

# ZOobyTES

## Spring 2022

Newsletter of the Department of Zoology  
Trinity College Dublin

### IN MEMORIAM

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#### Ruth Mary Blackith (1936-2022)

Many alumni will be saddened to hear of the recent death, at the age of 85, of our long time colleague and associate Ruth Blackith.

Known to many students from the 1970s and 80s as one half of the research and publishing partnership of R.E. and R.M. Blackith, Ruth was a constant presence in the Department in those days, where she worked alongside her husband Robert.

Born in the UK and educated at Nottingham University, Ruth was a gifted entomologist in her own right. She began to work as Robert's assistant in the 1960s (they married in 1964) and came to Dublin with him when he took up a position in Zoology in 1970, having previously travelled and worked together in Australia, PNG, Africa and on a memorable overland trip from Dublin to Sri Lanka and back, in 1969 in their trusty Citroën, collecting orthopterans.

Following Robert's untimely death in 2000, Ruth remained as a Research Associate of the Department and continued to research and publish, primarily on the sarcophagids and other diptera, with a wide range of colleagues until shortly before her death.

To all who knew her, Ruth was a quiet, charming and unassuming individual who always had the time to listen and offer assistance to others. She had a real passion for the natural world and for her research, which is best summed up in a quotation which hung on the wall of her study in Stepside:

*The scientist does not study nature because it is useful to do so. He studies it because he takes pleasure in it, and he takes pleasure in it because it is beautiful. If nature were not beautiful it would not be worth knowing, and life would not be worth living*  
Henri Poincaré 1908

Ruth will be greatly missed by all. Our sympathies are extended to her family and many friends, and in particular to her partner of the past ten years, Martin Speight. Codladh sámh a chara.

—Dr. John Rochford and Prof. Celia Holland



Ruth, at the unveiling of a portrait of her late husband Robert, in the Auk Room in 2009



Ruth M. Blackith (1936-2022)

## NEW PEOPLE

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**Grace Morris**  
**PhD Student**  
**Murphy Group**

I'm Grace Morris, 25 years old and from Wales. I have just started a PhD in Developmental Biology, looking into the structural changes and biological mechanisms that drive normal embryonic tendon development and how this can be applied to enhance the maturation of tissue engineered constructs via nanoparticle gene delivery. I have completed a BSc in Genetics and an MSc in Nanomedicine from Swansea University.



**Aedín McAdams**  
**Master's Student**  
**Buckley Group**

Hi, my name is Aedín. I am new research masters student in Prof. Yvonne Buckley's lab looking at the status of habitat suitable for restoration for the rare Geyer's Whorl Snail (*Vertigo geyeri*) at Lough Talt. I received my bachelor's degree in Zoology from TCD in 2019. Since then, I have worked as a sustainability officer, volunteered in an ethnobiological park in Mexico and organised STEM outreach programmes with Trinity Access. I am really looking forward to getting back into research and challenging myself further.

## ZOOLOGY IN THE NEWS

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[Research from Fionn Ó Marcaigh, Dave Kelly, Nicola Marples and co-authors](#) has found that populations of the Sulawesi babbler (*Pellorneum celebense*) have diverged on islands that were connected by land bridges just tens of thousands of years ago. The paper has been covered by outlets such as [the Irish Independent](#) and the environmental website [Mongabay](#). Fionn gave two radio interviews about it: one in Irish on Raidió na Life's [Fios Feasa programme](#), the other in English with Éanna Ní Lamhna and Niall Hatch on [Mooney Goes Wild](#). The paper even found its way into [the American creationist press](#), where David Coppedge of "Creation Evolution Headlines" offered a hearty critique!

The Ó Marcaigh et al. (2022) paper on supertramp island monarchs was given full coverage in [the Irish Times](#).

## PROJECT FUNDING AND UPDATES

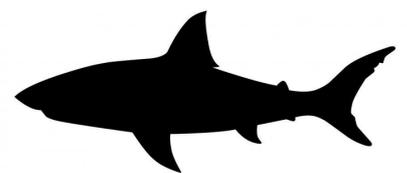
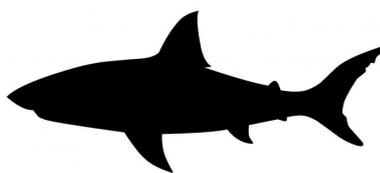
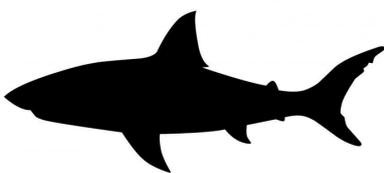
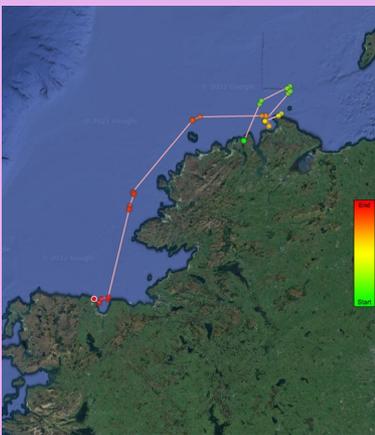
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### Population Ecology from Local to Global Scales

