COVID-19 AND AFRICA'S GREAT APES

Challenges and Threats Amidst the COVID-19 Pandemic for Sustaining Conservation through Responsible Great Ape Tourism

POLICY BRIEF

International Gorilla Conservation Programme

SECURING THE FUTURE FOR MOUNTAIN GORILLAS

CONSERVATION through PUBLIC HEALTH.

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Bonobo

Chimpanzee

Mountain Gorilla

ALICE MBAYAHI - *International Gorilla Conservation Programme*

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International Gorilla Conservation Programme

SECURING THE FUTURE FOR MOUNTAIN GORILLAS

CONSERVATION through PUBLIC HEALTH

Key Messages

Tourism brings people and great apes into close contact and because of their closely matched DNA great apes are susceptible to human diseases like coronaviruses. Adherence by tourists and field staff to the **IUCN Best Practice Guidelines for Great Ape Tourism** is therefore critical.

01

African governments, donors and tour operators need to establish and/or strengthen measures that minimize the risks of infection and other related threats to the survival of great apes.

02

Responsible tourism using a One Health approach can help minimise the trade-offs between economic motives and great ape conservation.

03

Community-based long-term nature-based and nature-compatible enterprises at great ape sites should be supported by governments, donors and tour operators to promote diversified income generation to reduce direct dependence on great ape tourism.

Why this Policy Brief

This policy brief highlights the key challenges and threats facing Africa's great apes in the wake of the global COVID-19 pandemic and offers actionable recommendations for a One Health[a] approach that can achieve great ape conservation, responsible tourism and community benefits.

Key Audience

Governments, tourism industry, private sector and donors.

The Challenge

Africa's great apes including bonobos, chimpanzees and gorillas face grave and growing threats including poaching, habitat loss and fragmentation and wildlife trafficking.[1] The emergence of the highly-infectious COVID-19 disease also presents great apes with a new threat additional to those posed by pre-existing transmissible human diseases.[2] Rangers, guides, porters, researchers, trackers, tourists and surrounding communities interact on the same land with habituated great apes and can transmit diseases to each other when they come into close proximity.[3]

Great Ape tourism is active at 33 sites in 13 countries across west, central and east Africa (Cameroun, Central African Republic, DR Congo, Gabon, Guinea Bissau, Ivory Coast, Liberia, Republic of Congo, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda), involving seven species/populations (Mountain Gorillas, Grauer's Gorillas, Western Lowland Gorillas, Eastern Chimpanzees, Central Chimpanzee, Western Chimpanzees and Bonobo). For further details on these locations and populations see the addendum to this policy brief.

Great ape tourism generates revenue that contributes significantly to national economies and community development with as much as 60% being allocated to wildlife management in the case of Uganda.[4] Both the survival of great apes, and all these benefits to livelihoods and economies are at risk due to the COVID-19 pandemic.

There is, therefore great urgency for African governments to strictly and consistently enforce best practices in great ape tourism[5] to protect and manage the health[6] of endangered and critically endangered populations of great apes. A One Health approach enables this to be done at the same time as optimizing the benefits of tourism, especially to local communities, through people-centered and nature-positive approaches.

Key Threats

Infectious Disease Susceptibility

Great apes are susceptible to a wide range of human diseases, including measles, scabies, tuberculosis, common flu, and other respiratory diseases.[7,8] First-time exposure to an illness or virus that is

[a] The 'One Health' approach aligns priorities for human health and environmental health, recognizing that each is critical for supporting the other. 'One Health' is consistent with the Sustainable Development Goals and ACBA's focus on Sustainable Use as a foundational principle for biodiversity conservation in Africa. See https://www.onehealthcommission.org/en/why_one_ health/what_ is_one_health/

