

CAMBRIDGESHIRE GARDENS TRUST

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LETTER FROM THE CHAIRMAN

ELCOME TO THE Autumn 2023 Newsletter. It doesn't quite feel like autumn yet as we seem now to be basking in something of an Indian summer, a compensation for the wintry August and wet July. The Trust has weathered it all in good shape and is ready for the enjoyments and challenges of autumn and winter ahead.

During the summer the Council of Management agreed that it would be a good idea to reconnect with our patrons, with some of whom we had previously been rather out of touch. This

initiative proved very successful, leading to interesting discussions about future directions for the Trust, renewed expressions of support and invitations to visit. We are very honoured and privileged to have such committed and supportive patrons. One, Jane Brown, sadly offered her resignation on health grounds. Jane has had a long association with the Trust, authoring many articles for the Newsletter and providing practical support for the Brown Tercentenary celebrations in



Flower Garden and front elevation at Elton Hall. Photo Lady Proby.

2016, and we send our very best wishes to her for the future.

Win July, we were delighted to award grants to two very deserving schemes in our fourth round of Small Grants. The first was to the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire for their 'Herbs for Little Bugs' scheme. The 'Little Bugs' in question are pre-school children, who are encouraged to connect with nature in weekly sessions at the colour and colour patterning in flowers and how these are designed to attract pollinating insects. For full details, read elsewhere in the Newsletter.

Next came a visit to the extensive and varied gardens of Churchill College, Cambridge, led by their Head of Grounds and Gardens, John Moore. Features included a range of specimen trees and a Plant Heritage designated National

Countryside Centre, Ramsey Heights. The second project that we have supported is also a scheme designed to better connect school children with nature and food production. It involves the development of a food-growing area, or allotment, in the school grounds at Abbots Ripton Church of England Primary School. Children will be encouraged not only to grow the plants but to harvest, cook and eat them as well.

Over the summer we have had some highly successful visits, written up elsewhere in the Newsletter. The first was to

Glebe House, home of Lady Whitbread. with а magnificent garden designed by the well known landscaper Tom Stuart-Smith. Our summer social event was held on the Green and in the Village Hall of the delightful, if rather confusingly laid out, village of Hilton. We were lucky with the weather for our pre-talk picnic on the Green. Our patron and Director of the Cambridge Botanic Garden, Professor Beverley Glover, gave a fascinating talk about

Collection of plants named after Sir Winston Churchill. Finally, by kind invitation of our patron Lady Proby, we were invited to visit her home and garden at Elton Hall, near Peterborough. What a delight it all was, with a fascinating multi-period house and lovely gardens, despite rather inclement weather.

The National Trust, which has several important parks and gardens in Cambridgeshire (Anglesey Abbey, Peckover House, Wimpole), recently invited the Trust to join them in discussions about their new project to redesign and replant the Victorian parterre at Wimpole. The idea is to make the parterre more attuned to our increasingly dry, hot climate and to reduce the amount of watering it currently needs. The discussions have not yet taken place but when they do the Trust will be honoured to take part and contribute its knowledge and experience of Wimpole's famous grounds.

Next year members can look forward to an exciting line-up of talks and visits thanks to the hard work of members of the Council of Management, very ably led by Judith Christie. I would like to extend our collective thanks to all who help to make these events happen and who organise others such as the AGM and summer social. A final huge thank you to Jane Sills, our patient, indefatigable and long-suffering treasurer, without whom the Trust could not function.

Enjoy the rest of the Newsletter and I hope we can meet up at future events.

Elisabeth Whittle

A VISIT TO ELTON HALL AND GARDENS

Lady Meredyth Proby of Elton Hall has been a CGT Patron for many years. The Trust was delighted when she offered an exclusive guided tour of her lovely family home to 36 fortunate members on 14 August.

UR VISIT TO ELTON HALL on 14th August proved to be unseasonably wet and cool in an otherwise fairly good summer. As I picked up my fellow committee member, the heavens opened. However, by the time we reached Elton, even though it was dull and overcast, the rain held off for the rest of the visit. And what a special visit this was: Lady Proby had very generously invited a limited number of CGT members on an exclusive guided tour of her family home, which is not normally open to the public on a summer Monday.

We were welcomed by Lady Proby who gave us a brief introduction to the hall and gardens. Sir William and Lady Meredyth Proby restored the house and award-winning gardens from the 1980s so that it is now a much-loved family home, as well as a delightful location to visit in the summer months.

In view of the weather we were divided into two groups to view the house so that no one had to wait very long outside. The tour was extensive and thorough since there is lots to see and a long history to recount. It is a fascinating house, Grade I listed, a conglomeration of architectural styles (Fig. 1) accumulated over the centuries. Commencing in the late 15C, the original house was built and extended by Sir Richard Sapcote (†1477) and Sir John Sapcote (†1501), of whose works parts of the gatehouse and chapel undercroft still remain. The house became the home of the Proby family around 1660, by when it was in very poor condition, and so Sir Thomas Proby, who had married the local heiress Frances Cotton, pulled down most of the old house and built a substantial Restoration house between 1665-8, sited in its own landscaped gardens. In the mid-18C, John Proby married Elizabeth Allen, an Irish heiress, and was created Lord Carysfort in the Irish peerage. His son John began a long period of transformation of the house, which extended into the early 19C, with additions made in a Gothic Revival style. Some of this transformation was reversed by the architect Henry Ashton in a reworking from 1855-60, which was sympathetic to the mediaeval and late-17C parts of the house. Pevsner refers to the mansion as 'a composite affair'. It is a delight for architects (and gardeners) to pick apart both inside and out.



Figure 1. The SE elevation of Elton Hall showing some of the range of architectural styles looking out over parternes and clipped greens. Photo by Sarah Hundleby.

Inside, the sumptuously furnished house reflects hundreds of years of collection and life ever since the Proby family made it their home at the time of the Restoration. In the early 1920s, the collection was enhanced by bringing over the contents of Glenart, the Irish seat of the Carysforts. Particularly impressive was the painting collection, including works by Reynolds, Constable and Gainsborough as well as 19C works by Lewis, Landseer, Millais and Alma-Tadema.

After the house tour we were let loose in the gardens to guide ourselves. While the gardens are based on a 1911 design by A.H. Hallam Murray, father-in-law to Sir Richard Proby, and are described as having been 'restored', it seems that much of the work is newly developed during the period from 1980-2021 when Sir William and Lady Meredyth Proby were in residence. The gardens won the Historic Houses Garden of the Year award in 2021 with a citation that recognised the devotion that Lady Proby has put into 'transforming and enriching a garden that had already been through many guises over the centuries, into something that brings joy to plantsmen, visitors, and her family alike.' It certainly provides a stunning setting for the house.



Figure 2. View NW towards the Orangery from the water fountain. Yew-enclosed gardens are planted with Mediterranean species, complementing citrus fruits in terracotta pots. Photo by Sarah Hundleby.

A series of enclosed spaces, with extensive hedging and topiary, reveal some highlights. These include the Orangery and Orangery Garden (Fig. 2), which were created to celebrate the Millennium. The Orangery building was designed to be sympathetic to the Gothic façade of the SE elevation. The Shell Arbour (Fig. 3), near to the Orangery Garden, was built to mark the Jubilee and is beautifully decorated by Charlotte Kerr Wilson. The sunken Lily Pond (Fig. 4), part of the original Hallam Murray design, has been enlarged, surrounded by a low wall and planted with herbaceous perennials and small shrubs. The magnificent flower garden is a reworking of a former tired Edwardian rose garden and was replanted with the help of Peter Beales in 1983. However, replanting roses in a former rose garden was not ideal and so the roses have now been replaced with a stunning Flower Garden, displaying massive clumps of Thalictrum and Veronicastrum, among other perennials, surrounding a modern fountain (Figs 5, 6 and figure on page 1).



Figure 3. The Shell Arbour was decorated by Charlotte Kerr Wilson. Photo by Sarah Hundleby.



Figure 4. The sunken Lily Pond is part of the original design by Hallam Murray. Photo by Sarah Hundleby.



Figure 5. The modern fountain and part of the planting in the Flower Garden. Photo by Sarah Hundleby.



Figure 6. A close-up of the planting in the new Flower Garden. Photo by Mark Wilkinson.

There was so much to enjoy and admire in the garden that it is small wonder that it won the Judge's Choice Award from the HHA.

After an amazing tour and feeling overwhelmed by new sights and information, we finally retired to the excellent café in the old walled garden to digest what we had seen.

Sarah Hundleby, September 2023

A VISIT TO CHURCHILL COLLEGE GARDENS

On Thursday 13 July, a day of clouds and sunny intervals that fortunately stayed dry for our visit, Churchill's Head of Grounds and Gardens, John Moore, led a group of CGT members on a tour of the college estate.

