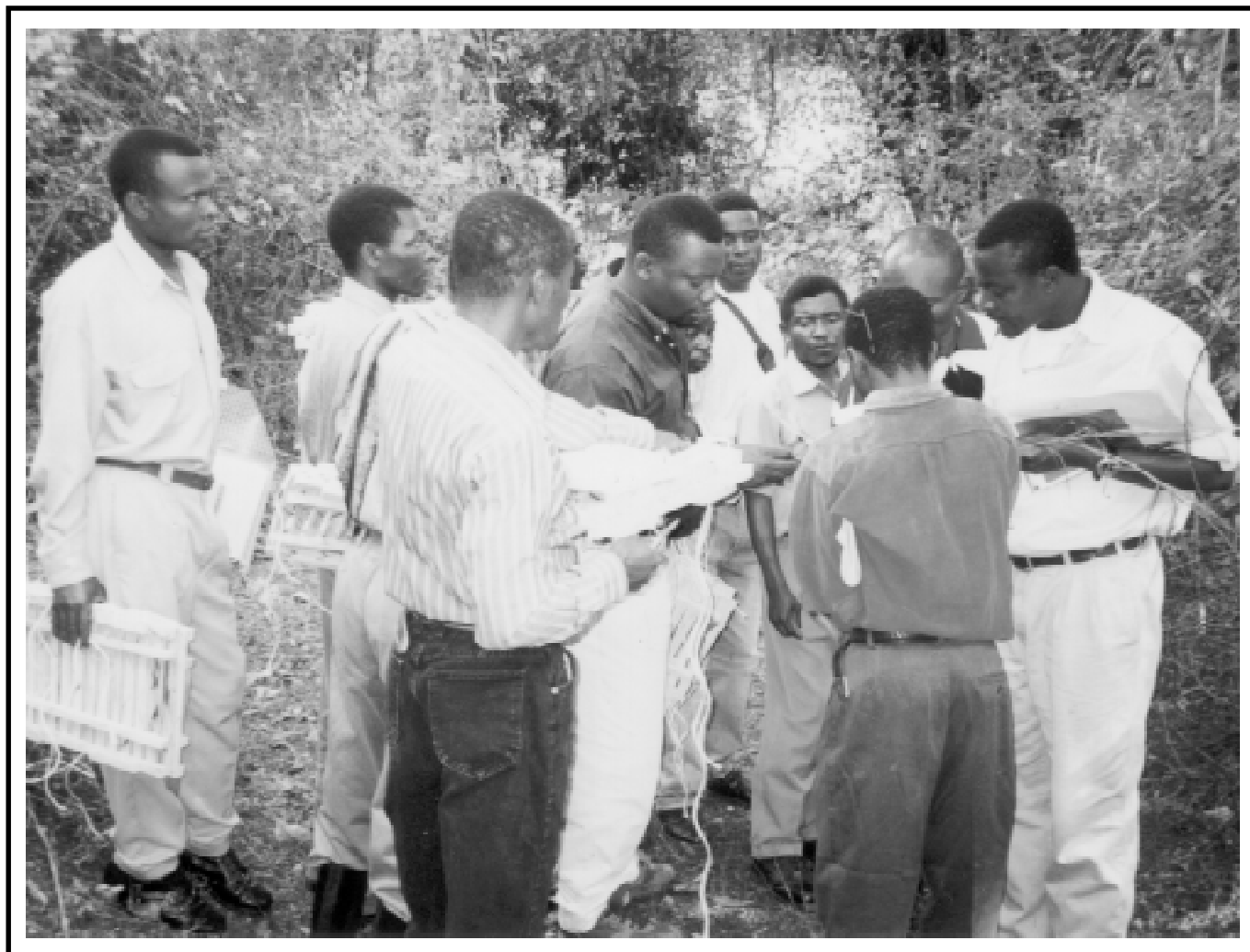


Gorilla Journal

Journal of Berggorilla & Regenwald Direkthilfe

No. 23, December 2001



Training in Species Identification for Kahuzi Guides

Continuing Exploitation of Congo's Resources

Activities against the Bushmeat Trade

Bushmeat Trade and Primate Conservation around Cross River Park



BERGGORILLA & REGENWALD DIREKTHILFE

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Photo: A. Kanyunyi Basabose

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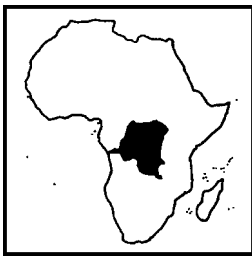
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Another Mountain Gorilla Killed in the Virungas

During June and July 2001, there was an increase in fighting between the military of the rebel forces in the Democratic Republic of Congo, Rwanda and Uganda with militia groups in eastern Congo. Much of the fighting took place in the forested Virunga Volcanoes. Rugendo, the dominant silverback male of one of the gorilla groups on the Congolese side of the border, was shot dead during clashes between the military and Interahamwe militia groups on July 15, 2001. He died only about 40 m from the park boundary.

Rugendo had been habituated since 1986 and was visited by hundreds of tourists. His body was taken to Rumangabo, the park headquarters, for examination. His remains will be buried there, with those of the other gorillas killed during the war. His son, Sekwekwe, who is also a silverback, has taken over leadership.

From a press release by the African Wildlife Foundation



A delegation from the southern part of the Parc National des Virunga receives ranger equipment from our storage. From left to right: Kambale (ranger), Nkakasi (monitoring and research), Garafura (secretary) and Muhindo Mesi (Conservateur Mikenno Sector).

Photo: W. Mugisha

Training in Species Identification for Kahuzi Guides

The rangers protecting a national park should be the ones who know most about the park's fauna and flora. Unfortunately, this is not always the case. The Kahuzi-Biega National Park is a case in point. Until recently, the training of tourist guides focussed on the gorillas, the greatest attraction of the park. However, tourism should be developed further, as soon as visits can be resumed, to include the entire fauna and flora. A good knowledge of animal and plant species is also required for the exact documentation of observations during patrols.

To address this, Augustin Kanyunyi Basabose proposed to train park staff in ecology and species recognition. Together with other experts he founded the *Kahuzi Biodiversity Training Group*. Within the framework of this project, a group of 3 lecturers representing various disciplines conducted a seminar for 12 park staff members in June. The course lasted 21 days in total and was partly funded by *Berggorilla & Regenwald Direkthilfe*.

In the first phase, participants learned the basics of taxonomy, biogeography, rain forest ecology and animal and plant morphology. In the second phase, the experts conducted modules on their specific areas of expertise: the ecology of the Kahuzi-Biega forest, plants and mammals. Endangered and endemic species were introduced in particular detail. Some of the sessions took place inside a training building; some were conducted in the field, where participants practised their newly acquired knowledge. For example, in one exercise they collected plants to identify them later in the botanical laboratory of the CRSN (Centre de Recherche en Sciences Naturelles) Lwiro.



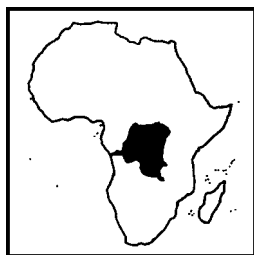
During the theoretical part of the training

The lecturers developed detailed and richly illustrated training materials for this course. Augustin Kanyunyi Basabose included the materials, together with documentation on the training course, in a report. The course contents themselves are presented on over 108 pages (in French). This seminar will not be the last. To date, the focus has been on plants and mammals; future courses of the *Kahuzi Biodiversity Training Group* will cover other interesting topics. Finally, the documentation is to be revised in such a way that other national parks will be able to use it for similar training courses.

News from the Kahuzi-Biega National Park

The exploitation of the coltan reserves in the Kahuzi-Biega National Park is a serious threat to the biodiversity of this protected area. In the beginning of 2001, the price for coltan had reached US\$ 100 per kilogram. At that time, approximately 15,000 people were inside the park and 69 quarries were operating. In June, the price for coltan started falling drastically. Currently, prices are between US\$ 1 and 10, depending on how much tantalum the ore contains.

It is not known whether this dramatic drop in price has had an impact on the situation in the lower part of the



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park. Two mines were closed, the level of air traffic in the region has declined and the number of foreigners in the area has decreased. However, the local population and the armed groups who settled in the park during the coltan boom are still there. Of course, they are now looking for alternative ways of making a living. The mining of gold has recently intensified in the region, seemingly as a substitute for coltan. The park is at risk from extensive cultivation of agricultural areas inside the park, deforestation of and fishing methods that permanently damage lakes and rivers.

It is rumoured that several gorilla babies, chimpanzees and parrots are in the possession of private individuals in Bukavu. It should be mentioned that elephant meat is no longer available anywhere, but this may merely be an indication that the elephants of the lower part of the park have met the same cruel fate as the elephants of the mountainous part (the latter were all massacred between 1997 and 1999).

The people who are currently inside the park know that they will be driven out sooner or later, so everyone is trying to take anything of value with them – and as much of it as possible. They are currently building up stocks of forest products in order to continue selling them after they have been driven out. This massive exploitation of the natural resources is currently the biggest threat to the fauna and flora of the Kahuzi-Biega National Park. It is urgent that the people who live in the area of the park be resettled, and assisted in developing livelihoods that do not rely upon exploitation of the park's resources.

The good news is that the illegal contracts on land utilisation in the area of the Kahuzi-Biega corridor, which were given to 12 farmers, were annulled. This finally affirmed the correct legal position of the ICCN (*Institut*

Two Gorillas Born – more than 7000 Killed

Two gorilla babies were born in the mountainous part of the Kahuzi-Biega National Park. The number of the gorillas living there is estimated to be around 130. The two habituated gorilla families of Mugaruka and Mishebere together include 52 animals.

However, the two newborn gorillas are a minimal increase compared to the tragic loss of so many individuals during the last few years. It is estimated that of the 8,000 gorillas who lived in the park some years ago only about 1,000 will survive the war. We should do our best to ensure their survival.

Congolais pour la Conservation de la Nature). In August/September 2000, the South Kivu governor's office deployed a mission to determine the park borders, in order to put an end to a conflict between the park and farmers who had settled illegally inside the park. After the mission had finished its work, it came under attack. Nine people were killed and one person is still missing. Subsequently, their reference marks were found on the ground. From these data, the exact position of the farms in relation to the park could be determined. The responsible authority informed the farmers concerned that their contracts were annulled, although one problem still remains: 4 farmers have already received their registration papers. The Bukavu Court of Justice is due to conduct a hearing in which the annulment of these papers is to be undertaken, but the court has not made any statement on this case for a year.

Valery Kasereka Bishikwabo

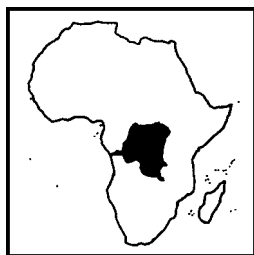
Continuing Exploitation of Congo's Resources

In November 2001, the UN published an addendum to the April report of the UN panel of experts on the illegal exploitation of natural resources and other forms of wealth in the Democratic Republic of Congo. The panel "confirmed a pattern of continued exploitation carried out by numerous state and non-state actors, including rebel forces and armed groups, conducted behind various facades in order to conceal the true nature of the activities". Although the effect of the earlier panel's report and the withdrawal of Ugandan troops gave the impression that the exploitation activities had been reduced, the facts on the ground show that they are, in fact, continuing.

