



Gorilla Journal

Journal of Berggorilla & Regenwald Direkthilfe

No. 28, June 2004

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**News from the
Kahuzi-Biega
National Park**

**Ten Years of
Gorilla Tourism in
Mgahinga**

**Conservation
Through Public
Health**

**The Problem with
Gorilla Mitochon-
drial DNA Analysis**



BERGGORILLA & REGENWALD DIREKTHILFE

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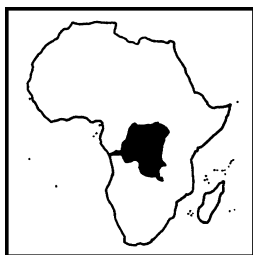
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D. R. CONGO

News from the Kahuzi-Biega National Park

March 2004: In spite of the instability that continues to weaken the east of the country, the management of the Kahuzi-Biega National Park has been able to regain control of almost the entire park. Following the re-opening of the last patrol posts of Kalonge, Musenyi and Lemera, all in the high altitude sector, our rangers have been constantly present in the sub-stations of Nzovu and Itebero since February 18, 2004. These sub-stations had been abandoned when hostilities broke out in October 1996.

Therefore, this is the first time in 8 years that our staff has regained control over the entire area of the Kahuzi-Biega National Park.

However, it has to be said that in certain small pockets, where insecurity is still predominant, the work will essentially concentrate on public awareness and development activities around the park and will take the greatest possible care. We hope very much that all forces will cooperate with us.

Mining in the Park

According to first reports from our staff posted in the sub-stations of Nzovu and Itebero, **90 mines are still active inside the park.** They produce mainly coltan, cassiterite and gold. This excludes the site in the high-altitude part of the park (on the border between the Kahuzi-Biega National Park and the Kalehe territory), which is under the control of the "Bakobwa" militia.

In Itebero, 50 mines have been counted, with 4,400 miners, and in the Nzovu Sector, there are still 40 mines with 3,600 secret miners. In total, there are more than 8,000 persons illegally digging for minerals in the park at the moment. There is a strong demand for cassiterite, and this seems to have overtaken the demand

for coltan. Probably the price for cassiterite has recently increased on the global market.

To make matters worse, certain mine owners hold contracts of sale that were signed by the country's authorities, who do not know where the mineral resources originated. These dealers are well-known in Bukavu; their purchase counters are installed everywhere close to the park

On February 26, 2004, we were able to reach an agreement as to the evacuation of military personnel from all ranger posts in the interior of the park, and especially in the part of the park visited by tourists. The program of mixed patrols has been extended to include monitoring of the park and the safety of through traffic. Since February 26, all camps of the former occupiers, i.e. the troops, have been burnt.

Cleaning patrols have been organised in order to collect rubbish, batteries, plastic and other waste from affected areas, including those around the old camps where hundreds of metal snares were found.

At the moment, more funds are needed in order to reinforce the monitoring of the park, whose integrity we have re-established.

The Gorillas

Currently, 7 gorilla families are monitored in the Kahuzi-Biega National

Park. There are 2 groups that can be visited by tourists:

Mugaruka	2 individuals
Chimanuka	20 individuals

In addition, 5 families are under observation:

Langa	6 individuals
Mpfungwe	6 individuals
Birindwa	9 individuals
Mufanzala	16 individuals
Ganywamulume	14 individuals

Total 73 gorillas

On January 6, 2004, an interaction took place between Mugaruka and Chimanuka, which ended in the transfer of the only female who had remained with Mugaruka; after that, the silverback Mugaruka remained with only one juvenile male. On December 31, 2003, twins were born in the Mufanzala group. In January, a baby was born into the Chimanuka family.

Bernard Iyomi Iyatshi and Carlos Schuler

A census of the gorillas that survived in the park is planned for this year. We shall keep you informed. This will provide reliable information instead of speculations on the actual number of Grauer's (eastern lowland) gorillas.



Distribution of new uniforms to the rangers of the Kahuzi-Biega National Park. These uniforms were donated by WWF and Berggorilla & Regenwald Direkthilfe.

Photos: Carlos Schuler



D. R. CONGO



Kahuzi-Biega National Park

CADAK at the International Women's Day

In Butembo (about 500,000 inhabitants) and Kyondo (about 20,000), the organization called CADAK took part in the parade for International Women's Day on 8 March 2004. One of the aims was to raise public awareness for the conservation of Mt. Kyavirimu in the Virunga National Park.

Harmony with nature was also a theme of the parade. The women who took part therefore wore a dress with animals and trees. They carried the message "Non au viol et à la violence sexuelle" (No to rape and sexual violence). This is an especially serious issue for women in eastern Congo and it also concerns women who enter the national park.



from left to right: Kisonia Desanges, Kamate Elisabeth and Miss Lwanzo)

CADAK representatives at the parade for the International Women's day (left picture,

During the parade, there was applause from the crowd for the gorilla posters and the signs that the women carried with them.

Summary of a report by Kavugho Kisonia Desanges and Masika Meso

CADAK (*Coordination des Activités de Développement Autour de Kyavirimu*) is a union of NGOs in eastern Congo near Mt. Kyavirimu (or Tshiberimu). The organization urgently needs support for its public awareness activities. For further information or the complete report of the International Women's Day activity, please contact Angela Meder at angela.meder@t-online.de.

Logging to be Intensified in Congo

According to a report of the *Rainforest Foundation*, up to 60 million of the 130 million hectares of forest in the Democratic Republic of Congo are now threatened by logging. New forestry laws, that have been developed with support from the *World Bank* and *FAO*, aim to increase industrial logging dramatically.

During the war, logging activities were reduced considerably because of the insecurity. Now, the *World Bank* wants to help companies to start their activities again, but wants to make sure that they are legal; this is difficult because many of the concessions were not granted legally.

Increased logging would mean also a severe threat to the survival of the people living in those forests, especially Pygmies. Many Congolese NGOs are therefore united to protest against the plans.

More on the *Rainforest Foundation's website:*

www.rainforestfoundationuk.org



RWANDA

Virunga Gorilla Census

The census of the Virunga Volcanoes mountain gorilla population carried out during September and October 2003 has shown a 17% increase in population size since 1989. There are now a total of 380 gorillas in 30 social groups.

Six teams had traversed the entire gorilla habitat range, searching for fresh signs of gorilla groups. Their night nests are used to establish the number of gorillas in each group. A total of 100 team members participated in the census, drawn from the staff of the protected area authorities and their partners.

The Virunga gorilla census was possible thanks to the close collaboration of the conservation authorities in the three countries, the *Office Rwandais de Tourisme et Parc Nationaux*, the *Institut Congolais pour la Conservation de la Nature* and the *Uganda Wildlife Authority*. It was supported by the *International Gorilla Conservation Programme*, the *Wild-*



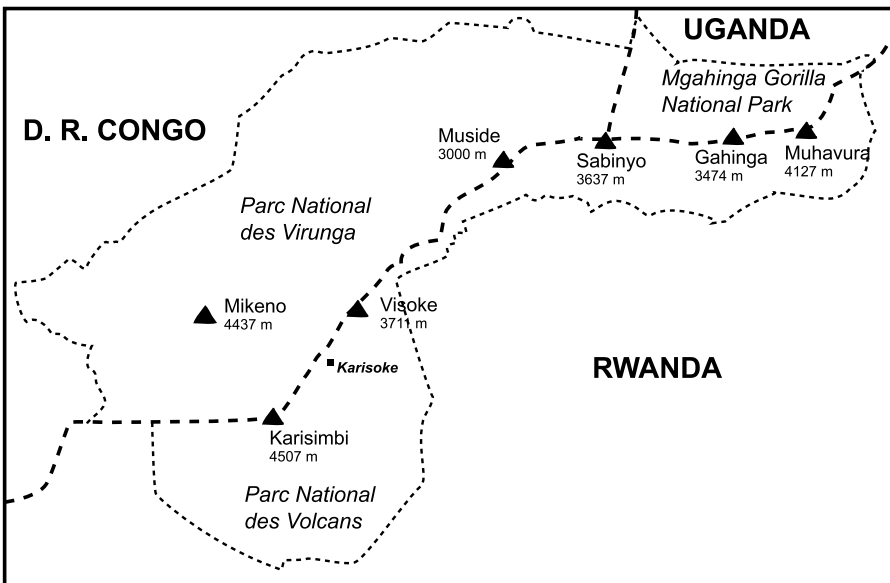
Two young members of the Susa group in Rwanda

Drawing: Chisato Abe

life Conservation Society, the Dian Fossey Gorilla Fund-International, the Institute of Tropical Forest Conservation (Mbarara University of Science and Technology), the Dian Fossey Gorilla Fund-Europe, Berggorilla & Regenwald Direkthilfe, the Mountain Gorilla Veterinary Project, and the

Max Planck Institute for Evolutionary Anthropology.