HURCHILL COLLEGE'S GROUNDS and gardens are one of Cambridge's best-kept secrets. Covering a 42-acre site, the original design was drawn up in 1959 by the landscape architect Sheila Haywood. Her response to the College's Modernist architecture was to use planting to frame the buildings. Trees and shrubs, chosen for their form and foliage, were used to create landscapes with borders that framed the vast brick facades. This was never destined to be a traditional college garden and, indeed, at one time it seemed as if Nature had the same intent, as significant remedial work was required to improve the heavy, water-logged Gault clay and turn it into land suitable for playing fields and gardens. The grounds and gardens have evolved over the years, but they still retain the integrity of the original planting.

But how were those gardens and the vast expanse of playing fields first developed? Nearly sixty years have passed since the site was levelled, the playing fields seeded and the first trees planted. How was this achieved, and to what extent has the College been able to maintain the integrity of Sheila Haywood's original design in the face of new development on the site and the need to refresh and adapt planting styles across the decades? The College's Garden Archives hold some fascinating clues.

The first trees on site, a *Quercus robur* (English oak; Fig. 1) and a *Morus nigra* (black mulberry; Fig. 2), were planted by the College's Founder, Sir Winston Churchill, on 17 October 1959. The *Morus nigra* was devastated in 1994 when heavy foliage and inclement weather caused it to fall to the ground. But it has since re-grown and, like the oak, it is a magnificent specimen. These trees were joined in 2009 by a *Morus alba* 'Pendula' (weeping white mulberry; Fig. 3) which was planted by Sir Winston's daughter, Mary Soames, to commemorate the fiftieth anniversary of the trees that were planted by her father. These three trees are all thriving.



Figure 1. The English oak, Quercus robur, planted by Sir Winston Churchill on 17 October 1959 almost dwarfs the 3storey brick façade behind.



Figure 2. The Morus nigra (black mulberry), also planted by Churchill in 1959, has become a magnificent specimen despite a collapse in 1994.



Figure 3. A Morus alba 'Pendula' (weeping white mulberry), was planted by Churchill's daughter Lady Soames in 2009, marking 50 years since her father's plantings.



Figure 4. The impressive Dawn Redwood.

There are now some 950 trees across the site. The college is justifiably proud of its tree collection, which includes both British natives along its boundary line and exotic and unusual trees elsewhere. Of particular interest are the majestic *Metasequoia glyptostroboides* (Dawn Redwood; Fig. 4), *Paulownia tomentosa* (Foxglove tree), *Davidia involucrata* (Handkerchief tree), *Liriodendron tulipifera* (Tulip tree) and the *Catalpa bignonioides* (Indian bean tree; Fig. 5).



Figure 5. The large Catalpa bignonioides, flowering in front of the Møller Centre.

Since John Moore was appointed in 1996 the College has carried out extensive redevelopment work as many of the original plants had become overgrown. However, it continues to work within the spirit of the original design as set out by Sheila Haywood in the early 1960s although it has also taken the opportunity to develop new areas. Of particular note is the new Sir Winston Churchill Border (Figs 6 & 7), the summer herbaceous borders (Fig. 8) and, in spring, the stunning display of some 20,000 daffodils near the Churchill College Chapel. The Churchill Border contains a collection of plants bearing the name of the college's founder, which was designated as a National Plant Collection by Plant Heritage in August 2021 (Fig. 6). The collection was started in 2010 with the breeding of the new Rosa 'The Churchill Rose' (Fig. 7) by Peter Beales to commemorate the college's 50th anniversary. Another, Rosa 'Sir Winston Churchill', was bred by Alexander Dixon III in 1955 but was no longer available, so cuttings were brought to the UK in 2014 from the National Rose Collection of Australia.



Figure 6. The Sir Winston Churchill Border has 15 genera and 17 cultivars of the 29 plants named after Churchill.

The College has been grateful for the donations it has received over the years, from individual trees and plants through to the establishment of an orchid collection in a new glasshouse, and the creation of a mini-arboretum. The Xiaotian Fu garden (Fig. 9) honours a series of generous gifts pledged to the College in 2016 by Ms Xiaotian Fu and provides an environment for peaceful, outdoor academic work and tutorial meetings in the summer months.

Today the grounds also provide a perfect setting for the impressive modern sculptures around the site.

John Moore, September 2023



Figure 7. Rosa 'The Churchill Rose' bred by Peter Beales.



Figure 8. One of the summer borders in full bloom.



Figure 9. CGT members enjoy the garden named after graduate Ms Xiaotian Fu, a generous donor.

UPDATING 'A POINT OF VIEW: BEING FEMALE CONFINES YOU TO THE FOOTNOTES OF BOTH GARDEN HISTORY AND PRACTICAL HORTICULTURE' FROM ISSUES 49 & 53

N THIS ARTICLE, we continue the biographical snapshots of women in gardening and garden history, put together by Council Member Gin Warren. Gin noted that her motivation was kindled by the series of lectures given by female speakers on *Forgotten Women Gardeners*, organised by Twigs Way for the Gardens Trust. Complementing her own research, Gin acknowledges contributions from Twigs, Sophie Piebenga, Deborah Reid, Catherine Horwood and Sandra Lawrence. If you, dear reader, have your own, hithertooverlooked female gardener, then please do not hesitate to drop an email to Gin at her address: gin-warren@ntlworld.com

As with the previous 'Point of View' articles, this is not intended as a scholarly work - it is a directory which simply introduces CGT members to women who were somehow connected to gardening, mainly in the UK. As sources (in contrast to academic references), Gin has used notes from the Gardens Trust lectures, an assortment of books and blogs, Twitter feeds, Wikipedia, the websites of various places and societies, and so on. The intention is that it might stimulate members to find out more about these people and to mention them as much as their male counterparts in members' writings and presentations. To aid that, the entries in these articles, and any future updates, will be merged and placed on the CGT website for easy access.

DIRECTORY OF PEOPLE -A YET DEEPER DIVE TO REINFORCE THE IDEA

Lucy Cust (1784-1856): botanical artist from the Brownlow family at Belton House. See, for instance her image of a *Paeonia suffruticosa* (Japanese tree peony) of 1815 in the Fairhaven Bequest at the Fitzwilliam Museum (PD 307-1973). Sarah Anne Drake (1803-57): botanical illustrator who knew Anne Lindley, sister of botanist John, in the 1830s. Painted for



Paeonia suffruticosa (Japanese tree pzeony): watercolour by Lucy Cust, 1815, and part of the Fairhaven Bequest at the Fitzwilliam Museum.

the Lindleys, Loddiges and Kew, and for James Bateman of Biddulph Grange. Images in the Botanical Register 1837-47, as well as several important publications including Bateman's monumental *Orchidaceae of Mexico and Guatemala*. John Claudius Loudon said that she had 'high talents and great industry' in the *Garden Magazine* of 1831. She apparently drew flowers botanically and fruits horticulturally.

Hillegonda (Hilda) Johanna Duckitt (1839-1905): farmer, gardener, horsewoman, dressmaker, philanthropist, smallpox inoculator, abandoned fiancée and author, known as the Mrs Beeton of South Africa for her book Hilda's Where Is It? Hilda seems to be horticulturally most famous for sending seeds of Nemesia strumosa to Suttons in Reading; she was very widely connected and sent many varieties of seeds to many people and places. Marianne North, for instance, stayed with her and painted the plants that Hilda grew, or pointed out, growing wild in the Fynbos. She was a friend of Harry Bolus, who funded the Bolus professorships of botany at the University of Cape Town. Margaret Moffat (Madge) Elder (1893-1985): gardener, nurserywoman and writer. Though deaf and dependent on lipreading, Madge graduated from Edinburgh School of Gardening for Women in 1912 and after spells at Fox Covert in Corstorphine and the Priory at Melrose she became Head Gardener to the Duke of Buccleuch at Bowhill in 1914. At that time, Bowhill was a convalescent home for wounded officers. She relinquished her position in 1918/9 and, following a spell at Chiefswood House, Melrose, she set up her own hardy plant nursery. Madge went on to write about the Border country in Tell the Towers thereof: the ancient Border story (1956) and Ballad Country (1963).

Nancy Mary (Nan) Fairbrother (1913-71): landscape architect (member of the UK Institute of Landscape Architects) and writer whose works include The History of England and its Gardens from Anglo-Saxons to the Modern Age (1956), and Men and Gardens (1956). Born in Coventry and graduating from the University of London, Nan's influence on landscape architects, planners and educators continued well after her death. Nan married a surgeon, William McKenzie, by whom she had two children. One, Dan McKenzie CH, is Cambridge Professor of Earth Science with seminal contributions to plate tectonics, sedimentary basin formation and mantle convection. Margery Fish (1892-1969; née Townshend): successful Fleet Street secretary, then plantswoman, garden designer and writer who developed and championed Cottage Gardening. Noteworthy for introducing the concept of ground cover as a labour-saving device, she liked grey foliage, and expressed her galanthophile tendencies at East Lambrook Manor in Somerset, which was awarded Grade I status by English Heritage in 1992. As it happens, the Manor and its snowdrops are up for sale at the time of publication; enquiries to Savills.

