

# The Horticulturist



Young Horticulturist of the Year 2024



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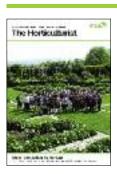
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#### FROM THE PRESIDENT

Change is in the air – we have a new government in the UK and there have been some announcements on skills and training. There is some optimism that there will be renewed impetus to address the skills shortages in many sectors including horticulture. We need to capture the enthusiasm for caring for the environment and keep making the case for our profession locally and also when asked to be part of government consultancy.

The challenges of the changing climate and the pressure on nature was brought home to me when I had the opportunity to visit Madagascar. It is the world's fourth largest island and a biodiversity hotspot. It is perhaps the largest producer of vanilla and of course is well known due to the Disney animated film *Madagascar*. The island has an enormous array of plants and animals found nowhere else in the world. It regrettably is also one of the poorest countries in the world with a growing young population striving for survival and the difficult consequence of this is that natural resources are being over-exploited. Illegal deforestation and 'slash and burn' activities are devastating the habitats of many species. It was really encouraging to see work on 'Sustainable Management for Future Generations' which is part of Defra's Biodiverse Landscapes Fund and the work which the Royal Botanic Gardens, Kew, and other partners, are undertaking.

Travel in Madagascar is challenging, and a four-wheel drive vehicle is essential and additionally a robust constitution to withstand the potholes. I was fortunate to visit a project to see baobab seed harvesting and planting. There are some tree species that conjure a vision and somehow are mystical and the baobab is one such tree. I saw mature specimens of two of the six endemic species, *Adansonia madagascariensis* and *A. suarezensis* and was also inspired by the work to replant these in some of the most challenging conditions.

This is very much a community-based project with the village elders taking care of the seed store where the wild collected seeds are kept before planting. The germination rates are good but the challenge of trampling by zebu cattle and the extended summer droughts provide different, but in many ways, similar challenges to tree establishment in the UK. We had a great discussion despite my imperfect French about bare-rooted stock, soil conditions and the use of mulches and tree guards. There was much to share and learn and somehow it put into context the relative simplicity of the challenges I face in

David Richardson CHort FCIHort, President president@horticulture.org.uk

encouraging biodiversity enhancements.

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THE JAMES BRUCE MEMORIAL LECTURE To start the 40th anniversary celebration of the founding of the Chartered Institute of Horticulture founder member **Alan Sargent** delivered the 2024 James Bruce Lecture. He looked back on his own career and noted changes to professional landscaping along the way.

# The changing face of professional landscaping

I was fortunate enough to become a founder member of the Institute of Horticulture (now the Chartered Institute of Horticulture CIH) on 1 May 1984, as a landscape contractor and garden designer.

That date, 1 May, is doubly important for me as I started work as a self-employed gardener on that day in 1968. This year I am celebrating 56 years in the industry. Born and raised on a farm, I have always been close to horticulture. Thanks to my father's influence I have always been a keen grower of vegetables. I left school at 15, worked on the farm, then became a grave digger before joining the Police, first as a cadet, then a constable in Sussex.

Having transferred to the Metropolitan Police, I discovered I disliked living in London, and returned to the tranquility of rural Sussex, where I found myself working on an *ad hoc* basis for a small firm of horticultural consultants.

I found work as a journeyman, and especially with Cheals of Pulborough, learned many of the 'old skills' such as pruning, grafting, budding roses, top-working amenity trees and a host of horticultural techniques that are no longer practiced on a day-to-day basis, then taught by 'old boys' who had decades of experience, which I found both fascinating and stimulating.

There were two commercial apple orchards in my area, where I worked as a contract pruner, charging different rates per tree – from sixpence for a pollard, to half a crown for a large Bramley, leaving the clearing up to others. This proved to be good winter work, even when the weather was inclement.

I was fortunate in my timing when entering horticulture, as many of those old skills were becoming redundant in this country, with many more plants arriving from the Continent at lower prices than British growers could match. The skills are still there of course, but mainly in specialist nurseries and practices.

I was also learning other skills, including the use of scythes and swop-hooks, stone-working tools including pitchers and dressers, working with hand tools, as then there were no strimmers, disc cutters or battery-operated machines available to the industry. In the 1960s and 1970s, most small operations were carried out using hand tools.

#### The 60s

Looking back the horticultural industry appeared to me to be heavily reliant on chemicals for all kinds of everyday use. In the orchard Malathion and Paraquat, DDT and Rogor were splashed about with little care or concern. I would carry arsenic and cyanide in the van, along with Phostox gas pellets for rabbits and moles, and think nothing of the dangers involved. There were no controls over purchasing or training requirements that I was aware of. In my hard landscaping work, I could buy neat, 100% hydrochloric acid in gallon jars from the chemist, for cleaning stone and mortar stains, without the need for any paperwork.

#### The 80s

Some 40 years ago, most hard landscaping materials used in domestic gardens were made from concrete. Paving slabs came in a wide range of finishes and colours, some emulating natural stone, others in modern patterns and designs. Walling blocks were similarly styled, with two main manufacturers leading the market – and many smaller operations, some offering lesser quality products, with unregulated aggregates and poor colour fastness.

How the gardening world has changed since the 60s! There were no 'garden centres' as such, only nurseries, some of whom sold garden requirements such as grass seed, fertiliser, composts and sundries. Most supplied open ground plants, lifted, bagged and dispatched to



Far left: Alan has created a 'natural' small lake complete with a planted island.

**Left:** New sandstone wall built using reclaimed materials and old-fashioned techniques.

designs in The Royal Horticultural Society (RHS) Chelsea Flower Show Design Marquee, but were banned as they were not Landscape Architects (at this time most designers had been trained as landscape architects) founded what became known as The Society of Garden Designers (SGD). I was fortunate in being involved (as the friendly landscaper) to help with setting up the Society at the request of Peter Rogers. I still have a copy of the inaugural Committee Meeting dated October 1981.