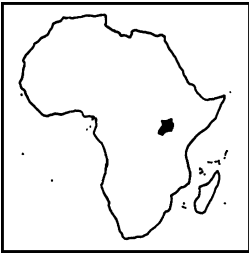
Summary of a press release by the national park authorities of Uganda, Rwanda and the Democratic Republic of Congo. The final report has not yet been published.



The national parks for the Virunga gorillas in Congo, Uganda and Rwanda
Map: Angela Meder

Gorilla Permit Prices

According to *Volcanoes Safaris* (a tour operator offering mountain gorilla tours in Rwanda and Uganda), on June 1, ORTPN in Rwanda raised the price for gorilla permits to US\$ 375 per person (350 for the permit and 25 for the park fee). UWA (*Uganda Wildlife Authority*) is presently considering to raise permit prices too during the second half of 2004; in May 2004 they were still US\$ 220 for Mgahinga and US\$ 275 for Bwindi.



UGANDA

2004 is the tenth anniversary of the incomprehensible genocide in Rwanda. April 7, 1994, the day after the plane with the presidents of Rwanda and Burundi had been shot down, the day when unspeakable violent crimes started to happen in Rwanda. No outsider can imagine the deep-seated psychological injuries that the genocide survivors sustained. My sympathy goes to these people who lost parents, children, relatives and friends.

The following text refers to entirely different events in Uganda, very removed from what happened in Rwanda in 1994.

Ursula Karlowski

Ten Years of Gorilla Tourism in Mgahinga

In **December, 1989**, a gorilla and nature conservation project was established on the Ugandan side of the Virunga Volcanoes. Biologist and historian Klaus-Jürgen Sucker started to develop the project with support from the *Deutscher Tierschutzbund* (German Society for the Protection of Animals), from the *Berggorilla & Regenwald Direkthilfe* and, later, from CIM (Center for International Migration).

At that point, the area on the northern slopes of the three volcanoes Muhavura, Gahinga and Sabinyo was characterised by increasing deforestation and transformation of the rain forest into agricultural fields. The primary forest was criss-crossed by a network of numerous smugglers' trails. Hundreds of wire snares were set on the game paths in order to

catch antelopes. Logging and grazing of livestock in the forest were also regular occurrences.

In co-operation with the Ugandan authorities, more rangers were employed and their equipment was improved. Very soon the first results of this work were noticeable. Because there were more rangers and they spent more time in the forest, livestock grazing in the forest, poaching with snares and logging all decreased. As a result, the populations of mountain gorillas, golden monkeys, duikers, bushbuck and buffaloes, and many other animal and plant species recovered.

1990. Interviews were conducted in all the communities bordering the Mgahinga Forest in order to determine people's attitude towards the planned national park (Yeoman et al., 1990; CARE/Impenetrable, 1990). The study found that a change in status from the existing forest/game reserve to a national park was welcomed by the population. The stipulation was that the national park should terminate at the well-known and highly visible row

of Australian silver oak (*Grevillea robusta*) trees along the 8,000 ft (about 2,440 m) contour line and, in the west, at a somewhat lower altitude (Nyakagezi triangle). This line of trees had been planted in 1944. In the late 20th century, many trees were still there and well-known to the local population.

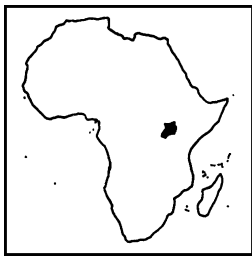
At that point in time, another option was to incorporate an even larger area, i.e. the entire "Gorilla Game Reserve", into the future national park. This option was subsequently rejected. The population of the villages bordering the Mgahinga Forest expressed the hope that the change of status to a national park would also mean an improvement of their economic situation.

May 1991. The Ugandan parliament passed a resolution to gazette the Mgahinga Forest and parts of the Gorilla Game Reserve as a national park, the "Mgahinga Gorilla National Park". The national park's borders largely followed the 8,000 ft contour. The park's area is approximately 34 km².



Klaus-Jürgen Sucker with Mgahinga rangers

Photo: Ursula Karlowski



UGANDA

1992. Another study (Wetikhe 1992) not only gave an idea of people's opinions, but also documented the size of the active fields and the number of livestock. Subsequently, these numbers helped to determine the amount of compensation that had to be paid to each farmer. The study showed clearly that 70% of the families who had fields and huts inside the national park also owned land outside. None of the buildings had been constructed for permanent occupation.

In the course of 1992, all settlers left the deforested zone of the national park (Zone 2) and most land use inside the national park was stopped: this included potato farming and grazing of livestock (Bachou et al., 1992). In all, 221 farms were moved to new sites on public land lower down in the valley. The settlers received compensation payments whose amount depended on the size of the national park area that they previously used and the number of their livestock. The vegetation of Zone 2 subsequently regenerated and has increasingly been utilised by the animals of the Mgahinga Forest (Sucker 1993a, 1994).

In **December 1992**, the wheat fields inside the national park were harvested for the last time. Since then, the entire area of Zone 2 has been left to regenerate naturally. The regeneration zone is approximately 10 km² and most of it extends from about 2,400 to 2,700 m asl.

The infrastructure of the new national park was developed during **1993**. The guard post was moved to the new park boundary; the northern boundary was marked with 180 cement cairns spread over 14 km. The cairns, which were about 1 m high, made the course of the boundary very clear, but they left adjoining fields completely unprotected from grazing by game animals. A hedge of *Erythrina abyssinica* was therefore planted along the national park's boundary. In



Construction of the buffalo wall with lava rocks

Photo: Klaus-Jürgen Sucker

those areas where the volcanic rock was very close to the surface and made it impossible to plant *Erythrina*, a natural wall was erected from lava rocks. This "buffalo wall" has subsequently been taken up by other projects, as it does in fact decrease browsing damage by game animals.

During the civil war, which smouldered in Rwanda for years, parts of the Mgahinga Gorilla National Park sometimes served as areas for paramilitary

units to retreat into. As there was the risk of these units having laid mines, all hiking trails were checked by a special unit of the Ugandan army with mine detectors. Unexploded mines were detonated with dynamite. During this work, the presence of 5 gorilla groups within the park was established. It also became obvious that parts of the afro-alpine vegetation on the peaks of Mt. Gahinga and Muhavura had been destroyed during the civil war.

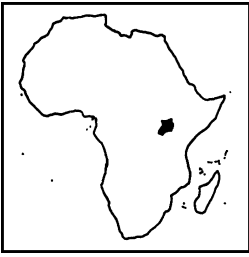
Nevertheless, eco-tourism was introduced on August 10th, 1993, initially consisting of mountain trekking, cave viewing and hiking on nature trails.