[b] Tour operators are businesses that combine two or more travel services (e.g., transport, accommodation, meals, entertainment, sightseeing) and sell them through travel agencies or directly to final consumers as a single product (called a package tour) for a global price, See https://tourismnotes.com/tour-operators/

relatively innocuous to humans can devastate an entire ape population. Because humans and great apes share over 98% DNA genetic material and have the same angiotensin-converting enzyme-2 protein receptors that the SARS-COV-2 virus attaches to, great apes can easily contract COVID-19 from people[9,10]. Some apes, especially gorillas and chimpanzees, have in the past succumbed to respiratory viruses, including coronaviruses, which quickly spread within and between groups as they interact.[11, 12, 13, 14, 15, 16, 17] If a novel disease like COVID-19 circulates in small vulnerable great ape populations causing significant morbidity and mortality, local or subspecies extinction can occur.[18] Captive gorillas in zoos contracted COVID-19 from asymptomatic keepers[29,30] providing direct evidence that great apes are susceptible to this novel coronavirus.

Although several governments have implemented policies to minimize the risk of disease transmission, enforcement of existing best practice recommendations remains weak. The great ape visitation rules, including viewing distance guidelines, are routinely violated, increasing the risk of disease transmission from humans.[19]

Inappropriate tourism marketing increases potential risky behaviours instead of reinforcing risk mitigation

Due to competition for clients, some tour operators ignore the tourism standards and best practices in order to make their products more appealing, while others are not even aware of them. Some operators post inappropriate marketing messages, including images of tourists close to or touching great apes, seemingly offering clients a similar experience.[20] Tourists also post similar images on social media.[31] This kind of marketing not only sends the wrong message, it raises tourists' expectations and trivialises conservation efforts as some tour handlers may resort to unethical practices to allow their tourists to get closer to the wild animals.[21]

Lack of awareness or limited knowledge of great ape tourism rules puts great apes at risk from contagious human diseases

While some tourists are quick to disregard tourism rules in the absence of strict enforcement, others are simply unaware of them.[22] Tourism site managers, tour companies, handlers and guides are sometimes reluctant to educate tourists about the great ape viewing guidelines before their adventure. Lack of knowledge leads to non-compliance to the rules, exposing the apes to both asymptomatic and visibly ill tourists. Tourists should be held accountable for failing to respect rules.

Inadequate capacity to manage disease outbreaks

With tourism revenue drastically curtailed by the coronavirus pandemic, tourism sites are struggling financially, and many are unable to provide adequate personal protective equipment, medicine, food and water to their staff. This in itself is demotivating to the teams responsible for the health of wildlife and management of tourists. Additionally, most great ape sites lack clear-cut contingency plans,[23] including operational funds and technical personnel to handle epidemics should they break out, making the situation even riskier.[24]

Climate, economic and social vulnerability

A combination of factors creates a potential 'perfect storm' arising from increased and frequent contact between humans and great apes both inside and outside their habitats, compounded by the growing human populations surrounding most great ape habitats. Communities living adjacent to parks often lack adequate sanitation and hygiene and have limited access to basic health care services and clean water, forcing them to source many of these basic services from inside the protected areas.[1] Because of all this and more, disease outbreaks especially diarrheal and respiratory illnesses are a common occurrence.[24]

Furthermore, these boundary communities usually survive on subsistence farming characterized by limited incomes and high food insecurity due to changing weather, adverse economic conditions, poor infrastructure and low literacy levels.[25]

Recommendations

***To African Governments*:**

- Develop and adopt clear guidelines for the re-opening and management of ape visitation that include mandatory wearing of masks by park staff, tourists and researchers, Consider decreasing the number of people for each daily visit from 8 to 6 and increasing the viewing distance from 7 to 10 meters.
- Enforce strict adherence to, the IUCN Best Practice Guidelines[5, 6] for disease prevention.
- Consider testing and vaccinating park staff against COVID-19 and other preventable diseases.
- Support local communities to develop both tourism and non-tourism dependent livelihoods that are compatible with great ape conservation, through nature-based and nature-compatible enterprises.[35]
- Enhance opportunities for transboundary collaboration and sharing of information and lessons on pandemics and conservation approaches that are people-centred and nature-positive and apply a One Health approach.

