



UNEP/CMS/GOR-TC1/Inf.8.1

Western Lowland Gorilla

Gorilla gorilla gorilla

Gorilla Agreement

Action Plan

This Action Plan is based on the following document: *Regional Action Plan for the Conservation of Chimpanzees and Gorillas in Western Equatorial Africa*. Tutin et al. 2005. IUCN/SSC Primate Specialist Group and Conservation International, Washington D.C., USA.

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Conservation of Gorilla and their Habitats (Rome, Italy, 29 November 2008)*

English Action Plans include additional editing not included in French versions.

Action Plan

Western Lowland Gorilla (*Gorilla gorilla gorilla*)

Species Range

Angola, Cameroon, Central African Republic, Congo, Democratic Republic of the Congo (DRC), Equatorial Guinea and Gabon.

Introduction

The Western Lowland Gorilla is the nominate species of the genus *Gorilla* (Savage, 1847; St. Hilaire, 1852). It is the most numerous and widespread sub-species, being found in seven countries in Central Africa: Angola (Cabinda province only), Cameroon, Central African Republic, Congo, DRC, Equatorial Guinea and Gabon. Its distribution is limited by the Atlantic Ocean to the west, the forest boundary just north of the mouth of the Congo River to the south, the Congo and Oubangui Rivers to the east, and the Sanaga River to the north (with the exception of the small population in Ebo Forest, Cameroon, north of the Sanaga, whose taxonomic affiliation is still not absolutely clear, but appears to be to *G. g. gorilla*, Morgan *et al*, 2003).

Gorillas have been observed, and in some areas hunted, since before written records began, but it was not until the mid-nineteenth century that they were first described by science (Savage and Wyman, 1847). The type specimen was collected by Dr Thomas Savage, an American missionary, from near the mouth of the Gabon River in what is now Gabon. The scientific discovery coincided with the debate over Darwin's theory of evolution by natural selection. This, coupled with dramatic accounts by early hunters, attracted numerous big game hunters to collect specimens for museums. Live specimens were also procured for zoos and menageries, but all of them died young. It was not until 1956 that a gorilla was born in captivity.

The twentieth century saw more and more gorilla habitat converted to agriculture and opened up by logging and roads, with a consequent decline in gorilla numbers and distribution. Few detailed surveys were carried out until the last quarter of the century, and so there are no reliable early population estimates.

Hunting continues in many parts of the sub-species range on a daily basis, as evidenced by the meat and body parts on sale in Bushmeat and traditional medicine stalls in towns and cities across the region (Redmond, 1995; Redmond, *et al* 2006). Live infants are also captured for sale as pets, but most die unless rescued by skilled carers. One rescue facility in Brazzaville in the 1980s reported 80 per cent mortality (Redmond, 1989) and in most cases at least two adults are killed in the capture of an infant. This suggests that every live infant represents four who died, each of whose capture resulted in two further deaths; thus, each infant rescued alive may represent a loss of 15 gorillas to the wild population.

The combined pressure of illegal commercial bushmeat hunting, logging and agriculture led the sub-species to be classed by the IUCN as Endangered in 1996 and 2000. The added impact of outbreaks of the Ebola virus led this to be changed to 'Critically Endangered' in 2007 (Walsh, *et al*, 2007). With wildlife law enforcement generally weak, current trends continue alarmingly downwards, despite the species being protected by law in every range state. The announcement in August 2008 of unexpectedly high gorilla densities in northern Congo was welcome news, but the IUCN maintained the 'Critically Endangered' status for the sub-species in the new version published in October 2008 (Walsh, *et al*, 2008).

Summary

A workshop in 2005 in Brazzaville brought together more than 70 experts, who identified sites and regional activities of high importance for gorilla conservation and, importantly, defined how to reinforce the knowledge base upon which conservation strategy design and implementation depends. The main outcome of the workshop can be found in "*Regional Action Plan for the Conservation of Chimpanzees and Gorillas in Western Equatorial Africa*". Tutin C. et al, 2005. Conservation International. Washington,DC. This Action Plan for the Western Lowland Gorilla, *Gorilla gorilla gorilla*, is based on this major publication.

The protection of the 12 priority ape populations identified during the Brazzaville meeting, if successfully implemented, would guarantee the survival of the majority of apes remaining in the region. The consensus reached on a clear list of the most urgently needed activities for each site provides strong conservation strategies for the immediate future, with a support of about **30 million dollars** over the next five years.

I. Most important sites, main threats and how to address them

Most important sites: Among the conclusions of the Brazzaville workshop (2005) was the classification of the most important sites for the Western Lowland Gorillas and for Chimpanzees in three categories: sites of exceptional priority, priority sites, and priority survey areas.

- **Exceptional Priority Areas**
 - Odzala/Lossi/Pikounda/Ngombe/Ntokou complex, in the Republic of Congo
 - Lac Tele/Likouala, complex, in the Republic of Congo
 - Sangha Trinational complex, transborder sites between Cameroon, the Central African Republic and the Republic of Congo
 - Loango/Moukalaba-Doudou/Gamba complex, in Gabon
 - Dja Conservation complex, in Cameroon
 - Boumba-Bek/Nki complex, in Cameroon
 - Lopé/Waka complex, in Gabon
 - The TRIDOM Complex, transborder (Dja-Ozala-Minkebe) sites between Cameroon, Gabon and Republic of Congo

- **Important Priority Areas**
 - Ivindo complex, in Gabon
 - Rio Campo/Campo Ma'an complex, in Equatorial Guinea/Cameroon
 - Belinga-Djoua, in Gabon
 - Mengamé, in Cameroon
 - Conkouati/Mayumba complex, transborder sites between Gabon/R. of Congo

- **Priority Survey Areas**
 - Ebo/Ndokbou conservation complex, in Cameroon
 - Maiombe Forest Transboundary Initiative, transborder sites between Angola/DRC /Republic of Congo

Main threats and ways to address them

Poaching:

Poaching of great apes in western equatorial Africa occurs despite the fact that they are protected under both national and international laws in all range states. Although hunters rarely target apes, the apes are killed when encountered and can fall victim to wire snares targeting other species.

Measures:

- Implement strict enforcement of wildlife protection laws in protected areas through guard patrols;
- Increase human capacity by recruitment and training to increase effective control on weak links in the chain of supply: transport routes and markets;
- Improve application of legal sanctions by awareness campaigns for police, gendarmes, judges and prosecutors.
- Conduct education campaigns to change attitudes;
- Reduce demand for ape meat through specific education about health risks;
- Provide alternative protein sources in rural areas (husbandry, ranching, fish farming);
- Create alternative employment for professional bushmeat hunters (park guards, ecotourism);
- Review sanctions for infraction of wildlife laws to ensure effective dissuasion (fines, destruction of illegal firearms and confiscation of vehicles).

Disease:

Great apes are vulnerable to many pathogens that affect humans and also to zoonotic disease epidemics such as Ebola.

Measures:

- Develop broad-based great ape health monitoring and surveillance programs across key areas;
- Develop rapid alert and response systems to ape mortality, including, if it appears necessary and feasible, vaccination campaigns;
- Implement preventative health programs for protected area staff;
- Target research on Ebola epidemiology and possible control strategies;
- Identify and mitigate risky human behavior in proximity to ape habitat.
- Conduct education and outreach in local communities on disease risk;
- Improve local livelihoods and health structures in key communities;
- Train local professionals in health monitoring techniques;
- Implement control strategies to protect apes from Ebola.

