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Current Status of Maïko National Park Signs of Success for Conservation in the Sarambwe Reserve Increase in the Virunga Gorilla Population

Reaction of Mammals to Oil Prospecting in Gabon



BERGGORILLA & REGENWALD DIREKTHILFE

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Organization Address: -

Berggorilla & Regenwald Direktniite			
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			

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

3

Chieko Ando has been working on the habituation of western lowland gorillas in Moukalaba-Doudou National Park since 2003 to study their social ecology. She is a Research Assistant at the University of Kyoto.

Prof. Christophe Boesch is Director of the MPI for Evolutionary Anthropology and President of the WCF. He has studied chimpanzees in the Tai Forest for over 20 years and recently gorillas and chimpanzees in Gabon.

Andrew Dunn is Project Manager for the WCS biodiversity research program in southeastern Nigeria.

Dr. Katie Fawcett works for the DF-GFI and is the Director of the Karisoke Research Center, Rwanda.

Dr. Cyril C. Grueter is a postdoctoral researcher with the Max Planck Institute for Evolutionary Anthropology in Leipzig and has been based at Karisoke since June 2009 collecting behavioural data and training KRC staff.

Isidore Kikukama Mupenda has been working for WWF for the past 6 years as Communication Officer in Bukavu. He is in charge of environmental education in and around protected areas such as Kahuzi-Biega and Itombwe. He is also in charge of media contact in the area for the WWF network.

Constanze Melicharek has led the zoo pedagogical department of Apenheul Primate Park for 10 years. She is

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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: The youngest member of the Amahoro group, Rwanda Photo: Wolfram Rietschel

also a member of the EAZA Ape Campaign Planning Group.

Dr. Roger Mundry is a biologist who is currently working as a statistician at the MPI for Evolutionary Anthropology.

Pierre Philippe Mbehang Nguema is a veterinarian and a researcher of the Research Institute in Tropical Ecology (IRET). He has been studying primates in Moukalaba-Doudou National Park since 2009.

Aaron Nicholas was the Director of WCS's Takamanda-Mone Landscape Project, with the core focus on the Cross River gorilla in Cameroon until 2010.

Radar Birhashirwa Nishuli has been working in the Kahuzi-Biega National Park since 1985. He is now Provincial Director and responsible for the Kahuzi-Biega National Park.

Luisa Rabanal is a PhD student at the Max Planck Institute for Evolutionary Anthropology and has been working in Loango National Park since 2006. Prior to Gabon she worked in Cameroon and Congo with Cross River gorillas and chimpanzees.

Dr. Martha Robbins, a research associate at the MPI for Evolutionary Anthropology, has been studying gorilla behavioural ecology since 1990.

Dr. Paul Scholte is an ecologist, specialised in conservation in a development context. Since 2009, he has been Principal of the Kitabi College of Conservation & Environmental Management (KCCEM), located at the entrance of Nyungwe National Park.

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.

Paulin Wilondja-as-Ngobobo 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.



Current Status of Maïko National Park

Maïko National Park (MNP) is part of a network of 7 national parks located in the Democratic Republic of the Congo. The MNP was created in 1970 by Decree no. 70-312, dated 20 November 1970, and covers an area of 10,830 km² within three provinces: Orientale, Maniema and North-Kivu. The park was gazetted primarily to protect a block of swamp forest.

MNP contains habitats for several key endemic species such as the eastern lowland (Grauer's) gorilla, the okapi, the forest elephant and the Congo peacock. It is also an important watershed and plays an essential role in the sequestration of carbon.

In terms of biodiversity, MNP ranks second in species richness among the 8 biodiversity reserves in the Congo. Despite this fact, the functioning of the



Transport of a monkey that was killed in the national park

park as a protected area has been severely compromised by a lack of national and international support, its inaccessibility and the continued presence of armed bands.

Park staff are reduced in numbers, aged, badly paid and insufficiently

trained. Quantitative and qualitative improvement in all aspects of park management is an urgent requirement to protect the area, but the profile and the requirements of each staff posting also need to be monitored as to whether each incumbent meets these requirements. In short, it is a question of putting the right person in the right place.

The presence of armed bands in the park is a key threat which needs to be addressed and addressed quickly. The removal of the armed bands is essential in order to make the park secure and stable. Action has already taken place in respect to the Simba Mai Mai, whose removal was planned and realized in cooperation with the political-administrative, traditional and military authorities, as well as other parties such as MONUSCO. The presence of the armed bands has forced the regular army to take up positions along the

Help for the Maïko National Park

A key threat in the Maïko National Park is the presence of armed bands, who hunt the animals, destroy the forest within the park, threaten the security of park staff and visitors and make patrols impossible. This is a problem which has to be addressed quickly. The removal of the armed bands is essential in order to make the park secure and stable.

Paulin Wilondja-as-Ngobobo is aiming to realize a meeting with the political-administrative, traditional and military authorities to organize the removal of the rebels; for this purpose he needs US\$ 15,000.

As soon as it is possible to work in the park again, we would like to donate equipment for the rangers' patrols. They urgently need as much as US\$ 30,000, to provide material such as uniforms, raingear, boots, tents, mats, dishes, torches, GPS devices, binoculars and knives.

Help us and Paulin Wilondja-as-Ngobobo to preserve this unique national park for the future! It is a refuge for Grauer's gorillas and for many other rare animal species.

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periphery of the park in order to control the threat posed.

The armed bands are responsible for the large-scale poaching of elephants, okapis and gorillas. They also encourage and support the illegal exploitation of minerals within the park, and are a constant threat to park staff and visitors. Unfortunately, certain elements of the regular army also engage in poaching and in the exploitation of minerals inside the park.

Main challenges for the future management of the park are the re-establishment and conservation of ecosystem integrity within the park, and the documentation of its biodiversity and natural resources. The sheer scale of the problems faced by the MNP means that significant funds and a great deal of scientific and technical inputs will be required.

ICCN would like MNP to become a viable World Heritage Site managed to international standards, with an ecosystem that is protected in the longterm and safeguards the survival of key endemic species and those that are locally threatened by extinction – such as elephants and primates. The site should be developed to contribute to environmental stability, to support the fight against poverty of the population in the surrounding area, and to contribute to the economic stability of the region, which has suffered through several decades of war.

Putting into place a modern and efficient management system that will facilitate the long-term protection of the natural resources of the MNP will require the following:

- development of a strategy for the restoration and preservation of the integrity of the park,
- reorganisation of management, conservation, monitoring and research systems, and the planning of community conservation activities to support an effective and efficient

control and protection of the park,

 strengthening of partnerships with the local communities and all other stakeholders.

If we can continue to develop and manage the MNP in harmony with the efforts of other partners, 2011 could turn out to be a year of renewal and hope.

Paulin Wilondja-As-Ngobobo

Current Situation in the Babira Bakwame Area, Kahuzi-Biega Park

The Kasese region contains the Kahuzi-Biega National Park (KBNP), the Maïko National Park and various forests that are not gazetted as protected areas but have been earmarked as community reserves since 2000. This region is recognized for its high density of Grauer's gorillas (*Gorilla beringei graueri*) – approximately 86% of the total population of this endangered ape, which is endemic to the Democratic Republic of the Congo, occurs here.