Sarah (c.1796-1874) and Elizabeth (1817-34) Fitton: Irish writers whose works include *A Visit to the Bazaar* (1817),



The garden at East Lambrook Manor, created by Margery Fish. Image courtesy of East Lambrook Manor Gardens.

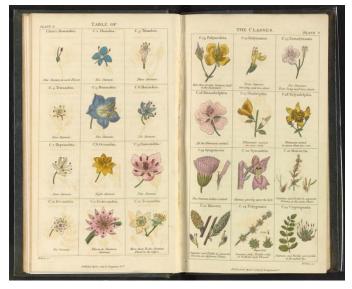


Plate 2, Table of the Classes, from 'Conversations on Botany' (1817) by the Fittons, engraved by Thomas Milton.

intended to help children learn geography and Latin through flowers, and *Conversations on Botany* (1817), a series of conversations on botany and the principles of Linnean classification. Sarah also wrote short stories for Dickens' *Household Words*.

Giovanna Garzoni (1600-1670): was an accomplished stilllife painter and miniaturist. Recognized as a pioneer of the genre and an important influence on subsequent artists, the young Garzoni showed immense talent but was largely kept from creating large-scale religious or mythological paintings, as patrons tended to commission such works from men. Garzoni turned to miniatures, scientific illustration and botanical art, which had emerged as a genre in the late 16C. During her career, Garzoni spent time in Florence, Naples, Paris, Rome, Turin, and Venice, creating works for the church and patrons such as the Dukes of Alcalá and Savoy, and the Medicis.

Maria Graham aka **Callcott** (1785-1842; née **Dundas**): plant collector and artist specialising in Brazilian plants, particularly ferns, and geologist. She sent 22 varieties of fern to Hooker at Kew on the *Aurora*. Hooker's *Exotic Flora* (1823-27) includes some of her 180 detailed drawings of South American flora and fauna. Graham travelled with her father to India where she married Captain Thomas Graham, RN, who died of fever

rounding Cape Horn in 1821. The widowed Graham carried on to Chile and Brazil, collecting and writing. She survived a major Chilean earthquake in 1822 and recorded its effects in detail '...the whole shore is more exposed and the rocks are about four feet higher out of the water than before.' Her travel writing and account of her time as governess to Princess Maria Gloria of Portugal were published as Maria Graham. She collaborated with Princess Maria Leopoldina in producing the Flora Brasiliensis (1840-1906) after their shared trips into the rainforest. It was as Maria Callcott (her second husband was the artist, Augustus Wall Callcott) that she tussled with some members of the Geological Society of London over the causes and effects of earthquakes. The insults alleging her to be an unreliable witness, caused both her husband and her brother to challenge her denigrators, but she said, 'I am capable of fighting my own battles, and intend to do it.' It helped that Charles Lyle and Charles Darwin (who saw a later Chilean earthquake) agreed with her, and the duels were not fought.

Jemima Marchioness Grey (1723-97): landowner and letter writer who was much interested in gardening. She inherited Wrest Park and her title from her grandfather, a Duke of Kent. He had employed Nicholas Hawksmoor, Thomas Archer, Batty Langley and William Kent to work on the garden and park, and she commissioned Lancelot 'Capability' Brown to soften the formality in 1758.

Sheila Mary Haywood (1911-1993; née Cooper): landscape architect of, for instance, Addenbrooke's New Site, Churchill College, and many local authority and commercial sites (cement works and power stations were specialities). Born in Bengal and trained as an architect in London, she worked for Geoffrey Jellicoe 1939-49. Led in the setting up of the International Federation of Landscape Architects (1948). Married John Haywood, a solicitor, in 1940 but the marriage certificate only gives his occupation, despite her being an established architect. Co-author of The Gardens of Mughul India (1973). In the context of Churchill College she said, 'There are strong arguments from a landscape point of view in favour of thinking on a timescale of fifty to sixty years ahead, and sometimes even more,' and in relation to the restoration of mineral extraction sites, 'The long term aim should be to create an area which will relate to its surroundings in such a way that future generations will suppose it always to have been so.'

Frances Eliza Burnett (1849-1924; née **Hodgson**): British-American novelist and playwright. Burnett is best known for the three children's novels *Little Lord Fauntleroy* (1885–1886), *A Little Princess* (1905), and *The Secret Garden* (1911), the latter especially dealing with gardening disguised as fiction. From the mid-1890s she lived at Great Maytham Hall, Kent where a large garden supported her love for flowers.

Frances Jane Hope (1822-80): orphaned at 20 with a legacy (her father had been a Regius Keeper of RBG Edinburgh) and gardened at her home, Wardie Lodge, overlooking the Firth of Forth. Wrote more than 50 articles in *The Garden Chronicle* and Robinson's *The Garden*. Advocated naturalistic plantings and complementary colour schemes well before Gertrude Jekyll. Used ornamental coloured kale in the Winter Garden and made posies of her flowers and herbs for the poor and sick of Edinburgh. A collection of her work entitled *Notes and Thoughts on Gardens and Woodlands* was published posthumously in 1881. Eighteen years later, Jekyll published

Wood and Garden: Notes and Thoughts, Practical and Critical, of a Working Amateur.

Maria Elizabetha Jacson (1755-1829): gardening writer and botanical artist. Her *Botanical Dialogues* of 1797 was well reviewed by Erasmus Darwin in his *Plan for the Conduct of Female Education*, but it was held to be too advanced for children as it drew upon the sexual differences of plants to guide sons and daughters in the roles society expected of them. She reworked the material specifically for adult readers as *Botanical Lectures by a Lady* in 1804. Jacson also wrote *Sketches of the Physiology of Vegetable Life*, illustrated with her own drawings, and *The Florists Manual* (1816). The latter, aimed at women, ran into several editions.

Ursula (aka Susan) Jellicoe (1907-1986; née Pares): writer, photographer and garden designer; created planting schemes for Cliveden in Bucks, Sutton Place in Surrey, a department store roof garden in Guildford and a public water garden in Hemel Hempstead. Educated at St Paul's Girls School and the Sorbonne, during WWII she served in the Ministry of Information department that countered enemy propaganda, analysing aerial reconnaissance photography. She later worked on projects with her husband Geoffrey (m 1936), and published relevant books with him, as well as editing, with others, The Oxford Companion to Gardens. Visited India with Sheila Haywood and Sylvia Crowe; with Gordon Patterson, they jointly produced The Gardens of Mughul India (1973). With Margery Allen she co-wrote The Things We See: Gardens (1953), The New Small Garden (1956) and Town Gardens To Live In (1977). Alone, she edited The Observer's Garden Panel for 3 years, and Landscape Design for 20 years.

Sibylle Kreutzberger (1930-): gardener. Trained at Waterperry School and from 1959-90 was Joint Head Gardener with <u>Pamela Schwerdt</u> at Sissinghurst, where they overlapped with <u>Vita Sackville-West</u> and continued under the National Trust. After Sissinghurst, they later developed their own garden in the Cotswolds, The Garden House, Condicote, renowned for its collection of rare fritillaries. Schwerdt and Kreutzberger were made Associates of Honour by the Royal Horticultural Society in 1980, and in 2006 they were presented with the Victoria Medal.



Fritillaries in April at The Garden House, Condicote, where Kreutzberger and Schwerdt created their own garden after retiring from Sissinghurst.

Louisa Lawrence (1803-1855 née Senior): horticulturalist and plantswoman whose entries won 53 RHS medals in the mid-19C. Jane Webb Loudon dedicated *The Ladies' Companion to* the Flower Garden, being an Alphabetical Arrangement of all the ornamental plants usually grown in gardens and shrubberies, with full directions for their culture (1841) to Mrs Lawrence of Ealing Park, Middlesex, 'as a zealous patron of floriculture, an excellent botanist, and, above all, as one of the first lady-gardeners of the present day.' Vol. LXVIII of Curtis's Botanical Magazine, edited by William Hooker of Kew, was dedicated 'with sentiments of great regard and esteem' to Mrs Lawrence, 'the beauty of whose gardens and pleasure grounds and whose most successfully cultivated vegetable treasures are only equalled by the liberality with which they are shown to all who are in botany and horticulture.' One of her sons, Trevor, later became President of the RHS. She persuaded Sarah Amherst's Amherstia nobilis to flower in Ealing, where the Duke of Devonshire's team had failed at both Chatsworth and Syon House with the specimen John Gibson had collected for him. Having been painted by Marianne North, this one was given to Queen Victoria. It died three years later.

