

Journal of Berggorilla & Regenwald Direkthilfe

No. 43, December 2011



Searching for Sustainable Solutions in Maïko Can Tree Nurseries in Schools
Contribute to
Conservation?

Orphaned Gorilla Care – First Response Situations Feeding Ecology of Sympatric Apes



BERGGORILLA & REGENWALD DIREKTHILFE

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Organization Address:

Berggorilla & Regenwald Direkthilfe c/o Rolf Brunner Lerchenstr. 5 45473 Muelheim, Germany E-mail brunner@berggorilla.org

Website:

http://www.berggorilla.org

Bank Account:

Account number 353 344 315 Stadtsparkasse Muelheim, Germany Bank code number 362 500 00 IBAN DE06 3625 0000 0353 3443 15 SWIFT-BIC SPMHDE3E

Authors of this Issue

Ekwoge Enang Abwe is manager of the San Diego Zoo Global Ebo Forest Research Project in Cameroon. Since 2008, he has been involved in Ebo gorilla monitoring and ecological data collection.

Prof. Christophe Boesch is Director of the Max Planck Institute (MPI-EVAN) for Evolutionary Anthropology in Leipzig, Germany, and President of the Wild Chimpanzee Foundation.

Jessica Burbridge is the Dian Fossev Gorilla Fund's Field Communications Officer.

Josephine Head is a PhD student at the MP-EVAN. She is also the project manager of the Loango Ape Project in Gabon, where she has worked since 2005. Her main area of interest is in community ecology, in addition to the study of interspecific competition in Loango National Park.

Romanus Ikfuingei is Field Manager of the Takamanda Mone Landscape Project within the Wildlife Conservation Society Cameroon Biodiversity Programme.

Inaoyom Imong has conducted research on Cross River gorillas since 2004. He is currently studying ecological and anthropogenic influences on the distribution and conservation of these gorillas at the MPI-EVAN.

Andreas Klotz is owner and manager of the company TiPP 4. For more

Gorilla Journal 43, December 2011

Editor: Dr. Angela Meder Augustenstr. 122, 70197 Stuttgart, Germany Fax +49-711-6159919 E-mail meder@berggorilla.org Translation and Proofreading: Ann DeVoy, Bettina and Andrew Grieser Johns, Colin Groves Cover: Silverback in a tree in Loango National Park

Photo: Josephine Head

than 25 years photography has been his hobby. This and his passion for travelling led him to initiate the project "Mountains of the Moon".

Loïc Makaga is the field manager of the Loango Ape Project which focuses on habituating western gorillas and central chimpanzees for research and tourism, and he has worked there since the project was set up in 2005.

Stephan Martin Meyer is a freelance author and editor.

Robert Muir has been responsible for re-starting the Frankfurt Zoological Society's Virunga National Park Conservation Program since 2004, with a focus on ranger training and park communications as well as its continued support for gorilla and chimpanzee conservation.

Jean-Robert Onononga is Manager of the Goualougo Triangle Ape Project in the Republic of Congo.

Dr. Jan Ramer was the Regional Veterinary Manager for MGVP from August 2009 to January 2012. She is an associate veterinarian at the Indianapolis Zoo. She has been in the zoo and wildlife business, either as a keeper or veterinarian, for over 30 years.

Dr. Martha Robbins, a research associate at the MPI-EVAN, has been studying the socioecology and reproductive strategies of mountain gorillas in Bwindi since 1998.

Claude Sikubwabo Kiyengo has been our assistant since 2008. In 2010 he became General Director of the Institut Superieur de Conservation de la Nature, Environnement et Tourisme (ISCNET) in Rumangabo and in 2011 he became the PACEBCo expert for conservation and biodiversity in the Virunga region (COMIFAC).

Paulin Wilondja-As-Ngobobo worked for several gorilla conservation NGOs, he was principal conservator and chief warden of the southern sector of the Virunga National Park from 2006 to 2007 and is now conservator of the Maïko National Park.



Searching for Sustainable Solutions to the Threats to Maïko National Park

Conservation in the Maïko National Park (MNP) remains difficult: the intensity of threats to the park has not decreased. It is an enormous challenge to keep these threats and their consequences within acceptable limits.

One of the main threats to the fauna and flora of the park is the commercial exploitation of minerals (gold, cassiterite, diamonds, etc.). Over 20 open-cast mines are operating inside the park: 14 are located in the northern sector, 8 in the centre and 5 in the southern sector. The mines belong to, or are co-owned by, armed bands and local chiefs.

Distribution of Illegal Mining Sites in the Maïko National Park

Several sensitization and lobbying missions have taken place, and follow-up activities have been carried out, targeting both the political-administrative and military authorities and the local population. All activities have the same primary goals:

 to strengthen the understanding and appreciation of the public and the authorities concerning the need to



conserve the fauna and flora of the park and its surroundings,

- 2. to promote cooperation between the park and the communities,
- 3. to help people understand principles for biodiversity conservation in the park,
- to lobby national and provincial decision-makers to gain their wholehearted support for the protection and the promotion of the park,
- 5. to provide new support to the MNP management to enable response to

the requirements for conservation and sustainable development.

In short, activities are aimed at defending and promoting the interests of biodiversity conservation of the park, which is under severe threat.

The Park Management has just launched a sensitization campaign called "SOS MAIKO" in cooperation with the environmental service, the local authorities and the community reserves. The campaign is meant to awaken a collective conscience to support the conservation of the fauna and flora. Among other goals it aims to reestablish the integrity and security of the park by dedicated lobbying and improved monitoring activities in the park and its surroundings.

The sensitization campaign is the final remaining activity before the ecoguards relocate the remaining stragglers who are staying on in the park. The park's managers have granted an extension of one week beyond the allocated deadline for the remaining people to leave.

A joint commission consisting of representatives of the park, the environ-

Distribution of illegal mine sites in the Maïko National Park

Site	Location	Exploited ore
Tokonoda, N'seli, Mbole, Makutaniyo, Lukandau, Brom, Syrte, Canaan, Irak, Etuyi, Mokili pasi, Masienene, Bisengo Anuarite	northern sector	gold and platinum
Angumu, Etabili, Maisha, Madekedeke, Mobwa, Landa Bajeunes, Masoso, Lengelenge	central sector	gold
Abolemba, Mbudju, Manganga, N'konya Amatchotcho	southern sector	gold and diamonds





Camp of mining workers at the edge of the park

mental service, the mines, the community reserves, the army and the local administration is currently touring the quarries and the villages surrounding the park in order to persuade the illegal miners to leave the park voluntarily before the new deadline.

Paulin Wilondja-As-Ngobobo

Maïko and the Simba

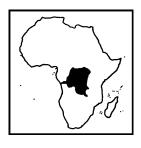
The Maïko National Park (MNP) is one of the least known and most biodiverse of all parks in the Democratic Republic of the Congo comprising over 10,000 km² of lowland rainforest towards the easternmost limits of the Congo Basin. It is also unique within the country's

protected area framework of biological representivity and is the only national park in DRC to contain three of the country's most important endemics: the Grauer's gorilla, the okapi, and the Congo peafowl (Amsini et al. 2005; 2006; Braum & Mufambule 2008). The park also contains significant and viable populations of elephant, chimpanzee, bongo and leopard (Hart & Sikubwabo 1994). Despite this significance, the park has received little national or international attention or management support since its creation in 1970, effectively existing only on paper. The Maïko forest also constitutes a vast carbon sink, and its protection is of global importance in preventing further climate change.

Photo: Paulin Wilondja-As-Ngobobo

Due to the park's inaccessibility and remoteness, the forest block remains a bastion for a group, known as the Simba Mai Mai, who took refuge there in 1964 after the assassination of Prime Minister Patrice Lumumba. Refusing to accept or acknowledge the legitimacy of the Mobutu regime, the Simba have remained in the park ever since, making a meager living from the park's resources and protecting it from other rebel groups fighting in the region.

