

## Project Update: April 2017

### Molecular work update

A large focus of this project is to understand connectivity between known roost sites for two understudied African bats: Dent's horseshoe bat (*Rhinolophus denti*) and the striped leaf-nosed bat (*Hipposideros vittatus*). Dent's horseshoe bat is found in the Northern Cape in South Africa and central and northern Namibia and northern Botswana, this small bat weighs around 7g and is only known from a small number of roosts. In contrast the striped leaf-nosed bat is southern Africa's largest insectivorous bat, roosting in large colonies in big cave systems across the northern regions of southern Africa. Unfortunately, little is known about the ecology and threats of these two species, so we have teamed up yet again with our long-term project colleagues at CIBIO, University of Porto in Portugal to carry out a population genetics study on both species.

Following our Namibian fieldwork in April 2016 we had a delay with exporting our DNA samples due to tighter regulations due to increased illegal poaching activities. Our samples from this trip together with samples collected since 2010 were sent to Portugal for the molecular analysis. The project will look at both mtDNA and microsatellite primers. After my trip to Portugal in November 2016 the lab technicians have been working hard to trial known primers for Dent's horseshoe bat and we now have the microsatellite primers to use, unfortunately the striped leaf-nosed bat is proving to be a lot harder so the lab technicians are currently still developing a microsatellite library and once this is done they will be able to process all the samples and we can then begin the analysis to understand gene flow between these important roost sites.

