

The University of Oxford

115

# Botanic Garden & Arboretum

Friends'  
newsletter

Autumn 2023



# From the Editor

By Chris Thorogood



Simon Vall

Alice's Day at OBG on 1st July

The living collections thrived under the mild, damp conditions this summer. Notable highlights included the largest giant waterlily (*Victoria cruziana*) leaf OBG has seen in years - spanning 2.27 metres - in the waterlily pool under glass, the recently-planted medicinal plant beds in the Walled Garden, and dozens of newly-planted saplings at the Arboretum that may well have succumbed to warmer, drier weather, had we had it.

Our sites have been a hive of activity this summer. Alice's Day, Oxford's city-wide celebration of all things Alice in Wonderland, returned to the Botanic Garden in July, run capably by Jo Boyes; meanwhile at the Arboretum the 18-month programme of Lottery-funded activity led by Lesley Best

continued; in total, the team engaged with over 1,000 new members of the public and worked with over twenty new community organisations - an incredible achievement.

There has been plenty of student activity at OBG this summer as well. Congratulations to the Oxford team for winning the national Botanical University Challenge; we were delighted to host the trophy-giving ceremony at the Botanic Garden, and hope to host the whole competition in 2024, logistics permitting. Meanwhile a group of dedicated biology undergraduate students has been assisting a taxonomy-based project examining parasitic plants; highlights included a day in the field seed-collecting for conservation, and accessioning rare species of *Orobanchae* into the Oxford Herbaria with Dr Stephen Harris.

In early August, I hosted school students from MRSM School Kuching, Sarawak (Malaysia), with members of the Sarawak Orchid Society and pupils and teachers from their UK partner, Writhlington School. MRSM School has a focus on orchid conservation, science and propagation since the creation of the school's micro propagation laboratory in 2019 with help from Writhlington School

in Somerset. Then, in September, I was invited to give a talk on *Rafflesia* (the world's largest flowers) at the Indonesian Embassy - preceding by just a week - a flurry of media exposure on our work examining the extinction risk of these extraordinary plants. We hope that this will help galvanise much-needed conservation action.

From rare plant propagation and conservation, to community engagement work with a focus on brain health and wellbeing; as you turn these pages, you will start to see a snapshot of the diverse and vibrant portfolio of activity led by the team at OBG.



Left: Chris with biology undergraduate students in the field in Oxfordshire; above: The team from Sarawak

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Chris Thorogood with the Chair of the Anglo-Indonesian Society at the Indonesian Embassy

## What's on

Our **Autumn Science Lectures** return online this autumn. We look forward to five lectures on plant sciences from renowned experts. Lectures are free but do remember to register online.

Our **Autumn Fair** returns with a focus on fungi! Car parking spaces will be limited and subject to pre-paid booking, so this year the Arboretum has partnered with Oxford Bus Company to provide a shuttle bus from Redbridge Park and Ride.

We are delighted to be holding an exhibition, **Fungi**, with watercolour paintings by Katherine Nicholson (1912-1972). Katherine's watercolours will be on display in the Herbarium Room at the Botanic Garden from 6th October until 4th November, from 11.00-15.00 every day.

Our **Winter Lectures** resume in January at a new venue: the Oxford Museum of Natural History. Tickets can be booked in advance and include a glass of wine after the lecture in a beautiful setting.

For information on the events listed above, or to register for a place, please check our **'what's on'** page on the website.

# From the Director

By Simon Hiscock



The digitization of Mary Somerset's Florilegium

Jacob Bobart the Younger introduced many exotic plants to the Physic Garden in the late 17th and early 18th centuries. Many of these, including American aloes, Indian figs, African geraniums, cedars and black walnuts from Virginia, were acquired through a network of botanical contacts Bobart had established. This network exchanged new plants coming into Britain from all over the world. One important figure among the network was Mary Somerset, first Duchess of Beaufort, who cultivated a splendid garden at Badminton replete with stove houses and conservatories built for tender exotics like aloes, agaves and pelargoniums (a favourite of the Duchess). Bobart and the Duchess exchanged numerous plants, including a hybrid *Senecio* that became known as the Oxford ragwort.

Now over 320 years later we have re-established the Botanic Garden's historic collaboration with Badminton via the present Duchess, Georgia Beaufort. On September 5th, OBG Curator and Head of Horticulture, Mark Brent, PhD student India Cole (whose thesis is on Mary Somerset), and I visited Badminton to celebrate the digitization of Mary Somerset's Florilegium by the Bodleian Library and to discuss resurrecting

plant exchanges. On a glorious sunny late summer's day, we enjoyed a splendid lunch with the Duke and Duchess along with their Badminton Estates Managers and Historian.

The Florilegium digitization project was conceived by India, the Duchess and me in 2022 to make this historic collection of 178 original paintings of plants cultivated by Mary Somerset more widely accessible to the academic community. The Florilegium, which forms the basis of a chapter in India's thesis consists of two albums, each measuring roughly 59 x 44 cm. The first album is understood to have been painted by the Dutch painter, Everard Kickius, while the second album has several contributors, many of whom are anonymous. We know that Daniel Frankcom painted several; he was a footman who

the Duchess had Kickius train in botanical illustration during his time at Badminton. We also believe that the Duchess may have painted some herself, although this remains to be verified by India's research. The magnificent Florilegium is a testament to the first Duchess' skill as a botanist and as a patron of the arts, and will allow us to better understand her plant collections, through identifying the plants painted and matching them with those in her catalogues and herbarium. Her passion for geraniums and pelargoniums is evident and they feature prominently in today's Badminton collections - indeed they will be part of our first exchanges with the present Duchess, in return for aloes and agaves from Oxford.

September also brought the long-awaited launch of our Black Pine Whisky by the Oxford Artisan Distillery. The first 28 bottles, presented in unique boxes made from the original 'Tolkien Pine', were offered to the highest bidders in an online ballot, while the remaining 370 bottles (each with a coaster made from the pine) went on sale at the distillery, Botanic Garden, Ashmolean, and Bodleian Library shops on September 22nd. At the time of writing, the launch has just taken place so I can't provide any initial sales figures, but given the rush of bids (from all over the world) received via the ballot, demand is high. This final legacy of the Garden's 400th anniversary makes a very special Christmas present in support of OBG, as the old sales cliché goes: 'hurry while stocks last'.



The new Black Pine Whisky

# News from the Garden

By Mark Brent



Mark Brent with Dr Tim Upson (RHS) judging exhibits at the Barakura Flower Show

In an apparent reversal of last year's weather the Botanic Garden has experienced a wet summer. A benefit to the horticultural team has been the near absence of the need for irrigation; the downside has been an abundance of weed growth. The rain has certainly supported the establishment of some of our more recent plantings such as in the medicinal plant collection. Thanks to the Garden team and our marvellous volunteers who have helped us keep the collections in order.

