

SEMESTER ACTIVITY REPORT FOR THE KAGWENE GORILLA SANCTUARY



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ABOUT CEPOW

CEPOW is a registered non-profit organization (reg. no. 004/e.29/1111/vol.8/ALPAS) with Head-Office in Bamenda, Cameroon. CEPOW is an off-spring of Obama Friends Cameroon a CIG founded in October 2008. In 2017 Obama Friends Cameroon (OFC) saw a need to engulf a wider perspective and broaden the organization's scope.

Organizational Background

With new ideas and expertise in the management team, a broader agenda was set for the organization. The name was modified from Obama Friends Cameroon (OFC) to Crusaders for Environmental Protection and Ozone Watch (CEPOW) to meet the new agenda geared towards environmental protection.

CEPOW is a membership organization. Currently, we have a membership of 15 (national and international). CEPOW is run by a board of experts and early career scientists who are motivated to lead change in their local communities and the world at large.

Vision

We are a non-governmental, non-political, and non-profit making organization. Our goal is to build on the theory of change, through healthier/sustainable solutions to uprising environmental issues. We focus on adaptation and mitigation strategies to climate change. We seek to contribute to a sustainable planet through climate change intervention, environmental conservation, capacity building, development intervention, women and development, and collaborative research.

Four SDGs

SDG 1: No poverty

SDG 2: Zero hunger

SDG 13: Climate action

SDG15: Life on land

2. CEPOW; All for a safe planet

SEMESTER MESSAGE FROM THE EXECUTIVE DIRECTOR (DESMOND FONTOH)



As the Executive Director of CEPOW, I want to take this opportunity to thank all of our staff, collaborators, funders, supporters and volunteers for their relentless support throughout the year. We have worked hard to support conservation efforts and promote biodiversity in Cameroon.

Thanks to you all, we were able to launch several initiatives which have had a direct impact on wildlife conservation in Cameroon especially in our target site; the Kagwene Gorilla Sanctuary. We are proud of the progress that we have made, but we also

recognize there is still much more work to do and will continue our efforts into 2024 and beyond.

We understand the urgency of protecting biodiversity from further degradation due to man-made activities. With your help, we will continue our mission of preserving wildlife in Cameroon for future generations. Thank you for being part of our journey!

As another semester draws to a close, it is time to look back on all the work that has been done at the Kagwene Gorilla Sanctuary. Despite numerous challenges, we have achieved some amazing success stories this year. We hope we will learn from our challenges and failures to better challenge the future's challenges.

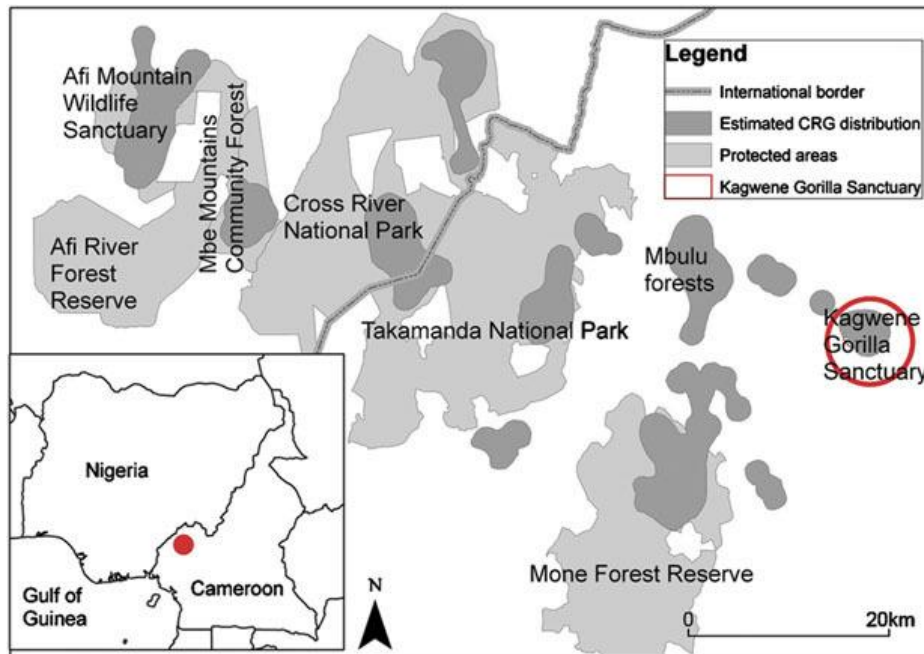
To our team of dedicated biologists, conservationists, and NGO workers who have been working tirelessly to protect wildlife and habitats in Cameroon, we say thank you. We are proud of our efforts and thankful for everyone who has supported our mission throughout this year. As we enter the new year, we remain committed to our cause of preserving biodiversity in Cameroon and beyond for generations to come.

