



Gorilla Journal

Journal of Berggorilla & Regenwald Direkthilfe

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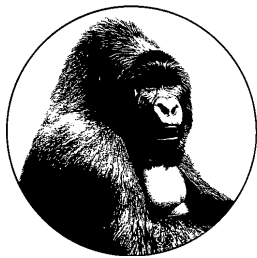


**Grauer's Gorilla in
the Maiko South
Region**

**Conservation Law
Enforcement
Training in the
Virunga Park**

**Habitat Protection
for Cross River
Gorillas in
Cameroon**

**Conservation of
Chimpanzees and
Gorillas in
Western Africa**



BERGGORILLA & REGENWALD DIREKTHILFE

CONTENTS

Democratic Republic of Congo	3
News from Kahuzi-Biega	3
Grauer's Gorilla and Other Wildlife in the Maiko South Region	4
Another Gorilla Confiscated	6
Intergovernmental Meeting on Great Apes in Kinshasa	7
Activities of a Local NGO	8
Conservation Law Enforcement	
Training in the Virunga National Park	9
Rebels Chased from the Virunga National Park	11
Rwanda	12
Mudslide in the Virungas	12
Respiratory Diseases in Mountain Gorillas	12
Uganda	13
Number of Gorilla Visitors Increased	13
Renovation of Ranger Outposts	13
Gorillas	14
Habitat Protection for Cross River Gorillas in Cameroon	14
News from Cross River State, Nigeria	15
CITES Recommendation for Wildlife Trade with Nigeria	16
Conservation of Chimpanzees and Gorillas in Western Equatorial Africa	16
The Ebo Forest Gorillas	19
National Parks in Gabon	19
Reading	22
News from the Internet	22
Gorilla Book for Schools	22
Berggorilla & Regenwald Direkthilfe	23

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Photo: Carlos Schuler

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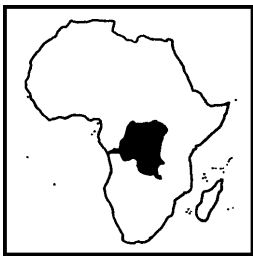
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D. R. CONGO

News from Kahuzi-Biega: May–October 2005

It has been confirmed that in the Nindja and Walungu communities, occupied by Rwandan militia, there have been repeated human rights violations – killings, rapes, lootings and kidnappings. These militia are the perpetrators of the Rwandan genocide, and they have been in the Congo since 1994. The Armed Forces of the Democratic Republic of the Congo (FARDC), supported by the United Nations Mission to the Congo (MONUC), have organised operations against them; forced to flee, the militias have taken revenge by attacking any civilians whom they encounter.

In their attacks, 13 persons have been savagely massacred, 4 have been injured, and 5 were abducted and taken into the forest of the park in the night of May 23 to 24. On July 4, the guards of the Mugaba patrol post were attacked by a group led by the lieutenant colonel “Kdt. 106”, a FARDC dissident. The majority of guards were kidnapped and their work equipment taken (weapons and walkie-talkies); one guard is still being held as a hostage. With the help of FARDC, the guards posted at Tshivanga repelled an attack by the same militia group, led by the same lieutenant colonel, on July 8. On July 9, the Madiri guards were also attacked by a group of Rwandan militia, but no loss of life or materials was reported. On July 10, the same Rwandan Hutu set fire to houses in Kalonge in the Mamba locality, and 45 persons burnt to death, the majority of the victims being women and children; this massacre has resulted in the displacement of 14,476 inhabitants of Mamba towards the neighbouring settlements of Cifunzi and Rambo, close to the park boundary, adding to the displaced people from Nindja who had already fled from the murderers, and increasing the number of displaced people in the Kalonge community to 32,000.

To try to reduce the pressure exerted by these displaced people on the park resources, the GTZ-KBNP project asked the *World Food Programme* to assist, with the result that 350 tons of food were distributed by the project to the victims of persecution. Project participants were mobilized to help with the distribution, which took place from June to September; the distribution helped to restore trust between the park authorities and the Nindja population, who were formerly hostile towards the park.

Between August 20 and 22, three attacks took place in the interior of the park, approximately 4 km from Tshivanga guard post; a lot of material was looted and taken to Bunyakiri on lorries, and several people were taken hostage by the Rwandan militia. From September 1 to 5, the authorities of the 10th Military Region made 1,000 armed troops available to the park to assist in patrolling the park’s tourism sectors. The operation also benefited from important assistance by MONUC. In the course of these patrols, several camps of the Rwandan militia were destroyed.

More Twins!

Nabintu’s two babies (Mushoho and Busasa), who were born on April 29, 2005, are doing very well. Bashige, also in the Chimanuka family, also gave birth to twins (Numbi and Kasiwa) on July 23, 2005. Three days after the birth, we observed that the newborns were very weak. On September 6, all females were observed and we were able to confirm an inconclusive sighting made on July 26, that one of the twins (Kasiwa) had disappeared. The remaining twin, Numbi, is still weak, but we hope that it will survive; its sex has not yet been determined, as it is always cradled by its mother.

The silverback Mugaruka, son of the late Mushamuka, is a patriarch who has been very distinctive since infancy,



Nabintu (left) and Bashige with their infants on 6 September

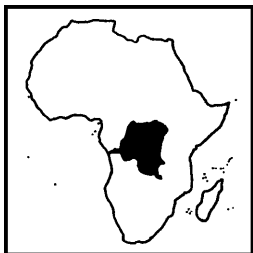
Photo: Carlos Schuler

as his left hand is missing. In September 2002, Mugaruka separated from his females, although no interaction was observed between Mugaruka and Chimanuka. For some time, Mugaruka formed a group with his son Chubaka; on May 19, 2004, they were joined by 8 survivors of the family of Mishebere, who was killed in 2002. Among the survivors was a young black-backed male called Mankoto; he has now replaced Mugaruka, who has become solitary for the last 3 months, and it is Mankoto who now leads this new family.

To summarize: two families habituated to tourists remain in the park: the Chimanuka group with 28 individuals and the Mankoto group with 11 individuals, in addition to a solitary male who can also be visited, Mugaruka.

Park Office on Fire

Unfortunately, a further misfortune has befallen the GTZ Kahuzi-Biega National Park Project. On September 26, at around 9 pm, a fire consumed the house where the project was located. Materials stored in the building were partly destroyed, including the library of 2,000 books, 7 computers, the accounts of the Kahuzi-Biega National Park and a sum of money. An enquiry into how the fire was started has been opened by the authorities. Part of the building (the ground and the first floors) was partially saved with the help of fire



D. R. CONGO

A Disastrous Loss for the Kahuzi-Biega Project

A fire has consumed the building containing the office of the GTZ project, and the library with 2000 books was destroyed as well as 7 computers. Although the GTZ will rebuild the house, it will be very difficult to replace the documents and the material that is urgently needed to continue the project's activities efficiently.

We want to help re-establish the library of the GTZ project. Please help us to raise funds to buy as many of the necessary books as possible. If you have an opportunity to donate special books directly, please contact us (see address below) – we will check with the project what they need.

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extinguishers from MONUC and the Pharmakina company.

Despite this situation, patrol activities in the park and development activities in the surroundings of the park continue with the support of the German Technical Cooperation GTZ and its partners WWF and WCS.

Bernard Iyomi Iyatshi and Carlos Schuler

Grauer's Gorilla and Other Wildlife in the Maiko South Region

At more than 10,000 km² in size, Maiko National Park (MNP) is the largest lowland forest park in eastern Democratic Republic of Congo and is widely recognized as an important site for the conservation of Grauer's gorilla, chimpanzee, okapi, forest elephant, forest buffalo, giant forest hog and the Congo peafowl. Despite such recognition, MNP has received very little

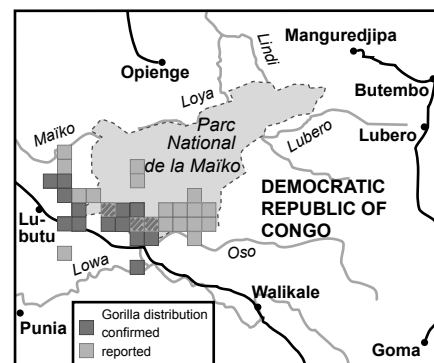
national or international support since its creation in 1970 and its function as a protected area has been limited by its inaccessibility, the long term presence of anti-government rebels in the south and central sectors, and almost 10 years of civil war. Consequently the current status of its fauna remains largely unknown. Since 2003, the *Dian Fossey Gorilla Fund International* (DFGFI) has supported a major rehabilitation program for MNP in close collaboration with the Congolese Institute for the Conservation of Nature (ICCN). From February through May, 2005, as part of this program, we completed the first stage of a faunal survey of the MNP southern sector aimed at identifying the current status and distribution of large mammals and associated threats, with a special emphasis on the distribution of Grauer's gorilla.

Gorilla Distribution

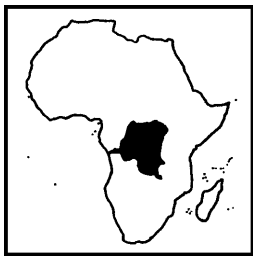
We conducted approximately 290 km of reconnaissance-based surveys

in the southwestern sector of the park and surrounding areas and our observations of gorilla nests, trail sign etc., indicate that gorillas are more or less continuously distributed throughout 1,875 km² of intact forest.

We also confirmed gorilla presence over an area of 125 km² south of the Kisangani-Bukavu road near the confluence of the Lowa and Oso rivers (see map). Although gorilla sign was



Original map: DFGFI, Brad Mulley



D. R. CONGO

sparingly distributed throughout the survey region, we encountered concentrations of gorilla sign in several remote areas typified by steep mountains, deep valleys and numerous treefalls supporting a dense herbaceous understory. Using data from transformed nest site encounter rates, we give a preliminary and tentative estimate that 600 gorillas (including those individuals not making nests) are found within the survey region. During the survey we also received reliable reports from senior park guards and local hunters that additional gorilla populations exist within and we were able to confirm these reports during this survey, and they indicate that the occupancy area for Grauer's gorilla in the Maiko South region is even larger than identified by this preliminary study.