Uganda and Rwanda have committed thousands of troops in support of the Congolese rebels fighting President Joseph Kabila. Angola, Zimbabwe, the Central African Republic and Namibia have also deployed thousands of troops to fight alongside the government to counter the rebel advance. It was interesting to note that troops were deployed or stationed where there were rich natural resources. The UN panel concluded that the troops were used as a tool by governments to grab as much as they could of the natural resources of the Democratic Republic of Congo.

According to the report, a wide array of interests has ensured that the war remains a self-financing and self-sustaining affair. While parties to the 3-year conflict in the country may have been originally motivated by security concerns, they have remained in Congo largely for economic gain.

The Congolese people are not among the beneficiaries of this activity; the panel states that the exploitation of human resources by all parties to the conflict has resulted in "flagrant and systematic violations of the funda-



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mental rights of the Congolese people", the panel reported.

The 38-page report can be downloaded at <http://www.un.org/Docs/sc/letters/2001/1072e.pdf>

The fall in coltan prices is forcing rebels in eastern Congo to seek alternative means of revenue, according to a report by *Refugee International*. Profits from the exploitation of coltan have been a major source of income for the Rwandan-backed *Rassemblement congolais pour la démocratie* (RCD) rebel movement that controls much of the region.

Although the price of coltan has dropped dramatically, many people in eastern Congo are still working in coltan mines. For them, it is still more profitable to sell coltan than beans or other crops from their fields. Others, however, have lost their job, and often

they see no other alternative for surviving than to exploit other resources (e.g. wildlife) or to join rebel groups.

Socio-economic Study around Kyavirimu

Kyavirimu (also called Tshiaberimu) is a protected area located within the Parc National des Virunga. Apart from various plant and animal species, the most popular attraction of the mountain is the gorillas. The word Kyavirimu, in the local language Nande, means "mountain of spirits".

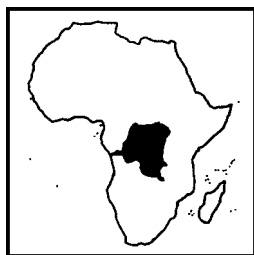
All the educated people of North Kivu, especially those of the area around Beni and Lubero, are worried about the cruel and systematic destruction of the ecosystems of Kyavirimu and the Parc National des

Virunga. There have been some attempts to intervene, but the two wars in the eastern Democratic Republic of Congo (1996 and 1998) made the situation more difficult. The wish to save and protect the ecosystems of Kyavirimu led a group of nature lovers to make investigations in the surroundings of Kyavirimu. They wanted to find an answer to the question: Why is Kyavirimu still being destroyed despite national and international interventions, and how can its ecosystems be saved?

In 2000, we carried out the inquiry in Kyondo, Kyavinyonge, Magheria and Masereka as well as small villages that contribute to the pressure on Kyavirimu. The large settlements exert direct pressure on the protected area. We visited these places within a period of 30 days. Our visits were very

Details about the villages

	Kyondo	Kyavinyonge	Magheria	Masereka
Distance from Kyavirimu	16 km	19 km	8 km	7 km
Population	17,000	22,000	13,000	13,000
Comments	The population lives from agriculture; city with electricity and acceptable living conditions; traffic junction	Lies on Lake Edward, the population lives from fishery; border crossing point to Uganda	Agricultural people; many local initiatives	Agricultural people who respect the authority of their chief; many local initiatives
Institutions, services	6 primary schools 5 second. schools 1 inst. for higher educ. 1 general hospital 12 pharmacies 3 dispensaries 36 shops, 1 market 6 theatres	2 primary schools 2 second. schools 1 health centre 10 pharmacies 3 health posts 1 market 2 theatres	4 primary schools 2 second. schools 5 pharmacies 1 health centre 1 market 1 theatre 10 shops	4 primary schools 3 second. schools 5 pharmacies 1 health centre 1 dispensary 1 multi-functional hall
Use of Kyavirimu	firewood; boards for houses; bushmeat consumption; search for arable land	boards for dugout canoes; firewood and charcoal; wood for fish smoking hunting	firewood and wood for boards; search for arable land gold mining hunting	firewood and wood for boards; search for arable land gold mining hunting



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delicate because of the security situation and the economic difficulties. We did not cause suspicion because we knew the area very well and the population was sympathetic.

In general, about 75% of the population are Catholic, 20% Protestants and 5% others, e.g. Islamic. They all believe in the spirits of Kyavirimu. All the settlements list the following as their most important problems: not enough fertile land; no means of mass communication; no drinking water.

As we wanted to obtain the opinion of the whole society, we interviewed people from all the different groups within the population: members of religious groups, intellectuals, traditional chiefs, people active in development, administrators. The questions we posed were:

1. How many gorillas and plant species exist on Mount Kyavirimu?

Replies: Many; difficult to tell; there is high-quality wood for boards; there are wild animals that can be hunted in times of malnutrition; many medicinal plants.

2. What are you looking for on Kyavirimu?

Replies: Fields that are still fertile; gold; we visit our ancestors; meat.

3. Are there any settlers on Kyavirimu?

Replies: Of course; you know the meaning of the word Kyavirimu; many people that have to hide; that is the secret of our ancestors.

4. Why do you destroy Kyavirimu?

Replies: Because we are kept forcefully from communicating with our ancestors; we go and get back the land/fields that were confiscated long ago; we cannot suffer from protein deficiency if wild animals are close; we are poor but gold is close on Kyavirimu; we are looking for high-quality wood for boards; we do not have enough firewood, boards and charcoal – near a forest that has no importance.

5. How does Kyavirimu benefit or how did it benefit you since it was incorporated into the park?

Replies: Nothing; always political harassment; a little money for crops from our fields; you see our poverty for yourself; we are angry and stressed since our children were killed and buried on the mountain because they were mining for gold, and we want revenge and compensation; nothing, because our ancestors are angry since we do not visit them freely any more.

Others replied: If we want to visit our ancestors, do we have to ask for permission? We do not always consult the official chiefs but the traditional chiefs.

There are moderate people as well as very radical ones. Their answers make us understand their frustration and anger regarding the political management of Kyavirimu. There is a gap between conservation policies and cultural values regarding the conservation of Kyavirimu. From these findings, we conclude that Kyavirimu is threatened from within and without.

Activities that threaten Kyavirimu within the protected area:

- Gold mining,
- Hunting of small animals and snares for small animals,
- Tree felling (production of charcoal and boards),
- Agriculture (search for fertile fields),
- Make offerings to the ancestors.

Threatening activities outside of the park:

- Selling and buying gold,
- commercial production of boards, charcoal and firewood,
- Trade in wild animals.

It is not only the large settlements in the surroundings of Kyavirimu that destroy the ecosystem, but also those farther away (e.g. Butembo with about 250,000 inhabitants, Beni with about 180,000 inhabitants and Lubero with about 21,000 inhabitants).

What Can Be Done?

Some associations and local organisations in Kyondo, Kyavinyonge, Mageria and Masereka know about the danger that threatens Kyavirimu. They are trying to mobilize people and increase the public awareness among the active members of development organisations working close to Kyavirimu. 13 of them are part of a network of these associations and development organisations called CADAK (*Coordination de Activités de Développement Autour de Kyavirimu*). Their aims are:

- Include all these organisations in a conservation program to support sustainable development around Kyavirimu,
- Public awareness campaigns to stop the destruction of the World Heritage site, since the population is already aware of its importance for local cultural values,
- Support the member organisations in realizing their aims.

CADAK's priority activities are:

- Intensive conservation awareness of important local people,
- A planning seminar,
- Planning for each association,
- Global planning for all the organisations,
- An assessment of all the associations and organisations.

It is important to very actively include the population in the surrounding area in conservation politics and the protection of the ecosystems. But it is also important that researchers explain their findings to the population. They hardly know anything about Kyavirimu's resources, plants or animals.

Therefore, public awareness campaigns are extremely important. For this purpose, all the partners and people working for development need to cooperate and share their experiences.

Paluku Vasangavolo Pavasa



BERGGORILLA & REGENWALD DIREKTHILFE

This Is What We Have Done – Thanks to Your Support!

- In our Kisoro store we keep equipment for rangers which is distributed to national parks as required.
- The population profits from this activity as well: some of the clothes are produced by a local co-operative.
- We regularly support the conservation magazine *Le Gorille* which is distributed around the Kahuzi-Biega National Park.
- Scientists and conservationists from African countries are supported, e.g. with technical equipment for their work.
- In addition, we fund important and urgent individual projects, such as the continuing education of rangers, awareness campaigns for the population and the reconstruction of destroyed buildings.

All of this has proven very successful and will continue. But this is not enough. A lot has changed over the last few years – and today our support is needed more than ever!

Victims of War

Over the last few years, millions of people have died in the Great Lakes region because of the war and its consequences. Countless others have lost their means of existence. According to a FAO report on world hunger, the number of malnourished people in the Democratic Republic of Congo has increased between 1990–1992 and 1997–1999 by almost 30%. The situation has deteriorated further since then. In order to survive, people have to raid the natural resources.

If the gorillas and their habitat are to be conserved for the future, we will have to support the people even more. In addition to hunger, lack of education is a great problem. Only people who know the significance of an intact natural habitat will treat it with respect.

The magazine *Le Gorille* is distributed for free. It informs the population living close to the Kahuzi-Biega National Park about the park and its conservation. We will fund the next edition.



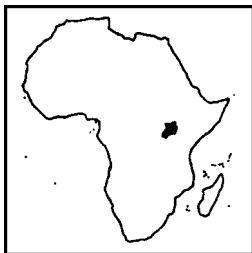
The future of Africa's gorillas, its nature and its people has to be secured! Please help us to achieve this goal!



Complete chaos now reigns in the regions ravaged by wars. The structures of society have been destroyed and aid organisations have given up their projects. Children are no longer able to go to school. But they are the ones who have to protect their natural heritage in the future!

Therefore, we want to support schools in the Great Lakes region. However, we cannot do this on our own: we are lacking both funds and experience. We are, therefore, looking for donors and experts who are experienced in this form of humanitarian aid.

Please send your donation to:
Rolf Brunner
Berggorilla & Regenwald Direkthilfe
Lerchenstr. 5
45473 Muelheim, Germany



UGANDA

Trip to Uganda

In July 2001, Juliana Ströbele-Gregor and I travelled to Uganda in order to meet representatives of the Ugandan government and partner organisations. I submitted a Memorandum of Understanding, a written document of official cooperation, to Robbie Robinson, the Director of the *Uganda Wildlife Authority* (UWA). Since the beginning of 2001, Ugandan authorities have increasingly required the submission of such a document from organisations active in Uganda. The bureaucratic procedures required for support to reach the projects remain a critical point in the Memorandum. One important issue is that custom duties are currently payable on equipment imported into the country. Other organisations have the same problem. Unfortunately, we have not yet received any information that would indicate that these duties will be waived in future. Another issue is that the Memorandum of Understanding guarantees the provision of a certain number

of rubber boots per year for both gorilla national parks.