A CLOSER LOOK AT CROSS RIVER GORILLA AND THE KAGWENE GORILLA SANCTUARY

I. Introduction

1.1. The Kagwene Gorilla Sanctuary

The government of Cameroon announced on the 3rd of April 2008 the creation of the world's first



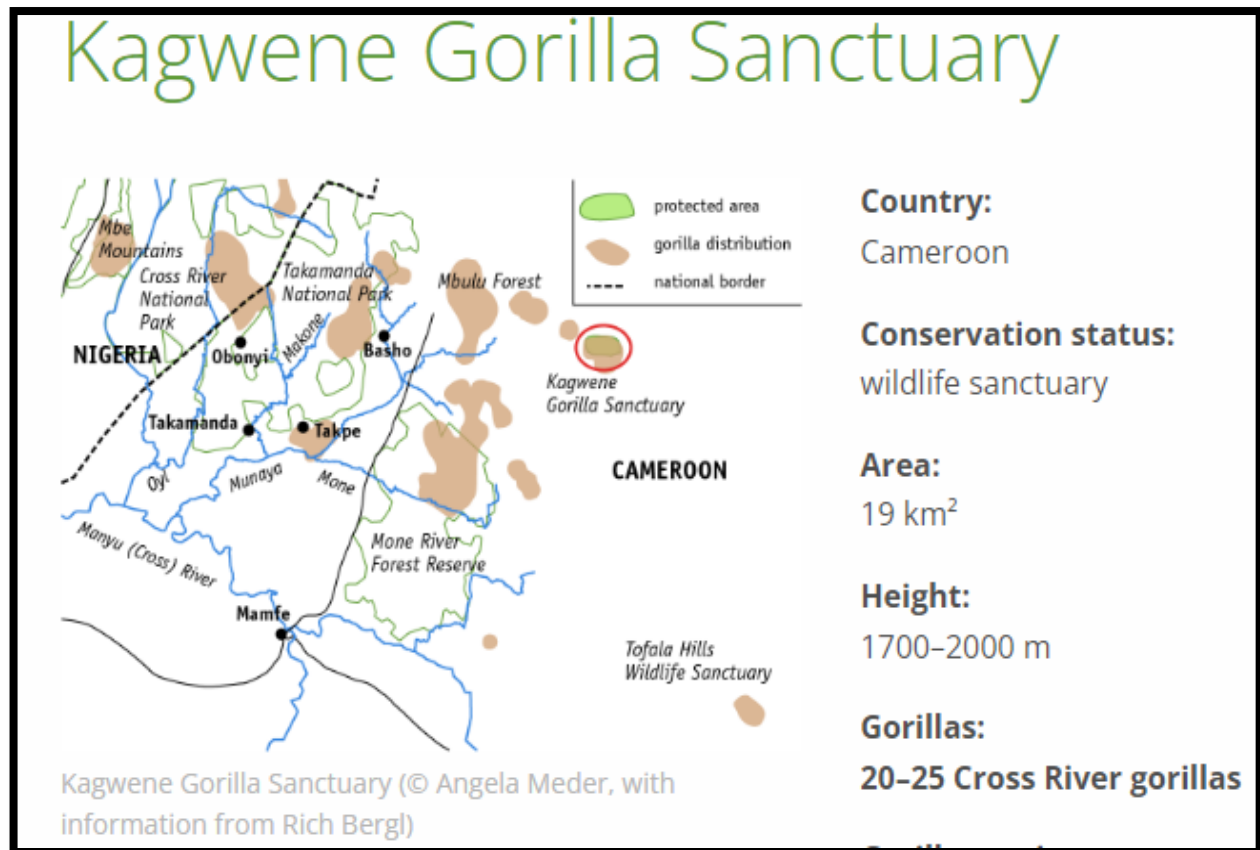
sanctuary exclusively for the Cross River gorilla, and this is now added to the national portfolio of protected areas managed by the Ministry of Forestry and Wildlife. The Kagwene Gorilla Sanctuary was officially created by decree of the Prime