Excluded from the Sun City Peace Agreement in April 2002, because they were considered to be an "internal problem", the Simba were eventually given a voice and a platform at the National Amani Peace Agreement in January 2008. Along with many oth-



er internal rebel groups, they agreed to demobilise as part of the national movement towards peace and stability within the newly established framework of democracy, the process which was officially launched by Congolese Government and the United Nations on the 6th May 2010. This provides a unique opportunity, for the first time since the park's creation in 1970, to resolve the issue of Simba rebels in the park and ensure the long-term protection of one of the world's last intact forest frontiers.

However, the group's basic demands to support reintegration into civil society after nearly half a century living in the forest have not yet been met by the Congolese government. The Frankfurt Zoological Society is about to launch an initiative, with funding from the German Government, to support the development of social and economic opportunities for those Simba Mai Mai and their families returning to a normal life outside the park.

The project will make significant contributions to the well-being of the Simba community. Over the next 2

years we will be working with local authorities to support the voluntary resettlement of the community and will be providing building materials for new homes outside the park. A purposebuilt school and health centre staffed by government employees will ensure that their children have the necessary access to health and education, thereby improving their physical and social capital. Support will also be provided for business and technical skill acquisitions, and for the development of pilot micro-credit programmes for conservation compatible and environmentally sustainable small business enterprises to improve the Simba community's economic capital and reduce forest dependency.

Land-use planning and participatory zoning schemes will help limit development activities to those areas of least environmental concern and importance, while training in improved agricultural techniques will improve productivity and yield of land set aside for agriculture. Support for the use of alternative energy sources and fuel-effi-

Manguredjipa

Goma

cient stoves will also be provided in an effort to greatly reduce fuel-wood consumption at the household level, thereby significantly reducing rates of deforestation and degradation and improving environmental sustainability.

This project will greatly enhance the protection of Maïko National Park by giving members of the Simba Mai Mai community the opportunity to join the park's ranger force. The recruitment of 30 young men will enable the Congolese wildlife authority to benefit from their superior knowledge of the park. while providing long-term employment opportunities to the Simba in a region of virtually zero employment. The Simba community's remarkable history is intimately linked with the presence of Maïko National Park, and its continued existence today may be in part due to their long-term occupation of the forest and protection of its resources from external pressures. Frankfurt Zoological Society will be working to ensure that the Simba are now able to play a role in the future of the park while benefiting from the stability of reintegration into society.

Robert Muir



Parc National de la Maïko

Lubero

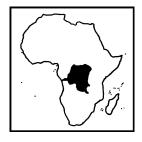
Lubero

Valikale

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Can Tree Nurseries in Schools Make a Contribution to Conservation?

Everything developed as a result of lessons learnt from two concurrent projects: the project for the protection of gorilla habitat on Mount Tshiaberimu, and the Sarambwe Reserve Support Project. The former was a microproject conducted in the vicinity of Mount Tshiaberimu and supported by Berggorilla & Regenwald Direkthilfe (B&RD). Its target group were the members of SAGOT at Buswagha village near Mount Tshiaberimu; the aim of the project was reforestation. The Sarambwe Reserve Support Project was co-financed by the French IUCN committee and B&RD; its objective was to improve the protection of the Sarambwe Reserve by supporting regular patrol activities, establishing monitoring trails, encouraging ecotourism, demarcating reserve boundaries, and providing assistance for reforestation and agroforestry in the vicinity of the Reserve.

In both projects, students from the local school were heavily engaged in the tree nurseries and the people made responsible for nurseries at the schools developed a great interest in the activity. The tree nurseries were frequented by

- students and their teachers, who learnt about the technical side of nursery work,
- students who came to collect seedlings for planting the school fields.
- students fetching seedlings for their families.

As a consequence, and in response to the requests of the population in the vicinity of Mount Tshiaberimu, B&RD decided to fund a pilot project in schools near Mount Tshiaberimu. Three schools have been selected to



Students in the tree nursery

Photo: Augustin Rwimo

participate in the project: the Vurusi Institute, a secondary school, and Tuvuke and Kisanga primary schools. The project will be funded for 6 months a year from 2011 to 2013 and should be able to satisfy the demand. Activities will be funded from September to March, with an implementation report to be submitted in May.

Results after the First Year and Perspectives for the Future

The project proposal planned the production of 24,000 seedlings per year - 8,000 seedlings per school. Sensitization activities were envisaged for the time before the growing seedlings were distributed and planted. The results for the first year of activities are as follows.

Production: The May report shows a production of 44,000 seedlings compared to the 24,000 that were planned. It also shows that between 22.75 and 27 hectares were reforested, compared to the 12 that were planned - an increase of 190%. Moreover, the seedlings that were grown and subsequently out-planted do not represent the entire output of the tree nurseries. More plants remained in the seedbeds or in the nurseries. The schools have arranged to continue the work in the nurseries even during the period when they are not funded.

The project supervisor, Katembo André, reported again on these activities at the beginning of the new school year in September, and indicated that by that time 52,500 seedlings had been planted on approximately 35 hectares. The project now foresees the planting of 40 hectares every year with no extra funding.

Distribution of 52,500 plants

- 20,000 plants have been distributed to the population around Mount Tshiaberimu.
- 20,000 plants have gone to the different churches to reforest their former plantations.



- 7,000 plants were received by the teaching staff of the participating schools.
- 3,000 plants have gone to health centres.
- 2,500 plants were given to students.

Sensitization took place on several levels:

- Parents of the students: The parents were sensitized through meetings with the school directors and in meetings with their committees. The students themselves also sensitized their parents about the plantings.
- General population: Messages have been disseminated in the catholic and protestant churches locally and further afield.

These sensitization messages refer to the threats to the forest and the gorillas, to the importance of the gorillas at the local, national and international level, to the loss of soil due to erosion, and to the decline of agricultural productivity caused by soil loss and by poor cultivation techniques that do not intercrop plants that could restore the fertility of the soil.

Lessons Learnt and Recommendations

It has been very obvious that the school tree nurseries have a much



School directors and teachers from Vurusi with planted seedlings

Photo: Jean de Dieu Paluku Vhosi



The young trees are handed over to the population.

Photo: Jean de Dieu Paluku Vhosi

higher productivity of seedlings than a typical tree nursery of the associations: production has reached 52,500 – an increase of 218.75% over the planned 24,000 seedlings.

The nurseries are externally funded for only 6 months each year. The schools have arranged to maintain the nurseries all year round, greatly contributing to the higher productivity.

All seedlings were distributed and planted by the different partners. Several schools near Mount Tshiaberimu, and even from further afield, have now expressed an interest to participate in the project, including Kasimbi, Kitolu, El-Shadai and Ighohya primary schools. The Vurusi Health Centre and the Kisharo Institute at Sarambwe have also expressed interest in developing tree nurseries, as have the secondary schools in Magheria and Masereka.

The tree nurseries have served to teach students nursery techniques. Students from other schools have vis-

ited the nurseries in order to learn the techniques, as has happened also in the Sarambwe and SAGOT nurseries.

Conclusion and Recommendations

The school tree nurseries are clearly very effective and profitable. If they are reproduced in other schools, they could make an effective contribution to the preservation of the forest habitats in the Virunga National Park, the maintenance and improvement of local climate, and the conservation of the park's rare and unique species. They also contribute to the improvement of the population's socio-economic conditions.

It has been found that one of the most profitable activities locally, a direct result from this scheme, is the trade in charcoal, preventing further deforestation. At Vuswagha village alone, which has approximately 500 people, almost 400 sacks of charcoal at 70 kg each are sold and transport-



ed to Kyondo and Butembo city each week. This translates to the cutting of approximately 1,200 trees (3 years old) in a plantation where they are planted with a space of 2.5 m between them, or a loss of 0.75 hectare of village plantation per week (36 hectares per year). Charcoal is sold for about US\$ 10 per sack in this village, which means that the overall profits from sale of charcoal are around US\$ 208,000 (20,800 sacks of charcoal).

