Luo Scientific Reserve (481 km²). Wamba, a long-term study site of wild bonobos, is situated in the northern section of the Luo Scientific Reserve¹ (Figure 1). The Kokolopori Bonobo Reserve is east of the ICBR. Creation of the ICBR will benefit the conservation of bonobo habitat because it expands the protected area. The present report describes the history of the area before the ICBR was gazetted, efforts to habituate the bonobos, and current management issues and implications for the future.

BACKGROUND

Most Iyondji villagers live in settlements that extend along established roads in the northern section of the Luo (Maringa) River. Crop fields and secondary forests stretch for 1 to 2 km on both sides of the villages. Primary forest extends along the southern section of the river where temporary hunting, fishing and gathering camps and small hamlets with cassava fields lie² (Figure 1). The local Iyondji communities (Yohala and Yokali villages) wanted to establish a community reserve in the southern section of the Luo River, and in 2007, they requested help from the African Wildlife Foundation, an international non-government organization (NGO), and the Japanese research team that had established the Wamba Committee for Bonobo Research, a long-term research project in and around Wamba. At the time, we conducted preliminary surveys and continued to train and support the community in searching for local bonobo group, and a local NGO, Forêt des Bonobos, took the initiative and carried out the project with the villagers. Between 2010 and 2011, with support from the United States Fish and Wildlife Service, efforts to gazette a new community reserve were made in earnest.

HABITUATION OF BONOBOS

In July 2010, habituation of the bonobos was begun on a daily basis in preparation for potential tourism or scientific research. The habituation procedure involved identifying unit-groups (or communities) and their ranges by finding footprints and food remnants, making and maintaining observation trails in the ranges, following one or two target groups on a daily basis and identifying individuals in the bonobo groups. We established a research camp at a hamlet along the Bembongo River in the northern part of the proposed protected area (0° 8' 20" N, 22° 44' 37" E; Figure 1). The Bembongo camp was 2–3 h from an Iyondji village (outside of the proposed protected area) travelling in a small boat and on foot.

We found two different groups of bonobos around the camp in the first 2 months. We focused our efforts on the Bembongo Group and followed them on a daily basis. Table 1 shows the number of days the group was observed and the direct observation times during the project. The camp was situated in the northern sector of the Bembongo Group's range. It was possible to follow the bonobos nearly every day when they were near the camp, but this was difficult when they ranged further south because their southern range was 2 h or more from the camp and we had not made observation trails further south.

We identified the Ite Group, a unit-group that ranged in the west adjacent area and the Bohondohondo Group, which ranged in the east adjacent area. Moreover, we found evidence of other bonobo groups in the southern area of the reserve.

The ICBR bonobo population borders the Wamba



Figure 1. Map of the lyondji Community Bonobo Reserve and the Luo Scientific Reserve.

	Number of research days	Number of observation days	Observation time (h)
2010			
July	17	3	0.3
August	8	0	0
September	12	0	0
October	0	_	_
November	26	4	19.32
December	26	13	33.18
2011			
January	23	12	45.38
February	28	16	62.62
March	31	23	66.9
April	27	11	24.28
May	31	19	84.63
June	30	15	32.13
July	31	12	27.58
August	30	12	27.57
September	27	7	23
October	30	16	30.52
November	25	12	44.63

Table 1. Number of research days, direct observations and observation time of the Bembongo group.

bonobo population. Behavioural and ecological studies of the Wamba group have been reported previously¹. Given the proximity of the two groups, their habitats are unlikely to differ significantly; however, further surveys are necessary to assess the two environments. Individuals in the ICBR and Wamba groups cannot transfer between groups because they cannot cross the Luo River, which separates the two populations. Thus, the behavioural diversity or "culture" of the ICBR bonobos is an interesting topic for future study³.

CURRENT PROBLEMS AND THE FUTURE

The local Bongando people (a Bantu ethnic group) are closely tied to their natural environment². Although their most important crop is cassava, the Bongando acquire most of their animal protein from the forest where they hunt and gather various species of mammals, birds, reptiles, fish, insects and plants. They keep livestock such as goats, pigs, chicken and ducks, which are consumed in rituals and on ceremonial occasions. Effective and sustainable management of the ICBR requires the development of alternative sustainable livelihoods while controlling the use of resources in the forest.

People living in the forest present additional difficulties. One objective of the 2010–2011 Iyondji project was to establish a biannual monitoring of large mammals and human activity in the proposed protected area. We originally planned to make 10 line transects (each 5 km) in the area for biannual monitoring and regular patrol. However, our monitoring walks were able to cover only four transects in the northern area because the people who lived in scattered hamlets in the middle and southern areas of the proposed protected area were not in favour of a new reserve and obstructed our work. These were not Iyondji people, but members of other populations in the adjacent administrative districts. Although the southern boundary of the ICBR was within the Iyondji jurisdiction, the Iyondji people only inhabited the forest in the northern sector of the ICBR.

Temporary hunting and gathering camps and small hamlets with cassava fields were present within the ICBR. Approximately 10 people lived in a hamlet (Lingomo *et al.*, unpublished data). According to the villagers, people lived in the forest permanently, and some of their children had never been to the villages along the established roads where there were schools and dispensaries. This situation was, in part, the result of the DRC civil war in the 1990s². Prior to the civil war, villagers hunted primarily for their own consumption. However, during the war the trucking and shipping transportation network collapsed, and the villagers were left with no means of selling cash crops such as coffee beans. As a result, the sale of bush meat became the primary way of earning cash.