Our gorilla results contrast sharply with previous data collected in this sector. In their 1959 eastern gorilla surveys, John Emlen and George Schaller identified 4 discontinuous and isolated populations in the Maiko South region, all of which appear to have been outside the current limits of the national park. Based on surveys conducted between 1989 and 1992, John Hart & Claude Sikubwabo identified only 2 small and isolated populations in the Maiko South region and reported the extinction of at least 3 of Emlen & Schaller's populations (see Schaller, 1963).

In 1998, Jefferson Hall and colleagues reported the extinction of all gorillas west of MNP and identified gorilla presence in an area of just 100 km² within the park boundaries, with a total population size estimated to be 33 gorillas.

Our recent results show that populations corresponding to all those identified by Emlen & Schaller still persist in this region and that gorillas currently have a wider distribution and are more abundant than previously estimated. We believe that this area is an important and overlooked site for the conser-

vation of Grauer's gorilla.

Current Status of Other Wildlife

Our surveys also reveal that chimpanzees are widespread throughout the Maiko South region and occur sympatrically with gorillas throughout the entire area (although the total number of chimpanzee nests found was approximately 50% of that for gorillas). During our census, we identified a total of 35 mammal species (all of which occurred within MNP), and large mammal sign was encountered frequently on all surveys. Seven monkey species were observed throughout the region, and red river hog and duiker sign were identified in all areas. Okapi trail was encountered on 4 of 6 surveys within the park boundaries (distributed continuously over an area of 625 km²) and in the Mundo area to the west of MNP. Forest buffalo sign was observed in all areas, although sign was sparse and concentrated predominantly along watercourses. The MNP was created in part to protect the endemic Congo peafowl and we were able to confirm the presence of this species (by call and trail sign) in this sector on four of 6 park surveys and on one survey west of the park boundary.

The most disturbing trend we observed is a drastic crash in elephant abundance over the last 13 years. Only three instances of fresh elephant dung were found within Maiko National Park all along trails leading to "edos" (swampy, mineral rich clearings frequented by elephants and other large mammals). Elephant sign was completely absent in adjacent forests. Within the park we observed the carcasses of 5 elephants slaughtered for ivory within the last 12 months, and identified at least a 500 km² reduction in occupancy range compared to observations made in the early 1990s (Hart & Sikubwabo 1994). This population decline was confirmed by local inhabitants who reported intensive elephant



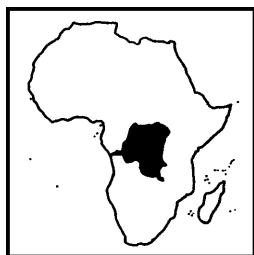
Ndjula Valley, interior of the park. An abundance of large mammal trails including gorillas, okapis and elephants were found in this region.

Photo: Stuart-Christopher Nixon

poaching by militia groups during the years of insecurity, with ivory reportedly being traded directly for automatic weapons between rebels and dealers from Kisangani. One local hunter we interviewed claimed to have shot at least 150 elephants over the past 8 years within the region. Although local reports indicate concentrations of elephant activity deeper in the park's interior, we believe that elephants are in grave danger in this region and without rapid intervention face imminent extinction.

Human Activity and Threats

Human activity in the region is high. Snares, mines, and hunting camps were encountered in all areas and rebels still maintain a presence in several regions of the park. Local communities are extremely poor, amenities virtually non-existent and food insecurity is widespread. Domestic meat is rare and a lack of other affordable options



D. R. CONGO

means that most rural families depend almost entirely on trapped wild meat as their primary protein source.

Although we found no widespread forest clearance within the park, we observed high levels of shifting “slash & burn” agriculture adjacent to its southern boundary, with large areas of forest being cleared for the shifting cultivation of manioc, rice and bananas. In this region we witnessed evidence of crop-raiding by gorillas only 350 m from the Kisangani–Bukavu road, a cause of significant human-wildlife conflict. Officially this region sits within the park’s buffer zone; however, the limits of the buffer zone are currently poorly recognized and we are in the process of delineating its boundaries. Our observations that significant faunal populations exist adjacent to the park boundary dictates that the development and enforcement of this buffer zone will be essential in protecting the region’s wildlife and reducing human-wildlife conflict.

Unregulated mining operations (gold, diamonds and cassiterite) are also common throughout the region. These rudimentary operations are widespread and continue to attract new miners who place greater pressures on forest resources. Living conditions within these operations (which may support up to 250 miners) are extremely basic and sanitation is non-existent posing a serious health risk to workers and local ape populations alike. Due to the widespread availability of locally made shotguns and automatic weapons, bushmeat remains the primary food resource within many mine areas.

Although we were informed that hunters do not generally pursue apes, ICCN confiscated an infant chimpanzee from a local merchant (subsequently transferred to the Lwiro sanctuary, Bukavu), and we observed chimpanzee meat on sale at the Lubutu central market. Further, we collected the skeletal remains of an adult male gorilla (re-

portedly killed north of the Lowa River in 1999) from a local practitioner of traditional medicine. We also received reliable reports that at least 6 adult gorillas had been killed in the region by military forces since 2002 and that 2 infant gorillas had been taken from the park during January 2005. During a 15-day survey at Lubutu central market, bushmeat accounted for 65% of available protein and we know of at least one buffalo, one elephant and two forest hogs being shot by military within the park during the survey period. Congo peafowl and the plumed guinea fowl were also observed on sale along the Kisangani–Bukavu road, and these principally terrestrial birds are reportedly a favored and easily trapped protein source.

Immigration, mineral extraction, ivory and bushmeat trafficking is greatly facilitated by the presence of the paved trans-African highway that runs along the southern limit of the MNP and serves as both the main trade route between Kisangani and Bukavu and as an airstrip for several commercial airlines specializing in mineral transport. As security returns to eastern Democratic Republic of Congo and forest areas become secure and accessible, immigration and forest exploitation is likely to increase. We believe that increasing settlement, and associated landscape pressures, represent the most significant and immediate threats to the MNP South Sector and surrounding forests.

Despite the very real and serious threats facing faunal populations in this region, this preliminary survey shows that despite years of limited protection and widespread insecurity, a rich faunal diversity still exists in the Maiko South region, and this area remains a global conservation priority. Following this survey, ICCN, with DFGFI support, has been able to commence the first regular patrols within the Maiko South region for almost 10 years and we anticipate that ICCN will make this sector

fully operational during 2006. Furthermore UGADEC and ICCN are currently in discussion with local stakeholders in the Lubutu region who wish to aid in the creation of a community-based nature reserve adjacent to the western and southern park boundaries. We believe that a combination of national park and community based conservation initiatives offers the best hope in saving this region’s unique biodiversity.

Stuart-Christopher Nixon, Emile-Emmanuel Ngwe, Kambale Mufabule, Francine Nixon, Didier Bolamba and Patrick Mehlman

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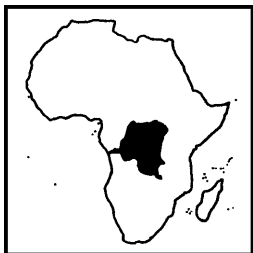
This work was supported by *Conservation International* (CI) through grants from the *USAID Central African Regional Program for Environment* (CARPE), and CI’s *Global Conservation Fund*. Bird identification materials were generously provided by *Chester Zoological Gardens* (UK). We would like to express our gratitude to MNP (South Sector) Chief Warden Justin Fofolo for facilitating this fieldwork and continued support during the survey period. Finally without the hard work of ICCN guards M. Assumani, L. A. Bitumba, N. Amundala, E. Sabiti, C. Byamungo, M. Ngungi, B. Nonbe, P. Mupenda, K. Mumbere, F. Bwanatambo and our numerous porters and guides this work would not have been possible.

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Another Grauer’s Gorilla Confiscated from Poachers

After more than a week of undercover investigation, another eastern lowland or Grauer’s gorilla was confiscated from poachers in Goma, Democratic



D. R. CONGO

Republic of Congo, on 10 October. The sting operation involved agents of the Congolese national parks authority ICCN (*Institut Congolais pour la Conservation de la Nature*) with assistance from NGO gorilla conservation partners of the *Dian Fossey Gorilla Fund International* (DFGFI) and the *Mountain Gorilla Veterinary Project* (MGVP). DFGFI was alerted by foreign aid workers in Goma who had been offered a baby gorilla for sale by a man on the street. That man and a number of his accomplices have been apprehended by Congolese authorities and are expected to undergo prosecution for their involvement in poaching and trafficking endangered wildlife.

The gorilla has already undergone an initial veterinary exam and appears relatively healthy physically though she is clearly traumatized psychologically. She is a female and is estimated to be under 2 years old. She is temporarily being cared for by MGVP and DFGFI with assistance from ICCN, and will remain in quarantine before join-

ing any other gorillas if that is what is decided for her. MGVP and DFGFI, with some caregivers from ICCN and the Rwandan parks authority ORTPN (*Office Rwandais du Tourisme et des Parcs Nationaux*), are currently car-

ing for 2 other confiscated eastern lowland gorillas and one mountain gorilla at different locations in the region. All of these animals are continuing to do very well as the regional partners try to find a better solution for their short-

Intergovernmental Meeting on Great Apes and First GRASP Council Meeting in Kinshasa

The first Intergovernmental Meeting on Great Apes and the *Great Apes Survival Project* (GRASP) was convened from 5–9 September 2005 in Kinshasa, Democratic Republic of the Congo, at the same time as the first GRASP Council Meeting. The final report and various documents are available for download at the following address:

www.unep.org/grasp/Meetings/IGM-kinshasa/Outcomes/index-reports.asp

There were over 200 international delegates and more than 300 participants from the Democratic Republic of the Congo. 18 of the 23 great ape range states from Africa and Southeast Asia were represented, 9 of them by Ministerial-level delegations; there were 29 GRASP non-governmental organization Partners, 7 donor countries (including the UK Minister of Biodiversity), the European Commission, the Central Africa Forest Commission (COMIFAC), 3 GRASP Patrons, and 3 of the biodiversity-related conventions. Finally, there were representatives of the scientific community, indigenous groups and the private sector. With so many political and scientific heavyweights gathered in one place, there might at last be a glimmer of hope on the horizon.

At the meeting, delegates signed the Kinshasa Declaration, affirming political will at the highest level for the first time in the history of the great apes; participants also adopted a global strategy for the survival of great apes, among other documents.

Now the Democratic Republic of the Congo – the only country with 3 great ape species, one species and one subspecies being endemic – has the incentive to show that it really is willing to protect the highly endangered apes living in this country.