As there is no forest near the villages, people go into the park, the habitat of the gorillas, to cut trees and burn charcoal. It is therefore very important to maintain tree plantations near the villages or among the village fields to keep the population from cutting wood in the park.

In view of the effectiveness of the school tree nurseries, the requests expressed by several other schools and the threat to gorilla habitat in the Virunga National Park, we recommend that the tree nursery project should be extended to the other schools in the Virunga area. The project should cover the whole of the Mount Tshiaberimu area, Sarambwe and the Mikeno sector in the southern part of the park.

Claude Sikubwabo Kiyengo

A Key Species Monitoring Plan for Kahuzi-Biega

A monitoring plan for gorillas and elephants has just been launched in the highland sector of the Kahuzi-Biega National Park (KBNP). Its purpose is to provide information on 10 gorilla groups in the park and to put together an accurate inventory of group compositions and home ranges. It also defines standardized observation methods for monitoring teams. The monitoring will be undertaken annually. The plan has been conceived as an offshoot of the overall monitoring plan for KBNP for 2011–2016.

In this report we provide details on the gorilla groups for which we already have some results from the monitoring activities. To compile information on distribution, density and population size of the gorillas in the highland sector of the park, inventories are conducted periodically (usually at 5-year intervals) and cover vast areas. Data are collected both on the habituated and unhabituated families and individuals. These censuses allow an estimate of the overall population size within the protected area.

In the case of those groups that are followed on a daily basis, accurate numbers of animals per group are available without additional census. Monitoring of the gorillas on a daily basis is therefore preferable. In the highland sector of the park, the gorilla population consists of 1 habituated group, 1 group in the process of being habituated, and 8 others.

Through daily recording, we aim to collect data on 10 gorilla groups, including group composition, state of health, activities, and social interac-

tions within the group. This monitoring enables tracking of the number of individuals per group, and group dynamics. The daily checking of unhabituated groups will provide basic data only.

Inconsistencies in monitoring data may be caused by inter-observer variance, by inexperience since the trackers do not carry out their monitoring activities regularly, by the relatively small number of trackers able to read and write, and by a general lack of motivation and confidence.

This has prompted the Park Management and the heads of the Research and Monitoring Programme, Tourism Programme and Programme for the Management/Protection of the Ecosystem to propose activities that encourage improved accuracy in monitoring. In the future, the monitoring results will help the management to respond rapidly to challenges in the effective organisation of field work.

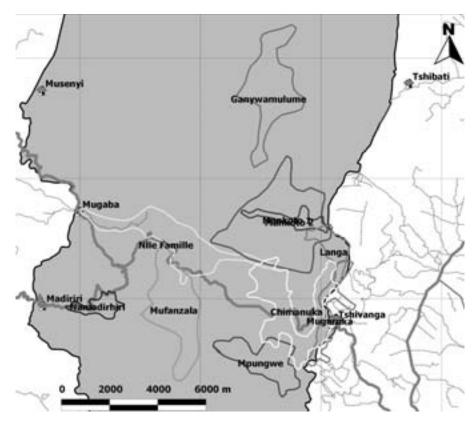
Preliminary Results

Ten gorilla groups had previously been identified in the highland sector of the

	Group composition								
Group	SB	ВВ	ADF	SUE	BAD	JU'	V	Infants	Total
				М	F	М	F		
Chimanuka	1		17	1	_	4	_	11	34
Mankoto I and II	1	3	13	3	1	_	-	2	23
Mugaruka	1	_	_	_	_	_	_	_	1
Langa	1	_	9		_	_	_	4	14
Mufanzala	1	_	9	5			_	4	19
Mpungwe	1	_	7	_	_	_	-	1	9
New group (Cibubula)	1	_	7	_	_	_	-	3	11
Ganywamulume	1	_	6	_	_	_	1	2	10
Namadirhiri	1		11	2				2	16
Total									136

SB: silverback; BB: blackback; ADF: adult female; SUBAD: subadult; JUV: juvenile





Home ranges of the gorilla families during the second trimester 2011

Namadirhiri

KBNP. Monitoring has confirmed that what used to be 2 groups, Mankoto I and Mankoto II, have joined up to form a single group, reducing the number of groups from 10 to 9.

We will keep track of the gorillas' home ranges in the future, in order to document their movements and to improve their security within their ranges.

Habitat monitoring provides us with information on what each gorilla group eats and the seasonality of food supplies. Group location and food plants have become the key main elements of observation. During the second quarter of 2011 the gorillas were observed eating the plant species listed in the table at the right.

Training of Monitoring Teams

In order to ensure that the monitoring is done correctly, guides and trackers

Group	Species eaten	Group locations
Chimanuka	Urera hypselodendron, Taca- zea, Cyperus, Allophyllus	Cishaka, Chirumbu, Marhale, Nyamu- hambaza
Mankoto I and II	Tacazea, Urera, Vernonia	Kakungu, Kabona
Mugaruka	Urera, Tacazea, Rumex	Marhale, Tshivanga
Langa	Gouania, Urera, Tacazea	Langa, Ihango, Ciziba
Mufanzala	Cyperus, Urera, Tacazea	Tombola, Musisi II, Rubusu
Mpungwe	Sinarundinaria alpina, Urera, Ficus, Tacazea, Vernonia	Myamubwa, Kizi, Kantotobwa, Kabwe
New group (Cibubula)	Sinarundinaria alpina, Urera, Ficus, Tacazea, Vernonia	Myriangarhi, Musisi, Muhaha
Ganywamulume	Sinarundinaria alpina, Urera, Ficus, Tacazea, Vernonia	Lushebere, Mashisho

Sinarundinaria alpina, Syzygium

have participated in a training course. They were taught to differentiate between a nest that was actually slept in and a nest that was started but never finished, and to distinguish between different individual gorillas.

Since the start of the monitoring programme we have been able to provide more information on the gorillas and, at the same time, to take timely decisions in response to urgent and difficult situations.

Now that the number of gorillas in the highland sector is known, the challenge is to extend the work to the low-land sector, where no census has taken place since the armed conflict started in the region. Currently, the park's efforts in the lowland sector are limited to observing the key species during regular patrols. A census is required to determine how many apes still occur in this part of the park. The park therefore appeals to concerned individuals or organisations to provide assistance to the park to carry out the required surveys.

Lusingula, Terre noire



A Name for the New Gorilla Group

On the occasion of World Tourism Day, the park's new gorilla group received a name. The provincial authorities and local heads of various state services were led by the Club of the Friends of Nature to participate in a naming game, which resulted in a permanent name for the group. The previously termed "new group" henceforth will be called Cibubula, which means "Eat in peace what you have received in peace".

Radar Birhashirwa Nishuli

Orphaned Gorilla Care – **First Response Situations**

Gorilla confiscations are on the rise in the Democratic Republic of the Congo. So far this year 3 eastern lowland, or Grauer's gorillas have been confiscated by ICCN (Institut Congolais pour la Conservation de la Nature) -Kyasa, Lubutu and in October 2011 little Shamavu. And in the second half of 2010 Ndjingala and Ihome were confiscated. In Gisenyi, Rwanda, on the border of Goma, DRC, an infant mountain gorilla was confiscated in early August of 2011, just as she was being smuggled across the border. Ihirwe is the first mountain gorilla to be confiscated since 2003. Is this because wildlife authorities are getting better at finding them, or is the traffic in baby gorillas on the rise? Either way, these poor little ones have gone through unthinkable trauma, almost certainly seeing family members killed, very roughly treated by their captors, fed wildly inappropriate diets before they were finally, and luckily confiscated from the poachers.