In September we bid farewell to our two horticultural apprentices, Jack Willerton and Lucy Hoggett, who have completed their two-year training programme at the Botanic Garden. Jack has secured a place on the prestigious Kew Diploma course at the Royal Botanic Gardens and Lucy will be doing an internship at Jerusalem Botanic Garden in the native species propagation and conservation

unit. We look forward to welcoming the new apprentices, George Wickson and George Harwood-Edwards, in September.

In June I was hosted by Kay and Eugene Yamada at their fabulous John Brookes-designed Barakura English Garden in Japan, alongside Dr Tim Upson, Director of Horticulture at the RHS. This was a wonderful opportunity to promote the work we do in Oxford, through numerous practical demonstrations, lectures and an interpretive display, and to recognise the importance of Japanese flora in British gardens. The relationship with Barakura, which translates as 'a rosy life' in Japanese, will hopefully blossom further in the coming years.

Once again this summer we were able to host one of Bonn Botanic Gardens' horticultural apprentices as part of a continuing exchange programme. Jessica



The Barakura English Garden



Mark Brent giving a presentation at Barakura

Heller thoroughly enjoyed her time in Oxford and also visited Kew, Hidcote and many of Oxford's college gardens.

Our Senior Botanical Propagator, Lewis Barrett, has settled in well and is busy propagating a range of medicinal plants and Sicilian flora from seeds collected on Mount Etna. Working with the Mayor's for Peace organisation we have also received seeds of ginkgo trees from Hiroshima, known as 'hibakujumoku' which survived the atomic devastation. We hope to plant these trees across Oxford's green estate as a lasting legacy of peace and reconciliation.

## Botanic Garden Propagation News

By Lewis Barrett

Since starting six months ago as the Senior Botanical Propagator, I have helped with a variety of projects to enhance the extensive plant collections at OBGA and assist with ongoing research. I previously worked as a Horticulturist in the Eden Project's Rainforest Biome, and prior to that I worked in horticulture and conservation at the Naples Botanical Garden in Florida. One of my first projects at OBGA has been to grow wildflowers from seed wild-collected from Mount Etna by Professor Simon Hiscock's collaborators at the University of Catania.

This required a very sandy well-drained substrate in order to emulate the natural growing conditions; the plants have now been planted out in the Rock Garden.

I have also been sourcing and growing some species to expand our medicinal plant collection, including plants used in Traditional Chinese Medicine, such as *Salvia miltiorrhiza* - also known as danshen - and others used historically by Native Americans such as *Thelesperma filifolium*, or Navajo tea.



Lewis Barrett

There are many challenges to overcome when propagating some of the unusual species which arrive as seed at OBGA. For instance recently I have been propagating *Cistus* from seed collected by our research collaborators in southern Spain; this required scarifying the seeds with fine sandpaper to break the hard seed coat to allow germination - an adaptation in nature that postpones germination until the onset of favourable conditions.

# News from the Glasshouses

## Giant Waterlilies under Glass

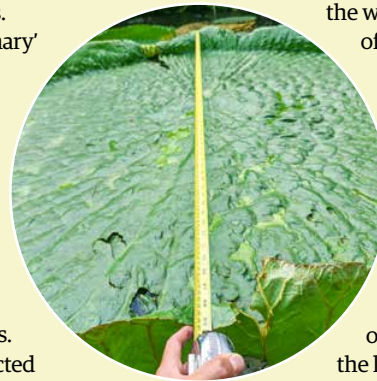
By Chris Thorogood

Giant waterlilies (genus *Victoria*) have been grown for centuries in Oxford Botanic Garden's tropical waterlily pool. Today they support the research we carry out with physicists exploring the mechanical properties of plants.

Our work has found that the distinctive pattern on the underside of the leaves is the secret to the success of these extraordinary-looking plants. A criss-cross framework makes up the vascular structure of the leaf, supporting its large surface area, and keeping it afloat. The giant leaves can reach nearly 3 m in diameter in nature - ten times larger than any other species of waterlily - and carry the weight of a small child. This summer

our plants produced some of the largest leaves seen in years, measuring 2.27 m across.

Compared with 'ordinary' waterlilies that grow in temperate pools, giant Amazonian waterlily leaves have a greater rigidity for a given volume of plant matter. Their strength allows them to occupy a large surface for light capture despite their low biomass. Leaf size is usually restricted mechanically by the expense of maintenance: a larger surface area uses



more of the plant's energy to maintain. The structure and load-bearing properties of the giant Amazonian waterlily give it a competitive edge: high strength at low cost.

In the quick-drying pools of the Amazon basin, the giant Amazonian waterlily evolved an advantage in the race among plants for space and light: its giant leaves unfold quickly and cheaply, jostling for position on the surface of the water, to create a mosaic of lily pads that block the light to any plants beneath. The leaf's flexible framework can withstand elastic deformation to avoid damage from wading birds. Small holes on the surface drain trapped rainwater. Spikes on the undercarriage of the leaf push other plants out of the way as the leaf unfolds and defend against nibbling fish. The leaves are truly multi-purpose.

Remarkable structures in nature such as these can help us to unlock design challenges in engineering. The form of these waterlilies could inspire giant floating platforms, such as solar panels in the ocean. We hope to take this work forward with engineers and technologists in the future.



The giant waterlily (*Victoria cruziana*) produced the largest leaf OBG has seen in years, spanning 2.27 metres



Another giant leaf: *Streptocarpus cooperi* in the Nursery House

# News from the Arboretum

By Ben Jones

I am pleased to say that work has continued on the new paths at the Arboretum, and has focused on two elements. Firstly, repair and maintenance work has concentrated on the existing main path around the Arboretum. Since January, over 200 metres of path have been repaired, including the main entrance driveway. Secondly, the path through Lime Wood has been upgraded with a cellular confinement system (CCS) for the first time. This is an exciting development: not only is this the first section installed as part of the Friends' Path Project; it will also enable the new path network to be installed throughout the Arboretum, with

