

[The Trinity College Dublin Botany Department Newsletter](#)

Accomplishments



Eamon Haughey had his last day as a Botany post-doc... Congratulations on his new post as an Assistant Lecturer in Agricultural Science at Galway-Mayo Institute of Technology (GMIT)!

“It’s a strange time to finish up... Even so I’m exciting to start a new challenge but I will miss TCD and Botany, which has been a great place to work!”

The project report from his research fellowship, **Climate Change and Land Use in Ireland**, is currently in review and will hopefully be published by the EPA in the coming months.



Congratulation to **John Parnell**, who has been co-opted to be one of the seven Senior Fellows of the College!



Welcome to Dr **Clare O'Grady Walsh**, the Director of the newly established **Seed Sovereignty Group** in the Discipline of Botany and Geography, working with Professor **Jennifer McElwain** (Chair of Botany) and Professor **Anna Davies** (Geography) as Principal Investigators.

Established in October 2020, with funding from The Mary Robinson Climate Justice Foundation, the purpose of the TCD Seed Sovereignty Group is to establish a Seed Sovereignty Centre at Trinity College Dublin in 2021. More info on the [Botany website](#).

Publications

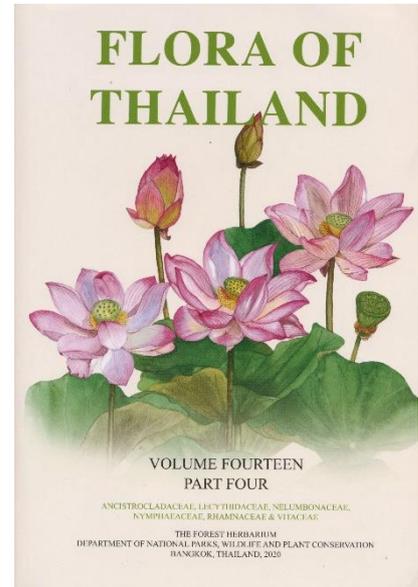
Global Change Biology: **Matt Saunders** was a co-author on a recently published article entitled "[COSORE: A community database for continuous soil respiration and other soil-atmosphere greenhouse gas flux data](#)", this article describes a new open-source database and software that focuses on automated, continuous and long-term GHG flux datasets, and is intended to serve as a community resource for earth sciences, climate change syntheses and model evaluation.

Journal of Fungi: **Erika Soldi**, Dr **Brian Murphy** and Prof **Trevor Hodkinson** have published a paper in the Special Issue **Fungal Endophytes in Agriculture and Ecosystems**. The article entitled "[Fungal endophytes for grass based bioremediation: an endophytic consortium isolated from *Agrostis stolonifera* stimulates the growth of *Festuca arundinacea* in lead contaminated soil](#)" is available in open access.

This is **Erika's** first primary author publication and described another possible application of endophytes in agriculture and ecosystems.

Flora of Thailand: **John Parnell** and his former PhD student **Anna Trias-Blasi** have just published a revision of the **Vitaceae** [Trias-Blasi, A., **Parnell, J.A.N.**, Pongponggrueng, P. & Kochaiphai, P. (2020). Vitaceae. Pp. 588-669 in *Flora of Thailand* 14(4)] in the new issue of the Flora of Thailand series of which John is also an Editor.

Anna is now a permanent staff member of the Royal Botanic Gardens Kew.



Meetings and Conferences

Catherine Farrell presented '*the Contribution of Limestones in Ireland to our Natural Capital*' at the [International Association of Hydrogeologists](#) (IAH) 2020 conference. You can view the presentation [here](#).

Events and Activities

Catherine Farrell wrote a new blog on the **INCASE project** website '[A day in the Dargle: Life beyond the INCASE laptop](#)'

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Remember the "5 in five" video showcases of Ireland's native plants and wild places, delivered by the Botany Department academics? They are now available on the [Trinity College Botanic Garden website](#), along with a new episode where Dr **Michelle Murray** will take you on a tour of some of Ireland's most iconic native trees from the living collections of Trinity College Botanic Garden.