When these infants are confiscated, they are emotionally traumatized, to say the least, but physical trauma is common. We have had infants come to us with gunshot wounds, pneumonia, deep cuts in their sides from rope leashes, and diarrhea. As soon as we

can after confiscation, Gorilla Doctors conduct a quick and gentle examination to determine the extent of injuries and illness, and try to begin appropriate treatment. The next most important thing to ensure recovery is to place the infant in the care of a stable and experienced caregiver. These infants are stressed, sick, tense and withdrawn, and generally between 1 and 3 years of age when they come to us. They need to regain trust - gorilla infants rely on their mothers for nursing, protection, and comfort for the first 3 years of their lives, and the caregiver must provide these essential elements to the infant.

Caregivers are all tested for infectious diseases and, at first, wear coveralls, masks and gloves to decrease the chance of spreading human disease to these extremely susceptible infants (gorillas can get all of the diseases we do, and are especially susceptible to respiratory disease). We Gorilla Doctors also wear masks and coveralls for

the same reason. Once the orphan has settled in to his/her new situation, after about a week, we conduct a thorough examination under light anesthesia. Samples are collected for evaluation, the infant is tested for tuberculosis, vaccinated against rabies, tetanus and measles, and treated for parasites. All gorillas confiscated from poachers go through a 30 day quarantine period before being introduced to other gorillas again, to try to reduce the possibility of transmitting disease either way.

The ideal goal for these orphans is reintroduction back into their native habitat, but the infants are too young to survive, and would not likely be accepted back into their groups even if the family groups could be found. There are many things to consider before an orphan primate can be reintroduced, and this is why a Technical and Scientific Advisory Committee was formed some years ago to bring together the wildlife authorities and others.



Virunga National Park Ranger Christian Shamavu and Jan Ramer with the confiscated orphan Shamavu

Photo: Molly Feltner/MGVP





Ihirwe is examinated by the Gorilla Doctors after confiscation

Photo: Jan Ramer

This committee is composed of representatives from ICCN, RDB (Rwandan Development Board), UWA (Ugandan Wildlife Authority), DFGFI (Dian Fossev Gorilla Fund International). IGCP (International Gorilla Conservation Programme), MGVP (Mountain Gorilla Veterinary Project), GVTS (Greater Virunga Transboundary Secretariat), and meets at least annually to discuss the progress of the orphans and come to consensus on the next steps for their rehabilitation. These gorillas will not be reintroduced to the wild without knowing they have the behavioural tools to survive, that the area into which they will be reintroduced is politically secure, that they have a strong silverback in the group to protect and lead them, and that they do not carry any infectious diseases that might cause serious disease in the wild gorillas. This is a tall order and will take years to achieve.

In the meantime the orphaned Grauer's gorillas will live in a semi-free ranging situation at the Gorilla Rehabilitation and Conservation Education center (GRACE) in Kasugho, DRC, and the mountain gorillas in Senkwekwe Center at Rumangabo, DRC. Both are great situations where the gorillas can be together, and learn to be gorillas again, under the watchful eyes of caregivers.

At the end of the day, these confiscated gorilla orphans are the lucky ones – their wounds and diseases are treated, they have a good almost natural diet, and they get to be gorillas. I do not like to think about what happens to the orphans that we do not know about.

Jan Ramer

New Mountain Gorilla Orphan Confiscated

A new orphan gorilla infant arrived in the night on Sunday, August 7th, at the care facility in Kinigi, Rwanda operated by the *Dian Fossey Gorilla Fund International* and the *Mountain Gorilla Veterinary Project* (MGVP). The newcomer is a female gorilla, confiscated from poachers by Rwandan police in the town of Gisenyi, at the border with the Democratic Republic of the Congo (DRC).

The little orphan, just barely over a year old was well enough, and, although she was not afraid of humans, she was very traumatized and underweight. She was captured on August 2nd at Bukima, on the Congolese side of the border in Virunga National Park, but arrived in Rwanda on August 3rd. Felix Ndagijimana, deputy director of the Karisoke Research Center, went to Gisenyi to meet with the principal organizations involved in the gorilla confiscation, including the MGVP, the Rwandan Development Board and the Congolese park authority (ICCN).

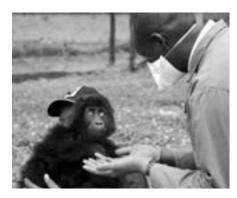
When the Congolese poachers, assisted by two Rwandan men, attempted to cross over the border to Rwanda, they were arrested and subsequently incarcerated in the Gisenyi jailhouse. They claimed that they did not capture the orphan themselves, but instead purchased her from an unnamed source for US\$ 15,000.

A rescue team led by MGVP's Regional Veterinary Manager Jan Ramer hurried to the jailhouse to rescue the

little orphan late Sunday evening. Immediately, it was clear that she was suffering from some upper respiratory distress, likely a product of exposure to a human captor's illness. However, with medical treatment and her nutritional and psychological needs met, she is now healthy and will soon be ready to travel to a new home.

The young gorilla is cared for in Kinigi while she waits out her one-month quarantine period. Ihirwe's rehabilitation facility is located at the base of the Virunga Mountains. It is safely enclosed by a tall brick wall which encloses a large lawn, equipped with wooden climbing structures and a night house. Ihirwe is never alone and is accompanied by one of her three caregivers at all hours of the day and night. She spends sunny afternoons out in the grassy play area where she teeters around on two legs while raising her little arms up towards her human caregiver. The caregiver casually picks her up and swings her around for the hundredth time this afternoon.

Jean Bosco Noheli of MGVP visits Ihirwe periodically to assess her medical condition and monitor her development. She is growing stronger and more confident by the day. MGVP and the Fossey Fund are excited that they will soon be able to integrate her with other youngsters of her kind in a larger, more natural setting as soon as she



Ihirwe with her keepers

Photo: Jan Ramer



RWANDA





Ihirwe playing the grass Photo: Jan Ramer

is ready and her subspecies is determined.

Although Ihirwe's one-month quarantine period is completed, the Dian Fossey Gorilla Fund and MGVP are waiting for one final piece of information before her big move. The results of her DNA analysis will determine whether she is indeed a mountain gorilla or a Grauer's gorilla. This will determine her future residence. If a mountain gorilla, Ihirwe would join four other recent graduates from the Kinigi facility in the Senkwekwe center, in a more natural, rural setting in Rumangabo, DRC that ICCN developed for confiscated mountain gorillas. The other option would be the Gorilla Rehabilitation and Conservation Education (GRACE) center for Grauer's gorillas, in the DRC.

Ihirwe's samples were sent to the Max Planck Institute for Evolutionary Anthropology in Germany. Jan Ramer hopes that, given their extensive database of information, they may also be able to determine Ihirwe's natal group, a fascinating possibility for the gorilla conservation community.

Jean De Dieu Ngilira, head caretaker at the Kinigi orphan facility, says that he is pleased with Ihirwe's progress. She has a great appetite and enjoys eating lots of bananas, carrots and pineapple. They are also supplementing the infant's food with milk and wild celery. It is important to the MGVP and the Fossey Fund that she be exposed to various food sources from her native habitat. Although Ihirwe has attempted to strip the celery stalks to access the nutritious inner core, she has not yet mastered the technique and still depends on her caregiver's deft fingers.

It took several weeks for the orphan to gain enough confidence and comfort in her new surroundings to start playing. Even then, she would separate only a short distance from her caregivers before running back to the safety of their touch. In mid-September, she began to entertain herself, and started climbing the small trees in her enclosure and playing apart from her caregiver for extended periods of time. This excellent development suggests that she will soon be ready for her move to Senkwekwe or GRACE.