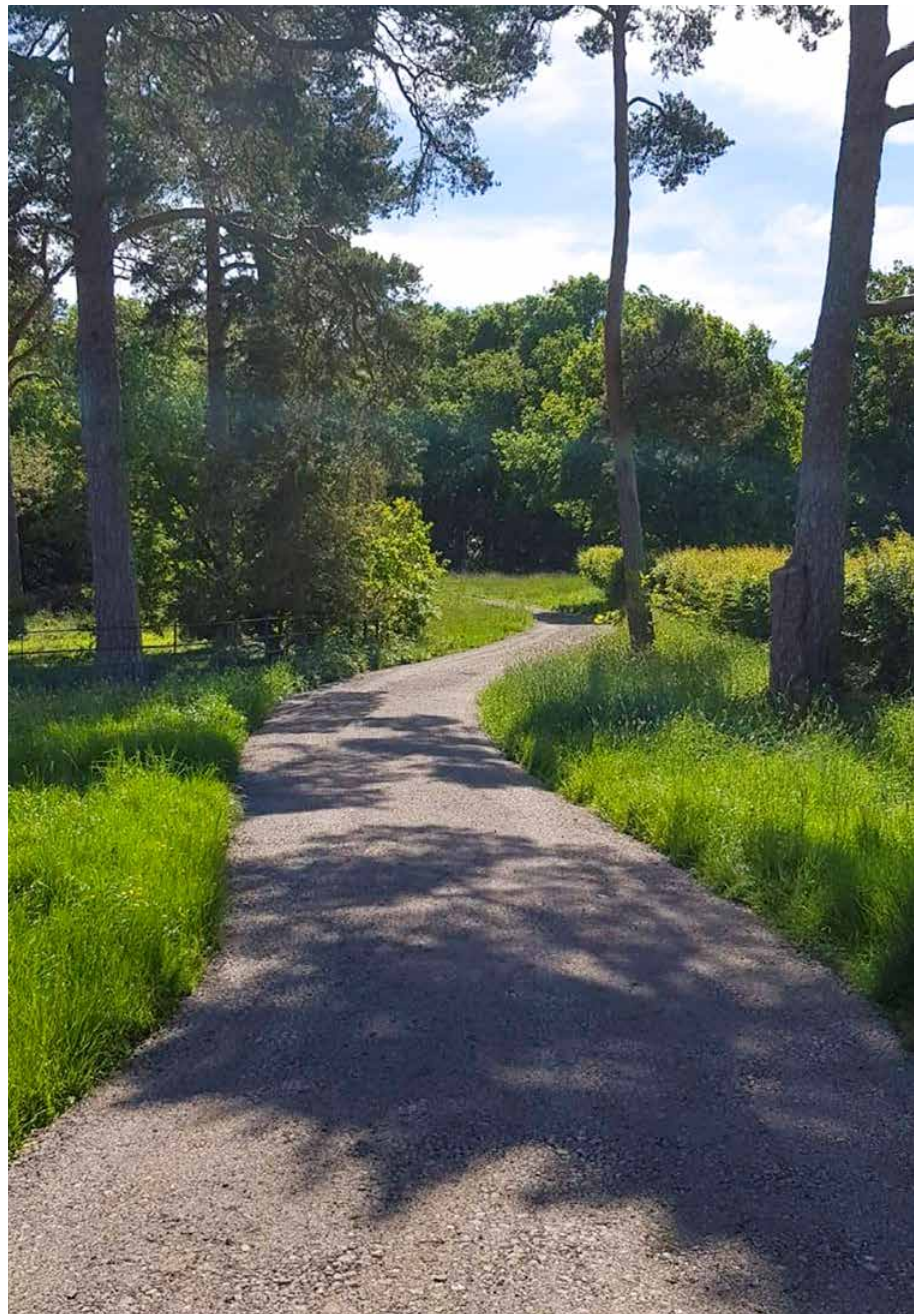
minimal impact to the trees. The new paths will be permeable, with a porous sub-base, ensuring gaseous exchange can continue for healthy root growth and development. The paths' porosity will also ensure that the tree roots can continue to benefit from precipitation, can also mitigate heat stress to tree roots during hot weather. Permeable paths tend to be cooler than traditional tarmac or concrete paths, thanks to their reflective properties and the cooling effect of water infiltration. When you next visit the Arboretum, be sure to walk through Lime Wood and take a look at the new section of path.

In other news, I am very pleased to say that the Arboretum's Phase II public access Wi-Fi project has now been completed. As important as it is to be able to 'switch off' and enjoy the Arboretum's beautiful landscape, and immerse oneself in nature without distractions, the delivery and completion of this project will enhance the Arboretum's capacity for engagement, education, and research. Digital access to our collections will enable people to engage in new and exciting ways, while promoting the work of the Garden and Arboretum.



The laying of new paths at the Arboretum

If you would like to be involved in the work of the Arboretum, you can find information on our website: <http://www.obga.ox.ac.uk>, under the 'What's on' section, including information about our practical courses such as forest bathing, nature photography, and plant identification. If you would like to hear more about the exciting work going on at the Arboretum, do join our monthly 'Insight Tour' which takes place on the first Wednesday of each month.





A wellbeing walk, organised as part of the NLHF-funded *Gateway to Nature* project at the Arboretum

## News from the National Lottery Heritage Fund team

by Lesley Best and Rodger Caseby

The NLHF engagement team has delivered an enjoyable and successful Engagement Programme throughout the summer. As the weather improved we were able to encourage more visits on-site and delivered a packed summer programme.

Throughout the 18-month programme of activity we engaged with over 1,000 new members of the public and worked with over twenty new community organisations including Leys Community Development Initiative (CDI), local libraries, East Oxford Café, Ark-T Creativity Camp, MyVision Oxfordshire, Crisis, the Berin Centre, Asylum Welcome, the Ukrainian Community and many more.

The bedrock of the NLHF project is utilising and expanding the Arboretum's potential to become a *Gateway to Nature* and develop health and wellbeing nature-based programmes. Feedback from course leaders, link workers and social prescribers has enabled us to produce a model of good

practice, drawing on the experiences of the project. Many people had engaged with a nature-based activity for the first time. The positive experience they have had at the Arboretum demonstrates how powerfully the outdoors can help mental health and wellbeing at all levels. An example is this feedback from Kirk Wheeler, Charity Manager at Leys CDI:

*As I am sure from the happy, smiling faces, you observed, EVERYONE had a thoroughly enjoyable day... The course leaders were so grateful and said what a wonderful time they'd all had and have even written an article about it on their website.*

The NLHF engagement team uses 'Five Ways to Wellbeing' and the 'Five Pathways to Nature Connection' as nationally recognised frameworks for promoting

mental health and well-being. These are used increasingly by other organisations from the NHS to the Scouts and align well with our project: to highlight the personal (wellbeing), cultural/societal (heritage), and the environmental importance of trees. These frameworks deliver activities designed to engage people and build trust in a setting, ultimately to help people connect with nature and one another. We are working closely with partners including the Centre for Evidence Based Medicine, the Department of Psychiatry, and the Oxford Health NHS Foundation Trust. We supported research into the development of natural sites such as ours for green social prescribing, defined as the practice of supporting people to engage with nature-based interventions and activities to improve their mental and physical health.

Looking ahead to the coming year, Rodger Caseby will be working focusing on wellbeing. This will enable us to continue to engage groups with whom we have built a relationship and to ensure that the Arboretum remains at the heart of research into nature-based green health and wellbeing.