The range of activities offered to tourists was extended on **January 15, 1994**: it was now possible to visit the so-called Nyakagezi group. This gorilla group regularly moved between the Ugandan and the Congolese sectors of the Virunga Conservation Area. During the first 2 months, only 2 visitors a day were taken to the gorilla family. In March, this was increased



One of the cement cairns and the Erythrina hedge

Photo: Klaus-Jürgen Sucker



UGANDA



100 m at the headquarters. It could not be determined which group (people or gorillas) watched the other group with more interest. (Sucker, 1993c).

Apart from this habituated group, a single silverback male and another group with 3 individuals utilized the new area.

Even before gorilla tourism started officially in the Mgahinga Gorilla National Park, a revenue sharing system was developed for the population living close to the park. This system envisaged the use of 20% of the income generated by the park entrance fees for project ideas coming from the population, for example for the construction of new schools or store buildings. These days, this concept is an integral part of the policies of the Uganda Wildlife Authority, UWA, for all reserves in Uganda (Muloba & Nyiramahoro, 2002).

On June 19, 1994, Klaus-Jürgen Sucker died, in circumstances that are still unresolved. His tragic, mysterious death still raises many questions and leaves a large gap that cannot be filled. Without the courageous involvement of all the people who have supported the conservation of this area of the Virunga region, the gain in wilderness area, which can clearly be seen on satellite images, would not have been possible. We owe a special debt to Klaus-Jürgen Sucker for ensuring that the mountain gorillas, as well as numerous other species of animals and plants, are not only conserved but also experience an enlargement of their habitat.

Ursula Karlowski

One of the first groups of gorilla tourists

Photo: Ursula Karlowski

to 4 people and in May of the same year, a maximum of 6 paying tourists were allowed to visit the mountain gorillas for one hour per day. One of the first visitor groups was

a group of representatives of the Kisoro district, who could observe these famous animals at close range for the first time and were visibly impressed (Sucker, 1993b).

By then, 12 months had passed since the last harvest of the deforested zone. Even after such a short time, the gorillas had extended their habitat to include about 80% of that zone: they found food on the fallow fields, nesting material in the small thickets and they felt safe. From November 1993 to mid-February 1994, one group spent most of its time in this "new" zone and obviously "reconnoitred" the newly won terrain.

They spent most of their time relatively close to the ranger post, mainly on the lower slopes of

Muhavura, where mountain gorillas had not been seen for over 20 years... For 2 days, this gorilla group even stayed in the very valley of the new park headquarters. The rangers registered an access time of only 5 minutes. [The "access time" is the time it takes to get from the start of the walk to the gorillas; comment by U. Karlowski.] Local residents gathered at the national park boundary to see the gorillas "from a safe distance" of about

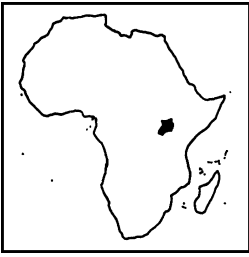


Silverback in Zone 2

Photo: Klaus-Jürgen Sucker

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UGANDA



The author standing at the buffalo wall

Photo: Jan Betlem

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News from the Bwindi Impenetrable National Park

The *Uganda Wildlife Authority* (UWA) has bought land within the radius of 12 km of the park near Nkuringo, in an area in which crops were being destroyed by gorillas and other wild animals. The farmers had not been compensated for the destroyed crops. The animals had been attracted by banana plantations close to the park boundary, in the area where the Nkuringo group is in the process of being habituated for gorilla tourism.

In January 2004 UWA christened 8 baby gorillas that were born among the habituated groups in Bwindi: Muyambi (21 months), Malaika (15 months), Nyampazi (7 months), Kasya (3 months), Rwamutwe (3 months), Kafuruka (2 months), Noel Kaconco (15 days) and Kwesiima (5 days). Performances by the Batwa cultural group and school children marked the affair held at the park headquarters in Buhoma on Saturday. Recent births (in January) have in-

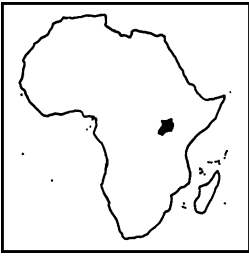
creased to 63 the number in the 4 habituated groups in Bwindi Impenetrable National Park. Each member of the habituated gorilla groups has now been given a name by UWA; they are all identified by noseprints.

Summaries of articles from the Ugandan newspaper New Vision in January 2004

Conservation Through Public Health

Conservation Through Public Health (CTPH) is a grassroots, non-profit, non-governmental organization founded by Ugandans in December 2002. Its mission is to promote conservation and public health by improving primary health care to people and animals in and around protected areas in Africa. The overall vision of CTPH is to prevent and control disease transmission where people, wildlife and livestock meet, while cultivating a winning attitude to conservation and public health in local communities. We decided to start our programs in Uganda because we saw a great need to integrate conservation and public health.

While working as a veterinarian for UWA in 1996 I was called to deal with the first scabies skin disease outbreak in the Katendegere group of mountain gorillas. This gorilla group had been visited by tourists for 3 years. The severity of the disease was age and size related, with the infant and juvenile being worst affected followed by the adult female and then the silverback. Scabies is caused by *Sarcoptes scabiei* mites that burrow under the skin and cause intense itching, hair loss, and white scaly skin. Working together with Liz Macfie of *International Gorilla Conservation Programme* (IGCP) and Richard Kock of *Kenya Wildlife Service*, we immobilized the juvenile gorilla, Kasigazi, and



UGANDA



Houses with banana plants in Buhoma. Gorillas love their pith

Photo: Angela Meder

took skin samples, which we strongly suspected to be scabies. Kasigazi was treated with Ivermectin anti-parasitic. We later returned to immobilize the shy mother to treat the infant, which had lost over 75% of its hair, was very thin, crying and too weak to hold onto its mother, Nyabitono. She dropped the infant, which had died, the day after she was given her treatment and we were able to perform a fresh post-mortem on the infant, Ruhara, which gave us further confirmation on the scabies mites after laboratory diagnosis – Ruhara's skin was covered with them.

After successfully treating this group and checking on all the other groups in Bwindi, we started to ask ourselves where the scabies could have come from. Physicians had told us that the most common skin disease in low income groups of people in Uganda is scabies. *Why?* Because it is a disease of poor hygiene and crowded conditions. This particular gorilla group left the park periodically

and went to forage in people's gardens, raiding their banana crops. Many of these people live very far away from water and do not often wash their clothes. Gorillas are curious and could have touched contaminated clothing, allowing the mites to spread through the group during grooming. The fact that the infant was so severely affected meant that the mite was new to the group and the most likely closely related host was humans.

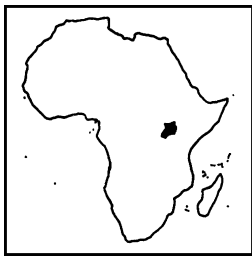
In early 2000, we organized participatory rural appraisal health education workshops with local communities on the risks of human and gorilla disease transmission with the aim of improving their health and hygiene. Not only did they have scabies, but they also did not cover their rubbish heaps and many of them did not have proper pit latrines. I teamed up with the Bwindi Community Conservation Warden Benon Mugerwa, Community Conservation Ranger Johnson Twinomugisha, IGCP Field Officer Stephen Asuma,

and Robert Sajjabi and Benon Nko-mejo, the district health assistants. Before we began we were worried that the communities would think that we care more about animals than people.

But we were pleasantly surprised. Communities that benefited from gorilla tourism were very willing to listen to us and put forward very good recommendations on how to improve the situation. They saw the benefits of improving their health and hygiene not only for themselves, but also to protect a sustainable source of income from gorilla tourism. Before mountain gorilla tourism came along, these poor, rural communities had very little hope of overcoming their poverty. Now, mud huts that were once selling local brew have been transformed into flourishing trading centers because of the traffic associated with tourism. UWA has employed many people; bandas have been built for the community to accommodate low budget tourists and other income generating projects. Additionally some of the tourism revenue is shared with communities surrounding the park, and used to build schools, clinics and roads.