Maria Leopoldina (1797-1826): first Empress of Brazil. Botanist and plant hunter, she was a well and broadly educated Hapsburg princess who entered a politically motivated proxy marriage in 1817 between Emperor Dom Pedro I of Brazil (later also King of Portugal) and the Austro-Hungarian Habsburgs. The Brazilian court was rudimentary and undemanding, so she was able to focus on her scientific interests, which she developed through her friendship with <u>Maria Graham</u>. A contributor to *Flora Brasiliensis*.



Maria Leopoldina of Austria, Empress of Brazil, collecting flowers in Madeira en route to join Dom Pedro in Brazil.

Norah Mary Madeleine Lindsay (1866-1948; née Bourke): a socialite garden designer. Influential between the Wars, she was a designer who favoured the romantic and untidy. Gardened herself at Sutton Courtney (designed with <u>Brenda</u> <u>Colvin</u>) and famously worked with Lawrence Johnston at Hidcote.

Jane Loudon (late 18C - early 19C): wood engraver and translator from German into English of gardening works,

including Vincent Köllar's Treatise on Insects Injurious to Gardeners, Foresters and Farmers (1840) and articles from Der Garten Zeitung. She, or Mary, was the wood engraver of the illustrations in Jane Webb Loudon's Gardening for Ladies. Mary Loudon (late 18C - early 19C): botanical artist specialising in trees. With Eliza Ronalds and five others, produced the illustrations for JC Loudon's Arboretum. Wood engraver and translator of gardening works including Vincent Köllar's Treatise on Insects Injurious to Gardeners, Foresters and Farmers (1840) and articles from Der Garten Zeitung. She, or Jane, was the wood engraver of the illustrations in Jane Webb Loudon's Gardening for Ladies.

Jane Wells Webb Loudon (1807-58): writer, illustrator, amanuensis and publisher of books and magazines including Instruction in Gardening for Ladies (1840), The Ladies' Hothouse, The Ladies' Flower Garden of Ornamental Perennials, The Ladies' Flower Garden of Ornamental Annuals, The Ladies' Conservatory, The Countryside Kitchen Garden, The Ladies' Country Companion (1845: it includes advice about suitable clothing and raised beds to reduce stooping and problems with stays). Previously a science fiction writer (The Mummy - A tale of the Twenty-Second Century) she had been left as a widow in debt with a child to support following the death of her husband.

Henrietta Knight, Lady Luxborough (1699-1756; née St John): landscape gardener, poet and wayward wife. While banished to her husband's country estate, Barrell's Hall in Warwickshire, she created the first ferme ornée and, according to the OED, first used - and so probably coined - the word 'shrubbery' in a 1748 letter to the poet William Shenstone. She visited him often at The Leasowes, where Shenstone also created a ferme ornée. The horticulturally positive exile was for having affairs with her doctor and the clergyman who was tutor to a friend's children. The latter, John Dalton (1709-1763), in keeping with the double standards of the day, went on to a post at Worcester Cathedral.

Winifred McNabb or MacNabb (late 19C - early 20C): plant hunter. The wife of the Deputy Commissioner in colonial Burma, in 1911 she invited Charlotte Wheeler-Cuffe to Mount Victoria (now Nat Ma Taung) where they found Rhododendron cuffeanum (featured in Curtis' Botanical Magazine in 1917 but found 1911/12) and what was later called Rhododendron burmanicum after Frank Kingdon Ward had reintroduced it to Europe in the 1950s.



Winifred McNabb (seated) alongside Charlotte Wheeler-Cuffe on one of her expeditions, 1912.

Margaret Ursula Mee (1909-88): botanical artist, explorer, conservationist, political activist and writer, with a special interest in Amazonian flora. After working as a draughtswoman at the de Haviland factory during WWII, she moved to Brazil in 1952 to teach art in São Paulo, where her second husband, Greville Mee, later joined her. She became a botanical artist for the Instituto de Botanica and conducted several expeditions into dangerous parts of the Amazonas, often alone. A derring-do type who held off drunken prospectors with a revolver, she wrote Margaret Mee's Amazon: Diaries of an Artist Explorer, among many other works. As Mee sometimes neglected to collect specimens she painted, her folios show plants not yet observed by other botanists. On her last expedition she painted the rare night-flowering Selenicereus wittii, the Amazon Moonflower, with flowers that open for a single night. Having searched since 1965, she finally found a plant in bud near Manaus in May 1988. She waited till it flowered and then sketched it by the light of a fluorescent torch. The resulting painting appears as the last plate in her memoirs, Margaret Mee in Search of Flowers of the Amazon Forest (1988).

Lady Anne Monson (1727-1776; née Vane): a greatgrandchild of Charles II, Monson's first marriage to Charles Hope-Vere was dissolved by Act of Parliament 1757, after the birth of an illegitimate child, and she married George Monson in the same year; 'I narrowly escaped becoming a slattern for life.' Lady Monson was a botanist and entomologist who travelled with/employed her own technical artist. Worked in India and South Africa. Was well known to Mary Delany; the British Museum links several botanical collages by Delany to Monson: it also identifies her as subject matter in some of Cruikshank's satirical images. Probably collaborated with the London nurseryman James Lee in translating and publishing An introduction to botany, extracted from the work of Dr Linnaeus (1760). The genus Monsonia was named for her by (the apparently besotted) Linnaeus.



A cutting satirical print by George Cruikshank, 1826. Lady Anne Monson is depicted in a portrait, top right, of a pregnant woman standing in a garden. The caption reads, 'Arethusa Bulbosa – a species of egg plant – hatches once a year & bears fruit in all climates.

Elsa Moore (late 19C-1933): 'Forewoman' or 'Captain' of Glynde School in 1913. Changed the uniform from a threequarter-length tweed skirt to high boots, leggings and an 'aviation skirt' (culottes) and apron, which were much freer to work in. Viscountess Frances Wolseley, founder of Glynde School in 1902, entirely stepped back from running the school

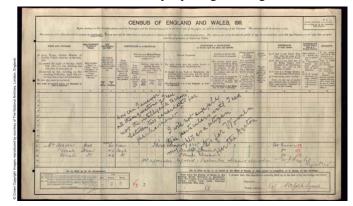


Elsa Moore, front right, gives the day's orders of work to the students at Glynde School.

in 1915. Elsa had a 'mental breakdown' in 1921, and left the school, moving to 'Somewhere' at Glyndebourne Corner. She later did some lecturing, garden design and talks on the BBC but died in 1933.

Annie Morison (1870-1948): gardener and educator of women in horticulture. With <u>Lina Barker</u>, worked as a female practitioner gardeners at the Royal Botanic Garden Edinburgh. Left to found the Edinburgh School of Gardening for Women in Corstorphine in 1902 because of the prejudice and ridicule they had experienced at RBGE (male uniform only, no outdoor work, two-year, fixed-term contract). This, the only ever school of gardening for women in Scotland (several in England), ran for twenty-five years. Many graduates went on to become head gardeners and nurserywomen. Morison and Barker were fervent suffragettes, and, like Hertha Ayrton (see next) boycotted the 1911 Census.

Phoebe Sarah 'Hertha' Ayrton (1854-1923; née **Marks**): spoiled her 1911 Census record; was a suffragette, a widely respected physicist, mathematician and engineer who, in 1904, became the first woman to read a paper at the Royal Society and was awarded the Society's prestigious Hughes Medal.



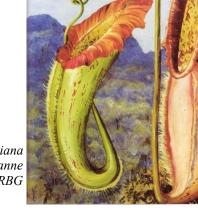
The 1911 Census record spoiled by Hertha Ayrton.

Mary Isabel 'Molly' Musgrave aka Mrs Francis Peete Musgrave (dates unknown; née McLeod): gardener, illustrator (inc. Wolseley's *Myths and Memories*). With her husband, Captain Francis Peete Musgrave on active service during WWI, Mrs Musgrave became War Agricultural Inspector for Sussex. She worked with <u>Frances Wolseley</u> from 1917 as inspectors until they both resigned and kept the car that Mary used for her work. They installed themselves in Massetts Place at Scaynes Hill, Sussex, running it as a smallholding and teaching one or two lady students market-gardening skills. Captain Musgrave came home in 1919 but had gone by the 1921 Census. He became an estate agent, and on his death left all to his sisters.

Lady Dorothy Fanny Nevill (1826-1913; née Walpole): plant collector and garden owner who would give seeds/plants only to Sir William Hooker and Charles Darwin. Hooker dedicated the 1856 volume of The Botanical Magazine to her. Knew Frances Wolseley. Eccentric, owner of the first Siamese cat in the UK, founder of school to train girls to be laundresses. An aristocrat who was sister of one cad and the victim of another, George Smythe MP, she then married an older cousin, Reginald Nevill, who adored her and bought her a 2000-acre estate, Dangstein, in Sussex in 1851. A profligate spender, Lady Nevill laid out the site extensively. A renowned orchid grower, she provided rare specimens to Darwin. Reginald's (†1878) will left most of his money to their children giving her the house and garden and £2000 a year. Tradition apparently suggests that one of her sons was fathered by Disraeli - she was much interested in politics and a founder of the Conservative Primrose League. She sold up in 1879, selling her enviable plant collection separately. Kew could not afford them. Of the plant sale she said, 'I never expect any good, so can never be disappointed.' The Prince of Monaco chartered a steamer to carry his haul.