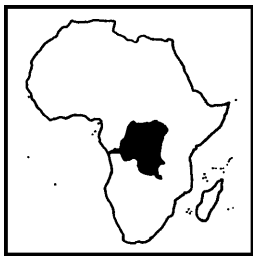
Even assuming that the political will remains after the euphoria of the meeting has died down, huge problems remain. If the orang-utan habitat countries, with their relatively developed political and social infrastructure, are finding it difficult to control illegal logging, palm-oil plantations and smuggling, what prospect is there that African countries, which mostly lack such infrastructure, will manage to take control of the bushmeat trade, illegal mining, and the trade in live gorillas and chimpanzees, especially in the face of continual civil strife and entrenched corruption?

Yet throughout the Central African region there are individuals and community groups who have been taking enormous risks to protect gorillas and chimpanzees and to preserve their habitat, regarding it as their precious heritage; some have been killed doing so. But these local groups and individuals desperately need the support of their governments to be fully effective. After the Kinshasa Declaration, perhaps at last they will get it.



The orphan, Pinga

Photo: Christopher Whittier



D. R. CONGO

term care, and improved enforcement of laws to halt the still continuing trafficking of these rare animals.

*Stuart-Christopher Nixon and
Chris Whittier*

Activities of a Local NGO in the Surroundings of the Virunga National Park

This article is to introduce *Voix de la Nature* (Voice of Nature), or VONA for short, a NGO that supports conservation, the development of tourism, the promotion of peace and the reduction of poverty. This is a local NGO, which works on behalf of the environment and development in the east of the Democratic Republic of the Congo. It was set up in 1997 with the following objectives:

- To spread awareness of the region's fauna and flora;
- To promote the sustainable use of renewable natural resources;
- To support initiatives of the local population in the development of agriculture, fruit cultivation, construction and rehabilitation, leading to the self-sufficiency and development of the population;
- To promote scientific research and activities such as reforestation and measures against erosion and landslides, which fall within the framework of protecting and rehabilitating the environment.

Currently, VONA has 589 members, distributed among the territories of Rutshuru, Masisi, Lubero, Beni, Fizi and Walikale.

Since its foundation, VONA has carried out several activities concerned with nature, health, development and rehabilitation. Amongst these has been a workshop funded by *Berggorilla & Regenwald Direkthilfe* on the management and conservation of Sarambwe.

This workshop, in which the ICCN and its partners, local authorities, the national authority for the environment, the police and local NGOs participated, helped raise awareness of the importance of Sarambwe and its protection. Several recommendations were put into words by the participants; this is an important contribution to the conservation of this site because concrete activities followed.

Since then, VONA has been active in the area of reforestation, producing and planting 85,000 seedlings with financial support from UNDP UNOPS, and an additional 15,000 seedlings through the efforts of its own members. In the area of health, 24 public toilets were constructed and 8 others were restored in the public markets of Goma, after they had been damaged by the eruption of the Nyiragongo Volcano in 2002. Currently, VONA is focusing on contributions to conservation, the development of tourism and the promotion of peace in the surroundings of the Virunga National Park.

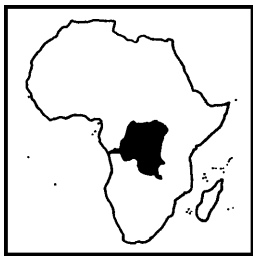
The previous decade has had a severe impact on the conservation of the Virunga National Park and on the population of its surrounding region. The ICCN reports that 109 guards have been killed in the defence of the park; the impact on the local population is more severe – there is no way of telling how much people have suffered. The same is true for the basic social infrastructure, such as schools, health centres, hospitals, dispensaries and rural roads: they have been completely or partially destroyed. It is therefore difficult to talk about conservation without mentioning development, without which the basic social and rural infrastructure cannot be restored.

VONA does not restrict its activities to reforestation and health in the public markets of the towns. It has also made several contributions to the restoration of rural and tourism roads in the Mikeno sector, and has undertaken the following projects:



Reconstruction of the social institute of Bunagana

Photo: Claude Sikubwabo Kiyengo



D. R. CONGO



These ex-combatants (81 in total) were demobilized by VONA and employed in the rehabilitation of social infrastructure.

Photo: Claude Sikubwabo Kiyengo

1. Reconstruction of the 17 km Jomba–Chanzu–Source Kamira road in 2001.

Financially supported by IUCN and the *World Food Programme*, this had the following impacts:

- Facilitation of the transport of goods from the local population centres to the markets;
- Facilitation of the access of conservationists to tourist sites and the gorilla conservation sites of Jomba and Bikenge;
- Facilitating the laying of a water pipe from Kamira to Jomba, organised by *Mondo Guisto* (Just World: one of the development branches of the Catholic Church); this pipe brings water to 35,000 people.
- Restoration of trust and the introduction of an atmosphere of peace to the project workers;
- Attraction of new members to VONA;
- Spreading greater public awareness of the advantages of protecting the Virunga National Park.

2. Reconstruction of the 23 km road (also used by tourists) Rugari–Kanombe–Kabaya–Rumangabo. This has permitted:

- Tourists to access the conservation site and the gorilla site at Bukima;

- Heavy use of the road by people visiting markets and by lorries on the route Rumangabo–Kabaya–Bukuta;
- Easy transport of agricultural and plantation products such as charcoal;
- Improvement of the prospects of peace and the re-integration of former fighters, whether already demobilized or in the process of being demobilized;
- The provision of paid work for over 100 workers for three months;
- Again, spreading greater public awareness of the advantages of protecting the Virunga National Park;

- A contribution to poverty reduction.
3. Reconstruction of the 19 km road from Kabaya to Bweza. This had the same effects as the rehabilitation of the road from Rugari to Kanombe (see above). It also allows people to enter the four *groupements* that form the border of the Mikeno Sector within the Bwisha community.

4. Public awareness to nature conservation in the Virunga National Park.

5. The dissemination of the Forestry Law of the Democratic Republic of the Congo.

6. The rehabilitation of the Social Institute of Bunagana, which currently makes it possible for several secondary school students, particularly the children of the Bu-

kima guards, to attend schools in Bunagana.

7. The construction of a maternity clinic in Bunagana.

None of these activities would have been possible without the support of ICCN, UNMC (United Nations Mission in the Democratic Republic of the Congo), UNDP/COMREC (*United Nations Development Programme*), the *World Food Programme*, *Berggorilla & Regenwald Direkthilfe*, the collaboration of the local population, and the active members of VONA.

Claude Sikubwabo Kiyengo

Conservation Law Enforcement Training in the Virunga National Park

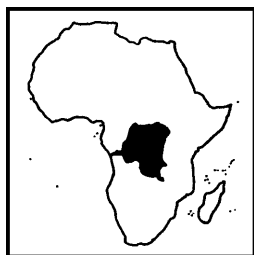
For more than a decade, the Congolese Institute for Nature Conservation (ICCN) has been working to conserve the national parks in the Democratic Republic of Congo without sufficient financial or institutional support. Although tourism in the Virunga National Park once generated sufficient revenues to support the ICCN's conservation efforts throughout the country, a decade of civil war and unrest has resulted in the almost total collapse of the ICCN's capacity to carry out its obligations to wildlife conservation.

In the Virunga National Park, armed militia and military groups still operate in the area and are responsible for regular attacks on park stations and patrol posts, taking weapons, uniforms, radio handsets and field equipment, and leaving rangers vulnerable and ill-equipped to carry out effective patrols. These armed groups also carry out large-scale poaching within the park and, through the use of automatic weapons, are responsible for the decimation of whole herds of elephant and hippo. In consequence, areas such as Rwindi and Vitshumbi, once famous for

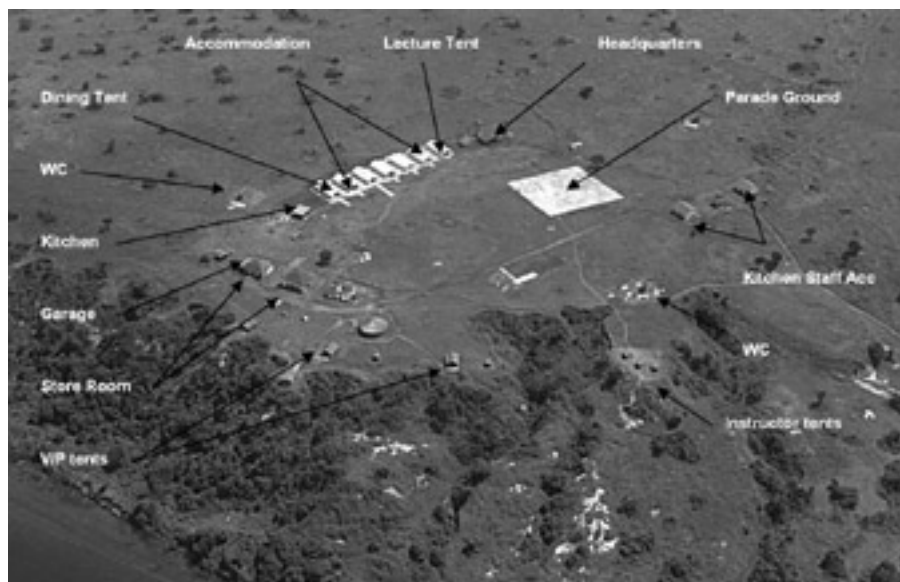


Road construction

Photo: Claude Sikubwabo Kiyengo



D. R. CONGO



advanced training. Those selected will receive new uniforms, and their salaries will double overnight. Most importantly of all, though, for these rangers is the pride they will feel for being chosen to attend the advanced course, with a shot at being a member of an elite rapid reaction anti-poaching unit.

The recently developed ranger training school has five large accommodation tents which sleep up to 20 rangers per tent, one dining tent, one training tent, nine toilets, and one kitchen. We have converted a disused warden's house into a headquarters which includes two offices, a storeroom and a medical room, and is equipped with three computers, a printer, scanner and photocopier, a satellite dish, VHF and HF radios, and a generator to provide electricity and lighting. We have built a parade ground and a 100 m shooting range, and have rehabilitated the airstrip, and will soon be underway with the construction of a basic assault course. We have also provided two Land Cruiser Pick-Ups, a motorbike and two pirogues with 15 cc outboard engines. These will facilitate both terrestrial and riverine patrols as well as providing vital logistical support to the programme.