Logging

Logging facilitates bushmeat hunting by the construction of roads that connect isolated forests to urban centers, by creating new demand for bushmeat by workers and dependents, and by providing new transport opportunities in company vehicles.

Measures:

- Extend partnerships between protected areas and logging companies working in buffer zones;
- Provide strict control of access routes to prevent commercial bushmeat hunting;
- Provide alternative sources of protein to work force and dependents.
- Include obligation to enforce wildlife protection laws in regional certification schemes for sustainable logging;
- Conduct further research on impact of logging on apes over medium-long time span.

II. By country

1. CONGO

Congo is one of Africa's main petroleum producers, with significant potential for further offshore development. Petroleum and timber represent 80% of GDP. It is one of Africa's most densely forested countries.

From the Atlantic coast, the Rivers Congo and Oubangui form the southern and the eastern edge respectively of the range of the Western Lowland Gorilla. The Oubangui River forms the eastern limit to the range of the species, and the border area with Cabinda and the Bas-Congo region of DRC the southern.

A large proportion of the Western Lowland Gorillas are thought to live in Congo, mostly in the densely forested northern region, but also, to a lesser extent, in the central and southwestern parts of the country. The announcement in 2008 of survey results with higher than expected densities in the previously unstudied swamp forests of northern Congo drew attention to the importance of that region. An estimated 73,000 were found in the Ntokou-Pikounda region and 52,000 in the Ndoki-Likouala landscape, where a previously unknown population of nearly 6,000 gorillas was discovered in an isolated raffia swamp. Most of these gorillas live outside existing protected areas, but the Government of Congo is reported to have committed to creating a new national park in the Ntokou-Pikounda region. Further inventories should be conducted over the entire area.

Where accessible, this large population of gorillas is at risk from logging and associated poaching, and, since the late 1990s, from the major threat represented by the Ebola virus. Bushmeat consumption is traditional among certain ethnic groups in the north, but there has been a rise in demand for bushmeat in towns and cities in Congo and neighboring countries with the growth of an urban middle class able to afford it.

1.1. Legislation

National:

The main laws dealing with wildlife preservation and use are Law 48/83, Law 49/83 and Decree 85/879. The Ministry of Forest Economy and the Environment (MFEE) is responsible for wildlife conservation and regulated use, including the management of protected areas.

There are three main categories of protected areas: national parks (3), wildlife reserves (6), and hunting reserves (2), faunal sanctuaries (4) including 2 for gorillas and 2 for chimpanzees.

International:

- COMIFAC Treaty, 2005
- Kinshasa Declaration, 2005
- CMS, 2000
- CBD, 1993
- WHO, 1987
- CITES, 1983
- ACCNNR, 1981
- Lusaka Agreement
- RAPAC
- CMS Gorilla Agreement, 2008

Congo has two Biosphere Reserves: Odzala-Koukoua NP and Dimonika (Mayombe mountains); it is part of the Congo Basin Forest Partnership.

1.2. Conservation action

Protected areas of importance to the Western Lowland Gorilla:

- **Odzala-Koukoua NP** (13.456 km²): Odzala has some of the highest recorded densities of Western Lowland Gorillas in Central Africa (mean 5.4/km², and up to 11.3/km² in the Marantaceae forests), administered since 1992 with the support of ECOFAC. It is one of the most important strongholds for elephant and gorilla conservation in Central Africa and arguably one of the most spectacular wilderness areas in the world. The area incorporates mixed and Marantaceae forest types and an abundance of forest clearings supporting exceptional densities of a number of charismatic large mammals, including gorillas.
- **Nouabalé-Ndoki NP** (4.263 km²), now managed by MFEE/WCS.
- **Conkouati-Douli NP** (5.049 km²), on the Atlantic coast in south-western Congo, this is also the site of the most successful rehabilitation and release programme for rescued chimpanzees, established in partnership with the local NGO, HELP-Congo.
- **Lossi Gorilla sanctuary**, a small reserve created by the local communities
- **Lac Télé/Likouala Community reserve**: the Reserve extends over approximately 4,500 km² of the Likouala swamps in northern Congo. It consists primarily of swamp forest with inclusions of riparian forest and mixed-species lowland forest on *terra firma* islands and savannah patches. The Lac Tele Community Reserve is one of only two central African protected areas that seek to conserve swamp forest habitat (and the only area within the range of the apes under consideration). Swamp forest has been found to be ecologically very important for great apes, and supports large populations of western gorillas in particular. Furthermore, swamp forests that are intact, ecologically functioning, and supporting a variety of endemic and wetland dependent species are unlikely to be logged. The relative inaccessibility of swamp forests limits resource extraction and may also constitute a barrier to the spread of disease, including Ebola. The Lac Tele Community Reserve and its surroundings therefore provide an unusual safe haven for both plant and animal species that are threatened elsewhere.

Current projects/activities with direct or indirect implications for Gorilla conservation:

1. ECOFAC (EU) funded conservation programme, has been very active in the management of Ozala-Koukoua NP since 1992.
2. WCS involved in conservation activities in Nouabalé-Ndoki NP; partnership with a logging company, CIB, in developing guidelines for hunting, including enforcement of the ban on ape and other endangered species hunting and preventing the export of meat from the concession. As a result, commercial bushmeat hunting has been reduced.
3. The Congo Government now requires all logging companies operating northern Congo to pay for “eco-guards” and wildlife management on their concessions.
4. Ecotourism and gorilla watching is developed at several sites, including Odzala-Koukoua NP and Nouabalé-Ndoki NP.

5. Sanctuaries: A gorilla orphanage was first established in Brazzaville Zoo in 1989; a few years later, in 1993, it was managed jointly through a cooperation agreement between the Government of the Republic of Congo and the John Aspinall Foundation. A Memorandum of Understanding was signed in 2002 for partnership management of a protected area, the Lesio-Luna Gorilla Sanctuary. In this protected area, located 150 km from Brazzaville, a gorilla rehabilitation and habituation project is currently implemented. This site, covering an area of 1700 km², consisting of a mosaic of savannah and gallery forests, crossed by the Lesio, Luna, and Lefini rivers.

Existing international initiatives with direct or indirect implications for Gorillas conservation:

1. Congo is a partner in the **Trinationale de la Sangha (TNS)**, a 7,300km² transboundary conservation zone, which comprises the Nouabalé-Ndoki NP of Congo, as well as Lac Lobéké NP of Cameroon, and Dzanga-Ndoki NP of Central African Republic. All three sectors of TNS support important populations of gorillas.

2. A proposal for a **Mayombe transboundary** area exists, between Congo, Angola and DRC, but still awaits approval by governments.

1.3. Priority actions:

a. Nationally:

- Increase law enforcement, anti-poaching brigades in forest concessions
- Increase effective surveillance of Protected Areas (PAs)
- Develop a monitoring system for illegal activities concerning gorillas
- Undertake more research into the status, distribution and biology of gorillas
- Improve coordination of research and monitoring of gorilla distributions and populations, improve disease (particularly Ebola virus) epidemiology throughout Congo.
- Increase research on vaccines and ways to vaccinate people and wild apes against Ebola virus.
- Develop a national policy on tourism, and promote local ecotourism
- Develop alternative sources of income for rural communities
- Create an autonomous wildlife and PA management agency.
- Undertake large-scale information and education campaigns needed to inform Congolese people of the endangered status of gorillas and attract their attention to the wildlife protection laws.

b. Priority actions to be taken in the sites of exceptional priority for *Gorilla g. gorilla* in Congo. For each site, actions needed, potential partners, timeframe and funding needed were identified at the Brazzaville workshop. The sites identified are the following:

Odzala-Lossi-Pikounda-Ngombe-Ntokou Complex:

- Establish a quick response structure and systematic epidemiological surveillance system for Ebola, before, after and during epidemics.
- Implement bio-monitoring of ape populations in zones both affected and unaffected by Ebola, in order to evaluate impact.
- Increase capacity in biological sampling techniques and bio-monitoring through targeted training programs.
- Establish early-warning system and community awareness campaign for Ebola in local community.
- Implement effective protection for remaining ape populations through anti-poaching patrols.