During these workshops I realized that communities that had many tourism benefits were very different from those that did not. It was clear that not only was poor health and hygiene affecting public health and wildlife conservation, but it was also affecting sustainable ecotourism.

This case study was the root of an idea to start an NGO that promoted both conservation and public health for the benefit of both. I went on to do a Zoological Medicine Residency and Master at North Carolina State University and North Carolina Zoological Park. During this time I got the opportunity to carry out field surveys on TB at the human/wildlife/livestock interface in Bwindi Impenetrable and Queen Elizabeth National Parks.



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These surveys highlighted how much TB, another disease of poverty, was a public health challenge in Uganda.

Together with my husband Lawrence Zikusoka, Founder and Director of ICT (Information and Communication Technology) for Development, and Steven Rubanga, Founder and Chief Veterinary Technician, we formed *Conservation Through Public Health*.

CTPH held a strategic planning workshop with stakeholders in September 2003 at the *Institute of Tropical Forest Conservation* in Ruhija, Bwindi. The *North Carolina Zoological Society* funded the workshop. The workshop brought together stakeholders from the government, NGOs,

private sector including tour operators, universities and schools.

The workshop came out with six strategic objectives, to guide our programs and activities for the next few years. Some of these include public awareness, strengthening community health outreach including TB treatments and improving health monitoring and disease surveillance of wild and domestic animals. So far, CTPH has formed Memoranda of Understanding with UWA and the CISCO Networking Academy for Least Developed Countries Initiative of Makerere University's Department of Women and Gender Studies. We opened an office in the capital city, Kampala, and

share a building with IUCN, the World Conservation Union, and the *Wildlife Conservation Society*. We are very privileged to have Hope Walker join the CTPH team as our US Representative and Director of Marketing in November 2003.

Conservation Through Public Health urgently seeks financial and in-kind support from interested individuals and organizations, and will soon be starting a membership program.

Gladys Kalema-Zikusoka

For more information visit www.ctph.org or sign into info@ctph.org for regular updates.

Support for Public Health around Bwindi

We want to support the activities of *Conservation Through Public Health* to improve the health of the population living near the Bwindi Impenetrable National Park and at the same time of the gorillas there. The organization urgently needs technical material, for example:

- field microscopes
- solar panels
- GPS recorders
- pulse oximeters
- projector for power point presentations
- LCD screens for PCs with software
- internet access
- laptop with software
- server with software
- digital cameras
- binoculars

We promised to donate as much of this material as we can afford.

Do you want to help us to support this innovative approach to conservation in Uganda? You can do this by providing either funds or some of the items that are needed!

If you want to donate technical material, please contact us first for details. You will get more information from:
Berggorilla & Regenwald Direkthilfe
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The Gorillas of the Ebo Forest, Cameroon

Cameroon is a particularly important habitat country for gorillas since it has two subspecies, separated by several hundred kilometers of forest and the Sanaga River. *Gorilla gorilla gorilla*, or the western lowland gorilla, was, until recently, thought to be restricted to areas south of the Sanaga River, and has been hard hit by hunting for at least the past 100 years. This southern region of Cameroon has also been affected by commercial logging activities for decades, and most of the few remaining populations are increasingly under threat. *Gorilla gorilla diehli*, or the Cross River gorilla, is even more endangered, with numbers estimated at around 250 split into at least nine isolated populations north of the Sanaga River along the Cameroon-Nigeria border (Oates et al. 2003).

In late 2002 a gorilla population separated from the lowland gorilla population south of the Sanaga River by around 100 km (distance to the Sanaga), and from the Cross River gorilla population by ca. 200 km, was "discovered" in the Ebo forest, Littoral Province, by a field team of the Center for Reproduction of Endangered Species, *Zoological Society of San Diego* (CRES) and 7 gorillas were observed for almost two hours (Morgan et al. 2003). The first suggestion that gorillas might occur within this forest resulted from a four-day survey of Ebo by F. Dowsett-Lemaire and R. J. Dowsett in 2001. They noted 8 old gorilla nests, but no direct sightings or other confirmation of the existence of gorillas in this forest was obtained. Most recently, in March 2004, the CRES field team observed a lone male gorilla for 15 minutes.

One interesting point worth noting about the gorillas in Ebo is their propensity to nest high in the trees. During our gorilla encounter in late 2002,



The Ebo gorilla population and the areas where specimens of western lowland and Cross River gorillas were collected

Map: Bethan Morgan

we have reported that all 6 day nests were arboreal, constructed at between 15 m to over 30 m above the ground (Morgan et al. 2003). At the site of our most recent sighting in March 2004, 4 night nests were discovered, all over 18 m from the ground. Possible reasons for the low frequency of ground nests elsewhere have included risk of disturbance (e.g. by elephants) or a lack of suitable ground nesting material. In Ebo, the abundance of large rocks and boulders throughout the area may be an added incentive to build arboreal nests.

The discovery of the Ebo gorilla population raises important questions as to the nature and role of zoogeographic barriers to speciation in this region, as well as taxonomic affinities of this new population. Although Ebo and the contiguous forest blocks are poorly known, the Ebo gorilla population may represent a remnant of a previous distribution, extending across the Sanaga River to the

extant Cross River/Takamanda population. The majority of the intervening populations may have been extirpated by a high degree of human disturbance in Cameroon over at least the last century. Both the Cross River populations and this newly discovered population are currently restricted to higher elevation and inaccessible forest, which probably accounts for their continued existence. Most recent evidence indicates that there are no fully reliable methods for obtaining high-quality DNA from non-invasive samples in gorillas (Thalmann et al. 2004), but we are collecting both hair and faecal samples wherever possible.

The Ebo forest is one of the largest single areas of lowland and montane forests in Cameroon, covering 1,424 km² of semi-deciduous and evergreen forest in Littoral Province. Topographically it consists of a series of hills and mountains with steep slopes and deep valleys, with an altitudinal range from less than 200 m to over 1,200 m.



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The gorilla population appears to be centered on a series of steep mountains close to the abandoned village of Bekob. Although today the forest is devoid of permanent habitation, until the 1960s several villages peppered Ebo, including Bekob, which was home to a German missionary doctor who ran a small hospital. The tribal wars during this period caused widespread unrest, and the enclaved villages were abandoned, with the inhabitants creating new settlements or joining existing villages that today run along the northern edge of the Ebo forest.

The Ebo forest is unusual in Cameroon, because it is currently thinly populated, the challenging topography has limited the potential for commercial logging and it harbors a significant and diverse assemblage of large mammals. We found extensive evidence of drills (*Mandrillus leucophaeus*), one of the most endangered

primate species in Africa, in Ebo during recent field expeditions, and managed to make a number of direct observations. Chimpanzee populations in Cameroon are more numerous than gorillas, but are still under intense hunting pressure in almost all areas. Gonder et al. (1997) proposed that there are two subspecies of chimpanzee in Cameroon – *Pan troglodytes troglodytes* south of the Sanaga river and *Pan troglodytes vellerosus* to the north. Several populations of this northerly subspecies, first described as long ago as 1862 but only recently recognised as a valid subspecies, have become extinct in the wild less than a decade after first being documented, but in Ebo populations are still extensive and we regularly hear chimpanzees during our fieldwork.

In addition to gorillas, chimpanzees and drills, there are 8 other diurnal primate species at Ebo. Both Preuss' red colobus (*Piliocolobus preussi*)

and Preuss' guenon (*Cercopithecus preussi*) are endangered species, yet both appear to be present in good numbers at Ebo. The latter species is very sensitive to hunting and has already disappeared from a number of localities elsewhere in Cameroon. In addition, the mona monkey (*Cercopithecus mona*), putty-nose monkey (*C. nictitans*), crowned monkey (*C. pogonias*) and the red-eared monkey (*C. erythrotis*) have been observed, together with the red-capped mangabey, *Cercocebus torquatus* and guereza colobus, *Colobus guereza*.

