



# ***Gorilla***

*Journal of Berggorilla & Regenwald Direkthilfe*

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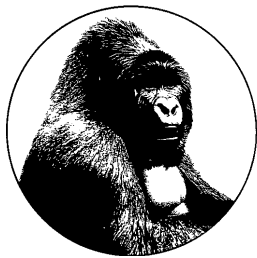


**Emergency Relief Mission for Congo's National Parks**

**Will the Virunga National Park Survive?**

**Conservation Activities in the Parc National des Volcans, Rwanda**

**Western and Eastern Gorillas: Estimates of the Genetic Distance**



# BERGGORILLA & REGENWALD DIREKTHILFE

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### Gorilla Journal 20, June 2000

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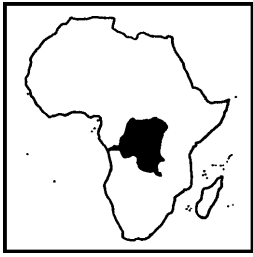
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## D. R. CONGO

### Situation in the Kahuzi-Biega National Park

In our last issue, we reported about the slaughter of large mammals in the Kahuzi-Biega National Park during 1999. Meanwhile, the ICCN/GTZ project (ICCN: *Institut Congolais pour la Conservation de la Nature*, GTZ: *Gesellschaft für technische Zusammenarbeit*) for the conservation of this park has successfully reduced poaching. In January 2000, 3 more gorillas were killed (their hands and heads were cut off), but since then no gorilla poaching has been recorded.

Although the situation in Kahuzi-Biega is evolving in a positive way, consistent rumours report the presence of several gorilla babies in Bukavu town. This is extremely worrisome, since poachers usually have to kill several gorillas to capture the infant. In 1999, 13 gorillas of the habituated family of Mugoli composed of 19 individuals were killed in this way. This situation is so worrisome that we are considering whether to stop habituating new gorilla families to tourism, as we fear this makes them more vulnerable to poaching.

The gorillas in the old part of the park were counted in 1996; at that time



**Carlos Schuler with the skulls of gorillas who were killed in 1999**

*Photo: Michel Hasson*

their number was 258. In February 2000, only 70 gorillas were recorded. We hope the inventory starting in July will find some more families. In 1996, the number of elephants in that area had been about 350 and at the beginning of 2000, only traces of 5 individuals were found. The vegetation has changed markedly in the meantime as the elephants are missing: The plants grow much denser now and the elephant paths that were also used by other animals do not exist any

more. The following text is a summary of the ICCN/GTZ conservation project's report for May 2000.

Many of the problems that have handicapped the management of the national park for more than 3 years were solved in May 2000. But the major problem still remains: 95% of the park is not controlled by the park authority.

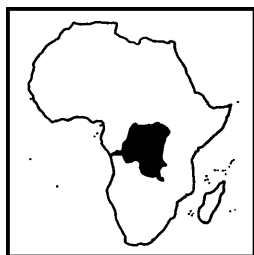
The guards now have permission to wear uniforms with the logo of the ICCN and the inscription "gardes du parc" (Park Ranger). Thanks to these uniforms, they can no longer be confused with the fighters of different warring factions. Of 100 complete uniforms financed by UNESCO, 77 were distributed to the guards and leading staff. Before receiving these uniforms, 64 guards and 5 leading staff were trained in paramilitary techniques. The new uniforms and the training helped to boost morale of the guards.

This morale was reinforced furthermore on 19 May, when the administration handed over 9 functional arms to the Tshivanga station and promised that the arms recovered by the guards during their habitual work will become property of the park.



**Former poachers who are now working for the Kahuzi-Biega National Park**

*Photo: Carlos Schuler*



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At the same moment, we were authorized to control passing vehicles at the roadblock in Tshivanga. As before 1996, all passing vehicles and their cargo are checked again by rangers, making it more difficult for dealers in park resources to transport their loot along the Bukavu–Kisangani road.

Another breakthrough was achieved when the governor of South Kivu province declared void 11 provisional occupation contracts in the corridor, totalling 1,200 ha. With this intervention, we hope that the problem of large-scale farmers illegally occupying the corridor of the park in complicity with certain state services has finally begun to be resolved. This is applauded by large parts of the population, who were concerned that the park would be totally destroyed by a few rich people with the acknowledgment of the administration.

Many people have been displaced by fighting from the western to the eastern side of the park. Such population movements pose a direct threat to the park, since the safer areas the people flee to are extremely densely populated (over 300 people/km<sup>2</sup>). The areas deserted by them are occupied by warring groups that use the park's resources for food. Currently, we observe that at least 50% of 35,000 displaced people we recorded in the eastern villages have regained their original villages. They now urgently need food aid and assistance, otherwise they may be forced to use the park's resources for their survival.

No gorilla deaths were recorded during the months February to May. A new family was discovered with 5 individuals; the number of gorillas is now exactly 70. We collected a trap with a cut off gorilla hand. The handicapped gorilla was not observed. We continue to see 5 elephant traces. In collaboration with WCS (*Wildlife Conservation Society*), a census is scheduled from July onwards, to survey the current status of large mammals – es-

pecially gorillas and elephants – in the highland sector.

More than 90% of the park remains out of control of ICCN and is occupied by different armed factions (*map on page 6*). They are exploiting minerals and other resources. Bushmeat is the major food source for the estimated 2500 persons installed in mining sites within the park. The work of the rangers will remain complicated because they will go against vested interests. The only way to recover the rest of the park would be to demilitarize the whole park and surroundings, including the major airstrips that are used to evacuate the minerals.

### Emergency Relief Mission for Congo's National Parks

Crossing language, cultural, and political differences a common goal has united the abilities and commitment of an impressively large group of international individuals and organizations toward the singular possibility of responding to protect a national community of wildlife in crisis. The Democratic Republic of Congo Parks Emergency Relief Mission evolved through the common vision of Michel Hasson (*Nouvelles Approches*, Belgium), Ian Redmond (*Ape Alliance*, United Kingdom) and Jo Thompson (*Lukuru Wildlife Research Project*, USA). Together, with the assistance of numerous people and organizations, we recognized that only an emergency on-the-ground response could make a difference on behalf of wildlife amidst the chaos of warfare.

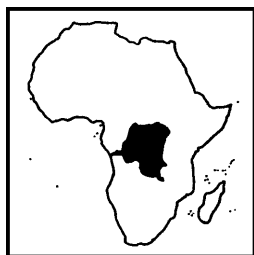
Forced to flee my study site in the summer of 1998 as word of armed conflict advanced across the terrain of the Democratic Republic of Congo, I regularly scoured the news for reports of Congo and maintained intense links with Lukuru workers and contacts that



**Medicine for Kahuzi-Biega rangers that we sent to Bukavu**

*Photo: Carlos Schuler*

remained in-country. The conflict made information and details about the situation on-the-ground hard to come by and sporadic at best. I knew that the outbreak of war had resulted in the disarming of park rangers across Congo, the forced abandonment of most "protected areas" by park guards, the influx of foreign occupiers with a disregard for local traditions and laws about wildlife, large-scale movement of resident human populations and subsequent absence of agricultural subsistence, a heightened demand for bushmeat for domestic consumption and economic betterment, large-scale availability of automatic weapons of mass destruction and ammunitions and wide-spread human destitution. Heavily armed rebel factions, militia and numerous groups of belligerents occupied many "protected areas". The supply of automatic weapons and ammunitions provided poachers with the opportunity to successfully hunt large mammals



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(especially apes and elephants) and dramatically changed the course and magnitude of wildlife extermination.

My search for information had been defined by the area south of the Congo River, the global limit of bonobo habitat and included monitoring the status of bonobo research sites and the Salonga National Park, directly along the battle front-line. However, once park rangers returned to their posts and reestablished patrols, substantial reports began to emerge detailing the widespread annihilation of wildlife across the whole Democratic Republic of Congo. After reading his report where he described the poaching and devastation of Upemba National Park, in July 1999 I contacted Michel Hasson. Our joint focus became the dramatic loss of critical species and wildlife communities as a result of human armed conflict across different sites and habitats of Congo. We continued to hear details of wildlife slaughter. I had to sound the alarm. I knew that the disintegration of the 7 National Parks, loss of the magnificent wildlife and plants harbored within and endemic only to the Democratic Republic of Congo, would constitute an irreparable loss for the world as a whole. This is not a Congolese crisis – it is a global crisis.

We needed help raising international awareness. Furnished with increasing details of unchecked, protracted poaching from across Congo, in October 1999 I reached out to Ian Redmond whose personal notoriety and position as Chairman of *Ape Alliance* offered a leap in exposure and strengthened our effort. He distributed my two-part missive and map to members of the *Ape Alliance*. Within a matter of days, *Ape Alliance* members began to contact him asking what they could do to help. With their pledges, other groups stepped forward to join our team.

Once permitted to return to their posts, park rangers did not have the basic means to do their jobs nor sim-

plest essential supplies to survive. The rangers persist as a very experienced group of men, committed to their tasks, known to risk their very lives to protect their charges, personally faced with desperate economic circumstances and truly the only ones who will ultimately conserve and protect wildlife in the Democratic Republic of Congo. It became clear that we needed to respond to the rangers with survival and motivational provisions. We decided to organize an immediate, short-term, "bottom-up" emergency response effort providing resources and support to Congolese park rangers. The success of this tangible conservation effort continues because of the joint in-country energies of the ICCN (*Institut Congo pour la Conservation de la Nature*), resident contacts and local NGOs, especially GTZ (Guy Debonnet and Carlos Schuler).

Believing in the critical nature of communication, cooperation and collaboration, I contacted all individuals and groups known to be working in Congo and coordinated information to ensure avoidance of duplicated efforts and finances, especially with regard to the future UNESCO project to support the Congolese World Heritage Sites (page 12). Through their generous responses our colleagues revealed that our Relief Mission remains distinct from but complementary to the UNESCO project.

It would require far too much space to identify all the people contributing to the Relief Mission. They will be acknowledged at a future date when we (Michel Hasson, Ian Redmond and I) compile a report of closure to our mission. However, at the time of this writing our sponsor organisations include IFAW (*International Fund for Animal Welfare*), *Born Free Foundation*, Columbus Zoo of Ohio, *Gorilla Haven*, HSUS (*Humane Society United States*), *Fund for Animals*, Chester Zoo, DFGF (*Dian Fossey Gorilla*

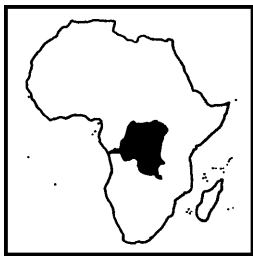
*Fund-Europe*), *Friends of Washoe* and *Primate Conservation*. Individual contributions have been received from throughout the United States, Canada, Europe, United Kingdom and Japan.

We determined that based on the Relief Mission financial status we would be able to assist 3 parks initially and, as additional contributions become available, we would direct our aid towards other parks with less critical concerns. Our first priority became the Kahuzi-Biega National Park. In January 2000 Michel Hasson joined Jean-Francois Segers on a trip to Kahuzi-Biega. Shortly thereafter, Ian Redmond made a journey to the park Kahuzi-Biega. These personal visits provided an abundant opportunity to communicate needs of the rangers and solidify relationships between the Relief Mission and rangers. Kasereka Bishikwabo (Conservateur Principale de Kahuzi-Biega) provided a priority list



**Distribution of equipment sent by the Relief Mission**

Photo: Carlos Schuler



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of needs for the park.

We have been able to successfully provide the items identified by the rangers including rain gear (ponchos and coats), rubber boots, clothes, blankets, books, soap, 100 back packs (knapsacks), sleeping bags, tents, water canteens, five Garmin GPS units, rechargeable batteries, a computer, a color printer, a scanner, computer software, materials to repair ranger houses, medicines and office supplies. *Nouvelles Approches* has provided all channels of transport and shipment to eastern Congo in cooperation with officials. The first shipment to Kahuzi-Biega departed from Belgium on 15 January 2000. The second container destined for the park shipped out from Belgium on 4 April. On 22 April another box was transported to Kahuzi-Biega by Jean-Francois Segers. Preparations for subsequent shipments of supplies destined for Upemba and Kundelungu National Parks in Katanga progresses. The rangers now know that they do not face this crisis alone. We care and will actively do what we can to help through concrete actions.