Lac Tele-Likouala Complex:

- Support government agents and local communities in promoting and implementing great ape protection efforts in and around the Lac Tele Community Reserve.
- Conduct regular ape surveys in the Likouala and Baille swamps to the southeast and west of Lac Tele Community Reserve to assess great ape populations.
- Standardize protocols for training and implementation of bio-monitoring program for great ape populations.
- Establish systematic surveillance systems for the emergence of zoonotic diseases in great ape populations.

Conkouati-Mayumba Complex, Republic of Congo and Gabon (see sites of international importance)

Sites of interest:**Lesio-Luna Sanctuary**

- Support the relevant local initiatives at the village level;
- Monitor reintroduced gorillas and other species of mammals;
- Protection of the PA and sustainable management of natural ecosystems and of all natural resources;
- Capacity building of staff;
- Establishment of basic infrastructure and development of tourism, in collaboration with all stakeholders.

Lossi Sanctuary: *data to be submitted by the Republic of Congo.*

c. International / transboundary cooperation:

Further reinforce existing transboundary agreements and initiatives, in particular:

1. La Trinationale de la Sangha, Republic of Congo, Central African Republic and Cameroon. The complex covers 25,000 km² of contiguous lowland tropical rainforest that is of critical biological significance. Biodiversity is partially protected in three national parks: the Lobéké National Park in Cameroon, Dzanga-Ndoki National Park in Central African Republic and the Nouabalé-Ndoki National Park in the Republic of Congo, that together support one of the most pristine blocks of protected forest in Central Africa. It is home to one of the largest remaining populations of gorillas and chimpanzees on the continent, and also harbours significant populations of other endangered large mammal species including forest elephants and bongo. The remaining landscape is dominated by forestry concessions, which have seen the rapid expansion of commercial timber exploitation across the region over the last two decades. In the Republic of Congo, sustainable wildlife management programmes are currently being carried out in 1.8 million ha of production forest — and potential ape habitat — surrounding the Nouabalé-Ndoki National Park. The Sangha Trinationale is not only a regionally and globally important area for wildlife, it holds great potential for assessing and enhancing the effectiveness of transboundary and collaborative approaches to conservation.

- Develop an epidemiological surveillance system and rapid response structure for the emergence of diseases, specifically Ebola.
- Improve judicial and law enforcement structures in protected areas and timber concessions, including capacity building, monitoring systems, and promotion of wildlife protection laws in logging concessions.
- Standardize protocols for training and implementation of bio-monitoring programmes for great ape populations.

- Develop and promote national and transboundary structures for gorilla ecotourism in the Nouabalé-Ndoki, Dzanga and Lobéké National Parks.

2. The TRIDOM complex:

The Tri-National transborder Complex Dja-Odzala-Minkebe (TRIDOM) extends over the Congo, Gabon and Cameroon. It covers an area of 141,000 km² of which 35,968 kilometers² (24%) are protected areas (7 PA altogether). These protected areas include:

- Dja, Boumba-Bek, Nki and Mengame for Cameroon;
- Minkébé and Mwagne for Gabon;
- Odzala for Congo

The three governments involved, as well as WWF, WCS and ECOFAC have actively participated in the preparation of TRIDOM. The cooperation agreement TRIDOM was signed in February 2005 by the Ministers in charge of protected areas in Cameroon, Gabon and the Republic of Congo. This agreement marks the commitment of 3 countries to manage the complex TRIDOM and defines the governance structures of the tri-national transborder site.

A project was developed, whose objective is to maintain the functions and ecological connectivity in the TRIDOM and ensure long term conservation of its protected area system. It is based on a GEF grant through UNDP for a period of seven years.

The management structures of the TRIDOM project are:

- An RMU (Unité Régionale de Gestion du Projet) which provides technical support to the three National Project Teams (EPN).
- A regional steering committee, which aims to ensure proper implementation of the project, to ensure transparent decision-making and to represent the interests of stakeholders in its implementation.
- A Scientific and Technical Committee: it is an auxiliary organ of the Regional Steering Committee. Its role is to assist the Steering Committee in its supervising tasks over the activities of the project.

3. Konkouati-Mayumba Complex, Republic of Congo and Gabon

- Develop capacity and structures for effective law enforcement and judiciary process in the Konkouati-Douli National Park and surrounding buffer zones, including training of park guards and trans-boundary protection efforts and policies.
- Build a great ape research and training station within the CDNP, to conduct effective and timely bio-monitoring and provide effective deterrent to poaching.
- Conduct baseline surveys of ape populations and other large mammals in CDNP and Mayumba NP buffer zone.
- Establish systematic surveillance systems for the emergence of zoonotic diseases.
- Implement conservation education awareness and outreach programs in local communities, with specific emphasis on great apes.

4. Mayombe Forest, Republic of Congo, Angola (Cabinda Province), DRC

- Strengthen the initiatives and transboundary agreements, for the Maiombe Forest situated between the Republic of Congo, Angola (Cabinda Province), and Democratic Republic of Congo.
- Establish a concerted preservation system between Angola, Republic of Congo and DRC in order to ensure the survival of this, the most southerly population of Western Lowland Gorilla, reported to migrate seasonally across international borders.
- Develop the transboundary collaboration and data exchange concerning Western Lowland

Gorilla status between the three states.

- Develop a new trans-boundary preservation initiative, in response to the fauna and wood smuggling. A proposal has been developed by the UNDP, and should carry on. This proposal suggests in particular to:
 - Conduct ape population surveys in the Mayombe Forest in Cabinda, DRC, and Congo Republic, to include ape counts, habitat status and collection of genetic material.
 - Provide training for local community participants and research personnel in ape census, methodology and community-based law enforcement.
 - Conduct socio-economic surveys on bushmeat market trade, hunting pressure and local attitudes to conservation in the Mayombe Forest.

5. The Batéké plateaux (*data to be communicated by the Republic of Congo*)

2. GABON

Located between the Congo Basin and the Gulf of Guinea, Gabon is surrounded by Cameroon, Equatorial Guinea and Congo. Decades of political stability, a relatively small human population (although growing rapidly now) and abundant natural resources including oil and forestry, explain the country's prosperity.

The Western Lowland Gorilla occurs throughout the country; in the 1980s-1990s, the total gorilla population of Gabon was estimated to be around 35,000 animals. However, there are signs now that many populations may have been reduced to such a low density, in areas affected by hunting and Ebola that their viability is threatened.

