



Gorilla beringei (photo: NRowe-alltheworldsprimates.org)

Primate Conservation Inc. UPDATE

2021

Director's Report

The year of 2021 has been very difficult for conservation around the world. Though the developed world has access to the vaccine against COVID 19, some who choose not to believe in science refuse to get vaccinated, but when they come down with Covid want medical science to cure them. Alas in the developing world there is a lack of vaccine for people who want it and need it. With limited or no travel for most of the year, there has been very little money for research sites and protected areas. One case in point is Kirindy National Park in Madagascar, which has had a research presence for decades. This problem was compounded when droughts in the south drove thousands of desperate Malagasy immigrants north to Menabe, Kirindy and Ankarafantsika. In October of this year, fires were set to develop more cropland and a large portion of this western dry forest was burned. Scientists can see it on satellite photos but can do nothing to stop it.

There have been intrepid PCI grantees, who have continued to work in their country's forests, studying primates and publishing the results of their studies. As you will read below Felipe Silva is continuing to study the least known red uakari in Brazil. Simplicious Gessa has published his data taken before the pandemic about how important how the instructions tourist are given before they visit the gorillas in Uganda are to the health of gorillas.

PCI is receiving more proposals from primate habitat country researchers, who are willing and able to study and protect their countries primates, if there is enough PCI money to support them. Donors who give through the alltheworldsprimates.org are rewarded with access to our exclusive All the World's Primates website, which has well-referenced information, as well as photos, video and audio recordings covering all the currently known primates. The book version of All the World's Primates, with over 1800 photos of all 505 species, can be bought at the best discount at www.pogonias.com, with free shipping

I hope you have or had a happy holidays and hope that in 2022 the pandemic will be a bad memory and the world will take serious and concerted action to control our climate destroying emissions and save the planet from the dramatic effects we have seen this year, drought, wildfires, hurricanes, typhoons and some of the hottest months on record.

World Lemur Day October 29th, 2021

World lemur day which is an annual event to raise awareness of charismatic endangered lemurs that are found only on the island of Madagascar, was the brainchild of Jonah Ratsimbazafy. Jonah, who received a grant from PCI in 1997 and obtained his doctorate from Stony Brook University in 2002, was honored this year by the Madagascar Post Office with a stamp.



Jonah Ratsimbazafy with the new stamp from Madagascar that features the mouse lemur described in 2020 in the American Journal of Primatology that is named after him. Photo: Pat Wright)

Simplicious Gessa: The Importance of Message Framing in Rule Compliance by Visitors During Gorilla Tourism in Uganda. \$3,650.00 Spring 2015.

Mountain gorillas (*Gorilla beringei*) are critically endangered. Approximately 1000 (half of all mountain gorillas) are found in the national parks of Uganda.

Gorillas are a flagship species for biodiversity and there is worldwide interest in ape ecotourism through exclusive safaris to see them in the rainforests of Uganda. Gorilla tourism is a major source of revenue for the government agency responsible for their conservation, the Uganda Wildlife Authority (UWA). Almost half of the funds received by the agency are generated from gorilla tourism to fund park operations in the country.

One of the challenges of ape tourism is balancing wildlife conservation and protecting the apes. These gorillas are highly susceptible to human diseases, a conservation challenge for park managers who need to ensure the gorillas do not get ill. To minimize zoonotic disease risk, health guidelines such as remaining seven meters from the apes and staying in a cohesive group were instituted. These rules are communicated by park guides at the beginning of gorilla tourist treks. Unfortunately, tourists often do not follow the critical rules and put the apes at risk. Communication is a key factor to assure that each tourist understands the rules and adheres to the guidelines. A convincing message can persuade tourists to follow the rules.

This research investigated the effects of message framing on visitor response to ape rules. The pre-trekking messages presented to tourists in Bwindi Impenetrable National Park, Uganda were changed to determine if the way messages are stated affects visitor adherence to rules. Tourists (n = 389) received positively or negatively framed strategic messages regarding adhering to specific rules to promote health guidelines. For example, tourists who received positive messages were told of the benefits of following the rules, while tourists who received the negative messages were informed of the dire consequences of not following the rules. During their treks, tourist behavior was recorded, such as the nearest distance they were to gorillas, and the tourist group's cohesiveness.



Simplicious Gessa Photo: J Rothman

Using generalized linear mixed models, it was found that framing messages affected tourist behavior. Tourists who received a negatively framed message had a higher adherence to rules than those who received a positive or control message. They were 75% further from the gorillas (7.26 vs. 4.52 m), more cohesive (0.40 vs. 0.81 m to each other), and approached the gorillas less (0.34 vs. 1.32 times) than the control message. These findings demonstrate that communicating in different ways promotes change in the behavior of the tourists, which reduces the chances of epizootic respiratory infections being passed to these vulnerable apes. In this case a message that informed the tourists of the negative consequences of not following the rules was most effective. Strategic message framing should be widely

considered as a cost-effective mechanism to promote behavior change during ecotourism of wild primates.

Felipe Ennes Silva: Conservation of Novaes' bald-headed uakari, *Cacajao calvus novaesi*, Amazon Rainforest, Brazil \$4,900.00 Fall 2020.

Basic information such as geographic distribution and population density remains unknown for uakari monkeys. An initiative to fill some of these gaps started in 2012, when I joined the Research Group of Primate Biology and Conservation of the Mamirauá Institute for Sustainable Development team. Since then, I have collected data on the geographic distribution of all bald-headed uakaris subspecies and used genomic data to study their genetic diversity. In 2020, my team got important financial support from PCI and other funders to collect data on the population density of uakaris from the middle Juruá River. In that region occurs one of the least studied Neotropical primates: Novaes' Bald-headed Uakari, *Cacajao calvus novaesi*, which has the most restricted geographic distribution of all uakaris. An important aspect of my project is the investigation of the synergistic effects of deforestation and climate change in bald-headed uakaris. The southern part of their range is of particular concern due to the presence of other threats such as the new BR365 highway and hunting.



Felipe with village kids who live near the Jutaf River
Photo Amanda Lelis

Cacajao calvus novaesi Photo: Marcelo Santana

How to Support PCI

PCI is an all-volunteer, tax-deductible private operating 501(c)(3) foundation which has supported more than 700 projects in more than 30 countries with primate habitats throughout the world since 1993.

If you would like to contribute cash, stock, or real estate to PCI or would like more information on a specific project, please contact me at the address below. To keep our overhead to a minimum, so that as much as possible of the money raised is used to support field conservation projects, this is our annual appeal for your donations. Please do not forget about this, as you will not receive other mail from us, nor will we share your name with others. We appreciate your support and hope you will give generously to help fund these vital primate projects.

Sincerely,