Minister of Cameroon. The creation of the sanctuary is the product of research and conservation action that was initiated in 2003 when researchers first realized the potential of Kagwene as a long term monitoring site for this elusive animal.

There are seven villages within the immediate area that access the Kagwene Gorilla sanctuary and its resources. The main dialect is Manta though Pidgin English is widely spoken. The area is fertile, and most individuals gain income through small landholdings producing cocoa, oil palm, coconut, maize, vegetables, and fruits. Hunting, including the use of wire snares or locally made shotguns, is largely for subsistence.

However, it is an immediate source of income when cash is required. The area suffers from limited vehicle transportation links to Mamfe, the nearest town (48 km), and the roads are only passable by motorbikes during the rainy season. Until the crisis that hit hard in 2017, the Wildlife

Conservation Society (WCS) has been consistently monitoring the gorillas in the region since 2009, with the Gorilla Guardian Program (GGP) initiation. This program promoted the conservation of the Cross River gorilla and the Nigeria Cameroon chimpanzee in villages outside



of the sanctuary and provided individuals nominated within each village with tracking and ecological training (Mboh *et al.*, 2007). In terms of biodiversity, the Cross River region found at the Nigeria-Cameroon border has long been considered an area of primate endemism since the 1970s. It is home to a total of 13 primates including at least seven unique primates including the Nigeria-Cameroon chimpanzee (*Pan troglodytes ellioti*), the critically endangered Preuss's red colobus monkey (*Procolobus press*), drill (*Mandrillus leucophaeus*), redrumped putty-nosed monkey (*Cercopithecus nictitans ludio*), Cameroon red-eared monkey (*Cercopithecus erythrotis camerunensis*), Preuss's guenon (*Allochrocebus preussi preussi*), crowned guenon (*Cercopithecus pogonius*), mona monkey (*Cercopithecus mona*), angwantibo (*Arctocebus calabarensis*), Demidoff's galago (*Galagoides demidovii*), Talbot's needle-clawed galago (*Euoticus pallidus talboti*), and Cross River Allen's galago (Oates 2011; Oates *et al.*, 2004). Above all, the Kagwene

Gorilla Sanctuary provides a habitat for the Cross River gorilla (*Gorilla gorilla diehli*) one of the world's most critically endangered sub-species.

1.2. The Cross River gorilla (*Gorilla gorilla diehli*)

The Cross River gorilla (*Gorilla gorilla diehli*) is restricted to the hilly rain-forest region along the Nigeria-Cameroon border, which forms the headwaters of the Cross River. Its population is separated by about 300 km from the nearest

population of western lowland gorillas (*Gorilla gorilla gorilla*), and by around 200 km from the recently-discovered gorilla population in the Ebo



Forest of Cameroon. Based on small size of the remaining Cross River gorilla population, its fragmentation across a large complex landscape, and continuing threats to its survival from habitat destruction and hunting, this subspecies is listed as Critically Endangered in the IUCN Red List (IUCN 2006).

Gorillas in this region first became known to science in 1904 when the German taxonomist Paul Matschie described skulls collected from the area of today's Takamanda Forest Reserve in Cameroon, as representing a new species, *Gorilla diehli*. Subsequent studies of gorilla anatomy and taxonomy reclassified Cross River gorillas as a subspecies of *Gorilla gorilla* (Rothschild 1904, 1908), and later subsumed them (along with all western gorillas) within the monotypic subspecies *Gorilla gorilla gorilla* (Coolidge 1929). However, new measurements and analyses of museum specimens, in combination with re-analyses of existing data, led to a realization that the skeletons of gorillas in the Cross River region are significantly distinct from those of other western gorillas to merit their recognition as the subspecies *G. g. diehli* (Stumpf *et al.*, 1998, Sarmiento and Oates 2000, Stumpf *et al.*, 2003).