Marianne North (1830-1890): botanist, botanical artist and traveller. She began flower painting following the death of her mother in 1855, which also motivated her to travel extensively with her father for 13 years. After his death in 1869, for whom she ever after dressed in mourning, North pursued her early ambition of recording the plants she had seen at Kew in their indigenous sites. She painted Lawrence/Sarah Amherst's Amherstia nobilis and stayed with Hilda Duckett to see and paint the flora of South Africa. She was expert at recognising plants that were unknown to European botany, and her paintings were scientifically accurate enough for some of them to be allocated to new species: Nepenthes northiana, Kniphofia northiae, Crinum northianum and Northia seychellana are named for her. Her sister edited her autobiography Recollections of a Happy Life after her death and published it: in 1879 North offered Kew 832 of her paintings and a gallery in which to keep them exactly according to her stipulations. The gallery was also to be a place where people could rest while touring the garden. In 2008, it was substantially restored with a grant from the National Lottery.

Gin Warren, September 2023 (To be concluded)



Nepenthes northiana (c.1876), Marianne North Gallery, RBG Kew.

THE 2023 SUMMER LECTURE: 'WHY ARE FLOWERS SO MANY DIFFERENT COLOURS?'

Beverley Glover is Professor of Plant Systematics and Evolution at Cambridge, as well as Director of Cambridge University Botanic Garden. She also happens to be an active CGT patron and kindly delivered our summer lecture to members attending the Trust's social event on 23 June 2023.

HIS YEAR MARKS the 10th anniversary of Prof. Beverley Glover's appointments to the twin posts that she holds in Cambridge University, for which CGT members will wish to offer their hearty congratulations. Having been recruited as a Patron by former CGT Chairman, Julia Weaver, Beverley has been an assiduous Trust supporter, personally delivering several lectures and offering CUBG help in the preparations for, and delivery of, the Brown Tercentenary celebrations in 2016. Consequently, we were delighted when she said she would be willing to give up her Friday evening and join us to speak at our annual social event in Hilton. The evening was fine, warm and dry and, following a picnic and summer refreshments, members settled down in the delightful Village Hall to hear Beverley speak on her chosen topic: *Why are flowers so many different colours?*

Beverley is well qualified to take on this topic as her primary research interest is the evolution of floral features that attract pollinating animals. Her approach to the topic of floral evolution integrates molecular genetics, to understand floral development, with functional analyses using bumblebees and other pollinators.

Just in case anyone doubted the range of colours in the floral kingdom, Beverley began her talk by showing us a wonderful sequence of images portraying plants of all hues and shades, with many displaying complex combinations of colours. Why should there be such diversity? Sadly, it is not simply to delight humankind and to keep florists in business; there is a much more transactional side to floral colour, which is how the plant advertises itself to a pollinator, 'I'm not just a green leaf, I have something that you will be interested in.' That something, of course, is sweet nectar and protein-filled pollen, and the attachment of the pollen to the pollinator has the collateral result in genetic dispersal for the plant. There is a mutual benefit to both plant and pollinator and this relationship has evolved over geological time to optimise the benefit to both, often resulting in specificity: a plant will target a specific pollinator to increase the chance that its pollen will fertilise another plant of the same species, while the pollinator has an easy life always finding nectar and pollen in the same place each visit. Colour appears to be a way for the plant to communicate with the pollinator and to compete against plants of other species or even its own. The evolution of such optical cues and the mechanisms behind them is a fascinating and amazing story, which is gradually being teased out by Beverley and her research team.

COLOUR PERCEPTION

Recalling that 'white' sunlight comprises the full spectrum of colour, where coloured light can be characterised by its wavelength, Beverley noted three factors that need to come together for plant colour to be perceived: (i) differential reflection by the plant of light according to its wavelength; (ii) photoreceptors in the pollinator that can absorb light of that wavelength, and (iii) cognitive ability enabling the pollinator to perceive and respond to the photoreceptor stimulation.

A flower that reflects all light components equally will appear white. A flower that absorbs all light components equally will appear black or dark. A flower that appears red does so because it reflects red light but absorbs light of other components (Fig. 1).

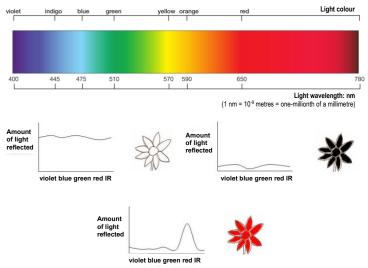


Figure 1. Top: the familiar colour spectrum of white sunlight scaled by wavelength in nanometres. Bottom: the colour of a flower depends on the wavelengths reflected or absorbed.

The retina of the human eye has light-sensitive cone cells, which are the photoreceptors responsible for colour vision. Three types of cone cells have responses which peak at three different wavelengths of light corresponding approximately to blue, green and red wavelengths. Hues are perceived by the brain interpreting the ratios of the responses of the three types of cones. Bees also have three photoreceptors (Fig. 2) but they are 'tuned' to different wavelengths from those used in human vision, making them less sensitive to red colours (long wavelengths) but much more sensitive to ultraviolet (short

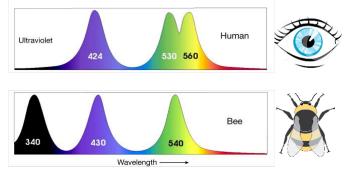


Figure 2. The human eye has three colour photoreceptors, similar to the red-green-blue picture elements in a colour TV. The bee has low red sensitivity but excellent sensitivity to UV.



Figure 3. Birds have four colour photoreceptors, and some have acquired a preference for red flowers. Image by Becky Matsubara.

wavelengths). Hence red flowers are less likely to rely on bees for pollination than, for example, birds which have good colour vision with four photoreceptors and have acquired a preference for red flowers (Fig. 3). On the other hand, plants that rely on nocturnal moths for pollination often have white flowers, which give good contrast against darker foliage in poor light.

HOW PLANTS MAKE COLOUR

Colour in plant structures is controlled by the presence or absence of pigments. Beverley mentioned two main types: carotenoids which, as their name suggests, result in oranges and yellows, and flavonoids, which produce creams, pinks, reds and blues. Carotenoids are fat-soluble and are found in petals, pollen, fruit and roots, as well as in chloroplasts, where they assist chlorophyl in the vital process of photosynthesis to convert sunlight into energy. Flavonoids are water-soluble and are widely distributed in plants, fulfilling various functions such as petal colouring, nitrogen fixation and even affording protection from harmful ultraviolet light.



Figure 4. Petunia Amore King of Hearts has a heart-shaped pattern controlled by combinations of gene switches.

The spatial location of colour pigments in a petal, which gives a flower its visual characteristics, and the timing of the production of pigment are controlled by genetic pathways within the plant cells. Understanding these pathways and their impact on plant flowering is a key part of the research by Beverley and her team. Some of the mechanisms involved in communicating to pollinators with colour and texture are remarkably sophisticated leaving one to wonder how such strategies could evolve by a 'blind' process of random mutation and selection of the fittest. Beverley proceeded to list some examples.

COLOUR ADJUSTMENTS IN PLANTS

Figure 4 shows a case of spatial control of several pigments through a combination of gene switches in the flower of the petunia 'King of Hearts'. Temporal control of pigmentation is familiar in the seasonal change of leaf colour as the photosynthetic green pigment chlorophyll breaks down in autumn, revealing other pigments in the leaf. By contrast, temporal colour changes in flowers can take place on much shorter timescales, as seen in the ageing of floral blooms over periods ranging from days to weeks. One might think that the ageing of flowers is a visual cue to pollinators to say that their job is done, but male flowers undergo ageing similar to female flowers, yet their ability to provide viable gametes would be useful over the full flowering season for a given species. Beverley recounted the case of possible visual messaging on a much shorter timescale, displayed by an East African flower, Desmodium setigerum. The lilac-coloured flowers last for just a single day and release their pollen explosively when visited by an appropriate pollinator, usually early in the day of flowering. Once tripped, the flower rapidly changes colour, becoming paler before turning white and eventually turquoise (Fig. 5), thereby presenting the visual cue that the flower has been visited. Unusually, and possibly uniquely, if fertilisation has failed, the flowers are able to regain some of their unpollinated colour in time for a potential second visitation on the same day (Stanley et al. 2016).