Until very recently, no conservation or research initiatives had been carried out in this region since the armed conflict started up in the Congo in the 1990s. It took 20 years for the security situation in eastern parts of the Democratic Republic of the Congo to stabilize sufficiently to allow the Congolese Institute for Nature Conservation (ICCN) to begin to exert its authority in the low-altitude sectors of the park. This was achieved with the help of the Institute's partner organisations.

An ICCN office has just been opened at Kindu, Maniema Province, to facilitate lobbying and sensitization of the political leaders. Contact has been re-established with the authorities of Maniema Province, the local population and the territorial leaders. Biological resurveys have been started in the part of the park located in Maniema Province, Punia Territory, Babira Bakwame county (collectivité secteur).

Two missions have recently been completed to this sector. One of them was a follow-up to an activity initiated by Radar Nishuli, the Director of KBNP, in November 2009. He worked in the main towns of Maniema Province to sensitize social and professional groups concerning the protection of this World Heritage Site. He managed to enlist the authorization and support of the political-administrative, traditional and military authorities for the purpose of initiating protection and development activities – as has been done in the other sectors of the KBNP. The aim





Two monkeys that were killed in the park by poachers Photos: Isidore Kikukama Mupenda, WWF



of the second mission was to survey a part of the park where no such biological study had been conducted to date. The aims of the two surveys were:

- to make a fauna and flora inventory of this part of the park,
- to document the socio-economic activities of the local communities,
- to improve the way the park is perceived by the local communities and to collect their opinions on the establishment of a local ranger post,
- to sensitize the local population and their leaders concerning the existence and the conservation of the KBNP in the Punia territory,
- to collect data and information on

A Dead Silverback Discovered by Rangers in Kahuzi-Biega

A carcass of a gorilla silverback surrounded by three females and one baby mourning was discovered in July 2010 by parks rangers during their daily monitoring in the Kahuzi-Biega National Park. According to witnesses and body measurements, the dead silverback weighed more than 150 kg and did not belong to the regularly monitored families. In the Kahuzi-Biega National Park's highland sector the latest survey found more than 130 gorillas; 60 of them in 4 families are monitored regularly.

The death occurred in the touristic sector of Tchirumbu marsh according to the testimony of park rangers. In this sector the *Myrianthus* trees were fruiting at that time, a favourite food of the gorillas. As two weeks before rangers had reported a fight between Chimanuka and a silverback from a wild group around the *Myrianthus* area; Chimanuka probably defeated his opponent to death. Because of their sharp canines and great strength, gorilla males are very dangerous opponents when fighting. However, most problems are resolved by displays and other threats. Severe aggression is rare in stable gorilla groups, but when two groups meet, the leading silverbacks can engage in a fight to the death, mainly using their sharp canines to cause deep, gaping injuries. This is probably what happened between Chimanuka and the dead silverback.

For several years now WWF has been providing support to the Congolese park authority, *Institut Congolais pour la Conservation de la Nature* (ICCN)



in the Kahuzi-Biega National Park to save the gorillas and their habitat. This support includes agroforestry, environmental education, integrated conservation and development initiatives, Geographic Information System and mapping, as well as participatory demarcation of park boundaries.

> Isidore Kikukama Mupenda, WWF

The carcass of the dead silverback after his fight with the silverback Chimanuka in Kahuzi-Biega National Park Photo: Isidore Kikukama Mupenda, WWF



Areas covered with transects and recce surveys in the Babira Bakwame area during the two missions in May and July 2010

the demarcation of the park boundary in the Kasese sector through walking the boundary,

- to obtain GPS coordinates for the villages in and around the KBNP (towards Kasese and Lulingu),
- to identify NGOs and other organisations involved in nature conservation with which we could cooperate in the future, and particularly the Punia Gorilla Reserve, RGPU.

The way in which the park is seen by the local communities and the politicoadministrative authorities is apparent from the following declarations of the traditional chiefs: "We understand that you have a very difficult mission to accomplish. As you have emphasized, it is up to us as the relevant authorities to facilitate the mission in as far as we are involved in it." The assistant to the administrator continued: "On behalf of the administrator whom I represent here, I assure the ICCN that it has our complete support. As a state service, it must benefit from our protection."



Socio-economic Situation in the Babira Bakwame Sector

The whole of the Babira Bakwame county sector consists of 6 village groupings. The following 2009 statistics for these village clusters were obtained from the sector office:

Village grouping	Number of
	people
Babongena	22,455
Babongombe	8,254
Banyamolembe	4,438
Banamea	10,349
Banamukulumanya	16,992
Total	72.462

It should be noted that the KBNP boundary runs through the village grouping of Banamukulumanya, where the "Bino" clan lives.

This population lives from mining, hunting and cultivation. The mine owners report that 10,000 tons of cassiterite leave the area via Kasese airport every week, but this volume does not include the quantities the local people transport on their heads to various points that are not officially licensed to sell the mineral.

Although the local community subsists on what they hunt and cultivate, we could only count 16 goats and 38 pigs in Kasese centre. The main source of animal protein for the community must therefore still be bushmeat, which they catch either by hunting with traditional weapons or fire arms, and by trapping. Alternative solutions need to be found for this area as soon as possible.

Kasese has no drinking water. Kasese village has between 5,000 and 8,000 inhabitants. The authorities find it hard to determine the number more precisely, as there is a lot of movement between the village and the mines. Kasese has only one place where drinking water is available; this is a waterhole left behind by SOMINKI (the Mining Society of Kivu) in the 1980s. It may dry out any time, and then there will not be any drinking water at all. The women get up at 3 am to fetch the precious liquid. Some people fetch water from the Ona River, which exposes the communities to disease and also carries a certain risk of drowning.

Schools without buildings. By way of educational facilities, Kasese has two senior schools, the Bakwame Institute and the Ndeke Institute, and two Catholic primary schools, but none of these schools have buildings. The children study outside, exposed to the elements.

Hospital without beds. What is left of the health services infrastructure is a laboratory open to the sky. The microscope is installed in a small hall made from sticks and covered by local materials, without any protection. Inside the hospital, the patients are lined up on wooden beds without mattresses.

Peace and quiet and absolute security. Total peace reigns in Kasese and its surroundings: there are no security problems. The local people cover distances of over 50 km on foot, both by day and by night, without being har-assed.

Infrastructure and transport are practically non-existent. The Babira Bakwame sector is completely isolated, Kasese in particular. It can be reached only by small airplanes carrying traders and miners. On a motorcycle it takes 3 days to cover the 125 km to reach Punia, the main town of the territory.

The state of settlement in this sector calls for priority actions such as:

- raising sufficient funds to establish a ranger post in Kasese sector and a patrol post at Kamibale,
- with the help of the provincial office in Kindu, intensify missions into the villages adjacent to the KBNP to sensitize people concerning the need for a ranger post,
- extend the community conservation approach by initiating activities that will benefit the local inhabitants. Developing or supporting schools and health centres should be a priority.



Cassiterite ready to be shipped to Bukavu and Goma Photo: Isidore Kikukama Mupenda, WWF



The road between Kasese and Itebero is almost finished; it only needs to be worked by hand. The friends of KBNP will help with the rehabilitation of the bridges which still hinder transport on this road. This will not only benefit the local communities: the completion of the route will also permit the reconnection of the two sectors of Kasese and Itebero for the purpose of monitoring.

As mentioned previously, the objective of the second survey in Kasese was to collect biological data and information on illegal activities in order to complement data collected during the first survey. These data are currently being analysed and the results will be published shortly.

