



In this issue: BUC2024 information and dates; call for teams; social media; Student Botany Festival 2023; careers; The Thymes interview with a Botanist

WHAT IS BOTANICAL UNIVERSITY CHALLENGE (BUC)?

BUC is an annual fun and friendly competition between teams of undergraduate & postgraduate university students. It embraces many aspects of botany: plant ID, taxonomy & evolution, ecology & conservation, plant health, horticulture, agriculture & forestry, plants in culture & history amongst others. It all started back in 2016 with 5 teams competing at the Royal Botanic Gardens, Kew. The competition went online with many more teams, reaching 25 in 2023 as well as growing a large UK and global audience on YouTube. BUC 2024 will feature online rounds in February, followed by a live final at University of Oxford in August, all streamed on YouTube - why not join in?

In 2024 there will be two knock-out rounds of multiple choice questions until 8 teams are left. In the quarter final the teams will be asked some free answer questions as well as more multiple choice questions. The four semi-finalists will go head to head at University of Oxford in August in front of a live audience. This will also be live streamed. After rounds of free answer questions, and others on live plant material, we will have our Botanical University Challenge 2024 winners & runners up!



How to enter Botanical University Challenge 2024

Teams of 4 university students can enter the competition, along with one or two reserves. There can only be one team from each institution.

Where there is a lot of interest (and why wouldn't there be?!) we suggest holding an internal contest to select team members plus reserves. The online registration form is now available on the BUC website. Any questions just email Dr Jonathan Mitchley a.k.a Dr M., at the BUC email below!

Call for BUC2024 teams!



Registration open now!

- 19 January:** Team registration deadline
- 14 February:** Knockout Round 1, online start 14:00
- 21 February:** Knockout Round 2, online start 14:00
- 28 February:** Quarter Finals, online start 14:00
- 28 August:** Live Semi Finals and Finals
Starts 14:00, University of Oxford
NB All BUC2024 rounds live-streamed!
- 28-30 August:** Student Botany Festival at University of Oxford open to all BUC 2024 contestants

Read more about BUC on our website
<https://botanicaluniversitychallenge.co.uk/>
 For further information and to enter, email BUC at
botanicaluniversitychallenge@gmail.com
 Deadline for registration is 19 January 2024.

*Student Botany
 Festival Memories
 overleaf*



STUDENT BOTANY FESTIVAL 2023 MEMORIES



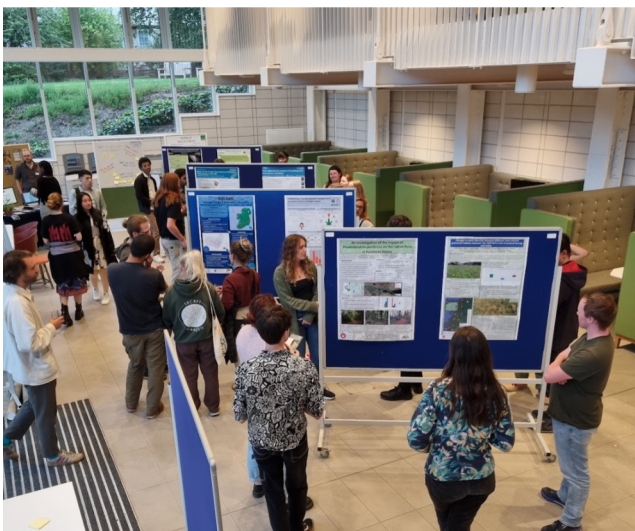
We love sharing student experiences of BUC2023 and our 1st student festival - helps us build experiences for next year (see page 7 for a sneak peek at the 2nd Festival August 2024!)

The first BUC student botany festival was a fantastic experience, with a plant sale, poster session, plant walk, engaging societies and career opportunities to keep everyone entertained!