Figure 5. Desmodium setigerum is lilac before pollen triggering (left) and turquoise after triggering (right). Images from Willmer et al. 2009.

The hue of a pigment can change significantly with the acidity or alkalinity of the pigment's environment. The petal colour of *Ipomoea tricolor* 'Heavenly Blue', a type of convolvulus, is purplish-red in the bud with a pH of 6.6 (acidic) but, as the flower opens, the petals turn a bright blue with a pH of 7.7 (alkaline; Fig. 6). The same petal pigment is responsible for both colours and it is the increase in the alkalinity over the



Figure 6. Petal colours of Ipomoea tricolor 'Heavenly Blue' in bud (A) and fully open (B). The change occurs in less than 24 hours and is controlled by the pH or acidity of vacuoles in the petal. Images from Yoshida et al. (2005).

course of a day or less that causes the colour change. This internal control of pH is chemically expensive for the plant but it is evidently worthwhile in the effectiveness of its visual statement. The biochemistry of the process has been elucidated by Yoshida *et al.* (2005), from whose paper Figure 6 has been reproduced.

Another mechanism for changing colour is the capacity of the plant to modify pigments by adding or changing metal ions (metallic atoms with one or more electrons removed, resulting in a net positive charge) in the pigment molecule. A wellknown example is the colouration of *Hydrangea macrophylla* (Fig. 7) whose sepals contain a water-soluble pigment which is normally red. When the plant is able to absorb water-soluble



Figure 7. Inflorescence of Hydrangea macrophylla in the presence of aluminium (above) and molybdenum (below). The pigment is the same but its molecular shape, and hence colour appearance, is controlled by the metal ions.

ions of the metal aluminium, often found in clay soils, the pigment forms an ionic-bonded compound with the aluminium. Compound formation with aluminium causes a change of shape of the pigment molecule and, when replicated over the other pigment molecules in the sepal, these collective shape changes cause the stacked molecular assemblage to absorb red light and hence appear blue. Gardeners can assure a blue colour to their hydrangeas by providing water-soluble aluminium salts to the soil together with some acidity. The acidity of itself does not cause the colour change but it facilitates the availability, and hence absorption, of aluminium ions by the plant.

Setting biochemistry aside for a moment, plants can also exert control over the light they reflect and absorb in a couple of ways related to the cell structure of their petal surfaces. As an example, Beverley cited two different genetic lines of snapdragon, *Antirrhinum majus*, which have very different surface textures that appear in micro-photographs like stacked conical artillery shells (Fig. 8, top left) or slightly domed interlocking plates (Fig. 8 top right). These give rise to visibly different colour intensities (Fig. 8 bottom), as light falling on the conical cells will be reflected forwards into the cell and be absorbed, while light falling on the platy structures will be more strongly reflected, resulting in brighter colour. Gorton & Vogelmann (1996) suggest that differences in colour saturation may result in visual cues to pollinators.



Figure 8. Top: microphotographs of two genetic lines of Antirrhinum majus showing very different epidermal cell structures. Conical cells result in a darker-looking flower (bottom left), while platy cells reflect more light (bottom right). Images courtesy of Beverley Glover.

The epidermal cells in Figure 8 have diameters of around 45 micrometres (45 μ m), which is about 10 wavelengths of indigo light (Fig. 1). Amazingly, plant petals can generate regular structures on a scale approaching that of visible light of order 500 nm or 0.5 μ m (Fig. 9). If you have ever wondered why you see a rainbow in light reflecting off the surface of a compact disc (CD), it is because the width of the 'groove' on a CD, 0.5 μ m - 1.0 μ m, is small enough to reflect, or scatter, light

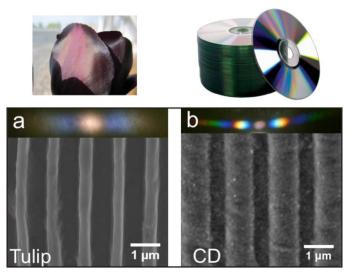


Figure 9. Top: iridescent tulip and a CD. The corresponding electron microphotographs below show similar elongated structures on both surfaces. Each structure scatters white light and separates it into its colour components according to wavelength (a & b). Images courtesy of Beverley Glover.

in all directions. The regular nature of the ridges and grooves presents to white light a repetitive (or periodic) scattering structure so that the reflections from each ridge interfere constructively and destructively with the reflections from all the other ridges (c.f. the Young's slit experiment in Newsletter 53, p20). For a given ridge width, each wavelength component of incident white light constructively interferes at a different angle, and hence the appearance of a rainbow. In the same way, a tulip flower generates a shimmering iridescence from its petals from aligned ridges of cuticle on the epidermal cells. The iridescence helps to attract pollinators and distinguish the flower from other parts of the plant (Glover & Whitney 2010).

GENES FOR DECEPTION

To this point in her talk, Beverley had reviewed a number of sophisticated mechanisms, most of which are genetically controlled, whereby a plant can provide visual cues to pollinators. One can easily imagine a genetic variant which gives greater colour intensity, for example, providing a plant with a competitive advantage over others without the variant and hence enabling that gene to become dominant through natural selection of incremental changes. The study that Beverley described for the finale of her talk left the audience wondering whether plant genes have a sense of purpose rather than being the outcome of a series of random mutations. Genes, of course, do not plan but one wonders at the evolutionary path leading to a South African daisy, *Gorteria diffusa* 'Springbok',



Figure 10. Detail of a bee-fly (right) and a decoy petal spot (left). Images courtesy of Beverley Glover.



Figure 11. Left: G. diffusa 'Naries' has dark spots in a ring around all the petal bases. Right: G diffusa 'Springbok' with just three greatly developed petal spots. Images courtesy of Beverley Glover.

mimicking female flies on its petals (Fig. 10) to encourage male pollinating bee-flies to linger longer in an amorous embrace. Observations of pollinator behaviour find that male bee-flies spend about 20 s attempting to mate with the decoy, greatly increasing the opportunity for pollen exchange. Figure 11 shows the Naries variant of G. diffusa with a complete ring of simple dark petal spots in contrast to the three, highly developed decoy petal spots displayed by the Springbok variant. Beverley and her team (Kellenberger et al. 2023) have employed genetic analysis of petals from spotted and unspotted variants to find out which genes are active in the decoy petals. Their astounding conclusion is that the plant has not evolved a 'fake-fly' gene; instead, it has co-opted existing genes to control the colour, texture and arrangement of the decoy petals to maximise the resemblance to a female bee-fly. They believe the use of a gene that controls the amount of iron in pigments to produce the deceptive colour was the first to evolve. Next, a gene that controls the arrangement of the spotted and unspotted petals was co-opted to produce apparently random decoy females. Finally, a gene used in the development of root hairs was co-opted to generate papillae cells on the petal that cause the 3D appearance and the textural feel of the decoy to the male bee-fly. The result is a complex but effective sexual-deception pollination strategy that is almost unknown outside the orchid family, and which probably developed in the past 1.5-2.0 million years, a snapshot in evolutionary time.

Beverley's talk was a veritable tour de force which brought home to her audience just why the Department of Plant Sciences and CUBG form such an internationally recognised centre for research in plant genetics with applications in global food security, sustainable bio-economics and environmental protection. Chairman Liz Whittle gave a heartfelt vote of thanks to Beverley at the end of her talk.

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A VISIT TO GLEBE HOUSE GARDENS

On Thursday 8 June, some 40 members made a visit to Lady Whitbread's garden at Glebe House, Southill.

LEBE HOUSE, SOUTHILL, has been the home of the Whitbread family since 1795, when Samuel Whitbread I bought the Southill estate from George Byng, 1st Viscount Torrington. By that time, Whitbread had worked his way from being a brewer's apprentice to founding the eponymous brewery and growing it into the largest brewing company in London. Whitbread himself had represented Bedford as a member of Parliament in 1768 and successive generations of Whitbreads have both chaired the family firm and made significant contributions to civic life and national institutions. For example, Samuel Whitbread I and II were both campaigners for religious and civil rights, pushing for the abolition of slavery, and proponents for a national education system and a minimum wage. Samuel Whitbread III founded the Royal Meterological Society in 1850 (a deed presumably unrelated to any vagiaries of the weather in Southill). Sir Samuel Charles Whitbread, the seventh generation to chair the family firm, served Bedfordshire as a magistrate, High Sheriff and Lord Lieutenant. He was elected a Fellow of both the Society of Antiquaries and the Linnean Society. Very sadly, he died in January 2023 and so the Trust was especially grateful to Lady Whitbread for her gracious offer to tour the gardens.

