

## Project Update: May 2014

### 1. Identification of critical habitats (main forest patches) where amphibians still occur

Of the three mountains visited, Mt Bamboutos appears altered with only few forest patches left (fig 1). The northern slope has been surveyed twice between 2279 and 2439 m. Increasing farming activities were noticed which greatly altered forest patches and less amphibians found. We surveyed around 2120, 2104 and 1383m on Mt Oku and habitat around the summit still appears intact based on the community conservation of the forest. Apart from cattle trespassing around streams and water sources, several forest patches on Mt Mbam are still intact.



### 2. Detection and record cryptic species with limited geographical ranges

Eleven species have been recorded on our sites amongst which six are only known from a few sites along the Cameroon highlands: *Astylosternus reophilus*, *Astylosternus* cf *ranoides*, *Leptodactylodon perreti*, (Fig 2) *Cardioglossa oreas*, (Fig 3), *Phrynobatrachus* cf *jimzimkusi*, *Xenopus longipes*. The later species has been recorded only from the crater lake on Mt Oku where it is known to be endemic while *L. perreti*, was recorded on Mts Bamboutos and Oku around 2400m. Few other widespread species recorded included: *Amietoprynus maculatus*, *Arthroleptis variabilis*, *Leptopelis nordequatorialis*, *Ptychadena mascareniensis*, *Trichobatrachus robustus*.

### 3. Map endemic species location using Global Positioning System (GPS) to produce a distribution map for conservation planning

For all the endemic species encountered so far, altitudinal range, GPS coordinates have been recorded. This will help map endemic species distribution by the end of the study

### 4. Collect basic biological and ecological information to enhance knowledge on endemic species

All endemic amphibians so far recorded (*Astylosternus reophilus*, *Astylosternus* cf *ranoides*, *Cardioglossa oreas*, (Fig 3), *Leptodactylodon perreti*, *Phrynobatrachus* cf *jimzimkusi*, *Xenopus*

longipes) where found around stream or water sources. Forest at these points appeared intact or less disturbed.



5. Evaluate the impact of agriculture, pesticides use and livestock overgrazing on endemic amphibians

Agricultural development with the use of pesticides is on an increase on Mt Bamboutos and of grave danger to the endemic species found there (Fig 4). Livestock grazing is more acute on Mt Mbam with increasing disturbances around streams in forest patches where frogs are known to occur.

