

Hormones in captive elephants

Location:	Okavango Delta, Botswana
Level:	Post-doctoral
Status:	Active
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Background

Elephants in small, isolated populations (including those in captivity) are often prone to stress, though this is not always detrimental. Stress can be monitored through the hormone metabolites excreted in dung and urine. These can also be used to monitor ovarian activity, which has been linked to social status, and can be used by mahouts to manage a herd. In captive situations, new elephants are often introduced to an existing herd, which could affect social status, and, in turn, ovarian activity.

Methods and Results



We collected dung samples from a small captive elephant herd in the Okavango Delta, which is mainly made up of adult females and their offspring. During our study period, three new females were introduced to the herd, and then removed. We will analyse the samples to quantify changing levels of stress and sex hormones. These data will contribute to our understanding of stress levels in captive and wild populations of elephants, thereby improving the welfare of captive and isolated

populations, particularly in the context of individual introductions to existing herds.

Output

Data are currently being analysed and we hope to publish them soon.