2.1. Legislation

International:

- CBD, 1997
- WHC, 1986 (A World Heritage Site: La Lopé NP, and MAB UNESCO site, the Ipassa Makokou reserve, now part of the Ivindo National Park)
- ACCNNR, 1988
- CITES, 1989
- COMIFAC Treaty, 2005
- CMS, 2008
- CMS Gorilla Agreement, 2008

2.2. Conservation action

Protected areas of importance for the Western Lowland Gorilla:

- **The Gamba complex (Loango NP and Moukalaba Doudou NP):** Large area covering 12,230 km² of the southwest of Gabon and includes two national parks; Loango (1,550 km²) and Moukalaba-Doudou (4,496 km²). The variety of landscapes — forests, savannas, mangroves, lagoons and beaches — create the astounding natural beauty of the area and

make it a prime area for ecotourism with several initiatives underway already. Elephants, hippopotamus, buffalo and gorillas can be seen on the beaches, and crocodiles in the lagoons. Gorillas and chimpanzees occur throughout the site and Mt. Doudou has the highest recorded density of gorillas in Gabon. Research on apes, including habituation of groups is underway at several areas. The direct environmental impacts of oil extraction have been minimized but diminishing oil production and subsequent unemployment present a threat of increased poaching. Ecotourism has been identified as a tool for sustainable development, and the potential for gorilla viewing is under investigation. It is of vital importance to maintain and reinforce the protection of the large ape populations that remain at this site.

- **La Lopé NP and Waka NP** complex cover around 12,000km², including the Lopé and Waka National Parks and a proposed corridor between them where selective logging will occur. The habitat is mostly lowland tropical forest, with Marantaceae Forest around the savanna/gallery forest mosaic in the northern part of Lopé National Park. The site includes mountainous areas and the diverse flora bears witness to a dynamic history of climate-induced shifts in vegetation. The dramatic and varied landscapes combined with relative ease of access to the northern parts of Lopé National Park make it a prime site for the development of ecotourism.

- **Ivindo NP** : the park covers an area of just over 3,000 km² along the Ivindo river in north-east Gabon, and the additional area of this priority site for ape conservation consists of commercial logging concessions surrounding the Park.

- **Minkébé NP**

- **Waka NP**

- **Birougou NP**

- **Makokou Biosphere Reserve**

- **Monts de Cristal**

- **Wonga Wongué**

- **Mwagne**

- **Mayumba**

- **Belinga- Djoua** : this site is important for ape conservation but threats will increase very significantly in the near future as iron reserves at Belinga are mined and a railway built to export the minerals to Libreville.

Current projects/activities with direct or potential implications for Gorillas conservation:

- ECOFAC, EU funded conservation program, has been active in Gabon since 1992, and has supported the management and development in particular of the Lopé NP.

- WWF has been active in Gabon since the 1980s; one of the longest running projects is in Minkebe Forest where, with funds from DGIS (Netherlands Development Cooperation) and CARPE (USAID), WWF has undertaken the Minkebe Conservation Project; the Gamba complex has, since 1990, also benefited from WWF assistance; now with CARPE funding, over the next 5 years WWF will assist the governments of Gabon and the Republic of Congo to develop, implement and monitor an integrated land-use plan for the Gamba-Conkouati landscape. This will be based on the designation of different use zones and associated management plans defining resource use and governance.

- Global Forest Watch works with local organizations in Gabon to collect and distribute information on forest development

- WCS involved in conservation programmes and activities Gabon since 1985; currently runs a major country program that includes activities in most of the national parks, institutional support to ANPN, nationwide monitoring of the bushmeat trade, new PA planning, and reduced impact logging.

- The Gorilla Organization has recently begun a project to help develop eco-tourism in and around Moukalaba Doudou NP, where high densities of gorillas have been reported.

2.3. Priority actions:

a. Nationally:

- Develop professional management capacity in all new 13 National Parks created in 2002;
- Legislative enforcement
- Development of a national strategy for the sustainable use of wildlife resources
- Developing measures for the conservation of primates in forest concessions under sustainable management
- Large scale information and education campaigns needed to inform citizens of the decline and endangered status of gorillas and attract their attention to the wildlife protection laws.
- Further population surveys.

b. Priority actions to be taken in the sites of exceptional priority for *Gorilla g. gorilla* in Gabon. For each site, actions needed, potential partners, timeframe and funding needed were identified at the Brazzaville workshop. The sites and measures identified are the following:

Loango-Moukalaba-Doudou Gamba Complex:

- Reinforce anti-poaching measures throughout the site especially on logging concessions in the buffer zones.
- Introduce measures to minimize risks of disease transmission and establish health-monitoring system for apes, rules for all people using the site, education for villagers and tourists and analysis of ape fecal samples.
- Develop and promote responsible great ape tourism within the broader ecotourism strategy for this site.
- Strengthen research capacity to respond to threats to apes, integrate research into site management, provide support in training, data collection and analysis and applied protocols.
- Maintain ape bio-monitoring programme, including training in monitoring methods for research personnel.

Lopé-Waka Complex

- Extend existing programs of health education and ape health monitoring to minimize risks of disease transmission between humans and apes (underway WCS-CIRMF).
- Support research and training programmes and improve capacity for adaptive management, through focused research protocols and systems to evaluate the effectiveness of management for the protection of apes.
- Standardize protocols for training and implementation of monitoring programs for great ape populations.
- Improve judicial and law enforcement capacity in protected areas and logging concessions, including mobile anti-poaching brigade, specialized training for local authorities, gendarmes & magistrates.
- Develop and promote responsible great ape tourism, of already habituated gorilla groups and within the broader ecotourism strategy for this site.

Ivindo Complex

- Extend existing programs of health education and ape health monitoring to minimize risks of disease transmission between humans and apes.
- Develop and promote responsible great ape ecotourism at Langoué Bai from viewing

platforms, and other appropriate areas within the broad ecotourism strategy for Gabon's National Park network.

- Develop on-site research capacity on great ape ecology, behavior and health, through support to the IRET research station.
- Sustain partnerships with logging companies in the buffer zone to reinforce the protection of apes and increase capacity to monitor population trends.
- Maintain ape bio-monitoring programme, including training in monitoring methods for research personnel.

Belinga-Djoua Complex

- Conduct surveys of ape distribution and density throughout the site, including training in monitoring methods for research personnel.
- Implement measures to prevent fragmentation of ape habitat block, through prevention of new human settlements and deforestation along the Zadio-Belinga road.
- Raise awareness of the need for ape conservation among local stakeholders and improve organization of anti-poaching patrol.
- Create a great ape sanctuary within the TRIDOM landscape, based on survey results.
- Conduct applied epidemiological research on Ebola, collect fecal samples and perform autopsies of cadavers to assess impact of past Ebola epidemics and current health status of ape populations.

c. International / transboundary cooperation:

- Encourage the transboundary management of gorillas populations.
- Further reinforce existing transboundary agreements and initiatives, in particular:

The Conkouati-Mayumba, Republic of Congo and Gabon.

- Develop the abilities and necessary structures for the efficient enforcement of the laws and judicial process in the Conkouati-Douli National Park and nearby buffer zones, including training park guards and developing transboundary preservation and policies.
- Build a research and training station on the great apes in the Conkouati Douli NP, in order to be able to lead an effective bio-monitoring programme and provide an effective deterrent against poaching.
- Conduct basic inventory studies on the great ape populations and other large mammals in the Conkouati Douli NP and the buffer zone of the Mayumba NP (done regularly by WCS, annually in Mayumba, biannually in Conkouati).
- Establish constant monitoring system to detect the appearance of zoonotic diseases.
- Establish programmes of local communities awareness-raising, stressing particularly the importance of gorillas in the ecosystem.

3. CAMEROON

Cameroon has experienced relative stability in the last decades, allowing the steady development of infrastructure, agriculture and the oil and timber industries.