To avoid administrative costs, the Relief Mission coordinators (Michel Hasson, Ian Redmond and I) volunteer our time, efforts, and finances. We have made the certainty of secure delivery of supplies our first priority. We purchase specific items and deliver them into the hands of the respective Park Conservateurs via secure contacts in-country, assuring that each dollar spent has arrived at its destination. Our effort will not result in an in-country structure or welfare program. In order to respond to specific needs, we communicate with each aided park prior to purchasing their supplies. Unfortunately, we cannot securely reach all parks at this time and must focus on those areas with greatest need. Today, Maiko National Park remains insecure due to the active presence of Congolese Interahamwe and Mai Mai militias

in that area. Virunga National Park continues to be supported by IGC (*International Gorilla conservation Programme*), DFGF, *Berggorilla & Regenwald Direkthilfe*, as well as the *Mountain Gorilla Veterinary Project*. Garamba National Park remains secure with the support of *Projet Parc National de la Garamba* and the UNF Project for the World Heritage Sites. We consider Salonga National Park strongly in our field of vision, although it remains insecure for the moment. Maiko and Salonga National Parks will be areas for future aid.

Under the broad umbrella of our Relief Mission, other needs have been identified. ICCN and GTZ produced a conservation education magazine called *le Gorille – Parc National de Kahuzi-Biega 2* as a follow-up to *le Gorille 1* (1999). ICCN and GTZ had insufficient funding to print their second publication, so they contacted our Relief Mission. This printing did not fall under our objective and our limited funds must finance targeted specific goals. However, IPPL (*International Primate Protection League*), *Nouvelles*

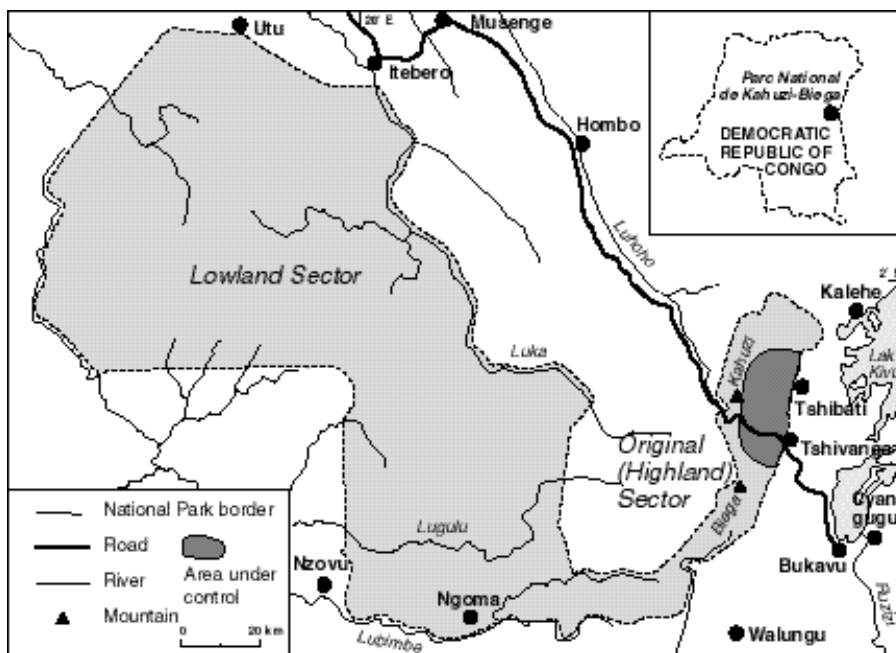


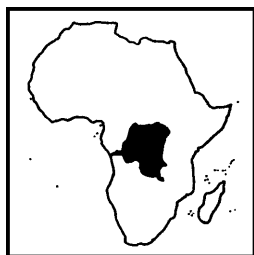
**Vehicle donated by the Born Free Foundation to Kahuzi-Biega**

Photo: Carlos Schuler

*Approches* and *Wild Images* provided funds for printing *le Gorille 2* as a sister initiative of the Relief Mission. The human population in and around the Kahuzi-Biega Park receive this critical publication at no cost. Translated to English, we widely distributed *le Gorille 2* to individuals and organisations whose interests and goals focus on African wildlife conservation.

As public awareness of the wildlife crisis in the Democratic Republic of Congo grew, many individuals contacted me to request options for action that did not require a financial contribu-





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tion. In January 2000 I compiled a list of US officials key to diplomatic will in Central Africa and made the list widely available, including posting it on several websites. I encouraged writers to implore US government officials to use policy and practice to promote national stability, security and peace in Congo. This campaign has been successful and continues to advance as another sister initiative of the Relief Mission.

When Ian Redmond returned from Kahuzi-Biega in January he brought with him a request for additional items outside the Relief Mission budget and goals. Specifically the park defined the need for a vehicle to be used in patrolling accessible areas, general transport and heavy-duty haulage of materials. *Born Free Foundation* provided the funds to purchase this vehicle and Ian Redmond personally delivered it to the Kahuzi-Biega National Park.

Several other endeavors under the Emergency Relief Mission include (but are not limited to) the active involvement of members of the European Parliament via IUCN-Netherlands and WWF liaisons. Other groups have responded to our awareness raising of the bonobo crisis in Congo in fellowship with the Relief Mission. The US Department of State has offered direct diplomatic assistance. We will continue to respond to the needs identified by sources in the Democratic Republic of Congo whose concern focuses on protection of wildlife and the vital communities that they contribute to.

*Jo Thompson*

### ***Nouvelles Approches* and the Kahuzi-Biega National Park**

Remaining true to its willingness to help the Congolese National Parks in these difficult times, *Nouvelles Approches* a.s.b.l. (association sans but lucratif) made contact with the Parc National

de Kahuzi-Biega-GTZ project "Integrated Conservation in the Kahuzi-Biega National Park" in December 1999. We wanted to take advantage of our president's numerous trips to Bukavu to make ourselves useful. When he came back from his first stay in Kivu, Jean-François Segers, our president, told us about his encounter with Carlos Schuler from the GTZ, who was suffering from feelings of despair, abandonment and lack of understanding. Carlos Schuler had lived through daily gorilla slaughters. He started sounding the alarm at the beginning of the war in 1996, but no one seemed to listen.

Enquiring about the way we could help, Carlos Schuler answered by presenting his most immediate problem to Jean-François Segers. The authorities

of the park, using and abusing diplomacy and persuasion, had managed to convince the poacher bands to stop their animal slaughters in exchange for a promise of amnesty and of their integration into the conservation project. Nevertheless, money was lacking to give these new recruits some equipment. The reconverted poachers, often pygmies, were not very demanding. Boots, raincoats, clothes. So if we could ...

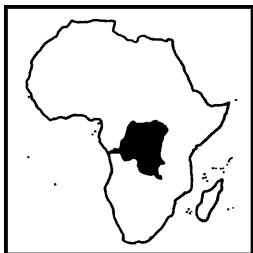
The following week, bundles of boots and clothes were ready to be sent. The only problem that remained was to organize the transport. To our great delight, our airline company DE-MAVIA offered us the airfreight as a contribution to our action.

I decided to join Jean-François Seg-



*Mugaruka*

*Photo: Michel Hasson*



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The magazine *Le Gorille* was produced by and for the people living close to the Kahuzi-Biega Park. It shows why conservation is important for everybody and why the park's resources should not be destroyed. The magazine contains articles about the rangers, the people, the park's activities, the animals and the present situation. For entertainment, it provides puzzles and jokes.

Although *Le Gorille* is published in French, this does not mean that it is only available people who can read French: Usually, the text is read in the community and interpreted to those who do not understand it.



*Pupils with the new issue of le Gorille*

*Photo: Carlos Schuler*

off than remain a prisoner of the steel jaws that held him. He survived probably thanks to the medicinal virtues of the plants he eats. When I see him watching us without seeming to be doing so, I cannot help thinking that this animal "knows" Man is responsible for his misery, the same Man who is following him now. Why does he tolerate us? How could I describe the feeling of shame that I was overcome by? Why do I consider him as a being capable of thought? These questions, inspired by his look, remain unanswered.

When we returned to Brussels a week later, we heard good news. Jo Thompson from the *Lukuru Wildlife Research Project*, who had proposed that we collaborate to help the Congolese parks, had achieved support from organisations in various countries and had collected the first funds. Ian Redmond of *Ape Alliance* had revealed a particularly dynamic partner in this operation. We could now proceed to the next stage: supplying the park with articles that were most urgently needed. The authorities of the park had given us a list of such items.

We also came back from Kivu with an additional challenge: the printing of a small magazine entitled *Le Gorille*. The aim of this half-yearly publication, which is distributed free of charge in the whole region, is to explain to the Congolese populations the importance of nature conservation, and the protection of gorillas. The first issue had a resounding impact, but the publication of the second one was delayed for both technical and financial reasons.

We proposed to take care of the printing, and to double the number of copies. Once again Jo Thompson made use of her gift of persuasion, and soon we received more funds from generous donors. In particular, I would like to express my thanks to Diane Walters from IPPL and Eli Weiss for their contribution. If the 20,000 copies of *Le Gorille 2* reach everybody in Bukavu

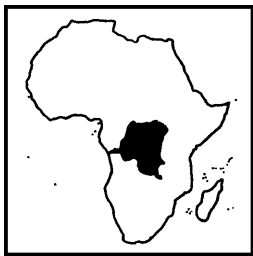
ers in his next trip. We met Carlos Schuler the day following our arrival in Bukavu, and we planned a visit to the gorillas. It should be pointed out that that tourists are not allowed to visit Kahuzi-Biega for the moment because of the war. I discovered the Tshivanga station, its personnel, its reconverted poachers, and its houses under restoration.

A visit to the gorillas is an unforgettable experience. I was vaguely anxious about confronting such powerful animals. How would we be greeted?

We progressed with difficulty in an entanglement of lianas that our trackers cut with machetes to facilitate our progression. We suddenly heard a noise ahead of us, and there appeared a dark shape, which disappeared immediately. I hardly saw anything. I had just experienced the first intimidation charge of the dominant male without even being aware of it.

Later, we had the opportunity to come near him, and I was finally able to admire Mugaruka. His right hand is missing. He had preferred to tear it





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and the surrounding area, it is mainly thanks to these donors.

We would also like to take the opportunity to announce that the following items are on the way to Bukavu: bundles of clothes, rugs, boots, about 100 knapsacks, boxes of school-books and material for children together with a brand new computer, a scanner, and a printer. This time, the company SIPEF that allocated us 5 m<sup>3</sup> in one of its containers, provided the transport.

And it continues. Jean-François Segers travelled to Bukavu at the end of April and took with him 5 GPS equipped with multiple memories. And, last but not least, Ian Redmond made a trip to bring a Land Rover for the park and gave it to the authorities in Bukavu (*page 6*).

However, it is not the time to sit back and become complacent. The first step has been made, but the race is far from being won. In the Kahuzi-Biega National Park gorillas are still being EATEN, the forest is being destroyed, and some landowners still invade the lands of the park. So...

*Michel Hasson  
(translation: Caroline Storms)*

### Visit to the Kahuzi-Biega Park in April 2000

With the support of the authorities, the park has started a systematic guard-training programme. After finishing the course, the guards receive new uniforms which have "gardes du parc" written on them. On April 26th, park authorities were promised by the outside authorities that the guards could soon be armed again. (*see also the article on further developments in the park, page 3*)

I handed over 5 GPSs to Mr. Karesereka, the park director, and Carlos Schuler. This equipment will make it easier to map patrolling routes and

to locate the gorilla groups. They will therefore help to improve the efficiency of the patrolling system.

A new census is being prepared at the moment. It will be supported scientifically by Juichi Yamagiwa whom I met at Tshivanga. With this census, park authorities hope not only to determine the exact numbers of gorillas surviving in the high altitude part of the park (10% of the park area), but also to get an idea of the genetic potential of the population. At the moment, it seems essential to us to draw the attention of the census organizers to the current insecurity of the region and to the unforeseeable nature of aggressive encounters, both in terms of location and severity.

On their part, the local human population and the authorities were shaken up by reports published in the magazine *le Gorille 2*. The distribution of this magazine has achieved its aim of making the people aware of the drama unfolding in the Kahuzi-Biega. Several readers told me: "We knew that things weren't rosy, but we hadn't realized quite how bad the situation actually is."