After the high intensity semifinal and final quiz rounds the various exhibits were a great way to relax and meet new friends. The poster session was a visual treat, showcasing innovative research and projects from budding botanists across the country. They offered insights into topics ranging from plant conservation to the intricate world of plant genetics. Discussions around the posters created a dynamic atmosphere of intellectual exchange, fostering connections between students and professionals alike. It was inspiring to see many other young students with a passion for botany and plant sciences all in one place and talking everything plants! The night ended with some drinks and light hearted pool and table tennis, a great way to celebrate with the fellow contestants!

One of the many highlights were the day trips which were split into two groups, one focusing on the excellent Plant Sciences department at the University of Nottingham and the other an organised biobash to a nearby nature reserve with some of the top plant identification experts in the country. The field trip quickly turned into a race to identify as many plants as possible both to find species not recorded on the official reserve list and to outcompete other teams. A well deserved round of ice creams rounded off an intense hour of exploring and learning lots about the details of identification.

Mayur Prag, University of Oxford



Student poster session at the festival



Plant walk around Beeston Sidings nature reserve



Survivors' photo on the last day of the festival!

This was the first time I participated in BUC since I only started my PhD in October last year. Frankly, I don't have any botanical background. I'm a palaeontologist who did his undergrad and masters in Geosciences, both devoid of botany except for 1st year biology, a very interesting palaeobotany (Archaeopteris <3) lecture and a geography lecture in electives.

When I got asked to join the 'Galway Ginkgos' for BUC 2023, I was delighted. However, watching the YouTube videos of last year's competition wasn't specifically encouraging – I didn't think that I'd be able to contribute much. We started preparing for the first round, which was very exciting and with very knowledgeable botanists on my team we got through the first round! The questions in the quarterfinals were quite tough though, so we ended up becoming 6th, still a major success!

The live (semi-)finals in Nottingham went great. Everyone tried their hardest and in the end, Oxford's 'Bad Birches' well deserved the win. After the finals, the Student Botany Festival started, which included a high-speed botanical survey, orientation talks, a table for plant swapping and another one for books. Most of all activities I enjoyed the poster session. It was amazing talking with so many interested people about my project as well as reading other people's projects. Fascinating to see, how broad the spectrum of research in plant science truly is! All in all, I had a great time and I'm looking forward to see you all again next year. (Hopefully with a few rounds of palaeobotany questions!)

Sandro Muller, University of Galway



STUDENT BOTANY FESTIVAL AUDIENCE EXPERIENCES

Meriel Jones, BUC Team member

We always like to know what people think about Botanical University Challenge, and now also the Student Botany Festival, held for the first time in 2023. As expected, only a small sample of those who view online completed our participant surveys but many of their responses match with what other people have told us informally.



BUC Planning Team at the festival

The online audience was from UK and Ireland but our latest stats show that nearly 5,500 have viewed the BUC2023 YouTube videos from a total of 28 countries, the highest numbers being from the USA then India and south-east Asia. The online viewers were mostly not students and really enjoyed the enthusiasm and knowledge of the contestants. They also liked learning from the very wide range of questions, and that even the Chairs didn't know all the answers! Everyone loves how the team numbers have grown, reaching 25 in 2023. Roll on even more teams for BUC2024!

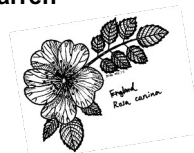
BUC IN ONE WORD!



Word tree for BUC and The Student Festival.



Sid Thomas Trophy made by Mike Warren



Get Creative Competition display

One comment was that the on-line rounds are too long! To address this, BUC2024 will have the knock-out round spread over 2 afternoons, each shorter than in the past. We will also use our lessons learned to prevent some of the technical issues that can creep in, especially during the live event!