Following the basic training, 14 ICCN trainers from Congo's five World Heritage Sites will travel to Ishango to undergo training specifically designed to enhance their capacity as instructors. These men will also receive uniforms and a salary, and will benefit from some of the best training available from our team of ex-British military instructors, all of whom speak either French or Swahili. Throughout the month long course, the ICCN trainers will master the techniques necessary to carry out selection exercises, as well as basic and advanced ranger training to meet future requirements. On completion of the course, the ICCN trainers will be retained by the programme to work alongside the British instructors

Aerial view of the ranger training school

their large mammal populations, have been left entirely denuded.

In order for the park rangers to be effective at both protecting themselves from attack as well as protecting and monitoring the park's natural resources, *Frankfurt Zoological Society*, with support from the *London Zoological Society*, the EU, the *US Fish and Wildlife Service* and UNESCO, is coordinating a ranger training program which will strengthen the ability of the ICCN to effectively manage its wildlife populations in what remains a hostile environment.

A ranger training school has been built on the banks of the Semliki River at Ishango, and is currently home to some 60 park guards who are being put through basic ranger training and selection. Over the next two months, a total of 480 rangers will pass through Ishango allowing the ICCN and international instructors to assess their mental and physical acuity through a series of standardised assessments. These include timed runs, shooting accuracy, fieldcraft and memory tests. Other less objective assessments will also be

made based on the individual's character, and the instructors will be looking for individuals who demonstrate self discipline, tenacity and motivation, and those that have teamwork and leadership qualities.

By the end of the basic training, the instructors will have developed a personal profile for all 480 rangers which will be held by the ICCN headquarters in Goma, and these profiles will help the ICCN and the team of instructors to make the difficult decision as to who should attend the three months'



Training course

Photo: Robert Muir

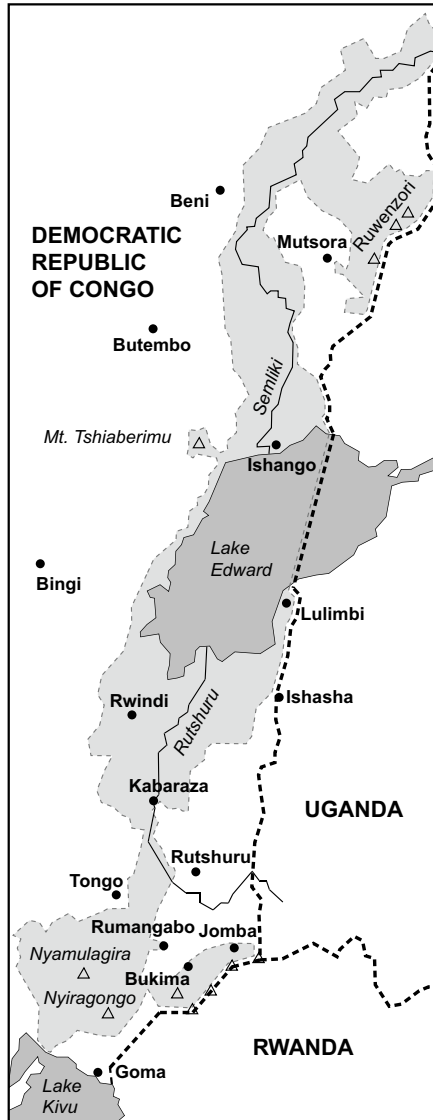


D. R. CONGO

and deliver an advanced training package to the park's top 50 rangers who will go on to form a rapid reaction anti-poaching unit.

Those selected for advanced training will receive three months' training in all aspects of law enforcement and park management operations, with an emphasis on modern approaches to conflict resolution and community relations. Once trained, the rapid reaction unit will operate within a new framework which will enable law enforcement activities and anti-poaching operations to be carried out effectively under extremely difficult and occasionally hostile conditions. This framework, which will include mandatory training competencies, as well as guidelines in tactics, planning and coordination, will provide the basis for Standard Operating Procedures (SOPs) for anti-poaching operations. Key to operations is the exploitation of timely information, and the SOPs will provide guidance for the systematic collection and collation of reports related to all sectors. These information cells will be responsible for providing timely support for day-to-day operations within the sectors, as well as highlighting trends which could be used as the basis for pre-emptive operations.

Frankfurt Zoological Society now has air support for the Virunga National Park, and it is hoped that monitor-



Rebels Chased from the Virunga National Park

On 31 October, 500 troops of MONUC and 2000 of the Congolese army destroyed five rebel camps in the Virunga National Park. This operation was launched because the rebels had ignored an ultimatum giving them a deadline of 27 October by which to leave the park. Gunshots were exchanged between the Congolese army and the militiamen, who held out for a long time and then escaped, but no casualties were reported.

The aim of the operation, which was scheduled to take several days, was to create a weapons-free area. This included all rebel groups, the FDLR as well as the Mai-Mai, who had been living in the park for many years.

A few days later, several dozen FDLR rebels from the park killed three of the inhabitants of the village of Bingi, west of Lake Edward, and burned 7 houses.

Summary of IRIN and AFP News



The new Cessna used for park monitoring and surveillance

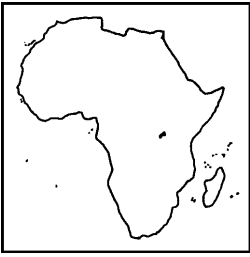
Photo: Robert Muir

ing and surveillance carried out from our Cessna 206 will provide critical information to patrols on the ground. Through combined air and ground operations, the ICCN might once again be able to regain control of the park and ensure the long-term protection of its endangered wildlife populations, while at the same time ensuring better protection for themselves and their families who inhabit one of the world's most dangerous parks.

Robert Muir

Rangers in the southern Virunga National Park with new uniforms provided by Berggorilla & Regenwald Direkthilfe at the beginning of 2005





RWANDA

Mudslide in the Virungas

Deforestation for subsistence agriculture has left much of the soil on the steep hills of the Virunga Volcanoes unstable and, therefore, vulnerable to mudslides. On 27 April, during the rainy season, an enormous mudslide carrying with it boulders, trees, and large amounts of water, crashed down in Rwanda, killing at least four people. Seven children were reported missing. It destroyed vast areas of the landscape and more than 17 homes.

Shortly after the mudslide, Rwandan police and military accompanied guards from the Volcano National Park to the site of destruction to provide assistance, evaluate damage and assess the risk of continued erosion in the area. Rangers from Uganda provided assistance, too. Their reports indicated that no damage occurred on the Ugandan side of the volcano.



Boulders that the mudslide left behind (above) and a house that was destroyed by it.

Photos: Médiatrice Bana/IGCP

The *International Gorilla Conservation Programme* (IGCP) has been working to provide assistance to the local people, including encouraging populations to move to slightly less steep areas. IGCP continues to help people living along the park boundaries to find alternatives to agriculture, in hopes of warding off future erosion problems. In addition, IGCP and other partners are working on reforestation of the park boundaries.

Summary of an AWF press release

Respiratory Diseases in Mountain Gorillas

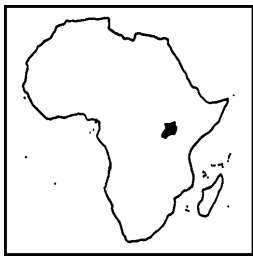
On 9 July this year, in a piece headed "Gorilla deaths show tourists should keep their distance", the *New Scientist* published an article to the effect that poaching is the most important cause of death for mountain gorillas, and respiratory diseases like influenza or parainfluenza come second. The report was based on an abstract presented at the annual meeting of the *Wildlife Disease Association* and a subsequent interview. "The *Mountain Gorilla Veterinary Project* (MGVP), based in Ruhengeri, Rwanda," the article stated, "investigated 100 gorilla deaths dating back to 1968. The team found that 40 were due to trauma, for which poaching is almost always the cause in adults. More surprising was the detrimental effect of respiratory diseases, including influenza A and parainfluenza viruses, which killed 24 of the animals. In a bid to cut the risk of people passing these diseases on, eco-tourists who trek to see the gorillas in the wild already have to stay at least 7 m away, and keep their visits to no more than an hour."

Subsequently, this story has been widely reported in the international press. It occasioned a response from the MGVP, which was published on the *New Scientist* website (<http://www.newscientist.com/article>

ns?id=mg18725074.500) and in the print magazine, saying that the information had been misrepresented: while it is true that trauma was the most common cause of death, "only part of that was attributed to poaching," and that there was "no evidence" of any deaths from influenza or parainfluenza viruses, although it is indeed "possible" that such viruses are present in the population. In a different abstract, MGVP presented data showing that some mountain gorillas are seropositive (i.e. have antibodies) against influenza, parainfluenza and other viruses, or at least viruses very closely related to those. Lastly, they took issue with the headline itself, saying that "nothing in [their] study implies that tourism poses any additional health risk to gorillas" and that tourism is essential as an incentive for the gorillas' conservation, but it must "continue to be very strictly controlled." MGVP is preparing a publication that will discuss this study in detail. The mountain gorilla population is the only population of great apes whose numbers are increasing in the wild.



Photos: Christoph Lübbert



UGANDA

Number of Gorilla Visitors Increased

For 12 years, the number of tourists permitted to visit a gorilla group in Uganda was limited to 6 persons per day, whereas in Rwanda and Congo the maximal number for many years has been 8. Several new studies from the Virungas and Bwindi suggest that smaller visitor groups are clearly preferable because they are less stressful and less dangerous for the gorillas. Despite this, the *Uganda Wildlife Authority (UWA)* has now decided to increase the permitted size of a tourist group to 8.

According to the Ugandan newspaper *New Vision*, a statement released by UWA said there was an increasing demand for gorilla tourism in Uganda, especially in the peak seasons of June, July and August: "This move will increase revenue for UWA, tour operators, hotels and local communities and enhance the capacity of UWA to implement its conservation programme".

Renovation of Ranger Outposts in Bwindi

It has taken more than a year, but now the three ranger outposts Ndego, Ruhija and Kitahurira in the Bwindi Impenetrable National Park are in good shape again. Repairs had been needed urgently, the needs of the rangers being paramount.