Cameroon is host to both the Western Lowland Gorilla and the Cross-River Gorilla. The Western Lowland Gorilla is represented with a total national population recently estimated at 15,000

individuals (ref. 54 of Caldecot and Miles). Two-thirds of this population lives in a triangle of PAs on the common border of Cameroon (Lac Lobéké NP), the CAR (Dzangha-Ndoki NP) and Congo (Nouabalé-Ndoki NP), collectively called the “Trinationale de la Sangha” (core area 7300km² and buffer zones of 21,000km²). The remaining third of the Cameroon Western Lowland Gorillas is distributed between 7-8 PAs of different status.

3.1. Legislation

National

Law n° 94/01 (1994) sets out the country’s forestry, wildlife, and fishery regulations, and lists gorillas as Category A species, which are fully protected against hunting, capture, or sale, in whole or in part. National Parks and wildlife reserves may be established under the auspices of the Direction de la Faune et des Aires Protégées (DFAP), of the Ministry of Environment and Forestry (MINEF), which is also responsible for the country’s biodiversity in general.

International

- CMS, 1983
- WHC, 1982(the Dja reserve, with the presence of *Gorilla.g.gorilla* is a World Heritage Site, also a UNESCO MAB site)
- ACCNR, 1968
- CITES, 1981
- CBD, 1994
- Yaoude Declaration, 1999

3.2. Conservation action

Protected areas of importance to the Western Lowland Gorilla:

- **Dja Wildlife Reserve/Biosphere Reserve:** the Dja conservation complex consists of the Dja Biosphere Reserve (5,260 km²) and the surrounding mosaic of logging concessions, community forests, agro-forestry zones, and even a mining concession. The area, both protected and unprotected, is home to significant populations of chimpanzees, gorillas, forest elephants and leopards, and high densities of indicator species such as mangabeys, colobus and yellow- backed duikers. Hunting pressure is high, both for subsistence and commercial trade in this area. A range of participatory approaches to conservation have been set up in and around the Dja Biosphere Reserve, focusing on community forestry, civil society capacity building and on the sustainable use of natural resources, including commercial forestry. In 2003, a management plan for the Dja Biosphere Reserve was agreed upon which focuses on the involvement of local stakeholders and which aims to build upon and synergize past and present conservation activities.
- **Boumba-Bek-Nki NP and Wildlife Reserve** the 8.000 km² complex comprising the proposed national parks of Boumba-Bek and Nki constitute the largest contiguous block of protected forest in Cameroon. The area is characterized by intact lowland rainforest harbouring significant populations of large mammals, including forest elephants, gorillas and chimpanzees. Its relative isolation from traditional population settlements has thus far ensured a certain degree of protection for its wildlife populations. However, the zone is currently surrounded by commercial forestry concessions. The presence of mineral exploitation and a national road to its northern periphery pose a considerable threat to ape populations and other wildlife as a result of commercial hunting and human encroachment.
- **Mengamé Gorilla Sanctuary:** this sanctuary lies on the southern Cameroon-Gabon

border and extends over an approximate area of 1,200 km². To the north, the sanctuary is surrounded by multiple-use forests, including commercial forestry concessions, and partially protected forested reserves. Recent surveys suggest the presence of significant populations of great apes; gorillas in particular.

- **Lobéké NP**
- **Campo-Ma'an NP**

Several of these PA are situated on or close to international boundaries: this can mean danger for conservation of gorillas if boundary conflict or cross-border poaching occurs, but can on the other hand represent opportunities for cooperation with neighboring countries.

Current projects/activities with direct or indirect implications for Gorillas conservation:

1. ECOFAC, EU funded conservation program, active in Dja WR since the early 1990s.
2. WCS involved in Cameroon since 1998. Involved in programmes to control the illegal transportation of bushmeat.
3. Jane Goodall Institute (JGI) established a community based and wildlife research program in Mengamé Gorilla Sanctuary.
4. Global Witness on the issue of illegal logging
5. A number of international organisations involved with research and education activities, Living Earth, Bristol Zoo (with GRASP funding), FFI, WWF, Antwerp Zoological Society.
6. Bushmeat Project, involving hunters in fauna protection in eastern Cameroon.
7. A number of awareness programs are run by national and international NGOs, and public education is a component of most current conservation and development projects.
8. The Limbé Wildlife Center is a rehabilitation center for confiscated great apes – including Western Lowland Gorillas and the world's only captive Cross River Gorilla - and other species.
9. Mefou National Park has forest enclosures for confiscated primates – including Western Lowland Gorillas – and is supported by the Cameroon Wildlife Aid Fund.
10. Participatory management presence and infrastructure through the support of a prior GEF project grant.
11. MINFOF/WCS Project for the protection of gorillas in the Deng Deng Forest, funded by AFD/Cameroon.

Existing international initiatives with direct or indirect implications for Gorillas conservation:

1999 Yaoundé Declaration signed by Cameroon, CAR, Congo, Chad, Equatorial Guinea and Gabon, outlining plans to create new cross-border protected forest areas in the Congo Basin. Later, the Conference of Central African Moist Forest Ecosystems (CEFDHAC), coordinated by IUCN Yaoundé, was nominated to lead an intergovernmental process based on the Yaoundé Declaration. The initiative includes:

- The endorsement of the 7,300km² network of PAs “Trinationale de la Sangha”
- The creation of 2 new NPs in Cameroon, one of them an important site for the Western Lowland Gorilla: Campo Ma'an NP.
- The new Central African World Heritage Forest initiative
- The Congo Basin Project
- The Congo Basin Forest Partnership
- In 2005, Cameroon's President signed the Treaty on the Central Africa Forests Commission at the Heads of State Summit in Brazzaville, Congo, adopting the Convergence Plan.
- In 2005, Cameroon signed the Kinshasa Declaration on Great Apes and accepted chairmanship of the GRASP Council.

- Endorsement of the Network of Protected Areas

3.3. Priority actions:

a. Nationally:

- Three areas have been identified by the Ministry of Forestry and Wildlife as priorities for protection in the Congolese lowland evergreen forest of the extreme southeast Cameroon: Boumba-Bek NP and wildlife Reserve, Lobéké NP and Nki NP. Better demarcation of existing PA boundaries would help in the fight against illegal logging.
- Better coordinated research and monitoring on gorillas distributions and populations throughout Cameroon
- Large scale information and education campaigns needed to inform Cameroonians of the endangered status of gorillas and attract their attention to the wildlife protection laws.

b. Priority actions to be taken in the sites of exceptional priority for *Gorilla g. gorilla* in Cameroon. For each site, actions needed, potential partners, timeframe and funding needed were identified at the Brazzaville workshop. The sites and measures identified are the following:

Dja Biosphere Reserve and surrounding forests - priority actions:

- Establish and maintain basic management infrastructure in the Dja Conservation Complex.
- Recruitment, training and deployment of 50 extra eco-guards for law enforcement activities.
- Reactivate and maintain permanent great ape research areas throughout the area.
- Establish great ape monitoring and survey program across complex.
- Establish a disease surveillance program and rapid response structure specifically for great apes (with focus on Ebola and Anthrax).
- Establish community-based biodiversity enterprises to support ape habituation and community-based ecotourism.

Boumba Bek- Nki Conservation Complex Boumba Bek and Nki proposed NPs:

- Finalize management strategy of both National Parks.
- Establish and implement effective law enforcement program, including recruitment and training of 100 eco-guards and annual transboundary patrols with Odzala National Park Initial recruiting and training for 100 eco-guards.
- Maintain annual ape bio-monitoring program.
- Establish a disease-monitoring program specifically for great apes given geographical proximity of recent Ebola outbreaks.
- Establish collaborative framework with all stakeholders in support of great ape conservation, while developing management plan.

