

ZOobytes

Autumn 2023

Newsletter of the Department of Zoology
Trinity College Dublin

NEW PEOPLE



Dr. Jim Barnett
Assistant Professor

Hi everyone, I'm Jim, I am a behavioural ecologist and I've just joined Trinity as an Assistant Professor in Zoology. I spend my time trying to understand how morphological and behavioural variation between and within populations affects how animals interact with each other and their environments. Much of my work involves using visual ecology to look at how colour evolves under the influence of multiple competing selection pressures, and how animals make behavioural decisions based on sensory information that is often incomplete or unreliable. Before joining Trinity, I did my PhD at the University of Bristol (UK) and postdocs at McGill University (QC, Canada), McMaster University (ON, Canada), and the University of Helsinki (Finland).

Tom Murphy
Technical Officer

My name is Tom, I'm from Blanchardstown in Dublin, and I'm happy to be joining the zoology department as a technical officer. I graduated from Trinity with a BA in Plant Science, and from the University of Sussex with an MSc. in Global Biodiversity Conservation. I also have a certificate in GIS and Digital Mapping from ATU Galway. I have an interest in biodiversity of all kinds, but particularly in birds. Outside of science, I enjoy miniature painting, board and card games, and going to the gym.





NEW PEOPLE



Dr. Jenny Bortoluzzi
Teaching and Research Postdoc
Piggott Group

Dr Jenny Bortoluzzi is starting a Teaching and Research Postdoctoral position in the Piggott lab. You might remember Jenny finished her PhD back in March and had been working with the IUCN Shark Specialist Group since then. She will now be teaching the Environmental Monitoring modules to Junior Sophisters in Semester 1 and Masters students in Semester 2 as well as joining the lab's research in freshwater ecology and continuing her ongoing collaborations with the Jackson and Payne lab. She looks forward to officially rejoining the Department and becoming part of the teaching team!

MacDara Allison
PhD Student
O'Connor Group

Hi, my name's MacDara and I'm from Galway. I'm starting a multidisciplinary PhD with Dr. Nessa O'Connor as part of the Prendergast Project – Life in the Currents. I'll be working with co-supervisors in the School of Mathematics and Engineering to study how changing ocean currents affect phytoplankton. I've just finished my undergraduate degree in Theoretical Physics here at Trinity and I'm excited for a change of scenery and a new challenge in zoology.



Caoimhe Coveney Mc Keown
Research Assistant
Piggott Group

My name is Caoimhe and I have started as a research assistant in the Piggott Lab, taking over the role from Aoife Robertson. I recently finished my undergraduate degree in Zoology from Trinity and I'm excited to be back in the Zoology building, as well as joining the department! I will be assisting on projects relating to multiple stressors in freshwater systems and will be working to expand upon my undergraduate thesis that looked at the vertical profile of carbon in Irish saltmarshes





NEW PEOPLE

Vivienne Gao **Research Assistant** **O'Connor Group**

My name is Vivienne Gao, and I am a research assistant on the Beyond Biofuel project with Professor Nessa O'Connor. I am assisting with various ongoing projects conducted by the team, including investigating the biochemical components and genetics of kelp under climate change conditions. I obtained my MSc and BSc in Marine Biology from Northeastern University in Boston, MA, USA, and I recently completed research at Queen's University Belfast, studying the population genetics of sympatric brown trout found in Lough Melvin, NI. I am a scientific diver and have previously worked on global change biology projects studying mollusc physiology and science communication.



Lauren Sliney **Master's Student** **Murphy Group**

My name is Lauren Sliney and I will be joining the Developmental Biology group this year as a research masters student. I completed my bachelor's degree in Biological and Biomedical Sciences in Trinity College in May and I have spent the final two years of my degree specializing in zoology. I first started working in the Developmental lab in 2022 as a summer intern where my interest in the subject sparked. Since then, I have completed my final year capstone project in the developmental lab and I plan to continue on this work into my research MSc. Outside of academia, I enjoy playing and watching GAA, and I am a big Dublin supporter. Another hobby of mine is music, with a recent interest in country music stemming from a summer spent in the US.