In discussions with GTZ (German Technical Aid) representatives, we learned that funds from German authorities for direct nature conservation measures will be steadily decreased. The *World Bank* has also reduced its commitments, so that the UWA now depends on support from conservation organisations. GTZ representative Klaus Schmitt told us about the bio-monitoring project MIST (page 9).

We also met with Samson Werikhe of the *Wildlife Clubs of Uganda*, who are active in environmental education, and with Helga Rainer from the IGCP (*International Gorilla Conservation Programme*). IGCP is in the process of trying to attract funds to buy land adjacent to the Bwindi Impenetrable National Park. This land in the immediate vicinity of the Nkuringo gorilla group's range is currently cultivated. We visited the area. Crops are frequently raided by at least some of the group's 19 members. Crop-raiding gorillas are driven back into the forest by

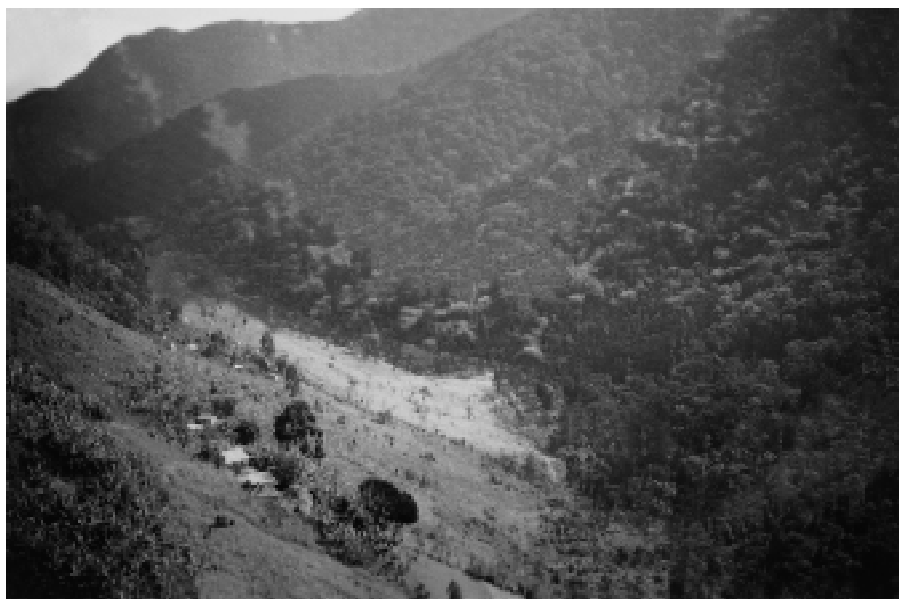


The ranger Silver (in the middle), responsible for the Nkuringo group, receives equipment from our storage. Photo: W. Mugisha

people trained specifically for this purpose. However, as this is an uphill struggle, it has been decided to create a buffer zone by purchasing additional land. Eight rangers are responsible for the Nkuringo group. After our visit, we donated 8 backpacks, raincoats and sweaters to those rangers. All 80 rangers of Bwindi Impenetrable National Park received sweaters produced in a cooperative in Kisoro.

Unfortunately, we had bad luck when we tried to visit the gorilla group in Mgahinga Gorilla National Park. On one occasion, they had migrated over the border into the Congo shortly before our arrival and on the other occasion, no stand-by permits were available. However, the behaviour of the rangers and the accompanying soldiers was correct and pleasant. We consider it an appropriate development that the national park's office has been moved from Kisoro directly to the border of the park.

During a short visit to Rwanda we visited the Sabinyo group. Because of the security situation, there were only a few tourists on the visitor lists. Many



Habitat of the Nkuringo gorilla group in Bwindi. The gorillas and other animals frequently leave the park to raid fields. Photo: Iris Weiche



UGANDA



Iris Weiche and William Mugisha in front of the Virunga Volcanoes
Photo: Juliana Ströbele-Gregor

soldiers and rangers accompanied us (a total of 3 tourists), but they kept back when we encountered the group. Here, too, regulations were strictly observed. We were very happy to be the first tourists to see a newborn that was only 3 days old. The group, which consisted of 12 members, including 2 silverbacks, was very relaxed. After a while, the young mother came into the open, laid down on her back and afforded a good view of the baby clinging to her stomach.

I also had a meeting with Claude Sikubwabo who suggested a cooperation in the new IUCN *Peace Park Project*. We told him that the *Berggorilla & Regenwald Direkthilfe* would provide 4 bicycles for the rangers of the Sarambwe area. They have since been

handed over by our assistant William Mugisha. We will also provide more equipment for the rangers in the southern part of the Virunga National Park (Mikeno Sector), Congo. Already, 14 raincoats and 41 sweaters have been handed over from our store. Additional equipment will arrive soon from Germany.

I had a conversation with a representative of the Tayna Gorilla Reserve, Mr. Likanga, on the progress of the ecological survey conducted there from July to September. Forty people helped to survey mainly large mammals (such as gorillas, chimpanzees, elephants and okapis). The project had started as an initiative of the surrounding communities and is therefore widely accepted by the approximately 1,000 people living around the reserve. The initiative seems to be going well and we will continue to follow its progress with great interest. I handed over US\$ 100 to Mr. Likanga as a contribution to the boundary demarcation. In addition, the staff received 10 raincoats, 10 sweaters, t-shirts, one tent and other pieces of equipment.

We visited St. Gertrud's School in Kisoro and talked about possibilities for cooperation there. Environmental education is an important way to in-



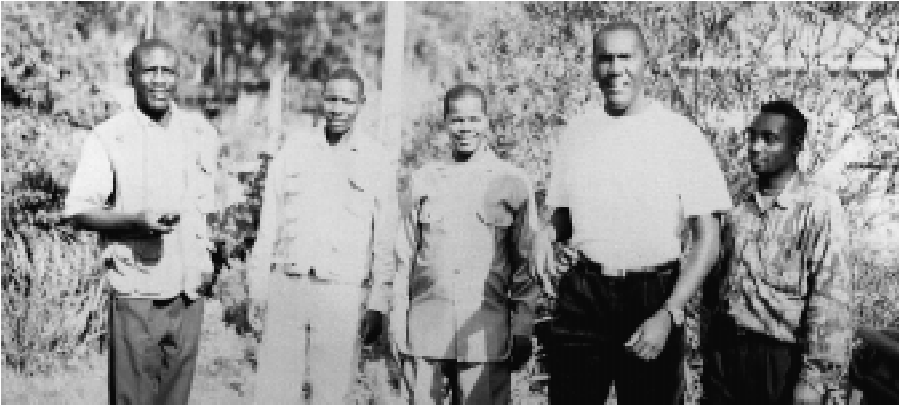
Rangers after paramilitary training in Buhoma Photo: William Mugisha

crease the acceptance and support of protective measures in communities bordering the park. We would like to start up German–African class or school partnerships in our project areas. Mother Superior Petronella explained that she would like to plant a hedge around the school plot with the help of the science teacher and our assistant. Bee-keeping is also planned and possibly the construction of a garden for medicinal plants. These measures can demonstrate ecological relationships and the benefits of conserving nature to young people.

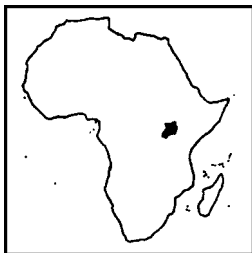
Iris Weiche

A System to Support Monitoring of Gorillas and Illegal Activities

MIST is a spatial Management Information System which has been undergoing development since 1997 by the *Uganda Wildlife Authority (UWA)* as part of a GTZ project – *Advisory Services to the UWA*. It has been designed to provide managers and planners at all levels with up-to-date information for planning, decision-making and evaluation. The intended users of MIST have been involved in the design of the information system from the start and their information needs have determined what data are collected, the methods of analysis and the types of output.



During the meeting with Claude Sikubwabo Kiyengo (middle): Chris Oryema, Mgahinga Gorilla National Park (left), and William Mugisha (second from right).
Photo: Iris Weiche



UGANDA

MIST has been developed as a user-friendly client/server application which is easy to maintain and update, thus contributing to sustainability. It provides information generated by the processing of data and also by giving access to files which are kept in a central archive on the UWA server. The program can be completely controlled by clicking on map items, page tabs, list entries and buttons of the MIST query wizards. All users have easy access to the central database from their workspace through a local area network (LAN) or through data transfer by e-mail or disks to the database on their computer.

Data Collection by Rangers and their Use for Monitoring

In UWA ranger patrols are used to collect monitoring data because at present UWA has neither the manpower nor the finances to carry out scientific monitoring programs by dedicated staff.

Data sheets, based on the information needs of managers and planners and standardized for use throughout the country, have been developed with support from the GTZ project. They include data sheets for ranger law-enforcement patrols for recording observations on key wildlife species and illegal activities. The data sheet for monitoring gorilla groups developed by IGCP for use in Rwanda, Congo and Uganda has also been included in MIST. The only modification is that UWA uses Global Positioning Systems (GPS) for geo-referencing of all data collected by rangers.

Data collection by rangers can be either systematic or opportunistic. Systematic data collection includes gorilla group monitoring and monitoring of the numbers of indicator species such as the fish eagle along waterways. Opportunistic data collection is carried out during law-enforcement patrols by rangers, who take GPS

readings for each observation (wildlife and illegal activities), but at least every 30 minutes. This enables not only the production of accurate distribution and home range maps, but also the calculation of the distance covered by each patrol with reasonable accuracy, which in turn enables the calculation of distance-related indices. Indices provide measures of relative density and can be used in comparisons for monitoring without the need for expensive baseline data. Examples for distance-related indices are snares collected per kilometre patrolled and costs per kilometre patrolled.

Planned Activities

The data entry is not only time consuming but also a source of mistakes. Most data entry in MIST is therefore done by selecting items from look-up tables which are stored on the central server. For geographic coordinates the project is in the process of replacing data entry with data download from the GPS. Thus, wardens will be able



Rangers testing MIST in the Murchison Falls National Park

to download the waypoints (i.e. date, time and coordinates) from the GPS directly into the MIST data entry screens for gorilla monitoring and data collected by law-enforcement patrols.

A stand-alone PC version of MIST has been developed for use in the protected areas. These will get access to MIST through direct dial-in to the server at UWA Headquarters using either the mobile telephone network or the land-line telephone. Data import/export will be handled by MIST



The border between Uganda and Rwanda – Mgahinga Gorilla National Park and Parc National des Volcans – on the Virungas

Photo: Juliana Ströbele-Gregor



UGANDA

and data transfer will be done by e-mail. The existing network will soon be extended to include Bwindi and Mgahinga National Parks.

Rwanda and the Democratic Republic of Congo are using the same system for the monitoring of gorilla groups and a similar system for data collection by ranger patrols. Efforts are currently under way to agree on data exchange and ownership between the three countries. If all managers of the gorilla parks of the Virunga Volcanoes had access to data from the three countries, they could make informed decisions based on up-to-date information on gorilla movements across international borders and cross-border patterns of illegal activities.

Here MIST could play an important role in giving all managers fast and easy access to up-to-date regional data through data transfer via e-mail. Easy data import/export is possible by means of a custom-made application program which will provide the required outputs at the click of a button without being dependent on a computer expert.