Then there were only about 200 individuals working as garden designers, but the publicity afforded by the Royal Horticultural Society shows created a new wave of designers, now with the opportunity to display in public, and the chance to enter into Awards ceremonies with both the SGD and BALI. During the 1980s garden design became a very popular career choice for many. Some designers became involved with landscape companies, by now offering design and build schemes, all available as a one-stop-shop.

The next major event in the industry was in 1984, with the formation of The Institute of Horticulture. Institute membership was for individuals as opposed to companies who had reached a certain standard or level of competence and proven ability in the widest possible range of horticultural disciplines, bringing scientists and boffins into the same metaphorical room as plantspersons, growers, landscapers, lecturers and garden designers, with the single purpose of recognising the industry as being a professional career. I have always maintained that gardening is a science without boundaries, and the formation of the CIH underlined that fact.

With BALI and the SGD bringing together the best artisans in the country, now underpinned by the CIH recognising individuals, horticulture had become a holistic career choice, with a clear structure for personal improvement. Individuals could join as students, associates, members or may be offered Fellowships, each one a meritorious category.

#### The 90s

In 1995, after 17 years with BALI, I felt they were moving away from their core purpose and becoming too political, becoming involved in forging trade links across the world and in Europe in particular. I left to found The Association of Professional Landscapers (APL). This soon attracted a considerable number of landscapers, led by a chairperson with a volunteer committee, and no paid staff. The APL was formed to serve the domestic landscape market.

Within a couple of years, the APL had grown to such an extent that it was no longer practical to operate as a volunteer association, and an invitation from David Gwyther to join the HTA was accepted, and a new group was formed within the HTA. Landscaping is now the second largest – and fastest growing – group within the HTA.

Around this time, television programmes, such as Ground Force, with Alan Titchmarsh, were

the nearest railway station. Plants were very much seasonal purchases.

Cheals used to show at Chelsea, in the main marquee, where, in the days before credit cards to secure pre-payment, the public could order plants for the appropriate season, by placing an order, leaving contact details including telephone number and delivery address. Often, in the plant lifting season, the manager would telephone the customer regarding their delivery, only to find they denied all knowledge of placing an order. Some people seemed to enjoy showing off in front of their friends, pretending to spend large amounts of money. Around 10% of all Chelsea orders were not ratified!

In 1970, I joined The Horticultural Trade Association (HTA), which was then the only trade body for the industry. The Members Handbook contained details of services available from each firm, with a simple 'tick-list' of services, including plants, trees, composts, fertilisers, turf, grass seed etc, across the page, with a single box for each. I could only mark the box titled 'Landscaping' – which was my sole entry.

Before the 1960s landscape construction in domestic gardens was largely carried out by builders or odd job contractors (although there were some excellent landscape firms including Waterers, Gavin Jones, Whiteleggs etc) with large scale projects overseen by a Landscape Architect, involving a number of different artisans, including stone masons and contract nurserymen. Only the very wealthy could afford to have complete garden builds, which might take a year or more to complete.

In 1972, a group of landscape contractors, including Derek Worrell of Cheals, broke away from the HTA to form The British Association of Landscape Industries (BALI). This development opened many channels, with suppliers, manufacturers and other specialists joining landscapers in a very proactive manner. The BALI Awards Annual ceremony has always attracted the very best projects in the world, not only from these shores.

Originally based in Keighley, Yorkshire, BALI became a Limited Company, with a Chief Executive and small team working from a converted house and basement. (BALI have since moved to bespoke offices in Warwickshire). Led by a Chairperson and National Council, they have over 1,000 members in various groups. I joined in 1978, eventually becoming National Council Member and Chairman of PR & Marketing).

In 1981 a group of garden designers, led by Peter Rogers, Robin Williams, Geoff Whiten, Basil and James Seymour, who wanted to show their



making major waves in the landscaping industry, with their quick make-over garden projects becoming a blessing and a curse. A blessing as thousands of people became aware of the potential of their garden plots and were now seeking professional assistance from landscapers. It was a curse because of the poor quality of some of the builds and construction techniques made professional landscapers appear slow and expensive when compared with the television crews.

By the mid-1990s, concrete landscaping products were gradually becoming less popular, with the advent of inexpensive sandstones being shipped in from India. With a far wider range of colours and textures, with walling materials to match the stones, British natural stone paving materials became relatively more expensive, costing as much as four times the price of imported stone. Even though the quality was inferior to British stones, they were favoured by customers and designers alike, as they were readily and cheaply available.

#### The new millennium

Garden design and landscaping have been steadily increasing in popularity with the general public,

who were becoming more selective in their choices, armed by Google research and more assertive when making material selection.

I realised that professional gardeners as consultants is not something that the majority of people are aware of. I have been an expert witness in legal disputes since the early 90s and I wanted to offer a platform for other such experts who have previously been invisible. In 2016 I founded The Professional Garden Consultant's Association (PGCA) and brought together 50 or more consultants offering a very wide range of expertise. Every member had at least ten years of experience at a senior level, with appropriate qualifications to suit their specialties – the majority, if not all, are also members of The (now) Chartered Institute of Horticulture.

In 2015, a major new influence in the world of landscaping came into force, namely the Construction (Design Management) Regulations. Originally applicable solely to the Building industry, CDM is based on Health and Safety at work, involving not only the designer and contractor, but also the customer, requiring strict terms of engagement, with fully specified contracts, including method statements and ongoing maintenance information.