The Trinationale de la Sangha complex, which includes the Lobéké NP in Cameroon. (See International Priority actions)

Proposed Mengame Gorilla Sanctuary:

Mengame GS priority actions:

- Finalize management strategy of Gorilla Sanctuary.
- Establish and implement effective law enforcement and community sensitization program, including recruitment and training of 30 eco-guards and initiation of cross-border protection activities.
- Develop and sustain great ape–human conflict mitigation strategy.
- Implement disease-monitoring program (given geographical proximity to past Ebola

outbreaks).

- Maintain ape bio-monitoring program and reinforce survey database.
- Develop community mobilization strategy in support of great ape conservation.

c. International / transboundary cooperation:

Further reinforce existing trans-boundary agreements and initiatives, in particular:

Campo-Ma'an – Rio Campo conservation complex, between Cameroon and Equatorial Guinea: the complex includes the Rio Campo Reserve (335 km²) in Equatorial Guinea and the adjacent Campo Ma'an National Park (2,640 km²) in Cameroon, is situated in the Atlantic Coastal Forest zone and contains a remarkable biodiversity, including a significant population of gorillas, chimpanzees and mandrills, and a rich floral diversity including several endemic species.

La Trinationale de la Sangha, with CAR and Congo

The Sangha Trinationale is not only a regionally and globally important area for wildlife, it holds great potential for assessing and enhancing the effectiveness of trans-boundary and collaborative approaches to conservation in western equatorial Africa.

- Develop an epidemiological surveillance system and rapid response structure for the emergence of diseases, specifically Ebola.
- Improve judicial and law enforcement structures in protected areas and timber concessions, including capacity building, monitoring systems, and promotion of wildlife protection laws in logging concessions.
- Standardize protocols for training and implementation of bio-monitoring programs for great ape populations.
- Develop and promote national and trans-boundary structures for gorilla ecotourism in the Nouabalé-Ndoki, Dzanga and Lobéké National Parks.
- Campo Maan- Rio Campo Conservation Complex, with Equatorial Guinea
- Implement law enforcement and disease surveillance program; including recruitment and training of 50 eco-guards.
- Establish and maintain basic management infrastructure in Rio Campo.
- Establish and maintain a bio-monitoring program for gorillas.
- Explore ecotourism potential — conduct a feasibility study with gorillas viewing options.
- Develop and sustain platform for collaboration between stakeholders about logging issues.

4. CENTRAL AFRICAN REPUBLIC (CAR)

The Central African Republic (CAR) is situated at the northeastern edge of the range of the Western Lowland Gorilla. Gorillas are restricted to the forests in the southwest of the country: they occur in both the Dzanga and Ndoki sectors of the Dzanga - Ndoki NP (2,333km²), in the Dzanga - Sangha Dense Forest Special reserve (3,359km²), and in the Ngotto forest, a proposed NP.

4.1. Legislation

National

The Ministry of the Environment, Waters, Forests, Hunting and Fishing is responsible for wildlife conservation and the use of natural resources in CAR. These are governed by Ordinance N°84.045 (1984) and Law n°90.003 (1990). Great apes are listed in Category A as “completely protected”.

There are three principal categories of PA in CAR: Strict nature reserve (1); National Parks (5); Faunal Reserves (8); Special Reserve (1), Private Reserves

International

- CBD, 1995
- CITES, 1980
- ACCNNR, 1969
- WHC, 1980
- CMS Gorilla Agreement, 2008

4.2. Conservation action

Protected areas of importance to the Western Lowland Gorilla:

- The Dzanga - Ndoki NP, gorillas occur in both Dzanga and Ndoki sectors, and in adjoining Dzanga - Sangha Dense Forest Special reserve
- Ngotto forest
- the proposed Mbaéré - Bodingué NP

Current projects/activities with direct or indirect implications for Gorillas conservation:

1. Several international NGOs have been supporting conservation projects in Dzanga - Ndoki and Dzangha - Sangha SR, including WWF, WCS, as well as international organizations such as the World Bank and GTZ.
2. ECOFAC, EU funded conservation program, supported the administration of the Ngotto forest until 2003.

Existing international initiatives with direct or indirect implications for Gorillas conservation:

CAR collaborates with Cameroon and Congo in managing a three-way transfrontier reserve “la Trinationale de la Sangha” (TNS), in which the Dzangha - Ndoki NP of CAR is contiguous with the Lac Lobéké NP of Cameroon and with the Nouabalé - Ndoki NP of Congo. The agreement signed in 2000 resulted in joint ranger patrols and successful exchange of information.

4.3. Priority actions:

The most important threats facing Gorillas in CAR are poaching for the bushmeat trade, and diseases, in particular the threat from Ebola virus epidemics.

Immediate priorities for gorilla conservation are:

a. Nationally:

- Increase law enforcement: Control hunting and bushmeat trade
- International research on Ebola virus nationally and internationally
- Further political commitment
- Long term sustainable funding mechanisms
- Capacity building
- Improved information on gorilla population size and distribution
- Large-scale information and education campaigns.
- Improve conservation status of Mbaéré-Bodingué area, in Ngotto forest
- A corridor connecting Mbaéré - Bodingué and Dzanga - Ndoki must be negotiated with logging companies

b. Priority actions to be taken in the sites of exceptional priority for *Gorilla g. gorilla* in CAR. For each site, actions needed, potential partners, timeframe and funding needed were identified at the Brazzaville workshop. The sites and measures identified are the following:

La Trinationale de la Sangha, in which in which the Dzanga - Ndoki NP and the Dzanga - Sangha SR of CAR are part (see International transboundary actions)

c. International/transboundary cooperation:

Strengthen regional collaboration on important trans-boundary Gorilla sites; further reinforce existing transboundary agreements and initiatives, in particular:

La Trinationale de la Sangha: the Sangha Trinationale is not only a regionally and globally important area for wildlife, it holds great potential for assessing and enhancing the effectiveness of trans-boundary and collaborative approaches to conservation in western equatorial Africa.

- Develop an epidemiological surveillance system and rapid response structure for the emergence of diseases, specifically Ebola.
- Improve judicial and law enforcement structures in protected areas and timber concessions, including capacity building, monitoring systems, and promotion of wildlife protection laws in logging concessions.
- Standardize protocols for training and implementation of bio-monitoring programs for great ape populations.
- Develop and promote national and trans-boundary structures for gorilla ecotourism in the Nouabalé - Ndoki, Dzanga and Lobéké National Parks.

5. EQUATORIAL GUINEA

One of the smallest countries in Africa (28,052 km²), the Republic of Equatorial Guinea consists of the islands of Bioko (2,017 km²) and Annobon (17 km²), and the continental Rio Muni (26,017 km²), bordering the Bight of Biafra between Cameroon and Gabon. Now the third greatest oil producer in Africa, Equatorial Guinea is currently the world's fastest growing economy. The Western Lowland Gorilla is present in some of the forested part of continental Rio Muni.

5.1. Legislation

National

The Law on Protected Areas of Equatorial Guinea was passed in 2000 (4/2000), and the number of PAs increased to 13 in total, out of which 10 are located in Rio Muni: 2 NP (Monte Allen and Los Altos de Nsork), 5 Natural Reserves, one scientific reserve and 2 natural monuments. The conservation of natural resources and biodiversity are managed by two Ministries, the Ministry of Agriculture and Forests, and the Ministry of Fisheries and Environment. They are supported by national technical institutions, such as the Instituto Nacional de Desarrollo Forestal y Gestion del Sistema de Areas Protegidas (INDEFOR), and the National Institute for Biodiversity conservation (INCOMA). A decree forbidding capture, trade and consumption of primate bushmeat was recently issued (Decree 72/2007).