Although this is very promising, we should not forget that certain fundamental problems still persist. Park authorities must be in a position to curb poaching and encroachment by unscrupulous farmers who have already deforested and cultivated an important section of the corridor linking the high altitude part (around Mt. Kahuzi) to the low altitude part of the park. Depending on the availability of food, elephants and gorillas sometimes migrate through this corridor. Its destruction would endanger the long-term survival of the park.

At this stage it seems that the authorities have become aware of the seriousness of the situation. Park authorities expect them to take a decision regarding the enforcement of the park boundaries.

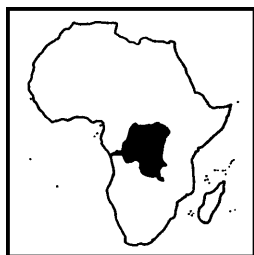
One cannot but wonder why the encroachers, whose names have been published in *le Gorille 2*, are not prosecuted. The most important among them is a Mr. Muhinuzi who alone has appropriated over 100 ha of park area. Admittedly, he is a magistrate, but does that give him the right to put himself above the law and to put the survival of the park at risk?

The unanimity of the authorities and the local population in supporting the survival of the park finally seems to be leading to concrete results. We can only hope that, in the future, the children won't have to wonder any more why the responsible people are not concerned.

*Jean-François Segers*

### Gorillas and Chimpanzees in Kasirusiru

The two sympatric groups of gorillas and chimpanzees in the montane forest show strong similarities in the plant species they eat, especially regarding fruits. This is due to the low diversity of fruit trees in the Kasirusiru region, compared to the lowland forest which is famous for its high diversity and availability of tree species with fruits consumed by gorillas and chimpanzees. In fact, in the montane forest of Kahuzi-Biega, fruits are a very limited food source because they are very dispersed and produce fruit only in certain seasons. The consequence could be some interspecific competition for fruits between the apes. However, such competition was observed rarely between the chimpanzees and gorillas in Kasirusiru, so they must have developed special feeding strategies in order to tolerate each other and live together in that forest. The ranges of the gorilla and the chimpanzee group overlap and the two ape species feed on the same fruit species when they are available. No aggressive interaction has been observed be-



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tween gorillas and chimpanzees during the study period. This shows that the feeding competition is low. Probably differences in the importance of certain food sources reduce the competition between the species.

According to studies from other regions where these apes live together sympatrically, gorillas spend more time in secondary forest than in primary forest. Our results also showed that the gorillas visit secondary forest more often than primary forest in Kasirusiru. Although the density of trees with fruit that the gorillas prefer is higher in primary forest, they mainly feed on leaves and tree bark that they easily find in secondary forest.

*Mbake Sivha and  
Kanyunyi A. Basabose*

*For this study Mbake Sivha received our support during the years 1994 to 1997. The results are presently prepared for publication in scientific journals, therefore only the discussion is presented here.*

### Domestication of Wild Plant Resources

As Mbake Sivha found in her study, many plant species from the forests of the Kahuzi-Biega Park are used by the people living close to the park. In an attempt to solve this problem, it was suggested to cultivate the most important plant species. Since September 1999, 5 species are in trials:

- *Arundinaria alpina* (Mulonge) – bamboo,
- *Polyscias fulva* (Lunga or Tong),
- *Prunus africana* (Muhumbahumba),
- *Myrianthus holstii* (Bwamba),
- *Hagenia abyssinica* (Mwizuzi).

The tree species are among the most threatened ones. *Prunus* is appreciated because it contains substances used in modern medicine. The trial is done by seed/grain, wild transplants, or cuttings.

In summary, after 3–4 months, the non-treated seeds germinated well and the wild transplants are growing well compared with the cuttings. Only the wild cuttings for *Polyscias* and *Hagenia* have done well. The wild transplant of bamboo taken from the park was not entirely successful. Considering that the *Prunus* bark can be bought as well as the bark of quinquina, its popularization would also be a way to contribute to the growth of revenue of the rural people.

*Summary of an article from le Gorille 2*

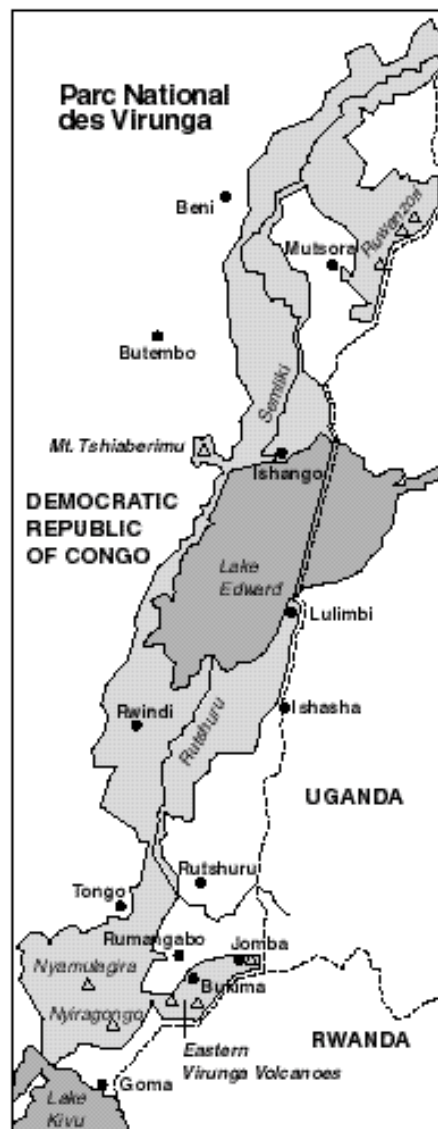
### Mt. Tshiaberimu

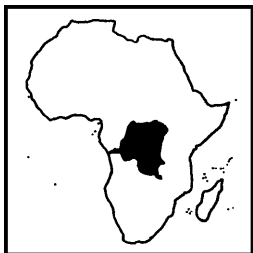
Funded by *Berggorilla & Regenwald Direkthilfe*, Claude Sikubwabo and Vital Katembo conducted a training course for law enforcement in February 2000. According to the most recent census, 13 gorillas are estimated to occur in the 45 km<sup>2</sup> protected area. Claude Sikubwabo reported that there is a 90% probability of observing the gorillas. Although the local population has not completely accepted the park boundaries and fields are still planted illegally inside the park, the situation has improved considerably over the last few years. This can be attributed to intensive talks between Claude Sikubwabo Kiyengo and Vital Katembo (DFGF-Europe) on the one hand and the involved farmers and local community chiefs on the other.

### Will the Virunga National Park Survive the Current Crisis?

The crisis in which Africa's Great Lakes' region has been gripped for about 10 years impacts upon all components of society. The region's fauna and flora are no exception. The economy is in a desolate state and the population has become extremely poor, some people survive by poaching animals in protected areas and by destroying the timber

resources (e. g. through the production of charcoal, trade in precious timber etc.). The park's resources are sold extremely cheaply and undercutting competition with legally produced materials in the majority of public markets around the protected area. As the guards were disarmed in November 1996 and because they basically have no operational funds available, poachers and others whose occupations have a negative impact on the park are at an advantage and can oper-





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**The building of the WWF education program for the Virunga National Park in Goma after a bombing raid in May 1999**

ate easily.

In North Kivu, trouble started already 14 years ago in the extreme north of the Virunga National Park. Subsequently, the guards withdrew from that sector to concentrate on the area south of Beni. In this way, the lower part of the great Semliki Forest was left without protection. The greatest negative impact on the park's biodiversity, however, has been observed since 1994, when Rwandan refugees arrived en masse on Congolese territory (former Zaire), and were installed on the boundary of the Virunga National Park. Several hectares of forest were cut in the park. Village forest plantations (woodlots) were cut before the trees reached maturity and the wood was sold in the refugee camps. Consequently, the entire region of North Kivu has been virtually deforested. UNHCR, WFP (*World Food Programme*) in collaboration with GTZ (*Deutsche Gesellschaft für technische Zusammenarbeit* – German developmental aid organisation) and CARE have supported local NGOs in their reforestation activities, but the

implementation has not yet reached a level where the population's demand for firewood or building material can be satisfied. People continue to help themselves from the forests of the park.

The attention of the international community has to be drawn to the unprecedented negative impact political events in the region have had on the fauna. In 1990, hippos numbered about 10,000; in March 1995, fewer than 4,000 were left. Between November 1996 and March 1997, the park guards abandoned the central part of the park because of the war. Subsequently, it was occupied by the Mai Mai who wreaked carnage among the hippos, distributing the meat to sympathisers or selling it in the villages. Park authorities have estimated that close to three quarters of the hippos remaining in 1997 have been killed since the Mai Mai departed. Only the guards' return will protect the hippos. Their presence would be a deterrent to poachers. Guards are always looking for possibilities to associate with soldiers to initiate

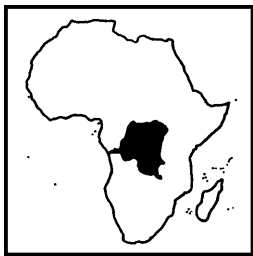
more effective mixed patrols.

In August 1998, a second crisis rocked the eastern region of the Democratic Republic of Congo, effectively cutting this part off from Kinshasa. Sporadic but repeated attacks by the Mai Mai started up again in the central part of the park. Several times, the guards were chased back to their posts and the remaining assets of the park are constantly plundered.

One of the two main factors currently putting the park at risk is the insufficiency of wood supplies from tree plantations. The second one is the presence of people in the park itself, such as the Mai Mai, dissidents from the Rwandan Interahamwe who have re-grouped in the forest of the park, civilians engaged in poaching and troops, who, having been installed in the park without food, have resorted to poaching with fire arms. Markets selling meat originating from the park have re-opened their doors in all big villages around the park. In the area between Rwindi and Beni, the magazine *Coullisse* published an article in July 1999 with the title "Long live the poaching in the Virunga National Park: hippos for US\$ 10 a head, antelopes for US\$ 3!" Further on in the article, the magazine informs the reader: "Kanyabayonga has become a meat city to such a point that the inhabitants suffer from toothaches because they've eaten too much meat. This situation is the work of the soldiers who indulge in poaching in the Virunga National Park." This is only one example of many.

### **What Can Be Done?**

It has to be noted that the war in Congo is the factor that forces all these groups of people to resort to poaching. For the rebels, the main goal of the war was to conquer Kinshasa. Other concerns had to wait until the capital was taken. As soon as the Lusaka treaty for a cease-fire by all parties was signed, everything was supposed to change.



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The whole population thought that the cease-fire would allow a glance at the internal situation of the controlled territories and give an opportunity to cleanse the park of Mai Mai and Interahamwe, the main perpetrators in poaching and the greatest threats to security in the area. Park staff thought that once security had been re-established, tourism would start up again and the park would have the necessary resources to function properly. This has not been the case to date. Insecurity still persists in certain areas of the park.

The park has no funds and poaching becomes worse every day. The park needs the means to function properly and especially needs support to allow the guards to stay in their posts in order to ensure at least some surveillance. Dissemination of information in an awareness campaign is an important tool to convince the political authorities to support the park, especially as some of them tend to use the park for political campaigns and publicity.

The park has lost almost all its infrastructure and does not have any possibility to generate its own revenue. Sightseeing in the central part of the park has been closed since 1996. Gorilla tourism, which generated a considerable income for the park, has also been closed since August 1998. The park staff's salaries haven't been paid for a very long time: some haven't received their salary for 5 years. The guards' wives and older children become traders or work in the fields to support their families. Some poaching by park staff can also be observed. The staff still hopes that one day everything will be alright and their salaries will be paid.

At the moment, park authorities base their remaining hope on existing environmental assets for tourism such as the presence of habituated gorilla families and large mammals of the plains, such as elephants, buffalo herds, an-

telopes, etc. However, sufficient funds are needed to ensure the protection of these assets, as they are under great pressure.

The Virunga National Park is a World Heritage Site in Danger. Since 1994, experience has shown that support for operations and to increase motivation of park staff can help to protect and conserve park resources. International NGOs such as IGCP (*International Gorilla Conservation Programme*), DFGF (*Dian Fossey Gorilla Fund*) and *Berggorilla & Regenwald Direkthilfe* have demonstrated means of saving and maintaining the gorillas in the Virunga National Park South and on Mt. Tshaberimu. Their operations were based on the support of staff in their posts (including bonuses for good performance), help with running costs in the guard stations, help with medical care and other things such as food for the patrols, provision of equipment etc.