Jessica Burbridge

The 2011 Kwita Izina

Rwanda demonstrates how much the country values its few remaining mountain gorillas. Every year, Kwita Izina is celebrated in June. All mountain gorillas born in Rwanda during the previous year are given names in this solemn naming ceremony. This occasion is celebrated in the same way as the naming of a human baby when it is accepted into its Rwandan family. In the gorillas' case, the occasion has become a national event. Guests of honour are invited (in 2010 it was Paul Kagame and his wife, in 2011 it was Prime Minister Bernard Makuza and

his wife), and in their presence and the presence of sponsors and guests from around the world Rwanda celebrates "its" mountain gorillas. This is a true contribution to gorilla conservation the event draws the world's attention to the situation of the last of the "gentle giants". On June 18th, 2011, the 7th Kwita Izina took place. I was there as tour leader for Windrose Finest Travel. It was quite an experience!

In the morning, we arrived at the festive area around the cultural village in Kinigi and were taken to the marquee. The atmosphere was already memorable, but it turned truly solemn when the national anthem was played. Among the spectators assembled at the openair venue were many Rwandans in military and ranger uniforms. Everybody had a view onto a roofed stage, where the programme of speeches, music and dances organised by the Rwandan Development Board unfolded. The en-





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thusiasm of the dancers was remarkable!

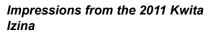
The sponsors finally arrived in their Kwita Izina gowns and the name-giving ceremony of the young mountain gorillas began. A total of 22 "newcomers" were welcomed, including twins in the Hirwa group. Every sponsor explained why "his" or "her" gorilla had been given its particular name. Beforehand, Kwita Izina sheets with pictures of the young gorillas had been distributed to the spectators. Anybody who wanted to wrote the name of the new arrival underneath his or her picture.

Spirits improved even further with another piece of entertainment: the well-known Ugandan pop-star Bebe Cool involved the audience in his rousing show.

Lunch was finger food and drinks. During this break we were able to meet a number of interesting participants. When we left the Kwita Izina area, however, we noticed many local people standing around on the periphery – which demonstrated once again that only people with money can afford gorilla trekking and the participation in such an event. Nonetheless, without tourism revenue there would not be any gorilla conservation, and if you are a tour guide with a biological focus you have thought about this issue very often.

But the local population also had a chance to celebrate: on the evening before the "official" Kwita Izina they celebrated in a marquee set aside for that purpose – and they celebrated as only locals can. We were there, together with a few other foreigners: the local celebration drew us in, too!

Gabriele Müller-Jensen

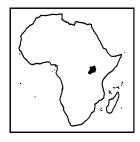


Photos: Gabriele Müller-Jensen









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Information Sharing for Gorilla Conservation: a Workshop in Ruhija

Gorilla conservationists and researchers working on the ground at different sites often face the challenge of accessing valuable yet unpublished information about ongoing projects outside their immediate locality, and sharing experiences on their respective projects. Poor information sharing among field workers means that those planning or carrying out projects at one site may not be able to learn from the experiences of others who might have implemented similar projects at other sites. Another consequence of poor information sharing is that opportunities for collaboration between sites or between researchers might be missed. Improving information sharing among field workers is therefore essential. One way of enhancing information sharing is by organizing meetings that afford field workers the opportunity to meet and interact regularly. Recently, an effort was made to meet this need.

From 28th to 30th June 2011 about 40 gorilla researchers and conservationists from nearly all gorilla range states (Nigeria, Cameroon, Gabon, Republic of Congo, Rwanda, Democratic Republic of the Congo, and Uganda) convened in Ruhija, a village on the edge of Bwindi Impenetrable National Park, Uganda to share their knowledge and experience on a wide range of issues concerning gorilla research and con-

servation during a workshop entitled "Gorillas Across Africa: Information Sharing for Conservation & Research". Participants came from diverse backgrounds - NGOs, government and academia. The workshop was organised and funded by the Max Planck Institute for Evolutionary Anthropology (MPI-EVAN) and North Carolina Zoological Park (NC Zoo) and hosted by the Institute of Tropical Forest Conservation (ITFC). The workshop provided a unique opportunity, especially for earlycareer gorilla researchers and conservationists, to share information on their work and build professional relationships. A wide range of gorilla conservation issues were discussed, including the diverse threats faced by gorillas (poaching, habitat degradation and fragmentation, disease etc.), gorilla research and monitoring (including use of camera traps and the cybertracker system for non-invasive monitoring), gorilla-human disease transmission, gorilla habituation and tourism, human-wildlife conflict management, gorilla ecology and behaviour, conservation education, community conservation and

For many participants, some of the information presented at this workshop about ongoing projects was new and helped improve their perspective on gorilla conservation efforts across Africa, and the conservation status of different gorilla populations. Most importantly, lessons were learned from the challenges faced in the implementation of different projects and the measures

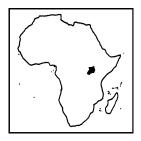
adopted to overcome them where possible. Many participants felt confident that the knowledge gained and lessons learned will help them improve their work at different sites.

It was recognised that site-specific differences do exist due to cultural, economic and socio-political factors between range countries and even regions within countries where gorillas occur. However, the threats facing gorillas (such as poaching, habitat loss and fragmentation, and disease) and the conservation approaches adopted to mitigate them are largely similar across all sites, though it is clear that there is not one blanket solution to address these threats at all sites. Therefore, while lessons could be learned from successful conservation approaches at certain sites, it is important to be cautious when attempting to replicate such approaches at other sites since the prevailing social, cultural, economic and political circumstances may be different and are likely to influence the outcome of projects and their long-term consequences on gorilla conservation.

Some general points were agreed by participants as being important for improving gorilla conservation at all sites:

- There is urgent need for better protection to reduce habitat loss and direct threats to gorillas from poachina.
- Support for conservation efforts must come from all stakeholders - community, national and interna-
- Transboundary collaboration should be promoted for effective landscapebased gorilla conservation.
- Improved monitoring and prevention of human-wildlife disease transmission is important to safeguard the health of gorilla populations.
- Better understanding and management of human-wildlife conflict is





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needed to reduce its negative impact on both humans and gorillas.

- While gorilla tourism provides an incentive for communities to support conservation, it is important to measure and monitor the impact of habituation and tourism on gorilla health and behaviour.
- An expectation has developed in the conservation world that local people must derive economic benefits from conservation. However, there are situations where this may not yet be possible, especially in the short term. This fact needs to be incorporated more strongly in conservation education messages for gorilla conservation.
- Research and monitoring: it is important to assess the long-term impacts of protection and development strategies on gorilla populations; more accurate estimates of gorilla numbers are needed at all sites.
- Community-based conservation has great potential for sustainable gorilla conservation because of the strong sense of local ownership often associated with community conservation initiatives.
- Sustainable funding is important to ensure continuity of conservation efforts.

Post-workshop Field Trip

At the end of the workshop, a field trip to some conservation projects and protected areas was organized to give participants (especially those from West and Central Africa) the opportunity to learn more about wildlife conservation in Uganda by directly observing conservation projects and interacting with protected area staff. From 1st to 7th July 2011 we visited four protected areas (Bwindi Impenetrable National Park, BINP, Queen Elizabeth National Park, QENP, Kibale National Park, KNP and a community forest managed by the Kibale Association for Rural and Environment Development, KAFRED), and a conservation education project – Uganda and North Carolina International Teaching for the Environment (UNITE), implemented in communities around Kibale National Park.

In BINP we tracked a gorilla group habituated for research and learned about some of the ongoing behavioural studies of mountain gorillas. For some of us studying populations with no habituated groups and very rarely seeing the gorillas (e.g. Cross River gorillas Gorilla gorilla diehli) viewing a whole group at close range for a relatively long period of time was a unique and exciting experience. It was also interesting to learn about the magnitude of gorilla based tourism activity in Uganda, the revenue derived from it, and the related management challenges.