# Research News

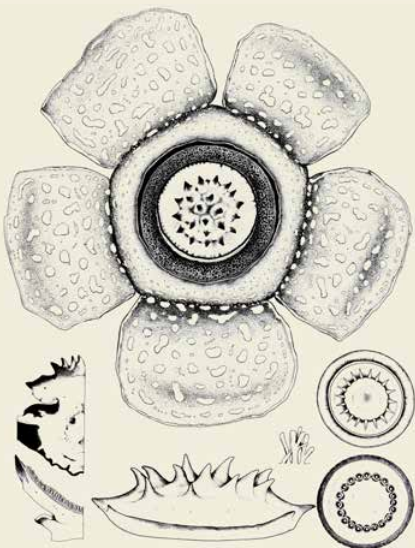
By Chris Thorogood

## Plants in peril

Following years of documentation with colleagues at the University of the Philippines Los Baños (UPLB) we have just reinstated a species of *Rafflesia* - the genus containing the world's largest flowers - in a paper published by Phytotaxa. *Rafflesia banaoana* has been confused with another species, *R. leonardi*; however by examining a set of previously overlooked characteristics, we were able to show the two species are distinct. This raises the total number of *Rafflesia* species in the Philippines to fifteen.

We also worked with an international group of foresters and conservationists across Southeast Asia, to issue an urgent call for coordinated conservation action for *Rafflesia*. The results of our work, published in the journal *Plants People Planet*, found that all 42 *Rafflesia* species are under threat: based on the criteria used by the IUCN, 25 should be classified as 'Critically Endangered', 15 as 'Endangered', and two as 'Vulnerable'. Furthermore, over two-thirds (67%) are unprotected by regional or national conservation strategies.

Most *Rafflesia* species have highly restricted distributions, making them particularly vulnerable to habitat destruction. We found that many of the remaining populations contain just a few individuals located in unprotected areas at critical risk of conversion for agriculture. Together we propose a detailed action plan for governments, research centres, and conservation organisations in Southeast Asia. We were pleased that our work attracted significant media attention which we hope will now galvanise conservation action.



The type illustration of *Rafflesia banaoana*, drawn by Chris Thorogood



*Rafflesia bengkulensis* with its custodians in Sumatra

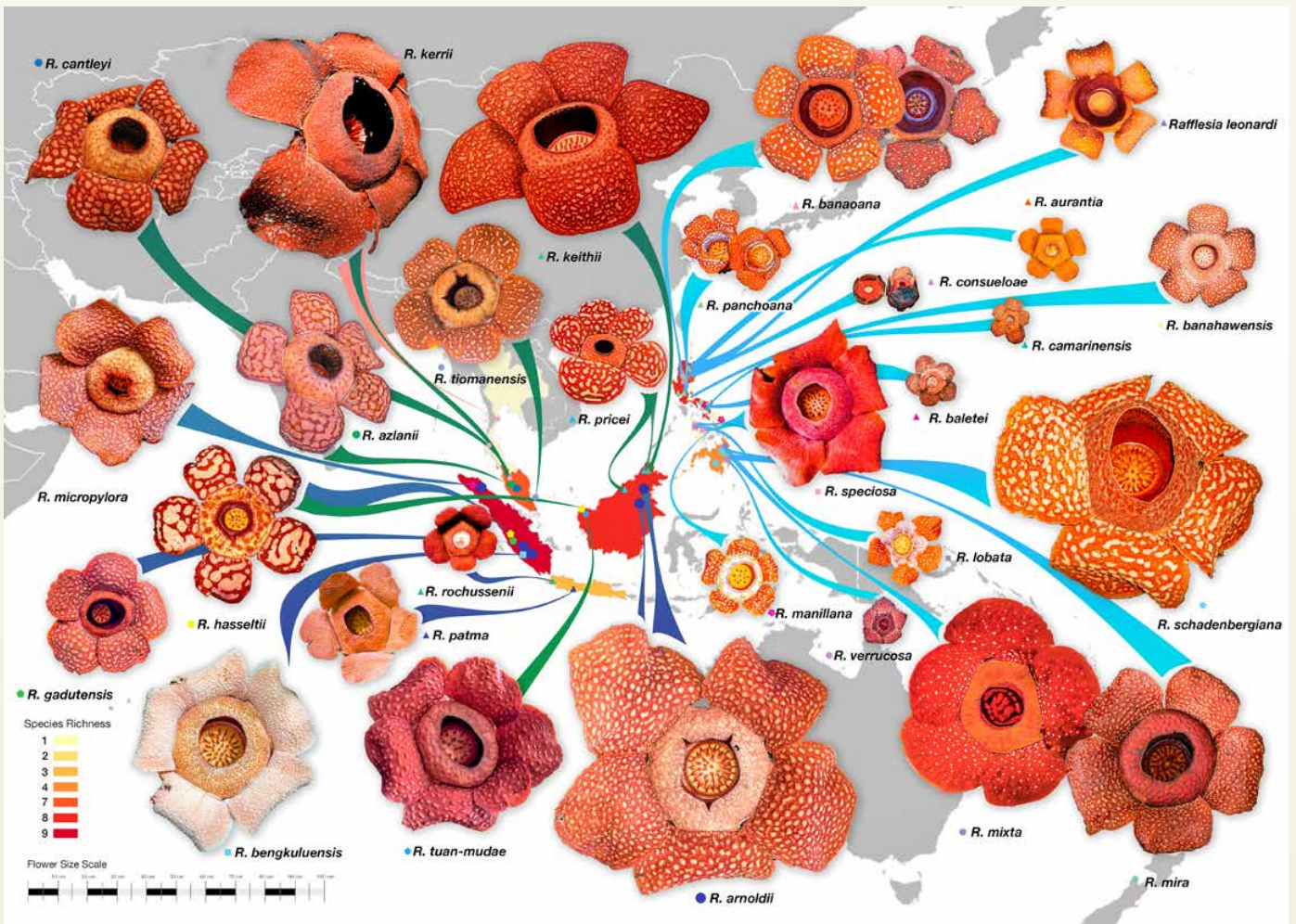


**The age of extinction**  
 The world's largest - and stinkiest - flower in danger of extinction, scientists say  
 The 42 known species of the parasitic plant *Rafflesia*, known as the corpse flower, are endangered due to destruction of forest habitats



*Rafflesia banaoana*, a species we recently reinstated with our collaborators in the Philippines; above right: OBGA research featured in headline news across the world

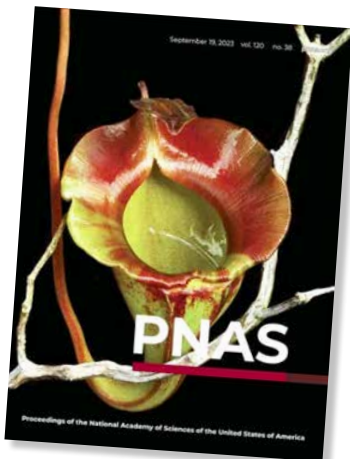




*Rafflesia* of the world, most of which are threatened, OBGA research shows

## Pitcher plant predators

Our work with Professor Alain Goriely and his team at the Mathematical Institute shows that the shape, size, and geometry of carnivorous pitcher plants determines the type of prey they trap. The study was published in the Proceedings of the National Academy of Sciences (PNAS) in September.