Therefore we encourage international conservation organisations to join together with those organisations, who have never abandoned the conservation of the Virunga National Park. If the examples set are followed, they will not be disappointed in the results. We urge UNESCO and IUCN to start up their support project for the park and the Peace Parks concept.

*Claude Sikubwabo Kiyengo*  
*The situation in the Mikeno sector is still good. Following the wrong interpretation of a speech of the Governor made at the beginning of May, the local population wanted to deforest the Mwaro corridor (which animals use to move between the sectors Mikeno and Nyamulagira). The situation was resolved thanks to the combined efforts of ICCN and its local partners by providing appropriate information to the whole population so that they would not cut the forest in the corridor.*

*The ICCN in the east of Congo has just been given a coordination structure. This structure has the same*

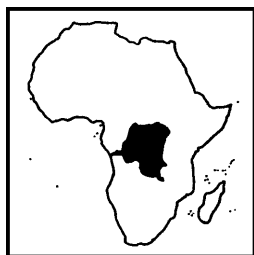
*mandate as the one devoted to the general management of the ICCN in Kinshasa. This was initiated in an attempt to achieve a real and efficient management of the protected areas in the East, with 4 World Heritage Sites among them.*

### UNESCO Supports World Heritage Sites in the D. R. Congo

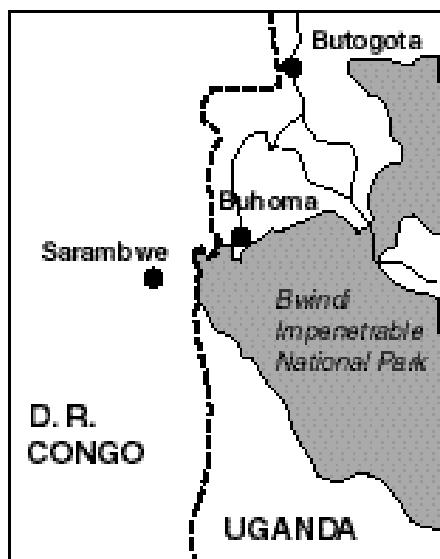
A project called "Biodiversity Conservation in Regions of Armed Conflict: Protecting World Heritage in the Democratic Republic of the Congo" will be supported with an initial donation of US\$ 2,895,912 by UNESCO. These funds will go to 5 conservation areas in the Democratic Republic of Congo: Garamba National Park, Okapi Faunal Reserve, Virunga National Park, Kahuzi-Biega National Park and Salonga National Park.

This project will require US\$ 4,186,600 in total; US\$ 1,290,688 have yet to be raised. The plan was approved in November by the United Nations Foundation, the U.S. charity which administers the US\$ 1 billion donated in 1998 by Ted Turner to promote UN-supported causes, and by the United Nations Fund for International Partnerships (UNFIP). It has been developed in cooperation with IUCN and a Task Force of partner organisations notably, GTZ (the German governmental technical aid organization) and ICCN (the Congolese national park authority), WWF and IRF (*International Rhino Foundation*).

The project will seek to facilitate UNESCO's interaction with relevant authorities with a view to supporting local staff in their duties. It will provide salary substitutes and field equipment to help them carry out their work, support staff training, monitor the status of biodiversity, support programs integrating indigenous people and establish



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### A Community Project for Conservation

The Gorilla Reserve of Tayna is situated in the Democratic Republic of Congo, North Kivu, Lubero territory, at 0°–0°30' N and 28°30'–29° E. It is separated into two parts: The southern sector has an area of about 450 km<sup>2</sup>, the northern sector about 90 km<sup>2</sup>. The reserve is a community initiative and the land is property of the state. It is under community management and customary responsibility of the Batangi and Bamate chieftains.

Within the reserve, the vegetation consists mostly of ombrophile forests of transition, and most of the area is covered by primary forest. Regarding the fauna, some species are particularly interesting: the eastern lowland or Grauer's gorilla, the chimpanzee, the forest buffalo and the Congolese peacock. The biological diversity is remarkable, gorillas and chimpanzees are numerous. More detailed studies are still necessary to determine the

number of animal and plant species in the reserve. The results will certainly be surprising.

In the surroundings of the reserve, people are grouped in small villages close to the boundaries. The largest village contains about 50 families along the main path that leads to a zone where mining takes place. This is an important place for gold mining, therefore it is presently fallow and a temporary encampment for 15–20 persons was constructed on this land.

The population cultivates various crops; the region is favourable for certain vegetables. People hunt for their own personal requirements, particularly porcupines and giant hogs. Gorillas are not consumed but sometimes chased when they damage plants and are considered dangerous for the population. Mining for gold is an important economic factor in the region. Bartering (with gold) is the only form of commercial exchange.

The main cause for deforestation in the region is the need of land for pas-

long-term financing mechanisms for the conservation of these sites in the D. R. Congo.

In May, a diplomatic mission with Jean-Pierre d'Huart and Terese Hart visited Uganda and Rwanda to ask the governments of these countries for their cooperation with the project. After that they travelled to eastern Congo before returning to the project office in Nairobi.

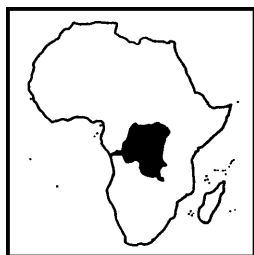
### Sarambwe Forest

The forested area of the Sarambwe Mountains borders the Bwindi National Park on the Congolese side. Separate forest areas are being isolated through deforestation. 50 families living in the area agreed to be resettled if they receive land somewhere else. In close cooperation with these families and local NGOs, these isolated forest areas are to be re-connected in the future. First, however, the area has to be given protected status.

*This year, Berggorilla & Regenwald Direkthilfe will support a project in Sarambwe suggested by Claude Sikubwabo with US\$ 1,000.*



*People involved in the Tayna Gorilla Reserve Project during the ranger training, from left to right: Mwami Muhindo Mukosasenge – showing a GPS unit provided by DFGF –, Celestin Kataliko (RGT administration), Jacques (secretary of the chefferie), Vusu (trainer), Jean-Claude Kyungu*



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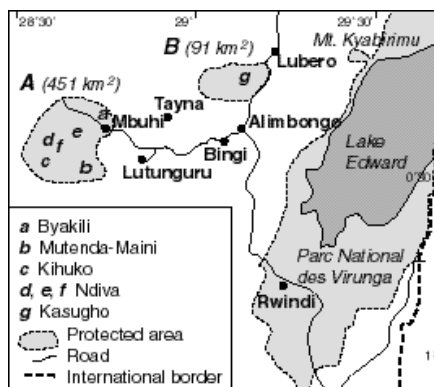
ture and agriculture. At the moment, deforestation has been stopped 20 km from the reserve. Population migration programs now being organised in Lubero territory may pose a danger for the region. Their aim is to relocate people who have settled in the boundary zones of the Virunga National Park and the population in the western lowland zones. These migrations would increase the deforestation and be a risk for gorilla protection.

It would be possible to cross the reserve from the east by vehicle if the road was re-opened. This road has provided access to the mines since the colonial period. After the end of the colonial time they deteriorated. An airstrip at Bunyatenge (about 30 km east of the reserve) has not been maintained since the 1960s. The rivers in the region are navigable only for short distances because of numerous falls and cannot be crossed during rainy seasons.

Gold mining and wild animal hunting constitute the main sources of income for the local communities living around the reserve. With tourist visits to gorillas, however, the roads could be re-opened, and if the airstrip were repaired, the region's development could be promoted.

### Management of the Reserve and Priority Actions

The reserve is run by three bodies: an administration counsel headed by a customary chief, a management counsel and a permanent management committee. Up to now, the material and feeding participation of the leader team during their visits of the area is financed by themselves individually and by the community. Some funding of material and for human resources would improve the conservation of the biodiversity in the region. We have no means of transport there. From the principal road up to the reserve, it is a 2-days walk and for crossing the re-



### Tayna Gorilla Reserve

*Redrawn from a map by J.C. Kyungu*

serve from east to west we need about 4 days.

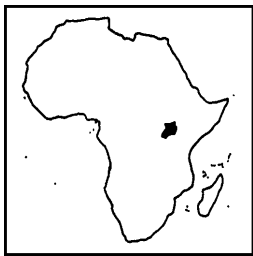
At the moment a survey of the fauna and flora in the whole reserve is the first priority as well as a socio-economic study of local population. Based on the results of these studies, educational, scientific, economic and ecotouristic objectives have to be defined and a plan for the optimal management of forest resources has to be developed. This should include the preservation of the resources by the promotion of agroforestry, reforestation and community development. An adequate area for the reserve based on ecological data should be set up. It is important to clearly define the duties of all those involved inside and outside of the reserve. The relationship between the reserve and the local population should be improved and the economic activities in the region should be controlled and developed. According to the settlements of the population, a clear definition of the reserve's limits is very necessary. Setting up structures for supervision and control of human activities is also necessary and requires the recruitment of additional personnel, equipment, means of transport, the improvement of living conditions of all the personnel and the marking of the boundaries. The training of the personnel is an absolute necessity.

### Support has Started

In order to reinforce the community efforts, the DFGF (*Dian Fossey Gorilla Fund-International*) donated a GPS machine and US\$ 500 for the training and setting up of a team of guard trackers (8 are already at work). *Partners in Conservation* (Colombus Zoo) gave US\$ 500 of allowances. *Berggorilla & Regenwald Direkthilfe* provided basic materials (blankets, basins, torches, ...). This support will be used to launch gorilla monitoring and to collect data on vegetation and cartography. *Earthwarch* allowed a probation period for 2 persons in Cameroon. Five staff members will be trained in Tanzania (Mweka College of African Wildlife Management) and soon in South Africa (South Africa College). In the meantime we need a sponsor for the training.

The Gorilla Reserve of Tayna welcomed the moral support from ICCN, IGCP and other local organisations (SEPRONA, UWAKI, ADPBL, PAL/AGIR, PEVI/WWF).

*Jean Claude Kyungu*



## UGANDA

### Gorilla Visits in Bwindi and Mgahinga

March 1999 was declared a month of mourning for the victims of the massacre in Buhoma and gorilla tourism was suspended. In April the parks were re-opened. During that month, 85 tourists visited Bwindi and 47 visited Mgahinga.

Soldiers are still constantly present and work together with the park staff. However, visitors must be aware that the region is still insecure.

Since the re-opening of the parks, the number of visitors has increased markedly. More than 3,000 people tracked the gorillas – about 2,000 in Bwindi and 1,000 in Mgahinga.

One gorilla group (Nyakagezi) can be visited in Mgahinga Gorilla National Park and 2 (Mubare and Habinyanja) can be visited in Bwindi. The Nkuringo group in Bwindi Impenetrable National Park continues to be habituated. Apparently, there have been no gorilla casualties from the attack on tourists last year.

### Equipment Deliveries

Once again we sent equipment for rangers in December. The storage was re-supplied with 570 kg of material, some of which has already been distributed:

- 40 rain coats and trousers, 30 fleece sweaters were given to rangers in the Rwandan Volcano National Park.
- 51 rain coats, 20 backpacks and sleeping bags, 30 T-shirts, 10 sweaters, 5 tents and other material will be of great help to the rangers on Mt. Mikeno, Virunga Park.
- Lanterns, tarpaulins, 30 blankets, cooking equipment, writing utensils and other small pieces of equipment were made available to the Tayna Gorilla Reserve.
- 40 sweaters, 7 sleeping bags, 3 tents, tarpaulins and water bottles are earmarked for the rangers in the Ugandan Mgahinga National Park.
- 30 pairs of boots were bought by Ute Eilenberger in Rwanda and taken to the rangers of the Kahuzi-Biega National Park.

### New Requests for Equipment – YouCan Help us to Fulfil them!

- For the rangers of the Mikeno we want to re-stock all the equipment delivered so far.
- Ute Eilenberger has informed us about the need for rubber boots in Rwanda.
- Uganda has reported a further need for material for its gorilla parks: 40 sets of equipment for rangers for the Mgahinga Park and 80 for Bwindi are requested, in addition to tents and technical equipment such as GPSs, binoculars, and many others. Because of last year's incursions from the territory of the Democratic Republic of the Congo and the political situation there, bulletproof vests are also requested.
- We intend to buy a certain number of rubber boots (50–100 pairs) each year in Uganda. Currently, we are negotiating with a manufacturing company.

