



PROJECT TITLE: Linking sociality and fitness

Project Science Theme: Evolution and Biodiversity Through Space and Time

Project keywords: Behavioural ecology; sociality; baboons

Lead Institution: University of Bristol

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Project aims and methods:

Social mammals are a ubiquitous component of global biodiversity and play an influential role in species communities. However, our grasp of the mechanisms underpinning sociality is limited in critical ways. Animals that are better socially connected produce more surviving offspring and live longer. This sociality-fitness relationship has been reported in species including hyrax, horses, baboons, and orcas, but the mechanism underpinning this relationship remains to be identified. This project will develop and test a suite of hypotheses about the ecological basis of this relationship using field observations and historical data from a wild chacma baboon (Papio ursinus) population at the Tsaobis Baboon Project in Namibia, a long-term, individual-based study which has been running for >20 years. In parallel with these field data, the project will explore the impact of this form of sociality on population dynamics by developing Individual-Based Models (IBMs) for stable groups of social foragers, parameterised for the Tsaobis population. The project will be based across Bristol, London and Namibia, and will involve a flexible mixture of fieldwork, analysis and modelling that will reflect the researcher's development.

Project Collaborative partner: Institute of Zoology

Useful recruitment links:

For information relating to the research project please contact the lead Supervisor via: sean.rands@bristol.ac.uk

Bristol NERC GW4+ DTP Prospectus:

https://www.bristol.ac.uk/study/postgraduate/research/great-western-four-doctoral-training-partnership-nerc/

How to apply to the University of Bristol:

http://www.bristol.ac.uk/study/postgraduate/apply/

The application deadline is Monday 13 January 2025 at 2359 GMT.