Radar B. Nishuli

We would like to express our gratitude to our partner organisations, the Wildlife Conservation Society and the Prague Zoo, for providing financial support for these expeditions. We would also like to thank those who will support our community conservation approaches, leading to the establishment of a ranger post in the park and provision of support for development activities in this sector.

First Signs of Success for Conservation in Sarambwe

Conservation of the Sarambwe Reserve has faced many difficulties for many years: security problems, invasions of foreign nationals, and a lack of funds, equipment and infrastructure. Activities of international conservation NGOs and the presence of rangers and other dedicated ICCN staff have all helped the reserve to make it through the hard years since 1995 in reasonably good shape. Clear progress is now being made in the stabilisation of the reserve, and lost areas may be recovered in the near future.

A whole series of events has contributed to the stabilisation of the reserve.



Discussion between the population, VONA, ICCN and MONUSCO in Satambwe Photo: Claude Sikubwabo Kiyengo

The key event seems to have been a workshop on the sustainable and integrated management of the Sarambwe Reserve held in May 2010. Participants included the WWF-Virunga Environmental Programme and the International Gorilla Conservation Programme (IGCP). The workshop was financed by the Berggorilla & Regenwald Direkthilfe (B&RD), and was part of a series of activities undertaken by VONA (Voix de la Nature, Voice of Nature) in and around the reserve and jointly financed by the French Committee of the IUCN and the B&RD. The workshop brought all stakeholders together to sit down at the same table: from the reserve and from the surrounding region. This included representatives of the local administration, traditional chiefs, farmers' leaders, representatives of local associations, the Pygmies, the state services at the territorial level, and the local media. The topics that were discussed during the workshop were as follows:

 A brief history of the Sarambwe Reserve,

The distinction between a reserve, a national park and a hunting domain,

- The current management of the Sarambwe Reserve,
- VONA and their activities in and around Sarambwe,
- How local communities can be involved in the conservation of nature reserves.

Update: Good News from Sarambwe

- 1. The construction of a ranger post has begun.
- 2. The Ugandans who had encroached the forest left the reserve. There have been no illegal activities in Sarambwe for one month, and we hope that it is the end of cultivating field crops in the reserve.
- 3. The activities of the project are going well.

Émail from Claude Sikubwabo, November 2010





Representatives of the military, the local administration, the police and the ICCN confirm the border of the Sarambwe Reserve with Claude Sikubwabo. Photo: Rwimo

After presentations and discussions on all these subjects, three working groups were formed to

- determine the stakeholders in the Sarambwe reserve and define their roles,
- 2. define the difficulties that Sarambwe is facing and their causes and propose solutions,
- determine the reasons behind Ugandans entering the reserve, and propose solutions.

The workshop ended with the formulation of recommendations to the committee, the provincial authorities, the ICCN and VONA. These included the establishment of a county committee whose roles will be to

- sensitize the population,
- act as a mediator between the population and the ICCN,
- identify the needs of the population,
- plan development projects in the area around Sarambwe,
- advocate on behalf of the population to partner organisations,
- denounce poachers to the authorities,
- participate in park management meetings organised by the ICCN

and report to the community,

- follow-up activities implemented around the reserve,
- report to the authorities and partner organisations on the activities that have been implemented around the reserve.

To conclude the workshop, a final statement was made and distributed to local radio stations; an interview with the VONA coordinator was also broadcast. This statement triggered a great deal of interest and reactions. For example:

 Both UNHCR and MONUSCO are encouraged to visit the reserve regularly to monitor the situation.

- The status of those who have returned to the region around the Sarambwe Reserve should be monitored.
- Support from B&RD has been provided in the form of equipment for the rangers of the reserve.
- There has been an influx of international organisations into the area to implement activities in support of conservation, such as *Objectif Brousse* and WWF.

The Mwami (local chief) sent letters to the military authorities and to development actors requesting that efforts to improve the situation in the Sarambwe Reserve be initiated.

To implement the workshop recom-

A New Threat for the Virunga National Park

In June 2010, the Congolese President signed a decree giving the oil companies SOCO and Dominion the rights to oil exploration in Block 5 (Nganzi) of the Albertine Rift between Lake Edward and Rutshuru, which contains part of the Virunga National Park. SOCO has 38.25% of the block, Dominion 46.75%, and Congo (Cohydro) the remaining share. Seismic exploration were to start in 2010 and production after 3 years (see p. 17 for the effect of seismic operations).

The UNESCO was concerned about the Congolese plans as soon as they heard of them; in June 2008 they wrote their first letter to Environment Minister José Endundu informing him that oil drilling generally is not permitted in world heritage sites. Several letters followed, and to the latest one (August 2010), Endundo replied: "We'll do everything to preserve the park but the Congolese people also have to benefit from the riches under the soil." He noted that if oil activities were excluded from the park, he might seek compensation.

In November 2010, the *World Bank* also sent an appeal to spare the Virunga National Park from oil exploration, not only because of its rich biodiversity but also because of its economic value as a tourist destination.

SOCO presented an environmental impact assessment, but according to experts it does not follow international standards (it does not even mention that part of the block lies within a World Heritage Site). Since the beginning of December 2010 the companies have been entering the park with their material, ignoring the park Director's advice. According to a SOCO press release dated 20 December 2010, a wildcat exploration well was spudded that will be drilled to 2,520 m depth.

From a Reuters press release, November 2010, and an article in La Libre Belgique, 20 December 2010



mendations, IGCP and ICCN organized a meeting between the staff of Bwindi Impenetrable Forest National Park, members of the Ugandan and the Congolese armies stationed on the borders of Bwindi and Sarambwe, and the politico-military authorities of the Democratic Republic of the Congo stationed close to the international border. Measures were put into place to monitor the situation and to put an end to future invasions of the reserve.

Current Status and Recommendations

At the moment, the situation regarding the fields cultivated by the Ugandans in the reserve is being addressed. When the first encroachment of the reserve took place, the Ugandans were being supported by certain military commanders, and thus the Sarambwe patrol rangers were unable to take any action. Now, the Ugandans flee when they see the Sarambwe rangers. To show goodwill and not to strain crossborder relations, the encroachers were given a period of 3 months to harvest their crops. The county committee continues to lobby for the reserve and to raise funds for the implementation of activities. It is important that rigorous follow-up activities are conducted and that support is provided to the rangers and the committee to maintain their activities.

> Claude Sikubwabo Kiyengo, August 2010

Increase in the Virunga Gorilla Population

The analysis of the census conducted in March and April 2010 indicates that there was a total of 480 mountain gorillas, *Gorilla beringei beringei*, in 36 groups along with 14 solitary silverback males in the Virunga Massif. 352 (73%) were habituated (349 in groups and three solitary males) and 128 were



Development of the Virunga gorilla population size from Dian Fossey's first estimate to the latest exact census

unhabituated (117 in groups and 11 solitary males). Along with the 302 mountain gorillas censused in Bwindi in 2006 and 4 orphaned mountain gorillas in a sanctuary in Congo, this brings the total world population to 786 individuals.

The last census undertaken in the Virunga Massif was in 2003, when the population was estimated at 380 individuals. The current figure represents a 26.3% increase in the population of mountain gorillas in this area over the last seven years, which is a 3.7% annual growth rate. This increase in the population occurred despite the killing of no fewer than 9 mountain gorillas, in four separate incidents, during this time period.