The forestry sector is managed on the basis of the Law No. 1/1997 and its application regulations (Decree 97/1997). These two instruments provide the basis for the regulation of natural areas. Other important instruments relevant to sustainable forest management include Decree 61/2007 on timber exploitation, and Decree 76/1999 on cancellation of contracts for forest concessions.

IMPORTANT: Since 2002, the Government of Equatorial Guinea has issued more new logging contracts, the main cause of degradation of natural habitats in Equatorial Guinea. Furthermore, Decree 61/2007 prohibiting the exploitation of timber caused a drastic decrease of wood production in 2008. The current government priorities relate to the exploitation of natural resources.

International:

- CITES, 1992
- CBD, 1994
- CCD, 1997
- Kyoto Protocol, 2000
- Ramsar, 2003
- World Heritage, 2003
- COMIFAC Treaty, 2005
- CMS, 2010

5.2. Conservation action

Protected areas of importance to the Western Lowland Gorilla:

- Monte Allen NP, a 2,000 km² Park consisting largely of dense tropical secondary forest (selectively logged in the past), is the most effectively protected PA in the country. Gorillas are the symbol of the Park.
- Altos de Nsork NP (4,000 km²). A large programme of research and inventories, led by CI (Conservation International) and the NGO ANDEGE, is currently taking place. The area is characterized by a strong presence of large mammals (elephants, primates including gorillas).

Current projects/activities with direct or potential implications for Gorillas conservation:

- ECOFAC, EU funded conservation programme, has been active in Equatorial Guinea since 1992. ECOFAC has supported the management of Monte Allen NP.

- ZSL and Imperial College London run , since 2002, a project on the sustainability of bushmeat hunting in Rio Muni, in conjunction with ECOFAC, INDEFOR, and CI.
- The Durrell Wildlife Conservation Trust, Jersey and the Wildlife Research Unit of Oxford also carried out a bushmeat study in 2003-2004.

5.3. Priority actions:

Immediate priorities for gorilla conservation are:

a. Nationally:

- Increase law enforcement within and around PA.
- Timber extraction must be made compatible with biodiversity conservation.
- Habitat restoration may be needed in buffer zones around the PA.
- Capacity building of PA staff is essential.
- Long-term research and monitoring on gorillas distributions and populations throughout Rio Muni is necessary to reassess the situation;
- Large-scale information and education campaigns needed to inform the people of the endangered status of gorillas and attract their attention to the wildlife protection law.
- Public awareness and sensitization of local populations and authorities needed, particularly on the consequences of bushmeat hunting and commercial trade on wildlife and primates species and of biodiversity loss.

b. Internationally / transboundary cooperation:

- Favor a trans-boundary management of Western Lowland Gorilla populations.
- Further reinforce existing trans-border agreements and initiatives, in particular for the Campo Maan- Rio Campo preservation complex, shared with Cameroon:
- Undertake a programme of application of the law and watching diseases including hiring and training 50 eco-guards.
- Establish and maintain the basic infrastructure for the management of Rio Campo.
- Establish and maintain a programme of gorilla monitoring.
- Explore the ecotourism capacity, conduct a feasibility study taking into account the potential for gorilla-watching as a tourist activity.
- Develop and support a collaboration platform between the various stakeholders on timber exploitation and forest management.

6. ANGOLA

In Angola, the Western Lowland Gorilla occurs only in the forests of Cabinda, north of the mouth of the River Congo. Its habitat is contiguous with that in the Republic of Congo and southwest DRC, which is the southern margin of tropical moist forest and the south-western limit of gorilla distribution. No definitive population figures exist. Gorillas are thought to be rare and probably declining since the 1970's (Caldecott and Miles, 2005), but no recent survey data exists.

6.1. Legislation

National

Existing (Article 24 of National Constitution; Decree N°40040 of 1955; Law 5/98 “basic law of

environment”); legal responsibility over biodiversity conservation and protected areas depends of the Ministry of Urban affairs and Environment, but in practice the Forestry Development Institute (IFD) remains in overall charge of forest sector, with the National Directorate of Agriculture and Forest (DNAF) with which it shares responsibilities in relation to policy formulation and guidance. Only PAs in Cabinda are Forest Reserves, aimed mainly at regulating logging.

International:

- CMS, 2006
- CBD, 1998, national report in prep., National Biodiversity Strategy and Action Plan adopted in 2006.
- World Heritage Convention (1991), but no World Heritage Site designated as yet
- ACCNNR, 1976

Not party to

- CITES (in process)
- Ramsar (in process)

6.2. Conservation action

Although the country has a long established system of PAs (since 1937), the independence war raging continuously since the early 1960s, followed by civil war in the country from 1974 until 2002 has had significant impacts on Angolan PA and conservation efforts, particularly relating to populations of large mammals, even in large PAs (Huntley and Matos, 1994). Many PAs lack wardens; poaching, logging and harvesting, settlement incursion and the cultivation of crops inside PAs occurs regularly.

Protected Areas of importance to Gorillas conservation:

The Mayombe forest in Cabinda is critical for gorilla conservation in Angola and globally, yet, is virtually unprotected in law or practice.

Current projects/activities with direct or potentials implications for Gorillas conservation (Ron, 2004):

1. Development of a national biodiversity strategy and action plan: UNDP with the Ministry of Urban Affairs and Environment, with GEF funding; started end of 2004 was finalized and adopted in 2006. Outcomes: identification of existing information on the status of biodiversity and priority actions to ensure biodiversity conservation and its sustainable use.
2. Improved Environmental Planning and Conservation of Biological Diversity in Angola (ANG/02/005): UNDP funded by NORAD. Aimed to strengthen national capacity to protect and manage natural biological resources, especially in planning, monitoring, evaluation and reporting on the state of the nation’s environment and its implementation of international conventions. Implemented 2002-2004.
3. Following this UNDP/NORAD project, the Cabinda provincial government has recruited an international consultant and initiated the development of plans for the study and conservation of the Mayombe forest and its ape populations. The proposal includes the designation of a new PA and a separate sanctuary for the rehabilitation of orphaned wildlife, including gorillas and chimpanzees. A regional task force for the joint protection

of the Mayombe forest by the 3 countries (Angola, RDC and Congo) was proposed. This initiative was not continued after 2005, but has now been restarted with the assistance of UNESCO and GRASP. The provincial NGO, Gremio ABC, is an important partner in conservation efforts in Cabinda Province.

4. A consultation and awareness process with resident communities took place 2000-2005.

5. Development, within the armed forces stationed in the Mayombe Forest, of voluntary "Friends of Nature" clubs, 2003-2004.