Donations of money and equipment are very welcome; however, regarding the equipment, certain requirements should be met. If you want to send material to us, we therefore ask you to contact Iris Weiche first:

Tel./Fax: +49-7071-31805

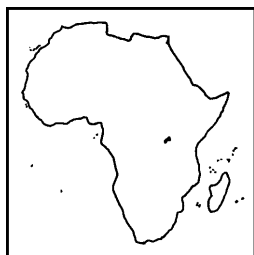
E-mail: [I.Weiche@t-online.de](mailto:I.Weiche@t-online.de)

Please send checks to:

Rolf Brunner, Lerchenstr. 5, 45473 Muelheim, Germany



**William Mugisha (left) with Conservateur Muhindo of Virunga Park South (right) and a representative of the Tayna Gorilla Reserve**



# RWANDA

## Some Conservation Activities

Following improvements in security in northwestern Rwanda and the reopening of the Parc National des Volcans for gorilla tourism in July 1999, field activities of the Karisoke Research Centre greatly increased and two new assistants were recruited to the DFGF-I (*Dian Fossey Gorilla Fund International*) project. Since undergoing paramilitary training, the Karisoke trackers have been able to work full-time and each gorilla group is visited daily. Karisoke researchers have been allocated military escorts 4 days per week since September (gorilla tourism is operational 7 days per week on demand).

During 1999 there was a total of 8 births, and 8 deaths or disappearances in the 3 groups studied at Karisoke, a population of 87 gorillas. Pansy, a 33-year-old adult female, was last seen on February 10, and probably died of old age. Pansy, two juveniles and 3 infants disappeared while we were unable to monitor the gorillas on a daily basis.

Arusha, a juvenile male, died in the presence of Karisoke trackers in September and we await results of advanced laboratory analyses. Simba seems to have died of natural causes aged 31, and was found dead close to her night nest 2 months after giving birth to a stillborn infant in September. One young silverback became solitary, so the study population has decreased by one since the end of 1998.

We are currently witnessing high levels of aggression between adult male gorillas. Three silverbacks in the 40-strong Pablo group have been seen to fight violently with lone silverbacks and with silverbacks of Beetsme's group. All have sustained extensive wounds, and 14-year old Ndatwa died from septicemia following an interaction. A young silverback from group 13 also died, and he too is thought to have

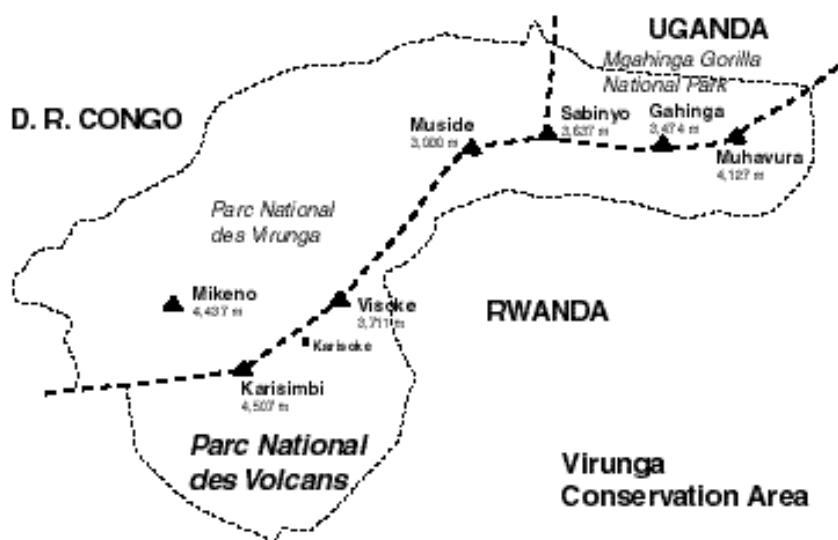
## Volcano National Park

With an area of 125 km<sup>2</sup>, the Parc National des Volcans is a small park situated in Rwanda's Northwest. The park headquarters are in Kinigi, 13 km from Ruhengeri. The park employs one director and his two assistants, 34 guides and 39 guards, as well as a lady assistant vet who helps supervising the gorillas' health.

The Parc National des Volcans shelters 4 groups of gorillas that can be visited by tourists. The Suza group has 32 individuals while the Amahoro group has 19; the Sabinyo group numbers 11 and group 13 consists of 6 gorillas. Several births have been registered this year: two babies were born in the Susa group and one in group 13. Unfortunately, one of the two new born gorillas in the Suza group died, and so did Kwilinda, the silverback male of group 13.

Since the park re-opened on 15 July, 1999, tourists have come from all over the world to visit the park and its gorillas. Up to April 2000, 649 visitors had been counted.

*François Bizimungu*



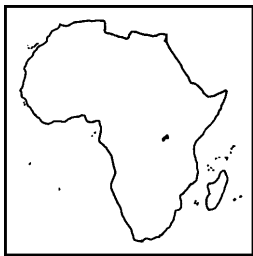
been wounded in a fight.

Competition between males influences many aspects of gorilla biology, and we hope soon to better understand competition and male reproductive success through paternity determination in the Rwandan gorilla population. Park staff are collecting hair and faecal samples from known individual gorillas for genetic analysis at the Max Planck Institute for Evolutionary Anthropology in Germany as part of a collaboration

with Martha Robbins and Christophe Boesch.

During the first 8 months of 1999, anti-poachers had to stay with the gorilla trackers whilst in the park, and thus collected snares visible from their route but could not deviate from the main paths. Although full patrols were not possible before September, the Karisoke anti-poaching patrols removed and destroyed 770 antelope and buffalo snares from the park during the year.





## RWANDA

Many hyrax snares were also collected in September. These are not typically encountered by Karisoke anti-poaching patrols, and it is believed that poachers from Congo entered the Rwandan portion of the Virungas to hunt hyrax and bushbuck.

An estimated 20 elephants came out of the park in September and trampled crops. The sightings were made at night by the local population and were the first in Rwanda for many years. There was a similar reappearance of elephants and buffalo in Mgahinga Gorilla National Park in Uganda, and these movements were attributed to a deteriorating situation in parts of the Parc National des Virunga.

Despite the vigilance of the anti-poaching patrols and the gorilla trackers, a juvenile gorilla was trapped during an interaction between Pablo's group and a solitary male in February 2000. The Mountain Gorilla Veterinary Center team was alerted immediately and able to intervene to remove the wire snare within 24 hours.

Karisoke was represented on a Technical Commission for the Protection and Restoration of the Parc National des Volcans, which spent several days in the field determining the location of the park boundary in areas that have been cultivated, and where the *Eucalyptus* boundary markers had been uprooted. The length of the park boundary was measured prior to CARE-International and IGCP (*International Gorilla Conservation Programme*) implementing a tree-planting program to demarcate the boundary.

A GIS program has begun as part of a collaboration between DFGF-I, the National University of Rwanda and Georgia Institute of Technology. In September 1999, newly developed technology belonging to *Earth Search Sciences Inc.* was tested in Rwanda, and high-resolution maps will be created using "hyperspectral image data" collected during flights over the Virunga

Conservation Area. Remote sensing will facilitate monitoring of the ecosystem and an assessment of degradation of the mountain forest following almost two years of insecurity and human settlement in the park.

The extent of human occupation was revealed by the amount of waste removed during a "park clean-up" organised by IGCP, and funded by the Dutch Government. Local people who had taken refuge in the park in 1997 to 1998 were employed to locate sites and remove refuse such as clothing and cooking utensils. The operation was carried out around the volcanoes Visoke, Sabinyo and Muhavura. The team dug up and burned several tonnes of tobacco, wheat, cabbages and other crops which had been planted in the forest. The clean-up will continue sporadically as more sites, particularly latrines, are discovered.

*Liz Williamson, Jessica Cantlon  
and Chloé Wilson*

### MGVC: Major Activities since December 1999

The *Mountain Gorilla Veterinary Project* vets moved back to Ruhengeri in a house where they constructed a new laboratory (funded by the Cincinnati Zoo) appropriate for their enlarged research activities. It has one room for analysing and preparing samples and tissues and a storage place for drugs and samples. It is very light and equipped with a refrigerator for sample storing donated by the Koontz company in Albuquerque/New Mexico. The project bought a deep freezing facility which allows them to store samples at  $-170^{\circ}\text{C}$ . This is important for the preservation of delicate samples as virus and tissue. Furthermore the lab is equipped for microbiology research such, with incubators, bunsenburner and other equipment.

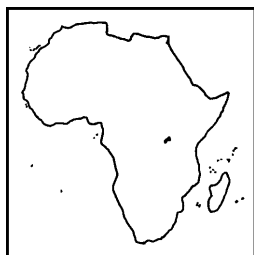
The vets have implemented two re-

search projects. As the transmission of diseases to gorillas is thought to be one of the major threats to mountain gorillas, the development of better protection against disease transmission is essential. A study is therefore conducted on the health status of tourists coming to see the gorillas. As the hygiene and health of the people around the park might facilitate disease transmission, a study on rodents entering the park has also been started. Both projects will be continued for a longer period of time.

The *Mountain Gorilla Veterinary Project* vets continue to monitor the health status of the gorillas in Rwanda and D. R. Congo and investigate the impact of humans on a gorilla group under habituation. All gorillas showing respiratory disease, bite and cut wounds have recovered without intervention in the period described.

In January the 14-year-old silverback Ndatwa from the Beetsme group died and the vets of the *Mountain Gorilla Veterinary Project* carried out a post-mortem. The silverback had huge wounds: the muscles of his right upper arm were destroyed, and half of his ear was missing. He showed signs of septic lung infection which might have been the final cause of his death. The remains of 3 more silverbacks – skeletons or corpses in advanced state of autolysis – have been found and buried. They are believed to be the skeletons of the over 30-year-old silverback Umugome, the second silverback of group 13, Kwilinda and a wild silverback. Most of them were reportedly involved in fights before their skeletons were found.

The vets treated the 3.5-year-old female Mitimbili who was found with two digits of her right foot in a wire snare. The foot showed deep wounds on both sides with extensive muscle damage. The animal was anaesthetised, the wounds were sutured and after having received antibiotics, the animal was released into the group. Although



## RWANDA

it lost the two digits due to a stop in circulation, the wound healed nicely and the animal recovered completely.

The *Mountain Gorilla Veterinary Project* has now official permission to carry out health care for the gorillas in the Kahuzi-Biega Park. The project's vets took part in several training sessions on health related problems for the local defense people, guides and trackers of mountain and eastern lowland gorillas in Rwanda and Congo.

### Travelog from Rwanda

In early May I could gain some impressions of the situation in the Parc National des Volcans when I visited northwestern Rwanda. They are summarized in the following report.

To register for a trek to one of the 4 gorilla groups habituated to tourists, you must contact the ORTPN office (*Office Rwandais du Tourisme et des Parc Nationaux*) in Kigali or Ruhengeri (ortpn@rwandatel1.rwanda1.com). In May, relatively few tourists travelled to the Virunga Volcanoes in Rwanda, therefore it was not absolutely necessary to book in advance. Which one of the 4 gorilla groups will be visited is decided on the actual day of the trek in the ORTPN office (which serves also as the park headquarters) in Ruhengeri. Tourists are still accompanied by armed soldiers, but their number has been reduced considerably. A maximum of 32 tourists per day are allowed access to the gorillas. Locals have to pay "only" US\$ 10 for a permit (US\$ 250 for foreigners).

I had the opportunity to pay visits to the gorilla families Suza and Amahoro. Visiting Suza, I was the only tourist; visiting Amahoro, there were three of us. The Suza family was habituated to the presence of tourists in the 1980s. Although visitor numbers have been low over the last few years, the group stayed calm and wasn't disturbed by the presence of the visitors. The mem-



**Suza group: mother and baby**

*Photo: Cyril Grüter*

bers of this group are extraordinarily indifferent. The silverback hardly deigned to look at us.

We encountered the Suza group on the Rwandan side in the zone of lava slopes (approx. 2,900 m) on Mt. Karisimbi. This zone is characterised by a dense vegetation of herbs, bushes and shrubs and isolated bamboo islands. Above the cultivated zone, a path runs through the lower section of the national park.