Maude Baudraz successfully defended her PhD thesis entitled Population Ecology from Local to Global Scales: a case study using *Plantago lanceolata*. Her panel was composed of Prof. Jessica Gurevitch (Stony brooke University), Prof. Jennifer McElwain (TCD, Botany) and Prof. Pepijn Lujckx (TCD, Zoology). She thanks all those who could attend the online public talk, or sent messages and presents! Maude is now headed back in Switzerland for a postdoc modelling populations of invasive species harmful to agriculture. Congratulations, Maude!

### Payne Lab Update

Earlier this month The Payne Lab travelled up to Co. Donegal to kick off a new collaborative project focusing on porbeagle shark movements and their reproductive dynamics in Irish waters. During the trip, the team, consisting of lead scientist Dr Nick Payne and PhD students Jenny Bortoluzzi and Grace McNicholas, worked with local shark anglers to catch and tag two large female sharks. Along with attaching two types of satellite tags, one archival relaying data in six-months once detaching from the animal and the other providing real time locations each time the animals fin breaks the surface (see picture for animal locations), the team took a small blood sample to test for reproductive hormones. This area just off the north Donegal coast may be a globally important reproductive area for this species, so this research is key to ensure the population here is monitored. The team were delighted for such a great start to the new project and look forward to continuing their work in this area.





## Dispersal and speciation in the avian archipelago

Fionn Ó Marcaigh has submitted his PhD thesis for examination, under the title of "Dispersal and speciation in the avian archipelago". Supervised by Nicola Marples and Dave Kelly, the thesis deals with the natural history, biogeography, and evolution of island birds across six data chapters, four of which have been published so far. Congratulations, Fionn!

## Green Lab Funding

Tallulah Davey secured funding for Dr. Nessa O'Connor's mesocosm lab to become a certified TCD Green Lab. The lab will begin the Green Lab programme next week, which includes an all-encompassing assessment of resource use, with actionable ways to reduce the lab's carbon footprint over the next 6 months.

## Nature+ Energy Update

The Nature+ Energy team are excited to have started placing acoustic recorders on windfarm sites across the country. The data gathered will be used to monitor bird and bat populations and aid in developing a new acoustic monitoring system for windfarm sites. We also welcome Dr Courtney Gorman to the Nature+ Energy team as our new project manager!



## LATEST PUBLICATIONS

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Chen et al. [including Donohue, I.] (2022) Nutrients and herbivores impact grassland stability across spatial scales through different pathways. *Global Change Biology* 28: 2678-2688.

Dolliver, J. P. & O'Connor, N. E. 2022. Whole system analysis is required to determine the fate of macroalgal carbon: a systematic review. *Journal of Phycology*. <https://onlinelibrary.wiley.com/journal/15298817>

Gross et al. [including N. E. O'Connor] 2022. The biogeography of community assembly: latitude and predation drive variation in community trait distribution in a guild of epifaunal crustaceans. *Proceedings of the Royal Society B: Biological Sciences* 289: 20211762. <https://doi.org/10.1098/rspb.2021.1762>

Kunze, C., Luijckx, P., Jackson, A.L. & Donohue, I. (2022) Alternate patterns of temperature variation bring about very different disease outcomes at different mean temperatures. *eLife* 11: e72861.





Holland, C.V. and Else, K.J. (Editors) (2021). Lessons from studying roundworm and whipworm in the mouse – common themes and unique features. *Parasitology* (Special issue), 48(14), 1717-1813.