Klaus Schmitt

The Life of Reuben Rwanzagire

Roveri (Reuben) Rwanzagire was a Forest Guide in Uganda and in the late 1950s and early 1960s served as tracker and advisor to many who visited the mountain gorillas on slopes of Mgahinga in the Virunga Volcanoes. His contribution to a better understanding of mountain gorillas and to what would now be termed "gorilla tourism" was detailed and recorded by Walter Baumgärtel, proprietor of the Travellers' Rest, a small hotel in Kisoro, South West Uganda, in his books *Up Among the Mountain Gorillas* (1976) and *Unter Gorillas* (1977).

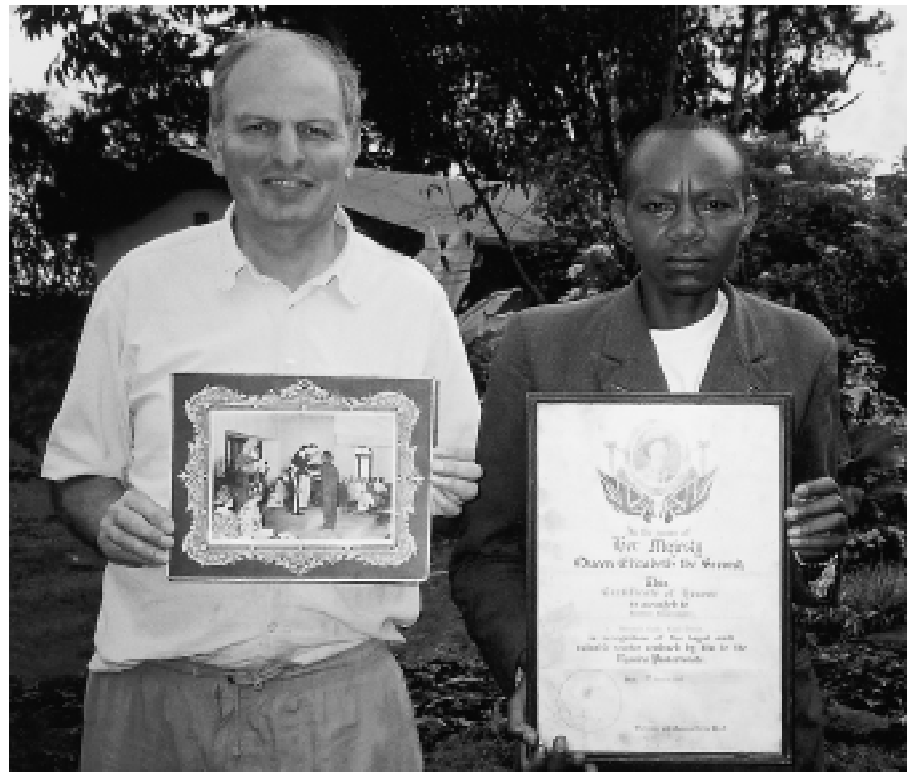
Walter Baumgärtel died in Europe in November 1997. His life and work were described in an extensive Obituary and Tribute to him by P. V. Tobias and H. S. R. Glaser (*South African Journal of Science* 95, March 1999).

The fate of Reuben Rwanzagire remained uncertain until late in 2000 when, following our enquiries, a friend from Kisoro reported that he was no longer alive. We had always hoped to meet Reuben as part of our study on the history of mountain gorilla research. Notwithstanding this disappointment, we made a trip to Kisoro in April 2001 and stayed at the Travellers' Rest. The hotel has recently been attractively renovated as part of a joint project between the Diocese of Kisoro and the Austrian Government. With the assistance of local contacts, we located Reuben's home where his family still lives. We met his widow

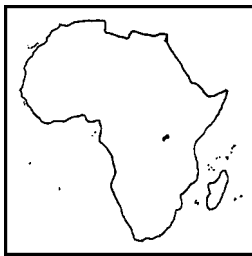
and were shown the spot near his house where he is buried; his grave is marked simply by lava boulders. The next day Reuben's son came, bringing with him a photograph and a certificate. The photo depicted the presentation to Reuben of a Certificate of Honour "in recognition of the loyal and valuable service rendered by him to the Uganda Protectorate". The award was made in 1962 by the last Governor of Uganda, Sir Andrew Cohen on behalf of Queen Elizabeth, and depicts Reuben, in a suit, surrounded by British and Ugandan dignitaries.

This was a moving and memorable visit to Kisoro and we felt pleased that we had been able to honour a man who played a key role in the study of mountain gorillas. It is, we feel, important that those early pioneers, particularly Africans, are not forgotten.

John and Margaret Cooper



Reuben Rwanzagire's son with John Cooper, displaying his certificate



RWANDA

Beetsme Is Dead

In June 2001, the body of the male mountain gorilla Beetsme was discovered by Karisoke field staff. The former leader of a group of 25 gorillas had been missing from his group for several days. As his body showed no obvious signs of injury or illness, it is presumed that he died of natural causes.

Beetsme was first observed by Dian Fossey in 1975, when he was about 10 years old. He joined an established gorilla group. When Dian Fossey found out that he was a male, she was surprised, because she had never observed a blackback male to join a strange group, and exclaimed "Beats me!" – this was subsequently transformed into "Beetsme".

When he reached maturity, Beetsme became the dominant silverback of his group and fathered a number of offspring. With advancing age, however, he lost his leadership position to a younger male named Titus, who leads the group today. Beetsme had known Titus for many years and the two formed a strong bond.

Even after Titus took over, they worked together to help maintain the integrity of the group. At times, Titus was observed confronting intruding silverbacks, while Beetsme remained behind with the females, keeping them together. Today, this group includes several other young silverbacks and juvenile males.

From a press release by the Dian Fossey Gorilla Fund International

A Tribute to Mathias Mpiranya and the Trackers of Karisoke

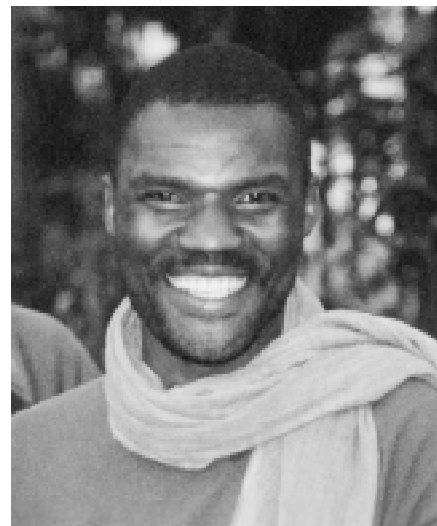
Rwanda is best known for Dian Fossey, the mountain gorillas, and for the genocide of 1994. Less well known is the hell to which the popula-

tion was subjected during 1997 and 1998 ("Rwanda: The Insurgency in the Northwest". *African Rights*, London, 1998). During that time, the Interahamwe took over the volcanoes when they were forced out of refugee camps in Zaire in 1996. They used the gorillas' forest home as a base from which to subjugate the local population. The Volcanoes National Park was closed to tourism, the government park guards and guides suspended anti-poaching and monitoring of four gorilla groups for a full 2 years, and thousands of people were killed.

The Karisoke trackers were unable to enter the park for 14 months, but used their initiative to negotiate military escorts to monitor three gorilla groups which had been studied from Karisoke for three decades. It is not only the hard work – long hours in physically strenuous high-altitude terrain and a formidable climate – which makes the attitude of these men unique. It is the extent to which they repeatedly risk their lives.

Conservation in Rwanda is not only a constant battle against poaching and other illegal activities, but for a decade there has been civil war in and around the volcanoes. The rugged terrain on the forested slopes provides a refuge where rebel groups are difficult to locate. Many gorilla trackers' homes were looted as they were known to possess raingear, rubber boots, and other equipment useful to infiltrators hiding in the forest. To try to combat the risks they were facing, in 1999 the park staff underwent a grueling period of paramilitary training to be able to protect the gorillas and themselves.

We began 2001 with optimism, announcing a 10% increase in the Virunga mountain gorilla population since 1989. Insecurity has prevented a full census, so we used knowledge of known individuals monitored by the protected area authorities in Rwanda,



Mathias Mpiranya

Photo: Liz Williamson

the Democratic Republic of Congo and Uganda, the Karisoke Research Centre and the *International Gorilla Conservation Programme* to produce a minimum count of 359 individuals. This gave us great hope that the gorillas are surviving in the face of so much adversity.

Events took a turn for the worse in late May, as the Great Lakes conflict continued to stir, and several groups of rebels entered the Virungas in an attempt to return to Rwanda. It was a great shock to learn of the killing for food of at least one silverback gorilla, shot on June 1. Eating primates is against Rwandese culture and one of the rebels was so afraid that his compatriots had be driven to such desperation, that he handed himself over to the authorities. Those captured subsequent to the killing admitted to having shot a second silverback. The gorillas were solitary males, so our only consolation is that these deaths were not disruptive to group life. (The killing of silverbacks in groups usually leads to disintegration of the groups, as was seen with Group 13 in Rwanda and more recently in the Kahuzi-Biega



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National Park). After the killing was brought to light, protection of the gorillas was greatly intensified with enormous support from the Rwandese government.

The security situation remained precarious for more than 3 months, during which time the Karisoke trackers monitored the gorillas irregularly, having received instructions not to visit gorillas when soldiers were unavailable to accompany them. On August 20, they went to work without a military escort, having been assured that the area they were entering was safe. Nine trackers were on the gorillas' trail when they were surprised by a small group of rebels. Mathias Mpiranya, always the strongest and the bravest, was in front.

As he prepared to fire, rebels shot him in the chest and he died instantly.

Born in 1962, Mathias began working for the *Mountain Gorilla Project* in 1980, and participated in gorilla habituation for the newly initiated tourism program, before he became an exceptional member of the Karisoke staff in 1991. He was strong as a horse, hard working, brave and gentle. In 1998, his wife was shot dead with their baby on her back. Mathias was left with four children to care for and remarried last year. His bereaved wife now has four dependants who are not even her own children. Mathias' loss is devastating, a terrible waste of a wonderful person. He was a source of strength and courage to us all, and we miss his calm good humor and his smile.

Mathias' death has been made harder to come to terms with by insidious insinuations that he was accidentally killed by one of his colleagues in crossfire. Mathias was one of the real heroes of conservation, the ones who rarely receive recognition. Nowhere else have I encountered such extraordinary dedication. The motivation to do their best in their jobs, their loyalty

to the mountain gorillas and the conservation ethic begun by Dian Fossey, has developed and grown over more than 30 years working as a team. With little formal education, the Karisoke staff have learnt about the biology of the montane forest and its inhabitants by assisting many students in their field research. And their enthusiasm has been fired and maintained as they have recognised the importance of the Volcanoes National Park and the vital ecological role of the montane forest to the human population living in this region. I wish to express my enormous admiration for these remarkable men, whom it has been a personal education to work with and a privilege to know, and to whom we are greatly indebted.