Since around 2015, a whole raft of new laws, regulations and restrictions concerning the landscaping industry have been introduced, along with other regulations involving plant health and movements, all affecting growers and suppliers to the landscaping industry. The whole horticultural world has become ever more closely aligned and

#### THE JAMES BRUCE MEMORIAL LECTURE

James Bruce MBE (1908-92) was a Fellow of the then Institute of Horticulture, having previously been a member of the Horticultural Education Association (the forerunner of the CIH) since 1934. James Bruce had a distinguished career as a horticultural adviser, advising country estates and prisoner of war camps on vegetable production through the Second World War. He later became the Head of the Department of Horticulture at East of Scotland College, where he was responsible for greatly improving the teaching estate and resources. This lecture recognises the enduring influence of James Bruce on the sharing of horticultural knowledge.

In recent years the lecture has been delivered by: David Gwyther CBE, CEO Horticultural Trades Association; Dr Simon Thornton-Wood, Director of Science & Learning, RHS; Roy Lancaster OBE, VMH, FCIHort, FLS: Lord Taylor of Holbeach CBE, Parliamentary Under Secretary, Defra; the RHS Director of Horticulture and Head of Science, Linda Lennon CBE; Richard Barley CHort MCIHort, Head of Horticulture, Kew Gardens; John Adlam CHort FCIHort, Dove Associates; Hayley Campbell-Gibbons, AHDB Horticulture Board Chair; Professor Dave Goulson, University of Sussex and Matthew Appleby, Editor *Horticulture Week*.



Left: A Sussex cottage garden designed and planted by Alan Sargent. Above: Flint and ironstone are favourite 'old fashioned' materials that Alan learnt to work with early in his career. Right: Alan's own garden was created from a wilderness.



integrated in a natural manner. In many ways, growers, suppliers and landscapers are now working together across the industry for the benefit of all concerned.

#### Looking to the future

In my opinion, we are only a few years away from becoming a formally regulated industry, as landscaping is in many other Westernised countries, including most of Europe, Canada, New Zealand, Australia and North America, whereby nobody can offer their services as professional landscapers (or gardeners or builders) unless they are qualified, assessed, certificated and insured. This does not, again, in my opinion, need an army of regulators or officials. It requires only that customers who employ uninsured, irregular contractors will themselves be uninsured and unable to claim compensation for any faults or defects in their projects unless they take steps to ensure they only employ bona fide contractors.

With so many Councils and Local Authorities under great financial pressure, it will not be long before some turn their attention to enforcing these myriad regulations and monetising them. With such a wide range of options available to them, such as compliance with the new SuDS (Sustainable Drainage) Regulations which require permeable driveway construction, dry cutting using mechanical disc saws, noise pollution, breaches of planning consents, changes of levels within a garden site, and a host of other regulations, each attracting immediate fines of between £1,000-£2,000, or £166.00 per hour for making

site visits including unwarranted inspections, I can see many companies falling foul of the authorities.

Some Local Authorities, including those in the North and in Wales, are instructing their staff – refuse collectors, rent collectors etc – to report any such breaches that they see on their rounds.

Looking to the future, I think there are several areas that will prove difficult or contentious, although I hope that pragmatism will hold sway.

With the RHS and the SGD both vehemently against artificial grass and anything they deem to be 'non-green', and with the carbon footprint of every product having to pass some tests before being approved, I feel that some major issues are currently being overlooked.

I feel that by championing environmental issues and placing so much emphasis on sustainability the RHS is likely to alienate potential exhibitors. Additionally, visitors to the shows are diminishing despite enthusiasm for gardening increasing massively since the start of Covid, when everyone with even the smallest plot was keen to maximise on the all-year round life-style benefits and opportunities gardening offered. People go to shows to look at ideas for their garden. Ideas they can recreate at home. Not acres of weeds. As the late Peter Seabrook was always keen to point out, visitors come to look at real gardens, not to go away feeling unhappy with their investment. The decreasing footfall at the shows in the past three or four years should be a wake-up call.

Most garden designers are specifying the use of

Indian sandstones, despite the huge distances the materials have to travel, whilst eschewing British materials that will last ten times as long as imported sandstones. Porcelain must be the least 'green' product available, requiring temperatures in excess of 1200 degrees Celsius to create, and is currently unable to be recycled due to its incredible crushing strength and sharpness. It is still not on any list of banned products. If porcelain is laid correctly, it is impossible to remove without smashing it to smithereens! Then it heads straight to landfill as it has no further use.

I have always worked with reclaimed and recycled materials, especially paving and walling, and would love to see far more emphasis and recognition of the uses of these materials. They require different skill sets and specification to modern materials, which fall under the new British Standards for Paving (for example) and yet will outlast any modern materials if used and laid correctly.

As an expert witness, over the years I have been obliged to condemn thousands of cubic metres of materials – mainly artificial grass and paving – including the laying bases, to landfill sites due to poor quality installations. In most cases, a complete rebuild is required, at great financial cost in money as well as cost to the environment.

We have some excellent training colleges in the UK. I would like to take this opportunity to urge those with the means to make a difference to look closely at reclaimed materials and their life spans and start training programmes that will benefit the planet and reduce waste before porcelain becomes the next banned material after artificial grass.

As an industry, we have come a very long way from the 1960s – or even the 1980s – moving away from the 'Wild West' from the early days of my career.

We have the best skills, products and materials, designers and constructors in the world working within the British landscaping industry. I have enjoyed an amazing career, and warmly recommend horticulture to any young person who might be considering such a step. There is simply no end to the knowledge – you will never ever get bored! For me gardening is a science without boundaries!