Like the Suza group, the Amahoro group is named after its silverback. "Amahoro" means peace. The guards located the group in a forest clearing close to the park boundary at the foot of Mt. Visoke. In this area, the park is relatively narrow and the border to the Congo is not far off. The Amahoro group was first habituated in 1996. The civil war, however, interrupted the habituation process, which was therefore completed only in 1999. Habituation was made more difficult because the group was known to have attacked four people. Habitators have by now managed to stem the animals' aggressiveness, but visitors can still feel a certain trepidation. Currently, the group is visited by park staff on a daily basis. The Amahoro group is the first gorilla group which was habituated by a Rwandan and not by a foreigner. The other two

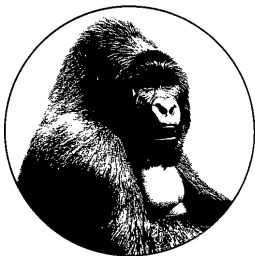
families for tourism (group 13 and Sabinoy) regularly range in the east on the slopes of the volcanoes Sabinoy and Muside.

The park headquarters/ORTPN office in Ruhengeri has only the most basic equipment (not much more than a telephone and the visitors' book), and the guards also need more equipment. Guards and guides take their work seriously and feel responsible for the animals. They have a great respect for the animals and more or less follow the park regulations. Only the minimal distance of 7 m between gorillas and visitors was not kept.

*Volcanoes Safaris* organized the transfer from Kigali to Ruhengeri on an excellent tarmac road, as well as the trip to Kinigi (for the Amahoro group) and Gashiya (for Suza). This company has offices in Kampala and London. Anyone interested in visiting the Parc National des Volcans should find out about the current political situation from media, tour operators and possibly the embassy prior to departure. During my entire stay in Rwanda I had no problems at all; we only had to submit ourselves to two military controls on the road from Kigali to Ruhengeri. Both passed without incident.

However, every traveller should be aware of the political and socio-economic crisis Rwanda is experiencing at the moment. Recently, an East African newspaper published an article in which a Rwandan bishop condemned the alarmingly high number of mass rapes that have occurred all over the country over the last few months. He also points out the fast increasing rate of infection with AIDS, which is high even compared to other African countries. The reasons given for this are the degradation of human values and the destruction of family ties as a consequence of the 1994 genocide.

*Cyril C. Grüter*



# GORILLAS

## Ape Tourism and Human Diseases

Gorillas are among our closest relatives and therefore susceptible to a large number of human pathogens. Although there is little published evidence demonstrating proof of *direct transmission* of pathogens from humans to great apes in the wild, a number of cases have been documented providing ample evidence of *definite susceptibility* of apes to human diseases.

Cases of illnesses in apes that have been associated with human respiratory viruses and bacteria include influenza, *Adenovirus*, *Thinovirus*, respiratory syncytial virus (RSV), pneumococcal pneumonia, *Herpes* viruses, measles, mumps, and *Cytomegalovirus*. Enteric germs include polioviruses, coxsackie viruses, *Salmonella*, *Shigella*, *Campylobacter*, as well as numerous parasites. This variety of agents leaves no doubt about a widely shared susceptibility to pathogens among great apes and humans.

Even though the transmission of diseases during interaction of humans with a wild environment generally poses a greater threat for wildlife than for humans, the risks for **humans** to acquire a new germ to which they have not previously been exposed cannot be underestimated. HIV, Ebola and other viruses of the filovirus family are obvious examples.

### Gorilla Exposure to Humans

The current trend in tourism based on "unique" adventures translates into more tourists increasingly entering remote, isolated and sometimes poorly accessible regions of the world in search of rare and meaningful encounters. Tourists visiting gorillas thus often arrive from distant and varied locations, and are likely to have travelled previously to other countries and continents. This represents, from an epidemiological point of view, a very effective means

of transport for an increased number of exotic germs due to the speed and diversity of modern transport systems.

Habituating gorillas for research or tourism requires regular, continuous and close human presence near the gorillas in their natural habitat. The researchers usually spend several hours at a time with gorilla groups, and therefore represent a similar degree of exposure to gorillas as tourists, even if they may not visit gorillas as often as tourists. In addition, occasional emergency veterinary interventions are inevitable and imply staff getting in direct contact with gorillas through clothes, hair and other fomites, despite the required use of masks and gloves, thus representing an acute additional source of exposure for gorilla groups.

The area surrounding the Virungas and Bwindi is one of the most densely populated areas in Africa. Malaria, respiratory infections and diarrhoeal diseases account for the majority of illnesses among adults, and deaths among children. Some areas like Kisoro District have particularly acute water and sanitation problems due to the volcanic basaltic structure of the subsoil. These conditions, combined with poor hygiene practices, greatly favour the spread of faecal-oral germs.

Among the major respiratory pathogens prevailing in the local population, *Streptococcus*, influenza, tuberculosis (TB), measles and RSV figure prominently. TB is of particular concern due to its association with the HIV, or AIDS virus, and the emergence of multi-drug resistant TB strains, which is most probably due to partial or inadequate treatment. In addition, many agents causing respiratory infections can cause bouts of diarrhoea as a result of the generalised immunosuppression suffered by people with AIDS.

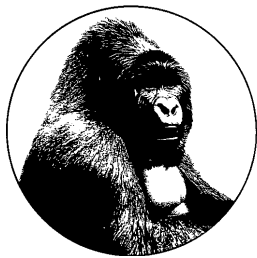
## Current Gorilla Tourism Rules: Sufficient Protection?

\* **Limiting the frequency of visits** (currently 1 visit per day per habituated gorilla group). Every additional daily visit doubles the exposure time of gorillas to visitors, thus increasing the risk of disease transmission. In addition, the duration of any disturbance to the gorillas' normal activities and the amount of associated stress induced would be doubled. Since stress, especially over prolonged periods of time, has been associated with immunosuppression, it could have negative health implications for gorillas. An associated risk of increased daily visits is that each visitor group entering the forest conceivably causes additional ecological disturbance.

\* **Recommendation:** Maintain the status quo.

\* **Limiting the number of visitors** (currently 6 in Uganda, 8 in Rwanda and Congo). Each additional visitor represents a potential contamination source and the susceptibility of gorillas to diseases greatly affects the outcome of exposure to humans. It would only take one individual gorilla to be infected for an infection to potentially spread very rapidly to the rest of the group, and the larger the group, the larger the number of animals infected. In addition, depending on interactions with other groups in the forest, the potential for spread to other wild, and perhaps even more susceptible animals, cannot be underestimated. These facts also point out that visitor group size cannot be reviewed without considering the size of the gorilla group.

\* **Recommendations:** No visits for gorilla groups smaller than 6 or larger than 15 animals, no more than 10 people per tourist group (including guides, trackers, rangers etc.).



# GORILLAS

\* **Maintaining a minimum distance between visitors and gorillas** (currently 5 m). Sneeze particles can cross a distance of 6 m in the absence of any wind or ventilation factor. Very light wind can greatly increase this distance for aerosols or dust particles. Therefore this rule should be reinforced to provide a safety factor against both avoidable (intentional) and unavoidable (wind) fluctuations in effective distance. This rule should apply not only to tourists, but also to all other gorilla visitors, including researchers, veterinarians, park guides, trackers and rangers and any other forest users.

\* **Recommendation:** Increase the minimum distance to 7.5 m.

\* **Limiting the duration of the tourist visit** (currently 1 hour). The shorter the viewing time, the greater the pressure and expectations exerted from tourists anxious to capture the best photos of gorillas, which might cause challenges to any distance rule. Conversely, the longer the viewing time, the greater the exposure of gorillas to potential disease transmission. This rule must therefore balance visitor satisfaction against increased exposure time.

\* **Recommendation:** Maintain the one-hour viewing time while allowing a maximum 15-minute waiting period, at 20 m or more from the gorillas, before starting the clock, if the gorillas are not visible at the time of initial encounter.

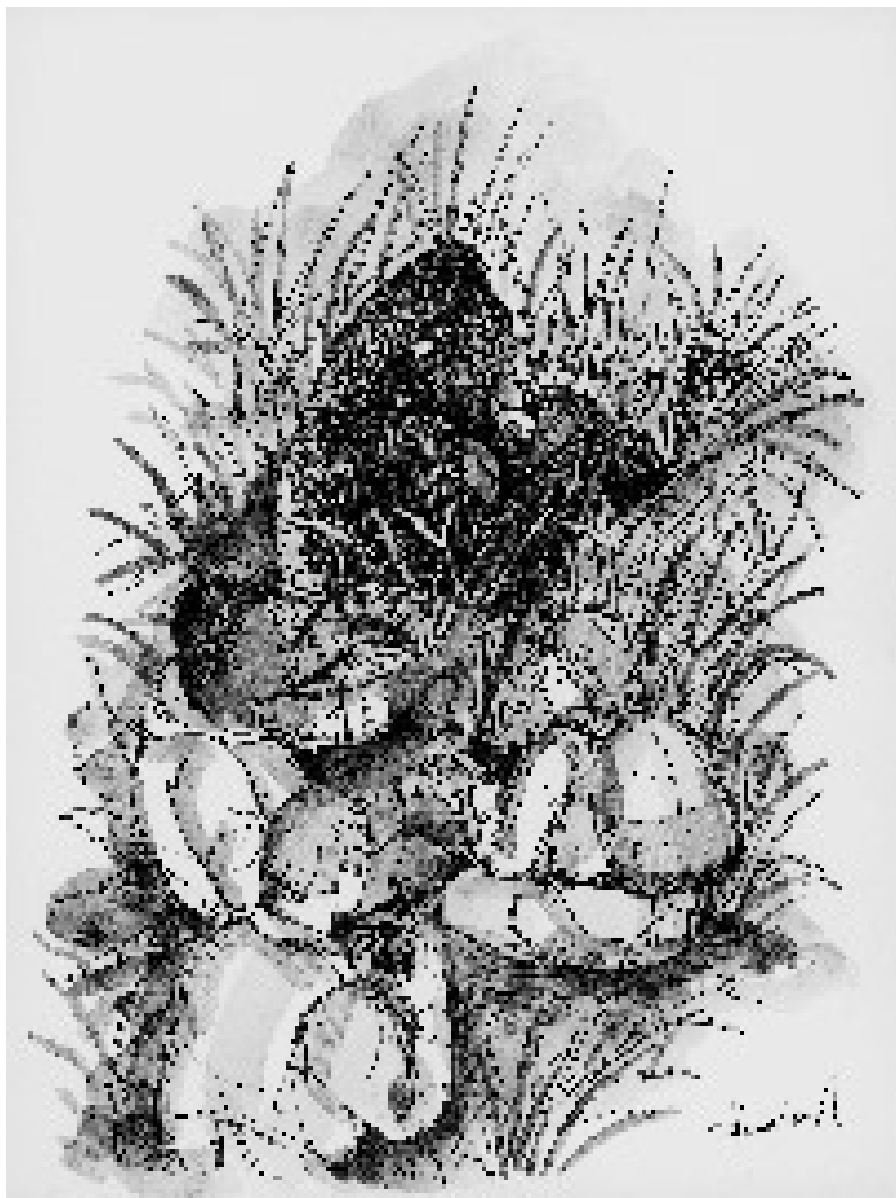
\* **Eating before or after gorilla viewing** (currently no eating "near" gorillas). Food is a source of direct exposure and several human diseases of concern for apes are transmitted via the faecal-oral route. Food can act as a strong attractant to apes and other animals in the park. Rangers and researchers, who may occasionally spend days or weeks at a time in proximity to gorillas and eat their meals there, also represent a

source of food contamination to gorillas, even greater than tourists. Food scraps dropped by community and other forest users represent another substantial contamination source.

\* **Recommendation:** A 5-minute minimum walking distance away from gorillas before eating; removal of all

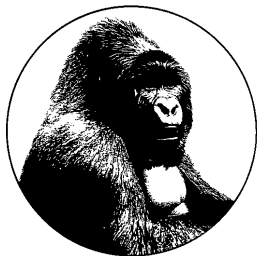
food remains.