Liz Williamson

email: e.a.williamson@stir.ac.uk

Amendment to my article in the *Gorilla Journal* 22

I would like to apologize for a mistake I made in my article "Visit to the Mountain Gorillas in Rwanda" in the June 2001 issue of the *Gorilla Journal*. I failed to inform *Chris Whittier* about my upcoming account in the above-mentioned journal which includes an unofficial statement, and not any formal report, of our personal communication (Chris Whittier is, by the way, not an official representative of the *Mountain Gorilla Veterinary Project*, but a visiting veterinary researcher collaborating with them).

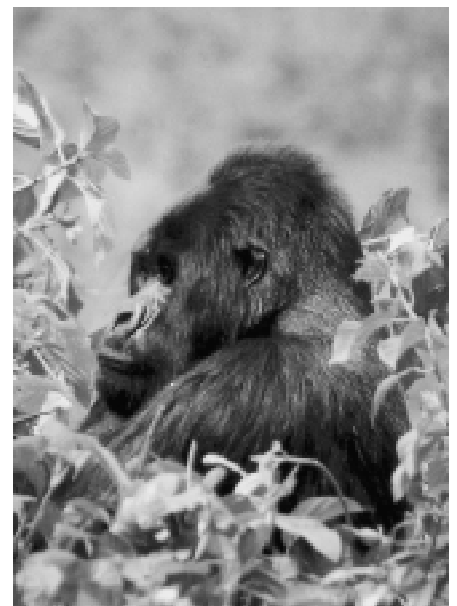
I wrote that the few soldiers and porters usually stay at a distance from the gorillas and that only the visitors and guides approach the gorillas to within a few meters. I added the commentary that this is not always enforced. I myself did not observe this exception to the rule during the two gorilla trackings in the Parc National

des Volcans. If it occurs, it is due to the security situation in the Virungas which necessitates military escorts that cause additional logistic challenges, but ensures the safety of the visitors. Thus, it is sometimes not easy to enforce all park regulations.

This is understandable, and the guides cannot be blamed. I agree with Chris Whittier (who never criticized the work of the guides during our conversation) that all parties in Rwanda are doing an admirable job of ensuring the welfare of the mountain gorillas and keeping the staff properly trained. I would like to add an excerpt of my article in the June 2000 issue of the *Gorilla Journal* which demonstrates my admiration for the work of the park personnel: "Guards and guides take their work seriously and feel responsible for the animals."

October 2, 2001

Cyril C. Grüter, Zürich (Switzerland)



Guhonda, the older silverback of the Sabinyo group. In August 2001, the younger silverback, Ryango started to fight him.

Photo: Iris Weiche



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Activities against the Bushmeat Trade

The bushmeat campaign initiated by the *European Association of Zoo and Aquaria* (EAZA) is approaching its climax. In the summer of 2001, many of the member zoos redoubled their publicity efforts. The collection of signatures for a petition addressed to political decision-makers in Europe and Africa terminated on 31 October. With more than 1.9 million signatures, it has been very successful. The exhibition "Gorillas in the Cooking Pot", which had been designed with considerable input from *Berggorilla & Regenwald Direkthilfe*, was placed on the internet (<http://www.bushmeat-kampagne.de>) by us.

This was done on the occasion of a press conference of VDZ (the Association of German Zoo Directors) in early September. Panellists included politicians and representatives of zoos and conservation organisations. Other conservation organisations such as the *Jane Goodall Institute* and the *International Fund for Animal Welfare* (IFAW) were also present. Questions were invited from the press after the panellists had made short statements.

The lobbying of politicians continued in the European Parliament in Brussels on 6–8 November. The handing over of the petition with more than 1.9 million signatures was combined



Discussion with the press and media Photo: Michael Reibenspies



On the panel: Marianne Holtkötter (Stuttgart Zoo), Ulrich Schürer (VDZ), Uschi Eid (German Federal Ministry for Economic Co-operation), Konrad Schwaiger (ACP EU Commission), Koen Brouwer (EAZA), Iris Weiche, Karl Ammann
Photo: Michael Reibenspies

with a big press conference and a public hearing. The bushmeat exhibition was shown too. Its English and French versions have also been placed on the internet by *Berggorilla & Regenwald Direkthilfe* (<http://www.bushmeat-campaign.net>). IFAW has funded the lobbying required before and during the EAZA campaign as well as the English and French versions of the exhibition on the internet. In cooperation with other organisations working to solve the bushmeat problem (e.g. UNEP), an EAZA delegation will travel to concerned African countries early in 2002 to hand over the petition.

The funds generated by renting out the German exhibition "Gorillas in the Cooking Pot" currently add up to more than DM 13,000. As agreed with other participating organisations, funds were shared between various nature conservation organisations. The *Wild Chimpanzee Foundation* (WCF) and the *Royal Zoological Society of Antwerp/Jef Dupain* received DM 2,000 each. WCF will use this money to support environmental education in its long-term project in the Taï National Park, Côte d'Ivoire. Theatre plays and a newspaper aim to help create an awareness of the problem among the human population living in the vicinity of areas with threatened chimpanzee populations.

Jef Dupain is in the process of setting up a conservation project in

Cameroon in cooperation with the local population (page 18). This area borders the Dja Wildlife Reserve and contains chimpanzees and gorillas, among other species. The money will be used for the employment of local rangers.

Roland Wolf, representative of *Rettet den Drill/Pandillus* also received DM 1,000. Mainly active in Nigeria, this organisation runs an orphanage and a breeding station for the threatened drill. Project leaders Liza Gadsby and Peter Jenkins have also been running environmental education campaigns for a long time.

In agreement with Karl Ammann and *Rettet den Regenwald* (Save the Rain Forest), DM 5,000 have been made available to fund the next issue of the magazine *Le Gorille* for the Kahuzi-Biega National Park.

Iris Weiche
There are several other initiatives in progress to try to solve the great apes bushmeat problem. In November/December a mission of the UNEP program GRASP (GReat Apes Survival Project) visited African countries to discuss action plans. Each country concerned already had already named a national focal person for GRASP.

In October, the ad-hoc committee of the IPS (International Primatological Society) discussed with UNESCO representatives the possibility of declaring the great apes as World Heritage Species. The aim is to



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appoint a Special Envoy and national ambassadors for the great apes in habitat countries. During that discussion, however, it became clear that the concept has to be developed further. Its implementation is a complex procedure and will take some time.

Bushmeat Trade and Primate Conservation around Cross River Park

Bushmeat generally refers to meat derived from wild animals (from wildlife sources), which is normally consumed in place of meat from domestic or livestock sources. The supply of bushmeat from wild sources no doubt serves as the only possible measure to bridge the gap between livestock production protein supply and human population growth. Wild animals of various sizes, both vertebrates and invertebrates, form parts of the diet of people across the globe.

In Subsaharan Africa, the proportion of wild animal meat in the total animal protein supply is exceptionally high. Thus, communities living near rain forest in Nigeria obtained as much as 84% of their total animal protein needs from bushmeat. Forest mammals account for between 20 and 90% of the total animal protein consumed in Benin Republic, Cameroon, Ghana, Cote d'Ivoire, Liberia and Nigeria. However, wild animal meat demands tended to a large extent to focus on large game species such as antelopes, large primates, large rodents, etc. The preference for bushmeat has been attributed to the higher protein content and the fact that bushmeat contains less fat than domestic animal meat and supplies iron, vitamins A and B, etc.

The traditional inclination of rural people of the Cross River National Park area towards bushmeat can be explained as a matter of attitude.

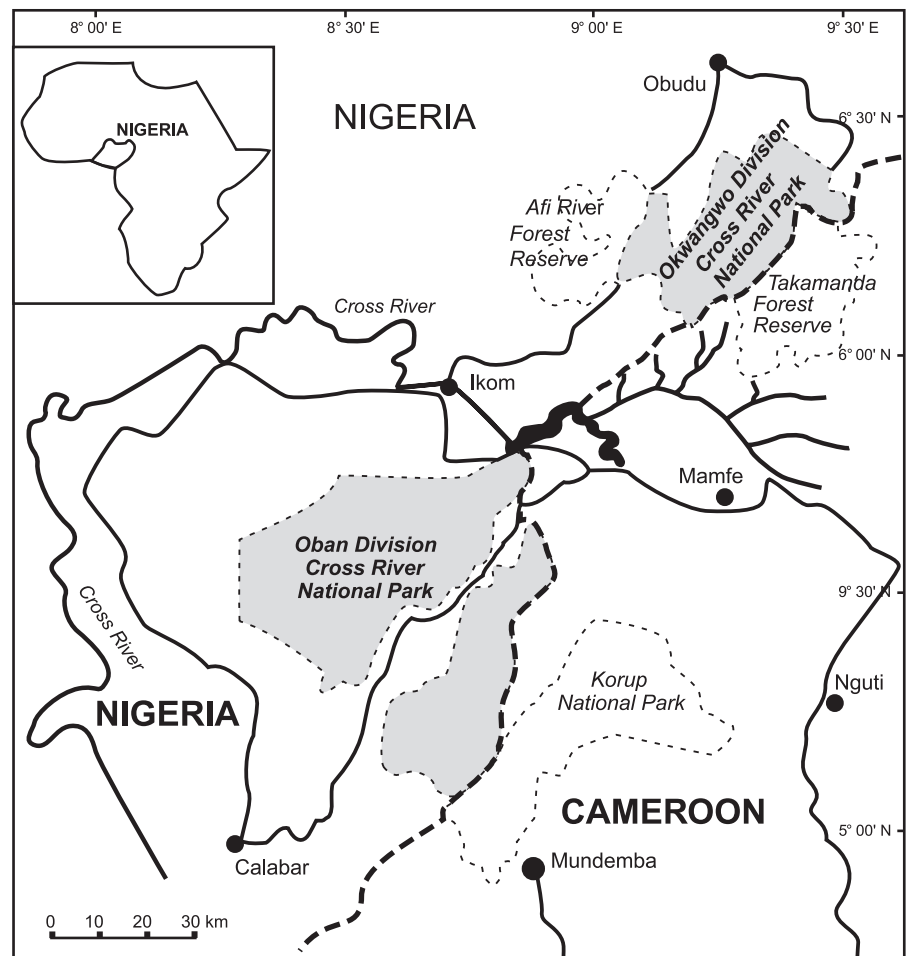
Based on years of studying and following bushmeat trends and trade around the park, this author has seen that the bushmeat phenomenon transcends current public or popular opinions about the issue. The issue (bushmeat trade and consumption) is as complex as the rain forest itself and the motivation for the trade and consumption as diverse as the species involved in the trade.

Major Bushmeat Markets

Many bushmeat markets exist in Cross River State, Nigeria, and in many other cities within adjoining

states in southern Nigeria. But the most popular markets can be found in Obanliku, Obudu, Boki, Ikom, Ugep, Biase, Akamkpa and Calabar Local Government Areas.

A majority of these markets are weekly markets, which operate on separate days of the week on a rotational basis. In each of these markets, full bushmeat sales do not go on throughout the duration of the markets. The present strategy involves the sale of bushmeat as soon as the day breaks. At this time, the buyers (mostly women) who have gathered from several locations, especially from



The Cross River National Park and adjoining reserves in Cameroon

Map: Astrid Varrasquinho; original map: Edem Eniang



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densely populated cities such as Uyo, Aba, Port Harcourt and Calabar, and the middlemen (mostly men) who have returned from several hunting sites across the state and from across the international border, engage in the brisk trade in black market style. It is the middlemen that have either direct contact with the hunters or through village collectors.

