



ONE Planet Undergraduate Research Experience Placement (REP) Scheme

Placement title: Investigating species recovery and extinction risk on the IUCN Red List

One Planet Research Theme:

Climate & Climate Change | Earth System Processes | Anthropocene |
Environmental Informatics

Supervisor: Dr Louise Mair

School/Department: SNES, Modelling Evidence and Policy Department

University: Newcastle University

Placement Description:

The student will undertake a pilot study to test the theory behind the International Union for the Conservation of Nature's 'STAR' metric, which quantifies the contribution of abating different threats to the reduction of species extinction risk (Mair et al., 2021). To achieve this overall aim, the project will address three objectives:

- Compile a database of species on the IUCN Red List that have changed extinction risk category.
- Search the Red List and Conservation Evidence databases for evidence to explain the cause of the change, and identify any links between conservation actions and threat abatement.
- Calculate the STAR metric for each species before and after change in extinction risk.

The student will have the opportunity to bring their own initiative and ideas to the project, and will gain experience of data collation, manipulation and analysis. As part of the placement, the student will be integrated into the Modelling Evidence and Policy (MEP) research group, which specialises in data analysis, modelling and evidence synthesis. The student will be given a desk in the shared ECR offices, and invited to our twice-weekly MEP meetings, biweekly Global Biodiversity Policy subgroup meetings and weekly meetings with their supervisory team. The project will also be supported by a PGR student who is working on this topic, who will be available to advise and guide the research. If the project goes well there is potential to be included in a publication generated by the PGR further down the line.

Timescale:

- Each of the above objectives is estimated to take around 2 weeks, giving 6 weeks in total.
- Start date is flexible, with the latest possible start date being the 22nd of July.

Itemised Budget for the Project:

This is an analytical, desk-based project, with support provided in-kind, so there are no expenses.

Prerequisites:

Essential skills: Good time management, teamwork and communication skills.

Desirable skills: Experience using Microsoft excel for data management, and basic experience using the statistical software R.

For more information, please contact Dr Louise Mair (Louise.Mair@newcastle.ac.uk).