The Southill landscape park had originally been laid out for Byng in 1777 by Lancelot 'Capability' Brown. The main Southill House had been remodelled for Samuel Whitbread II by Henry Holland in the late 1790s, and included an addition of a lake in the park. Glebe House lies to the NE of the main house, not far from All Saints church, and had been a parsonage until 1797, when the incumbent moved to Old Warden. Now a Grade II listed building, it was successively the Steward's house, the Agent's house and Estate Office. In 2004, Sir Samuel and Lady Whitbread moved from the main house to occupy Glebe House. In preparation for the move, Peter Inskip was engaged as the architect for the Glebe House project and Mark Todhunter, as Garden Advisor, was asked by Lady Whitbread to create an appropriate new garden and, indeed, it was Mark who guided the group around on the day. After a most hospitable welcome by Lady Whitbread, accompanied by coffee and home-made biscuits, Mark got into his stride.

In view of the size of the landscaping project, Mark introduced the Whitbreads to his friend Tom Stuart-Smith, who

drew up plans in 2002. Much of these were implemented by Mark's team, together with Little Offley Landscapes, though parts of the initial plan, including a long canal and other water features, were adapted or replaced according to Lady Whitbread's vision for the garden, which stipulated there must be vistas and herbaceous borders. The creation of the garden involved massive earthworks, the monitoring of wet/dry areas and the acquisition of large numbers of trees and hedge plants. During the process, plans were altered and trees moved according to the conditions on the ground. A new, sinuous access drive was built passing through parkland trees to conceal the drive yet afford vistas of the house on the approach. The house has two main elevations, facing SE and SW. The SE frontage looks out over a gravel garden, giving way to lawns covering the former drive and a vista towards woodland with cut-grass paths. The SW frontage faces a kitchen lawn, with herbaceous brorders that lead to four stone steps that accommodate a change in level between the lawn and its upper continuation (Fig. 1). The change in level was originally closer to the house but the lower lawn was dug back to its present extent. At the far end, there is a delightful view back along the bordered lawns towards the house (Fig. 2), before reaching a gap in the beech hedge which gives access to a gravelled area featuring a statue given to John Howard. Howard was a



Figure 1. The group on the kitchen lawn, below the stone steps leading to the raised lawn. Photo by Judith Christie.



Figure 2. The view back towards Glebe House from the raised lawn with herbaceous borders. Photo by Judith Christie.



Figure 3. The memorial to John Howard which overlooks the sea at Kherson, Crimea, where Howard died after contracting typhus on a prison visit.

philanthropist and prison reformer who was brought up in Cardington, Bedfordshire, the home of Samuel Whitbread I. Howard travelled extensively to report to the House of Commons on prison conditions in both Britain and elsewhere. He died in 1790 of 'prison fever' (typhus) contracted in southern Russia and is buried overlooking the sea at Kherson in Crimea (Fig. 3). The statue was a gift from the Russian people.

Leaving the statue towards the SE, the colourful planting of the Late Summer Border runs parallel to the walled garden on the right before reaching the delightful Rose Garden. Six gravel paths radiate from the centre of a semicircle, delineating segmental rose beds, and leading to gaps in the surrounding yew hedge, through which varied vistas serve to bring the whole garden together (Fig. 4). At the centre of the Rose Garden stands a rustic thatched summer house (Fig. 5) which is based on a similar house that stood in the garden at Chicksands, Beds, in the early 19C. The Rose Garden summer house was relocated from its original site, closer to Glebe House.

The easterly radiating paths lead from the Rose Garden into the woodland area, planted by Lady Whitbread for shade, and comprising a selection of trees of various ages (Fig. 6). This area had formerly been occupied by the original access drive, now grassed over, and a paddock. On preparing the ground for the new drive, a section to the east of the paddock, adjacent to



Figure 4. A path from the centre of the Rose Garden looks back to the house through a gap in the encompassing yew hedge. Photo by Janet Probyn.



Figure 5. Inside the thatched summer house, which stand at the centre of the Rose Garden. Photo by Janet Probyn.

the road, was found to be very damp and so this became the site of a lake, created in the summer of 2002 by moving the soil to provide some varied topography planted with wildflower plugs. In the centre of the lake is an island, accessed by an elegant new bridge, which was designed and installed by Southill Estate's engineer. The island is inhabited by resident waterfowl (Fig. 7).



Figure 6. A view of the trees looking NW towards the bounding hedge of the Yew Garden. Photo by Janet Probyn.



Figure 7. The lake and new bridge leading to the island, inhabited by bronze herons, as well as local ducks and geese.

Heading NW from the lake, one reaches the rectangular Yew Garden which, together with three large pine trees that stand on the main lawn (Fig. 6), is a survior from Glebe House's original landscaping. The Yew Garden is named after the large, mature yew hedge which sourrounds it and it can be accessed only through two sculpted gaps in the middle of its longer sides. One steps down into this secret sunken enclave which is edged by a brick path and sun-loving herbaceous borders that spill out over a low, dry-stone wall. In the centre of the garden is an iris bed and a large, monumental urn planted up as a focal eye-



Figure 8. The sunken Yew Garden: Mark Todhunter, the Garden Advisor, describes the finer points of the garden's history and layout. Photo by Janet Probyn.

catcher (Fig. 8). Closer to the house are a white wisteria walk and a water fountain, which are best enjoyed in late spring when the flowers bloom in succession from the base and provide a wonderful fragrance. Hidden behind the western boundary hedge of the upper kitchen lawn lies the Kitchen Garden which produces fruit and vegetables for the house from a series of raised beds, each with their own theme and planting scheme.

Glebe House has quite a remarkable garden with something for everyone. Although designed over 20 years ago now, and many plants have been added to Tom Stuart-Smith's original scheme, the garden is still developing thanks to the vision and care of the Whitbreads and Mark Todhunter. The CGT visitors had been given a super tour, and a vote of thanks and appreciation was given in a few words by Mark Wilkinson at the end of the visit.

Janet Probyn & Phil Christie, September 2023

Endnote

Readers may be interested to know that, from the research by John Drake into the Wood & Ingram ledgers, the eponymous nursery supplied on 27 November 1930 '12 Yews, 2 Dwarf Roses, 2 Passiflora and several Fruit Trees' to Mr S. Whitbread, Southill Park, Bedfordshire for the sum of £2 12s 2d. The recipient was most likely to have been Samuel Howard Whitbread CB MP (8 January 1858 - 29 July 1944) who was Lord Lieutenant of Bedfordshire from 1912-1936.

WHAT DO YOU WANT FROM THE CGT WEBSITE?

N THE PREVIOUS NEWSLETTER, we reported on the online survey of members that was conducted by Jane Sills during February 2023. The survey was one of the action items that followed the strategy meeting held by the CGT Council of Management in January. The goal was to find out what people liked, or didn't like, about membership of the Trust and what the Trust does. Jane's overall summary can be found in Issue 54, pages 22-23, but herebelow we reproduce her findings regarding communications with members.

COMMUNICATIONS

Newsletter: 75% said they read most, or all, of the newsletter (Fig. 1). Satisfaction was high with an average rating of 9.6. **Website**: 52% look at the website occasionally with 22% looking once or twice and 14% never (Fig. 2). Given that the

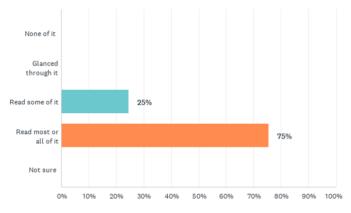


Figure 1. To what extent do you read the Newsletter?

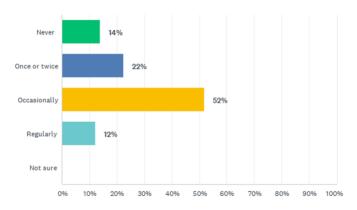


Figure 2. How often do you look at the CGT website?

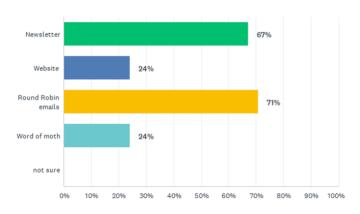


Figure 3. How do you find out about CGT events (tick all that apply)?

respondents were by and large the more active, the website could perhaps be promoted more.

Keeping informed: the most common way in which members found out about events was from the round-robin emails (71%) and the newsletter (67%), with 24% saying the website and 24% word of mouth (Fig. 3).

A total of 64 separate responses to the survey were were sent back, with several of these being 'households', representing just under half of all members. Jane felt that the group who responded were broadly in line with the membership profile with the proviso that, since the survey was conducted online, the respondees were more likely to be those that were active computer users.

While your Newsletter Editor was delighted by the percentage who said they read most or some of the Newsletter, his warm cosy glow took a knock when he read that only 12% regularly looked at the website and that only 24% find out about CGT events from the website (Fig. 3), the same number as hear by 'word of moth' [sic]. That the Newsletter is minutely read is consistent with the landslide of comments that came in a number of years ago when he incorrectly spelled Repton's first name. The low website use is somewhat puzzling given that responders to an online survey are likely to be experienced websurfers. Jane suggested that 'the website could be promoted more' and so here is a brief 'did you know' about the website.

