

TOM CLEGG

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Summary

PhD student at Imperial College London using quantitative methods to explore the impacts of climate change. Flexible and adaptable with experience of working in research teams and adapting to new cultures. Experienced in several programming languages for statistics, data visualisation and ecological modelling. Particular interests include community and ecosystem ecology in marine and freshwater environments.

Education

2017 - 2020 PhD in Ecology, Imperial College London

Project: Predicting the effects of temperature on ecosystem functioning

Supervisors: Prof Guy Woodward, Dr Saamrat Pawar, Dr Dan Goodman
NERC funded QMEE CDT

2013 - 2017 MBiolSci (First Class) Biology (with a year abroad), University of Sheffield, UK

Research projects:

- *The role of Life History in food webs* (Masters; first class)
- *Does pond creation work? Using food webs to assess community robustness* (3rd year; first class)

Key modules: Landscape ecology, Marine ecology, Data analysis, Community and population ecology, Freshwater entomology, Ichthyology and Systematics of Fishes

Year 2 abroad at Oregon State University (**GPA: 3.91, Honor Roll**)

2005 –2012 Stoke Newington School, London N16 9EX

A levels: Biology A*, Chemistry A, Economics A, Maths B

AS level: Moving Image Arts A

GCSE: 3A*'s, 2A's, 4B's

Research Projects

PhD research project, Imperial College London 2017 – 2020

- Predicting the effects of temperature on ecosystem functioning
- *This project uses combination of ecological modelling and empirical data analysis to predict the effects of climate change on natural ecosystems. I will use a mathematical modelling and measurements from databases to develop models of ecosystem response to temperature and environmental change.*

Masters research project, University of Sheffield – September 2016 – June 2017

- The role of Life History in food webs. Supervisor Dr Andrew Beckerman, University of Sheffield.
- *This project involved the simulation and integration of life history theory into current understandings of food web and community structure with special reference to a newly constructed large marine food web.*

Undergraduate research project, University of Sheffield - Winter 2015

- "Does Pond Creation Work? Using Food Webs to Assess Man-made Pond Community Robustness". Supervisor Professor Philip H. Warren, University of Sheffield.
- *Identified aquatic invertebrates and constructed food webs from a collection of ponds in southern England which were used to assess the effectiveness of pond creation schemes.*

Other Experience

- **Research Assistant, University of Sheffield March - June 2014**
 - *Research assistant on avian sperm competition exploring the relationship between fertilisation success and time of mating in the Birkhead lab. Responsibilities included the dissection of eggs and the preparation of slides for fluorescent microscopy.*
- **Research Assistant, Natural History Museum, London January – March 2013**
 - *Assisting in large-scale biodiversity studies in the soil biodiversity group. Responsibilities included the identification of invertebrates and cataloguing samples.*
- **Volunteer, Museum of Life Sciences, KCL London September 2012 –2013**
 - *Working at the newly established museum of life sciences my responsibilities included the preparation, repair and identification of specimens from the King's College biology department.*

Publications

Clegg T., Ali M. & Beckerman A. (2018) The Impact of Intraspecific Variation on Food Web Structure.
(under review)

Awards and Bursaries

CCTB Spatially Explicit Modelling Summer school, University of Würzburg May 2017

- *Received a grant to attend the spatially explicit modelling summer school at the university of Würzburg. The course introduced the methods used to model spatial processes and their application to ecological problems.*

Nuffield Foundation Research Bursary Student June - July 2011

- *As a recipient of the Nuffield Bursary I carried out a research project with Professor Mavesh Tavassoli's molecular oncology lab at King's College London. My work was awarded a Gold CREST Award and as a result I was selected as a finalist for the 2012 UK Young Scientist of the Year.*

Conferences and Presentations

- **Gordon Research Conference, University of New England 2018**
Scaling interspecific variation in thermal sensitivity to ecosystem carbon flux.
- **British Ecological Society Meeting, Ghent 2017**
Student helper assisting the running of the conference

Skills

- Experienced with R, Python and Julia programming languages for statistical analysis, data visualisation and spatial and ecological modelling.
- Experienced in ecological field sampling in marine and freshwater environments including the use of transects, quadrats, dip netting, seine netting and field identification of organisms.
- Significant experience in the identification of organisms, especially invertebrates and fish, under the microscope.
- A competent user of the Microsoft office package, Photoshop, Illustrator, Final Cut Pro (video editing software), still and video cameras and GIS software.
- PADI Open water diver

References

Dr Samraat Pawar
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