Forest elephants (*Loxodonta africana cyclotis*) still occur in Ebo, though they have been hunted out in most of the surrounding areas. Forest buffalo (*Syncerus caffer nanus*), red river hog (*Potamochoerus porcus*), sitatunga (*Tragelaphus spekei*), bushbuck (*T. scriptus*) and several duiker species are also present.

The Ebo forest, together with two further areas – Makombe and Nlonako – were designated "Proposed Protected Areas" by the Government of Cameroon in January 2003, with the gazettelement and demarcation process due to commence in late 2004. This process will be undertaken by a team under technical supervision from CRES Cameroon and WWF Coastal Forests Program. In May 2004 CRES Cameroon will establish a permanent field presence at Ebo in order to have a base from which to study the gorilla population. Field studies are also important since the ape populations have an additional degree of protection because researchers will maintain a monitoring presence in the field as well as enabling the constituency of public interest and support, both in Cameroon and elsewhere.

We also plan to conduct transect surveys throughout the Ebo forest to assess the distribution and density of the gorillas, and will additionally survey forest outside the present limits of



The mountains of the Ebo forest

Photo: Bethan Morgan



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the proposed protected area to ascertain whether the current boundaries will be sufficient to protect the Ebo gorillas.

There are several communities situated around the Ebo forest, and the impact of these populations on the forest has not yet been quantified nor described systematically, but it is clear that human population density is low.

Although hunting for the commercial bushmeat trade is likely to be important in the villages to the south given the proximity of major towns such as Douala, the mountainous terrain has restricted hunting within the central area of Ebo. The small villages to the north seem to be sustained by bushmeat extraction sold (mostly) locally. Given the parallel mountain ranges running north-south throughout this region, with steep valleys and deep rivers, hunters do not penetrate far in the area from either east nor west, and so thanks largely to its topography, both the plants and animals of the proposed Ebo protected area have been relatively spared the effects of habitat destruction found elsewhere in Cameroon. We intend to start a study of bushmeat offtake in villages and towns to the north of the Ebo forest in mid-2004, which will entail close collaboration with Cameroonian authorities.

Bethan Morgan

Grateful thanks to the Government of Cameroon (DFAP-MINEF) for continued collaboration, and to the Margot Marsh Biodiversity Foundation and the Offield Family Foundation for financial support. Thanks also to our collaborators, WWF Coastal Forests Program and WCS Cameroon.

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Networking Silverbacks?

Much of what we know about the behaviour of gorillas in the wild comes from studies of the habituated mountain gorillas (*Gorilla beringei beringei*) at Karisoke Research Center in Rwanda. The lives of the Karisoke gorillas have been monitored for over

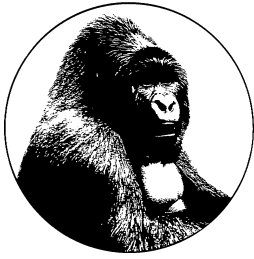
three decades and study subjects cross multiple gorilla generations (Robbins et al. 2001). By comparison, we know rather little about the social behaviour of the wild western gorillas (*Gorilla gorilla*) that live in the dense lowland forests of western equatorial Africa. In such forests it is difficult to monitor gorillas from a distance, and western gorillas have been notoriously difficult to habituate to the presence of human observers.

However, after years of effort, researchers at several sites have finally been successful in habituating some western gorilla groups to sustained observation. Another successful strategy has been a 'wait and watch' approach in which observers on platforms at the edge of forest clearings (or bais) monitor the comings and goings of multiple groups (e.g. Parnell 2002). Both types of study have highlighted something rather unusual:



A silverback in Mondika

Photo: Roberta Salmi



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western gorilla groups frequently react more calmly to the presence of other gorillas than do mountain gorillas (Doran et al. 2004). These peaceful interactions between different western gorilla groups puzzle researchers because in many primates, when different social groups cross paths, interactions are often hostile. This is especially true in species like gorillas in which females can transfer between groups during inter-group interactions. Male mountain gorillas have been observed to aggressively defend their females against males from other groups by chest beating, charging and actively herding females (Sicotte 1993).

Why then are some western gorilla males more nonchalant in their interactions with other gorilla males? Recent analyses of genetic relationships among 14 silverbacks at Mondika Research Center (Central African Republic and Republic of Congo) indicate that the majority of silverbacks ranging in the study site are related (father-son or brothers) to one or more males leading nearby groups (Bradley et al. 2004). This results in what appear to be clusters or networks of related males. So perhaps these oddly peaceful interactions between western gorilla groups are simply silverback family reunions.

But how might these males recognize each other as relatives? Not all interactions between western gorilla groups are peaceful, in fact some have involved violent interactions between silverbacks that have led to fatal injuries. This suggests that silverbacks might know which males are relatives and which are not and respond accordingly.

A possible clue to how male relatives might recognize each other is also found in the genetic data. Virtually all western gorilla groups observed to-date have only one silverback, and DNA-based paternity analy-

ses indicate that the group silverback sires all of the group offspring, that is, there is no evidence that females produce offspring with immature males or with males outside of the group. Thus, the silverback can be fairly certain that an infant is his and an infant can be fairly certain that the group silverback is his father, and the time together in the same group gives them a chance to learn to recognize each other.

But how would brothers recognize each other? If some silverbacks can maintain leadership of their groups for long periods of time, as is indicated from observational and genetic data, then all gorillas growing up together in the same group will be paternal half-siblings. Lengthy periods of infant and juvenile development (~8 years) allow for years of interaction among paternal siblings. These siblings could then later recognize each other long after leaving the natal group. Social familiarity has been demonstrated as an important mechanism for kin recognition in other primates, such as macaques (Widdig et al. 2001) and baboons (Smith et al. 2003). Thus, it is plausible that such paternal-kin recognition could also play an important role in the social lives and social bonds of gorillas. The gorilla male network hypothesis suggests that paternal kin ties among silverbacks are a fundamental component of western gorilla social structure.

However, the idea that social relations among groups vary with the degree of relatedness among males is based upon consideration of genetic, but not behavioural data, from some groups and behavioural, but not genetic data, from others. Testing of the hypothesis requires determining whether peacefully interacting silverbacks are really relatives, or if their laid back attitudes are based on something other than kinship. This research, combining observations and genetic characterization of the exact

same groups, is underway at Mondika.

If this ongoing genetic study finds additional support for our hypothesis that western gorilla silverbacks are forming social networks with male relatives, these findings could have broad importance for our understanding of ape and human social evolution. Indeed, these results suggest that a "patrilocal" social system, that is, a social system in which males stay in the region of their birth and potentially benefit from male kin associations while females leave, is a feature uniting African ape and human societies.

Brenda Bradley, Diane Doran-Sheehy and Linda Vigilant

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The Problem with Gorilla Mitochondrial DNA Analysis

A mere glance at a map of the distribution of gorillas in Africa reveals a striking pattern. In contrast to chimpanzees, which occur more or less continuously across equatorial Africa,



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gorillas are limited to two discontinuous areas in West and East Central Africa. While western gorillas are relatively numerous, with an estimated total population of up to 110,000 individuals distributed over about 709,000 km², gorillas in eastern Africa are much more limited in number and found principally in scattered populations (Sarmiento 2003). This pattern raises interesting questions, such as the length of time western and eastern gorillas have been separate from one another, and whether the populations have been very different in size for a long time or only rather recently.

To address such questions, scientists have often turned to laboratory analysis to estimate the relative amounts and geographical pattern of genetic variation present in representatives of the populations of interest. A commonly-used tool in such studies is analysis of the mitochondrial DNA (mtDNA), a type of DNA found in all cells, but separate from the genomic DNA that forms the chromosomes. Some peculiar properties of mtDNA, such as a particularly high rate of evolution and maternal inheritance, make it especially informative for studying the evolution of populations in the last tens of thousands or few million years (Avise 2000).

