

Project Update: December 2017

The original analysis, using a biological stressor in the form of animal handling delivered mixed results. Although a spike in stress hormones was observed in certain individuals, we also found it to be absent in the majority of our study animals. This may point to considerable variation in the rate and magnitude of the stress response in each individual. To account for this, we conducted a physiological validation (ACTH Validation) on 32 frogs, collecting additional material (urine/saliva faeces/blood) to assist in validating mucus as a robust matrix for monitoring stress, reproduction and metabolic patterns in amphibians. Our initial result look promising, with a number of individuals injected with ACTH showing a marked increase in stress hormone concentrations in mucus compared to control animals. Another 400 samples will be analysed to confirm this pattern and the validity of mucus as a hormone monitoring matrix in amphibians.

