

ASP Conservation Action Network (CAN)

Fellow Primatologists:

In light of the extinction crisis facing primates (and so much of the Earth's wildlife), the *American Society of Primatology* has formed the **ASP Conservation Action Network (ASP-CAN)**. This March newsletter (also on the ASP website) is our second **Call to Action** to ASP members. It was authored by Francine Dolins (fdolins@umich.edu), Sylvia Atsalis (sylvia@sylviaconsults.com) and Anne Russon (arusson@glendon.yorku.ca).

The subcommittee's main goal is to motivate the membership to move from **advocacy** to **activism** as we unite to protect primates globally. With the approval of ASP, we plan to apply member expertise, through social media platforms, media campaigns, public lectures, workshops, crowd-source funding and other events, to inform and move our membership and the public to take actions that protect primates. Other initiatives will include engaging with US and international businesses, governments, politicians, NGOs, and conservation societies, to promote environmental justice, reforestation and habitat restoration, with the aim to protect primate populations, biodiversity, as well as local human populations. To support this engagement, we aim to train interested primatologists in activist methods in order to meet with state and federal lawmakers and gain backing for the global protections of primates and other species.

Due to the origins of COVID-19-caused by the SARS CoV-2 virus-and the high infection rate and mortalities among all human populations, we believe that bringing attention to the critical significance of protecting wild animals including primates is of paramount value. Although no great apes have yet been reported with COVID-19, great apes are already at risk of extinction due to forest destruction and poaching. Infectious diseases such as COVID-19 are a major concern for great ape conservation. There also is concern for other primate species' welfare with regard to COVID-19.

The COVID-19 pandemic almost certainly has its origins in illegal poaching and butchering of wild animals, with the virus SARS-CoV-2 likely entering the human population from interactions with wildlife in "wet" meat markets (some that are illegal). These wild animals were housed and butchered with and near domestic farm animals, a clear and easy pathway for zoonotic transmission to humans. Two other examples of zoonotic diseases (https://www.ncbi.nlm.nih.gov/books/NBK215317/pdf/Bookshelf_NBK215317.pdf) that entered the human population from wild primates are Human Immunodeficiency Virus (HIV) (from chimpanzees and bats) and the Marburg Hemorrhagic Virus (from grivet monkeys *Chlorocebus aethiops* and fruit bats). Highlighting the importance of protecting wild animals also leads to protection of human populations.

With this Action Letter our aim is to call ASP members' attention to the potential impact on wild and captive primates of SARS-CoV-2, the highly infectious and deadly virus that causes COVID-19, and summarize relevant information that you can share in class lectures and formal presentations. We believe it is very important to both inform and inspire our colleagues to further inform others outside of our Society, creating a ripple effect of information transfer. In addition, to help achieve this goal, we provide you with this link to write a letter to your local newspaper

editor, in a call to action to prevent further pandemics by protecting wildlife:
<https://actionnetwork.org/letters/call-for-action-to-prevent-pandemics-by-protecting-wildlife/>

“Wet” Meat Markets and Endangered Species as Remedies for COVID-19

SARS-CoV-2 is thought to have originated at a wild animal market (wet market) in Wuhan, China, where it may have made the leap from bats to pangolins to humans. Even to the present day, often unregulated “wet” markets, which sell legal meat, vegetables and fruit, allow illegally hunted and poached exotic and endangered wild animals (such as pangolins, monkeys, civet cats, bats, rats) to be housed, sold, and butchered alongside domestic food animals (e.g., chickens, ducks, geese, pigs). The close proximity and commingling forms a ‘biological stew’ from which exchanges of bodily fluids and waste materials enable the rapid transmission of diseases, viruses, and bacteria, from one host to another. The animals’ suffering is also evident; their distress creates additional shedding of the virus. Butchering animals in these wet meat markets provides another avenue for direct transmission of viruses to humans, especially when those doing the killing sustain cuts that become bathed in animal blood and feces. This situation creates a straight-forward migratory path for transmission of viruses, which can mutate and invade their new human host.

Wet meat markets that allow the commingling of multiple exotic and endangered species are not limited to China and other parts of Asia; they are prevalent in many parts of the world. An article in *The Guardian*, reveals the exploitation of wildlife that is devastating their populations and endangering humans with exposure to viruses and bacteria:
<https://www.theguardian.com/environment/2020/mar/18/tip-of-the-iceberg-is-our-destruction-of-nature-responsible-for-covid-19-aoe>.