OBGA research featuring on the cover of PNAS

The mechanism by which pitcher plants capture prey is well known: the pitcher has a slippery rim, called a peristome, covered in ridges that collect a film of water. This causes the prey to skid and fall into a pool of digestive juices at the bottom of the pitcher. However the shape of the rim ranges from simple cylinders, to highly ornate, fluted, or toothed structures. The more lavish the rim, the greater the cost to produce it: so why don't all pitcher plants just produce a simple structure? To address this question, we applied mathematical models to pitcher plants grown at the Botanic Garden. Hypothetical capture efficiencies were measured for different shapes using a 'point mass' - the equivalent of an insect sliding into the trap. The energetic cost of producing the rim was then calculated by examining the relative area and steepness of the different structures.

Our results showed that variations in peristome geometries have a profound effect on what plants can catch. For

example, the geometry of highly flared peristomes appeared to be particularly suited to capturing walking insects such as ants. Just as birds' beaks are shaped differently to feed on nuts, seeds, or insects and so on, different shapes of pitcher plant are well-adapted to the different forms of prey that exist in their environments. Studying pitcher plants in the wild is difficult, but mathematical approaches are a powerful way to shed light on the evolution of these botanical enigmas.

You can read the original articles here:

<https://www.biotaxa.org/Phytotaxa/article/view/phytotaxa.612.2.5>

<https://nph.onlinelibrary.wiley.com/doi/10.1002/ppp3.10431>

<https://www.pnas.org/doi/abs/10.1073/pnas.2306268120>

# Education at OBG

By Lauren Baker, Rodger Casey and Catherine Vivian



Lauren Baker learning about the education programming for secondary schools from her counterpart, Celine Boudard, within the Jardin du Lautaret

In March 2023, the Friends of Oxford Botanic Garden and Arboretum generously funded a project to support the development and knowledge exchange between botanic garden education teams. This has supported visits to Grenoble, Kew and Edinburgh.

OBGA staff visited Université Grenoble Alpes and the Jardin du Lautaret in early June. Accompanied by Professor Max Weigend, Director of Bonn Botanic Garden, Helene Tronc and Lauren Baker toured several botanical institutions and compared education programmes and engagement strategies. The Jardin du Lautaret was a highlight: this garden boasts an extensive

alpine collection, which is beautifully displayed and interpreted, as well as a newly-opened learning centre. We discussed how their team selects the information displayed and curates the associated programming.

In July, Lauren Baker met Julia Willison, the Head of Learning and Participation at Kew. The visit focussed on sharing best practice for developing effective teacher training programmes and online education resources. Later that month, Catherine Vivian and Lauren Baker visited the Royal Botanic Garden Edinburgh. Head of Learning, Suzanne Hermiston, shared insights on RBGE's early years programme, including a new outdoor nursery, outreach programmes linked to their glasshouse redevelopment project, and the digital education programme. We gave a presentation on the 400th anniversary and engagement supported by the National Lottery Heritage Fund *Gateway to Nature* project at the Arboretum.

Back in Oxford, education sessions were in high demand over the summer, with a particular increase in visits to the meadows at the Arboretum. Over 2,500 students have visited OBG for education visits over the last 12 months. A highlight of the summer was a project called Building Bridges. In the first week of July, 563 students from nine schools in Gloucestershire visited the Botanic Garden under this partnership project which spans the Departments of Chemistry, Earth Sciences, Physics, as well as Balliol, Wadham and Hertford Colleges, as well as Oxford Botanic Garden. The aim of the project is to boost students' motivation, engagement and sense of academic belonging as they transition from primary to secondary school.



Pupils at OBG as part of the Building Bridges programme

Schools that took part in the programme were from areas of least advantage, as measured by percentage of pupil premium and IDACI (income deprivation affecting children index).

Partner schools were supported over the year with assemblies for the pupils and OXBoxes and teacher training for the staff. OXBoxes contained six weeks' worth of activities linked to the theme of 'Green Planet' (climate chemistry, medicinal plants and food plants). It was an extremely successful trial that we will be continuing with in summer 2025. This project was funded by the Royal Society of Chemistry.

## Xplorer Orienteering

In August, Active Oxfordshire, a part of South Oxfordshire District Council, ran Xplorer Orienteering at the Arboretum. Xplorer is a family-friendly fun navigation challenge that is educational and gives children a sense of adventure. It involves a healthy mix of physical activity and decision-making that the whole family can enjoy together. This partnership was developed as part of the 'Gateway to Nature' project. The event aimed at attracting YouMove card holders, which provides free or low-cost activities for families living in Oxfordshire in receipt of benefits related free school meals. In addition, YouMove supports refugee children, young carers and children in or on the edge of care.

## Botanical University Challenge 2023

We're delighted that the team of students from the University of Oxford triumphed at this year's Botanical University Challenge (BUC). Botanical University Challenge returned to an in-person event in July 2023. Semi-finalists represented the Universities of Cambridge, Manchester Metropolitan and Oxford along with Eden Project Learning. The two semi-final scores were close but the Cambridge and Oxford teams were just ahead, after which Oxford won. Every team demonstrated an incredible breadth and depth of knowledge about plants. Congratulations to Oliver Spacey, Lucy Morley, Reuben Nebbett-Blades, Ellen Baker and Mayur Prag on their achievement. We hope to host BUC in Oxford in August, 2024.



The Botanical University Challenge winning team from Oxford - Ollie, Mayur, Ellen and Lucy receiving their BUC trophy at Oxford Botanic Garden

## Oxford Play Association Play Days

This summer, the Education team continued their outreach work, meeting families in their local community spaces, as part of the Oxfordshire Play Days programme. Armed with a handling collection including monkey puzzle pine cones, sycamore seeds and giant redwood bark, we met 170 people at Abingdon and Berinsfield Play Day and 143 at Cutteslowe Park Play Day.

# Friends' Section

## News

### Valedictory from the retiring Chairman, Sarah Taylor

On 6th July, the AGM of the Friends of Oxford Botanic Garden & Arboretum was held in the fantastic auditorium of St John's College. At this meeting, the then board of directors, other than Professor Simon Hiscock, resigned and new directors were elected, namely Professor John Geddes of the Department of Psychiatry (also Chair of the OBGGA Board of Visitors) and Mr Marius Apetrei, head of finance operations for GLAM (Gardens, Libraries and Museums). There was a lively question and answer session at the end of the meeting as members sought to understand the implications of the change. The meeting was followed by drinks and 'nibbles' in the reception room next door.