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Erika Soldi and **Trevor Hodkinson** undertook fieldwork in the Northern Irish countryside at an agroforestry stand of ash at Loughgall, Co. Armagh. They are currently working on the **NEXCELSIOR project** which is focused on developing silviculture methods for managing a deadly and widespread pathogen of ash trees.

Hymenoscyphus fraxineus is an invasive fungal species originally from Asia, which is present in 32 European countries, including Ireland since 2012. It led to the death of many ash trees in Europe causing heavily economic and ecological losses.

This project is funded by the Department of Agriculture, Food and the Marine (DAFM) and is a collaboration with the Department of Agriculture, Environment and Rural Affairs in Northern Ireland (DAERA). Research groups from Trinity College Dublin (TCD), University College Dublin (UCD) and the Agri-Food and Biosciences Institute (AFBI) from Northern Ireland are collaborating on an all-island basis to manage the impact of the disease.



Matt Saunders and **Peter Cox** installed the infrastructure of the eddy covariance tower that will be deployed at the Bord na Móna Cavemount peatland restoration site, Co. Offaly, as part of the **SmartBog project**.



Fritillary frivolity

A story by *Henry Lamb*

In April, the long-neglected rock garden at Woodfield, Co Offaly, is dotted with the elegant chequered flowers of *Fritillaria meleagris*, the Snake's Head Fritillary. But these are plants of damp grasslands – think of Oxford's Magdalen Meadows – not an overgrown garden in the shade of beech trees.



By late summer, the fritillaries disappear from view as they die down among the tough grasses, geraniums and beech saplings. Renovation of the rock garden thus risks their destruction, so in late October we decided to try to rescue as many as we could. The geraniums in particular have an extraordinarily tough matted root system; even heavy-duty intervention with a mattock and spade is hard going, but worth the effort. Peeling back the root mat reveals tiny white bulbs, scattered through the dark, organic soil, each with a delicate shoot in readiness for spring.

Hours later, we have collected many hundreds, far more than revealed themselves in the previous spring. Where to replant them? Offaly, of course, has abundant damp pastures, but introducing a non-native species to semi-natural grasslands would be very much frowned on, quite rightly so. (My forebears have bad form in this respect – my grandfather went around with a pocketful of *Erinus alpinus* seeds to scatter on limestone walls and roadsides around the country; my father planted three pitcher plants on Woodfield bog in the 1930s – now there are millions!). One or two fritillaries have already seeded themselves into the front field, so it may be worth trying a few there, close enough to the house, but at risk of trampling by the cattle. The front lawn, just inside the fence, is equally damp, so we've done most of the replanting there, imagining a miniature fritillary meadow in spring.



EcoEvo Blog Posts

Want to learn more? Check out the [EcoEvo Blog](#), where Trinity's Botany and Zoology departments discuss their work and reflections in research. The latest posts include ...



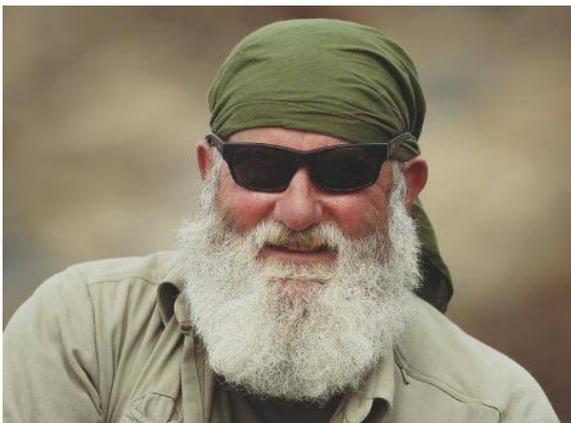
[Separating signal from noise in acoustic biodiversity surveys](#)
by Sam Ross



[The Marvellous Photo Competition 2020 - Part 2: Entries and the winner](#)



[Endophytes for Sustainable Agriculture](#)
by Brian Murphy



[The Marvellous Photo Competition 2020, with Special Guest Judge John Holden – Part 1: Interview with the Judge](#)



[Nature and Wellbeing](#)
by Cian White

PHYTOBYTES needs your input! Whether you are student or staff, please send any news you have, big or small, to Marine Valmier (valmierm@tcd.ie) with the subject heading “Phytobytes”. Let’s share the latest news and always be aware of what is happening at Botany!