#### Alan Sargent FCIHort

Alan is a norticultural author, columnist, and expert witness. He began his career in 1968, learning his trade from gardeners with a lifetime of experience. He has gone on to design and build over 60 show gardens before becoming an RHS Show Gardens Judge and Assessor, sitting on the RHS Chelsea Flower Show Gardens Panel for more than a decade. In 1995 he founded The Association of Professional Landscapers (APL) which has

grown to become the largest association of domestic landscapers in the UK. Since 2012 he has published books on management issues for head gardeners, garden designers, professional gardeners, landscapers and garden consultants, as well as producing a long-running column for Horticulture





Left: Bug hotel at Gardener's Cottage, St James Park, London Right, clockwise from top left: Konstantinos Tsiolis at the Hampton Court Discovery Day; Konstantinos Tsiolis and Joris Rockx (Rockx Entomology) at City Livery Careers Showcase; an orange tip butterfly on apple blossom; training at Capel Manor College, London: Joris Rockx at City Livery Careers Showcase; and diverse planting in a flowerbed at St Pauls, I ondon

RAISING AWARENESS There are two major planetary emergencies, climate change and biodiversity loss. Both need urgent attention; we have no planet B! **Heather Barrett-Mold** explains how Pollinating London Together developed and what its aims are.

# Pollinating London Together

Pollinating London Together (PLT) is an initiative established in 2020 (and now a charity in its own right) in response to a recognition that the global economy is 100% dependent on nature and natural resources (Taskforce on Nature Markets 2023), whilst nature has been historically misvalued, and its economic benefits distributed unevenly (Dasgupta 2021).

Most of us will have noticed that we don't get insects on car windscreens in quite the same quantity anymore. In springtime new leaves emerge, and up to 15 years ago these would have been riddled with holes even as they emerged due to insect larvae feeding on them. These days they are most often pristine. The decline is largely due to habitat loss and the overuse of chemicals.

Not only will humans feel this loss but so will birds and other animals in the food chain, not being able to feed on such insects or the fruit that they enable. Flying insects have declined by 78% in the UK in the past 20 years (Ball *et al* 2023), and we should not forget that one third of every mouthful we eat is dependent upon pollinators. Greenspaces













can help with climate change (Webster *et al* 2017), biodiversity (Threlfall *et al* 2017) and wellbeing (de Bell et al 2020). It is clear from the pressures of the pandemic that greenspaces are so important to people.

PLT's main objective is to prevent the decline of pollinators in the City of London and beyond and help greenspace managers to improve habitats with pollinator friendly planting and space for nesting.

PLT aims to champion and enhance pollinator friendly green spaces, starting in the City of London (32ha), allowing all pollinators, including bumble bees, butterflies, moths, bugs and beetles to thrive. There are around 200 species of hoverfly, 59 species of butterflies and 270 species of bee in the UK but only one of those is the honeybee. Especially in the urban situation we need to be wary of a monoculture as honeybees will inevitably compete with our non-domesticated pollinators for nectar and pollen and could as a result reduce biodiversity. What PLT has found is that the prevalence of honeybees in the City is very high and much higher than would be expected in an urban

area. However, urban green spaces – with their ecological diversity – can be one of the most important places for pollinators because of their variety of food sources and potential nesting sites.

PLT's activities are designed to address three specific objectives:

- 1. To redress the decline in pollinators in urban environments by promoting action to increase pollinator-friendly planting and habitats in the City of London and its immediate environs;
- 2. To raise awareness of the human benefits of pollinators and pollinator-friendly planting across the wider population of residents, workers, and organisations in the City of London;
- 3. To inform and encourage companies, organisations, and individuals to make meaningful decisions to make this happen.

#### City greenspaces

The City of London has some 376 green spaces totalling 32ha which includes private gardens and spaces manged by the City of London Corporation, such as parks, gardens, and church-

yards. Around 80% of the sites are less than a fifth of a hectare in size. At rooftop level there is an increasingly important resource for biodiversity. There are 700,000ha of domestic gardens in the UK, equivalent to 93,000 professional football pitches (Griffiths A 2021.)

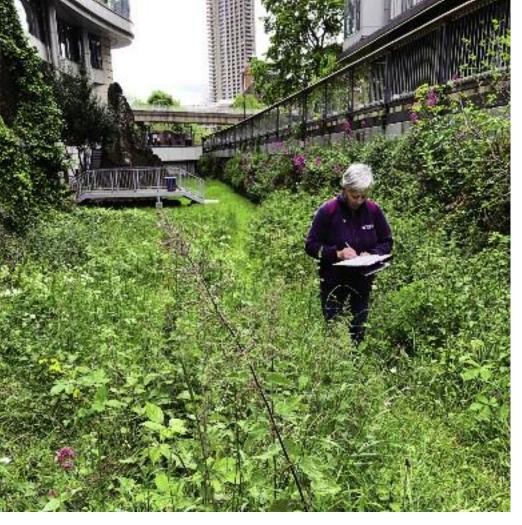
In 2020 PLT established a website, produced helpful resources and videos as well as started to review city gardens for their contribution to good pollinator habitat and provided advice to enhance greenspaces to make them more pollinator friendly. This developed so that by 2023 PLT reviewed over 60 sites multiple times through the season for the presence of pollinators and the value of the greenspace as a good pollinator habitat. PLT has subsequently been measuring insect abundance to monitor progress and to establish baseline data. (Report of Pollinator and Habitat Surveys 2023 - Pollinating London Together), ( Barrett-Mold H, Tsiolis K 2023 How Pollinator Friendly is the City of London youtube.com/ watch?v=sqCHrYENfg4).

PLT has raised awareness of the plight of pollinators through a range of events from the informal to a lecture by Professor Sir Dasgupta, social media and a variety of communications and has built a membership base of City livery companies, corporate's and a number of other members including Historic Royal Palaces and Chelsea Physic Garden. A grant from the City of London Community Infrastructure Levy Neighbourhood Fund (CILNF) was received which enabled the employment of the services of two pollinator ecologists from Reading University which in turn developed into a close relationship with the University and a memorandum of understanding. Following on from the successful completion of the first two-year project under the City of London CILNF grant a further award has been made of £270k for a further two years. PLT is most grateful for this as well as contributions made by some members and private individuals.