The work was funded by *Berggorilla & Regenwald Direkthilfe*. Local labourers and contractors repaired and painted the roof sheets, fixed and painted windows and doors and performed all kinds of special work on the various buildings. Water supply being the most urgent problem in all of the outposts, new water tanks were installed.



New water tank in Ndego: here, as in the other two outposts, the water supply was secured for all the rangers; this solved their most urgent problem.

Photo: Dieter Speidel



Kitahurira: painted walls in the ranger house (above) and the new latrine (below).

Photos: Y. Verkaik, D. Speidel



Front of the office of the Ruhija outpost: cracks were repaired, the ceiling painted, cover beads fixed, the splash apron repaired.

Photo: Yvonne Verkaik



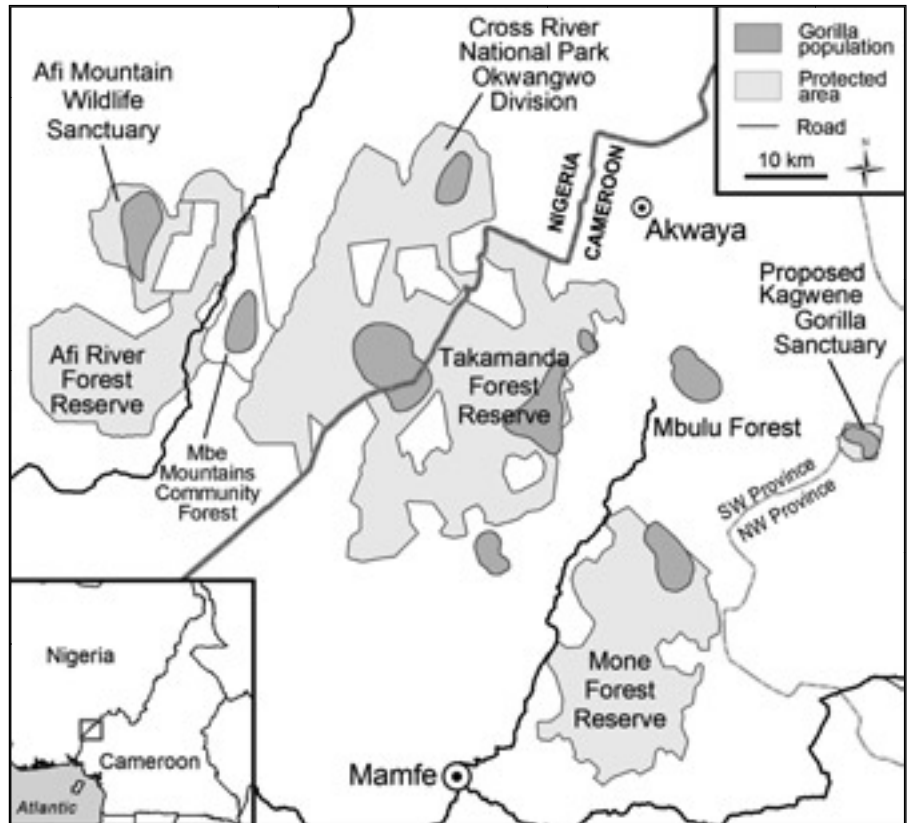
GORILLAS

Habitat Protection for Cross River Gorillas in Cameroon

Until recently, the critically endangered subspecies of gorilla *Gorilla gorilla diehli*, inhabiting the rainforest region across the Cameroon-Nigeria border, was afforded little habitat protection on the Cameroon side of the border. Across the border in Nigeria, two of the three main forest blocks inhabited by Cross River gorillas are already located within protected areas (Afi Mountain and the Cross River National Park). In Cameroon, however, all Cross River gorilla subpopulations identified exist in either Forest Reserves (Takamanda and Mone River Forest Reserves) or non-classified forests (Mbulu-Njikwa). A further subpopulation is located approximately 40 km east of the Mone River Forest Reserve in the forests of Bechati-Fossimondi-Besali, which is also categorised as a non-classified area and borders a proposed timber concession. Without increased protection status, all of these forested areas could be reassigned in the future for timber exploitation, and the non-reserve areas will be at risk of destruction from expanding agriculture.

To address the conservation threats to the continued existence of the Cross River gorilla, a conservation strategy was developed by participants during a second international Cross River gorilla workshop held in Cameroon in 2003, organized by the *Wildlife Conservation Society (WCS)*. The recommendations resulting from this forum were validated by the Ministers responsible for Environment and Forests of Cameroon and Nigeria (reported in *Gorilla Journal* 27, 2003).

Two prominent conservation actions were identified by participants: the urgent need for increased law enforcement activities and the protection of Cross River gorilla habitat. Habitat pro-



Map: Daniel Slayback

tection actions recommended for Cameroon stipulated the need to *increase the protection status of the Takamanda Forest Reserve* to a similar status to that of the contiguous forests of the Okwangwo Division, Cross River National Park in Nigeria and, to *develop a land-use plan for the Mone River Forest Reserve and Mbulu Forest in Cameroon, incorporating a network of protected areas and corridors*.

Proposed Protected Areas

In response to these urgent protection recommendations, two major developments have been announced by the Government of Cameroon, Ministry of Forestry and Wildlife (MINFOF). In July 2004, the government stated their intention to upgrade the status of the Takamanda Forest Reserve, an area

covering 67,599 ha, to a National Park. Following this, in January 2005, a government Public Notice was issued for the creation a gorilla sanctuary in the Kagwene Mountains (1,880 ha), an area located in the eastern section of the Mbulu Forest, stretching towards the Bamenda highlands.

Kagwene was first identified as an important area for Cross River gorillas by WCS researchers in 2001, and since 2002 WCS field teams have been studying gorilla ecology in this region. As a direct result of the data recorded over three years, particularly on the gorillas' ranging behaviour, WCS together with the Ministry of Forestry and Wildlife delineated and proposed this important gorilla site for official protection. The final decree officially gazetting this area is expected in the near future.



GORILLAS



Three members of a gorilla group in the proposed Kagwene Gorilla Sanctuary

Photo: Jacqueline Sunderland-Groves

These initiatives represent significant progress towards the overall conservation goal of actively protecting Cross River gorillas in Cameroon and increasing their survival prospects in the wild. The area of Takamanda is situated in the most western range of Cross River gorillas in Cameroon, however, and Kagwene in the most eastern range.

In 2001, I identified at least three further sites where gorillas existed in the forest blocks located between Takamanda and Kagwene: these are in the Mbulu Forest and the Mone River Forest Reserve. In order to maintain future connectivity between all these groups or subpopulations, it is imperative that a network of protected areas and corridors is realised in these areas. WCS is working with the Government of Cameroon and other collaborators to develop an overall land-use plan for these areas. This is challenging given that there are a significant number of communities scattered throughout the area, particularly within the forests of

Mbulu. Proposals to protect sites and corridors must also address human requirements. Despite these challenges, significant progress is being made towards the protection of Cross River gorillas and their habitat and we continue to build on these achievements.

Jacqueline L. Sunderland-Groves

This project is funded by the Wildlife Conservation Society, United States Fish and Wildlife Service, WWF-African Great Apes Programme and the Margot Marsh Biodiversity Foundation.

News from Cross River State, Nigeria

Construction of the ranger post at Anape, situated right on the very edge of the Boshi Extension forest area of the Okwangwo Division of Cross River National Park, has now been completed. With US\$ 23,000 received from Kolmården Zoo in Sweden, the Director of Cross River National Park,

Alhaji S. O. Abdulsalam, has been able to construct a magnificent 4-room building in one of the most remote and inaccessible locations in the entire country. Undaunted by the challenging conditions, and despite escalating costs, the park engineer completed the job as specified and to a high standard. Additional funds to complete the building were provided by the *Wildlife Conservation Society*.

The building has living quarters and office space for rangers and research staff and also has toilets, bathroom, kitchen and a cell. A team of more than 10 park rangers has already been posted to the site. Additional work is still required, however, and the building is not yet finished. At present the rangers must draw their water from a nearby stream, so it is planned to install an overhead water tank supplied by either a gravity-feed system or a water pump. The building also requires radio communication equipment, solar panels and simple basic furniture such as beds and chairs.

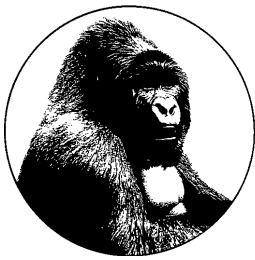
Revovation of Research Camps

As reported in the last edition of the *Gorilla Journal*, *Berggorilla* & *Regenwald Direkthilfe* donated the sum of 4,000 Euros to the *Wildlife Conservation Society* for the renovation of research camps in the Afi Mountain Wildlife Sanctuary (AMWS) and the Mbe Mountains. Supervised by the AMWS Conservation Coordinator, Ubi Sam, a variety of construction materials such



The Anape ranger post

Photo: Andrew Dunn



GORILLAS

CITES Recommendation for Wildlife Trade with Nigeria

Nigeria was one of the first countries to become a signatory to CITES (*Convention on International Trade in Endangered Species of Wild Fauna and Flora*), an agreement that has been in force since 1975. As the trade in endangered species in Nigeria is not always handled according to CITES regulations, the national authorities have been criticized by conservationists for many years.

At its 53rd meeting in Geneva in June/July 2005, the CITES Standing Committee discussed "a report from the Secretariat regarding the implementation of the Convention in, and illicit trade from, Nigeria and agreed that insufficient progress had been made by Nigeria in relation to its action plan to improve implementation of CITES".

In a notification dated 19 July 2005 to its members, CITES recommended that "all Parties should refuse any import from and export or re-export to Nigeria of specimens of CITES-listed species. This recommendation will remain in effect until Nigeria has enacted adequate legislation for implementation of the Convention and will only be withdrawn once the Secretariat has confirmed, by *in situ* verification, that CITES is being adequately implemented in Nigeria."

One of the reasons why CITES made this recommendation is the illegal export of apes – gorillas and chimpanzees – from Nigeria on several occasions during the last few years; two widely discussed gorilla cases were the smuggling of a baby that was finally killed by a veterinarian in Egypt and the "Taiping Four" – 4 gorillas that were sold to a Malaysian zoo and are now in South Africa. The latest case was the smuggling of six chimpanzees out of Nigeria in February 2005.