Research published in the last decade on the pattern of mtDNA evolution in gorillas estimated a date of about 2.2 million years ago for the split between western and eastern gorilla mtDNA (Ruvolo 1996) and suggested that the amount of variation within western gorillas was about ten times greater than that found within eastern gorillas (Garner and Ryder 1996) – a striking difference in comparison with results from studies of other animal populations. However, while mountain gorillas were sampled intensively from their small range in the wild, far fewer western gorillas were analyzed and

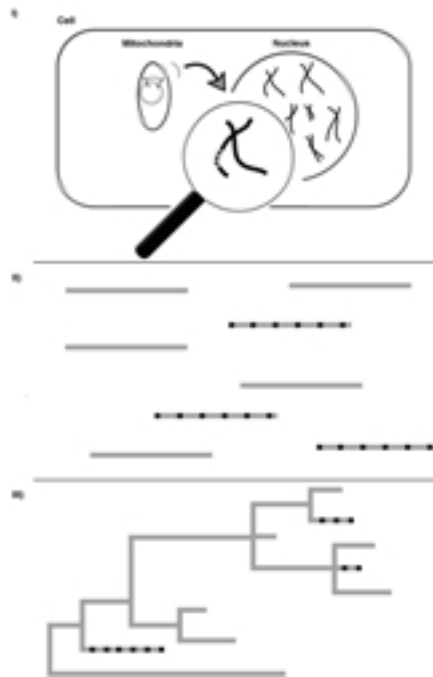
most of those were captive individuals whose ultimate origins in Africa were unknown. This made it difficult to directly compare levels of variation between western and eastern gorillas since the sampling schemes were so different. Another remaining question of interest was determining how the genetic variation was distributed across the range of western gorillas.

We decided to conduct a study of gorilla mtDNA using samples from wild gorillas. We relied upon non-invasive samples such as feces or hair that could be collected from nests

without disturbing the animals. Back in the lab, we used standard polymerase chain reaction (PCR) techniques to make copies of our target mtDNA segment of interest – the hypervariable segment of the control region. This segment is frequently used in studies examining variation within species as it contains the most variation in the mitochondrial genome.

We almost immediately ran into difficulties because we often found more than the expected one unique sequence per individual. The multiplicity of sequences was suspected to be due to the inadvertent inclusion of pieces of mtDNA that had become copied to the nuclear genome, so-called "nuclear insertions of mtDNA" or "numts" (Lopez et al. 1994). These numts occur in a variety of animal genomes, and if recently-integrated numts very similar to the mtDNA segment of interest are present, it can be very hard to reliably distinguish real mtDNA from numts (Bensasson et al., 2001). Some suggestions for distinguishing authentic mtDNA sequences from numts rely upon comparison of questionable sequences with those of assumed authenticity, and a new study investigating mtDNA variation in wild gorillas relies upon such comparisons (Clifford et al., 2004). Troubled by the uncertainty inherent in such subjective comparisons, we decided to investigate the matter directly.

We used a method ("long-range" PCR) that could produce only the authentic mtDNA from two individuals, a western and an eastern gorilla, and compared the results to the collection of sequences obtained from those same individuals using conventional PCR methods (Thalmann et al., 2004). We had hoped to see consistent differences between the authentic mtDNAs and the imposter numt sequences, so that we would be able to use these differences as criteria for determining authenticity of se-



The problem with numts.

- I) A segment of mtDNA becomes integrated in the nuclear DNA.***
- II) Potential outcome of a PCR amplification targeting a DNA segment that is present in the mtDNA and also in the nuclear DNA.***
- III) Tree analysis depicting close relationships among authentic mtDNA sequences and recently integrated nuclear copies.***



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quences. Unfortunately, the numt sequences were so numerous and so similar to the authentic sequences, no reliable criteria could be devised that would allow distinguishing of the authentic sequences. This was especially disappointing as the long-range PCR procedure required to produce authentic mtDNA sequences requires the use of high-quality DNA samples derived from blood or tissue, and so we have as yet no way to determine authentic mtDNA sequences from our fecal and hair specimens.

Interestingly, we also conducted the same analysis using representatives of the other great ape species, and had no difficulties in reliably generating authentic mtDNA sequences from humans, chimpanzees, bonobos and orangutans. The underlying reasons why numts are prevalent in some animal genomes, and relatively infrequent in others, are currently not known (Bensasson et al., 2001).

The take-home message of our study was that all conclusions based upon analyses of gorilla mtDNA control region variation should be considered suspect. A total of three sequences from captive gorillas have been authenticated. Some of the rest of the data generated may also eventually be proven to be authentic and hence usable, but an objective assessment is impossible at present time since the means for direct validation – DNA from blood or tissue samples – are not available from most individuals. This suggests that insights into patterns of genetic variation in gorillas will depend upon analysis of genetic segments occurring in the nuclear DNA.

In a new study, researchers used analysis of 50 nuclear DNA segments sampled from captive individuals to infer a level of nucleotide diversity in gorillas twice as high as that in humans, but only slightly higher than in chimpanzees (Yu et al., 2004). If the

technical challenges of working with DNA from noninvasive samples can be surmounted, application of a similar approach of surveying multiple, independently-evolving nuclear DNA segments from wild individuals may provide a reliable means towards obtaining more detailed insights into the population history of gorillas.

*Linda Vigilant, Olaf Thalmann and
Brenda Bradley*

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Resolution of the European Parliament

During the bushmeat campaign of the European zoo association EAZA 1.9 million signatures were collected for a petition to the European Parliament. They were handed over in November 2001. A resolution was finally adopted on 14 January 2004.

It urges the Commission to integrate an EU strategy and action plan

on bushmeat in the context of implementing the EU biodiversity action plan, to encourage full stakeholder participation involving local populations, civil society, government, as well as the private sector, and provide all necessary support, including capacity building, to empower local populations and civil society to participate fully in this process. Special attention should be paid to capacity building of wildlife, forestry and nature conservation authorities, law enforcement and anti-poaching measures, planning and management of national parks and other conservation areas, strategic environmental assessments for proposed policy reforms; environmental impact assessments for all infrastructure, and other relevant projects.

The Commission is urged, among other things, to assist communities that traditionally relied on bushmeat as their principal source of animal protein to develop the means to purchase other foodstuffs, to support educational and information campaigns. It calls for EU financial support for ecotourism in order to encourage local communities to protect endangered species, particularly the great apes, to develop, together with the timber industry and the developing countries concerned, ways and means to control bushmeat hunting on concessions. Bushmeat issues, criteria and indicators should be included in the European FLEGT (Forest Law Enforcement, Governance and Trade) process, and the conservation and sustainable use of wildlife should be included in the development policy of the EU. Moreover, measures and resources put in place by Member States to detect and prevent illegal imports of bushmeat into Europe and assess the adequacy of legal deterrents and penalties should be assessed.



READING

Steven V. Price (ed.)

War and Tropical Forests. Conservation in areas of armed conflict. Binghamton (Food Products Press of Haworth Press) 2003. 239 pages. Hardcover US\$ 49.95. ISBN 1-56022-098-8; paperback US\$ 24.95. ISBN 1-56022-099-6.

In 2000, a conference of researchers, conservationists and policy makers took place, and some of the contributions were published now in this book. But the subject matter is still relevant, and this book will certainly be interesting to anybody who works in tropical forest conservation within areas of armed conflict.

Apart from a few general contributions (e. g. by Jeffrey McNeely and Annette Lanjouw) the book consists of examples from a number of countries: Nicaragua, Colombia, Rwanda, the D. R. Congo, and Indonesia. Especially interesting for gorilla conservation are the contributions by Andrew Plumptre on Rwanda and Congo and Juichi Yamagiwa on the Kahuzi-Biega National Park. Both authors summarize the history of the conflicts in the Great Lakes region, discuss their effects, and provide recommendations on appropriate conservation strategies.

