Dear Colleagues,

Wishing you and yours some well-deserved downtime and a very happy New Year to come.

The past two years have been challenging because of COVID-19... It was so beautiful to see again the Botany Building a little more alive, with people and students around in the late summer. I really hope that things will keep getting better and better over the time with the beginning of 2022. Take care everyone, see you soon.

Happy New Year
BE GREEN!
Welcome back to Kamila Kwasniewska, who joined - once again - Jennifer McElwain’s Plant-Climate Interaction Laboratory. Kamila will be working as a part-time Project Manager on a new ERC TERRAFROM project, ensuring that the project runs smoothly, and new students and staff have everything they need to execute their research.

**TERRAFORM is a five-year research project** funded by ERC and will contribute to discovering how plants TERRAFORMed the Earth, how plant functional traits evolved over the past 300 million years, and establish a new methodological framework to extract the full untapped potential data from fossil plants.

TERRAFORM will be a labour-intensive team-based research project with experimentation, biogeochemical analyses and preparation of varied plant material. To achieve their research goals, the team will use state-of-the-art experimentally controlled climate chambers in the newly established Variable Atmosphere and Light Lab. The future team will consist of two Postdoctoral Research Fellows, two PhD students, Technical Assistant and Teaching Fellow.

The research team will be accompanied by three artists who will be commissioned to produce unique artworks and exhibits focused on the research of TERRAFORM and the importance of Earth System Science in general.
Marine Valmier, Matthew Saunders’ PhD student, finished the fieldwork of her Ph.D! Her research on grassland on drained peat soil and the impact of water table level on greenhouse gas emissions correspond to the first time use of the Eddy covariance technique to monitor such system on Irish soil, and to a unique experimental design of peat lysimeters.

She has collected data at the study site in the Irish midlands for almost 2 years weekly, and fortnightly at the mesocosm experiment at the Johnstown Castle’s Teagasc facilities for the last year. She is now back in Montpellier, her hometown.

“It is with great satisfaction and a healthy dose of relief that I say goodbye to my life in Ireland. I am very excited to start a new phase of my PhD, where I’ll dive deeper into the processing and the analysis of results. I’m deeply grateful, I’d like to thank everybody for their friendship, help and support.”

Best of luck and see you soon, Marine!
Niamh Curran, PhD student in Botany, successfully defended her PhD thesis on ryegrass genetics in her viva voce examination last week. Her work has advanced understanding of compositional changes in ryegrass swards over time among other things.

Congratulations, Niamh!
(In the picture, Lolium multiflorum Lam.)

Publications

Erika Soldi, Anna Tiley and Trevor Hodkinson co-authored an article published on Insects (MDPI), entitled: First Report of the Ash Sawfly, Tomostethus nigritus, Established on Fraxinus excelsior in the Republic of Ireland.

Conferences and Meetings

Dr Alina Premrov is co-convening the EGU22 SSS9.7 session “Soil organic and inorganic carbon stocks and dynamics in agro-ecosystems: mechanisms, measurements and modelling strategies” at the EGU General Assembly, Vienna, Austria (3 - 8 April 2022).

Peter Lebrocquy Cox was interviewed by Northwestern University's Spotlight Podcast about the SmartBog Project and his research. Link here.
Everyone in Botany was shocked and saddened by the loss of Research Fellow, Dr Aoibheann Gaughran, on 13\textsuperscript{th} December after a sudden illness. Aoibheann did her degree and PhD in Zoology in Trinity, and joined Botany as the project manager and mammal consultant on the year-long Biodiversity Audit of Áras an Uachtaráin in 2019-2020. Aoibheann worked closely with Jane Stout and the rest of the team on this unique project, and delivered the final report to President Higgins in November 2020.

During the first semester of the 2020-21 academic year, Aoibheann co-taught the Senior Sophister “Plant-Animal Interactions” module with Jane, earning much praise from the students for her enthusiastic delivery, despite the whole module being taught online. And since early 2021, Aoibheann was project manager for the Nature+ Energy project, within the SFI MaREI centre, working with Ian Donohue, Yvonne Buckley and Jane Stout.
In loving memory of Dr Aoibheann Gaughran

Aoibheann was a brilliant scholar, an enthusiastic naturalist, generous colleague, and hilarious friend. She will be missed by so many within and beyond Botany. We send our heartfelt condolences to her partner and family.

See also: Trinity remembers Dr Aoibheann Gaughran.
Phytobooks

*Tropical Arctic*
By Jennifer C. McElwain, Ian J. Glasspool, and Marlene Hill Donnelly

An upcoming coffee table book will be launched soon at the Botany Building to present the release of this art-science book.

*Tropical Arctic* is a project which took over eighteen years in the making, as a result of a unique collaboration between two paleobotanists, Jennifer C. McElwain and Ian J. Glasspool, and award-winning scientific illustrator Marlene Hill Donnelly.

The book’s field sites date from one of the Earth’s great extinction events, between the Triassic and Jurassic periods, when greenhouse gases from cataclysmic volcano activity created a “hot-house Earth” that extinguished many biological species. **The reader will experience Triassic Greenland, at that time when the area was a lushly forested, tropical zone, through three reconstructed landscapes and an expertly researched catalog of extinct plants.**

*Tropical Arctic* bring a lost world to life with a beautiful compilation of paint and pencil art, photos, maps, and engineered fossil models.

Click here & here for more information
Introducing Paul Starosta

Paul Starosta is a biologist and photographer. Combining his two passions for nature and photography, he has published over forty award-winning books on plants, animals and minerals, for which he has received numerous awards.

His website (paulstarosta.com) is a wonderful collection of macros that can be downloaded for free in medium definition.
Phytobooks

*Ulivi monumentali di Puglia*
By Giovanni Resta

Giovanni Resta ([giovanniresta.com](http://giovanniresta.com)) is an Italian photographer and this book is a unique review of monumental, millenarian olive trees of Puglia (Italy). This photographic journey extends for about 400 km, from Gargano to Capo di Leuca. “*Each olive tree is an inimitable, mysterious and unrepeatable unicum, different from any other that has its gnarled roots in the thirsty land of Puglia.*”
PHYTOBYTES needs your input!

Whether you are student or staff, please send any news you have, big or small, to Diego D. Bianchi (dbianchi@tcd.ie) with the subject heading “Phytobytes”. 