Since then, it is fair to say that it has, for the Friends, been business as usual.

Our administrator, Grace Denton-Spalding, has continued to deal with the day-to-day organisation and the Friends volunteers have continued to put on the usual wonderful diet of Garden visits and Patrons group events. These culminated on 7th September in the annual Friends' party which took place on a miraculously sunny evening at the Arboretum, organised with faultless efficiency by Seonaid Danziger and the Events committee. Rebecca Mather and her team provided professional standard canapés and Friends enjoyed a series of tours round the site with the ever-informative Guides, taking in the Mount Tateyama plantings, the site of the new propagating facility and the structure of the new paths.

Your erstwhile Chairman is now, inter alia, a member of the Events team and continues the fund-raising efforts for the Paths Appeal, so she is still around, and after nearly thirty years, continues to support the Botanic Garden and the Arboretum which we all love so much! So, this is not so much a farewell as a new beginning.

### Membership By Rebecca Mather

Membership numbers continue to rise (and currently stand at 3,096) which must be related to how glorious the Garden and Arboretum have been this season. Please encourage your relatives and friends to join or perhaps give a Gift Membership for a birthday or Christmas. Let them know about the benefits, the fantastic programme of garden visits, May Morning, 2 for 1 at Kew.

Next summer we hope to visit two Friends' gardens to see the gardens and enjoy what is in essence a social event as much as a horticultural one. Friends can also volunteer to support the various events run by Friends which is always great fun.

### Thomas Clayton and Oxford Physick Garden, By Sue Burge (a Friend of OBGGA)

The 6th Regius Professor of Physick, Thomas Clayton (1575 -1647), played a key role in the founding of Oxford Botanic Garden. Clayton came to Balliol College when he was 16 years old. He studied languages, music and natural philosophy, and received a master's degree in 1599. After several years as Professor of Music at Gresham College in London, he returned to Oxford to complete his medical studies. By 1612 he was appointed Regius Professor of Physick, a position that he took over from his father-in-law. He was a gifted linguist and a caring physician. It was said of him that he 'taught concern for the patient's soul as well as his body'.

Clayton set about strengthening the practical education of medical students and wanted an academic physick garden similar to those established in Europe in the 1500s for the study of plants. However, at that time, the University had insufficient funds.

Enter Henry Danvers, Earl of Danby (1573-1643/4): a distinguished soldier who retired to Cornbury Park just 15 miles from Oxford. Danvers suffered ill health in retirement and it seems likely that he would have consulted Thomas Clayton as an eminent physician of the day. A contemporary account describes Danvers as 'minded to become a benefactor to the University, determined to begin and finish a place whereby learning, especially the faculty of medicine, might be improved'. We can only imagine Clayton's delight: he knew exactly what was needed. The University used Danvers' money (£250) to acquire land opposite Magdalen College for the establishment of the new garden. It is recorded that the opening ceremony took place at 2.00pm on the 25th of July (St. James's Day) 1621, Clayton, Edward Dawson, a Physician of Broadgates Hall and the Vice-Chancellor each gave an oration and the Vice-Chancellor laid a foundation stone, with an offering of money...

Clayton also provided anatomy demonstrations in the new School of Anatomy in Schools Quadrangle, obtained a special edition of



Bartholin's *Anatomy* for the students and arranged for students to be apprenticed to Oxford physicians.

Clayton died in 1647 and was interred without a monument in St Aldate's church. He was a man who made things happen. Alongside his contributions as Regius Professor, he was instrumental in the foundation of Pembroke College (1624), of which he was the first master. It seems extraordinary that we have no portraits of this distinguished man who made such major contributions to Oxford. Alastair Robb-Smith, an Oxford pathologist and historian, hails Clayton as 'as one of the greatest, if not the greatest, Regius Professor Oxford has as yet had'. Oxford Botanic Garden's medicinal plant beds feature many of the species Clayton might have discussed with his students.

# Friends' Events

## September 7th, the Friends' annual garden party - 'A garden party in the truest sense of the phrase'

By Seonaid Danziger

What a joy it was to see over 100 Friends gathered in this beautiful space amongst ancient giant trees to enjoy the delights prepared for them by the team of Volunteer Friends. The venue had been chosen in celebration of the most recent 60 years of the Arboretum (originally begun in 1835) during which it has been part of the Oxford Botanic Garden.

There were delicious canapés, iced drinks (very important after such a hot day) and the gentle sounds of a cello, so appropriate in that woodland space. The guides provided short walks around the newly planted areas and there was a display illustrating the care with which the new paths are being constructed - they are strong and built to last while not interfering with drainage and the roots of the trees.

Our thanks to all those who made the event the success it was, the Garden staff who contributed in many ways, the Arboretum volunteer gardeners who tidied and weeded the area ready

for us, and then especially to the team of Friends' volunteers, most of whom you saw at the party. It was so interesting to end the evening with words from those who were able to tell us of progress in so many directions.

As a Friend wrote afterwards, "One always listens to speeches on such occasions with some trepidation, but all the speakers were sensitively brief and to the point. Even the weather could hardly have been improved. It was obvious that everyone was thoroughly enjoying themselves, a garden party in the truest sense of the phrase."



Friends gathered for the speeches

Cathy Stewart

### First Friday of the Month

#### Coffee mornings

Coffee mornings are held on the first Friday of each month, except January, from 10.30am - midday. No booking is needed but do remember to bring your membership card. Dates for the future months are as follow:

#### 2023

3rd November / 1st December at the Garden

#### 2024

January - No coffee morning

2nd February / 1st March / 5th April / 3rd May at the Garden

Please check the Friends' website for up-to-date information

<https://www.botanic-garden.ox.ac.uk/>



## Christmas Fair

The Oxford Botanic Garden Christmas Fair returns on Saturday 2 and Sunday 3 December, from 10.00. Enjoy a festive market with food, music and specially selected retail shopping from local makers. Friends enjoy an exclusive discount. Early bird tickets available until 30 October:

[www.obga.ox.ac.uk/event/christmas-fair](http://www.obga.ox.ac.uk/event/christmas-fair)

### 2nd and 3rd December 2023

#### The Friends' Christmas Tombola

Christmas Fair, Oxford Botanic Garden

As you can see, this Tombola stand (pre-Covid) was full of enticing prizes and we were able to make a very decent contribution to the Friends' Appeal that year. We are hoping, with your help, to exceed that this year - and to make an even more significant addition to the Friends' Paths Appeal.