\* **Disposal of human faeces** (currently burying it 1 ft deep). The potential for transmission of human viruses or parasites through faeces is much more efficient than the airborne route and also much more dangerous than through food, due to the concentration



*Years ago: gorilla visitors in Kahuzi-Biega*

*Drawing: Chisato Abe*



# GORILLAS

of germs that can be found in faeces. Even significantly more park staff and local community residents deposit faeces in the park than do tourists.

\* **Recommendations:** Promoting and allowing time for toilet use before start of tour, ensure that guides or trackers dig holes at least 0.5 m deep for tourists and themselves, treat faeces with an antiseptic solution before filling holes.

\* **Prohibiting littering in the park** (currently carrying out all rubbish).

\* **Recommendation:** Ensuring and monitoring safe and adequate rubbish deposits and removal around parks.

\* **Limiting the minimum age of eligibility to visit gorillas** (currently 15 years). The health rationale of an age limit is to prevent the transmission of "childhood" diseases to gorillas. It is widely admitted that the majority of childhood disease episodes occur before puberty.

\* **Recommendation:** Maintain the age limit of 15.

\* **Prohibiting access to people who are ill** (currently required to self report). The greatest challenge to this rule is its limitation in scope and enforcement. Infected people can shed viruses or bacteria before and after the appearance of symptoms and this rule does not address the situation of sick guides, trackers or rangers. Tourists may lack the motivation to self-report and guides may not be qualified to judge whether or not a tourist is ill.

\* **Recommendation:** Immunisation of tourists and park staff against specific diseases.

\* **Controlling smoking, eating, sneezing, and coughing in the pres-**

**ence of gorillas.**

\* **Recommendation:** Include spitting and nose-blowing.

## Possible Additional Measures

To further reduce the risk of disease transmission, the following measures were recommended, among others:

- Wearing protective devices during hands-on interventions by park and veterinary staff;
- Hand and boot disinfection before and after gorilla viewing;
- Proof of immunisation against yellow fever, polio, tetanus, hepatitis A, measles and influenza as well as a clear TB status;
- Regular medical checks for park staff and researchers;
- Regular information and discussion sessions for guides, trackers and rangers on disease transmission;
- Sensitisation campaigns for surrounding park communities, tourists and tour operators.

## Conclusions

Rules are only meant to limit the potential damage that tourism may cause. As long as tourism will be practised, rules will have to be in place, constantly revised and refined, and enforced as well as possible. Yet, the most powerful enforcement tool is motivation and self-control. No matter the level or sophistication of punitive or coercive schemes that are used or have been articulated, rules can – and will – always be broken. The best hope for minimising the damage from a tourism program resides in the widespread sensitisation, awareness and understanding of the catastrophic consequences of unconscious gorilla tourism. This is admittedly a medium, if not long-term, goal that requires careful planning and sustained efforts and certainly cannot be considered in isolation. Other immediate actions can and should be undertaken to limit the risks in the

meantime.

Eventually however, it is not the rules, but the attitude of the human community towards its non-human environment that will decide of the fate of the gorillas, and indeed of many life forms on this planet, including our own. Therefore, awareness raising, albeit a long and strenuous process, is the only sure investment. It may not be a guarantee of success, but it undoubtedly is a vital ingredient in the balance of the many choices that will have to be made.

*Summary of a report by Jaco Homsy (1999), with permission of IGCP (International Gorilla Conservation Programme)*

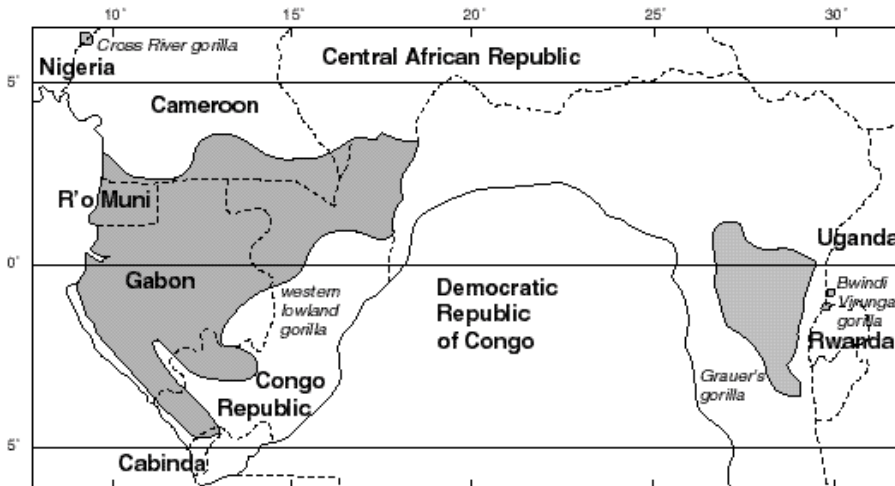
## Western and Eastern Gorillas: Estimates of the Genetic Distance

In 1929 Harold Coolidge revised the genus *Gorilla* to comprise a single species, despite clear differences in morphology between the western and eastern populations. Today the single-species classification is still the most widely used, although increasingly researchers are advocating a two-species taxonomy, with the West African gorillas belonging to *Gorilla gorilla* (with the subspecies *Gorilla gorilla gorilla* and *Gorilla gorilla diehli*) and the eastern gorillas to *Gorilla beringei* (with subspecies *Gorilla beringei beringei* and *Gorilla beringei graueri*).

The most widely stated criterion for species-level separation of two populations is whether or not they interbreed. However, since western and eastern gorillas never meet in the wild, we must rely on other methods. One way is to compare the amount of difference between two populations relative to that seen in other closely related species, in an effort to achieve consistency within a larger taxonomic group. For gorillas, this most commonly



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## Gorilla distribution areas

means comparing the amount of difference between western and eastern gorillas relative to that between common chimpanzees (*Pan troglodytes*) and pygmy chimpanzees, or bonobos (*Pan paniscus*).

## Genetic Distance Studies

Some of the recent discussion of revising gorilla taxonomy has been motivated by results from studies examining the amount of genetic distance between gorilla populations. Maryellen Ruvolo and co-workers sequenced a portion of mitochondrial DNA (mtDNA) and found that the difference between eastern and western gorillas was about the same as that seen between common chimpanzees and bonobos. Since chimps and bonobos are considered different species, it was suggested that

perhaps we should recognize two species of gorillas. Likewise, Karen Garner and Oliver Ryder found the same picture when they sequenced a different part of mtDNA.

Recently, Michael Jensen-Seaman and Ken Kidd examined yet another region of mtDNA in western and eastern gorillas. They found very similar results as had previous studies of mtDNA. That is, that the amount of difference between eastern and western gorillas was about as large as that seen between chimpanzees and bonobos. This suggests that western and eastern gorillas have been reproductively isolated for perhaps as long as 2 or 3 million years.

However, these same researchers also examined DNA sequence variation in the nuclear genome of these

same gorillas and chimpanzees, but found somewhat different results. Specifically, they found that the eastern and western gorillas were not nearly as different from each other as were chimps and bonobos. This pattern was consistent across multiple nuclear genetic loci, and suggests that perhaps western and eastern gorillas have been in reproductive contact much more recently than have chimps and bonobos.

It is difficult to explain the discrepancy between the mtDNA and the nuclear DNA findings. In general, we expect the differences between the two genomes to be roughly similar, except for species in which females do not transfer from their natal group. Since female gorillas do transfer, the different patterns observed cannot be due to any simple sex-biased dispersal pattern.

## Implications for Biogeography and Taxonomy

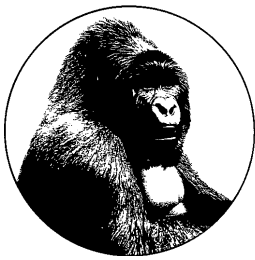
If eastern and western gorillas have experienced much more recent gene flow than have chimpanzees and bonobos, then either the initial split between these gorillas occurred more recently than the chimp/bonobo split, or there has been periodic gene flow between western and eastern gorillas during the last 2 million years or so.

Periodically during the last million years, Africa was warmer and wetter than today. During these times, the extent of the tropical forest would have been greater than at present, providing a possible corridor for migration between western and eastern gorillas



Eastern gorillas from: Virungas (4), Bwindi, Kahuzi-Biega

Jörg Hess (4), Ulrich Karlowski, Carsten Leidenroth



# GORILLAS

## New Gorilla Species?

In April primatologists gathered in Washington, D. C. to discuss the effects of new findings in genetics, anatomy, ecology and behavioural research on primate systematics. They suggested to increase the number of distinct species from 275 to 310. They also suggested to separate western and eastern gorillas in different species and to introduce two new subspecies. This suggestion now has to be discussed further.

**Species:** Eastern gorilla (*Gorilla beringei*)

**Subspecies:** Virunga gorilla (*Gorilla beringei beringei*) – Virungas  
 Bwindi gorilla (*Gorilla beringei bwindi?*) – Bwindi  
 Grauer's gorilla (*Gorilla beringei graueri*) – eastern Congo

**Species:** Western gorilla (*Gorilla gorilla*)

**Subspecies:** Western lowland gorilla (*Gorilla gorilla gorilla*)  
 Cross River gorilla (*Gorilla gorilla diehli*)

and eastern gorillas into separate species? No. Taxonomy is more complex than sequencing a little bit of DNA. There is no objective standard of how much genetic difference, or how much time since separation, is required to consider two populations different species. The use of the "chimp-bonobo" standard may provide some comparative measure of divergence, but there is no reason to believe that the separation between chimps and bonobos represents any sort of minimum level of divergence required for species level status. The relationship between genetic distance and reproductive isolation is not at all understood.

Given the discrepancy between the results observed from the mitochondrial genome and those from the nuclear genome, more data are clearly needed to resolve the issue of exactly how genetically different are western and eastern gorillas. Once this rather simple question is better understood, we will need much more theoretical discussion of how to relate genetic differences to taxonomic differences.

*Michael Jensen-Seaman*

north of the Congo River/Ubangi River. Along these lines, it is tempting to speculate that the population of gorillas which might have existed near Bondo in northern Democratic Republic of Congo in the earlier part of the 20th century may reflect a relict population from these intermittent forest connections. In contrast, after bonobos were split off from chimpanzees by the Congo River, there would seemingly be no possibility of gene flow between what

are now the two species of *Pan*.

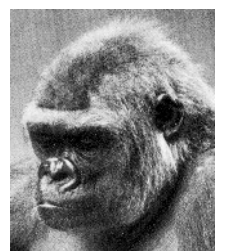
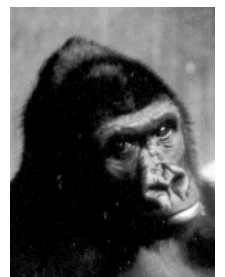
Others have made the argument that since chimpanzees and bonobos are definitely considered separate species, and since western and eastern gorillas initially appeared to be as genetically different as chimps and bonobos, then we should divide gorillas into two species. If we now believe that western and eastern gorillas may not be as different as we thought, does that mean that we should not separate western



**Western lowland gorilla females in zoos who were imported from Equatorial Guinea (left, above), Congo (left, below) and Cameroon (right).**



*Photos: Jörg Hess (left, below), Angela Meder (all others)*





# READING

**John Oates**

**Myth and Reality in the Rain Forest:** How Conservation Strategies Are Failing in West Africa. Berkeley (University of California Press) 1999. 311 pages, 31 photos. Hardcover US\$ 50, £ 30, ISBN 0-520-21782-9. Paperback US\$ 19.95, £ 12.50, ISBN 0-520-22252-0.

The primatologist John Oates describes conservation problems as he has experienced them himself. He explains which conservation concepts have been used during the past decades and their relative successes. This is most clearly apparent with the projects he has been involved in. The history of these projects is described and discussed; especially interesting for gorilla conservation is the story of the Cross River National Park, Nigeria. In another chapter he explains what opportunities zoos have in ensuring the survival of endangered species. In the last chapter he looks into the future of conservation.

John Oates criticizes many conservation efforts in western Africa, but nevertheless he thinks that conservation organizations can achieve something and he gives advice as to what they should consider and which methods are promising. He explains why the "fashionable strategy of integrating conservation with economic development" has failed to protect wildlife sustainably. His book may be depressing for some readers, but it does not only show the wrong ways – it also gives suggestions for improving conservation efforts. Most important for the author is better protection of parks and reserves and raising appreciation of nature's intrinsic value. Conservation projects do not have to be expensive, as they do not need the costly infrastructure for development projects and highly paid expatriate consultants. The least expensive approach is preferable. Conservation can be supported for love of nature or love of money – John Oates

is convinced that only the first approach can lead to success.