At all the sites we visited we observed relatively high levels of wildlife abundance. The considerably lower levels of wildlife abundance at many sites in West Africa (for example) compared to levels observed at the sites we visited is indicative of weaker protection in most protected areas in West Africa which underscores the urgent need to improve protected area management in the West African region. Poor protected area management and the consequently low abundance of wildlife makes wildlife based tourism. with its immense potential for generating sustainable conservation funding in the West African region less feasible.

At QENP it was interesting to see people living together with wildlife apparently peacefully despite the challenges, the incentive from tourism revenue probably playing a role. KAFRED, a community-based conservation initiative in Bigodi village, near Kibale National Park, seems to be a good example of a successful community-based conservation approach to protecting biodiversity outside of government managed protected areas. This group is conserving a swamp forest from which

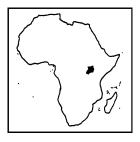
it is also generating revenue from ecotourism. During a quick guided tour of this community forest we observed four species of monkey; and revenue from ecotourism at the site has been used to build a secondary school and fund other developmental projects in Bigodi village.

We rounded up our trip with a visit to the headquarters of the KNP where we had a meeting with the chief warden, who is also the head of the Kibale Conservation Area (a conservation management unit), and other staff to discuss the observations we made during our trip and management challenges facing the park authority (including human-wildlife conflict and poaching) and strategies adopted to deal with them. We had a similar meeting with the chief warden and other staff at the park headquarters of BINP at the end of our visit to that park, and with park wardens at QENP during our visit there. These meetings were very informative, and provided an excellent opportunity for sharing our conservation experiences from three African regions with some differences in political, economic and socio-cultural characteristics that influence biodiversity conservation.

Overall, this workshop was successful as a medium for information and experience sharing among field workers. The field trip at the end of the workshop was both interesting and informative. We would like to see such meetings organized more regularly to provide regular updates on conservation and research projects at different sites.

Inaoyom Imong, Ekwoge Abwe, Romanus Ikfuingei, Jean-Robert Onononga and Loïc Makaga

We are grateful to the organizers, especially Martha Robbins and Richard Bergl, for providing us with the opportunity to interact, face-to-face, with other gorilla researchers and conservationists from across Africa, share knowledge and experiences and build relationship that will improve our work. We would also like to thank the Uganda Wildlife Authority and the management of the different protected areas



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we visited for their assistance and cooperation that made the field trip enjoyable and rewarding. Finally, we would like to thank the people of Ruhija and Bigodi villages and the many other Ugandans we met during the workshop and field trip for their warm hospitality that made us feel very much at home in Uganda.

Mondberge visits Ruhija

Uganda, June 2011: After our fascinating hike through the Ruwenzoris and a short safari in the Queen Elizabeth National Park we were looking forward to seeing the mountain gorillas and paying a visit to the various aid projects in the Bwindi Impenetrable National Park - Mondberge meets Gorilla beringei beringei.

The road became worse all the time: dusty tracks and potholes were putting our jeep's driver to the test. The forest became denser, the huts fewer and further between, the greenery more impenetrable. Shaken to the core, we finally arrived in Ruhija to meet Martha Robbins, the primatologist who specializes in mountain gorillas and, together with her staff, spends several months a year at the remote place to study this threatened species.

Martha Robbins brought her colleagues Emily Turinawe and Peter Kabano and two students to the barbecue at our lodge. Over dinner, she told us about the mountain gorillas, her work in the forest and its challenges. An important part of her work is the sensitization of the local people to coexist with the animals in a peaceful way. Another activity is a survey that was carried out after our visit to give an accurate idea of the gorillas' population size.

Emily Turinawe's task is to educate the children in the local schools about the need to care for nature. Until a few years ago, gorillas were killed whenever they strayed into the villages - people were scared of them. As the local inhabitants improve their understanding of the animals and the ecosystem of Bwindi National Park, they begin to accept them as their neighbours. The gorillas' presence attracts tourists, and therefore money, and creates jobs. The Mondberge team supported Emily's work with exercise books and pens. chalk and other school materials.

Peter Kabano goes into the forest almost every day in order to habituate two gorilla groups. In a process lasting approximately 2 years, the naturally shy animals are faced with people and eventually they stop running away. At this point, tourists can be taken to view the gorillas.

In the meantime, Martha prepared for the census - among her other duties. As the census is connected with a genetic analysis of the faeces, we carried 1,000 sample vials through customs - not without a number of discussions! As soon as they are filled they will be sent to Germany for analysis.

The next morning, we were taken to the mountain gorillas deep in the forest. We run into them in the impenetrable undergrowth. Dominant silverbacks, rebellious blackbacks, devoted females and playful youngsters kept us spellbound for an hour.

In the afternoon, by way of saying thank you for the presents, the school children performed a play for us. They sang and danced - exuberant in spite of the poverty that casts a shadow over their lives. When T-shirts were distributed, they formed a long queue and waited patiently.



School children performing Photo: Andreas Klotz, www.mondberge.com

It was hard to say good-bye to Ruhija, the wonderful people and the legendary animals. The fog that covered the valley like a blanket, the green hills and the melodious sounds from the forest increase our desire to stay.

> Andreas Klotz and Stephan Martin Meyer, www.mondberge.com

Death of a Blackback in Bwindi

On June 17th, 2011, Uganda Wildlife Authority (UWA) staff discovered that the blackback male Mizano of the Habinyanja group was dead. According to initial reports, he was killed by poachers who were hunting small antelopes. A post mortem carried out by doctors from Conservation Through Public Health indicates that the gorilla was killed by a spear thrust which entered through the right side of the shoulder and pierced the lungs.

UWA, with the help of the Uganda Police sniffer dogs, managed to track and arrest the suspected killers. In addition, machetes and spears soiled with (what purported to be) Mizano's blood were retrieved from the three suspects' homes. The three men were arrested and the case went to court but the presiding magistrate almost dismissed the case for lack of strongly incriminating evidence to specifically link the men to the death of the mountain gorilla, and the trio were only fined US\$ 20 and US\$ 40, found guilty of entering a protected area without authority and possession of illegal devices capable of killing wildlife species.

Summary of blog entries at http://bwindiresearchers. wildlifedirect.org



CROSS RIVER



The tropical rainforests of Cross River State, Nigeria are recognized as a biodiversity hotspot of global significance, supporting numerous endangered primates - most notably the Cross River gorilla. With fewer than 300 remaining in 11 small groups, Cross River gorillas are now regarded as critically endangered and as the most threatened taxon of ape in Africa. The WCS project aims to reduce the threats faced by gorillas in the Cross River National Park, Okwangwo Division. Their populations have declined due to habitat destruction for farming, roadbuilding and poaching.

A BBC film on gorillas is shown in a pedal-powered cinema.

Photo: Louis Nkonyu/WCS

Conservation Education Outreach for the Cross River Gorillas

It is not only the rangers of protected areas who are responsible for the conservation of gorillas – the local population needs to be convinced as well. This is the aim of the *Wildlife Conservation Society*'s education outreach activities in Nigeria. This campaign has reached about 42,000 people living in 49 villages in and around Cross River National Park.

Now the ongoing schedule of conservation education activities is to be improved and expanded for critical audiences such as school children, farmers and hunters. It is important for the communities to understand how their actions affect the environment, how they can reduce environmental damage and the threats to Cross River gorillas, and ensure that there will be a continual supply of natural resources in the future.

WCS project manager Andrew Dunn sent us a request for additional funding that especially concerns future generations. A total of 25 teachers will be trained in conservation education, for which field trips with school clubs to the Mbe Mountains are planned. Other activities will include support for a World Environment Day campaign rally against deforestation and poaching for bushmeat, a Cross River gorilla school exercise book, and a program of films to be shown in villages.