#### Developing a standard

Much research has been undertaken and data gathered on the greenspaces in the city. The data has been shared with others, specifically the detailed data has been shared with Greenspace Information for Great London (GIGL). PLT aspires to develop a standard for these green spaces and is working on a funding proposal to do this, with the initial focus being on rooftops. PLT works closely with the City of London Corporation aiming to enhance the biodiversity corridors in the city and a network of oases that occur between the corridors. Pollinators don't recognise political boundaries and some of the smaller bees in particular cannot fly far without pit stops. We map our survey sites and identify any gaps where pollinators might get stuck. One of our key plans is to link these with surrounding boroughs: we are currently engaged with Hounslow, Islington, Lambeth, Lewisham and Southwark.

Other medium-term planning is to develop a blueprint for pollinator corridors in the city and surrounding areas and then roll this out to other cities in the UK. PLT is currently engaged in early-stage discussions with Edinburgh on this. We are members of the DEFRA pollinator advisory strategy group and have also provided input to the City of London's local plan 2040, with specific



emphasis on pollinators and biodiversity generally. One thing established in our pollinator work to date is that there is a need for more research. You can never have enough data or research, we plan to conduct research on the link between greenspaces and health and well-being. There is clear evidence and research highlighting the importance of greenspaces to mental health and well-being. (Barrett-Mold H, Griffiths A, 2024 Greenspaces Cultivating the Mind Body and Soul youtube.com/watch?v=sGBgRx85y0A). A further area of work is to assess pollinator activity at different heights on buildings in the city, and to review the relative value of different roof garden types and their potential to contribute to biodiversity net gain.

#### Education and citizen science

Formal and informal education is part of the PIT work. From the outset we have championed citizen science especially using the Centre for Ecology and Hydrology Flower Insect Timed App (FIT count). The data that is collected contributes to a national database. We have trained many groups in its use as



well as many of our own volunteers. On 1 July, following a suggestion from the Lord Mayor we conducted our first annual pollinator count in the City of London, which the Lord Mayor attended. PLT is developing materials for use in schools but in our current work in schools we use a variety of materials from a range of sources. We are engaged with a small number of schools: we would like to do more but as we have limited capacity our plan is to develop resources which can be rolled out to other schools.

Looking forward we must strive for financial sustainability We have achieved a great deal with just two full-time employees, our pollinator ecologist and our project coordinator along with a part-time intern and our team of volunteers. We are heavily dependent on a great group of dedicated volunteers from our membership base but we need to bring on board more paid professional resource. We have a funding proposal underway which if successful would support a part-time Chief Operating Officer.

#### What we plan to do in 2024/25

- 1. Reduce the number of sites and increase the frequency of visits in order to catch all possible species present given the quick life cycle and to concentrate on impact.
- 2. Increase the number of roof garden sites
- 3. Increase focus on nesting resources for cavity and ground nesters
- 4. Increase work on moths. Surveying has mostly taken place in the daytime to date.
- 5. Survey with subject: Do green spaces and pollinators influence human well-being?
- 6. Build long-term relationships with specific schools.

Left: Gill Perkins CEO Bumblebee Conservation Trust in the garden at Plaisterers Hall, London. Bottom left: Pollinator experience for Gravis Capital Management staff.

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#### More info

pollinatinglondontogether.com

#### Dr Heather Barrett-Mold OBE

Heather is Vice-Chair of the Pollinating London Together Charity and leads the science and education work. She is a member of the City of London Natural Environment Board, Past Master of the Worshipful Company of Gardeners and a founder member of the Livery Climate Action Group.

Heather is a Chartered Scientist, Chartered Horticulturist, Chartered Environmentalist and Chartered Biologist. She was Principal/CEO of the Pershore Group of Colleges and responsible for a 242ha mixed farm, fruit production and cider unit. Now she is Vice Chair of Governors at Capel Manor College. She was a member of the Government Actisory Panel on Sustainable Development Education for its lifetime of five years, and then Advisor on the Secretary of State Sounding Board. Heather was an expert with the Commission for Sustainable London 2012.

and Secretary of State Board member for the Chilterns Area of Outstanding Natural Beauty. She is a Fellow of the Linnaean Society, Vice President of the Institution of Environmental Science, Past President of the Chartered Institute of Horticulture, and a previous Chair of the Science Council.





NORAH STUCKEN AWARD In 2023 this 14-week City and Guilds accredited training scheme primarily aimed at candidates from inner London received the CIH Norah Stucken Award for best horticultural project. Programme co-ordinator **Shereen Chung-Blake** welcomes you to the world of Future Gardeners, where green thumbs and big dreams come together in a horticultural haven. She explains how the programme works and outlines its aims for young people in horticulture.

## The Future Gardeners

The Future Gardeners Horticultural Course is a transformative platform for unemployed individuals seeking to cultivate new skills and opportunities in the green industry. Arising from an idea of the Worshipful Company of Gardeners the programme, which nurtures growth in the garden and in the lives of those who participate, has been developed and managed by Bankside Open Spaces Trust (BOST) since 2016. It's about nurturing growth, both in the garden and in the lives of those who participate.

Over the past eight years we have seen 75%-85% of our Future Gardeners graduates go into employment in the sector or into further study. Graduates have secured employment across the industry. The National Trust, Royal Historical Palaces, Fulham Palace, Chelsea Physic Garden, Royal Botanic Gardens Kew, Wimbledon and Queen Elizabeth Olympic Park sports grounds, Historic and Botanic Garden Training Programme (HBGTP) and Royal Parks Apprenticeships and landscaping companies large and small are all home to Future Gardeners graduates. Many more past students have gone on to start their own businesses or establish community gardening projects!

