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Into the Clouds: Surveying the Sky Islands of Mozambique (Part 2)

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Researchers from the South African National Biodiversity Institute, SANBI, travelled to Mozambique to survey three mountains for reptiles and amphibians. They received a small grant from the Critical Ecosystem Partnership Fund though the Regional Implementation Team led by BirdLife International. Their aim was to gather data to update the information about an already identified Key Biodiversity Area (Mt Chiperone) and to identify two potentially new Key Biodiversity Areas (Ribáuè and Inago mountains). The survey team leader, Krystal Tolley, wrote the following story about their adventures, successes, and worries.

Part 2: Ribáuè

But all good things come to an end, and after a week, we packed up and headed down Mt Chiperone. The trip down was a breeze compared to the trip up, of course. Getting back to the Landcruiser, we loaded the gear, said our goodbyes to the locals who had assisted us, and off we roared, bumping our way back across Mozambique toward Nampula. The trip again took more than a day before we reached our next destination, Mount Ribáuè. This was in fact, our second visit to Ribáuè.

The first time was in 2015 and we had tried to access the forest from the eastern side, but the forest was so degraded and impacted by the machamba's that essentially there was no intact forest left. This time we aimed for the western side, where Google Earth had promised there was intact forest. Dave did another rekkie and made contact with the village where we would begin our ascent.

Field station

The next morning we started up the mountain with the help of the local people again, another mamba winding up the mountain. As grueling as Chiperone, we ascended through machamba to about 1100 metres and found a good camping spot fairly deep into the forest. Unlike our trip in 2015, this section of the forest was intact, verdant and full of life. A sparkling stream tumbled from the high granite dome that was far above our camp, and we were in a good mood. We had found one species of *Rhampholeon* chameleon in 2015 in the degraded forest, but I was sure that there'd be another *Nadzikambia* here too. And we were in search of a new species of 'mongrel frog' (*Nothophryne*) which only lives on the thin film of water that can be found trickling down the granite at elevation. So we spent most of the time trying to get deeper and higher into the forest in search of these new species.

The mongrel frog was easier than we thought. The first day we hiked up to the base of the granite and found a wet patch, and there they were, but in tadpole form. The tadpoles, which are normally the free swimming larvae stage for frogs, were stuck to the water film on the granite. In fact, that is their habitat. They specialize in living on this trickle of water on granite. They squiggle around on it and as long as the water trickles down, they will not dry out. It was the first time any of us had seen these tadpoles, and I would venture to say that we are now in an elite group of people no more than 10 who have ever seen a *Nothophryne* tadpole. We searched a bit harder for the adults, as they are extremely small and cryptic. Basically, they look a lot like a bit of granite. But after a few more days of hard searching across larger patches of granite, we got lucky and found dozens. We were thrilled to find these little guys, and their tadpoles! What a remarkable discovery this mountain had given us.

Hyperolius subtriatus from Mount Ribáuè, found at night by using torchlight.

But that wasn't all. We had also tried to find the elusive caecilians again, digging here and there but we had no luck. Weird how things go, because as we returned to camp, Mike had a big smile on his face, and he pulled out a caecilian. It had simply crossed in front of him while he

was sitting outside his tent. We began the screaming and dancing routine again. Funny how small things can bring such excitement! But after nights and nights of searching in the trees, still no *Nadzikambia* chameleon. I was starting to get disheartened. It was hard going, the canopy was too thick and closed in which makes searching difficult and after hours of searching each night, we were empty handed. On the second to last night, we decided to search in a new area, past the *Notophryne* tadpole spot. It meant leaving early to get there by dark, so that we could find our way back down later. We tracked all our nighttime movements by GPS, knowing that we'd always be able to find our camp again.

After considerable distance, we sat down to wait for dark, snacking on granola bars and thankfully somebody had brought jelly-babies. These seemed like luxuries to us. As darkness fell, we began our slow walk back, scanning the trees and bushes in the torchlight. At least an hour passed, and there was no sign of *Nadzikambia*. Growing despondent, but not giving up yet, we continued to scan as our eyes began to lose focus.

An undescribed species of chameleon (genus Nadzikambia) found in the forest of Mount Ribáuè.

I kept thinking, where are these chameleons!?? I wondered about a very small greenish blob about 7m up in a tree. Calling Werner over, asking his opinion… "What's thaaat….?" He's not sure either. After all, 7m up and into a tree is not exactly clear viewing. Hmmm… well I do have one way to find out. I carry with me an extendable 'chameleon pole' which is just a fishing pole without the tackle. It extends to 8m plus my height and reach. I was sure I could get the pole up there. So I extended it all the way and just tapped the little green spot. It moved. It uncurled its tail. It was a *Nadzikambia*! So now we had found another undescribed chameleon.

Ribáuè now had given us a new species of chameleon, frog and the amazing caecilian finding. We left Ribáuè feeling very satisfied. In all, 18 species (11 amphibians & 7 reptiles) under our belt and one more mountain to go.

BirdLife International runs the Regional Implementation Team (RIT) for the Critical Ecosystem Partnership Fund (CEPF) investment in the Eastern Afromontane Hotspot (2012 -2019). See the interactive map of all projects implemented under the CEPF Eastern Afromontane Hotspot programme here.

The Critical Ecosystem Partnership Fund is a joint initiative of l'Agence Française de Développement, Conservation International, the European Union, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank. A fundamental goal is to ensure civil society is engaged in biodiversity conservation. More information on the CEPF can be found at www.cepf.net.