

EKOLO YA BONOBO: Bonobo Reintroduction in the Democratic Republic of Congo

Congolese association Les Amis des Bonobos du Congo (ABC) has been working for bonobo conservation for the past fifteen years. The Association's goal is to **contribute to the protection of bonobos in their natural environment**. To achieve this long-term goal, ABC has set itself the following inter-related objectives:

1. Ensure the successful rehabilitation of bonobos confiscated by the DRC Ministry of Environment and entrusted to the ABC for their rehabilitation and long-term care, by providing them with an environment appropriate for physical exercise and social interaction, and with all necessary nutritional, medical and psychological care;
2. Contribute to bonobo protection *in situ* through educational programs organized for school groups, law enforcement officials and other visitors at *Lola ya bonobo* Sanctuary and through advocacy work in the DRC;
3. Release socially stable groups of rehabilitated bonobos into the bonobos' natural habitat.

The reintroduction of socially stable and self-provisioning groups of bonobos represents an exceptional opportunity for the preservation of the genetic diversity and possibly the repopulation of areas from where bonobos might have disappeared.

Over the past couple of years, ABC has worked concurrently on three fronts: (1) final selection of a site that is appropriate for the release of the bonobos; (2) identification and preparation of the bonobos that are candidate for release; and (3) negotiations with all stakeholders both at the release site and at national level to secure all required authorizations and support for the project.

In line with IUCN philosophy, the ultimate aim of the release program is that the released individuals successfully re-adapt to life in the wild and reproduce in a sustainable manner.

In June 2009, a first group of bonobos rehabilitated at LOLA YA BONBO was released at EKOLO YA BONOBO, a 20,000 hectare area of swampy forest in Equateur Province, DRC.

June 14th : The reintroduction

Nine bonobos (4 females and 5 males, including Mbano the 4 year old son of Etumbe) were selected to be part of the first reintroduction group:

<i>Females</i>	<i>males</i>
Etumbe + Mbano	Max
Lukaya	Beni
Lisala	Lomami
Lomela	Kubulu



On June 14, a Sunday, the bonobos were transported from LOLA to EKOLO YA BONOBO, as planned. The bonobos traveled in specially made crates, under close veterinary supervision. The crates were transported by cargo plane between Kinshasa and Basankusu, by truck to ABC's Basankusu office, then on a specially-made raft for the 55 minute river travel between Basankusu and the Mombengele reintroduction site.



Although we had planned for a discreet arrival, in practice a joyful crowd and the highest authorities of Basankusu were there to welcome and accompany the bonobos. The crates were kept covered to protect the bonobos from the sun as well as noise and crowds. In practice, the

bonobos did not seem overly stressed by their pre-release anesthesia or by the transport.

The crates were placed in the small electric isolation enclosure built at EKOLO YA BONOBO. The bonobos were given water and food and allowed to calm down before the crates were opened, one by one, in the late afternoon. Etumbe and Mbano were the first to be released, Max the last one.



Plans were for the bonobos to be kept in the isolation enclosure under observation for 72 hours, before opening the gates onto the forest. In practice, Lisala (an 8 year old female) jumped the fence on the very first day, followed by Lukaya. While Lukaya subsequently returned into the enclosure, Lisala spent the night outside, making a nest for herself right next to the enclosure.

On June 17th, all the bonobos were allowed to leave the enclosure and explore the forest, accompanied by ABC President Claudine André and Suzy Kwetuenda, a Congolese graduate student who has been observing the bonobos at LOLA for several years and was hired to lead the bonobo post-release monitoring.

The bonobos rapidly adapted to their new environment:

- ✧ The group remained cohesive, under the leadership of alpha female Etumbe (age 23); it did not seem unsettled by their new environment, as if they were in a 4th enclosure at LOLA. More than 6-month pregnant, Etumbe seemed a little stressed and tired, even though she still led the team in active provisioning. In this context, Lisala - a naturally curious female who had her first menstruations shortly after the release - affirmed herself as a dominant female.
- ✧ The bonobos rapidly discovered (apparently with great pleasure) numerous local fruit, leaves and stems, including fruit from *Uapaca* tree and *aframomums*.
- ✧ Staff continued offering the bonobos water solution at the enclosure, but the bonobos were frequently observed drinking from the river as well as licking dew from leaves and stems.
- ✧ All the bonobos but Max immediately started making nests to sleep in high in the trees, including 4-year old Mbanu (whose mother, Etumbe, rejected from her nest). Their nests appeared to be far more sophisticated than those they had been observed building at LOLA. By the end of the second week after the release, Max also started building nests for himself (he had never been observed doing so previously).
- ✧ Over the period, the bonobos showed increasing tendency to move about in the trees, rather than covering significant distance on foot as at LOLA.
- ✧ From the start, alpha male Max started displays towards both bonobo females and staff. He also responded strongly to the presence of male staff. By mid-August, Max - who had never been sexually active - was observed soliciting sex from selected females, though always from the discreet cover of a tree. By September, Max started to patrol further away from the group, a behavior usual in wild male bonobos.
- ✧ In line with behavior to be expected from the son of an alpha female, little Mbanu adapted well, behaving like a little prince (i.e. bully) towards the other bonobos.
- ✧ On July 18th, Etumbe gave birth to a healthy female bonobo. Etumbe immediately rejoined the group and resumed her dominant position, as well as sexual contacts



with other females.

- ✧ Little Lomela (a 5 $\frac{1}{2}$ year old female) and Kubulu (a 7 year old male) had the hardest time adjusting, due to their low position in the group; they were frequently bullied by Lomami (a 10 year old male) and other older bonobos.

Possibly due to continued supplementary feeding during the period, the bonobos regularly returned to nest at or near the isolation enclosure, but they frequently spent the full day in the forest and sometimes failed to come to the isolation enclosure or one of the feeding beaches at provisioning time, indicating increasing capacity to self-provision.

Post-release monitoring

Recruitment of the proposed team of 12 eco-guards started in May. As per our initial agreement with the Ilonga-Pôo community, the eco-guards were to be in their majority from their community. To accommodate increasing demands from the Kodoro - another local community on whose land our base camp is located - it was eventually decided to recruit 8 eco-guards from the Ilonga-Pôo and 4 from the Kodoro.



Four villagers who had participated in the initial site survey and two staff who had worked on the construction of the enclosure and had been trained in its maintenance were pre-selected. The remaining trackers were selected from among 25 candidates nominated by their communities. The trackers initially included only one woman, in part due to low female literacy rates; a second female tracker was hired in August.

The team is lead by Suzy Kwetuenda and also includes one experienced eco-guide, Ibrahim Walelo, a Congolese national who used to work at HELP Congo in neighboring Congo-Brazzaville. All other team members are new to their job.

The team's roles include a mix of eco-guard duties - verifying that there are no settlements, hunting, snares and other proscribed activities in the forest - and tracking of the bonobos. The staff was trained on how to use a compass and a GPS as well as the basics of anti-poaching monitoring.

Two post-doctoral students (ethologist Amandine Chapelain of Loughborough University in England and ecologist Catherine Workman from Duke University) spent 6 weeks at EKOLO from early July. They trained staff on the basics of data collection for behavioral observations, as well as common bonobo behaviors, facial expressions and vocalizations

that may be interesting to monitor. The researchers also drew a list of behaviors to be monitored post-release, focusing on feeding, movement and inter-group dynamics.

We had assumed that the bonobos would be afraid of the forest, so that human presence for post-release monitoring would prove reassuring. In practice, the released bonobos adapted surprisingly easily to their new environment, showing no sign of fear. In particular, Max immediately started displaying towards intruders in "his" territory, before calming down and coming for a contact with known staff. Max similarly displays towards bonobos, but they seem to largely ignore his shows and simply get out of his way. The new trackers were notably more impressed and this delayed initial post-release monitoring efforts.



The planned release of a second group of bonobos was postponed until effective monitoring could be implemented. Several "break contact" training sessions were conducted by Suzy, accompanied by Claudine André, veterinarian Fanny Mehl and/or EKOLO Coordinator Marielle Puit (all female staff) in June and July, based on the bonobos' presence at one of the provisioning beach (which is most appropriate for integration). However, the new trackers remained hesitant to risk an encounter



When an intruding villager was bitten in August while fishing for eel right next to the isolation enclosure, it was decided to remove the three bonobos who were showing more potential aggressiveness and return them to LOLA, so that the trackers could start effectively monitoring the group before the seasonal rise in river water risked dispersing the bonobos further away into the forest. On October 19-20, Max, Lisala and Lomami were transported back to LOLA YA BONOBO and reintegrated their former groups without any

trouble - like they just went on a short holidays. (It is worth mentioning that Max has remained sexually active...)