The above average outcomes are the result of the comprehensive Future Gardeners curriculum and personalised support that empowers participants to embrace the world of horticulture, not only as a source of livelihood but also as a pathway to personal growth and community impact.

The Future Gardeners programme offers a beacon of hope for those looking to cultivate new skills and opportunities. Through a blend of hands-on training, classroom learning, industry talks and visits participants embark on a journey of professional growth and empowerment.

#### Equality, diversity and inclusion

At the core of the Future Gardeners programme lies a simple yet powerful mission: to empower individuals through horticultural education and training. We are proud to have one of the most diverse student intakes in the sector! Our current course percentages are comprised of 46% Black, Asian and minority ethnic (BAME), 46% Special Educational Needs and Disabilities (SEND) or Mental Health Additional Needs and 13% currently unhoused or in short term accommodation.

The Future Gardeners team acknowledged the industry structural inequalities and social and

economic challenges that can impact our students and have sought ways to address these issues, to create a supportive environment which encourages individuals to achieve their potential and attain sustainable employment. This required a whole organisation approach, with BOST CEO, Charlotte Gilsenan, investing in high quality Equality, Diversity and Inclusion (EDI) staff training and signing up to the Access All Areas Charter – an industry initiative aimed at addressing inequalities in the horticulture and landscape industries (see *The Horticulturist*, Vol 33 No 1, Spring 2024, pages 8-10).

For the Future Gardeners team, it was our priority to use those EDI principles to audit the current provision and look at how we could make the programme as accessible and supportive as possible. For example, we developed support materials for our neuro-diverse students and made simple changes to improve the accessibility of the programme for individuals with visual impairments. Representation is one of our core values and we selected training resources, talks, garden visits and keynote speakers that are representative of the diverse talent and knowledge in the horticulture industry and the communities we support.









We are pleased to say that since these implementations we have had a 96% student pass rate and full cohorts. Significantly, the adaptions and considerations benefitted all students with an overall increase in student wellbeing and satisfaction. Embedding the EDI practice into the course curriculum not only equips all participants with the knowledge and skills needed to thrive in the green industry but also instils the confidence and resilience necessary to overcome challenges and obstacles faced by individuals seeking to re-enter the workforce.

#### Valuable skills

In today's ever-evolving economy, horticultural skills are more valuable than ever. From landscaping and urban farming to plant propagation and greenhouse management, the green industry offers a diverse range of career paths for skilled individuals. By honing their horticultural talents, participants of the Future Gardeners programme are not just planting seeds – they're sowing the seeds of their own success.

The Future Gardeners programme thrives on collaborations with industry partners and local organisations. From the CIH, RHS to Hampton Court Palace, Royal Botanic Gardens, Kew and the London Legacy Development Corporation (LLDC), the industry support provides participants with valuable networking opportunities,

access to job placements, and exposure to diverse horticultural practices, enriching their learning experience.

#### **Work Experience Charter**

This year we created the Future Gardeners Work Experience Charter, an industry standard to ensure that work placements are purposeful, supportive and acknowledge the value of students' and employers' time. Chelsea Physic Garden, Royal Botanic Gardens, Kew, Provender Nurseries, Frognal Gardens Landscapes and Hampton Court Palace gardens are some of the industry names that have already signed up.

By offering tailored support systems and resources, such as career guidance, job placement assistance, and ongoing mentorship, the Future Gardeners programme empowers participants to overcome barriers to sustainable employment. Through personalised support, individuals gain the confidence and tools needed to succeed in the workforce and know-how to seek support when they need it.

Alumni of the CIH Norah Stucken Award programme include Head Gardeners, Kew Diploma and Apprentice Graduates, Royal Parks, Chelsea Physic Garden and RHS interns, trainees and apprentices and gardeners across the horticulture and landscaping industry.

The true measure of success lies not only in

landing a job but in flourishing in one's chosen field. By tracking post-course employment rates and overall well-being of graduates, the Future Gardeners Programme showcases the long-term impact of its horticultural training on individuals' lives.

#### Case study comments

#### **Nat, Community Gardener**

Nat applied for the course after volunteering for a community gardening and arts programme which inspired her to make the transition to employment in the horticulture industry. After graduating from the course, she moved to Scotland to work in a community garden which supports children in the local community access nature: "It has been a fantastic course; I have learnt so much from all of our visits as well as our regular learning. It is such a nourishing place to be. The course instructors have all been wonderful and it's been amazing learning alongside lovely people on the course. It has transformed my understanding of green space in London and beyond - plants, growing, identifying species and so much more. I feel empowered to be able to think of myself as a gardener, having my own equipment and to have valuable knowledge to contribute. Thank you for everything. I would recommend it to anyone considering a career change or who wants to get a foot in the door of an incredible world!"





Top row, left to right: Kew Gardens Nursery visit; Aiden Barton with Nicholas Woolf, Master of the Worshipful Company of Gardeners, at the Graduation 2024; and Future Gardeners celebrate with Hazel Gardiner (second from the right).

Bottom row, left to right: Graduation 2024; David Richardson, CIH President, delivered the keynote speech at the Graduation; and Shereen Chung-Blake.