In the census over 1,000 km were systematically walked by 6 mixed teams of 72 people from the Democratic Republic of the Congo, Rwanda, and Uganda. Teams covered the entire range and meticulously documented fresh signs of mountain gorilla groups. Genetic analysis of fecal samples collected were analyzed to identify and correct for any double-counting of individuals or groups, ensuring the most accurate estimate for the population.

The census not only recorded the presence of mountain gorillas, but also the presence of other large mammals and illegal activities such as bamboo cutting and snares. The full report of the census, which will be available in 2011, will include details on population dynamics and distribution of the Virunga gorilla population as well as population structure and genetic composition. *From a press release by IGCP, 7 December 2010*

The Virunga Massif mountain gorilla census was conducted by the protected area authorities in the three countries: L'Institut Congolais pour la Conservation de la Nature, the Rwanda Development Board and the Uganda Wildlife Authority. The census was supported by the International Gorilla Conservation Programme (a coalition of the African Wildlife Foundation, World Wide Fund for Nature, and Fauna & Flora International), the Max Planck Institute for Evolutionary Anthropology, the Dian Fossey Gorilla Fund International and the Mountain Gorilla Veterinary Project. IGCP played a lead role and coordinated all participating institutions and organizations. It was funded by WWF-Sweden, Fair Play Foundation, and the Netherlands Directorate General for International Cooperation (DGIS) through the Greater Virunga Transboundary Collaboration.

Changing Ecological Conditions for the Virunga Mountain Gorillas

The mountain gorillas of the Virunga Volcano Massif have been the subject of intense research and conservation efforts by the Karisoke Research Center spanning more than 40 years, but many questions remain concerning the relationship between ecological conditions and the population dynamics of the gorillas. Despite two decades of political instability, the mountain gorilla population of the Virunga Volcanoes has



received intense conservation efforts such as ranger-based monitoring and veterinary interventions and increased in size over the past decades, from 250 gorillas in the mid-1980s to 480 in 2010. However, this increase has not been uniformly distributed across the Virunga Massif. The gorilla groups studied by the Karisoke Research Center now live in much larger social groups than average and at a density 2-3 times that from the 1970s. The Karisoke area, i.e. the area between Mount Visoke and Mount Karisimbi. also has a higher population density than other areas in the Greater Virunga Landscape such as the eastern volcanoes. This unequal distribution has been attributed to either differences in the intensity of anthropogenic disturbance or differences in habitat structure/composition. Plant species composition and the biomass and density of foods consumed by gorillas are heterogeneousacrosstheVirungas.The



Didier Abavandimwe from the feeding ecology research team Photo: Cyril Grüter



Cyril Grüter on top of a Virunga Volcano

Photo: Cyril Grüter

Karisoke study area is characterized by a large proportion of open herbaceous vegetation zones where food biomass and nutritional quality (e.g. protein content) is highest.

While the recovery of the Virunga gorilla population is certainly a success story, we do not know what impact this dramatic increase in gorilla numbers/ density in the Karisoke area is having on the habitat. The habitat available to the gorillas is limited because of the high human density in the surrounding areas and extensive encroachment in the past. The population is confined to an island in a sea of farmland, and it is both the growing population and the compressed habitat that may eventually push them to the carrying capacity, i.e. the natural limit of a population set by resources in a particular environment.

A collaborative project between the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany (MPI) and the *Dian Fossey Gorilla Fund International* (DFGFI) has been launched to provide answers to some pressing questions such as: Has food availability changed over time in the Karisoke study area? Has this increase in group sizes and population size had an impact on group dynamics (daily travel distance and energy expenditure) and female social relationships (dominance interactions and feeding competition)?

The first objective of this study is to compare food availability in the historical Karisoke area between the volcanoes of Visoke and Karisimbi from the late 1980s to the present day. This will ultimately allow us to understand if foods consumed by the gorillas are declining in abundance as the gorilla density increases. Intense vegetation sampling is being done using the same methods at the same locations as was done in 1989 by Andrew Plumptre (Wildlife Conservation Society, WCS). Plant samples are also collected and the nutritional and energetic content of the major food plant parts will be determined in the laboratory.

The second objective is to measure how extremely large gorilla group size



influences food intake and feeding competition. This is important from a conservation point of view since enhanced aggression and lowered food intake may negatively influence female reproductive performance and ultimately lead to a reduction in the growth rate of the gorilla population. This study focuses on groups of different sizes, viz. Pablo with 43 individuals (11 adult females), Bwenge with 11 individuals (6 adult females), and Ntambara with 11 individuals (3 adult females). This involves detailed observations of food intake and dominance/aggressive interactions of females. We estimate how much food a gorilla female consumes in a certain time period and how many times she gets displaced by other females. One hypothesis that we are testing is that females in larger groups exhibit lower food and nutrient intake relative to females in smaller groups due to competition (more competitors feeding on the same resources/more mouths to feed). While Bwenge's group spends most of its time in the lower Hagenia woodland and in the bamboo zone and is usually within easy reach, Ntambara's group and especially Pablo's group tend to range high up in the subalpine zone at altitudes of up to 3800 m. Locating Pablo's group is often challenging and takes several hours of hiking through muddy terrain and dense shrubby vegetation. We also collect data on the distance travelled per day which we can use to make inferences about feeding competition. We would expect individuals in larger groups to travel further to obtain sufficient food.

This study also involves capacity building as several Rwandan research assistants (BSc level) have been trained in ecological methods and data collection and are an integral part of the project. Field work will continue through the end of 2010 and results should be made available once the analysis is completed. We hope that this study will be a major contribution to gorilla conservation by providing a deeper understanding of the relationship between ecology and population dynamics.

Cyril C. Grueter, Katie A. Fawcett and Martha M. Robbins

The Impact of Sericostachys scandens on Forests in the Albertine Rift

In November, 2004, WCS and ICCN teams surveyed the highland sector of the Kahuzi-Biega National Park where they found at least 168 gorillas. The survey also triggered the following observation:

"The well-being of the gorillas will depend not just upon patrolling, but also upon availability of suitable habitat. The highland sector of the park is currently undergoing an apparent explosion of *Sericostachys scandens*, a native but invasive liana not eaten by gorillas or chimpanzees. The liana has colonized recent openings caused by fire and cutting, and is now overtopping adjacent canopy, killing trees and bamboo and creating large mono-dominant prairies that are not favoured by the apes. While the causal linkages leading to *Sericostachys* expansion are not yet known it evidently represents a threat to gorilla habitat, and a potential constraint on the recovery of gorilla populations in the highland sector of the park." (Hart and Liengola 2005)

As in Kahuzi Biega, also in Nyungwe National Park (Rwanda) at some 100 km away, the proliferation of Sericostachys scandens, especially in the period 2007-2009, has caused widespread concern on its impact on the ecosystem. S. scandens is a native, monocarpic liana in Afromontane forests that mass flowers and dies back approximately every decade. It often covers trees, clearings and road edges, possibly causing tree mortality and impeding regeneration. Concern over such impacts, visible from the national road connecting Butare with Bukavu (Democratic Republic of the Congo), has led some politicians and members of the public to demand interventions to control the liana. This concern and the



Sericostachys scandens in Nyungwe National Park at the height of its flowering (20 January 2010)

Photo: Paul Scholte



resulting polemic have challenged decision makers, including those at high levels. In contrast, from other Afromontane forests in the Albertine Rift where *S. scandens* occurs, including the Virunga and Bwindi massifs, home to mountain gorillas, no proliferation of *S. scandens* has been reported, despite its abundance at the peak of its flowering cycle.