Unlike the people from adjacent districts, the local Iyondji communities agreed to manage the ICBR, and they regularly monitor and patrol their forest. It is important to note that the Iyondji people were provided with opportunities for alternative livelihoods that allowed them to decrease the hunting of wild animals and habitat destruction through slash-and-burn agriculture. Continual support for the Iyondji and other adjacent communities may be necessary to resolve conflicts with the ICBR. Furthermore, it is necessary to develop innovative ways to create revenue through the forest and its bonobos, such as tourism and scientific research.

At present, it is not realistic for the local communities to forego the use of resources in the forest. However, local community activities must adhere to regulations of the reserve, and regular monitoring of animals and human activity is important and necessary. Ideally, the local communities will take the initiative in carrying out regular monitoring and patrolling of their forests. Our ICBR project is a model case of collaboration among local communities, conservation NGOs and scientific researchers. At this stage of the ICBR project, the collaboration is expected to continue to help solve current problems and facilitate development of the management plan.

ACKNOWLEDGEMENTS

Invaluable support and logistical assistance were provided by Jef Dupain, Charly Facheux, Lillian Nsimba and other members of the Africa Wildlife Foundation (AWF); the Centre de Recherche en Ecologie et Foresterie (CREF) of the Democratic Republic of Congo; T. Furuichi, D. Kimura and other members of the Wamba Committee for Bonobo Research; members of the local NGO, Forêt des Bonobos, and the local Iyondji communities. Research permission was arranged by the CREF and the Ministry of Scientific Research of the Democratic Republic of Congo. I thank K. Hosaka and T. Furuichi for useful comments on the original manuscript. The present project was financially supported by the US Fish and Wildlife Service Assistance Award (96200-0-G017 to AWF), Grants-in-Aid for Scientific Research of the Japan Society for the Promotion of Science (JSPS) (2225507 to T. Furuichi), the Environment Research and Technology Development Fund of the Ministry of the Environment, Japan (D-1007 to T. Furuichi), and the JSPS Primate Origins of Human Evolution (HOPE) project (AS-22-027, ITP-23-006 to T. Sakamaki).

REFERENCES

- Furuichi T, Idani G, Ihobe H, Hashimoto C, Tashiro Y, Sakamaki T, Mulavwa MN, Yangozene K, Kuroda S 2012. Long-term studies on wild bonobos at Wamba, Luo Scientific Reserve, D. R. Congo: Towards the understanding of female life history in a male-philopatric species. In: *Long-Term Field Studies of Primates*. Kappeler PM, Watts DP (eds), Springer, Heidelberg, pp. 413–433.
- Lingomo B, Kimura D 2009. Taboo of eating bonobo among the Bongando people in the Wamba region, Democratic Republic of Congo. *Afr Stud Monogr* 30:209-225.
- Hohmann G, Fruth B 2003. Culture in bonobos? Betweenspecies and within-species variation in behavior. *Curr Anthropol* 44:563–571.

<NOTE> Death of the Oldest Female at Mahale and Some Notes about Longevity of Wild Chimpanzees

Michio Nakamura & Hitonaru Nishie

Kyoto University, Japan (E-mail: nakamura@wrc.kyoto-u.ac.jp)

DEATH OF CALLIOPE, THE OLDEST FEMALE AT MAHALE

Calliope (Figure 1), an old, female chimpanzee at Mahale, is assumed to have died this past year (*i.e.*, 2012). Her death is *assumed* because it has not been confirmed, but she has not been witnessed since the final observation

on 5th April 2012. As it is rare to observe the deaths of wild chimpanzees directly, or to find the dead bodies, we usually assume individuals who have not been observed for more than 3 consecutive months in Mahale to be deceased.

Calliope was estimated to be 52 years old in 2012, which is the oldest age at death so far recorded at Mahale. She was first identified in 1973 as a young adult. The starting age of adulthood in females is 13 years old. Therefore, she would have been at least 13 years old at that time. This gave the estimation that she was born in 1960, but her exact birth-year could be even earlier.

According to Nishida¹, Calliope had been very shy to human observers until the 1990s. Although she later became tolerant of observations from a certain distance, she continued to be more timid than the other females. She seemed reluctant to get too close to humans, especially when she had a small baby. Throughout her life, Calliope gave birth to a minimum of 5 offspring (*i.e.*, 3 females and 2 males)². Except for 1 female offspring who died at 3 years old, the other 4 were weaned and reached the age of puberty. Thus, it can be said that she was a successful mother. After she gave birth to her last offspring in 1997, she did not give birth again throughout the last 15 years of her life. Excluding the 5 years during which she was nursing her last baby, she enjoyed her remaining postreproductive life for 10 years.



Figure 1. Calliope in 2010 (at estimated age of 50 years old). Although her hair was white, she did not look old.

CALLIOPE'S FINAL DAYS OF LIFE

Calliope was often observed traveling with her last daughter, Carmen, until Carmen emigrated from the M group in July 2011. Calliope also groomed often with her two mature sons, Carter and Cadmus, when she met them. After the emigration of Carmen, Calliope often