We have been collecting prizes all year and are extremely grateful to those who have already helped our collection. It would be wonderful if everyone could have a rummage in present drawers or the pantry. We would welcome all unused items that are in date and suitable for adults or children. If you have items you would like to donate to the Tombola - or would like to discuss anything, please contact the Friends' Administrator ([friends.administrator@obg.ox.ac.uk](mailto:friends.administrator@obg.ox.ac.uk)). We will arrange a drop-off point or collection as suits you best.

# Friends' Garden Visits

By Harriet Bretherton, Jane Annett, Pauline Coombes, Diana Naumann and Jane Thrift

The 2024 garden visits programme begins with a garden previously visited, though not during winter, followed by two snowdrop gardens quite different from each other. Next a presentation about the future of our University Parks, then a 'dancing' daffodils visit culminating with a glorious garden full of tulips. We therefore hope you'll want to enjoy visiting them with us.

**Booking Garden Visit Tickets:**

Online AND postal booking form with cheques.

1) Online: To book and pay for garden visits online - please visit [www.obga.ox.ac.uk/friends-visits](http://www.obga.ox.ac.uk/friends-visits)  
Any online problems? Please contact our Friends' Administrator, Grace Denton-Spalding, [friends.administrator@obg.ox.ac.uk](mailto:friends.administrator@obg.ox.ac.uk) / 01865 610303

2) By post with cheque: A Booking Form is enclosed with this Newsletter.

**Before booking a visit:** Please be aware that some gardens may be a bit challenging, should anyone have mobility or health issues.

**Dogs and Garden Visits:** Following Botanic Gardens policy, dogs are only permitted if they are registered assistance dogs.

If you have any other queries about any garden visit, please contact our Friends' Administrator because they support the work we volunteers undertake to organise the visits programme. And if you've visited any gardens which you'd like other Friends to visit through our programme, please email details to: [harriet@brethertonfamily.com](mailto:harriet@brethertonfamily.com)

**Thursday 11th January,  
10.30am and 1.30pm**

**Private visit to St Timothee Garden**

St Timothee, Darlings Lane, Pinkneys Green, Maidenhead, Berks SL6 6PA

By kind permission of Sarah and Sal Pajwani

Following an earlier summer visit, we are now revisiting this garden in winter. St Timothee is a private two-acre garden

created slowly from scratch over the last 15 years by its owner, Sarah Pajwani. Designed to look good at all times of the year, the visit includes a fully illustrated talk by the owner focusing on the key shrubs, ornamental grasses and hardy perennials which keep things looking good even in the depths of winter. This is followed by a look around the garden with Sarah available to answer questions. Refreshments included.

- Friends £25, guests £32
- Maximum 23



© Waterperry Gardens

Waterperry Gardens

**Tuesday 6th February, 2.00pm**

**Waterperry Gardens, snowdrops tour**

Waterperry, Nr Wheatley, Oxford OX33 1JZ

Snowdrops have been grown at Waterperry since long before Miss Havergal's Horticultural School started in the 1930's. They are found along the banks of the river Thames, sheets of the double snowdrop (*Galanthus nivalis* 'Flore Pleno') growing beneath giant oaks and grey poplars. The collection has been added to over a number of years and the garden now has nearly 100 cultivars. It is hoped they will be flowering in the new winter walk for the coming season, making a wonderful start to the garden's new year. There will be a guided tour. Refreshments included.

- Friends £25, guests £32
- Maximum 40



St Timothee

© Sarah Pajwani

Saturday 17th February, 2.00pm

## A private visit to Hanwell Castle gardens

Hanwell Castle, Hanwell, Oxon OX17 1HN

By kind permission of Mr C Taylor and Rowena Archer

The garden at Hanwell Castle (not open) has an extensive collection of snowdrops planted around an ancient flight of fish ponds. Join us for a wander amongst swathes of snowdrop colonies. Part of the gardens are being excavated resulting in very exciting recent finds in the old castle grounds including a very large collection of 17th century garden urns. Unsuitable for those with walking difficulties. Tea and cake are included.

- Friends £20, guests £25
- Maximum 40

Thursday 21st March, 2.00pm

## 'The University Parks - what is their future?'

The Cricket Pavilion, University Parks, South Parks Road, Oxford OX1

A garden visit with a difference - an opportunity to visit the historic University Park's Cricket Pavilion to hear Dr Carolyn Jenkins, the 9th Superintendent of the University Parks (the first was William Baxter 1866-1890), talk about her plans for one of the city's most beautiful public spaces for which she and her team of gardeners and arborists are responsible, along with about 200 smaller green spaces all over the University Estate. It is a period of strategic change for the University Parks. Appointed in 2022, Dr Jenkins is interested in finding ways to build on and communicate the University Park's long and interesting history while still meeting 21st-century needs. Additionally, the Park's



Snowdrops at Hanwell Castle

team needs to ensure that the wide variety of important archaeology beneath the Park is kept safe. The talk will therefore focus on looking forward, describing plans for improving the plant collections and on making the Parks resilient in the face of climate change, dwindling water supplies and plant health threat. If time & weather permit, there will be a guided walk. Refreshments are included.

- Friends £15, guests £20
- Maximum 40

Wednesday 27th March, 10.30am

## A private tour of Shotover House and its daffodils

Shotover House, Wheatley, Oxon OX33 1QS

By kind permission of Alexander and Camilla Stanier

We are privileged to have an introductory talk and tour of Shotover House by Alexander Stanier. The house was



Daffodils at Shotover House

constructed by 1718 and was surrounded by formal gardens, pleasure grounds and a landscape park designed in the 1730s by William Kent. Following the talk, you can explore the gardens individually to see the wonderful drifts of daffodils. Refreshments in the house.

- Friends £22, guests £29
- Maximum 40

Tuesday 30th April, 10.30am

## A private tour and garden visit to Chenies Manor and Garden

Chenies Manor, Chenies, Bucks WD3 6ER

By kind permission of Boo and Charles MacLeod Matthews

Our private visit to Chenies Manor and Garden begins with a guided tour of this Tudor house which the architectural historian, Nikolaus Pevsner, described as "Beautifully mellow under the trees by the church, and archaeologically a fascinating puzzle". The gardens are divided into a series of compartments - the sunken garden and



University Parks, Oxford



© Wendy Aldiss Photography

**Chenies Manor House and gardens**

white garden, the south border, the rose gardens, the inner court, the physic garden, the parterre with its yew maze and a penitential maze. However, at the time of our visit it is the tulip (thousands of them!) which reigns supreme. On arrival, refreshments are included. After the tour, you are welcome to explore the gardens on your own, leaving when you wish though, should you depart, re-entry is not possible without purchasing a new ticket, because the gardens open to the public from 2.00pm. A tearoom opens from 2.00pm with an array of cakes, though no sandwiches. Picnicking in the is garden not permitted, but in your car is.