NEW PEOPLE

Michael Officer Research Assistant Piggott Group

Hi, I'm Michael, you may have met me floating about the Zoology Department during my undergrad here in Trinity. I'm now starting as a research assistant in the Piggott Lab. I completed my Capstone project with the supervision of Prof Pepijn Luijckx, investigating whether maternal temperature confers offspring with altered disease resistance during transgenerational temperature shifts. In my spare time I enjoy SCUBA diving, hiking, and woodwork. I've recently completed a bursary with the Marine Institute and am now eager to broaden my research experiences! I look forward to meeting you!



Ruth Brennan Senior Research Fellow Nature+Energy Project

Ruth Brennan is a transdisciplinary marine social scientist, specialising in marine environmental governance, ethnographies of coastal communities and participatory research at the arts-science-policy interface. She has recently joined the School of Natural Sciences as a Senior Research Fellow to work on the Nature+Energy project. Ruth is also an Associate Research Fellow at the Trinity Centre for Environmental Humanities, a policy advisor to an Irish Member of the European Parliament, an external expert for the European Commission, an expert advisor to the Irish and Scottish Governments and a Board Member of Ireland's new Maritime Area Regulatory Authority.





ZOOLOGY IN THE NEWS



Smalltooth Sandtiger Shark Strandings

Following the discovery of 3 Smalltooth Sand Tiger sharks in April this year, the group of scientists including four members of the **Payne Lab** at Trinity, have published their first report relating to the strandings. The study is published here:

Northerly range expansion and first confirmed records of the smalltooth sand tiger shark, *Odontaspis ferox*, in the United Kingdom and Ireland
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/jfb.15529>

You can hear Postdoctoral Researcher **Dr Jenny Bortoluzzi** talk about it on The Claire Byrne Show from August 29th here: <https://www.rte.ie/radio/radio1/clips/22291944/>

Read about it in The Times here: <https://www.thetimes.co.uk/article/15ft-sharks-are-heading-for-britain-blame-the-marine-heatwave-703s7h9jl>



Museum News

Outreach programme

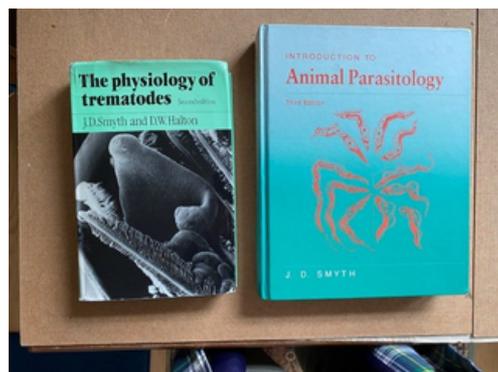
The Zoological Museum outreach programme ended at the end of August after a very successful season. Almost 6,000 visitors came to the museum over the 10-week period, providing much needed financial support for the ongoing maintenance and development of the museum. Thank you all for your support and patience during the sometimes 'noisy' visits.

Donations to museum

Palaeolithic flint tools: Hand axe and scraper. (Old Stone age) (see attached image). Barnfield Pit, Swanscombe, North Kent. Collected and donated by Prof Barry Roberts (2023).
 Two signed books (see attached image) by J.D Smyth, Head of Zoology (1956/7). Presented to Zoology by Prof William C. Campbell, Trinity Zoology graduate (1952) and Nobel prize joint winner (2015).

Grant

Martyn Linnie was awarded a research development grant from the Irish Museums Association/ Irish Museums Trust for a project relating to the history of the museum collection.





PROJECT UPDATES

Beyond Biofuel Project Updates

Dr. Nessa O'Connor's **Beyond Biofuel team** has had a busy summer of fieldwork in West Cork. The team has successfully harvested their cultivated kelp from two farms, Toormore and Gearhies, which have been growing since January 2023. This experiment aimed to investigate efficient methods of cultivating kelp specifically grown to produce high value products and biofuels. This involved the hand harvesting, sorting, weighing, and measuring of monocultures, bicultures and polycultures of kelp. The environmental impacts of the presence of the kelp farms are being investigated. The team are in the middle of processing the harvest samples and are looking forward to some exciting results as part of the SFI project. The team would like to thank our technical staff at Trinity and the staff at Bantry Marine Research Station for their assistance.



New project C-FAARER kicks off!