Today, the total population of Cross River gorillas may number fewer than 300 individuals. This population is spread across a broad landscape including a more-or-less continuous forest area of about 8,000 km².

1.3. Key sites for cross river gorilla

The figure below gives the key sites for the cross river gorilla and their corresponding population sizes. It covers home ranges for both countries; Cameroon and Nigeria.

Country/Site	Status	Altitude (m)	Area (km ²)	Gorilla range (km ²)	Estimated numbers
Nigeria					
Afi Mountain	Wildlife Sanctuary	130–1,300	ca. 100	40	25–30
Mbe Mountains	Proposed Community Wildlife Sanctuary	110–900	85	25	25–30
Okwangwo Division, Cross River NP ¹	National Park	110–1,700	640	65	25–50
Cameroon					
Takamanda ¹	Forest Reserve, proposed National Park and adjacent areas of non-classified forest	80–1,500	676	80	45–65
Mone River	Forest Reserve	110–1,200	538	35	20–30
Mbulu	Unclassified	500–2,000	ca. 1,000	30	20–30
Kagwene Mountain	Proposed Gorilla Sanctuary	1,700–2,000	19	19	20–30
Bechati-Fossimondi-Besali	Unclassified	500–1,200	80–100	ca. 25	20–30
TOTAL					200–295

Table 1. Key sites for Cross River gorillas. Adapted from the Regional Action Plan for the Conservation of the Cross River Gorilla (Gorilla gorilla diehli)

II. Threats to the Cross River Gorilla

A recent genetic study suggests that the Cross River gorilla population has undergone a marked reduction in size, perhaps within the last 100–200 years (Bergl, 2006). This decline is probably the result of the increasing availability and use of guns. Other factors contributing to the decline are habitat loss and fragmentation caused by the spread of agriculture, cattle grazing and road construction.

2.1. Hunting

Although Cross River gorillas are a protected species across their range, isolated cases of them being killed by hunters still occur, and the loss of even a few individuals poses a serious threat to the viability of the population, given the small numbers present at each locality. Hunting was identified as a major threat to the future existence of gorillas as far back as the 1930s (Anon. 1934). Gorilla hunting in this region, as elsewhere, is not purely for subsistence; gorilla meat is consumed, their bones are used in traditional medicine and as fetishes, and infants have been sold as pets. Because gorillas are such impressive animals, hunters often keep the skulls of individuals they have killed, so these trophies are found in many villages. While hunting certainly had a significant impact on this population, traditional practices in some localities may have deterred gorilla hunting. For example, throughout much of the Cross River gorilla range in Cameroon, there is a traditional prohibition on the sale of gorilla meat, and hence hunters have not sought out this species. Similarly, people in the Kagwene Mountains and Bechati-Fossimondi forest region of Cameroon, and some people on the Obudu Plateau in Nigeria, have a traditional ban on eating gorillas. The prolonged presence of research projects at some Cross River gorilla localities over the past years, coupled with conservation education activities and increased law enforcement, have undoubtedly helped to reduce gorilla hunting.



Bush meat being carried as a head-load, Cameroon. Photo credit, WCS



Cartridges found during bush meat survey. Photo credit, CEPOW-2023



Outcome of cartridges eminent through animal kills. Photo credit, CEPOW

2.2. Habitat Loss and Fragmentation



In the north of the Cross River gorilla's range and in the Bamenda Highlands to the east, much of the montane forest that probably harbored gorillas in the past has been lost to agriculture and, through burning by pastoralists, converted to grassland. This process continues

at the margins of the subspecies' present range, where there are high human population densities. Many small human settlements are scattered throughout the gorillas' range (some in the form of legal enclaves within protected areas) and the continuing expansion of these settlements has the potential to further fragment the forest and make it impossible for gorillas to migrate between their mountain strongholds. The improvement of old roads within the gorillas' range and the building of new roads are also contributing to habitat loss and fragmentation, as they open up new areas for settlement and cultivation, and act as possible barriers to migration.