The high level concern on its possible proliferation motivated the organization of an international workshop on 24 September 2009, by the Rwanda Environment Management Authority, in collaboration with the *Rwanda Development Board* (in charge of Rwanda's national parks) to reach consensus among the diverging opinions held by researchers and managers about the proliferation of *S. scandens* in Nyungwe. The main results were reported in Scholte et al. (2010).

The workshop began with one overarching question: is *S. scandens* functioning within its historical parameters or has something triggered the recent proliferation, thus justifying interventions? Just over half of the participants considered the liana's proliferation to be within its natural range of variability.

S. scandens, a pioneer species dominating open areas, appears to be

most abundant in eastern Nyungwe National Park. This most likely reflects recent human disturbances and may explain why this liana appears to have increased. Monitoring in the forest interior shows that following postflowering die-back of the species in 1994 other species increased rapidly in areas vacated by the liana. Ten years later, cover of *S. scandens* had reached pre-dieback levels, but is currently (September 2010) showing massive dieback.

Various observers noted spatial variation in flowering events at different places in Nyungwe at varying times, as well as at varying periods between different forests. Early explorers reported that S. scandens was already abundant in Nyungwe in 1898 and 1907, despite the presence of elephants and buffaloes, refuting assumptions that the recent extirpation of these species triggered the proliferation of S. scandens. Observations from Bwindi suggest that while elephants occasionally feed on the liana they also favour habitat suitable for S. scandens by maintaining open areas. Participants agreed that reintroduction of elephants to Nyungwe would not suppress S. scandens. To understand the influence of S. scandens on forest dynamics and composition, monitoring of cover and abundance over the complete multi-annual



Sericostachys scandens in Nyungwe National Park, showing the recent die-off. Left: 20 January 2010, right: 27 October 2010

Photos: Paul Scholte



life cycle of the species was recommended. The greatest knowledge gap appears to be the impact *S. scandens* may have on forest regeneration but there is also a need to document its local distribution.

Participants concluded that political will for action and slow recovery of disturbed areas justify trial interventions that should consider: reduction (not elimination) of *S. scandens*, experience with ongoing forest regeneration trials, experimental cutting in highly visible places (e.g. along the national road), and the anticipated die-back conditions following the current flowering.

The workshop concluded that the earlier polemic on *S. scandens* was related to the limited information available and poor communication between scientists, managers, decision-makers and the public. The proposed trial interventions represent a timely opportunity to address these deficiencies.

Paul Scholte

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CROSS RIVER

Different Approaches to Saving the Cross River Gorillas in Nigeria

Cross River gorillas face diverse threats resulting from high human population densities around the areas they inhabit. Efforts to save these gorillas must therefore take into account the needs of the people who live next to the gorillas. The WCS Nigeria program has developed and implemented a number of community conservation education and alternative livelihood projects.

Exchanging Guns for Snails and Beehives

Hunting is one of the main threats to the gorillas and other wildlife found within Afi Mountain Wildlife Sanctuary. the Mbe Mountains Community Wildlife Sanctuary and Cross River National Park. Hunting of wildlife is carried out by local community members for consumption and for sale to raise cash to meet their economic needs. Hunting increases during local festival periods and the Christmas and New Year celebrations. WCS believes that one of the ways to curb the threat of hunting in the area is to enhance livelihoods of community members, especially those who actively hunt and therefore directly pose the threat. The aim of the project is to reduce levels of hunting through provision of alternative livelihood activities such as snail farming and beekeeping for identified active hunters. Working with local chiefs and community leaders we identified the active hunters in each community who posed the greatest threat. As a condition each beneficiary had to demonstrate his willingness to abandon hunting and to relinquish their hunting gear (shotgun, lamp/flashlight, and cutlass) to their respective village heads or guarantors who subsequently handed over the items to WCS. The project has enjoyed wide acceptance at all sites. A total of 12 snail pens and 135 beehives have been constructed and stocked, benefiting 39 hunters from 30 different communities.

Raising Awareness through Radio

A weekly radio programme entitled "people and conservation" has been developed by WCS to convey conservation messages to local communities at Cross River gorilla sites in Nigeria with the aim of changing attitudes toward the use of natural resources. The programme typically features discussions by a panel which includes community leaders (often village chiefs), hunters, park officers, nature enthusiasts and conservationists. The participants, who are also members of the target communities, educate the target audience in the local Boki language. So far, the programme has aired 48 times on the local CRBC FM radio station. The target audience includes hunters, farmers, fishermen, loggers, students and NTFP collectors. It is estimated that the programme has a weekly audience of around 10,000 people in 74 communities. Topics aired on the programme so far have included discussions of forest laws and decrees. sustainable use of natural resources, local attitudes to conservation, crop raiding, river poisoning as a fishing method, the hunting and trading of endangered wildlife, and community conservation within the Mbe Mountains.

Better Law Enforcement through the Training of Eco-guards

To improve protection of the gorillas living in the Mbe Mountains WCS recently organized training for 12 ecoguards who carry out daily patrols to monitor and protect the gorillas and their habitat from illegal activities. Over a period of 10 days from 5th to 15th of May 2010 the Mbe eco-guards received training in anti-poaching techniques focusing on patrol planning and coordination, ambush techniques, arrest, physical fitness, discipline, community relations and conservation education skills. Refresher training in the use of handheld CyberTracker units to collect data was also conducted during the period. The training was conducted to equip the guards with the necessary skills to carry out their protection duties effectively.

Equipped with skills acquired during the training, and with raised morale, the eco-guards are now able to conduct more effective patrols. Since the training 8 poachers have been arrested and handed over to the *Conservation Association of the Mbe Mountains*, the community conservation association which manages the Mbe Mountains in accordance with existing community bylaws. Three of the poachers have already been fined. Seven hunting camps have also been destroyed and 167 wire snares removed.

Andrew Dunn

We are grateful to the Great Ape Conservation Fund of the United States Fish and Wildlife Service, the Great Apes Program of the Arcus Foundation, Kolmården Fundraising Foundation, La Palmyre Zoo, Berggorilla & Regenwald Direkthilfe, Taronga Foundation, Margot Marsh Biodiversity Foundation and Columbus Zoo for their support.



WCS education coordinator, Mark Otu (right), hands over the keys of a snail pen to one of the project beneficiaries, John Kidze, as he receives hunting gear from him. Photo: WCS



CROSS RIVER

Tribute to Ymke Warren

We are grateful for this opportunity to shed a little light on an exceptional life that was dedicated to the study and conservation of Africa's primates.

Ymke Warren obtained a degree in Zoology at King's College London in 1992, and followed that with work experience with the *Gorilla Organization* (then *Dian Fossey Gorilla Fund Europe*) in the UK. Ymke's first taste of African primate conservation was field work with chimpanzees in the Bwindi Impenetrable Forest in Uganda. Her growing interest in mountain gorillas then led to a research position at the Karisoke Research Centre in Rwanda in 1994.

Despite the terrible ordeals of that period, Ymke's work with the mountain gorillas in Rwanda between 1994 and 1999 was definitely the highlight of her short life. Ymke discovered what would be a life-long passion for behavioural ecology, excelled in adapting to tough field conditions and forged friendships that won her the respect of all of those she worked with, especially the dedicated Rwandese gorilla trackers and guides.