Bank Account:

Account number 353 344 315
Stadtsparkasse Muelheim, Germany
Bank code number 362 500 00
IBAN DE06 3625 0000 0353 3443 15
SWIFT-BIC SPMHDE3E
Bank account in Switzerland:
Postscheckkonto 40-461685-7
Postfinance



Help us to realize this important WCS campaign! Euro 8,000 are needed to carry out these conservation education activities for one year. By donating for the education of school children, you contribute to the survival of the rarest gorillas in the world.

Address:

Berggorilla & Regenwald Direkthilfe c/o Rolf Brunner Lerchenstr. 5 45473 Muelheim, Germany



GORILLAS

Feeding Ecology of Sympatric Apes: Dietary Overlap and Competition

Examining dietary composition and overlap between species living within the same environment is important for improving our understanding of their distribution and abundance, as well as answering questions about community ecology, and the processes of speciation and adaptive radiation. Most species that occur sympatrically and have a similar diet are assumed to have evolved species-specific ecological adaptations that decrease the competition between themselves and other species living in the same habitat, and make co-existence possible (Eccard & Ylönen 2003).

Dietary overlap of sympatric apes is complex and understudied. Chimpanzees and gorillas occur sympatrically across a wide variety of ecological habitats, including the East African moun-

tains of Bwindi Impenetrable National Park in Uganda, the Kahuzi-Biega National Park in the Democratic Republic of the Congo, and the Ebo forest of Cameroon on the west coast of the continent. Ecological differences cause variation in the degree of dietary overlap and niche separation between sympatric species, making it difficult to generalize from a single study site to a broader area of sympatry. In addition, large inter-annual variation in fruit production in rainforest habitats means that short-term studies only provide a snapshot of interspecies dynamics, which can vary substantially both within and between years.

In 2005 we set up a new field site in Loango National Park, Gabon, with the aim of habituating sympatric western gorillas (Gorilla gorilla gorilla) and central chimpanzees (Pan troglodytes troglodytes) in order to answer questions about feeding ecology, interspecies competition, ranging behaviour and social structure. Loango National

Park, located on the coast of Gabon, contains highly heterogeneous habitat that includes mature and secondary forest, mangroves, swamps, savannah and coastal forest, making it an interesting location to study interspecies dynamics of closely related species. The 100 km² study area where our project is based is also notable in that terrestrial herbs (considered to be a staple gorilla food in other field sites) are extremely sparse. We wanted to know whether living in such an environment might lead to an increase in frugivory by gorillas as well as increased dietary overlap between them and the more frugivorous chimpanzees compared to other sites. Would chimpanzees remain more frugivorous than gorillas despite these ecological constraints, and would gorillas find other ways of maintaining their intake of dietary fibre through an increased consumption of bark or leaves? Another question was whether the density of gorillas in Loango was lower than at





A silverback gorilla male and a chimpanzee female feeding in trees

Photos: Josephine Head (left) and Erick Reteno (right)



GORILLAS

sites where terrestrial herbs are abundant, and whether this location would be unable to support a high density of gorillas. If gorillas occur at very low densities in Loango then competition between them and the chimpanzees would be reduced even if dietary overlap was high.

From 2005 to 2008 we studied food availability and dietary composition of the chimpanzees and gorillas using a variety of methods, but largely through faecal analysis and trail signs since the apes were still unhabituated to human presence and we were therefore unable to observe them directly for long periods of time. We tried to collect faecal samples every day from under night nests, on trails and after contacts with the apes, and then brought them back to our research camp for washing. After washing away all the faecal matter through a sieve we then identified and counted all the seeds found within, in order to measure both the diversity and quantity of fruit consumed by both ape species. By separately weighing whole fruits of species that we found in the faeces, we were also able to measure the volume of fruit consumed, and estimate how many grams of each faecal sample were fruit remains.

We monitored changes in fruit abundance from 750 trees from 57 species known to be consumed by chimpanzees or gorillas on a monthly basis, and we used data on the presence of fruits, flowers and young leaves to create a monthly fruit abundance index for each ape species. We then measured overlap in fruit consumption between the two species through faecal analysis, in addition to looking at seasonal variation in fruit consumption and its relation to overall fruiting patterns in the forest.

Our results showed that Loango National Park has a very low herb density compared to other locations where gorillas have been studied and a different seasonal fruiting pattern than reported for other ape habitats, illustrating that

there can be high variability between sites. Mean dietary overlap for fruit between chimpanzees and gorillas was 27.5% but varied greatly seasonally, ranging between 0.3% and 69%. More fruit was available for chimpanzees than gorillas throughout the study, and chimpanzees consistently consumed a greater number of fruit species than did gorillas. Chimpanzees were also significantly more frugivorous and their faeces contained more fruit than gorilla faeces 90% of the time.

We found a positive correlation between the seasonal consumption of fruit and the availability of fruit in the forest for both chimpanzees and gorillas, indicating that both ape species respond to fluctuations in fruit availability by consuming more as it becomes increasingly available. A very low availability of terrestrial herbs did not lead to increased frugivory by gorillas nor increased overlap between the two ape species compared to other field sites. Instead, our results suggest that Loango gorillas may eat more tree leaves to make up for the lack of terrestrial herbs. Only direct observations once the apes are fully habituated to human presence will confirm this theory, but the number of species of tree leaves eaten by gorillas in Loango is higher than that found in any other site where gorillas are studied, and so we await direct observations to confirm if the quantity of leaves eaten is also higher.

We also found that gorillas avoided fatty and oily fruits that were high in crude lipids, but these fruits were regularly eaten by the chimpanzees, and were the main cause of differences in fruit consumption between the two ape species. In each month of the study, fruits from one or more of these fatty species were available, indicating that in Loango chimpanzees have a more consistent supply of fruits throughout the year that gorillas do not compete for, and it is possible that this dietary differentiation allows the two ape spe-

cies to coexist without too much competition. In addition, genetic analysis confirmed that the density of gorillas in Loango was comparable to that found in other gorilla study sites (Arandjelovic et al. 2010), indicating that the lack of terrestrial herbs does not appear to have led to a reduced density of gorillas in Loango. Our results therefore support the idea that forests with minimal terrestrial herbs can support healthy western gorilla populations.

Our study showed that chimpanzees and gorillas in Loango have a similar pattern of niche differentiation as that found in other locations, with chimpanzees being more persistent frugivores and gorillas more generalist folivorefrugivores. This suggests that each species has evolved a certain range of dietary flexibility as a response to variation in food availability and the presence of a potential competitor. It is possible that greater digestive flexibility leads to the more variable dietary patterns of gorillas compared to chimpanzees and reduces interspecies competition between them. In conclusion, our study highlighted the fact that forest composition, fruit availability and dietary variability of sympatric species can vary greatly between locations, and that chimpanzees and gorillas can adapt to heterogeneous forest with few terrestrial herbs where they concentrate their diet on fruit and leaves.

Josephine Head, Christophe Boesch, Loïc Makaga and Martha Robbins

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Original article: Head, J., Boesch, C., Makaga, L. & Robbins, M. M. (2011): Sympatric chimpanzees and gorillas in Loango National Park, Gabon: Dietary composition, seasonal changes and inter-site comparisons. International Journal of Primatology 32, 755–775



GORILLAS

International Gorilla Workshop 2012 - June 11th-15th

Apenheul Primate Park and GaiaPark Kerkrade Zoo proudly announce that they will host the International Gorilla Workshop in 2012. The Gorilla Workshops traditionally have had very high standards and, naturally, the organisation team for 2012 strives to continue in this tradition and offer a useful and inspiring meeting, one that will be remembered for a long time to come.