People have also suggested an international version of Botanical University Challenge. Since 2022, BUC has had teams from Irish universities, one team in BUC2022 and three in BUC2023, so we are already international! But a version of BUC with teams from more countries is certainly something for the future. In fact BUC has already experimented with a more distant country, although all the teams were based there. In 2021 John Warren contacted Dr Min Ya, then one of the Botanical Society of America's student representatives at Harvard, about running a version of Botanical University Challenge in the on-line social programme of the society's virtual summer meeting in 2021. He and Jonathan Mitchley designed the questions while Min Ya was responsible for the local logistics. This was the first time that we had tried multiple choice questions in BUC, now part and parcel of the online rounds. You can read Min Ya's blog post about successes and difficulties with this transatlantic contest by scrolling down to 2021 in the BUC blog on our website.

Earlier in 2021, inspired by BUC, Professor Carmen Acedo Casado had held *La Liga Botánica de la Universidad de León* in Spain (further info here). This was held in person for teams of students at her University, following the COVID-19 health precautions in place at that time. This event was held again in 2022 and you can read more about it here on the BUC website and here too!

BUC TASTER QUESTIONS!

BUC ON SOCIAL MEDIA

By Meriel Jones, BUC Planning Team member

For those new to *The Thymes* and BUC, we include questions in each issue from previous BUCs for insight and to aid practice. These are a mixture of multiple-choice questions (MCQs) and open questions. Answers on page 7.

Question 1: Which of the following best describes mistletoe (*Viscum album*)?

- a) Parasitic
- b) Saprotrophic
- c) Hemiparasitic
- d) Protocarnivorous
- e) Holoparasitic

Question 2: The term calcicole means:

- a) Plant with blue petals
- b) Plant grows on acid soils
- c) Plant has white petals
- d) Plant grows on calcareous soils
- e) Plant has dark (almost black) petals

Question 3: What is a plastid?

- a) Small closed circular double-stranded DNA molecule
- b) Plant with more than 2 complete sets of chromosomes
- c) The state of cell cytoplasm when it has shrunk due to loss of water, as in hyperosmotic stress
- d) A family of related organelles such as chloroplasts, etioplasts and chromoplasts.
- e) A plant preserved through drying in silica gel

Question 4: Identify this species of grass.



We use social media, X/Twitter, Instagram and Threads, to spread awareness of Botanical University Challenge as well as all things botanical. The idea was to grow the audience for the competition and we now have an international following who react to posts and the streamed events. We've also been contacted about entering teams from people who have seen our social media. As the annual competition draws near, we use social media to introduce the BUC teams and the Chairs who will ask the questions. During the events we share the current scoreboard and some of the questions. In the days after, we reflect on how it went.



Botanical University Challenge
@BUCBotany

Day 8: My true love gave me 8 maids a-milking. #Plant connection? Milkworts (*Polygala* sp., British Isles) delicate #plants of chalk grassland & hills, blue, pink or white #flowers. Name from Greek 'much milk' because of supposedly higher milk yields in cattle. #12DaysOfChristmas



10:27 AM · Jan 2, 2023 · 1,429 Views

Between competitions we tweet about plants, their identification, families, uses and appearances in artworks etc. We also highlight examples of #CareersWithPlants from organisations like CIEEM (X/Twitter @CIEEMnet), British Ecological Society careers information (X/Twitter @BES_Careers) and the Countryside Jobs Service (X/Twitter & Instagram @CountrysideJobs). In December, we post about the 12 days after Christmas using botanical examples for each line of the song!

Check us out here: X/Twitter: @BUCBotany. Instagram and Threads: @botanicalunichallenge

Crab Apple by Yi Zhao

Yi Zhao, Meriel Jones

In Issue #3 we mis-identified the tree in this illustration. It is a crab apple, *Malus halliana*, that is covered in fragrant pink flowers in springtime. The drawing was inspired by a Chinese poem from c. 1000 AD. People were impressed by the beauty of the crab apple flowers. They were afraid that the flowers would fall asleep at night and therefore they lit a candle to prevent the flowers from sleeping. The drawing is by Thyme's Team's Yi Zhao.



Question 5: What group of plants have this world distribution?