Ymke was inevitably deeply awed and inspired by contributing to the long-term study of the famous mountain gorillas. Examples of some of the contributions she made in this respect are papers on the carriage of a dead infant by a female gorilla, and observations related to a "super-group" of more than 60 gorillas, a unique and puzzling Rwandese habituated mountain gorilla group.

Ymke was passionate about the well-being of the mountain gorillas as well as those who cared for them. She bore the incisor wounds inflicted by one particular silverback, Shinda, on both sides of one thigh, an injury she accepted as a fair price for removing a wire snare that was in the path of a young gorilla, not knowing how the protective and vigilant Shinda would react.

Her response to the 1994 genocide in Rwanda was typically to do all that she could to protect the gorillas and the national staff she was working with. Hair raising, and rarely shared stories of fleeing to the Zaire border and returning shortly afterwards to search the high mountain slopes for the gorillas and among the detention facilities for her colleagues affirm her deeply caring and committed nature.

Having returned from Rwanda in 1999, Ymke's strong academic drive and desire for self-improvement resulted in her enrolling in a Masters programme in Human Evolution and Behaviour at University College London. Ymke made use of data she had collected in Rwanda, and in the opinion of Volker Sommer was a model student, achieving the highest marks. After completing her Masters in 2000, Ymke won a PhD scholarship at Roehampton University under Caroline Ross. Her study involved the arduous task of habituating and then studying two groups of olive baboons, one crop-raiding group and one non-crop-raiding group. Her research demonstrated the influence of ecological conditions on social and reproductive strategies.

I met Ymke while she was completing her field-work in Gashaka-Gumti National Park in Nigeria having been recruited as a Project Manager for WWF in the same park. It was immediately clear that Ymke was a unique-blend – someone passionate about their work and doing things with a high level of precision and organization; a true champion of nature; deeply caring and funny, while at the same time never putting to one side her own ideals and values. Ymke's return to the UK to write-up played a part in also bringing to a close my 8-year Nigerian stint and heralded a short period in our lives when we were both in the UK, building our relationship around weekends in London. Ymke completed her PhD in 2003 on the topic of: "Olive Baboons (*Papio cynocephalus anubis*): Behaviour, Ecology and Human Conflict in Gashaka Gumti National Park, Nigeria".

While we were in the UK, I was offered a job managing a private nature reserve and Ymke made the brave decision to move with me to Namibia, not a country generally famed for its primates! Over the following 3–4 years we adjusted to desert life and got increasingly involved with the Namibian conservation scene. Ymke's adaptability was shown through her initially undertaking research on the Hartmann's mountain zebra, then initiating a project to study the black mongoose, Namibia's largest endemic carnivore, and later she was offered a position as a Post-doctoral Research Fellow with Pretoria University studying alloparental care amongst Cape ground squirrels.

Our move from Namibia to Cameroon in 2003 was largely un-planned, we both applied for an interesting position with the *Wildlife Conservation Society* managing a project to conserve the critically endangered Cross River gorilla. I was lucky to be offered the position, and in hind-sight that was probably for the best as the job involved more office-based management, meetings etc. that would have driven my better half mad with frustration. Instead, Ymke was



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able to draw on her wealth of primate-related field experience and academic know-how in order to establish a well thought-out and effective research and monitoring programme to further guide Cross River gorilla conservation.

Working with colleagues around the world, Ymke built the capacity of a number of national staff, visiting students, researchers and government counterparts. She played a crucial role in developing rigorous yet simple field research and monitoring protocols that will be valuable for years to come. Many positive knock-on effects resulted, including the creation of a stronger knowledge base on which conservation actions could be carefully planned, and increased donor confidence in our projects work. With the creation of protected areas such as the Kagwene Gorilla Sanctuary and Takamanda National Park, nearly 60% of Cross River gorillas are under some form of protection today, a far cry from the situation 10 years ago.

It goes without saying that everyone who worked with Ymke gained in some way, and time will show how her patient mentoring and quiet leadership will act to shape the lives of a number of promising young African conservation professionals across the continent, all of whom owe a great debt to her.

Ymke set her goals high in all aspects of her life. When not looking for ways to develop herself, she could be found climbing the highest peaks in Africa – even managing Margherita Peak in the Ruwenzoris, Mount Kenya and Kilimanjaro (Africa's three highest peaks) in 5 weeks at the beginning of 2010 to raise money for gorilla conservation – despite having next to no climbing experience. Even after nearly 10 years together, Ymke continued to surprise me, in terms of her knowledge, her no-nonsense take on life and her mental and physical strength.

A few words can never serve to capture the impact one individual has had in terms of their life's work, nor the role that person has played in each of our lives. Personal testimonies on the 4Apes website confirm this, and present additional heartfelt insights into an incredible woman: http://www.4apes.com/ymke/

For many of us, Ymke's murder at our home in Cameroon, 3 weeks after her 40th birthday is particularly painful to bear and difficult to adjust to. It is important that we understand the exact circumstances surrounding what happened and a number of authorities in the UK and Cameroon are currently assisting with that process.

The gorillas of Rwanda and Cameroon are unaware of the loss that they are also bearing. It is up to the rest of us to ensure that the gains Ymke paid for most dearly are not squandered. To help achieve this, a fund has been established in Ymke's memory to generate an annual award for promising young African primatologists. To achieve this we need to raise £25,000. Please visit: www.gorillas.org/ymkewarren



Ymke, we love and miss you so very much.

Aaron Nicholas

Ymke Warren during her observation of the mountain gorillas in Rwanda



Readaptation of an Injured Juvenile Gorilla and Care by Group Members

Since 2003, we have been trying to habituate western gorillas (*Gorilla gorilla gorilla*) for the purpose of scientific research in Moukalaba-Doudou National Park, Gabon. As a result we succeeded in habituating a single gorilla group, Group Gentil (GG) by 2007 (Ando et al. 2008) and now we are able to observe them at a distance of 10~20 m.

Moukalaba-Doudou National Park covers an area of 5,028 km², which is located about 700 km south of the capital city of Gabon, Libreville. Our study site is located in the southeast of the park and covers about 30 km². There is a dry season from May to September and a rainy season from October to April. Annual rainfall is from 1,224 mm to 2,164 mm (2002-2009). Mean monthly maximum and minimum temperatures ranged from 29.2 to 33.2 °C, and 20.9 to 24.3 °C respectively. The vegetation in the study area is a mixture of old secondary forest, young secondary forest (Musanga cecropioides dominated), riverine forest and savanna

GG was composed of 20 individuals – 1 silverback, 1 blackback, 7 females and 11 juveniles – in June 2008. In August 2008, one female, Ngoû, disappeared from the group leaving her infant. When Ngoû disappeared, her son, Petit Ngoû (about 3 years old), injured himself seriously and lost his right forearm.

When we found Petit Ngoû, the wound was still open and there was no hair around. He often licked the wound which sometimes bled. For the first few weeks, he was always lying on the ground, seemed to be losing weight, and he became very weak, but after one month he recovered dramatically. At first he walked using his left hand and legs. After a few days he sometimes walked bipedally feeding with his left hand. We observed him for the first time climbing a tree one month after the injury, using his left hand and legs, and sometimes using his teeth.

Two months after the injury, we saw him feeding in a tree using his left hand and legs. He also rested, lying on a branch at a height of 10 m. After 3 months we observed him using his injured right arm to climb a tree and feed in the tree. While facing his observers, he stood and beat his chest with his left hand. He gradually developed more and more physical ability as the wound healed. Thus Petit Ngoû was able to readapt very well and recover his ability to walk, feed and climb trees.