The authors not only describe the situation but also discuss "lessons learned" in their projects. They explain the negative (and positive) effects of conflicts and wars on biodiversity and conservation and discuss strategies to maintain conservation in this extremely difficult situation. They stress the importance of collaboration between all NGOs, especially also with humanitarian and relief organizations, governments, advocacy groups and military. It is important that international NGOs continue their activities. Even in situations like these, conservation can be secured, but working under such dangerous conditions requires considerable flexibility and experience. Moreover, the motivation of

local staff and the local population is even more crucial.

Angela Meder

William M. Adams

Against Extinction. The story of conservation. London (Earthscan) 2004. 327 pages. Hardcover, £ 48.00, ISBN 1-84407-055-7; paperback £ 16.95, ISBN 1-84407-056-5.

This book was written on the occasion of the 100th anniversary of FFI (*Fauna and Flora International*) and deals with the development of the idea of conservation during that period. The author looks at the subject from his own viewpoint (the view of a western expert with a focus on FFI) but the historic account he gives is interesting for anybody working in conservation. It explains why it is so difficult to convince local people of the necessity to protect certain areas.

Adams starts at the end of the 19th century, when (white) hunters and settlers in colonial Africa had destroyed and dramatically reduced a number of species. During that time, conservation meant to protect wildlife for elite hunting. The early conservation organizations accepted "sport hunting", but not subsistence hunting by the local people. During the 20th century, several new concepts were introduced, and since the 1980s biodiversity conservation has come to be regarded as most important. But often, the same ideas return again and again; even at the beginning of the 20th century, for example, the funding of protected areas was being discussed with similar arguments as today.

Adams introduces the various (exclusively American/European!) conservation concepts with their advantages and weaknesses, especially regarding the local populations. Those concepts are often contradictory; this makes the cooperation of organizations almost impossible sometimes, and it makes it difficult to convince

local NGOs and other partners (who have to accommodate themselves to the changing perspectives). Today, many conservation organizations use corporate methods with all that that entails, and Adams doubts that this will improve conservation.

He concludes that the threats to nature have not reduced, but have even increased within the last 100 years. None of the concepts that were utilized during that time has provided a solution for the protection of nature – it is still a challenge. Adams suggests that we open up to new ideas and cooperate with new partners.

Angela Meder

Anne E. Russon and David Begun (eds.)

The Evolution of Thought. Evolutionary origins of great ape intelligence. Cambridge (Cambridge University Press) 2004. 394 pages, 36 illustrations, 48 tables. Hardcover, £ 65. ISBN 0-521-78335-6.

What is so special about great ape cognition in comparison to monkeys and to humans – and how did it evolve? This question is discussed here; the book provides a good overview of the present state of research.

In the introduction, the most important hypotheses are explained briefly, and in the main part of the book a number of authors analyze and discuss these ideas. Often the same subjects are reviewed by several authors with varying viewpoints. The authors are on the one hand researchers who work with great apes in the wild and on the other hand palaeontologists who study the development of the hominoids. Most of them are not mainly occupied with cognition, but rather with ecology, social structure, skills and tool use, anatomy (especially of the brain), life history and other subjects.

In the final chapter the editors discuss the hypotheses introduced at



READING

the beginning by summarizing the results of the contributions. They conclude that many factors were involved in the evolution of great ape intelligence, "a particular constellation of ecological and social pressures and possibilities". There is definitely still room for more research.

Angela Meder

Rebecca Kormos, Christophe Boesch, Mohamed I Bakarr and Thomas M. Butynski (eds.)

West African Chimpanzees. Status survey and conservation action plan. Gland, Cambridge (IUCN) 2003. 228 pages, many illustrations. Paperback £ 18, US\$ 27. ISBN 2-8317-0733-1.

Peter Kappeler and Carel van Schaik (eds.)

Sexual Selection in Primates. Cambridge (Cambridge University Press) 2004. 298 pages, 46 illustrations, 14 tables. Paperback, £ 40. ISBN 0-521-53738-X.

Fred Anapol, Rebecca Z. German and Nina G. Jablonski (eds.)

Shaping Primate Evolution. Form, function and behaviour. Cambridge (Cambridge University Press) 2004. 442 pages, 106 illustrations, 39 tables. Hardcover, £ 70. ISBN 0-521-81107-4

Laura K. Marsh (ed.)

Primates in Fragments. Ecology and Conservation. New York (Plenum Press) 2003. 428 pages. Hardcover, US\$ 135. ISBN 0-306-47696-7.

W. Adams and M. Mulligan (eds.)

Decolonizing Nature: Strategies for conservation in a post-colonial era. London (Earthscan) 2003. XII, 308 pages. Paperback £ 16.95, ISBN 1-85383-749-0.

Jean Hatzfeld

Une Saison de machettes. Paris

(Seuil) 2003. 312 pages. Paperback, Euro 19. ISBN 2020612143.

Hervé Cheuzeville

Kadogo, enfants des guerres d'Afrique centrale: Soudan, Ouganda, Rwanda, Congo. L'Harmattan 2003. 311 pages. Paperback, Euro 26. ISBN 2747548511.

Patrick de Saint-Exupéry

L'inavouable. La France au Rwanda. Paris (Les Arènes) 2004. 287 pages. Paperback, Euro 19.90. ISBN 2912485703.

Linda Melvern

Conspiracy to Murder: the Rwanda genocide and the international community. London (Verso Books) 2004. 256 pages. Hardcover, US\$ 25. ISBN 1859845886.

Dawn Prince-Hughes

Songs of the Gorilla Nation. New York (Harmony Books) 2004. 240 pages. Hardcover, US\$ 24. ISBN 1-40005058-8.

Great Ape Project

Great Ape Project Census. Available for US\$ 14.95 at the *Great Ape Project* website:

www.greatapeproject.org

Graham Bennett

Integrating Biodiversity Conservation and Sustainable Use: Lessons Learned From Ecological Networks. Gland (IUCN) 2004

This book can also be downloaded as pdf-file (>2 Mb) at www.iucn.org/themes/cem/library/publication/ecological_networks_graham_bennett.pdf

New on the Internet

The *Last Great Ape Organization* Cameroon (LAGA) presents its work at www.lastgreatape.org. The main

activities of this organization are intelligence, law enforcement, legal assistance and media contact.

In 2003 a survey was finished on Mt. Tshiaberimu, Democratic Republic of Congo, and the report is provided for download at the DFGF-E (13 Mb). It also includes a detailed report on the 20 gorillas that were counted there, with photos. www.dianfossey.net/reports/0311tshiaberimu.pdf

The *Congo Basin Forest Partnership* is a project introduced by the USA and South Africa during the World Summit on Sustainable Development in Johannesburg in 2002. More information on the program is available on its website:

www.cbfp.org

Great Apes – the road ahead is a report edited by Christian Nellemann (UNEP Grid-Arendal, Norway) and Adrian Newton (UNEP World Conservation Monitoring Centre, Cambridge), available at www.globio.info. The report looks in detail at the great ape species to assess the current, remaining habitat deemed relatively undisturbed and thus able to support viable populations of apes. The experts have then mapped the likely impact and area of healthy habitat left in 2030 at current levels of infrastructure growth.

Satellite images of Central Africa are available for download on the CARPE website (<http://carpe.umd.edu/landsat>), the ESA/SOGHA site (<http://styx.esrin.esa.it/sogha>) and at INFORMS (<http://luci.umd.edu/lcluc/lcluc/data.htm>).

An IRIN Web Special on Life in northern Uganda: "When the Sun Sets, We Start to Worry..." is available at

www.irinnews.org/webspecials/northernuganda/default.asp

PASA (*Pan African Sanctuary Alliance*) has a website – still under construction, but already with information: www.panafricanprimates.org



BERGGORILLA & REGENWALD DIREKTHILFE

General Meeting

On February 28/29, 2004, the bi-annual general meeting of the *Berggorilla & Regenwald Direkthilfe* took place in Wesseling near Cologne. Eichholz Castle, an education centre of the Konrad Adenauer Foundation, was a pleasant venue. Former board member Carola Vogelsberg organised everything extremely well.