Many cases of wildlife smuggling from Nigeria have been reported to the CITES Secretariat, they have continued to be numerous and severe, and the CITES Secretariat concluded that the national authorities did not enforce the law sufficiently to prevent these abuses. Although Nigeria is not the only country that has failed to implement CITES, much endangered wildlife probably is exported from there because Nigeria is a large and populous country with a long tradition in trade of all kinds. Of course, the CITES Secretariat should pay equal attention to other countries, too.

In Nigeria, the recommendation will hopefully encourage the government to prevent CITES violations in the future, and it might make it more difficult now for individual dealers to export wildlife – which will potentially improve the conservation of great apes.

sion whilst on patrol in the area and by visiting researchers. Surveys of amphibians and birds have recently been completed.

We can report that no cases of gorilla poaching have been received during the last 12 months.

Andrew Dunn

Conservation of Chimpanzees and Gorillas in Western Equatorial Africa

A plan that identifies the priority sites and actions needed to promote the conservation of the two subspecies of ape, western lowland gorillas (*Gorilla gorilla gorilla*) and central chimpanzees (*Pan troglodytes troglodytes*), across their shared geographic range was recently completed. It was the major outcome of a workshop that brought together 70 experts, including researchers, government representatives and conservation managers in Brazzaville in May 2005. The workshop and publication were supported by grants from *United States Fish and Wildlife Service Great Ape Conservation Fund*, the *UNEP/UNESCO Great Ape Survival Project (GRASP)*, the *Cleveland Park Zoological Society*, the *Primate Action Fund*, the *Centre International de Recherches Médicales de Franceville, Gabon*, the *French Ministry of Foreign Affairs*, the *Wildlife Conservation Society*, the *Center for Applied Biodiversity Science at Conservation International* and the *Wild Chimpanzee Foundation*.

Surveys in western equatorial Africa in the 1980s indicated that healthy populations of both gorillas and chimpanzees existed in many areas remote from human settlements.

However, despite the fact that this region has one of the lowest human population densities of any tropical forest area in the world, ape populations are, today, in dramatic decline. This

as timber, cement and roofing sheets have been purchased in Calabar and transported to the site; these heavy materials are slowly but surely being carried up the mountain by a steady stream of porters. Construction work proper will commence as soon as the rains have finished.

Located high up on the slopes of this mountainous region both research camps will provide a more secure and comfortable base for gorilla trackers, whose job it is to monitor the gorillas that survive in these mountains. The camps are also used by rangers of the Cross River State Forestry Commis-



GORILLAS

is largely because of increased commercial hunting, the spread of logging, which alters forest structure and facilitates poaching, and because of Ebola haemorrhagic fever. There are many site-based, national and international projects that work to conserve great apes in this region, but the continuing, rapid decline indicates that past efforts are not sufficient, and that more is needed. The aim of the action plan is to provide a clear investment plan for researchers, conservationists, and donors and, most importantly, to assist habitat country governments in developing strategies for the conservation of great apes.

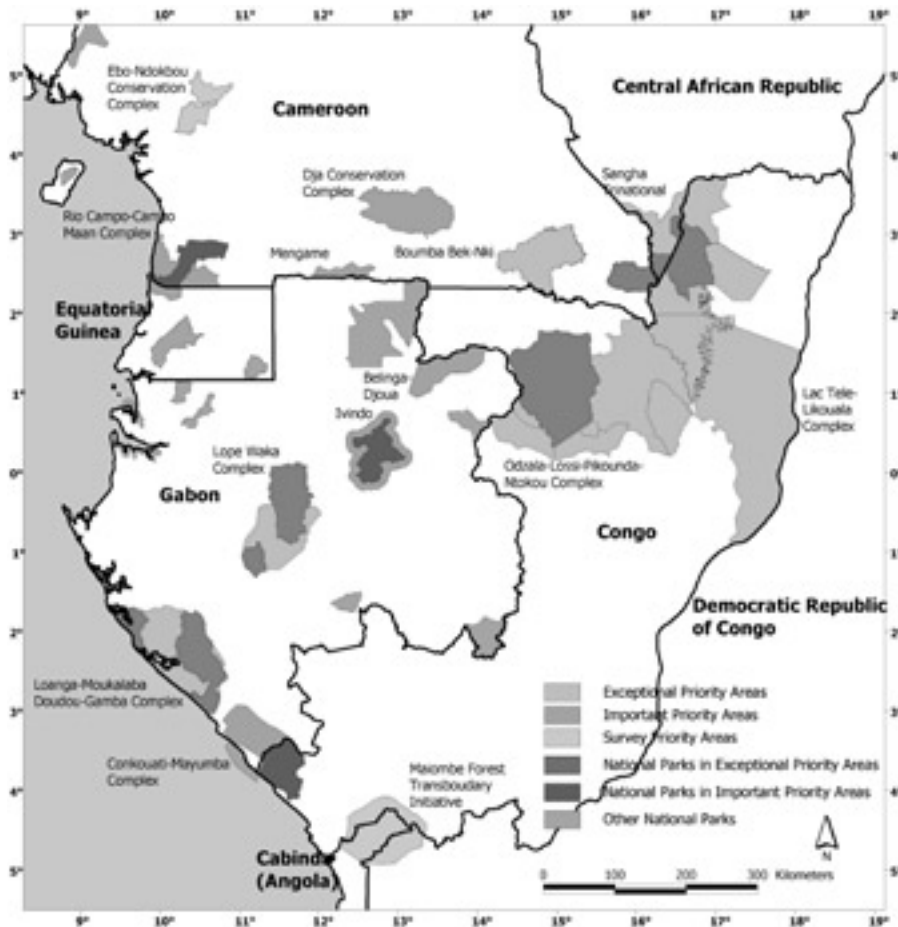
Priority populations were identified during the workshop using the best available data and a set of criteria to evaluate population size, area of site and the importance of the site for biodiversity in general. Methodological problems precluded consistent reliable distinction between gorilla and chimpanzee nests and, in addition, many surveys were conducted more than 5 years ago. Thus, workshop participants agreed to adopt the precautionary principle in considering numbers of "apes" (rather than gorillas and chimpanzees separately) and a post-hoc evaluation of the quality of the population estimate for each site was made.

Twelve priority areas were identified as well as 2 areas where present data are inadequate to assess their importance for ape conservation as are priority sites for surveys. These areas, listed in the table on page 18, cover over 150,000 km² of priority habitat for the protection of gorillas and chimpanzees and contain the largest populations remaining in the region. The majority of the priority sites include existing protected areas with buffer zones of forests allocated as commercial logging concessions.

Preparation for the Brazzaville workshop included the development of the APES database (Ape Populations, Environments and Surveys) by researchers at the Max Planck Institute for Evolutionary Anthropology. This revealed the extensive knowledge gaps that remain, and clear research priorities emerged at the workshop, including the urgent need to improve census methods and our ability to monitor trends in ape populations over time.

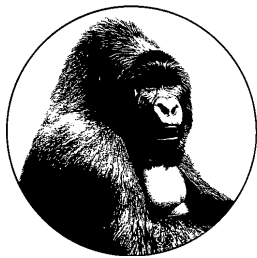
In addition, the emergence of Ebola as a major threat to apes in this region has dramatically complicated the challenge of protecting apes. Since the early 1990s, repeated outbreaks of Ebola have very drastically reduced ape numbers in large regions of northern Gabon and northern Congo, and there are current epidemics in Odzala-Koukoua National Park. Research on possible Ebola containment strategies will require new alliances between laboratory and field-based scientists in a range of disciplines, including virology, epidemiology, ecology and conservation, as well as logistical support from habitat country governments and health authorities. Without new focussed research to reduce these knowledge gaps the design of conservation strategy and the effectiveness of implementation will remain compromised.

The three major threats to apes in western equatorial Africa are poaching, disease and the spread of logging



Priority areas for the conservation of apes in western equatorial Africa

Map: Stephen Blake, WCS



GORILLAS

	Country	Score for estimated population size	Size of area (km ²)	Score for size of area	Rank for importance of site for other taxa	Quality of population estimate
Exceptional Priority Areas						
Odzala/Lossi/Pikounda-Ngombe/Ntokou complex	Republic of Congo	5	41,900	5	4	4
Lac Tele/Likouala complex	Republic of Congo	5	29,545	5	4	3
Sangha Trinational complex	Cameroon/C. A. R./ Republic of Congo	5	27,908	5	4	5
Loango/Moukalaba-Doudou/Gamba complex	Gabon	5	13,062	4	4	4
Dja conservation complex	Cameroon	5	6,238	3	3	4
Boumba-Bek/Nki complex	Cameroon	5	6,110	3	4	3
Lopé/Waka complex	Gabon	4	10,129	4	4	3
Important Priority Areas						
Ivindo complex	Gabon	4	6,527	3	3	2
Rio Campo/Campo Ma'an complex	Equatorial Guinea/ Cameroon	4	5,843	3	4	5
Belinga-Djoua	Gabon	4	3,453	2	4	1
Mengamé	Cameroon	4	1,219	1	4	3
Conkouati/Mayumba complex	Gabon/Republic of Congo	3	7,066	3	3	3
Priority Survey Areas						
Ebo/Ndokbou conservation complex	Cameroon	3	2,677	2	2	1
Maiombe Forest Transboundary Initiative	Angola/D. R. Congo/ Republic of Congo	2	8,000	3	2	1

Priority areas for the conservation of chimpanzees and gorillas in western equatorial Africa as determined by consensus at the 2005 workshop in Brazzaville

Population size: 5 >4,000 apes; 4 >2,000; 3 >1,000; 2 >500; 1 >250. Area of site: 5 >16,000 km²; 4 >8,000 km²; 3 >4,000 km²; 2 >2,000 km²; 1 >1,000 km². Importance for conservation and sustainable forest management, attributed at the 2000 WWF-sponsored Libreville biodiversity vision workshop: 4 highest; 3 high; 2 medium; 1 low. Quality of data available for the estimate of ape population size, based on the time elapsed since the data were collected and methodology: 1 unsubstantiated (presence/absence or surveys undertaken before 2000); 2 low quality (Rece surveys after 2000, or single transect survey after 2000, with <50 km survey effort); 3 minimal quality (single transect survey after 2000 with >50 km effort in a specific area, or multiple transect surveys after 2000 with <50 km effort in different areas); 4 good quality (multiple transect surveys after 2000 with ≥50 km effort in different areas); 5 best quality (multiple transect surveys after 2000 with ≥50 km effort in different areas and nest decay rate available for the area and density estimate)

into remote forest blocks. Commercial hunting for the bushmeat trade was identified as a major threat at all of the priority ape conservation sites. Ebola currently threatens apes in the exceptional priority site of Odzala and is a potential future threat elsewhere. Logging emerged as a significant threat especially in concessions surrounding pro-

tected areas. Without strict control, the roads and transport opportunities created by industrial logging systematically lead to a massive increase in commercial bushmeat hunting. The action plan summarizes debate at the workshop in the form of recommendations for the immediate and longer-term mitigation actions that are needed at a re-

gional level.