Other group members cared for Petit Ngoû by staying near him. In particular, the silverback, or the blackback or older juveniles, always staved by him. We observed many times that another member waited for Petit Ngoû and walked slowly when the group moved. The silverback always defended him, especially from the observers who approached him. One day we saw that Petit Ngoû stayed in a tree when the other group members left. When he started to cry, Upinda (about 5 years old) guickly returned to him and waited for him until he got down from the tree. and they left together. Another day we observed that Petit Ngoû walked holding onto the back of Manbu (about 4 years old), and Manbu adjusted his walking speed to Petit Ngoû's. In contrast, we never observed any of the females caring for him; all females were completely indifferent to the injured juvenile.

We also observed dominance behaviour by Petit Ngoû towards other juveniles. On two occasions, Petit Obono (about 3 years old) allowed Petit Ngoû to pass on a branch. In another case, Petit Obono waited to feed on ants in a hole in a fallen tree until Petit Ngoû left. We saw also that Petit Ngoû was able



Petit Ngoû before the injury (15 August 2008, above), after the injury, walking with his left arm (23 September 2008, middle) and resting on a tree (28 October 2008, below)

Photos: Chieko Ando

to feed close to the silverback, while other juveniles were not allowed to do this. From these observations, it can be concluded that a physically handicapped individual does not have disadvantages in the relationships in the group.

Some reports about mountain gorillas have shown that orphans spent more time with the silverback after los-



ing their mother in the group (Stewart 2001; Fossey 1979), and the silverback defended these maternal orphans more than other juveniles (Fossey 1979). In our study site we also observed such a relationship between this maternal orphan and the silverback, but this is the first report of older juveniles caring for a younger juvenile. Our observation seems to reflect the social relationships of western gorillas.

We confirmed that a handicapped individual does not experience any harm from other group members, and the group composition and social relationships do not change if there is an individual with a physical handicap. Gorillas can maintain group composition even if there is a handicapped individual, as long as adult males and juveniles care for it.

> Chieko Ando and Pierre Philippe Mbehang Nguema

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Response of Great Apes and Other Mammals to Oil Prospecting in Gabon

As the world's oil reserves continue to decline, interest from major petroleum companies in the largely unexploited reserves of African oil increases. In 2005 the Chinese petroleum company, Sinopec, was granted a concession for oil exploration in Gabon's Loango National Park, an area which acts as a stronghold for populations of



A gorilla and an elephant in the Loango National Park

Photos: Luisa Rabanal

endangered western gorillas, chimpanzees, forest elephants, and many other species of large mammals. Most of the information regarding how apes are affected by extraction of natural resources from forests comes from studies on the impacts of logging (Tutin & Fernandez 1984; White & Tutin 1996; Arnhem et al. 1998). We were able to expand on this knowledge by investigating the impact of seismic operations in Loango National Park, where we established a long-term field site for gorilla and chimpanzee research in 2005.

Seismic operations using dynamite explosions began in the park in 2006 in the absence of clear environmental regulations. We were not able to study the impact of these operations initially due to the speed at which seismic operations began. Following the first period of oil exploration an ecological and sociological impact assessment study was instigated by the Gabonese Ministry of the Environment. As a result, several requirements to limit the impact on the flora and fauna of the park were established prior to the second phase of oil exploration in 2007. These environmental guidelines led to what could be considered a relatively low-impact seismic operation, which should be kept in mind when considering our results.

We aimed to determine if the seismic activities, particularly the loud noise of dynamite explosions, would have a negative impact on apes' habitat use (e.g. habitat avoidance). Since previous studies on the impact of intense human-induced noise on a variety of species have highlighted the various ways in which animals of different sizes respond (Klein 1973; McLellan & Shackleton 1988; McCauley et al. 2000), we included a number of species of large mammals in our study. We focused on large fauna (apes, elephants, monkeys and duikers) given their low survival ability as compared to smaller species following habitat disturbance (Johns & Skorupa 1987). Due to the differences in the species' biological characteristics (body size and home range size), we predicted that the large-bodied species (apes and elephants) using larger home ranges would show a response on a larger spatial scale, whereas monkeys and duikers, with their smaller home range





sizes, would be less impacted by the exploration activities.

We conducted our study in 80 km² out of 332 km² of the Sinopec exploration in the northeastern zone of the park, located on the other side of a lagoon from our ape research site. For a six month period including before, during and after the 2007 seismic operations we recorded counts along transects of indirect signs of gorillas (Gorilla gorilla gorilla), chimpanzees (Pan troglodytes troglodytes), elephants (Loxodonta cyclotis), duikers (Cephalophus spp.) and monkeys (Cercocebus torquatus, Cercopithecus cephus, C. nictitans, C. pogonias and Lophocebus albigena). A total of 80 line transects of 0.5 km in length were placed systematically over the study area with 40 located on the seismic lines and 40 located 0.4 to 1 km in between seismic lines. Placing transects on both seismic lines and at varying distances from the seismic lines allowed us to examine the distribution of the species in response to the seismic activity. Transects were walked once per month for 6 months. To examine the impact of seismic activity on large mammal distribution we explored how well three different models (small, intermediate and large-scale disturbance) could explain our data. The use of three scales of disturbance allowed us to detect different movements between species in response to the oil exploration.

Our results showed that seismic activity, despite being a low-impact operation, did have a negative impact on certain large endangered rainforestdwelling mammals. A clear pattern of disturbance was evident for the spatial distribution of both elephants (on all three spatial scales) and ape nests (on the small and intermediate scales). Our encounter rates of monkey and duiker signs, however, were not related to the seismic impact on any spatial scale. In particular we showed that apes and elephants avoided the seismic lines in



A hole for the dynamite is prepared (left); cable for the ignition of the dynamite (right). Photos: Luisa Rabanal

the four months after the dynamite explosions had finished, but we did not observe this effect for duikers and monkeys. Our results reflect the biology and limitations of movement and ranging patterns of the species. Large mammals (apes and elephants) which were able to move further away from the dynamite explosions, due to their large home ranges, were more affected by seismic operations than smaller territorial mammals (duikers and monkeys) whose movements are more restricted. We do not know the longer term impacts of the seismic operations since the study was not extended further in time.

Our results emphasize that the species living in the area and their patterns of habitat utilization should be considered when establishing guidelines to minimise the impact of any seismic operation. Such guidelines should include the designation of refuge areas where no dynamite explosions will take place. We suggest that impact on endangered species can be minimised by adequately spacing seismic lines and activity in space and time to allow species to move away from the progressive noise disruption.

In regards to gorillas and chimpanzees, the absence of a large-scale impact on their movement patterns should be interpreted with caution. We acknowledge that a range of other behaviours, aside from changes in habitat use, could be affected and we emphasize the need for other analyses to be used, such as hormone and behavioural measures. For example, based on the results of our study, if the apes and smaller mammals were unable to move larger distances from the explosions, it is possible that they experienced other types of physiological stressors and were disturbed by the explosions in other ways. Wildlife responses to oil exploration are complex and future studies should incorporate additional elements of response behaviours where possible and evaluate other types of human disturbance which may occur during the seismic operation (e.g. human traffic).

At the time of writing Loango National Park remains free of seismic activity.



