



Conservation biology and social behaviour of an endangered bird in South Africa

PhD studentship based in Hungary, 2022-2026

Supervisors: Prof. Tamás Székely, Dr. Robert Thomson, Dr. Narhulan Halimbekh
University of Debrecen, Hungary

Climate change and other human activities are affecting organisms at global scale, causing downwards trends across many taxa. There are increasing numbers of studies aimed at understanding how climate change and human activities influence the survival and reproduction of wild populations. Social behaviours, especially mating and parenting behaviours, are associated with the survival and reproduction processes, and are highly variable in wild populations. Therefore, how anthropogenic changes influence social behaviours and related demographic processes has conservation implications especially in endangered species.



Female chestnut-banded plover on the nest. © N. Halimbekh

The proposed PhD project will focus on endangered shorebird, the chestnut-banded plover *Charadrius pallidus* at the Berg River estuary, South Africa. The project will investigate the roles of climate change and human activities in influencing mating and parental behaviours, and their implications in the conservation of this threatened species. Our team is investigating the behaviour and ecology of chestnut-banded plover population at Berg River since 2020 and has established insights into the behaviour, demography and ecology of the population. The research will combine detailed studies of social behaviour, population monitoring with field experiments.

The student will be based within the University of Debrecen, one of the largest institutions of higher education in Hungary with a substantial number of students from all over the world. Our team has special strength in conservation and ecology and is carrying out cutting-edge research using shorebirds as model organisms. The PhD student will benefit from our international network of experts. For further details of please visit <https://elvonashorebirds.com/>



Research team from University of Cape Town collecting data in the field © N. Halimbekh

We are seeking candidates with a MSc in a biological subject, strong interest in fieldwork, biodiversity, animal behaviour, evolutionary biology and be willing to work in remote areas. We are closely collaborating with research groups from the UK (University of Bath), South Africa (University of Cape Town) and China (Sun Yat-sen University), the PhD student will have opportunity to take part in various academic visits. Scholarship is available for Hungarian nationals. International students should contact Prof. Tamás Székely (T.Szekely@bath.ac.uk) regarding scholarship opportunities. Interested candidates should get in touch by sending their CV (max 2 pages) to Dr. Narhulan Halimbekh (hn364@bath.ac.uk) by the 31st March 2022.

Selected references

- Ferguson, A. J., Thomson, R. L., Nelson-Flower, M. J., & Flower, T. P. (2021). Conditioned food aversion reduces crow nest predation: An improved framework for CFA trials. *Journal for Nature Conservation*, 60, 125970.
- Halimubieke, N., [...] G. C. McDonald, Y. Liu, A. Kosztolányi & T. Székely (2020) Successful breeding predicts divorce in plovers. *Scientific Reports*. 10, 15576.
- Kubelka, V., M. Salek, P. Tomkovich, Z. Vegvari, R. P. Freckleton, and T. Székely (2018). Global pattern of nest predation is disrupted by climate change in shorebirds. *Science* 362:680-683.
- Székely, T. (2019) Why study plovers? The significance of non-model organisms in avian ecology, behaviour and evolution. *Journal of Ornithology*. 160, 923–933.