Western lowland gorilla and chimpanzee populations in western equatorial Africa are in steep decline. We do not know exactly how many remain, but the alarming average annual rate of decline of 4.7% in Gabon between 1983–2000 and the high mortality (>80%) recorded in two studied pop-



GORILLAS

ulations affected by Ebola underline a critical state for conservation and the need for urgent reinforcement of their protection.

The protection of the 12 priority ape populations identified in the regional action plan would guarantee, if successfully implemented, the survival of the majority of apes remaining in western equatorial Africa. The consensus reached on a clear list of the most urgently needed activities for each site provides strong conservation strategies for the immediate future and we estimate that, with about 30 million dollars over the next 5 years, this could be achieved. We hope that funding agencies will understand the urgency of the situation and seize the opportunity to support such a broad agreement.

The list of priority sites is not “set in stone”, nor are their geographical boundaries, as conditions can change rapidly and some areas, such as the two identified, need surveys to establish the present status of apes, while others were too small in size to be included but contain populations that may have long-term viability. Without effective monitoring of wild ape numbers and health status, optimal conservation will not be possible; there is, therefore, extreme urgency to advance applied research on these issues in addition to reinforced multi-disciplinary investigation of Ebola prevention in the face of this extremely potent new threat.

It is illegal to kill or capture apes in all of the habitat countries of *Pan troglodytes troglodytes* and *Gorilla gorilla gorilla*, thus law enforcement is the central thread of the conservation strategy. Effective law enforcement requires a huge investment but, given this, it would have an immediate positive effect for apes. In the face of the staggering ongoing decline, dampening the impact of commercial hunting on apes is the easiest action to implement – through arrest and prosecution of poachers, and through control of ac-

cess and transport opportunities in the key protected areas and logging concessions identified as ape strongholds. Clearly, enforcement must be accompanied by awareness and education campaigns and the creation of jobs and appropriate incentive systems for rural populations.

Once an ape population is reduced by hunting or disease, its capacity to recover is very limited, due to very slow reproduction and complex social behaviour. Females give birth for the first time at about 12 years of age for gorillas and 14 for chimpanzees. Thereafter they give birth only once every 5 to 6 years. Even with perfect protection from hunting, it would take roughly 150 years for populations to recover from high levels of mortality documented in past Ebola epidemics.

The “natural protection” afforded in the past by the large remaining blocks of forest habitat isolated from human activities is eroding as logging spreads into the most remote parts of the western equatorial region of Africa. The addition of Ebola to poaching and habitat loss has created a potent cocktail of threats to apes in this region. Strong political will for conservation and environmental protection exists in western equatorial Africa, as well as mechanisms for cooperation at a regional level. This provides hope that, with increased international aid, implementation of the recommendations of the expert group who met in Brazzaville in May 2005 can be achieved quickly and this will make a very significant difference to the survival of chimpanzee and gorillas in these six countries.

Caroline Tutin, Emma Stokes, Rebecca Kormos, Christophe Boesch

Regional Action Plan for the Conservation of Chimpanzees and Gorillas in Western Equatorial Africa (2005). Compiled and edited by: Caroline Tutin, Emma Stokes, Christophe Boesch, David Morgan, Crickette Sanz, Trish

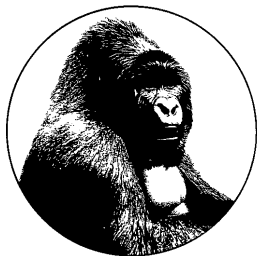
Reed, Allard Blom, Peter Walsh, Steve Blake & Rebecca Kormos. Conservation International, Washington DC. 36 pages

Plan d'action regional pour la conservation des chimpanzés et des gorilles en Afrique Centrale (2005). Compilé et édité par: Caroline Tutin, Emma Stokes, Christophe Boesch, David Morgan, Crickette Sanz, Trish Reed, Allard Blom, Peter Walsh, Steve Blake & Rebecca Kormos. Conservation International, Washington DC. 36 pages

The regional action plan is available in pdf format in English or in French. Please contact Rebecca Kormos (r.kormos@conservation.org)

A Note on the Affinities of the Ebo Forest Gorilla

The discovery of an important new and hitherto unsuspected population of gorillas was announced in 2004, in Ebo Forest, Cameroon (Morgan 2004), which is at about 4°30' N, 10°30' E. Biogeographically, its importance is that it lies 100 km to the north of the Sanaga River, which forms a boundary between sister species or subspecies within other species. For example, the moustached monkey (*Cercopithecus cephus*) occurs to the south of it, and is replaced by the red-eared monkey (*Cercopithecus erythrotis*) to the north; it forms a boundary between different species in three genera of small nocturnal primates (angwantibo – *Arctocebus*; needle-clawed bushbaby – *Euoticus*; Allen's bushbaby – *Sciurocheirus*); the mandrill (*Mandrillus sphinx*) lives to the south of it, and the drill (*Mandrillus leucophaeus*) lives to the north, although according to Grubb (1973) drills are also known from immediately south of the river's mouth. In cases of more widespread species, the Sanaga often forms a barrier between subspecies – including, supposedly,



GORILLAS

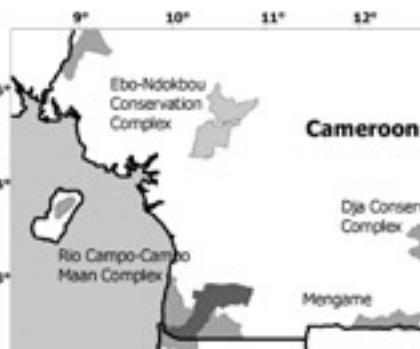
the chimpanzee. Finally, two primate species are actually restricted to the region north of the Sanaga: Preuss's red colobus (*Ptilocolobus preussi*) and Preuss's guenon (*Cercopithecus* – or *Allochrocebus* – *preussi*).

The Sanaga River separates the Ebo gorillas from the known distribution of the western lowland gorilla (*Gorilla gorilla gorilla*); the other subspecies of western gorilla, the Cross River gorilla (*Gorilla gorilla diehli*), is also found north of the Sanaga, but 250 km further north, spanning the Cameroon-Nigeria border, and separated from the Ebo Forest by Mt Cameroon and the Bamenda Highlands.

Morgan et al. (2003) described and provided some measurements of a skull which they had found in a nearby village. They noted that in two measurements, basion-inion and palate lengths, it seemed to resemble *G. g. gorilla* rather than *G. g. diehli*.

To test the affinities of the skull from Ebo, I added the measurements given by Morgan et al. (2003) to an extensive data file of gorilla skull measurements, and used Discriminant Analysis (SPSS version 12.0.2) to compare the skull with samples of the three geographically closest populations: Cross River (19 skulls); Cameroon Coast (Bipindi and Edea districts, 24 skulls); and Cameroon Plateau (Batouri and Yaounde districts, 25 skulls). The first of these samples represents *Gorilla gorilla diehli*; the other two represent *G. g. gorilla*.

Discriminant Analysis is a method which uses all available measurements simultaneously to find the relative amounts of difference between three or more samples; in this instance, there being three samples, the program calculated two Discriminant Functions. Having found the differences between the three samples, I entered the measurements of the Ebo skull as an unknown, to see which of the three samples it would most resemble.



Detail of the map on page 17, showing the location of the Ebo region. The gray area near the upper left corner is the Korup National Park at the border with Nigeria; the Cross River region is located north of this park and no more visible in the map.

High scores on the first Discriminant Function mainly indicate skulls with a relatively long basion-inion length and long palate compared to the general length and breadth measurements. High scores on the second Function indicate skulls with a relatively long braincase and long face. The first Function accounts for 71% of the total variation in the sample; the second, for the remaining 29%.

As the diagram shows, the three samples do not separate very well, although, as might be expected, the Cross River skulls are more distinct from the Plateau and Coast samples than these two are from each other. The position of the Ebo skull is very interesting: it falls well away from both Cross River and Coast samples, and at the outer edge of the Plateau sample. What the Ebo gorilla is certainly not is a derivative of a coastal population isolated by a southerly displacement of the river's mouth, still less is it a southeastern range extension of *Gorilla gorilla diehli*. It could be a recently isolated population of Plateau gorillas; but, considering its peripheral position,

it is much more likely to be a population that does not fit into any of the known "demes" of western gorillas – a relict, that is to say, of a formerly more widespread population living north of the Sanaga. Indeed, Morgan et al. (2003) drew attention to two other gorilla populations apparently surviving north of the river.

In this context, it is relevant that the researchers observed drills, not mandrills, and *Cercopithecus erythrotis*, not *C. cephus*, in Ebo (Morgan, 2004): recall that these are species typical of the north bank of the Sanaga. If the Ebo Forest were an isolated fragment of the Cameroon Plateau forests, cut off, say,



Two skulls of western gorillas from the Berlin Natural History Museum that were collected in Cameroon: a specimen from the region west of the Dja Reserve (above) and a Cross River gorilla from the Takamanda area (below)

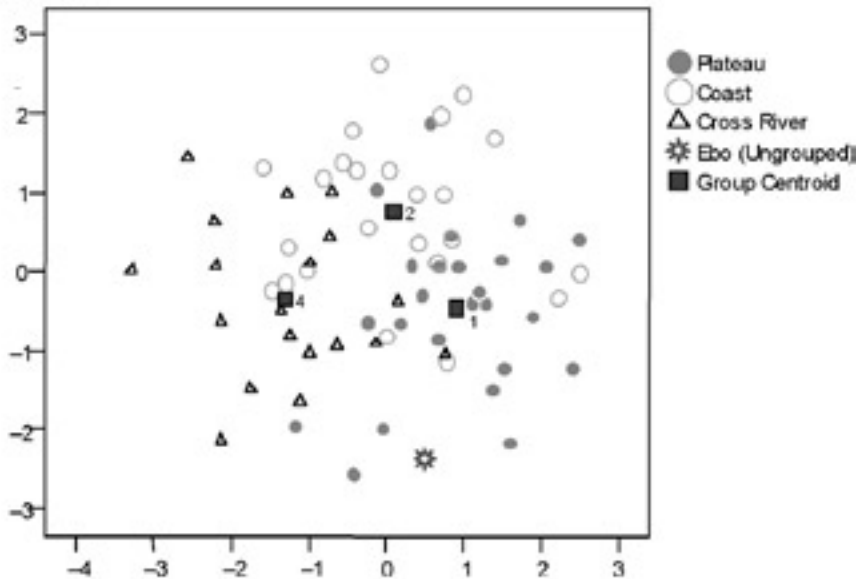
Photos: Hendrik Turni





GORILLAS

Function 2



by a course change of the Sanaga, one would have expected mandrills and *C. cephus*.

