

Oryx

Searching for one of Africa's most enigmatic primates in the Lomami River basin

By Daniel Alempijevic & Kate Detwiler, 20th April 2021

In July 2014, Henri Silegowa, a field leader for the Tshuapa-Lomami-Lualaba (TL2) conservation project, photographed a mysterious monkey, killed by a hunter near Bafundo Village, one of the Project's field bases in Lomami National Park's buffer zone in the Democratic Republic of the Congo. Henri had photographed a dryas monkey *Cercopithecus dryas*, nearly 400 km from the species' reported range. When TL2 Project directors John and Terese Hart inquired about the monkey, only a few hunters recognized it, as the Inoko.



Left: The first hunter-killed dryas monkey detected by the TL2 Project in Bafundo Village. Photo: Henri Silegowa. Middle: A rare encounter with a dryas monkey in Bafundo Forest. We encountered the monkey in the understory before it ran upward, and remained hidden until after we left the site. Photo: Daniel Alempijevic. Right: Illustration of an adult male dryas monkey, drawn from photographs of an individual killed by a hunter in the Bafundo Forest, for use in educational material distributed in local communities, to help bio-monitoring patrol teams inform people of the protected status of the inoko, and to solicit information on the occurrence of the species.

The dryas monkey is one of Africa's most enigmatic primates and is endemic to the central regions of the Democratic Republic of the Congo. When the TL2 Project documented the range expansion in July 2014, dryas monkeys were categorized by the IUCN as Critically Endangered because they had a restricted range that overlapped with a few adjacent bonobo research and conservation sites between the Luo and Lopori rivers.

Since 2016, we have collaborated with the TL2 Project to help determine a reliable method to detect dryas monkeys, and to identify their habitat preferences and distribution in the area. As

dryas monkeys are cryptic and seemed to occur at low densities, we used both local knowledge and camera traps to study them. We started by placing posters in villages illustrating the Inoko and inviting people to report sightings to park rangers. We also met with the hunters in Bafundo who recognized the Inoko, including the hunter who shot the female monkey in 2014. The hunter agreed to take us to the location where he shot it, and drew a map in the sand to show us where we could find more.



Left: A map drawn in the sand by Reddy Bosisa, who identified an area of dense thicket where we would have the greatest success of finding Inoko. Right: Reddy listening for primates as we searched for Inoko in Bafundo Forest. Photos: Daniel Alempijevic

Hunters led us to an area in the Bafundo Forest with an open canopy and pockets of dense fallow. This forest was degraded and had little sign of primate activity. We were later informed that in 1956 Bafundo Village was moved from this area to its current location. We wanted to confirm the presence of dryas monkeys in the area before placing camera traps.

On our third day of searching Bafundo Forest, we had our first encounter with dryas monkeys. They did not flee through the canopy, but ran upward into dense vegetation and froze. We managed to take a few photographs, but the monkeys remained concealed until after we left.



Multi-stratum camera trap placements, forming a column of surveillance from the ground, through the understory, and into the rainforest canopy. Photos: Daniel Alempijevic

This location became the first of 44 camera trap stations we deployed during this study. Each station consisted of one camera at ground level, one in the understory and one in the canopy. We

used this method to determine the stratum use and habitat preference of dryas monkeys first in Bafundo Forest, and then at a less degraded site in Lomami National Park.

Park rangers also documented any sightings of dryas monkeys during their patrols. The TL2 Project has now confirmed seven locations where dryas monkeys occur, in the central-southern region of the Park and buffer zone. Overall, our findings justified the recategorization, in 2019, of the dryas monkey as Endangered on the IUCN Red List. We have now developed camera-trap methods to detect the dryas monkey that we encourage others to use at sites throughout the central basin. This study provides some optimism for the conservation of the dryas monkey, which appears to tolerate anthropogenic disturbance, as does its closest kin, the savannah monkeys (Genus *Chlorocebus*).

<https://www.oryxthejournal.org/wp-content/uploads/10200004.mp4>

A camera trap video of a dryas monkey in the Bafundo Forest. Video: Florida Atlantic University Primatology Lab

The open access article [Using local knowledge and camera-traps to investigate occurrence and habitat preference of an Endangered primate: the endemic dryas monkey in the Democratic Republic of the Congo](#) is available in *Oryx—The International Journal of Conservation*.



Daniel Alempijevic & Kate Detwiler

Daniel Alempijevic is a PhD candidate in the Integrative Biology programme at Florida Atlantic University. His research interests focus on detection and surveillance of elusive and threatened species. Currently, he uses camera traps and specialized climbing techniques to study arboreal rainforest mammals, and has conducted arboreal camera trap research in the Democratic Republic of the Congo and Côte d'Ivoire.

Kate Detwiler is an associate professor of anthropology and the principal investigator in the Primatology Lab at Florida Atlantic University. The lab's research focus is on the behaviour, ecology, evolution and conservation of African forest monkeys. Kate is the

director of a long-term research project on hybrid guenons in Gombe National Park in Tanzania, and since 2012 has collaborated with the TL2 Project on primate field studies in Lomami National Park in the Democratic Republic of the Congo.