



AERU

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AERU Research Studies: Past, Present and Future

Completed projects

- Investigating the role of tourism as a potential stressor to a captive population of African elephant, *Loxodonta africana*, using specific behavioural interactions and faecal glucocorticoid metabolites. Kelly Mealor, Honours Thesis, Department of Botany and Zoology, University of Stellenbosch. 2011
- Determining systemic arterial pressure in semi-wild *Loxodonta africana* using a Cardell Multi-parameter monitor. Whitney Phipps, Carissa Wood, Kirk Suedmeyer, Deborah Fine. University of Missouri, College of Veterinary Medicine. 2011
- The relationship between behaviour and FGM's in an African elephant during a translocation event. Stephan Zander. University of Potsdam, Germany. 2012
- Controlled versus free-range – the influence of tourism activities on the behaviour of elephants at the Knysna Elephant Park, South Africa. Lucia Silva. University of Cordoba, Spain. 2012
- How does the African elephant (*Loxodonta africana*) influence plant diversity at Knysna Elephant Park? Kathrin Schmitt and Johanna Mettler. Master's Thesis, Munich University of Technology. 2012
- Social structure and interaction patterns in a captive herd of African elephants and the influence of tourism. Cornelia Hebrank. Bachelors Thesis, Munich University of Technology. 2013
- Behavioural changes in juvenile elephants – the influence of age, environment and tourism. Alex Sancho. Master's Thesis, University of Barcelona, Spain. 2013
- Night-time, Daytime: Is stereotypic behaviour in African elephants related to levels of tourist interaction? Clare Padfield. Master's Thesis, University of Exeter, UK. 2013
- The effectiveness of intrinsic enrichments in reducing stereotypic behaviour in African elephants. Sophie Johnson. Master's Thesis, University of Exeter, UK. 2013
- The use of cognitive bias technique to investigate emotional states in African elephant (*Loxodonta africana*). Lenka Feilhauerova. Master's Thesis, University of Exeter, UK. 2013
- Social interactions and play behaviour of juvenile African elephants (*Loxodonta africana*) in captivity. Lisa Weidner. F1-internship report, University of Wuerzburg, Germany. 2013

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- Free versus protected contact management: The influence of two different management techniques on the behaviour of two semi-captive African bull elephants (*Loxodonta africana*). Mieke de Kreij. University of Applied Sciences, Van Hall Larenstein, Netherlands. 2013
- The welfare of African elephants in relation to modern day tourist practices. Petra Boelhouters. Master's Thesis, University of Exeter, UK. 2013.
- An investigation into the effects of enclosure size and social access on species typical behaviour in African elephants (*Loxodonta africana*). Sarah Grayson. Master's thesis, University of Exeter, UK. 2014.
- Welfare at night: A new management solution to increase the welfare of captive African elephants (*Loxodonta africana*). Simon Hendry. Master's thesis, University of Exeter, UK. 2014.

Ongoing Projects

- Fertility and aggression control in elephant bulls through GnRH vaccination. (KEP, EOE, AEBS, Shamwari Game Reserve, Inverdoorn Game Reserve). Imke Lueders^{1*}, Debbie Young, Charlie Gray³, Gerhard van der Horst⁴, Douw Grobler⁵, Frank Goeritz⁶, Thomas B. Hildebrandt⁶, Cheryl Niemuller⁷, Henk J Bertschinger⁸ GEOLifes, Reproductive Research and Animal Fertility, Hamburg, Germany; 2. African Elephant Research Unit, Knysna Elephant Park, Plettenberg Bay, South Africa; 3. African Lion Safari, Cambridge, ON, Canada; 4. University of the Western Cape, Dptm. of Life Sciences, Cape Town, South Africa; 5. Catchco Africa-Wildlife Capture, Pretoria, South Africa; 6. Leibniz Institute of Zoo and Wildlife Research, Reproduction Management, Berlin, Germany; 7. Kingfisher Int., Conservation Biology Laboratories, ON, Canada; 8. University of Pretoria, Pretoria, South Africa. 2011 – present
- The effect of GnRH on behavior and faecal glucocorticoid metabolites in African elephant bulls, with particular emphasis on the welfare aspects of self-directed and/or displacement behaviours. Lisa Howard, Imke Lueders^{1*}, Debbie Young², Charlie Gray³, Gerhard van der Horst⁴, Henk J Bertschinger⁸. 2011 - present
- The allometry of African elephant ears (KEP, EOE, AEBS, Buffelsdrift Game Reserve). Prof. Joseph Tomkins - University of Western Australia. 2012 - present
- Footprint project – using footprints to identify and track wild elephants. Dr. Kate Evans, Elephants for Africa, Botswana. 2011 - present
- A first assessment of the zoo-geomorphological impacts by elephants in a private game reserve, Knysna South Africa. Cecelia Engvall. Uppsala University, Sweden. 2013 – present
- Optimisation trial study – Dung samples from KEP and Knysna Forest Elephants - viability of hormones at different stages. Lizette Moolman; Dr. Andre Ganswindt. South African National Parks; Onderstepoort, University of Pretoria. 2014 -

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Future projects

- Vocal and social behaviour of bull African elephants (KEP, EOE, AEBS). Dr. Angela Stoeger-Horwath. University of Vienna, Department of Cognitive Biology. 2016.
- Sound/musical enrichment: impact on behaviour and stereotypic behaviour? Brooke Reilly, Master of Animal Science, University of Queensland, Australia. 2015.
- Is affiliative behaviour affected by tourism? Rebecca Moss. MSc Animal Behaviour, University of Exeter, UK. 2015
- Preferred associations (friendships) between unrelated elephants. Primrose Manning. MSc Animal Behaviour, University of Exeter, UK. 2015
- Investigation of proximate causes of SDBs. Which tourist activities are associated with higher levels of SDB performance? Hoi-Lam Jim. MSc Animal Behaviour, University of Exeter, UK. 2015.
- Human-directed elephant behaviour. What affects an elephant's selection of which human to direct which behaviour towards? Zoe Rossman. Bachelor's degree. Evolution, Ecology and Biodiversity, University of California, Davis. 2015.

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