

Sam Hillman

Cardiff, United Kingdom
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Undergraduate Ecologist with interests in coinfection and within-host parasite dynamics, parasite community ecology, and the microbiome. Experience of both laboratory and field work, with laboratory experience including post-mortem and archiving work.

Five years' previous experience of leading and managing teams of up to 15 people, including abroad. Confident presenting to both technical and less-technical audiences, with experience of running citizen science projects.

Education

BSc. (Hons) Ecology with a Placement Year

2015 – 2019

Cardiff University

Second Year Modules include Animal Behaviour (1st), Animal Diversity (including parasitology) (2:1), Molecular Ecology and Evolution (2:1), Microbial Ecology (1st), Population Ecology (2:1) and Statistics (1st).

Research Experience

Research Intern, The Ezenwa Lab

September 2017 - Present

Odum School of Ecology, University of Georgia

Placement year as a Research Intern, working on “The effects of anthelmintic treatment on non-target parasites in wild rodents” and assisting on a project on the causal relationship between personality and parasitism in wild rodents.

Work included trapping and handling hispid Cotton Rats (*Sigmodon hispidus*) throughout Georgia and administration of behavioural assays, administration of anthelmintic drugs via gavage, collection of blood and faecal samples, and the processing and reading of faecal samples for parasite egg and oocyst intensity counts. Also completed dissection and extraction of GI tract parasites and working on statistical analysis of field data with R.

Research Assistant, CRIPES Group

July 2017 – August 2017

School of Biosciences, Cardiff University

Summer student research assistant, working on “Investigating the effect of temperature on the in vitro growth rate of the oomycete *Saprolegnia parasitica*”. Funded through the Cardiff CUROP program.

Focused on samples from Welsh salmonid species and worked with Salmon and Brown Trout. ImageJ used for automatic and manual image processing of fungal growth rates and R for data analysis. Wrote macros for automatic image analysis and used R/Tidyverse for data processing and analysis.

Research Assistant, Open Air Laboratories (OPAL)

February 2016 – April 2016

National Museum Cardiff

Lichen ecologist surveying lichen distributions as an indicator of air quality near Aberthaw power station, using the OPAL (Open Air Laboratories) and APIS (Air Pollution Information Systems) standard methodologies.

Post-Mortem and Archival Assistant, The Otter Project
School of Biosciences, Cardiff University

September 2015 – July 2016

Post-Mortem Assistant taking faecal and stomach content samples from dissected organs, as well as brain samples from otter skulls, for use in a long-term environmental surveillance scheme.

Outreach Experience

President, Cardiff University Wildlife Conservation Society

May 2016 – September 2017

President of the student society. Setting up community conservation schemes, working with local conservation groups to organise field work and setting up training schemes with local ecologists.

Royal Society for the Protection of Birds Wales

June 2016 – September 2016

Working on citizen science and community engagement projects and land management activities throughout Cardiff.

Urban Buzz Project, Buglife

February 2015 – September 2017

Working on creating pollinator habitats in Cardiff. Includes basic selecting and surveying of potential sites and training on how to provide key needs of pollinators, as well as planting new sites.

Awards and Grants

2017

Cardiff University Research Opportunities Programme (CUROP) Grant
£1600 for summer research work in the CRIPES lab at Cardiff University

2017

Cardiff University Placement Year Bursary
£600 for placement year work at the University of Georgia

Poster Presentations

June 2018

Ecology and Evolution of Infectious Diseases (EEID) Conference, Glasgow, UK
The effects of anthelmintic treatment on non-target parasites in wild rodents

March 2018

Center for the Ecology of Infectious Diseases Member Retreat, Georgia, USA
The effects of anthelmintic treatment on non-target parasites in wild rodents

Affiliations and Memberships

2017 – present

Center for the Ecology of Infectious Diseases, University of Georgia

2015 – Present

British Ecological Society, Undergraduate Member

2015 – Present

Association for the Study of Animal Behaviour, Undergraduate Member

Training and Training Courses

2018

Computational Modelling workshop, University of Georgia

2018

R Programming and Statistics with R, Datacamp

2017

Data Manipulation with R and Intermediate R, Datacamp

2017

Python for Data Science, Datacamp

2016

Good Clinical Practice (Primary Care) Certification, NICE

2016

Great Crested Newt Survey Training

2016

Conducting Citizen Science using Open Air Laboratories (OPAL)

2016

Conducting Environmental Surveys using Open Air Laboratories (OPAL)

2016

Phase One Habitat Surveying for Ecologists

References

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Other academic and professional references available