In 2012, environmental journalist Jim Robbins wrote that if we fail to understand and take care of the natural world, the resulting breakdown of these systems can come back to haunt us in ways we know little about. In his words, “Disease is largely an environmental issue; 60% of emerging infectious diseases that affect humans are zoonotic — they originate in animals...more than two-thirds of those originate in wildlife” (<https://www.nytimes.com/2012/07/15/sunday-review/the-ecology-of-disease.html>). Indeed, the story of COVID-19 is a story of humanity’s ever-encroaching relationship with other living species (<https://thenarwhal.ca/what-coronavirus-covid-19-pandemic-tells-us-about-relationship-natural-world/>). Moreover, consuming wildlife constitutes only one layer of this encroachment. An analysis of the Ebola outbreak in West Africa demonstrates the complexity of human-wildlife interactions. In this case, shifting agricultural policies in Guinea’s forested region, particularly a rise in palm oil plantations promoted through governmental policy, may have been behind how Ebola crossed from the environment into humans. The conclusion is that economic and agricultural policies can shift land-use activities triggering a sequence of long-term dire repercussions. In a recent opinion piece in The New York Times, Peter Daszak, a disease ecologist and the President of EcoHealth Alliance, reminds us again that as the world struggles to respond to COVID-19, we risk missing the big picture: “Pandemics are on the rise, and we need to contain the process that drives them, not just the individual diseases”.

As an aside, the current crisis has further exacerbated the exploitation of certain wild animals; as an example, the trade in moon bear bile has increased in China in the misguided belief that an injection of bear bile can cure COVID-19. This has occurred even though there is a readily

available synthetic version (<https://www.nationalgeographic.com/animals/2020/03/chinese-government-promotes-bear-bile-as-coronavirus-covid19-treatment/>).

GREAT APES AND VIRUSES

Our closest living relatives are known to be susceptible to catching respiratory diseases from humans, and scientists have warned that the coronavirus pandemic could wipe out populations of chimpanzees, gorillas and orangutans. Since 2008, when research revealed the first direct evidence of human-great ape virus transmission, common human respiratory viruses have caused lethal outbreaks in wild great apes. Ebola, for example—a hemorrhagic fever that affects humans and great apes—has led to mortality rates of up to 95% in gorillas. Calculations indicate that some of those infected populations will need more than 130 years to recover. Although no great apes have yet been reported with COVID-19, these species are already at risk of extinction due to forest destruction and poaching. Therefore, infectious diseases such as COVID-19 are of major concern for great ape conservation.

Thomas Gillespie, at Emory University, a lead author of a letter co-authored by 25 experts on great ape health published in the journal Nature, stated that the current pandemic poses a potentially dire situation for these species (<https://www.theguardian.com/environment/2020/mar/24/coronavirus-poses-lethal-threat-to-great-apes-experts-warn>). Johannes Refisch, a United Nations Program Manager and Coordinator who oversees the Great Apes Survival Partnership, has explained why disease prevention is critical, and what specific measures are being taken to protect wild great ape species (<https://www.unenvironment.org/news-and-stories/story/virus-which-causes-covid-19-threatens-great-ape-conservation>). A case in point: the IUCN's Primate Specialist Group/Section on Great Apes and the Wildlife Health Specialist Group published a joint statement, recommending that “great ape visitations by humans are reduced to the minimum needed to ensure the safety and health monitoring for the great apes”. Both groups recommend suspension of great ape tourism and reduction of field research. To this end, as of 23 March 2020, the majority of gorilla tourism sites have been closed. Unfortunately, necessary measures taken in times of crisis are associated with economic losses because great ape tourism is an important source of livelihood for local communities and generates conservation funds.

TAKE ACTION

<https://actionnetwork.org/letters/call-for-action-to-prevent-pandemics-by-protecting-wildlife/>

<https://www.change.org/p/united-nations-end-the-next-covid-19-ban-global-wet-markets-and-illegal-slaughterhouses-now/sign>

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ADDITIONAL REFERENCES AND LINKS

<https://www.unenvironment.org/news-and-stories/story/virus-which-causes-covid-19-threatens-great-ape-conservation>

<https://www.nature.com/articles/d41586-020-00859-y>

<https://www.theguardian.com/environment/2020/mar/24/coronavirus-poses-lethal-threat-to-great-apes-experts-warn>

<https://www.the-scientist.com/news-opinion/us-primate-centers-work-to-protect-animals-from-covid-19-67294>

<http://www.internationalprimatologicalsociety.org/docs/Final%20-%20SARS%20CoV-2%20and%20Great%20Apes%20Joint%20Communique%2016-05-20.pdf>

<https://thehill.com/opinion/energy-environment/486398-coronavirus-and-the-karmic-interconnectedness-of-humans-animals>

The Revelator (Center for Biological Diversity) on disease transmission in “wet meat markets”:
<https://therevelator.org/biodiversity-health-pandemics/>

<https://www.newyorker.com/science/elements/from-bats-to-human-lungs-the-evolution-of-a-coronavirus>

<https://www.latimes.com/food/story/2020-03-11/coronavirus-china-wet-markets>

<https://news.mongabay.com/2015/01/did-palm-oil-expansion-play-a-role-in-the-ebola-crisis/>

<https://www.brookings.edu/books/the-extinction-market-wildlife-trafficking-and-how-to-counter-it/>

https://apple.news/AlpleSzMfTGKbFU5b_2KhLQ