6.3. Priority actions

Immediate priorities for gorilla conservation are:

a. Nationally:

- Building capacity for environmental law enforcement in particular anti-poaching and logging regulation;
- Improving relevant national and provincial legislation, including designation of protected areas.
- Education and awareness development at governmental, nongovernmental organisation and community level throughout Cabinda, especially in and around the Mayombe forest;
- Census of the Mayombe Forest in Cabinda to identify viable populations of gorillas and connectivity;
- Effective law enforcement to halt commercial hunting (there is a strong ape bushmeat and pet-trade to the military and to illegal networks in Luanda and the neighboring countries, Republic of Congo and DRC). Wildlife protection laws are not sufficiently enforced either inside or outside PAs, and poaching, harvesting and settlements inside PAs all occur regularly. Wildlife products are sold openly in markets in Luanda and throughout the country.
- Awareness campaign aiming at soldiers, police, resident communities, accompanied by measures to encourage and enable local people to achieve sustainable livelihoods;
- Continued consultation process with resident communities;
- Financial and technical support to the development of alternative sustainable livelihoods, and Human-Wildlife-Conflict mitigation;
- In the long-term, support to eco-tourism development

b. Internationally /collaboration across borders

- Favor a trans-boundary management of the gorillas populations.
- Further development of a trans-border conservation initiative between Angola, DRC and Congo, for the protection of the Mayombe forest, as a response to the cross-border smuggling of wildlife and timber. A proposal has been developed by UNDP, and should be taken further (Ron, 2003).
- Put in place a concerted preservation system between Angola, Congo Republic and DRC in order to insure the survival of the Western Lowland Gorillas whose populations are probably not viable in DRC.
- Develop collaboration and trans-boundary information exchange between the three countries on the Western Lowland Gorilla's situation.
- Develop a new trans-boundary preservation initiative in response to the fauna and wood smuggling. A proposition has been developed by the PNUD, and should be going on. This proposition suggest in particular:
- Lead inventories of the gorilla populations of the Mayombe forest of Cabinda, DRC, and Republic of Congo, in order to gather gorilla census data, data on habitat status as well as genetic material.

- Train the participants belonging to local communities as well as the research staff, in census methodology and the establishment of laws enforcements by the communities.
- Lead socio economical investigations on the “bush meat” trade and market, the pressure of hunting and local attitude toward the Mayombe forest preservation.

7. DEMOCRATIC REPUBLIC of CONGO (DRC)

The Western Lowland Gorilla was considered extinct from its former range in the Mayombe (Bas-Fleuve region) in the extreme southwest of DRC, as a result of the combined effects of habitat loss, fragmentation, and poaching. However, recent sightings and observations indicate that a small population subsists in western DRC (Bas-Congo Province) and probably moves seasonally across the international border shared by DRC, Angola (Cabinda) and Congo Brazzaville.

The Mayombe forest, shared between the Congo, Angola and DRC, forms the southwest margin of the Congo Basin’s tropical rainforest and the geographical limits of several forest-dwelling species, including gorillas. A trans-frontier initiative for the conservation of the Mayombe Forest focuses on its southern sector, between DRC, Angola, and Republic of Congo. This zone incorporates the Dimoneka and Luki Biosphere Reserves in Republic of Congo and DRC, respectively. In spite of little or no protection efforts in these reserves, coupled with high human populations, illegal exploitation activities and decades of, as yet unresolved, political and economic instability, local reports suggest that significant ape populations, particularly chimpanzees, may remain. Community-based conservation measures have been seeking to build support for protecting a 2,000 km² zone of the Mayombe Forest in Cabinda, Angola. Information on ape status in the Mayombe Forest is scarce, and much-needed survey efforts have been hampered by civil unrest. Ape surveys in this trans-frontier region would also confirm the presence and status of western gorillas in DRC and build political support for trans-boundary conservation efforts in the three countries.

7.1. Legislation:

National

The Ministry of Environment and nature preservation and tourism is in charge of the preservation of the nature at the governmental level. Law 69.041 on the nature preservation of 1969 determines the national parks. Law 82.002, 1982, determines faunal reserves, hunting reserves and lists the species that it is forbidden to catch and hunt.

There are 4 main classes of protected areas in DRC: National Parks (9); Hunting reserves (1); Forest reserves (7); Wildlife Reserves (2)

The Congolese Institute for Nature Preservation (ICCN), controls these areas. A Forestry Act was passed in 2003, according to which the state owns all the forests and determines land-uses. Legal mechanisms and zoning systems are being developed. This is a source of concern for the recognition of traditional rights particularly for forest groups, and there have been few public consultations before the formulation of the Forestry Act (Caldecott and Miles, 2005). Taxes

imposed on forest exploitation are very low (0.06 US\$/ha).

International

- CMS, 1990
- CBD, 1994
- WHC, 1974
- ACCNNR, 1976
- CITIES, 1976
- COMIFAC Treaty, 2005
- Kinshasa Declaration on Great Apes, 2005
- CMS Gorilla Agreement, 2008

7.2. Needs and recommended priority actions:

The important and immediate priorities for the preservation of Western Lowland Gorillas are:

International / transboundary cooperation

- Favor trans-border management of the remnant Western Lowland Gorilla population:
- Strengthen the initiatives and existing trans-boundary agreement, for the Mayombe forest, between the Republic of Congo, Angola (Cabinda province), and the DRC.
- Establish a concerted system of preservation between Angola, Congo Republic and the DRC in order to ensure the survival of the Western Lowland Gorillas, that may have reached non-viable figures in DRC.
- Develop the collaboration and trans-boundary information exchange between the three countries on the Western Lowlands Gorilla.
- Common planning and integrated management for the trans-boundary gorilla population between Dimonika, Conkouati and the reserves and corridors still to create on the Bas Fleuve.
- Develop a new initiative of transboundary preservation in response to the fauna and wood smuggling. A proposition has been developed by the UNDP, and should be carried on. This proposition suggests especially:
- Conduct inventories on the gorilla populations in the Mayombe forest in Angola, in the DRC, and in the Republic of Congo, to gather data of gorilla numbers, habitat status as well as collecting genetic material.
- Train the local community participants and research staff in census methodologies and for the better enforcement of wildlife laws by the communities.
- Conduct socio-economical surveys on the bush meat market and trade, the hunting pressure and local attitude toward Mayombe forest preservation.

References to introduction (page 1)

- Morgan, B. J. et al. 2003. Newly discovered gorilla population in the Ebo forest. Littoral Province, Cameroon.. *International Journal of Primatology* 24(5):1129–1137
- Redmond, I. 1989 Trade in Gorillas and other Primates in the People's Republic of the Congo. Report for the International Primate Protection League, 42pp.
- Redmond, I. 1995 The ethics of eating ape. *BBC Wildlife* 13: 72-74
- Redmond, I., Tim Aldred, Katrin Jedamzik and Madeline Westwood. 2007 Recipes for Survival: controlling the Bushmeat trade. Ape Alliance and WSPA, downloadable from www.4apes.com/bushmeat
- Saint-Hilaire, Geoffroy I. 1852 Sur le gorille. *Compte rendu des séances de l'Académie des Sciences, Paris*, Vol. 34, 81-84
- Savage, Thomas. 1847 Letter read to the Boston Society of Natural History by Jeffries Wyman
- Savage, T.N., Wyman, J. (1847) External characters, habits, and osteology of *Troglodytes gorilla*. *Boston Journal of Natural History* v: 1847.
- Walsh, P.D., Tutin, C.E.G., Baillie, J.E.M., Maisels, F., Stokes, E.J. & Gatti, S. 2007. *Gorilla gorilla* ssp. *gorilla*. In: IUCN 2007. 2007 IUCN Red List of Threatened Species. <www.iucnredlist.org>.
- Walsh, P.D., Tutin, C.E.G., Oates, J.F., Baillie, J.E.M., Maisels, F., Stokes, E.J., Gatti, S., Bergl, R.A., Sunderland-Groves, J. & Dunn. A. 2008. *Gorilla gorilla*. In: IUCN 2008. 2008 IUCN Red List of Threatened Species. <www.iucnredlist.org>. Downloaded on 23 November 2008.
- WCS 2008 <http://www.wcs.org/gorilladiscovery/press-release> 5th August 2008