In our opinion the Gorilla Workshop meeting is mainly targeted at gorilla keepers. Therefore we believe it is essential to provide enough time during the meeting to exchange experiences; not only during coffee breaks, but also in the lectures. After (inter)national scientific experts, as lecturers on various gorilla-related topics, we feel that keepers themselves should give the majority of the talks. This is why we would like to encourage you to actively participate: share your experience in and vision about several different issues, which will soon be published on the Gorilla Workshop 2012 website (www. igw2012.org)

We would welcome good discussions about aspects of gorilla management that we are dealing with at the moment. To encourage thinking about "ethical questions concerning gorilla management" already before the meeting, we will soon put a questionnaire on the Gorilla Workshop 2012 website. During the conference, the first results from your answers to this questionnaire will be presented. Other issues that will be covered include improvement of husbandry techniques, diet, and news from research in the wild. We will also look at how to integrate gorillas into high-impact educational programs for a not-so-usual zoo target group: managers.

The meeting will mainly take place in Apenheul's auditorium in the brandnew, CO₂ neutral main building. But we will also have a one-day excursion to GaiaPark Kerkrade Zoo in the south of the Netherlands, where the youngest Dutch EAZA zoo is located. Both institutions have had tremendous successes in gorilla husbandry and breeding in the past as well as at present.

Dates: Monday the 11th of June until Friday the 15th of June 2012. Monday starts with registration and icebreaker at the end of the day. On Friday the conference will close that night after a full day program of lectures and a farewell dinner in GaiaPark Kerkrade.

Fee: Early-bird registration fee is euro 200 per person for the entire Gorilla Workshop. Included in this price are all lunches and some dinners as well as the excursion to Gaia-Park. Accommodation is not included. There will be low priced accommodation available in a hostel at walking distance from Apenheul, and there are various mid-priced hotels around.

Registration: Registration starts in June 2011, via the website.

We hope to see you all in June 2012; so keep an eye on www.igw2012.org For more information, write to:





READING

John F. Oates

Primates of West Africa: A Field Guide and Natural History. Conservation International 2011. Paperback, 556 pages. £ 34.99, about US\$ 55.09. ISBN 978-1-934151-48-8

This field guide introduces the primates of West Africa in much more detail than other field guides. The species/subspecies are not only described (and shown in drawings by Stephen D. Nash as well as photos), but their behaviour and ecology are also explained. But it is not just a field guide, it contains much more information for people interested in West African primates; the appendix introduces important sites for primate conservation and observation (also with respect to tourism), also illustrated with photos, and finally, 52 pages with references suggest material for further reading.

Angela Meder

Tetsuro Matsuzawa, Tatyana Humle, Yukimaru Sugiyama (eds.)

The chimpanzees of Bossou and Nimba. Springer 2011. 490 pages. Hardcover, US\$ 209. ISBN 978-4431539209

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New on the Internet

GRASP has a new website: http://www.un-grasp.org

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Pandering to the Loggers: Why WWF's Global Forest and Trade

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The Democratic Republic of the Congo-Post-ConflictEnvironmental Assessment. Synthesis for Policy Makers. UNEP 2011. 76 pages. PDF download (4.3 MB): http://postconflict. unep.ch/publications/UNEP_DRC_ PCEA_EN.pdf

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Brief Report: Primate Pathology Workshops

Two workshops were organised by the Gorilla Pathology Study Group (GPSG) in November 2011. Both of these covered pathology and were planned with a view to providing training in diagnostic and investigative techniques in non-human primates for East African veterinarians, primatologists, wildlife biologists and laboratory personnel.

The first Workshop was held in Karen was hosted by the Institute of Primate Research (IPR), part of the National Museums of Kenya. The emphasis in this Workshop was on the pathology of captive non-human primates, especially monkeys.

There were 34 registrants from various parts of Kenya and the programme included lectures (anatomy and taxonomy, pathology, zoonoses and labora-

Law Enforcement Ensures Great Ape Survival

Recent studies show that the populations of African great apes are rapidly decreasing. To prevent this, conservationists always try to find out which strategies protect biodiversity most effectively. In a new study with 41 authors working in many different countries, the protection of great apes in Africa was assessed. They compared the conservation efforts in 109 resource management areas over the last 20 years and analyzed whether primary (law enforcement), secondary (tourism, research) or other conservation measures (NGOs) were most effective. They found that law enforcement by rangers is most important among these strategies. Furthermore, longterm NGO support had a significant positive influence on ape persistence. The other conservation measures were successful too: if there are no conservation efforts at all, there is an increased risk of the extinction of great apes. Conversely, national development, often cited as a driver of conservation success, and high human population density had a negative impact on the likelihood of ape survival.

The study confirmed unequivocally that prolonged conservation efforts lead to a measurable decrease of the probability of apes going extinct, and the longer they last, the lower the probability. In addition to the application of an evidence-based approach, the authors recommend a continuous monitoring program of population trends and threats to ensure the long-term persistence of ape populations.

Original study: Tranquilli, S., Abedi-Lartey, M., Amsini, F., Arranz, L., Asamoah, A., Babafemi, O., Barakabuye, N., Campbell, G., Chancellor, R., Davenport, T. R. B., Dunn, A., Dupain, J., Ellis, C., Etoga, G., Furuichi, T., Gatti, S., Ghiurghi, A., Greengrass, E., Hashimoto, C., Hart, J., Herbinger, I., Hicks, T. C., Holbech, L. H., Huijbregts, B., Imong, I., Kumpel, N., Maisels, F., Marshall, F., Nixon, S., Normand, E., Nziguyimpa, L., Nzooh-Dogmo, Z., Tiku Okon, D., Plumptre, A., Rundus, A., Sunderland-Groves, J., Todd, A., Warren, Y., Mundry, R., Boesch, C., & Kuehl, H. (2011): Lack of conservation effort rapidly increases African great ape extinction risk. Conservation Letters. doi: 10.1111/j.1755-263X.2011.00211.x

tory techniques) practical demonstrations, post-mortem work and examination of bones and skeletons from the National Museum of Kenya's excellent collection of primate material. Each registrant received a signed certificate and the veterinarians present gained three credits, granted by the Kenya Veterinary Board, towards their CPD (Continuing Professional Development) record for 2011.

The second Workshop took place in Entebbe. It formed part of the programme for the Veterinary Meeting of PASA (Pan-African Sanctuary Alliance), and had a strong emphasis on the pathology of free-living and confiscated/orphaned gorillas and chimps. The audience numbered 55 and three formal lectures (on the history and objectives of the Gorilla Pathology Study Group (GPSG), principles of pathology and sample-taking) were followed by practical sessions, including handling and examination of bones and soft tissues and field post-mortem work. Each registrant received a signed certificate. John and Margaret Cooper

The organisers are grateful to IPR and PASA for hosting the Workshops, to Kenyan, Tanza-

nian and Ugandan lecturers and demonstrators for their participation and to various organisations overseas for providing literature, equipment and modest funding. Full reports are in preparation.



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When Ravid Aloni offered to completely re-design our 10-year old website, we did not expect that it would take more than 2 years until we could relaunch it. Many thanks to Ravid for her invaluable support and her incredible energy!

For the English version, click on the flag at the right or go to www.berggorilla. org/index.php?id=home&L=1

You can now also donate online via PayPal to support our gorilla conservation projects!

Our Donors

From May to October 2011 we received major donations by Don Cousins, Angelika Dickmann, Elisabeth Engel, Marianne Famula, Volker Jährling, Kong Island Productions, Uwe Kribus, Hans Mayer, Angela Meder, Hannelore Merker, Mondberge, Hanne Otte, Helga Rave, Alfred Roszyk, Antje Werner, Zoo Milwaukee, Varga Zsuzsa and Jutta Zwicker.

Uwe Kribus collected donations at the party for his 50th birthday; he transferred euro 1000 to us. Gabriele Uhl and Michael (Theo) Schmitt organized a flea market (photo below) and donated euro 250 to us. Wolfram Rietschel collected euro 250 after a presentation about his travels to the gorillas.

Many thanks to all these donors, and to all the others that are not listed here as well! We are grateful for your support, and we hope that you will continue to support us.



The Berggorilla & Regenwald Direkthilfe wishes you all a happy, healthy and successful 2012!

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