Maciag, L, Morgan, E.R. and Holland, C. (2022). Toxocara: time to let cati 'out of the bag'. *Trends in Parasitology*, 38(4), 280-289. <https://www.sciencedirect.com/science/article/pii/S1471492221003226>

Ó Marcaigh, F., Kelly, D.J., O'Connell, D.P., Dunleavy, D., Clark, A., Lawless, N., Karya, A., Analuddin, K., Marples, N.M. (2021) Evolution in the understorey: the Sulawesi babbler *Pellorneum celebense* (Passeriformes: Pellorneidae) has diverged rapidly on land-bridge islands in the Wallacean biodiversity hotspot. *Zoologischer Anzeiger* 293, 314-325. <https://doi.org/10.1016/j.jcz.2021.07.006>

Ó Marcaigh F., O'Connell D.P., Analuddin K., Karya A., Lawless N., McKeon C.M., Doyle N., Marples N.M., Kelly D.J. (2022) Tramps in transition: genetic differentiation between populations of an iconic "supertramp" taxon in the Central Indo-Pacific. *Frontiers of Biogeography* 14(2), e54512. <https://doi.org/10.21425/F5FBG54512>

Radujković et al. [including Donohue, I.] (2021) Soil properties as key predictors of global grassland production: have we overlooked micronutrients? *Ecology Letters*: 2713-2725.

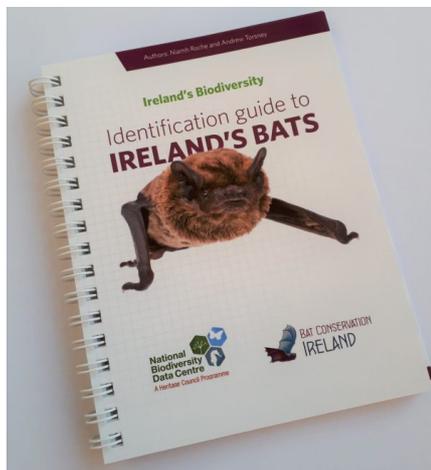
Schwanz, L.E., Gunderson, A., Iglesias-Carrasco, M., Johnson, M.A., Kong, J.D., Riley, J. et al. (2022). Best practices for building and curating databases for comparative analyses. *Journal of Experimental Biology*, 225, jeb243295. <https://doi.org/10.1242/jeb.243295>

Tobias, J. et al. (2022) AVONET: morphological, ecological and geographical data for all birds. *Ecology Letters* 25: 581-597. <https://doi.org/10.1111/ele.13898>

- This study was a major collaboration, and there were 115 authors on the paper including TCD Zoology's Dr. Nicola Marples and Dr. David Kelly. It announces the publication of an international database of bird morphology and incorporates the data collected over 18 years in Sulawesi.

Urrutia Cordero et al. [including Donohue, I.] (2022) Integrating multiple dimensions of ecological stability into a vulnerability framework. *Journal of Ecology* 110: 374-386.

### Identification guide to Ireland's bats



Identification guide to Ireland's bats, written by Andy Tornsey and Niamh Roche, is a pocket-sized publication is an easy to read, simple guide which will help readers distinguish Irish bats based on their morphological features. There are lots of photos and illustrations of each species and their distinguishing traits. In addition, each species has been provided with descriptions of its distribution, habitats, flight style, roosts and emergence. Also, because so much bat identification in the field is based on sounds, QR codes are included that link to sounds of typical echolocation calls for each species from both tuneable and full spectrum bat detectors. This field guide is part of the National Biodiversity Data Centre's 'Ireland's Biodiversity' series of identification swatches and booklets, and it was funded by the Community Foundation for Ireland and National Parks and Wildlife Service. <https://www.batconservationireland.org/product/identification-guide-to-irish-bats>





## EDI/Athena SWAN Update

### Pride in Research

On the 16th June #TCDPrideInResearch is hosting their first ever in-person event to showcase the exciting contributions the LGBTQ+ community make to research at TCD. Pride in Research will take the form of an academic conference and is open to researchers of all levels and faculties to present their work.

### Resources

We would like to encourage everyone, but especially those thinking of recruiting new personnel, or are those that involved in assessment or provision of feedback to students or staff to consider taking Unconscious Bias training: <https://www.tcd.ie/equality/training/unconscious-bias/>

We would also like to draw attention to the Speak Out Tool, which allows for anonymous reporting of bullying, harassment, and sexual misconduct you may have experienced or witnessed and can direct you to helpful support: <https://www.tcd.ie/equality/speak-out/>

If you would like more information please view our website at <https://naturalscience.tcd.ie/equality/>



## Edited by Whitney Parker (@whitneyk127)

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Do you have news to share in the next issue of ZooBytes? Whether staff or student, if you have news (big or small!) get in touch with me at [parkerw@tcd.ie](mailto:parkerw@tcd.ie) using the email subject "ZooBytes."

Are you a Zoology Alumnus doing something interesting? We'd love to hear what you're up to and include you in the next issue's "Where are they now?" section.

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