- **Friends £25, guests £30**
- **Maximum 40**

### Don't forget your membership card

when you come to visit the Garden or Arboretum. Our ticket office staff do not have access to the membership database (for data protection reasons) and can't let you in free of charge if you don't have your membership card!

### Message to all email users

If you are not receiving regular e-bulletins with news of Friends' events by email, it will be because you have not signed up to receive them. If you wish to sign up, please send an email with your name, to the Friends' Administrator at [friends.administrator@obg.ox.ac.uk](mailto:friends.administrator@obg.ox.ac.uk).

### Dates for the Newsletter

The newsletter is published three times a year. The dates this is usually sent out are as follows: Mid-March / Early July / Early November

# The Danby Patrons' Group

By Sarah Taylor

Since the last newsletter, the Danby group has had a hugely enjoyable visit to the Garden, with dinner, something which will become an annual fixture in the programme.

The evening began with a welcoming drink and a 'show and tell' from Dr Chris Thorogood who, with characteristic enthusiasm, entertained us with a journey through some of his research. He emphasised that the research is collaborative, both with other departments within Oxford University such as chemistry and mathematics and with external partners.

He highlighted the evolution of the carnivorous *Nepenthes*, or pitcher plants, to attract insects with nectar whose odour varies depending on the insects available in their specific habitat. He also showed us the structure of the plants designed to trap insects by channelling them down into the pitchers but not allowing them to climb out again - a structure which interestingly has evolved in parallel in other species. We were at the 'cutting edge' of science, as the research shortly afterwards made the front cover of the journal 'Proceedings of the National Academy of Sciences of USA'!

He also spoke of the extraordinary structure of the giant Victoria water lily, economically designed to maximise the photosynthesising area of the leaves whilst minimising their weight, or rather biomass. The principles of these structures could be usefully applied to biomimetics.

**A night flowering cactus (*Cereus* sp.)**

Another collaborative publication is 'A Herbal of Iraq', published in conjunction with Dr Shahina Ghazenfar of Kew. It is based on the work of the 'Doctor of Al-Ashab' who was tragically killed during a terrorist attack. His comprehensive herbal flora of Iraq, however, survived and was in 2011 handed by his widow to his daughter, Rana Ibrahim, for safekeeping in Oxford. Each of the members of the Danby group was the fortunate recipient of a copy of this fascinating book.

Thus mentally stimulated, the group then moved into the conservatory for a convivial feast.

Afterwards, they were lucky enough to view the night flowering cactus which had obligingly bloomed just in time, a spectacular end to the evening.

**The conservatory at night**

# The Bobarts Patrons' Group

By Helen Potts



View from Cannon Bridge House

Our summer visits programme continued with mixed weather, which of course was the story of summer 2023. Bobarts Patrons enjoyed warm sunshine at Upton Grey Manor in June, where in garden after garden we discovered graceful and elegant combinations of plants from Gertrude Jekyll's original catalogue. Identifying some of the plants challenged even the most knowledgeable of our members, whilst others simply admired the beauty of the plants and shrubs and the sheer stamina of the owner, Rosamund Wallinger.

In early July, a relatively small group of Bobarts members were just as impressed with the hard work, enthusiasm and incredible results of the gardening team at St Hilda's College. Despite increasingly

heavy rain, we refused to go indoors until we'd seen absolutely everything. Nothing disappointed!

A private visit to Broughton Grange and one to the gardens of Le Manoir aux Quat'Saisons are yet to take place as I write.

Our 2023 programme finishes with our annual Bobarts' Day event, this year at the Arboretum in mid-October, so by the time you read this my stint organising visits for the Bobarts will be over. I was brought on board by Dr Jennie Turner, group founder, in 2011 and worked alongside her until she sadly died in 2020. As Patrons of Oxford Botanic Garden we are able on occasion to access private gardens that are rarely opened, an aspect of the role that has been particularly satisfying. And despite the hard work involved I have loved the multi-day visits to more distant counties that began when Jennie

and I first took a group to Somerset in 2016. Since then, we have been to Herefordshire, Cornwall, Norfolk and this year to Dorset. Where next, I wonder?

The Bobarts Patrons' Group is now looking to continue with Claire McGlashan, who has been helping me since 2021, coordinating a small team of fellow Bobarts. They are currently finding their feet and working towards a programme for next year. Things might change a little. Would you like to help too? Are there any gardens you would like to visit? Please contact the Friends' Administrator. 2024 will mark the 20th anniversary of the group. Already in place is a return visit to one of the most dramatic roof gardens in the City of London at Cannon Bridge House in July.

Do consider joining this group. Our loyal Patrons provide extra financial backing to support the valuable work of the Botanic Garden and Arboretum. Members, and the Danby Patrons' Group, enjoy all the benefits of the Friends plus our programme of small group visits to a range of gardens and to special collections in Oxford.

## Calendar

Please check on the website: <https://www.botanic-garden.ox.ac.uk/> for the latest news regarding forthcoming events.

### 2023

#### November

Friday 3rd November

**Coffee morning, the Botanic Garden**

#### December

Friday 1st December

**Coffee morning, the Botanic Garden**

Saturday 2nd and Sunday 3rd December

**Christmas Fair, Oxford Botanic Garden**

### 2024

#### January

Thursday 11th January, 10.30am and 1.30pm

**Private visit to St Timothee Garden**

#### February

Friday 2nd February

**Coffee morning, the Botanic Garden**

Tuesday 6th February, 2.00pm

**Waterperry Gardens, snowdrops tour**

Saturday 17th February, 2.00pm

**A private visit to Hanwell Castle gardens**

#### March

Friday 1st March

**Coffee morning, the Botanic Garden**

Thursday 21st March, 2.00pm

**'The University Parks - what is their future?'**

Wednesday 27th March, 10.30am

**A private tour of Shotover House and its daffodils**

#### April

Friday 5th April

**Coffee morning, the Botanic Garden**

Tuesday 30th April, 10.30am

**A private tour and garden visit to Chenies Manor and Garden**

**The Friends of Oxford Botanic Garden and Arboretum,**  
Rose Lane, Oxford OX1 4AZ.



All Friends' enquiries, including those about Friends' events, should be made to the Friends' Administrator. The Friends' Office is staffed Monday-Friday, 9.00am to 5.00pm.

Tel: **01865 610303**

E-mail: [friends.administrator@obg.ox.ac.uk](mailto:friends.administrator@obg.ox.ac.uk)

Web: [www.botanic-garden.ox.ac.uk](http://www.botanic-garden.ox.ac.uk)

This Newsletter was edited by Chris Thorogood and Carol Maxwell. The views expressed do not necessarily reflect the policies of the Board of the Friends or the Visitors of Oxford Botanic Garden.