Trade Patterns

The traders restrict their sale of bushmeat to the early hours of the day before officials of the law enforcement agencies begin their day's job. Movement of bushmeat from the interior to the markets etc. is mostly carried out on weekends, especially Sundays, and also public holidays, when officials are less vigilant or are likely to be

away from their duty posts. Others go through odd routes, e.g. rivers, bush tracks and farm trails.

Beyond the recognized bushmeat markets, other avenues for trade and consumption include, but are not limited to, roadsides (especially along major highways), restaurants, drinking parlours, hotels, bushmeat bars and joints, bukerterias (these are special make-shift restaurants or eating places usually constructed of semi-permanent materials or bamboos, ramshackled in nature, where the operators serves bushmeat as major component of their trade), etc.

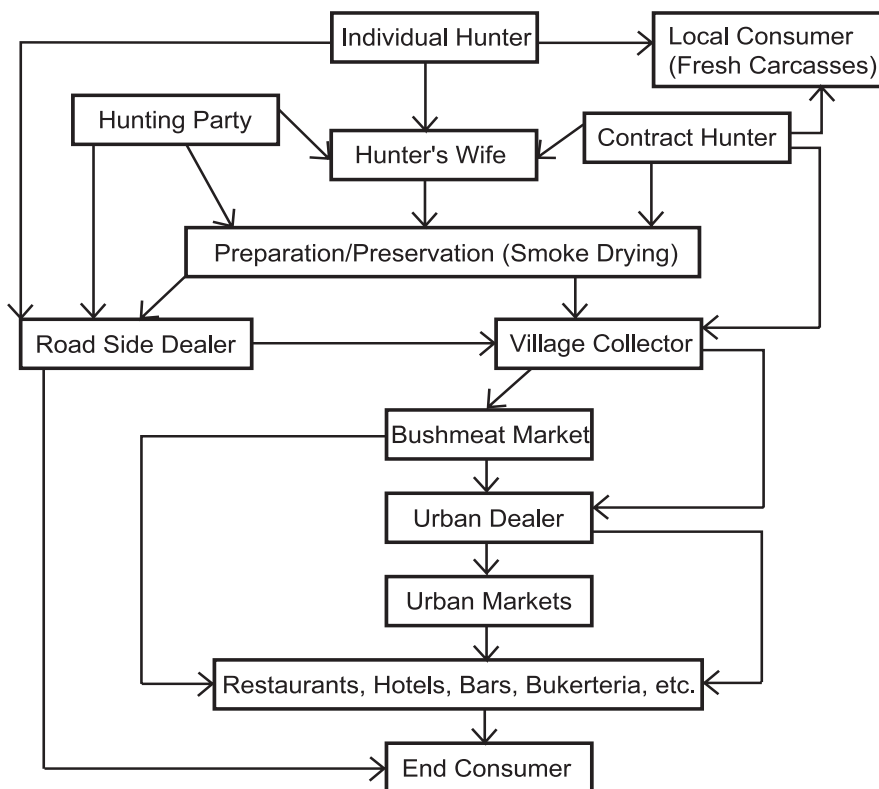
Another serious situation is the cross border trade where hunters cross over to less protected forests in Cameroon to hunt and poach animals, which are then brought into Nigeria for

sale. The sequence of trade shows clearly why it is possible to obtain various kinds of bushmeat in any town in southern Nigeria irrespective of its location or whether such animals still exist in these areas or not. Therefore, to the superficial observer, wild animals seem to be inexhaustible. This makes it difficult even for enlightened Nigerians to accept the fact that bushmeat and indeed primates are being exterminated from their native habitats.

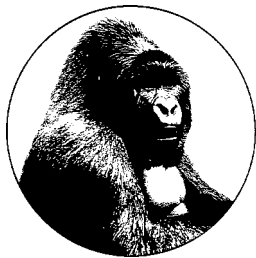
Animals Traded

Prior to the 1990s, it was possible to see almost any mammalian species of reasonable size traded in major markets. Recently, even reptiles, birds, amphibians, fishes and insects have not been left out. It is simply the fact that the word "bushmeat" refers mostly to those animals generally accepted by the largest number of people while others are just consumed as delicacies. Furthermore, recent surveys have shown that certain species are traded for reasons beyond protein supply. Therefore, some species have been traded for ritual and fetish uses, medicinal and concoctive uses, souvenirs and decorative functions as well as the pet trade (if the animals were brought alive to the market).

It has been observed that there is a traditional attachment of the general populace to meat from wild sources. This factor and the relative scarcity of bushmeat have led to higher prices of meat from wild sources than meat from domestic sources. The increased vigilance of park officials has also led to a relative scarcity of bushmeat even in known bushmeat markets. Interestingly, a few areas around the park do not actually have access to other sources of animal protein and hence depend on bushmeat, while in other areas people simply relish bushmeat in spite of available alternatives.



Bushmeat trade in the Oban Hills region



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Park Protection and Problems

Rangers as a Paramilitary Outfit.

The abrogation of Federal Military Government Decree No. 36 of 1991 and its replacement by Act No. 46 of 1999 brought about the *National Parks Service* (NPS). This development led to the NPS having a similar status to other paramilitary institutions in Nigeria, for example the Nigerian Immigration Service, Nigerian Customs Service and the Nigerian Prison Services, except that the NPS officials are not equipped with firearms (military rifles, pistols etc.). Save for the above, the rangers have received modern training in paramilitary techniques, tactics and survival strategies. This new development has led to a more efficient Ranger Force in the Cross River National Park and also their new and smart service uniforms have motivated the rangers in recent months. Furthermore, apart from the ranger equipment donated by *Berggorilla & Regenwald Direkthilfe*, the President of the *Friends of the Gorillas Inc.* of California, USA (Suzanne Kingston) donated protective boots, uniform materials, computer software and accessories as well as office stationery to assist the park in protection activities.

Persistent Problems

Poaching and Encroachment.

Rangers have made a number of arrests in connection with poaching and other illegal activities within and outside the park's core zone in both divisions. A number of illegal farming and non-timber forest product extraction activities have also been observed. There is, however, an increasing awareness of conservation laws and protected forests and animals within the park, so it is worth noting that the park has not recorded any confirmed incident of gorilla killing in the last 5 years. Also, the very fact that trade in bushmeat occurs around unholy

Primates in Bushmeat Trade in Oban Division 1999–2000

English name	Local name	Total	%
Drill	Nsimbo	1556	52.36
Chimpanzee	Idiok	35	1.18
Guenons	Ebok	1192	40.11
Mangabeys	Ikpok Ebok	183	6.15
Red Colobus	Okoyo Ebok	6	0.20
Prosimians	Angwantibo	0	0
Gorilla	Omon Idiok	0	0

Source: Eniang (2000)

hours of the day and in unusual locations is an indication of the impact of the protection activities of the park. It is a common practice these days for any stranger visiting any bushmeat joint to be told that there is no meat on sale for fear of arrest by rangers. If a known person makes the same request, he will be served his choice.

Boundary Demarcation. In some areas, the park's boundaries are not clearly marked. Some community members, especially in the park support zones, claim ignorance of the boundaries between community forests and the park as an excuse for poaching. To date more than 60 offenders have been arrested.

Inadequate Funding. The Cross River National Park – like most other



Edem Eniang examines confiscated drill body parts.

national parks in Nigeria and elsewhere in West Africa – is grossly hampered by lack of funds, so that many projects are not successfully executed without undue delays and frustrations. Hereby, it would be a welcome relief if well-meaning organisations with clear motives come to assist or sponsor some park management activities, projects as well as provision of kits, equipment, technical support and so on.

Research. There is a serious need for increased research activities in all areas of the park, and to date, research activities have not been conducted in certain important areas of the park except for few casual study visits by some visiting scientists. No long-term well-organized research has been undertaken in recent times within the park and in other national parks. Currently, the members of the *Biodiversity Preservation Group* (BPG), formally *Primates Preservation Group*, have continued to maintain a research presence in some key areas of the park in both Divisions. The members of the group have been engaged in primate surveys, notably Cross River gorilla surveys in the Okwangwo Division and the Mbe Mountains, and Preuss's red colobus monkey surveys in the Ikpan Forest Block of the Oban Division. However,



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A rare forest buffalo killed for bushmeat near the park's buffer zone

Photo: Edem Eniang

both studies, which were supported by grants from the *Wildlife Conservation Society* (WCS) and the *Margot Marsh Biodiversity Foundation* coordinated by *Conservation International* through John F. Oates, came to an end in July 2001.

Cross Border Issues. In recent months, the Cross River National Park developed a better working relationship with other conservation agencies across the international border with Cameroon. Thus, the Korup National Park in southwestern Cameroon, Takamanda Forest Reserve, and the GTZ project PROFA (*Protection of Forests around Akwaya*), also in Cameroon, are initiating collaborative management activities for the collective benefits of both natural resources and people in the short term and the earth on the long term.

Recommendations and Conclusions

Since people traditionally tend to prefer bushmeat, the Government, NGOs, schools, etc. should embark on projects educating Nigerians about wild animals and bushmeat on one hand, and conservation of biodiversity

on the other hand. The projects should also provide alternatives to bushmeat, one example is the "ONLY LIVESTOCK" project of BPG.

It is recommended that meat from livestock sources be provided in areas where people have no access to it. In addition, the domestication of adaptable wildlife species for consumption should be encouraged in areas where people have access to livestock but show preferences to animals from the wild (bushmeat). This measure would help our national parks achieve their long-term goals of biodiversity conservation.

Edem A. Eniang

Conservation of Great Apes on the Periphery of the Dja Reserve

The southern part of the Republic of Cameroon is still covered by about 200,000 km² of forest, most of which is potential habitat for the western lowland gorilla (*Gorilla gorilla gorilla*) and the central chimpanzee (*Pan troglodytes troglodytes*). Currently, less than 10% is gazetted as Reserve or National Park, whereas by 1999 the cumulative number of logging concessions since 1959 covered 76% of the total forest area. At the same time, the effect of logging activities on hunting pressure is widely accepted and the hunting pressure on fauna in general and great apes in particular in Cameroon has been well documented (Bowen Jones 1998; WSPA 2001). Hence, if no action is taken for the protection of the surviving gorilla and chimpanzee population in the non-protected areas, reserves and national parks will soon harbour island populations.

In the beginning of 2000, I was appointed by the *Royal Zoological Society of Antwerp* (RZSA) to conduct a great ape survey at two sites in the

Republic of Cameroon, situated north of the Dja Wildlife Reserve and south of the Lobeke National Park respectively. At both sites, great ape densities were estimated for an area of about 50 km². Densities were similar to the ones within the protected areas, indicating the importance of these populations for further conservation activities.

We decided to set up a long-term project on the periphery of the Dja Wildlife Reserve. The aim of the project is to enhance the protection of vulnerable great ape populations by setting up "great ape socio-ecology research sites" in collaboration with local people. This is done in collaboration with the NGO *Nature+* (P. Auzel/W. Delvingt, FUSAGx, University of Gembloux, Belgium), who has many years of experience in the area. This NGO seeks to promote the sustainable use of natural resources, especially in tropical forests, and tries to work out new strategies for the management of these resources taking into account both ecological and social factors.