To Donor Partners:

- Channel funding to critical conservation sites and issues including; the improvement of health systems around great ape habitats, equipping park staff with necessary protective gear and supplies and capacity building of park staff on disease identification, monitoring and management.
- Support government agencies to establish an African Great Apes Emergency Fund for disease response and great ape conservation during periods of reduced tourism.
- Support and invest in research on prevention of disease transmission between humans and great apes.
- Support local communities to develop both tourism and non-tourism dependent livelihoods enterprises that are compatible with great ape conservation.

***To Tour Operators*:**

- Heighten vigilance to ensure adherence to best practice guidelines for responsible marketing of all tourism services.
- Sensitize clients about great ape tourism best practice guidelines ahead of the visit guidelines and hold them accountable.
- Sensitize clients about great ape visitation rules in advance and hold them accountable.
- Encourage government agencies to enforce great ape tourism basic best practices.
- Encourage clients to promote conservation at great ape sites by supporting local community initiatives.

Conclusion

Evidence clearly shows that great apes can and do contract human respiratory infections. With the current availability of effective vaccines against COVID-19 that prevent severe disease, there is an urgent need to further protect great apes from infection by making vaccines available to people interacting closely or sharing a habitat with them[33], and ensure the promotion and circulation of information about vaccines with culturally-appropriate messages to combat vaccine misinformation and vaccine hesitancy. Such target people include park staff, conservation and tourism personnel, local communities and tourists.

Even after the current COVID-19 pandemic has been brought under control to the fullest extent possible, these recommendations should continue to be enforced to protect great apes and the tourism industry, against emerging zoonotic diseases and future pandemics. Respiratory disease incidences in great apes have reduced after mandatory mask usage including during the pandemic[34] demonstrating the benefits of continuing with these recommendations even after the COVID-19 pandemic ends to protect great apes from common flu viruses and other human related diseases.

An integrated 'One Health' response to the COVID-19 pandemic has the potential to protect great apes and other wildlife whilst safeguarding the communities with whom they share their habitats, now and in the future.

ANNEXES

ANNEX I: ACKNOWLEDGEMENTS

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Map Credit: International Gorilla Conservation Programme/Stephen Holness; Site data compiled with support from UNEP-GRASP and IUCN SSC Primate Specialist Group Section on Great Apes; PA data from UNEP-WCMC World Database on Protected Areas (WDPA).

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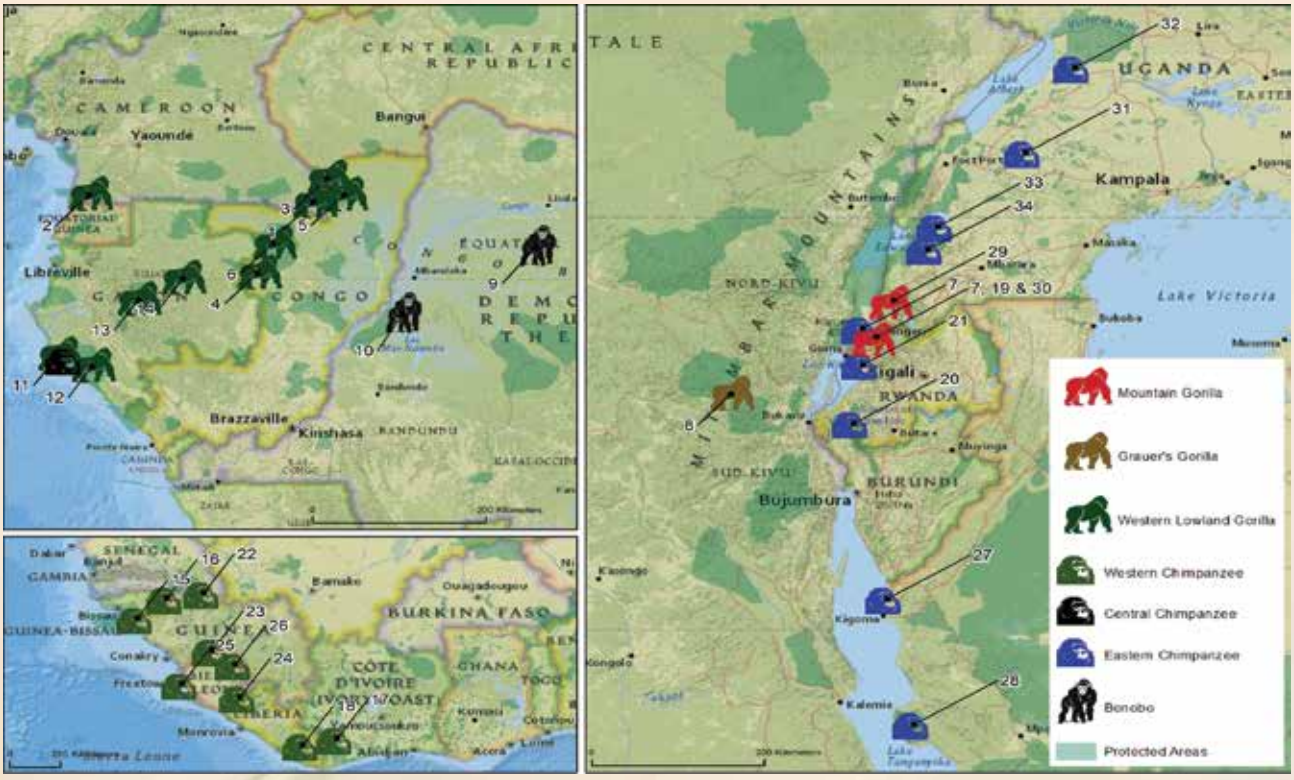
ANNEX II - MAP OF GREAT APE TOURISM SITES IN AFRICA