The Thymes INTERVIEW: PROFESSOR JOHN WARREN

Prof John Warren is a botanist with BSc and PhD in Plant Biology. During his career he researched plants, gave lectures about plants and illustrated plants. Recreationally he grows plants and eats and drinks plants. Oh, and did I mention, he is rather obsessed with plants, and there is a folk song written about his research on plants? Here he talks to Dr M about his forthcoming book "Frustrating Flowers and Puzzling Plants" (Pelagic Press).

When did your interest in botany begin?

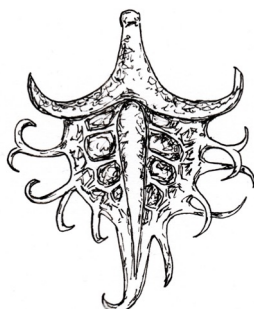
I don't remember ever not being a botanist. Many of my earliest memories are of plants rather than people and places. So I can remember finding plants in particular locations as a kid, and I can still go back to the site from 30-40 years ago and find the plant where I remember seeing it. Of course it was my favourite subject at school and I went on to do a degree in plant biology at Newcastle, and I have had a career in plants ever since.

Tell us about the impetus for your new book Frustrating Flowers and Puzzling Plants

It's well known that some plants like daisies and nettles are relatively straightforward to ID, while others like dandelions and the wider group of yellow composites are much more difficult. But in a standard flora you get as much guidance on how to identify a daisy as you do the tricky ones. Also, there is a gap between the introductory wildflower books and BSBI handbooks, Stace and things like that. So Frustrating Flowers bridges that gap. It describes why things are complex, the features you want to concentrate on, and a little bit of debate about why you might want to do it and do you want to do it? Because not all botanists go to that level of resolution on every group of plants and most ID books don't have this information..

How did you choose which plants to include and which to leave out?

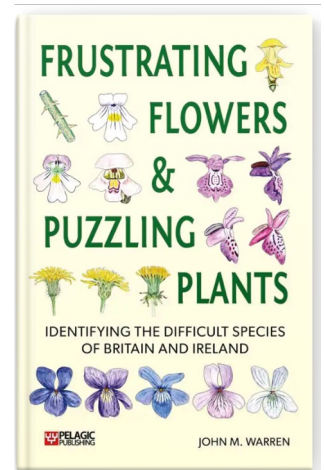
It's a pragmatic solution; there are some groups regarded as real horrors and others that aren't that complex. Sometimes this relates to biology and sometimes to the idiosyncrasies of the botanist. We all have groups of plants that we say "I don't do those, I'm saving those for a rainy day." I've tried to include a range of different levels of complexity and that includes my own idiosyncrasies. There are one or two things that people might say, "why didn't you include these?" The obvious ones are grasses and sedges, and things like these are for another volume.



Dock (*Rumex*) achene
by John Warren



Above: Perennial sweet pea
by John Warren. Right: The
cover of John's new book!



The original illustrations are by you John, how did you decide on the illustrations?

For some groups instead of illustrating the entire plant, I just illustrate the part which or parts which I thought most helpful. I went for illustrations rather than photographs because you can draw exactly the position that you want, which is much more difficult to do with a photograph. The colour aspect is interesting too. With photography you can shoot off hundreds of images and look at them instantly, but often, although the image might be perfect, the colour is completely different from the real flower. That applies also to watercolour, and I'm aware that the colour is very difficult to get accurately, and you've also got the printing process and it will change again so I would perhaps have preferred to avoid that complexity of the colour. However, coloured images are just nice, aren't they? So as well as it being a helpful book, I'd like to think that it's a nice book, a beautiful book.

How does Frustrating Flowers and Puzzling Plants relate to Botanical University Challenge?