Angela Meder and Iris Weiche reported on the numerous activities of the last two years and informed the audience about the current political situation in the various areas. In addition, guest speakers talked about their experience in Africa. For example, Yvonne Verkaik, who supports the society in Uganda, reported first-hand on the current situation there. Jessica Ganas, who is conducting a study in Bwindi for the Leipzig Max Planck Institute for Evolutionary Anthropology, talked about her studies of the Bwindi gorillas – the differences of habitat, food and behaviour.

Finally, Olaf Paterok (*Rettet den Drill*) reported on the *Pandrillus* project in Nigeria. The drill ranch was founded in Nigeria as early as 1991. Today, over 100 animals have been bred and



raised there (by their mothers). Most of them now live on Afi Mountain, which they share with the Cross River gorillas, who are as much at risk as the drills.

The evening concluded with a social gathering, personal conversations and the opportunity to watch videos. One of the videos showed a celebration in Kahuzi Biega, held on the occasion of the handing over of equipment. Others were touching films and photographs from private collections, showing visits to the gorillas. They probably infected all the people who were watching them with wanderlust.

The official part of the event took place on the second day. The society's finances were made public and the organizational structure of the society was explained. After the treasurer and the board had been exonerated, a new board was elected. An-

gela Meder, who has been on the board for 12 years, was re-elected, in addition to new board members Sylvia Wladarz and Rolf Brunner. Rolf Brunner will also continue as treasurer.

Overall, there were many useful discussions. The new ideas will help to direct the future planning and targeting of the *Berggorilla & Regenwald Direkthilfe*. People had the opportunity to meet the board, other active members and various guests, who had many interesting things to say. We had two informative days.

*Kerstin Hirschegger and
Denise Nierentz*



Iris Weiche's report of her trip to Uganda. At the right: Sylvia Wladarz and Andreas Fretz

Photo: Angela Meder



BERGGORILLA & REGENWALD DIREKTHILFE

20th Anniversary of the *Berggorilla & Regenwald Direkthilfe e. V.*

In 1983, Paul-Hermann Bürgel, a great animal lover, spent his holidays on one of his world trips. This time he crossed Africa from north to south. He met a colleague of Dian Fossey's in Rwanda who told him about the problems of gorilla conservation. At that time, the survival of the mountain gorillas had not yet been ensured and only a few organizations were working on behalf of these animals. P.-H. Bürgel promised to help once he was back in Germany.

Then, however, he encountered problems. Bernhard Grzimek, the director of the *Frankfurt Zoological Society*, was willing to listen to him, but then told him about all the projects that his organization was already running. He did not commit himself to anything: "We'll have to see," he said. That is when P.-H. Bürgel decided to become actively involved himself. He was an opponent of typical "societies" and only wanted to form an action group. But when it turned out to be impossible to generate support in Germany – financial or otherwise – for an action group, he found that he had to establish a society after all.

P.-H. Bürgel talked to his friends, they talked to their friends, and so on. Finally, seven people met in Voerde, a small town on the Lower Rhine, in Hartmut Golomb's sitting room on June 2, 1984. For lunch we had curried sausages and French fries, beer and wine. This was the meeting where the *Berggorilla Patenschaft* ("mountain gorilla sponsorship society") was founded by Paul-Hermann Bürgel, Manfred Hartwig, Rolf Brunner, Hartmut Golomb, Gabriela Ernst, Adelheid Kuningas and Claudia Wallraven.

The society's headquarters were to be located in the castle in Burgpreppach in Upper Franconia, where



A meeting in 1988: Manfred Hartwig, Rolf Brunner and Paul-Hermann Bürgel

Photo: Angela Meder

P.-H. Bürgel lived, and he was elected chairman. We started to make our way through the obligatory paperwork: we had to see a notary, open bank accounts, etc.

WWF Belgium was well represented in Rwanda and we made contact with the *Mountain Gorilla Project/Projet Gorille de Montagne*. We also established first contacts with GTZ who had already started to work in the Kahuzi-Biega National Park.

Targeting Germany, we promoted the conservation of the mountain gorillas and tried to spread information about these animals and the threats facing them. The film *Gorillas in the Mist* helped, of course. We collected donations, bought the first used equipment from army surplus stores and transported the equipment to WWF in Brussels ourselves. It was still a very small-scale operation.

After P.-H. Bürgel had withdrawn from the society, the headquarters were moved to Mülheim and the name was changed to *Berggorilla & Regenwald Direkthilfe* (Mountain Gorilla and Rainforest Direct Aid). The change in name was necessary because of the international scope of the society's

work: "Patenschaft" does not translate easily into English or French. Apart from that, the name is intended to indicate that gorilla conservation is impossible without the conservation of the gorillas' habitat and that the society wants to help directly without the handicap of a large administrative apparatus.

Rolf Brunner

Electronic Gorilla Journal

You can download the latest *Gorilla Journal* in PDF format from our website (www.berggorilla.de) – in English, French and German. Just click on "Gorilla Journal" in the upper menu. If you prefer to download the journal from the internet instead of receiving a printed copy, please inform us at angela.meder@t-online.de. We will notify you by email as soon as the journal is available on our website. You will then be able to read it before it is printed.



BERGGORILLA & REGENWALD DIREKTHILFE

Finances

Income in 2003

Subscriptions	13,886.63
Donations	30,441.48
Refund from travel	921.61
Refund from meeting	544.00
Sales	898.66
Total	Euro 46,692.38

Expenditure in 2003

Administration	990.74
<i>Gorilla Journal</i>	6,115.08
Subscriptions	220.11
Items for sale	913.29
Postage	1,853.78
Pay/top-ups	1,900.00
Office supplies Uganda	120.00
Kisoro Office Rent	733.00

Kahuzi-Biega Nat. Park

Equipment	4,571.37
Public awareness	1,112.99

Lwiro orphanage

Food and nursing	340.00
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Virunga National Park

Dialogue committees	4,076.45
Travel expenses CADAK	25.00

Sarambwe

Bicycles	198.00
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UGADEC

Ranger equipment	5,627.01
Radio equipment	5,504.70

International cooperation

Virunga gorilla census	2,726.07
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Mgahinga Gorilla Nat. Park

Radio equipment	1,945.00
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We are very grateful to Nouvelles Approches for the translation of the Gorilla Journal to French again!

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

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

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 http://www.nouvellesapproches.org
 N° identification nationale:
 10281/97



Bwindi Impen. Nat. Park

Ranger outpost renov.	3,000.00
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Project Management

Equipment for storage	2,409.90
Travel expenses	1,583.42
Expenses	1,745.00
Repairs of vehicle	532.03
Total	Euro 48,354.77

We thank everybody who supported us from November 2003 to April 2004. Major contributions and donations were received from Horst Engel, Marianne Famula, Stefan Faust, Peter

Günther, Peter Haug, *Hundeleben* GmbH, Hartmann Knorr, Reinhold Kunstle, Dr. Lore Marholdt, Dr. Kurt Niemeyer, Brunhilde Präckel, Alexandra Ruoff, Holger Schickor, Peter Schmitz, Silke Schröder, Ralf Stein, Dr. Juliana Stroebele-Gregor, Anke Volpe, Sylvia Wahner, Karl-Otto Weber, Bärbel Winkler and Elisabeth Zaruba. We are very grateful for the help of these persons and of all the other supporters whom we could not name here!

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Kurt Niedermeier

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If you become a member, you will receive the journal regularly. If you want to receive the printed journal without becoming a member, we would be grateful if you could make a donation to cover our costs. The costs to send the journal overseas are about US\$ 20.

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