#### Inder, Seasonal Gardener, RBG Kew

Inder had found it challenging to secure his first job - he had attended other employment bootcamps, but it had not led to employment or any post-graduation support. After graduating from the Future Gardeners programme, Inder was inundated with job offers and he is now working at the Royal Botanic Gardens, Kew over the summer: "I have enjoyed the industry trips on the Future Gardeners course as I have always learnt something new and have met inspiring people who work in horticulture. The industry talks were really amazing as I learnt a lot about the opportunities and career paths in the industry. The two of my most favourite were the visits to Kew Gardens and Wisley. The Herbarium at Kew was really unique and something very new to me as I had never seen one like it before. Another most enjoyable part of the course was the visit to Shereen's Community Garden where we as a team helped prepare a bed for planting. I enjoyed the process of the environmentally friendly method used to plant the flowers and the tools used."

#### Jen, Trainee, Chelsea Physic Garden

Many of our students are career changers who have left successful careers feeling unsatisfied or burnt out. They turn to the outdoors and wish to pursue a career in nature. Jen left the teaching profession and found a sense of joy volunteering at her local community allotment. After a year developing her food growing skills, she decided to apply for the Future Gardeners course. Today, Jen is about to complete her Traineeship at Chelsea Physic Garden, where she did her work experience on the course: "I cannot sing the praises of this course highly enough. I've never felt so supported, encouraged and empowered. I almost cried walking in on the first day because the atmosphere was so warm, positive and welcoming. That atmosphere continued throughout the course. I don't think I would've learnt so much as I feel I have without it."

#### **Bailey**

We welcome individuals of all ages and backgrounds onto the course – we believe lived experience is a strength and we encourage the peer support and knowledge sharing through community building events such as 'potluck' shared lunches and peer teaching activities which are always scheduled on the curriculum timetable.

Bailey heard about the course when we attended her local job centre's Green Skills Job Fair. She excitedly approached our table sharing with us her love of gardening and the connection it gave her to her Jamaican heritage: "I enjoyed the fact that everything was well organised, the schedules were on time, the opportunity to experience work in a real horticultural environment, there was endless amounts of information about horticulture, jobs, training, study, volunteering, guided tour experiences, talks and lectures by prestigious guest speakers.

I am very happy to have met a group of warm and passionate future gardening colleagues with like-minded interests such as my own. I am also very grateful for our Future Gardeners Project Managers, who most importantly, made me feel safe at all times during my journey on the Future Gardeners experiences. Thank you very much."

#### **Jay, National Heritage Trainee**

Many of our students have had to prioritise the needs of others before their own, pushing employment goals to the side for parenting or carer responsibilities.

Jay approached us after six years of unemployment. At the course interview she impressed us with her self-taught botanical knowledge and determination to start her career in horticulture: "I have seen first-hand how much joy and excitement I get from working outside with plants: being out in the natural daylight and fresh air, the dopamine from physical work, and the sense of satisfaction from creating something beautiful that also is great for the environment. Even working in poor weather conditions such as wind and rain is something I am positive about!"

#### A beacon of hope

The Future Gardeners Horticultural Course not only equips participants with valuable skills but also encourages community engagement through various projects and outreach initiatives. From beautifying public spaces to creating sustainable urban gardens, course graduates actively contribute to their communities.

In conclusion, the Future Gardeners Horticultural Course stands as a beacon of hope and transformation for individuals facing unemployment, offering them the tools and resources needed to thrive in the green industry. As we celebrate the success stories and positive impact of this programme, we are reminded of the profound difference that education and support can make in the lives of those seeking new opportunities. The Future Gardeners participants are not only cultivating gardens but also sowing the seeds of a brighter future for themselves and their communities.

## More info bost.org.uk/future-gardeners

#### Shereen Chung-Blake

Shereen is the Future Gardeners Programme Co-ordinator and Safeguarding Lead at Bankside Open Spaces Trust (BOST). A postgraduate certificate in education (PGCE)qualified teacher and senior leader with 17 years experience in education and a BA Hons in Marketing, she transitioned into the horticulture industry just over a year ago after founding a community garden and allotment in her local area and then deciding to pursue qualifications in Practical Horticulture, Environment Conservation and Sustainability. She is passionate about the Future Gardeners Programme and the opportunity it presents to address social inequalities in the horticulture sector and wider society. Combining her skills as a Sky Arts Royal Society of Literature playwright, poet, advocate against domestic violence and (fairweather) samba dancer, Shereen believes in community engagement and empowerment through education, art and horticulture.

WAR GARDENING Richard Storey frequently travels to learn about plants and horticulture. He reports on gardens and gardening in Sarajevo during the siege of the city in 1992. The horticulture that arose in difficult times continues with many growers of vegetables now selling plant plugs and produce in markets.

# **Cultivating hope**





On 5 April 1992 Serb forces began a siege on the city of Sarajevo that would last for 1,425 days. During this time the city endured unimaginable hardships, yet one unexpected element played a crucial role in the survival and resilience of its people: horticulture. I visited Bosnia and Herzegovina several times in 2023 to hear firsthand accounts of how horticulture provided sustenance, hope, and a sense of normalcy in the midst of chaos and how it is still having a positive impact on the mental health of the survivors of the 1995 Srebrenica genocide.

I had barely enough time to check into my room before navigating the labyrinthine backstreets of Sarajevo's old town to meet with Salem Hatibovic – an ex-soldier, proud Bosnian, and advocate of peace. "It was a very bad time. People were suffering", he said. "I lost my brother, many cousins, and many friends. Everybody in Sarajevo lost somebody."

During the war, Salem took in a group of refugees who lived with his family for two years. In the immediate months following the start of the war, most people didn't think to start growing their own food. The war had surprised them, and many found it inconceivable that Bosnia would

succumb to the lunacy of ethnic violence. But as the war raged on with no end in sight, it was clear that obtaining enough food would become a widespread problem.

"There was some humanitarian aid, but it was not enough. Some cooking oil, rice, and macaroni", said Salem. "You had to find another way to find food and feed your family, so we planted. I had a garden, but many people living in apartments grew pots of salad, tomatoes, and cucumbers on their balconies." Salem explained that growing vegetables in a besieged city had problems that most other gardeners couldn't begin to comprehend.