C-FAARER (Community driven Farming for the Atlantic and Arctic Sea basins through REgenerative aquaculture) is a two-year project funded by Horizon Europe under the Mission 'Restore Our Ocean and Waters by 2030'. Recognizing the detrimental effects of the expanding blue economy on the natural environment, C-FAARER will deliver a roadmap and guidance, co-designed with stakeholders, to support ocean farmers in the Atlantic and Arctic Sea basin to develop community-driven business models for regenerative ocean farming and policymakers to take enabling actions. C-FAARER is led by Trinity College (PIs **Nessa O'Connor**, Zoology and **Mary-Lee Rhodes**, Business School) in a consortium of six organisations and enterprises from three countries including Horizon Nua, Redrose Developments, Nofima (Norwegian Food Research Institute), NSA (Norwegian Seaweed Association) and Sea Going Green. Check out our website for more information: <https://www.c-faarer.eu/>





PROJECT UPDATES

Green Labs Updates and Tips

In July the Greenlabs team held a debrief meeting to discuss our results from the initial baseline survey and come up with ideas of things we can do to improve the department's sustainability. It was a very productive meeting and produced many ideas we hope to introduce in the coming weeks.

Some of these have already been implemented, including fitting tap aerators to the Developmental Biology lab which will reduce water use (all labs are encouraged to fit suitable aerators. There is a budget available to cover the costs so please don't hesitate to reach out for guidance and budget access), taking part in the [Freezer Challenge](#), and engaging with the Sustainability Office to spread awareness and resources!

We've still got some work to do before the final assessment in the coming months and we would like to encourage everyone to engage your lab group in conversations surrounding sustainability and how we can work to improve it as a department!

Each lab/research team has a Greenlabs team member so don't hesitate to reach out and engage for information and initiatives. Any suggestions of ways we can further improve sustainability, please get in touch!

Our Greenlabs Tip is to sign up to the [Trinity Reuse/Repurpose community page](#) for unwanted office or lab equipment/furniture!



Huge congratulations to **Dr Katrin Schertenleib** and Martin Focke on the birth of their baby daughter, Rhia Leonor Feline Focke. Well done Katrin for producing a PhD, first PhD publication and a human in the same year!!





PROJECT UPDATES

Athena Swan Update

The Athena SWAN SAT/EDI committee are thrilled to announce that the School of Natural Sciences has been successful in its Athena Swan Silver application. After a huge collective effort by both the present and past committee members it is a wonderful achievement to have levelled up from our previous Bronze award. The application was submitted earlier this year in June, and the result was received at the end of August. Now we have been awarded Silver, it is time for the new action plan to be implemented to ensure our work towards gender equality in the SNS continues. If you would like to show support of the school's silver award, you might consider adding the silver award logo in your email signature, which can be found here: <https://www.advance-he.ac.uk/athena-swain-ireland-silver-logo>



PUBLICATIONS

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Gilson, A.R., White, L.J., Burrows, M.T., Smale, D.A. and O'Connor, N.E., 2023. Seasonal and spatial variability in rates of primary production and detritus release by intertidal stands of *Laminaria digitata* and *Saccharina latissima* on wave-exposed shores in the northeast Atlantic. *Ecology and Evolution*, 13(6), p.e10146 doi.org/10.1002/ece3.10146.

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Wear, B., O'Connor, N.E., Schmid, M.J. and Jackson, M.C., 2023. What does the future look like for kelp when facing multiple stressors?. *Ecology and Evolution*, 13(6), p.e10203. doi.org/10.1002/ece3.10203

Zintl, A., McManus, A., Galan, M., Diquattro, M., Giuffredi, L., Charbonnel, N., Gray, J.S., Holland, C. and Stuart, P., Presence and Identity Of *Babesia microti* In Ireland. Available at SSRN 4373187. <https://doi.org/10.1016/j.ttbdis.2023.102221>

Zulfiqar, S., Gasser, R.B., Ghodsian, S., Almukhtar, M., Holland, C. and Rostami, A., 2023. *Strongyloides* coinfection in COVID-19 patients treated with corticosteroids: A systematic review. *Reviews in Medical Virology*, p.e2469. <https://doi.org/10.1002/rmv.2469>





Edited by Whitney Parker (@whitneyk127)

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 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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