In this way, the RZSA undertakes scientific research in collaboration with the local population as a tool for conservation, which can become part of management plans in great ape habitat.

Dja Wildlife Reserve

The Dja Wildlife Reserve (5,260 km²) was listed as a World Heritage Site in 1987. The Reserve contains important populations of chimpanzees, gorillas, elephants and buffalos (Nzooch Dongmo 2001). The most extensive survey (Nzooch Dongmo 2001) describes the spatial distribution of all large mammals throughout the reserve. This survey (1,478 km of transects) also reveals the presence of 71 hunting camps within the reserve. Hunting pressure is alarming (WSPA 2001). Although ecoguards are present, the



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human pressure is too important to be controlled. Moamosse refers to 5,000–7,000 people living within or at the edge of the reserve, and the population is still growing.

The Dja and Surrounding Areas

In 1994, the Government promulgated new forest legislation according to which a land use planning system was implemented. The forest was divided into a permanent and a non-permanent forest sector. Different types of exploitation permits are defined. The legislation also gives a number of opportunities to local communities to acquire control of the management of their forest, e.g. through the creation of "community forests". Yet the procedures are complex, as is the legislation in general. "community hunting zone", communal forests, community forests, forest management units, "vente de coupes" – these are just a few elements of the land use planning system.

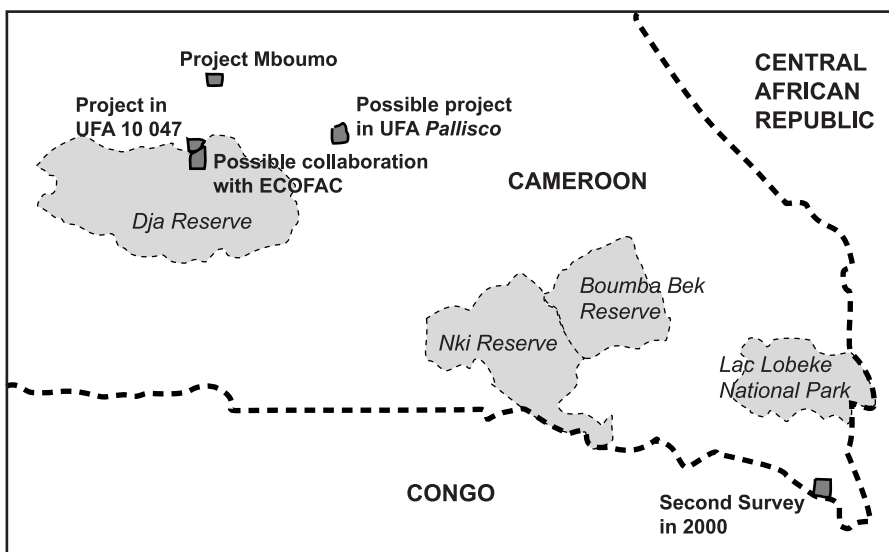
The result is a mosaic of activities, some exclusive, others overlapping, faced by the local population, who find

it almost impossible to assess the pros and cons of the different alternatives. Making decisions for their future is not easy. Meanwhile, the human population is growing, one of the reasons being the concentration of logging company workers on the edge of the reserve. In this area, bushmeat is cheaper than domestic meat, and the bushmeat trade is thriving; the depletion of the fauna in large areas surrounding the reserve is ongoing. Finding solutions for the unsustainable exploitation of the fauna will not be easy. This was confirmed at the workshop organised by IUCN, FAO and TRAFFIC: "Links between Biodiversity Conservation, Livelihoods and Food Security: the sustainable use of wild meat" (17 to 20 September 2001, Yaounde, Cameroon). Different complementary approaches at all levels will be necessary.

With regard to the Dja Wildlife Reserve and the future of its fauna, Nzoo-Dongmo (2001) stressed the need for more surveys and research activities on the periphery of the reserve, to be complementary to the

work done by ECOFAC (*Conservation et utilisation rationnelle des ÉCOsystèmes Forestiers en Afrique Centrale*) within the reserve. Our grant proposal "Great apes ecology, bushmeat hunting, logging and community based management around the Dja Faunal Reserve, Cameroon" was approved by the *Wildlife Conservation Society*. The main goal is to achieve protection of the fauna in collaboration with local people, by setting up great ape research sites: "Great apes ecology, bushmeat hunting, logging and community based management around the Dja Wildlife Reserve: rethinking conservation issues in non-protected areas".

Set-up and Research. After the initial surveys in 2000, and discussions with the villagers, a research site was set up within the forest of Mboumo. Logistical help and infrastructure has been offered by a logging company, R. Pallisco. This company logged the research site about 15 years ago. Since mid-2001, research has been carried out by European and Cameroonian volunteers and students. About 15 villagers from Mboumo are involved. The research focuses on ranging/nesting patterns, habitat use and the distribution of different vegetation types and food of great apes in an area of about 70 km². Authorisations have kindly been provided by the Ministry of Research and Technology. The first scientific results have been published. At the same time, the spatial exploitation of the "communal forest" to which the research site belongs is being studied and the procedure to initiate the creation of a "community hunting zone" has been started. Once created, the villagers will be authorised to manage the exploitation of the fauna. Part of the management plan will be the existence of a research zone in which no hunting will take place. This combination of scientific research and the



National parks and wildlife reserves in southeastern Cameroon (light grey) and areas discussed in this article (dark grey)



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Some comparative prices of meat at Eboumetoum

Species	CFA/kg	CFA/animal	Other units
Imported chicken	1,800		
Chicken of village	1,000		
Goat	1,500	>10,000	
Pig		5,000	
Beef	1,500		
Porcupine (1.5–4 kg)		2,000	
Blue duiker (3.5–9 kg)		1,500	
Black fronted duiker (14–18 kg)			6,000
Moustached monkey (2–5 kg)			2,500
Colobus (10–23 kg)		5,000	
Chimpanzee		20,000–25,000	5,000 (1 fourth)
Gorilla			variable (depending on body part)
Elephant			1,000 (1 slice)

Preferably, the study site should adjoin the area mentioned above. This will allow both comparative research and collaborative protection of a larger area.

- *R. Pallisco* put forward the possibility of setting up research within their Forest Management Unit. For this, we will discuss the possibilities with *Nature+*, who will be in charge of the management plan of the Forest Management Units of the logging company.

Conclusion

From this, it is evident that a good deal of great ape activity is going on, and more is planned. Collaboration between all the different sites will make larger-scale comparative research possible. Conservation of great ape populations is the ultimate goal.

Although our efforts seem to be succeeding in small-scale protection, we emphasise the need to continue efforts that aim at long-term conservation of nation-wide biodiversity and the absolute need for law enforcement. At this moment, it is no problem to contact gorilla hunters and chimpanzee pet traders, and market prices for "CITES A meat" are publicly known. The legislation exists, but as long as people can make money out of great ape meat, gorillas and chimpanzees will continue being victims of commercial hunters.

Jef Dupain

References

- Bowen-Jones, E. (1998) A review of the commercial bushmeat trade with emphasis on Central/West Africa and the great apes. Report for the Ape Alliance. c/o Fauna & Flora International, Cambridge.
- Nzoo Dongmo, Z.-L. (2001) Dynamique de la faune sauvage et des activités anthropiques dans la Réserve de Biosphère du Dja et ses environs. MINEF/ECOFAC. 75 pp.
- WSPA (2001) Bushmeat – Africa conservation crisis. Hunting our heritage: an inside perspective on bushmeat and corruption in the Dja World Heritage Reserve. Website: <http://www.wspa-international.org/campaigns/bushmeat/bushmeat10.html>

creation of management plans for the exploitation of fauna is subject to collaboration between the RZSA and *Nature+* (FUSAGx, Belgium).

Anti-poaching Patrols and Logging. During the first year of collaboration with the local people and partnership with *R. Pallisco*, two successes were achieved in terms of conservation:

- The research area suffered from a high degree of hunting pressure by external hunters, especially those coming from Abong Mban where forests are already depleted. Since mid-2000, the villagers of Mboumo have organised routine anti-poaching patrols. Several guns have been confiscated, hundreds of snares have been collected. Unfortunately, one of the "eco-guards" ended up in hospital after a "discussion" with poachers. However, since this incident, and the official reaction by the Cameroonian authorities, intrusion by hunters has been very limited.
- *R. Pallisco* has been allocated a logging concession on the northern boundary of the study site. For the most effective access, the com-

pany would have had to re-open an old logging road that crosses the study area; because of the ongoing project, however, *R. Pallisco* decided to opt for a less efficient, more costly alternative. The company also invited us to propose an approach that would minimise the effect of their activities in this area.

Perspectives.

- As a consequence of the approach in Mboumo, other villages invited the RZSA to set up great ape research within their forest. At the time of writing, surveys are being carried out in the forest of Malen V, Doumo and Mimpala. Gorillas and chimpanzees seem to be present at relatively high densities. The area under survey is part of Forest Management Unit 10 047, allocated to a logging company called *Fipcam*, which has already welcomed the setting up of great ape research within their concession. Interestingly, the potential research area borders the Dja Wildlife Reserve.
- A collaboration will possibly be set up with ECOFAC for research within the Dja Wildlife Reserve.



READING

Martha M. Robbins, Pascale Sicotte and Kelly J. Stewart
Mountain Gorillas. Three Decades of Research at Karisoke. Cambridge (Cambridge University Press) 2001. 431 pages. Hardcover, £ 55. ISBN 0-521-78004-7.

Karisoke has acquired legendary status in gorilla research and conservation. Three decades ago, Dian Fossey began her studies of mountain gorillas there, and a few years ago, her research center was looted and destroyed. Nevertheless, research in the Karisoke area has continued, whenever it was possible, up to the present day. As a result of this research we now have a totally new understanding of mountain gorillas, and they have achieved a wide popularity.

"Mountain Gorillas" is not a book for people who love to see emotional pictures of mountain gorillas, but for readers who are seriously interested in gorilla behaviour and conservation. The book gives a good overview of what researchers have learned since Karisoke was created. The 22 authors

include the most important living experts on mountain gorillas (and, in some cases, on other gorilla populations as well). Most of the results of Karisoke mountain gorilla research have already been published elsewhere, but this book summarises the various research topics and provides references to the other important publications.

For anyone who wants to be up-to-date with research on gorilla behaviour, "Mountain Gorillas" is a must, containing essential articles on mountain gorillas and dealing with new aspects that also lead to future research. Special aspects of gorilla research are also treated: the problems of poaching and armed conflict.