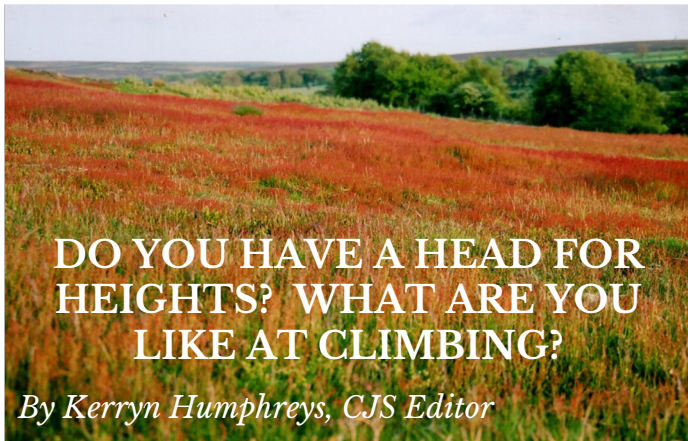
I think both of them are part of a wider movement in botany that just wasn't there when we were younger botanists. We're now much more concerned in getting young people into plants in the first place and Botanical University Challenge is all about supporting early career botanists and putting them in connection with each other and, by asking them tricky questions, getting them to improve their botanical skills. And Frustrating Flowers and Puzzling Plants, is doing the same thing. Hopefully it's providing support and help and guidance and moving along their journeys of botanical discovery.

Finally, if BUC was a plant, what would it be?

Oh, it's gonna be a Bramble. Brambles are horribly complicated and they are definitely prickly, but they're also absolutely lovely to eat and lovely to turn into wine and lovely to make into jam. So Botanical University Challenge is both complex and lovely and rewarding and prickly at the same time.

Thanks, John, we'll have copies of your book during BUC2024 especially at the 2nd Student Botany Festival in Oxford in August 2024.

Watch the full interview on our YouTube channel [5 here!](#)



DO YOU HAVE A HEAD FOR HEIGHTS? WHAT ARE YOU LIKE AT CLIMBING?

By *Kerryn Humphreys, CJS Editor*

Maybe not things you'd expect to be asked as a plant specialist, however these are vital skills from one of my all-time favourite job titles advertised by CJS (Countryside Jobs Service), that of a Rope-Access Botanist required to carry out vegetation surveys in Cheddar Gorge. Surprising as it sounds there are quite a few of these specialist jobs at sites across the country and at Botanic Gardens where rope access is required to check, trim and prune the larger glasshouse species.

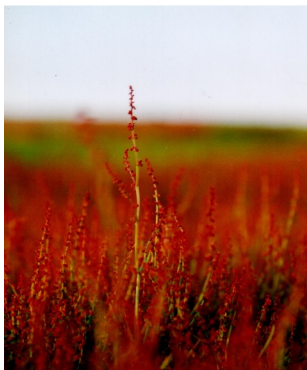
With a qualification in botany you'd expect to search for Botanist jobs and might stumble across these literally high level posts. However, botany skills are required in many other roles that you might not initially consider. What about a Highways Environment Adviser where you'd be setting up low nutrient grassland in locations as varied as small town roundabouts to the large embankments lining our motorways. Many ecology focused posts also need botanical skills to carry out vegetation surveys, to design the right plants in the right place, to assist in site designation - does it qualify as ancient woodland or wildflower hay meadows?

When it comes time to find a job, don't limit your options to botanist, widen the net and think about what other skills you might be able to utilise. I'll finish with another unusual work site. In October this year we advertised a Seagrass and Seaweed Research Officer for Durham Wildlife Trust. Although diving qualifications are not required, 'sea legs' and being happy with regular work at sea certainly are!

There are a range of useful sources and opportunities on the Countryside Jobs website, including info on [native flora](#), [national highways](#), and [seagrass projects](#)!

[Countryside Jobs Service website is here](#), and we're on [Twitter](#) and [Instagram](#)!

Top image: The long view of a section of Goathland moor eighteen months post spraying with Asulam and litter removal. Lower Image: Sheep Sorrel – close up of *Rumex acetosella*. Post bracken spraying, a pioneer species in one of the areas surveyed. (Kerryn Humphreys)



ANNUAL MEETING, NEWCASTLE!