2.3. Disease

Cases of devastating epidemic diseases such as Ebola and anthrax have not yet been recorded among apes in the Cross River region of Cameroon and Nigeria. But with humans, domesticated animals and gorillas living comparatively close together and often using the same habitat, there is a serious risk of a variety of pathogens and parasites spreading to the gorillas. The small size of the Cross River gorilla subpopulations makes them extremely vulnerable to the effects of introduced disease, and groups could be effectively eliminated by virulent infections.

III. Recommendations for the protection of the Cross River Gorilla (*Gorilla gorilla diehli*); Drawn from the Regional Action Plan.

3.1. Conservation education

Considering the large number of people living around and within the range of Cross River gorillas, raising awareness about the value of conservation education in general and the uniqueness of these gorillas in particular must be a major component of a long-term conservation program. Education and awareness efforts already undertaken at a number of sites in Nigeria and Cameroon have contributed to a significant reduction of gorilla hunting. These initiatives have included regular radio broadcasts in the Boki language in Cross River State, Nigeria, the establishment of an “outreach” program in Cameroon, and the distribution of Cross River gorilla conservation posters in both Nigeria and Cameroon. These efforts need to be continued and expanded.

3.2. Promoting Community Participation in Conservation

The Nigeria-Cameroon border region is surrounded by high human population density which directly influences the population of Cross River Gorillas and their habitats. There is also a large number of human settlements scattered through the gorilla’s range, while demarcated village enclaves lie inside both the Okwangwo Division of Cross River National Park in Nigeria and the proposed Takamanda National Park in Cameroon. Much of the gorillas’ range falls outside protected areas, on community-managed land with little or no formal protection status. Community support and involvement in conservation activities are, therefore, crucial to securing a safe future for the Cross River gorilla across its entire range. Mutual understanding, trust and transparency among government, non-governmental organizations and communities are key factors in community participation, and community members should therefore be included in the development of protected-area management plans and in park management committees. Beyond this, communities may be assisted with livelihood improvements that are designed to reduce the direct impact of people on the gorillas and their habitats. To achieve this outcome, appropriate income-generating activities may be promoted, along with agricultural practices that have the potential to produce increased crop yields without further encroachment on forest habitats or the conversion of buffer zones; improved marketing techniques for agricultural produce should also be explored. These efforts may be assisted by developing community-based training centers.



Donor-assisted development efforts tied to conservation projects need to make development assistance contingent on cooperation with conservation management systems.

3.3. Transboundary Conservation Planning

3.4. Development of Ecotourism and Gorilla Viewing

3.5. Improved Legislation and Law Enforcement

3.6. Research Priorities (population monitoring, distribution survey, genetic analysis etc.)

IV. CEPOW’s intervention for 2023 in the Kagwene Gorilla Sanctuary

4.1. Conservation education

Conservation education campaigns have been gaining momentum in recent years and has been one



of CEPOW’s core activities in the Kagwene Gorilla Sanctuary, as it is recognized that they are a powerful tool to create awareness about the importance of preserving and protecting the sanctuary’s gorillas and their habitats.

CEPOW holds that the key to a successful conservation education campaign is targeting the right audience. School visits, community workshops, and church visits have been some of the most effective ways to target our audiences with conservation messages. With these strategies, we have reached a wide variety of individuals in different age groups and backgrounds. Because radio broadcasts have proven to be an

effective way to target individuals who might not have access to other forms of media or education campaigns, CEPOW will in 2023, be considering to add this approach into her activities.

Summary

- 05 community schools visited with 5 eco-club established
- 07 churches visited across seven communities
- 10 village workshops held
- At least 450 persons reached through behavioral change campaigns

Conservation education cont.



Conservation education targeting churches



conservation education targeting community schools



Conservation education targeting communities

4.2. Habitat restoration/climate action



Habitat restoration has become increasingly important in order to preserve our environment and protect the species that inhabit it. The Kagwene Gorilla Sanctuary is a prime example of how restoring an environment can help wildlife thrive. CEPOW works with local communities to restore the forest by planting trees, conducting bush fire control and increasing agroforestry nurseries.

