

DANIEL J NICHOLSON

Evolutionary Biology | Tropical Ecology | Conservation | Zoology
danielnicholson49@gmail.com · theroamingresearcher.com · +447825983756

EDUCATION

2016-2021

PHD QUEEN MARY UNIVERSITY LONDON & ZOOLOGICAL SOCIETY OF LONDON

Alongside the Smithsonian Tropical Research Institute, I established a large-scale evolutionary experiment on an island system in the Panama Canal. Using this experimental system, I investigated: adaptative changes in behaviour and morphology, natural selection, colonisation and population dynamics of an anole species.

Supervisors: Dr Michael Logan (UNR), Dr Robert Knell (QMUL) & Prof Trenton Garner (ZSL)

2012-2013

MRES BIODIVERSITY AND CONSERVATION UNIVERSITY OF LEEDS - MERIT

Thesis 1: Resource competition between co-occurring UK invasive crustaceans.

Thesis 2: Comparative study of invasive/native reptile life history traits.

2009-2012

BSC(HONS) ZOOLOGY UNIVERSITY OF DERBY – 2:1

KEY SKILLS

- Coordinating and running large-scale field projects.
- Supervising multiple MSc and undergraduate students.
- Quantifying natural selection.
- Working with large data sets.
- Four years field experience.
- Monitoring adaptive changes in life history traits.
- R based statistical analysis and modelling.
- Proficient with ArcGIS and QGIS.

RELEVANT PUBLICATIONS

Nicholson, D.J. et al. 2021. Competition and climate mediate colonization success: a transplant experiment in the Panama Canal. (**In Prep**). Estimated submission - June 2021.

Nicholson, D.J. et al. 2021. Island colonization leads to rapid behavioral and morphological divergence in *Anolis* lizards. *Am Nat* (**In Review**).

Neel, L.K*. Logan, M.L*. **Nicholson, D.J.** et al. 2021. Habitat structure mediates vulnerability to climate change through its effects on thermoregulatory behaviour. *Biotropica*. 00, 1-13. * Co-first author.

Logan, M.L. Neel, L.K. **Nicholson, D.J.** et al. 2021. Sex-specific microhabitat use is associated with sex-biased thermal physiology in *Anolis* lizards. *Journal of Experimental Biology*. 224, jeb236597.

Rosso, A.A*. **Nicholson, D.J.*** et al. 2020. Sex-biased parasitism and expression of a sexual signal. *Biological Journal of the Linnean Society*. 131, 785-800. * Co-first author.

GRANTS & AWARDS

SMITHSONIAN PRE-DOCTORAL FELLOWSHIP 2018 - \$20,000

Awarded to fund all aspects of a self-designed project "Evolutionary feedbacks under abrupt environmental change".

SMITHSONIAN TROPICAL RESEARCH INSTITUTE TRAVEL AWARD 2018 - \$800

Awarded to cover travel costs to a conference in Florida (SICB 2019).

NATIONAL ENVIRONMENTAL RESEARCH COUNCIL (NERC) PHD FUNDING 2016 - £100,000

Awarded to fund all elements of a 4.5-year PhD, including stipend.

EXPERIENCE

JAN 2018 – APR 2021

DEMONSTRATOR QUEEN MARY UNIVERSITY LONDON

Teaching undergraduate classes in statistics in R and human physiology practical classes.

OCT 2015 – JULY 2016

IN-COUNTRY PROJECT MANAGER - DOMINICA ZOOLOGICAL SOCIETY LONDON

- Captive husbandry of a critically endangered amphibian in the island of Dominica.
- Monitoring the remaining wild population, and the prevalence of the chytrid fungus.
- Working in partnership with local stakeholders including the Dominican Forestry Department.
- Establishing and maintaining public outreach initiatives and treat mitigation programmes.

JUL 2015 – AUG 2015

SCIENCE LEADER – PERUVIAN AMAZON BRITISH EXPLORING SOCIETY

- Biodiversity monitoring in the Manu National Park; Peru.
- Amphibian, mammal, and invertebrate sampling, including camera trapping.
- Educating students about field ecology, conservation, and climate change.

SEP 2014 – DEC 2014

RESEARCH ASSISTANT – CHRISTMAS ISLAND AUSTRALIAN NATIONAL UNIVERSITY

- Investigating the threat of invasive species on the endangered wildlife of Christmas Island.
- Development of future threat mitigation plans.
- Working with Christmas Island National Parks on island surveys & reptile breeding programmes.

JUL 2014 – AUG 2014

SCIENCE LEADER - NAMIBIA BRITISH EXPLORING SOCIETY

- Educating students about: desert ecology, human-animal conflict, conservation, and research methods.
- Leading a weeklong expedition across the Namib desert to the Skeleton Coast.

JAN 2014 – APR 2014

RESEARCH ASSISTANT - THAILAND NATIONAL UNIVERSITY OF SINGAPORE

- Investigating the effect of forest fragmentation on biodiversity and species abundance of small mammals.
- Extensive camera trapping to observe and monitor the abundance and diversity of endangered megafauna.

JULY 2012 – AUG 2014 (SEASONAL)

TROPICAL ECOLOGIST - HONDURAS OPERATION WALLACEA

- Supervising and mentoring undergraduate students.

ACADEMIC PRESENTATIONS

ASSOCIATION FOR TROPICAL BIOLOGY & CONSERVATION 2021 – INVITED SPEAKER

SOCIETY OF INTEGRATED & COMPARATIVE BIOLOGY (SICB) 2020 - TALK

Morphological change and population dynamics after experimental colonisation.

BRITISH ECOLOGICAL SOCIETY (BES) 2019 - TALK

Morphological change and population dynamics after experimental colonisation.

SOCIETY OF INTEGRATED & COMPARATIVE BIOLOGY (SICB) 2019 - TALK

Natural selection on morphology in a tropical lizard after a rapid shift in habitat structure.

BRITISH ECOLOGICAL SOCIETY (BES) 2017 - POSTER

The ecological and morphological drivers of ectoparasite load in a tropical ectotherm.

ACADEMIC MEMBERSHIP & REVIEWER POSITIONS

Membership: British Ecological Society, Royal Geographical Society, Society for Integrative and Comparative Biology, Association for Tropical Biology and Conservation.

Reviewer For: Nature Scientific Reports, Journal of Zoology, McGill Undergraduate Research Journal, and the North-Western Journal of Zoology.