*Louise Marsh, Communications Officer,
Botanical Society of Britain and Ireland*



You're all invited to the British & Irish Botanical Conference, taking place at University of Newcastle on Saturday 2nd December. The event, organised by the Botanical Society of Britain and Ireland (BSBI) in association with the Natural History Society of Northumbria (NHSN), features speakers on subjects such as urban botany, research to help address biodiversity loss and climate change, and the resources available to the botanical community. There will also be exhibits, posters, workshop/ demo by Prof John Richards BSBI's expert referee on the almost 300 dandelion taxa that occur in these islands, a behind-the-scenes tour of the NHSN Archive, pop-up natural history bookshop and much more!

Speakers include two top botanists whose names will be very familiar to the Botanical University Challenge community: Prof John Warren will be talking about his new book, *Frustrating Flowers and Puzzling Plants*, and with Dr M, explaining how Botanical University Challenge can help address the lack of field ID skills provision in higher education.

The Conference is completely free, whether you want to exhibit or just come along and enjoy the day. This is a great opportunity for students to network and to share your research with the rest of the botanical community – we'd love to see you and find out how we can help you in your studies as you get started in your career. For more information and to book, visit bsbi.org/british-irish-botanical-conference



UPDATE: BUC2024 & SECOND STUDENT BOTANY FESTIVAL



Lauren Baker, Oxford Botanic Garden & Arboretum

We are delighted to confirm the live semi-finals, finals and 2nd Student Botany Festival will take place at the University of Oxford in August 2024, organised by Oxford Botanic Garden and Arboretum. The programme is still under development but highlights will include: a botanical illustration workshop, FISC-style plant ID workshop, science communication masterclasses, a tailored careers showcase, poster sessions, talks and tours. The student botanical illustration competition will also be back! All BUC2024 participants will be invited for free and we look forward to meeting you all! Invites will be sent to all BUC2024 participants in Spring 2024.



OUR BUC2023 SPONSORS

BUC2023 was possible due to generous financial support from [New Phytologist Foundation](#), [Gatsby Charitable Foundation](#) and [British Ecological Society](#). In addition, [Field Studies Council](#) and [Botanical Society of Britain and Ireland](#) donated publications and on-line memberships as prizes and gave support in kind.

BUC2024 SPONSORS: BUC2024 is an ambitious undertaking boasting three online rounds and live finals and the 2nd Student Botany Festival spanning three days at the University of Oxford. The BUC2024 Funding Team are currently investigating opportunities from the same and a range of new sponsors. If any readers have ideas for potential sponsors please email us at:

botanicaluniversitychallenge@gmail.com



ABOUT *The Thymes* TEAM



Layout and Design: Hattie Roberts (Lancaster University), **Graphics:** Yi Zhao (University of Cambridge).

Editors: Hattie Roberts, Yi Zhao, Meriel Jones (University of Liverpool, retired), John Warren (Associate Tutor FSC), Jonathan Mitchley (University of Reading).

Special Thanks to Mayur Prag, Sandro Muller, Kerryn Humphreys, Louise Marsh, Lauren Baker.



Contribute to *The Thymes*

Do you have a botanical story, or other content to contribute? Are you interested in editing or design? We need your skills and enthusiasm! Contact us: botanicaluniversitychallenge@gmail.com

Joke Thyme!

How do you get rid of a *Senecio* infestation? Wort remover! BOOM BOOM!

Got a botanical joke or pun? Send it to us!



Enjoying *The Thymes*?

The *Thymes* Team are always pleased to get feedback from our readers, please complete our short readers' survey [here](#), or QR code.



Date of Next Issue: January 2024

Answers to the BUC taster questions (NB All have featured in previous BUC contests):

1. C - Hemiparasitic
2. D - Plant grows on calcareous soils
3. D - A family of related organelles such as chloroplasts, etioplasts and chromoplasts.
4. Annual meadow grass *Poa annua*
5. *Eucalyptus*