This map represents sites that offer different types of primate viewing experiences and are at different stages of development. NOTE: We believe that Chimpanzee sites remain under represented.

ANNEX III – LIST OF COUNTRIES AND TOURISM SITES

Country	Map Code	Park	Mountain Gorillas	Grauer's Gorillas	Western Lowland Gorillas	Eastern Chimpanzees	Central Chimpanzee	Western Chimpanzees	Bonobo
Cameroun	1	Lobéké National Park			■				
	2	Campo Ma'an			■				
Central African Republic	3	Dzanga Sangha			■				
Republic of Congo	4	Lossi interzone			■				
	5	Nouabalé-Ndoki National Park			■				
DR Congo	6	Virunga National Park	■			■			
	7	Kahuzi-Biega National Park		■					
	8	Lomako-Yokokala Faunal Reserve							■
	9	Lac Tumba, Malebo							■
Gabon	10	Parc National du Loango			■		■		
	11	Moukalaba-Doudou National Park			■				
	12	Lopé National Park			■				
	13	Ivindo National Park, Langoué,			■				
Guinea Bissau	14	Cantanhez National Park						■	

Country	Map Code	Park	Mountain Gorillas	Grauer's Gorillas	Western Lowland Gorillas	Eastern Chimpanzees	Central Chimpanzee	Western Chimpanzees	Bonobo
	15	Boé National Park						■	
Ivory Coast	16	Taï National Park						■	
Liberia	17	Sapo National Park						■	
Rwanda	18	Volcanoes National Park	■						
	19	Nyungwe Forest National Park				■			
	20	Gishwati-Mukura National Park				■			
Senegal	21	Reserve Naturelle Communautaire de Dindefelo						■	
Sierra Leone	22	Outamba National Park						■	
	23	Gola National Park						■	
	24	Western Peninsula National Park						■	
	25	Loma Mountains National Park						■	
Tanzania	26	Gombe Stream National Park					■		
	27	Mahale Mountains National Park					■		

Country	Map Code	Park	Mountain Gorillas	Grauer's Gorillas	Western Lowland Gorillas	Eastern Chimpanzees	Central Chimpanzee	Western Chimpanzees	Bonobo
Uganda	28	Bwindi Impenetrable National Park	■						
	29	Mgahinga Gorilla National Park	■						
	30	Kibale Forest National Park				■			
	31	Budongo Forest Reserve				■			
	32	Kyambura Gorge, Queen Elizabeth National Park				■			
	33	Kalinzu Forest Reserve				■			

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