



Isotopic investigation of pangolin trade: composition, pathways, and implications for health

Date: Tuesday, 29 August

Time: 10am

Venue: 6N-11 and Zoom



About the speaker:

Tracey-Leigh Prigge is a 1st year PhD student in the Global Change and Tropical Conservation Lab, working under the supervision of Prof. Tim Bonebrake, Dr. Caroline Dingle and Dr. Maria Zhu. She is particularly interested in illegal wildlife trade and developing new methods with which to investigate it.

Abstract:

Pangolins are the most trafficked wild mammals worldwide. Pangolin material is often confiscated in the form of large quantities of mixed scales, where it can be difficult to identify the species and determine the provenance. Stable isotope analysis (SIA) provides dietary and environmental information about the animal at the time of tissue formation and SIA of seized scales/tissues can potentially be used for species identification, determining provenance and investigating the health of trafficked pangolins.

For my PhD, I am exploring the use of stable isotope analysis (SIA) in wildlife trade research, specifically in pangolins. I will be looking into differences that can be used for determining species and provenance. I will also investigate whether we can pick up changes in diet and/or location that could help us investigate the overall health of these animals in the trade. In addition to stable isotope analysis, I will extract lipids and test for viruses of zoonotic/epizootic potential to gain additional information on health. Illustrating trade networks and the origins of pangolin products can aid in the development of conservation interventions designed to mitigate the impacts of Illegal Wildlife Trade. Results will also give us important insights into the health/welfare of these animals along trafficking pathways and could help in understanding the emergence of zoonotic diseases and how they spread.