THE CGT WEBSITE

The first time the Christies booked a self-catering holiday in France, we responded to a brief, text-only advert in the personal column in The Times. Now we can see what we are signing up for with a gallery of photographs on the Airbnb website (other letting agencies are available). As we are constantly being told, today's information consumers can access their information needs from multiple different 'channels' and CGT has followed suit. A basic CGT website was launched when Julia Weaver was our Chairman, then migrated to Twigs Way, who looked after it until she stepped down. Your Editor inherited a website that, like Topsy, had 'just growed', built on an Apple application that was no longer supported by Apple. The site was rebuilt on top of a professional, user-friendly application called WordPress, which makes the site very much easier to maintain and adapt, and this incarnation of the website went live on 4 December 2019. The re-launch was followed by regular refreshes of the Twitter (now X) and Facebook accounts by Gin Warren and Val Harrison, whose efforts are much appreciated. By the time of writing, CGT members can access information via a number of channels but Jane's round-robin emails and the newsletter appear to be those most frequently used.

So why have a website? One answer is to provide information about CGT events which is not in the newsletter. Since our newsletter is published bi-annually, some events are not scheduled by the time of going to press, and others may change. An example of the latter is the Plant History talk by Anne Tweddle that was advertised in our previous issue, but which was replaced by a talk from the University Botanic Garden's current Artist in Residence, Nabil Ali. Again, the website can provide talk synopses and speaker bio-notes, as for our Christmas Lecturer, Prof. Richard Selley, which would be too bulky to put into a round-robin email. This function appears to be supported by Figure 4, which shows the number of views made of the top 21 CGT webpages in 2023. After the home page, which is most frequently viewed at 974 hits, the Programme page received 717 hits, suggesting that viewers were either interested in forthcoming events or needed to find specific information on date, time, venue, parking etc. Interestingly, information about the Council of Management and Grants and Outreach also scored relatively highly.

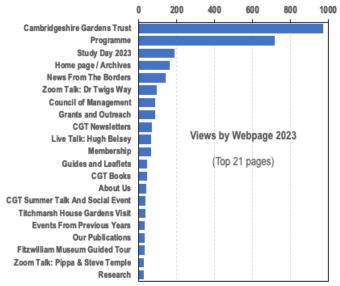


Figure 4. The number of views made of the top 21 CGT webpages in 2023.

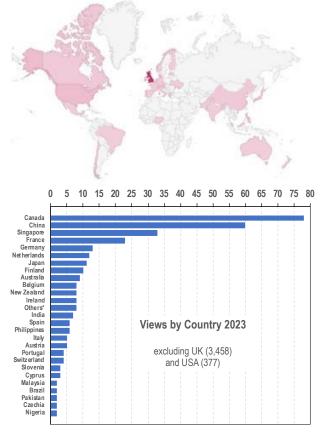


Figure 5. The number of views of the CGT website in 2023, by country of viewer. The map has the distribution in pink.

By using colourful images of sites and gardens and photos involving people, we seek to present a window to the world for CGT that might encourage the wider public to become more familiar in who we are and what we do, with a possible view to becoming a member. Figure 5 shows the amazing geographical reach of the website: after the UK, with 3,458 viewers and the USA with 377, there is a wide spread of countries from all over the world, including many countries whose primary language is not English. The plot counts 8 countries with a single view in 'Others'. We would like to convert more of these views into landings on the Membership page!

A further function of the website is to archive the material that CGT produces. Figure 6 shows the download count in 2023 for some of the files stored on the website. Ninety-one files have been downloaded at least twice but the figure shows only the top 26, each of which has been downloaded 13 or more times: 14 files are newsletters of various vintages; 5 contain information relating to specific events; 4 are the set of Brown-related walks that CGT produced for the tercentenary; 2 relate to applications for Small Grants, and one is the membership form. Perhaps we are making progress in converting website visibility into membership interest – it would be nice to think so.

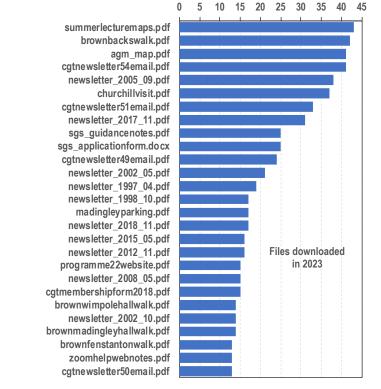


Figure 6. The number of downloads made in 2023 of files stored on the CGT website.

CGT provides the website as a service to members and the wider public, free at the point of use. We hope this article has delivered some insight into the statistics available on the website and how we are able to monitor usage. However, these statistics are absolutely anonymous data and what would be even more valuable would be feedback from members as to what you would like from your website – tell me what you want, what you really, really want (via the <u>admin email</u>)!

Phil Christie, Newsletter Editor and Website Apprentice October 2023

PROGRAMME OF VISITS AND EVENTS 2023

We invite members to evaluate prevailing covid advice and to consider whether participation in an event is appropriate for them. If members have locations they'd like to suggest for visits, please get in touch via the admin email address below.

NOVEMBER 2023	4 Sat	From 11:00am	AGM in Hilton Village Hall, Grove End, Hilton PE28 9PF. Doors open 11:00am, AGM starts 11:30am, followed by guest speaker Hugh Belsey MBE at about 12:00noon, with buffet lunch to follow. Hugh's title is <i>An Artist's View of Landscape Gardening</i> . AGM papers to be sent out beforehand. AGM attendance is free but for catering numbers, please register for lunch and talk (\pounds 12/head via BACS or at the door) through admin below.
NOVEMBER 2023	11 Sat	2:00pm for 2:30pm	Live talk: hosted by Cambs. Plant Heritage at Madingley Hall. Arborist and broadcaster, Tony Kirkham MBE VMH FICFor, the former Head of Arboretum, Gardens & Horticulture Services, RBG Kew, will present the 10th Max Walters Memorial Lecture: <i>Plants from the Edge of the World</i> . Entry £12 for PHS and CGT members, £15 for guests. Prior booking required via this ticket application <u>form</u> (please state if CGT member); further details from <u>Rosemary Buisseret</u> and the CGT website.
DECEMBER 2023	12 Tues	From 11:00am	Christmas Lecture: at Storey's Field Centre, Eddington Avenue, Cambridge CB3 1AA. Prof. Richard (Dick) Selley , globally experienced geologist and author, will tell us about <i>The Winelands of Britain: past, present & prospective</i> , starting in Roman Britain and ending in Scotland, noting how viticulture is affected by geology and climate. Tickets, to include a tasting of three English wines, are £12 for members/ £15 for guests, payable by BACS or at the door. Full details, including parking and access, are on the website. For catering please email bookings by 8 December to admin.

(For up-to-date details please go to <u>https://cambridgeshiregardenstrust.org.uk</u>)

Our preferred method of booking is by BACS transfer to **our new account** Cambridgeshire Gardens Trust (sort code 30-99-50, account number 80635768) using your name as reference; please confirm payment by email to admin@cambridgeshiregardenstrust.org.uk. Cheques, **payable to Cambridgeshire Gardens Trust**, to Jane Sills, The Willows, Ramsey Road, Ramsey Forty Foot PE26 2XN. To avoid disappointment (some venues limit numbers), please book at least 2 weeks before the visit, where possible. Should you need to cancel a booking, please advise admin@cambridgeshiregardenstrust.org.uk as early as possible.

CGT CHRISTMAS LECTURE 2023

Abstract Wine has been drunk in Britain since the late Iron Age but has only been made in this country since the Roman occupation when wine production was a local agri-business. Viticulture declined in the cooler climate of the Dark Ages but renewed as temperatures rose in late Saxon and Mediaeval times. It again declined during the Little Ice Age of the late 16C – early 19C. However, gentry returning from the Grand Tour modelled their gardens on those of sunnier climes with eyecatchers and vineyards. The Industrial Revolution warm phase of the late 19C – 21C has led to an accelerating renaissance of viticulture, which continues today under global warming.

Our speaker Richard (Dick) Selley is Emeritus Professor of Petroleum Geology and a Senior Research Fellow at Imperial College, London. While travelling the globe, he found time to study vineyard geology with the collateral conviviality that such demanding research entails. Forty years ago, Richard suggested that the Denbies estate near Dorking had chalk slopes with the perfect petrophysical properties to make an excellent vineyard supported by the anticipated effects of climate change. The rest is history...



Denbies' wine estate at harvest. Photo Helen Dixon.

Booking information See calendar above or the website.

Cambridgeshire Gardens Trust The Willows, Ramsey Road, Ramsey Forty Foot, Cambs. PE26 2XN. Tel: 01487 813054 Registered Charity no. 1064795. Website <u>https://cambridgeshiregardenstrust.org.uk/</u>