Angela Meder

William Weber, Lee J. T. White, Amy Vedder and Lisa Naughton-Treves (eds.)
African Rain Forest Ecology and Conservation. New Haven, London (Yale University Press) 2001. 588 pages. Hardcover, US\$ 65. ISBN 0-300-08433-1

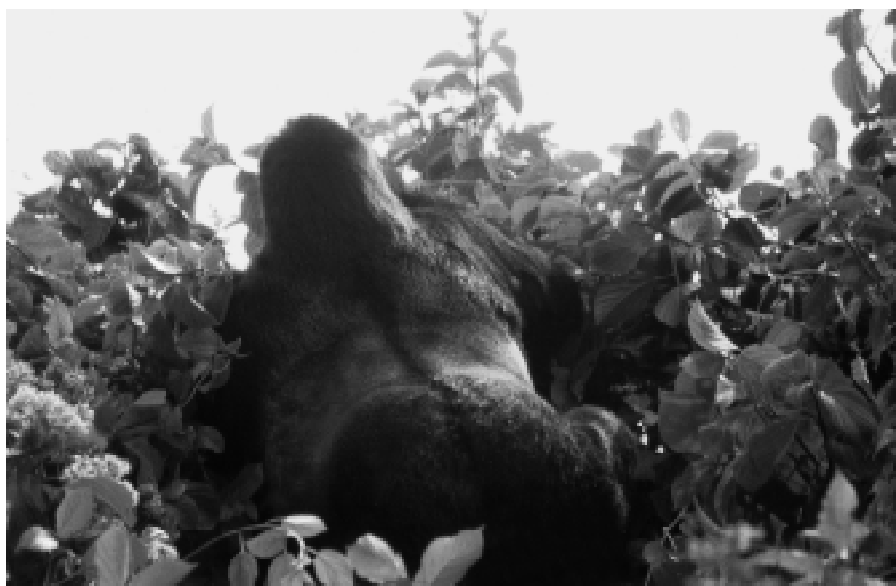
A large number of renowned authors from different backgrounds provide a broad overview of present research on rain forest ecology in Africa (especially Central Africa) in this impressive book. 43 authors contributed their experience and knowledge; the conservation aspect is mainly presented by the 14 authors who work for WCS (*Wildlife Conservation Society*). The main parts of the book are: the African rain forests' geology, biology and history; the forest ecosystem; humans and the forest; applied research and management. Most of the articles give examples of particular aspects of forest ecology and conservation. Many of them are not reviews, but original articles by experts in their respective fields.

As many different topics are discussed in the book, at least by case studies, the scope is very broad. Many tables, maps and line drawings illustrate the text, and references provide additional information in each contribution. The index is very detailed and extremely useful. "African Rain Forest Ecology and Conservation" is a very valuable source for anybody – researcher as well as conservationist – seeking a general idea of the problems of the African rain forest.

Angela Meder

Benjamin B. Beck, Tara S. Stoinski, Michael Hutchins, Terry L. Maple, Bryan Norton, Andrew Rowan, Elizabeth F. Stevens and Arnold Arluke (eds.)
Great Apes and Humans. The ethics of coexistence. Washington, D. C. (Smithsonian Institution Press) 2001. 384 pages, 4 illustrations, 5 tables. Hardcover, US\$ 34.95, £ 24.95. ISBN 1-56098-969-6.

Increasing knowledge raises new questions. "Are the other great apes entitled to exactly the same basic moral rights as human beings?", asked M. A. Warren. "Is such equality



Guhonda, Parc National des Volcans, Rwanda

Photo: Iris Weiche



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in their best interests? Or does their survival, both as individuals and as viable species, require that they be subject to a higher degree of paternalistic intervention than would be morally acceptable in the case of similarly endangered human populations?"

The result of a workshop in Florida initiated by the *Great Ape Project*, the book shows that there are no simple answers. Contributions from 19 authors on "Great Apes in the Wild", "Great Apes in Captivity", "History and Evolution" and "Ethics, Morality and Law" provide the reader with scientifically sound arguments on how to answer these questions of conscience which everybody should face. They are of particular relevance to those of us who have shouldered responsibility for our "hairy relatives" in some way or another, be it as politicians, lawmakers or philosophers, researchers in the field, medical people, filmmakers, zoo staff or zoo visitors.

There is not a single photograph; the comprehensive collection of facts and arguments is never in danger of slipping to an emotional level. This will certainly increase the book's acceptance by politicians, philosophers and those lawyers who support the improvement of the legal position of the great apes all the way to the apes' inclusion into a "community of equals". However, the question remains as to whether such formal rights would in fact improve the protection of the great apes *in situ*. For example, T. M. Butynski shows in his survey of chimpanzees, bonobos and gorillas that although the CITES convention has been signed by all the countries in West and Central Africa, for various reasons it is implemented only in a very few cases. Butynski is afraid that the "commercialization of bushmeat is probably a more significant and immediate threat than forest loss for all four of Africa's species of ape..."

D. S. Wilkie suggests ways out of the vicious circle of poverty and the destruction of nature in his contribution "Bushmeat Trade in the Congo Basin". Making the bushmeat trade illegal is of little use as long as bushmeat remains the most important source of meat to the inhabitants of the Congo basin. Alternatively, selective price manipulation and an increased utilization of domestic animals could help to alleviate the problem.

It is not sufficient to denounce lawlessness and corruption in the habitat countries of the great apes. H. D. Rijksen puts into words what other authors only hint at: "In a final analysis, the orangutan may be one of the most spectacular victims of neo-colonialism."

A contentious issue is whether we have the moral right to keep great apes in our zoos. M. Hutchins et al. believe "that recent advances in animal exhibit design and care programs have made it possible to maintain captive great apes humanely...", especially if the zoos contribute to conservation. A survey among workshop participants confirms this opinion. Similarly, the majority of participants oppose the great apes' inclusion into the genus *Homo*.

The book is most powerful in those contributions dealing with the boundary between apes and humans. Raymond Corbey shows that this demarcation is based on the Christian teaching of *imago dei* and the definition of European peoples of the 19th century in contrast to supposedly uncivilized cultures. The question as to what is human and what is not affects our very own self-image and touches our own interests. Some contributors consider the great apes to be the better humans and give them the dignity of "grand apes". Others point out that – with all due respect for the cognitive abilities of the great apes – one must

not belittle the differences between humans and apes. For instance, M. A. Warren shows that it would be wrong to treat chimpanzees or gorillas like human adults and to endow them with all human rights: "The human right to liberty includes the right to choose a dangerous freedom, or even a certain death, in preference to exile or imprisonment. Other apes' right to liberty must be more circumscribed, because they cannot currently understand their situation well enough to make sound decisions about their individual and species' futures." "Great Apes & Humans" is a valuable book, particularly for those who, for whatever reasons, do not want to make humans the measure of all things.

Mathias Orgeldinger

Craig B. Stanford

Significant Others: The Ape-Human Nature. New York (Basic Books) 2001. 236 pages. Hardcover, US\$ 25. ISBN 0-465-08171-1.

Are great apes similar to us humans and are we related to each other? To anybody who observed great apes for some time, the answer to this question is very obvious, but many other people still doubt it. Craig Stanford seeks to explain new understandings of the evolutionary biology of humans to the general reader by describing the life of great apes. He analyzes popular ideas and the myths perpetuated in "pop-books" that are repeated again and again. On the other hand, he too repeats some ideas that already have been or soon may be refuted – but this happens to anybody who tries to explain something that can never be proven. New research can turn a convincing explanation into a myth very quickly.

The book summarizes the many interesting research results on the culture, politics etc. of primates that have emerged during the last few decades. Each chapter has its own sub-



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ject, but the chapters are not always connected. One of the author's main issues is the biological foundation of culture and language. Another issue is his fieldwork in Africa, especially in Bwindi – research results as well as stories from fieldwork. He discusses, for example, gorilla taxonomy and tourism.

Craig Stanford's book is interesting and a pleasure to read for non-professionals who want to stay up-to-date with ideas about the evolutionary biology of humans. As it is written for these readers, the author sometimes simplifies complex research results and hypotheses and discusses mainly those theories that support his own ideas (thereby promoting the development of new myths). Some anthropologists think that the unique character of humans is their spirituality. Therefore, let's create and destroy more myths!

Angela Meder

Frans B. M. de Waal (ed.)

Tree of Origin. Cambridge, Mass. (Harvard University Press) 2001. 320 pages. 57 illustrations. Hardcover, US\$ 29.95, £ 20.50, Euro 34.40. ISBN 0-674-00460-4.

Tetsuro Matsuzawa (ed.)

Primate Origins of Human Cognition and Behavior. Berlin, Heidelberg (Springer) 2001. 587 pages, 248 figures. Hardcover, US\$ 129, £ 88. ISBN 4-431-70290-3.

Anthony B. Cunningham

Applied Ethnobotany. People, Wild Plant Use and Conservation. London (Earthscan) 2001. 300 pages. Paperback, £ 24.95. ISBN 1-85383-697-4.

Andrew G. Young, D. Boshier and T. Boyle (eds.)

Forest Conservation Genetics: Principles and Practice. Wallingford, New York (CABI Publishing) 2000.

360 pages. Hardcover, US\$ 120, £ 75. ISBN 0851995047.

Mauro Agnoletti, S. Anderson (eds.)

Forest History: International Studies on Socio-Economic and Forest Ecosystem Change. Report No. 2 of the IUFRO Task Force on Environmental Change. Wallingford, New York (CABI Publishing) 2000. 432 pages. Hardcover. US\$ 100, £ 55. ISBN 0851994199.

Javier Beltrán (ed.)

Indigenous and Traditional Peoples and Protected Areas: principles, guidelines and case studies. Gland (IUCN) 2000. 144 pages. £ 16.50, US\$ 24.75. ISBN 2-8317-0547-9.

Jean-Yves Pirot, Peter-John Meynell, Danny Elder (eds.)

Ecosystem Management: lessons from around the world. Gland (IUCN) 2000. 139 pages. £ 15; US\$ 22.50. ISBN 2-8317-0542-8.

Yearbook of Forest Products 1999.

Annuaire des produits forestiers 1999. Anuario: productos forestales 1999. Rome (FAO) 2001. 340 pages. Paperback, US\$ 57. ISBN 9250045441.

News from the Internet

There are a few new websites dealing with the bushmeat problem. UNEP's initiative GRASP is explained at <http://www.unep.org/grasp>. The bushmeat exhibition "Gorillas in the Cooking Pot" is now available for download in PDF format in German, English and French at <http://www.bushmeat-campaign.net>. The website contains the tables of this exhibition as well as additional information, addresses and links to great ape conservation organisations and other websites.

Ruth Keesling, who formerly was involved in the *Mountain Gorilla Veterinary Project*, has recently founded a new gorilla conservation organisation: the *Mountain Gorilla Conservation Fund*: <http://www.mgcf.net>.

For people interested in rain forest conservation: The FAO's publication "State of the World's Forests 2001" is not only available in print, but also in PDF and HTML format at <http://www.fao.org/forestry/FO/SOFO/sofo-e.stm>.

Our New English Website

The *Berggorilla & Regenwald Direkthilfe* now has a new website: <http://www.berggorilla.org>. It contains a choice of articles from the *Gorilla Journal*, information, e.g. about our organisation and about gorillas, news, links and references. It was especially important for us to provide an overview of the conservation sites for eastern gorillas – with maps, basic data, articles, news and references.

You can also download the latest *Gorilla Journal* in PDF format from the site – in English, French and German. If you are on our mailing list and prefer to download the journal from the internet instead of receiving a printed copy, please inform us at angela.meder@t-online.de. Tell us which language you would like and we will then 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!





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