Sinopec completed their oil exploration in 2007 and found too little oil for terrestrial extraction to be economically viable.

Luisa Rabanal, Martha M. Robbins, Roger Mundry & Christophe Boesch

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From Ape Campaign to Zoos

In 2011, European zoos will conduct a campaign for the conservation of apes. The campaign will have two targets: collecting 1 million euros for selected projects, and raising public awareness of the problems faced by apes.

For 10 years now the *European Association of Zoos and Aquaria* (EAZA) has been conducting an annual nature conservation campaign. In 2001, when this joint effort was initiated, the campaign focused on the bushmeat issue. At that time, the trade in bushmeat and its terrible effect on apes was still widely unknown. Many people were shocked by the mere idea that people would eat gorilla meat. Over 1.9 million zoo visitors signed a zoo-initiated petition to

the European Parliament. The European Parliament subsequently passed various resolutions to improve the control of the bushmeat trade.

In the following years, the EAZA campaigns have targeted tigers and rhinos, amongst others, and even animals that are not exactly the favourite of zoo visitors have not been left out: for example, one year's focus was on endangered amphibians, a campaign carried out in cooperation with IUCN. Whole ecosystems have also been at the centre of the campaign, such as the Brazilian coastal rain forest or the fauna and flora of Madagascar.

In September 2010, the 2011 campaign was launched. This one is called the "EAZA Ape Campaign". The campaign focuses on all apes: chimpanzees, bonobos, gorillas, orang-utans and gibbons.

Objectives of the Ape Campaign

The campaign has two objectives. On the one hand, we urgently want to draw attention to the dangers faced by the apes; on the other hand, we aim to raise funds for projects. These projects are - at least regionally - a solution to some of the main threats (loss of the apes' natural habitats, hunting and





trade in bushmeat and live animals, and the transmission of diseases during intensive contact between humans and apes).

The ambitious financial goal is to raise 1 million euros in the course of the year in order to be able to support several long-term projects. After the call to submit proposals for the first round of project sponsoring, 16 projects were proposed; it was required that the projects have a link to zoos. Of these 16 projects, 4 were selected by a dedicated committee, together covering all types of apes and all main campaign issues: habitat protection, reducing pet and bushmeat trade and improving animal health. These projects will receive support and serve as examples during the campaign. The Dja Biosphere Project in Cameroon was selected as a gorilla conservation project. In the course of the year it will become evident whether the campaign will reach



The Ape Campaign Steering Group, from left to right: Neil Bemment, Tom de Jongh, Constanze Melicharek, Bryan Carroll, Eoghan O'Sullivan, Vicky Melfi

its financial target; if this is the case, a second call for project proposals will out. There are only two conditions for projects that want to apply: it must be ape-centered, and preferably it should already have a link to at least one EAZA zoo.

Motivation

It is hoped that the EAZA member zoos will participate in the campaign, but they are not obliged to participate. Of primary importance is to motivate as many zoos as possible to become involved. Many zoos already have their own nature conservation foundations and support a number of individual projects.

In the present times of financial crisis, when visitors hesitate to open their wallets in zoo restaurants let alone in front of donation boxes, some zoos worry that an additional call for funds might be counter-productive. It is therefore necessary that individual zoos support the objectives of the campaign and can identify with the selected projects.

It is also important that the zoos are not deterred by having to invest time and money. Background information on all species of apes has been published on a dedicated website

www.apecampaign.org

which is also interesting for private individuals. The website provides many ideas for activities in zoos, ranging from a handicraft corner to a series of lectures.

In addition, EAZA offers institutions participating in the campaign the free use of the website's images and text resources although, to protect copyrights, they are accessible only to campaign participants. Information signs have already been designed; they only need to be translated into the respective languages.



Get Involved!

What can you do to make the EAZA Ape Campaign a success? Keep an eye on the websites of the zoos in your neighbourhood. Soon you will learn which zoos are participating in the campaign. Of course you can limit your personal involvement to visiting the zoos on ape action days - alone or with your (grand)children - and to making a donation, but as an active member and supporter of Berggorilla & Regenwald Direkthilfe you might want to do more. Maybe you want to give a slide show on your visit to the mountain gorillas; or maybe you want to man an information table at the weekend to inform zoo visitors about the plight of the apes.

Take your ideas to the educational departments of the participating zoos! The zoos will be grateful for your help in enriching action days; it is hoped that this will lead to a cooperation that is satisfying and useful to all concerned! *Constanze Melicharek*





Photos: left and above: Apenheul; below: Ravid Aloni (2), Angela Meder







(un)disputed

300 European zoos have joined the umbrella organisation EAZA. With approx. 125 million visitors a year, there is no doubt that the EAZA zoos have an enormous potential for public relations work and education. Not only does the association uphold certain standards in regard to animal keeping, ethics and education; the European Breeding Programmes are also organised at the level of EAZA. (Studbooks and/or programmes are in place for over 300 animal species, most of which are endangered.) In addition, EAZA zoos commit themselves to supporting nature conservation projects. About 430 western lowland gorillas are held in slightly over 60 EAZA zoos.

Not every member of the *Berggorilla & Regenwald Direkthilfe* and not every primatologist or nature conservationist unconditionally considers the keeping of animals in zoos as a good thing. In particular, the keeping of intelligent mammals with complex social structures and/or habitats that are difficult to reproduce in captivity is not without dissention. Such animals include dolphins, elephants and, of course, apes. If you can accept the keeping of zoo-born gorillas and other apes in well-managed zoological gardens, then it is essential to use these animals as effectively as possible as ambassadors for their wild brothers and sisters.

Constanze Melicharek



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IPIS produced an interactive web map of all mining concessions in the Democratic Republic of the Congo: http://www.ipisresearch.be/maps/ CaMi/web/index.html.

The data on this map are official and public data from the Cadastre Minier (CaMi) of the Congo, showing the situation as it was on 27 July 2010. The map shows the concession areas for the whole of the Democratic Republic of the Congo. The concession areas can be clicked, making appear a popup window containing information on the concession holder, type, date of expiry and several other data. For five provinces in the east of the Congo, North Kivu, South Kivu, Maniema, Katanga and Orientale, the map also contains detailed cartographic data (places, administrative boundaries. roads rivers, protected areas, airports). The map contains an enormous amount of data and therefore patience is required when opening the file to allow all data to load.

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Stefanie Reska (left) receives a document by mayor Matthias Hahn to honour the collection of mobile phones for recycling in the Stuttgart Zoo. Part of the proceeds support B&RD's projects in eastern Congo. She was joined by Bea Jarczewski (great ape head keeper) and Angela Meder.

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Our Donors

From May to October 2009 we received major donations by Angelika Dickmann, Elisabeth Engel, Ingeborg Erhardt, Marianne Famula, Regina Maria Harris, Antje Hoyer, Rosl Kirchshofer, Karin and Manfred Linke, Hannelore Merker, Mondberge Project, Ursula Reimann, Birgit Reime, Alfred Roszyk, Erwin Rosenkranz, Michael Schmitt and Wigwam Naturreisen. The mobile phone collection of the Stuttgart Zoo Wilhelma has been verv successful and so far resulted in almost euro 6,000 donated to the Berggorilla & Regenwald Direkthilfe. Several of our members also collected mobile phones for recyclingfor us - especially Reinhold Künstle and Susanne Zeitler. Many thanks – to all the other donors as well! We are grateful for your support, and we hope that you will continue to support us during 2011.



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