*Angela Meder*

**Bob Campbell**

**The Taming of the Gorillas.** London (Minerva Press) 2000. 221 pages, paperback, £ 13.99. ISBN 0-75410-963-1.

**Ronald M. Nowak**

**Walker's Primates of the World.** Baltimore, London (Johns Hopkins University Press) 1999. Paperback, US\$ 19.95. ISBN 0-8018-6251-5.

**Karen B. Strier**

**Primate Behavioral Ecology.** Needham Heights (Allyn and Bacon) 2000. 392 pages, US\$ 37. ISBN 0-205-20019-2.

**Abigail Entwistle and Nigel Dunstone (eds.)**

**Priorities for the Conservation of Mammalian Diversity.** Cambridge (Cambridge University Press) 2000. 472 pages, 46 line diagrams, 10 half-tones, 37 tables. Paperback £ 24.95, ISBN 0-521-77536-1. Hardcover £ 70, ISBN 0-521-77279-6.

**Adam Hochschild**

**King Leopold's Ghost.** A Story of Greed, Terror, and Heroism in Colonial Africa. Boston, New York (Houghton Mifflin) 1998. 366 pages. Paperback US\$ 15, ISBN 0618001905. Hardcover US\$ 26, ISBN 0395759242.

**Jean-Pierre Chrétien**

**L'Afrique des Grands Lacs.** Deux mille ans d'histoire. Paris (Aubier) 2000. 411 pages, FF 160.

## News from the Internet

You can read about the *Bushmeat Crisis Task Force* (AZA bushmeat project) and its activities at <http://www.bushmeat.org>. *Global For-*

*est Watch* is a new initiative of the WRI (*World Resources Institute*). At <http://www.globalforestwatch.org> it provides information and documents in PDF format, for example on the situation of the forests of Cameroon and Gabon, can be downloaded. A collection of websites about conservation and wildlife is *African Websites* (<http://www.africanwebsites.net>).

The war in the Great Lakes Region is still going on. All kinds of opinions on this conflict, news and reports are available in the internet. We have been providing addresses from time to time. A humanitarian organisation working there, *International Rescue Committee*, has also published information on their web site, <http://www.intrescom.org>.

## Expo 2000

What are gorillas doing at the world exhibition Expo 2000 in Hannover, Germany? Gorilla tourism is an important theme at the Ugandan stand. For this stand the *Berggorilla & Regenwald Direkthilfe* designed a computer presentation based on the German website. Its aim is to inform the visitors about gorillas and gorilla conservation. You don't have to visit the Expo 2000 to look at this presentation – it is also available in the internet at <http://www.berggorilla.com/expo>. The pages have been adapted to the computer at the Ugandan stand. For hearing gorilla sounds, you need the latest Flash player.







## BERGGORILLA & REGENWALD DIREKTHILFE

### Activities

One of our goals is to draw the general public's attention again and again to the current situation of Africa's fauna. Over the last few years, extremely bad economic conditions and political instability in West and Central Africa have had a very negative impact on the great apes.

Last year and early this year disastrous news emerged from the Kahuzi-Biega National Park in the Democratic Republic of the Congo: the park's elephant population and an alarming number of Grauer's gorillas were slaughtered. Subsequently, we issued several press reports. Former Board member Ulrich Karlowski and others wrote articles which were sent to magazines and newspapers. During a conference with representatives of zoos and German nature conservation organisations, Iris Weiche gave a talk on the impact of the political instability on the gorillas. This talk was also published on the Internet. On the occasion of our general meeting in March 2000, another newspaper article on this topic appeared and a radio interview followed.

Our supporter Volker Jähring continues to take action: In the Bünde department store he introduced the first wine of the year 2000 from South Africa to Germany country-wide and connected this with a fund-raising drive for the *Berggorilla & Regenwald Direkthilfe*!

This summer, the 3-months' special exhibition in the Stuttgart Zoo was designed mainly by the *Berggorilla & Regenwald Direkthilfe*. The topic is: "Gorillas in the Cooking Pot – Will the Bush Meat Trade Finish Off African Wildlife?" We want to show the background, current threats and solutions for this new dimension in the meat trade of endangered species. This is a joint effort based on the goals of the *Ape Alliance* and involves mainly the zoo management, Marianne Holtkötter

in particular, but also other organisations such as *Rettet den Regenwald*, the *Wild Chimpanzee Foundation*, the *Bonobo in situ Project*, the *World Society for the Protection of Animals* and *Save the Drill*. In addition, many active individuals such as Martha Robbins, Liz Williamson, Armin Heymer, Johannes Refisch, Karl Ammann and many others provided photographic or text material concerning their special fields. Moreover, we received exhibits from the customs authorities at the Stuttgart and Frankfurt airports, the Linden Museum and Klaus Paysan. The Director of Stuttgart Zoo agreed to pay all costs for the production of 34 boards. After the summer, the boards will be available for other zoos and institutions as a touring exhibition. The exhibition will be shown in Stuttgart from 21 June to 24 September.

William Mugisha has managed our office in Kisoro since last summer. He has become indispensable for *Berggorilla & Regenwald Direkthilfe*. He coordinated formalities with the custom authorities and organised the transport of the material sent to Uganda. He is responsible for its distribution and buys additional material locally. As the *Berggorilla & Regenwald Direkthilfe*

representative he participates in local meetings of gorilla conservation organisations and keeps us up to date with important news. He contacts the responsible authorities directly and passes queries from Uganda on to us. After having equipped the office with new technology, we also hope to improve communication, which has been difficult and expensive until now.

### General Meeting

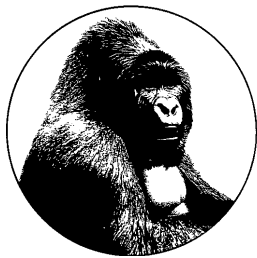
About 45 members and friends of *Berggorilla & Regenwald Direkthilfe* met in Reutlingen, South Germany, on 11–12 March in order to make and re-new contacts and exchange news from gorilla areas.

The Board reported on the current situation and on conservation measures, in particular on the activities of *Berggorilla & Regenwald Direkthilfe*. The focus was on Mt. Tshiaberimu, the Sarambwe Forest and the Kahuzi-Biega National Park. New international projects were introduced and explained, too, such as the UNESCO project for the threatened national parks of the Democratic Republic of Congo (*page 13*) and the Peace Parks concept for the Uganda/Congo/Rwan-



*Discussions at the general meeting*

*Photo: Michael Reibenspies*



## BERGGORILLA & REGENWALD DIREKTHILFE



**Karl-Heinz Kohnen, Angela Meder and Iris Weiche talking**

*Photo: Michael Reibenspies*

da border area.

Guest-speakers were again invited to report on their own experience and to answer questions from the audience. Cherry Kabulo Gbushu gave a talk on the political development in the Democratic Republic of Congo since 1994, especially the current political situation in the east of the country. He also explained the roles of the neighbouring countries Uganda, Rwanda and Burundi and pointed out the political and economic interests in this conflict.

Martha Robbins gave a talk on her research in the Bwindi Impenetrable Forest National Park, Uganda. She is studying the impact of the different ecological systems of the Virungas and Bwindi on the behaviour and social structure of the gorillas.

In the evening, several interesting videos were shown. Mr. Griegel explained his video travelog from Uganda; a TV documentary on gorilla conservation in Rwanda was shown and commented upon as well as some excellent video footage taken by a tourist during his gorilla visit.

On the second day, the Board reported on the cooperation with other organisations and institutions, such as international efforts to reduce the trade in ape meat. Moreover, the Board introduced new projects to be supported this year. The rain forest exhibition is to be renewed this year and made avail-

able again. Several zoos have already expressed their interest. Dorothea Gierra talked about her activities for children to date and what she is planning for the future. Manfred Hartwig is planning to set up a picture library for the *Berggorilla & Regenwald Direkthilfe*, which will supply photographs to zoos and other interested parties.

The official general meeting was the last item on the agenda. Treasurer Rolf Brunner reported on the finances of the last 2 years and explained the organisation's budget for the current year. His report was accepted and the Board was given a release. The three former Board members – Karl-Heinz Kohnen, Angela Meder and Iris Weiche – were re-elected. The treasurer, Rolf Brunner, was re-elected as well.

### Finances

#### Income 1999

Subscriptions	18,521.82 DM
Donations	29,977.70 DM
Refund from meeting	1,130.00 DM
Sales	3,501.35 DM
<b>Total</b>	<b>53,130.87 DM</b>

#### Expenses 1999

Freight and transport	3,336.39 DM
Equipment for storage	1,022.88 DM
Support for Buhoma	2,889.56 DM
Training Tshiaberimu	1,345.56 DM
Notebook C. Sikubwabo	635.00 DM
GPS	600.03 DM
Office Kisoro, rent	375.00 DM
Off. Kisoro, computer	1,861.08 DM
Pay W. Mugisha	805.28 DM
Administration	3,647.63 DM
Project management	3,187.83 DM
Gorilla Journal	15,341.17 DM
Subscriptions	336.51 DM
Items for sale/postage	1,312.58 DM
<b>Total</b>	<b>36,696.50 DM</b>

We thank each person and company that has supported us during the period from 1 November, 1999, to 31 May,

2000. Larger contributions were given by Rolf Brunner, Horst Engel, Jürgen and Irmgard Friedrich, Gabriele Holzinger, Hella Kasten, Edelgard Kipka, Hartmann Knorr, Susanne Messmer, Kurt Niemeyer, B. Präckel, Wolfram Rietschel, Alexandra Ruoff, Juliane Ströbele, Cecile Vischer, Karl-Otto Weber, Ursula Wittenburg, Heinz Zaruba and Hartmut Zeitler. Volker Jährling donated equipment and Erwin Fidelis Reisch (*Gentner Verlag* Stuttgart) took charge of the costs of reproduction and composition for the journal. Sylvia Wladarz donated 2 modems, Frank Seibicke another one, the company *Büttel 4* waistcoats and Mr. Fenger clothes. Many thanks to all the above mentioned and all the other donors for their confidence in our work. We hope that you will continue to support us in the future!

### Information Please

Phillip V. Tobias and John E. Cooper are presently preparing a paper about the role of South Africa in pioneering studies of the mountain gorillas of Uganda. From 1957–1960 the University of Witwatersrand funded work based at Kisoro and Makerere University. If the readers of this journal know more about this relationship between South Africa and Uganda, the authors would very much appreciate to receive this information. Please contact

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DICE Research School  
of Biosciences  
University of Kent  
Canterbury, CT2 7NJ  
United Kingdom*



## A NEW SAFARI ALTERNATIVE

**Mgahinga Safari Lodge** is a new luxury lodge, perched at the tip of a peninsula jutting into the waters of Lake Mutanda, in southwestern Uganda. The lodge is the ideal setting from which to track the mountain gorilla in nearby Mgahinga Gorilla National Park; venture deep into Bwindi Impenetrable Forest; search for savannah antelope in Lake Mburo National Park; or visit Lake Bunyonyi – renowned as the 'lake of little birds and sweet water fish'.

The lodge complex consists of a main building – which houses the reception, restaurant, lounge and bar – and six spacious, twin-bedded tents. All equipment at the lodge is of the highest European standard. The tents are en suite, with hot showers and flush toilets, and have continental quilts and pillows. Soft drinks and laundry service are provided. The restaurant serves a high standard of continental and traditional cuisine accompanied by a selection of local and international wines and spirits.

For further information contact:

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## Subscription to the Gorilla Journal

If you become a member, you will receive the journal regularly. If you want to subscribe 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. Please send your application with a cheque to Rolf Brunner (address below).

## Declaration of Membership

Starting with the following date \_\_\_\_\_ I declare my membership in *Berggorilla & Regenwald Direkthilfe*

Name \_\_\_\_\_ Affiliation \_\_\_\_\_

Address \_\_\_\_\_

Birth date \_\_\_\_\_ male  female

Yearly subscription (please mark)

- US\$ 25 (Student)  
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 US\$ 120 (Family)  
 US\$ 180 (Donor)

Date and signature \_\_\_\_\_

Please send to:  
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