There seems to be one further respect in which the Ebo gorillas are unusual: there are “good numbers” of red colobus in the same forest. This makes the forest of very particular interest: in most areas where gorillas are present, red colobus are absent, and vice versa. Red colobus are, for example, absent from almost the entire range of the western gorilla, and from the lowland portions of the distribution of *Gorilla beringei graueri*, between the Maiko and Lowa Rivers. Gorillas in turn are absent from Korup, where red colobus are numerous, and from the eastern Democratic Republic of Congo, broadly speaking north of the Maiko and south of the Lowa. The main regions where red colobus and gorillas are sympatric would appear to be the Ngotto Forest (in the Central African Republic) and the mountain forests west of the Western Rift Lakes.

For quite a number of reasons, therefore, the Ebo Forest gorillas would seem to be a unique and significant

population, which should be protected as soon as possible.

Colin P. Groves

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A young gorilla confiscated in Cameroon

Photo: LAGA

Gabon: 10% of the Country Will Be Turned to National Parks

Gabon announced on 24 September that it will set aside 10% of its land mass for a system of national parks which contains some of the most pristine tropical rainforests on earth. Percentage-wise, only Costa Rica has set aside more land for conservation, though the total size of its parks is much smaller.

Up to this point, Gabon had no national park system. Some 13 national parks comprising more than 10,000 square miles will now be established, protecting vital habitat for gorillas, chimpanzees, forest elephants and other wildlife. Much of the land set aside was based on years of field research by the *Wildlife Conservation Society* (WCS), which has studied Gabon's wildlife since 1985.

In 2000, WCS, along with WWF began a survey of Gabon's remote areas in order to help the government develop a national park system. Many of the new parks will be developed for ecotourism, as an economic alternative to exploiting Gabon's forests for timber. A commitment of U. S. funding will help fund this endeavour.

Summary of a WCS press release



READING

Jan Kremers (ed.)

The primate visual system: a comparative approach. Hoboken (John Wiley & Sons) 2005. 382 pages. Hardcover, US\$ 135, ISBN 0-470-86809-0.

Rosie Woodroffe, Simon Thirood and Alan Rabinowitz (eds.)

People and Wildlife, Conflict or Coexistence? Cambridge (Cambridge University Press) 2005. 517 pages, 32 line diagrams, 30 tables. Hardcover £ 75, ISBN 0-521-82505-9. Paperback £ 38, ISBN 0-521-53203-5.

Diane K. Brockman

Seasonality in Primates. Cambridge (Cambridge University Press) 2005. 574 pages, 97 line diagrams, 3 half-tones, 51 tables. Hardcover, £ 70. ISBN 0-5218-2069-3

Vernon Reynolds

The Chimpanzees of the Budongo Forest: ecology, behaviour, and conservation. New York (Oxford University Press) 2005. 352 pages. Paperback, £ 32.50, US\$ 65, ISBN 0-19-514226-8. Hardcover £ 70, US\$ 135, ISBN 0-19-851545-6.

Didier Babin

Beyond Tropical Deforestation. Paris (UNESCO, CIRAD) 2004. 526 pages. Hardcover, Euro 65. ISBN 92-3-103941-5

Theodore Trefon (ed.)

Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa. London (Zed Books) 2004. 224 pages. Hardcover US\$ 75, ISBN 1842774905. Paperback £ 17.95, ISBN 1842774913.

Pamela S. Turner

Gorilla doctors: saving endangered great apes. Boston (Houghton Mifflin Co.) 2005. For children aged 9–12. 48 pages. Hardcover, US\$ 17. ISBN 0618445552.

Julian Caldecott and Lera Miles

World Atlas of Great Apes. UNEP World Conservation Monitoring Centre. Berkeley (University of California Press) 2005. 456 pages, 150 colour illustrations, 50 maps. Hardcover, US\$ 45.00, £ 29.95, ISBN 0-520-24633-0.

FAO

State of the World's Forests 2005. Situation des forêts du monde. Rome (FAO) 2005.

The chapters of the document are individually available for download in PDF format at http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/y5574e/y5574e00.htm (English) and at http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/y5574f/y5574f00.htm (French). Download of the complete PDF version is possible at <ftp://ftp.fao.org/docrep/fao/007/y5574e/y5574e00.pdf> (2258 KB) in English and in French at <ftp://ftp.fao.org/docrep/fao/007/y5574f/y5574f00.pdf> (2356 KB).

From the Internet

Global Witness published a report called *Under-Mining Peace: Tin – the Explosive Trade in Cassiterite in Eastern DRC* (June 2005). Download as PDF (1.9 Mb) at <http://www.globalwitness.org/reports/download.php/00242.pdf>

This report is also available in French (2.4 Mb): <http://www.globalwitness.org/reports/download.php/00243.pdf>

The *Wildlife Conservation Society's* Albertine Rift Programme published several interesting reports on the internet. You find an overview at <http://albertinerift.org/arift-home/arift-publications/reports> – these documents are available there, among others:

McNeillage, A., Plumptre, A. J., Brock-Doyle, A., Vedder, A. (1998) Bwindi Impenetrable National Park, Uganda Gorilla and Large Mammal Census, 1997. (7.7 MB)

Plumptre, A. J. (2002) The Extent and Status of the Forests in the Ugandan Albertine Rift. (7.3 MB)

Bush, G. K., Nampindo, S., Aguti, C., Plumptre, A. J. (2004) Valuing Uganda's Forests: A Livelihood and Ecosystems Approach. (1.9 MB)

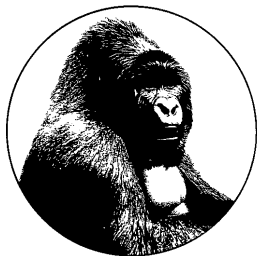
Owiunji, I., Nkuutu, D., Kujirakwinja, D., Liengola, I., Plumptre, A. J., Nsanzurwimo, A., Fawcett, K., Gray, M., McNeillage, A. (2005) The Biodiversity of the Virunga Volcanoes. (2.4 MB)

The Greater Virunga Landscape. (560 KB)



Gorilla Book for Schools

Waltraud Ndagijimana has written a book about the life of the mountain gorillas for school children in Uganda. It describes a day in the life of a gorilla family and gives an impression of their behaviour, and also of the threats that they face. The book was printed in Uganda with funds of *Berggorilla & Regenwald Direkthilfe* and distributed in primary schools close to the Mgahinga Gorilla National Park.



BERGGORILLA & REGENWALD DIREKTHILFE

Donations

We thank everybody who supported us from June to October 2005! Major contributions and donations were received from Klaus and Christa Baumgarten, Jane and Stuart Dewar, Horst Engel, Michael Erhardt, Jörg and Marianne Famula, Stefan Faust, Susan Götsch, Evelyn Hoffmann, *Hundeleben*, Frank Jacobi, Volker Jährling, Karin Linke, Angela Meder, Artur Reichl, Erwin Rosenkranz, Dieter and Elke Schmitz, Frank Seibicke, Jörg Steffen, Nina Sündermann, Jörg Steffen, Friedrich Stier, Eva Titz, Heiko Weber, Elisabeth Zaruba and the Münster Zoo. Bernd-Ullrich Reitz donated a part of the proceeds from his sale of plush gorillas. Our member Christian von Gehren collected funds on the occasion of his wedding, and a school class in Göttingen sent a donation. We are very grateful for the help of these persons and institutions as well as all the other supporters whom we could not name here!

We are very grateful to Nouvelles Approches for the translation of the Gorilla Journal to French again!

Nouvelles Approches, a Belgian based NGO, works to safeguard the national parks of the Democratic Republic of Congo. We are the only NGO currently active in Upemba and Kundelungu National Parks of Katanga Province and we collaborate with the GTZ in Kahuzi-Biega National Park.

The fact that almost every member of our Board of Trustees has lived or is still resident in the D. R. Congo, is an asset that gives us good knowledge of the country. We maintain permanent contacts in Bukavu, Lubumbashi, and Kinshasa. We keep excellent relationships with the ICCN and all national and international organizations involved in conservation in Central Africa.



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Members' Meeting 2006

Our next members' meeting will be on 11/12 March 2006; the language will be German. We will bring the participants up-to-date on our activities over the past 2 years, and report on the present situation in the countries where we have recently supported projects. Several members are planning to visit various projects in January 2006, and they will talk about their trips. Christoph Lübbert, who has just published the second edition of his Uganda/Rwanda travel guide, will be present at the meeting, as will some GTZ experts who will talk about their experiences in Africa. We will present our plans for the next few years, and there will be an opportunity for questions and discussion.

We will meet in the Rittergut Lützensömmern in Thüringen. If you want to register, you can use the registration form provided on our website (www.berggorilla.de/deutsch/aktuell/anmeld.html) or obtain a form from Rolf Brunner at our organization address.

Gorilla Journal on the Internet

You can download this *Gorilla Journal* issue at:

www.berggorilla.de/gj31e.pdf

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If you become a member, you will receive the journal regularly. If you want to receive the printed journal without becoming a member, we would be grateful if you could make a donation to cover our costs. The costs to send the journal overseas are about US\$ 20. If you do not need the printed version, we can include your email address in our mailing list and you will be informed as soon as the PDF files are available (contact: angela.meder@t-online.de).

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