COVID-19 and great apes
Recommended Great Ape funding priorities during the COVID-19 pandemic

Section on Great Apes*, IUCN SSC Primate Specialist Group
Effective: until further notice

This document is intended for conservation donors and anyone designing conservation programs in great ape habitat.

The COVID-19 pandemic has impacted the world in a manner that has not been seen since the early 20th century, with severe human health impacts (toll of more than 520,000 lives), economic impacts (cost to the global economy of $8.8tn) and social impacts on jobs, mental health, industries and societies, disproportionately impacting the most vulnerable populations. The impact of a relatively small zoonotic incident from wildlife to humans has been devastating and continues to spread around the world. It has become abundantly clear that biodiversity, the environment and the conservation of natural ecosystems is central to human survival on this planet and without effective management and protection of biodiversity and nature, no human enterprise can flourish. This includes health, education, economy, finance, society and culture. Conservation of all wildlife and natural systems, on land and in water, needs to be prioritized.

Apes, including both the great apes (gorillas, chimpanzees, bonobos and orangutans) and small apes (gibbons) occur in forested ecosystems across Africa and Southeast Asia. They are all threatened with extinction and protected by law in every country in which they are found. They also occur in areas of high biodiversity, in forests that are the natural habitat for a large number of other species and important ecosystem functions and services. Range state governments, protected area authorities, conservation organizations and projects, tourism companies and other private industry stakeholders face a severe loss of funds needed to protect great apes and their habitats as a result of COVID-19 related disruptions and the economic impact of the pandemic. The pandemic has altered conservation and management activities in ways that may impose greater pressures on great ape populations via exposure to SARS-CoV-2 and co-infections, increased risk of poaching in great ape habitat, and increased risk of habitat disturbance through illicit logging, firewood extraction and other extractive and illegal activities that may increase while tourism and protected area management is curtailed.

Great apes and humans are genetically closely related, which creates a high potential for infectious pathogen exchange. There is an abundance of evidence showing that wild great apes can be infected with human pathogens, including viruses causing respiratory illness (e.g. human metapneumovirus, respiratory syncytial virus), other viruses (e.g. herpes simplex virus), internal and external parasites (e.g. helminths,
protozoa, mites) and bacteria such as *Escherichia coli*, *Salmonella* and *Streptococcus*. SARS-CoV-2, the virus that causes COVID-19, is spread via contact with respiratory droplets emitted by an infected person through coughing and sneezing. It should be assumed that great apes are susceptible to SARS-CoV-2, as the ACE2 surface receptors that allow coronaviruses to infect cells are highly similar among humans and great ape species. If SARS-CoV-2 infects a wild great ape, it should be assumed that the infection could cause morbidity and mortality in infected animals, and it should be assumed that the virus will spread rapidly among great ape groups and communities.

The recent crisis has highlighted the importance of maintaining diverse sources of funding to support great ape conservation, particularly for those field sites that rely on tourism. Strategies to develop alternative funding sources to ensure the continuation of essential management activities (e.g., ranger patrols and community engagement) during emergencies and other unforeseen events must be pursued in order to help ensure the long-term sustainability of conservation efforts.

In addition to providing long-term, stable funding to ensure continued presence at field sites, the IUCN SSC Primate Specialist Group’s Section on Great Apes encourages conservation and great ape donors to focus their funding on the following urgent priorities during the pandemic.

1) Funding to ensure the continuance and effective management of forests and forest ecosystem protection. Forest degradation and destruction often results from foreign-owned extractive industries (logging, mining, etc), industrial agriculture (rubber, cocoa, palm oil, soya, etc.) and infrastructure development (hydroelectric power, dams, roads, bridges, etc.) Additionally, subsistence agricultural clearance for food production or artisanal mining also often leads to forest degradation and destruction. Enforcement of Environmental Social and Governance regulations is critical to ensuring that such activities avoid destruction in high conservation value forests, which also often damages the livelihoods and existence of forest-dependent communities. Yet due to economic pressures, industry is relaxing standards and large swathes of forest are being destroyed without regard for the value of the ecosystem, the wildlife and the people dependent on the forest.

2) Funding to ensure the continuance of wildlife anti-poaching activities, including community engagement, intelligence collection, patrols, law enforcement and law enforcement monitoring. Increased wildlife poaching often results from the economic downturn of those communities where people (both local people not directly employed by a project, and those employed as guides or research assistants) usually rely on tourism and research revenue. Tourists and research staff act as additional “eyes on the ground” at many sites, therefore, the suspension of these activities as a result of the COVID-19 pandemic could lead to an insufficient number of guards observing what is going on over large landscapes. Furthermore, as some staff become sick or quarantined, there is a risk that the existing efforts may become less effective, as fewer patrols may be deployed. Therefore, there will also be a need to make anti-poaching efforts more efficient on the ground.

3) Funding to ensure that protected area authorities, tourism and conservation projects have adopted and are strictly implementing IUCN protocols for great ape visitation and disease prevention, including funding to closely monitor great ape populations for respiratory disease outbreaks and

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1 For the full recommendations for disease prevention in great apes, and tourism with great apes, please see:

- IUCN Best Practice Guidelines for Health Monitoring and Disease Control in Great Ape Populations [https://portals.iucn.org/library/node/45793](https://portals.iucn.org/library/node/45793)
- IUCN Best Practice Guidelines for Great Ape Tourism [https://portals.iucn.org/library/node/9636](https://portals.iucn.org/library/node/9636)
diagnostics to rapidly confirm causes of respiratory disease outbreaks should they occur. Funding to assist protected areas with contingency planning will ensure that multi-stakeholder sites have a uniformly accepted and approved plan for response should COVID-19 enter a great ape population.

4) Funding to enhance personal hygiene infrastructure in protected area sites, so that personnel are engaging in best practices for hand-washing, boot cleaning, clothes laundering for use in the PAs; provision of quarantine infrastructure and supplies.

5) Funding to support COVID-19 testing and vaccinations (upon availability) for frontline field staff, including rangers, research assistants, trackers, field cooks and any other category of park staff that enter ape habitat. Some conservation projects have already delivered testing and vaccinations for other pathogens on site, in collaboration with the national local authorities, and health organizations, where the work is done by medical staff. This would also be possible for COVID-19 testing and vaccinations. However, where this capacity is lacking, we advise support to local health partnerships that involve conservation programs, local authorities, and health organizations to assist in COVID-19 testing and vaccinations for frontline field staff.

6) Funding for targeted community health initiatives that reduce the risk of ape exposure to SARS-CoV-2 or co-infections for habituated ape populations, which are particularly vulnerable to disease transmission.
   - Foster community hygiene in villages around great ape habitat, perhaps including hand washing stations and local production of cloth face masks.
   - Education campaigns on SARS-CoV-2 and prevention.
   - Local testing capacity linked to contact tracing and quarantine procedures.
   - *Streptococcus pneumoniae* vaccination programs.
   - SARS-CoV-2 vaccination programs (upon availability) for communities living close to great ape habitats.

7) Advocacy by conservation donors to encourage health organizations and governments to ensure that communities living in and around great ape habitats are taken into account when vaccination programs are designed and implemented.

*The IUCN SSC Primate Specialist’s Group Section on Great Apes comprises 144 experts active in research on and conservation of great apes. Its role is to promote conservation action on behalf of the great apes, based on the best-available technical information. It serves as a forum for discussion and information exchange; it establishes guidelines for best practices in research and conservation; its members formulate action plans, and advise on effective protection of great ape populations.*