Post-release monitoring immediately resumed at EKOLO YA BONOBO, led by Suzy with support from Zanna Clay, a bonobo behavioral scientist from St Andrews University (UK) with prior experience tracking chimps at Gombe. (Zanna went to EKOLO as a short break from her observations at LOLA YA BONOBO, where she spent the Fall.) By the end of October, the bonobos had gotten used to the presence of the trackers and started to move of their own accord into the forest, with five local trackers following them, two women and three men.

The temporary disruption in the social organization of the group, who initially proved less active in exploring their environment, did not last a week. Beni soon took over the dominant male position, conducting patrols away from the group as Max had started doing. (Beni even got lost in early November, moving further and further away from the group for two full days, until he abruptly turned back and rejoined the group on day 3. Two trackers were able to follow him on foot during this period while Suzy was tracking him from a pirogue from nest to nest, trying to attract him back with recordings of her own and the other bonobos' voices.)



The isolation enclosure still remains the basis of the group's daily routine, and the bonobos routinely return to the enclosure for nesting and feeding. Food supplementation (currently at 4 kg per bonobo per day, as against 7kg at LOLA) will be progressively reduced now that the group can be effectively tracked and foraging practices documented. The bonobos' supplementary food includes bananas, sugar cane, *tondolos*, *beyas* (*marantacea* stems that are rich in proteins), peanuts, pineapple, papaya and wild mangos, based on availability. In addition to reducing the overall quantity of food provided, we are also progressively reducing sugar intake from fruit in favour of leaves and stems, which better reflects the naturally occurring range of bonobo food in the forest. The diets of Etumbe (nursing) and Lukaya (pregnant) are closely monitored.

The team also started anti-poaching patrols in the forest in mid-July. Patrol findings are recorded with full GPS information, for systematic mapping of animal and human use of the forest. While the team continues to report signs of human use of the forest, this is mostly for local eel fishing and wood collection. No snare or other evidence of hunting has been reported. The teams have also seen evidence of antelopes, porcupine, caimans and monkeys.



Both patrols and bonobo tracking are becoming increasingly difficult with the seasonal rise in the Lopori River, with water up to waist level in many parts of the forest. Swampy forests are the bonobos' natural habitat and the released group simply moves along on the forest canopy....

Educational impact of released bonobos



Because the released bonobos still regularly return to the isolation enclosure, they are providing an ideal opportunity for education of a variety of river users through direct observation. The trackers' team has taken on a complementary role as educators for villagers and passers by, who usually come to observe the bonobos whenever they settle at one of the beaches to feed or play, especially in the evening.

After Etumbe gave birth in July, a special focus was given to her maternity, with strong impact on the population.

In September and October alone, 386 pirogues with over 2,000 people stopped by EKOLO YA BONOBO to observe the bonobos and listen to the team's explanations. A large number of the people came from neighboring communities, but many also came from villages far upstream the Lopori River, deep in the bonobo habitat; pirogues were recorded from far away Kinshasa and Kisangani. None of the villagers had ever seen a bonobo before and many willingly admitted that if they had ever eaten bonobo meat before, they would never do so anymore. The educational impact of the reintroduced bonobos was therefore far greater than had initially been anticipated and constitutes an important initial success of the project.



Preparation of new release group

Based on lessons learned from post-release monitoring of the first release group, it was decided that tolerance of trackers (i.e. accepting human presence at a distance, without showing aggression or trying to come for a hug) would be added as a criterion in the selection of the next group of bonobos to be released. As such, release candidates are likely to be younger than initially planned, at least during this initial phase, although older juveniles and adults of easier disposition may also be included based on training results.

In October, the enclosures at LOLA YA BONOBO were reorganized and a new group of juveniles was identified for post-release monitoring training. The group includes 3 females, Sankuru, Sake and Tshilenge, and 3 males, Maniema, Bili and Kikongo.

Tracker Ibrahim Walelo (formerly of HELP Congo) has been temporarily re-assigned to LOLA YA BONOBO to train other staff in post-release monitoring. From October, he started training the new bonobo group together with Yvonne Vela, one of the Sanctuary's substitute mothers, and Jean-Claude Nzumbi, one of the keepers (i.e. one female and one male staff). Other staff will be rotated in and out of the team to get bonobos used to ignoring human presence, not only specific individuals. Every morning, they go for a walk in the enclosure's forest with the group.