In addition, CEPOW is also taking climate action in order to reduce deforestation and help fight global warming. WE have been encouraging community tree planting initiatives in order to provide shade for gorillas and other species living within the sanctuary

while simultaneously promoting agroforestry nurseries that provide fruit trees and other plants for conservation efforts as well as local subsistence farming.

Our activities in the Kagwene Gorilla Sanctuary is an example of how habitat restoration can be beneficial for not only nature but also local communities. By restoring habitats, we can reduce deforestation, mitigate climate change impacts, increase biodiversity, and offer ways for people to sustainably interact with nature.



Establishment of community nurseries



Launching of community tree planting



Reforestation of degraded wildlife habitats

Summary

Three nurseries created

At least 6,000 socio-economic tree species nursed.

10,000+, ecological tree species nursed

At least 25ha of both farmlands and wildlife habitats/gorilla corridors reforested

4.3. Creation of village forest management committees

The creation of village forest management committees (VFMCs) is at the fore front of CEPOW's activities and has been observed to be a vital step in the protection and conservation of sanctuary. One VFMC was created in 2022 made up of custodians from seven local communities, with 40 members in total. They will be responsible for managing the sanctuary forests and protecting them against poachers.

The village forest management committees will be responsible for ensuring that the sanctuary forests are managed sustainably, with an emphasis on maintaining biodiversity and preserving natural resources. They will also work to educate local communities on the importance of conservation and sustainable practices, as well as provide support to those who rely on these resources for their livelihoods.



Sectorial meeting with VFMC members and community representatives of Oshie

4.4. Alternative livelihoods

Valorization of Non-Timber Forest Products (NTFPs) is an important way to create livelihood alternatives for the members of Village Forest Management Committees (VFMCs). This process helps in socio-economic empowerment of local communities by providing them with incentives for their participation in NTFPs valorization activities.

The valorization of njansang and honey are some of the most promising NTFPs that can be used as a source of income for VFMC members and other indigenous forest users. With the right strategies, these resources can be utilized to generate income and create employment opportunities in future. Hence, CEPOW began exploring ways to increase the value chain of these NTFPs so as to ensure long-term sustainability and economic benefits for VFMC members.

V. Plans for 2024

For 2024, we plan the following immediate activities:

- Continue with nurseries to expand our reforestation activities in the site. It is hoped that over the long run, this activity will not only increase the carrying capacity for gorillas and other wildlife, but will improve on the living standards of the indigenous population while at the same time, supporting CEPOW's actions in the fight against climate change.
- With a successful pilot test on the valorization of njansang, we hope to develop a robust pro-biodiversity green value chain for Non-Timber Forest Products especially *Ricinodendron heudelotii* (njansang) and honey for communities dependent on the Kagwene Gorilla sanctuary. As compensation for dedicated service to conservation, this aspect will prioritize more the VFMC members.
- The behavioral change campaign strategies that were adopted for this project were observed to have played a great role in the engagement of the indigenous population on the conservation of the Cross River gorilla, its habitat and other biodiversity at large. Thus, we intend to replicate a more detailed plan as far as conservation education is concerned and this time, extending our campaigns to other villages.



- Develop an inclusive sustainable management plan for the Kagwene and Mbulu Gorilla Sanctuary.
- Initiate plans to improve the tourism potential of the forest. This is going to be a very important aspect of our long-term plans because unless the government starts seeing the financial benefit, they will hardly support conservation works at the expense of alternative activities that would otherwise generate income for the state.



VI. Conclusion

Moving forward, we at CEPOW are pleased to look back on the year with a sense of pride and accomplishment. We have achieved so much over the past 12 months, from our successful partnership with Kagwene Gorilla Sanctuary to our collaborations with numerous other partners and collaborators. We wouldn't have been able to do this without their help, and we would like to thank them all for their support.

As we look forward to the coming year, we are eager to continue our work towards protecting endangered species and preserving their habitats. We have exciting plans in place for the future, and hope that these will help us achieve even greater success in the years ahead.