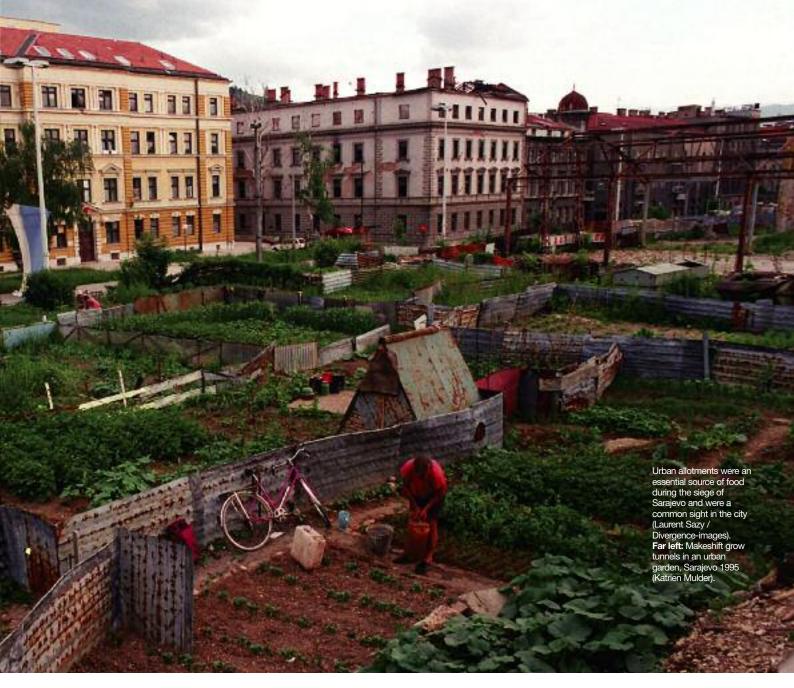
#### The basics

Firstly, obtaining seeds was difficult as most people had never grown vegetables before and therefore didn't have packs of seeds to hand. "In the beginning, it was hard to get seeds", he said, "but if your neighbour had some, he would give them to you, so I planted tomatoes under 10sq m of nylon." Once you had procured some seeds and soil – usually dug up from outside if you lived in a flat – you would need to water your crops, which was not easy in a city whose water supply was cut

off. "We collected rainwater in cans, or you would have to go to the brewery." With no grain for brewing, the Sarajevsko Brewery was repurposed to distribute water, but with daily queues of hundreds of people, it soon became a target. Yet despite the significant risks to obtaining water, people persevered because, as Salem said, "if you can grow some things in the summer, you can have some food for the winter."

Food scarcity meant that people would take considerable risks to avoid starvation. Outside the city, on the other side of the airport, was a small town where food supplies could be purchased by those willing to take the risk. The only way to reach the town was through an 800m tunnel underneath the UN-controlled airport. Initially, the tunnel was a secret, but very quickly, everybody knew of its existence, and an order was given that only those with permission from the army could use it. Others attempted to reach the town by running across the runway, which was perilously close to snipers equipped with night vision. These risks meant that the only option available to most people was to grow their own food, even if they lived in high-rise apartment buildings.

The following day, I met up with Džehva in the



sprawling concrete district of Dobrinja, where most of the buildings still bore the scars of conflict. Dobrinja was one of the most dangerous parts of the city during the war, and Džehva told me how the residents banded together to survive. "Before the war, nobody grew vegetables", she said. This was unsurprising, considering that Dobrinja is a large area of high-rise flats originally built for the 1984 Winter Olympic Village. "For four months, we were completely cut off from the rest of the city. We were isolated. Nobody in and nobody out." Over those four months, they had meagre supplies, and food was shared between neighbours. "I remember one onion being shared between four families", she said.

Džehva told me she was on her balcony one morning and saw a woman frantically digging in the ground, trying to plant seeds. It was obvious that she was struggling. "She was very well educated but didn't know how to do basic gardening, so I went down to help her", she said.

Džehva's father didn't want to grow crops because he thought it would be too dangerous and tried to stop her from helping the woman. Being out in the open would mean risking your life, and one of her neighbours even found an unexploded grenade when she was digging in her plot. "Most people tended to get killed when they were collecting water", said Džehva. "There was a hand pump, and it was very loud, so the soldiers would hear it and start attacking us."

Humanitarian aid supplied vegetable seeds, and eventually, Džehva persuaded her father to allow them to grow their own crops in a patch of ground outside their flat. "It was a very small plot, but it was very productive," she said, telling me how she had so many tomatoes that she didn't know what to do with them, so she ate chopped tomatoes and spring onions every day. "It was delicious, and just a few months ago, I tried to remake it, but it wasn't the same". She shrugged: "Maybe it was because we were so hungry that it tasted so good."

#### A garden network

Džehva described how neighbours started to copy each other until the residents had converted the entire area into allotments. People would demarcate their plots with anything they could find – pieces of old fences or corrugated metal – and create makeshift grow tents from netting or discarded plastic sheeting. I was shown photo-

graphs of a vast patchwork of gardens that occupied every inch of available space. It was a beautiful sight and incredible to think it was in a capital city, yet this was a scene that played out across all of Sarajevo, where urban landscapes were transformed into an ocean of greenery. I glanced out of the café window onto the street that had now reverted to concrete monotony, and as if sensing my thoughts, Džehva added, "Lots of local people don't even know the story of the gardens of Dobrinja because many of the original residents have moved away or died."

It's sad to think that the gardens are all but forgotten and that such horticultural revolutions only seem to occur under the duress of war. Indeed, the inner-city gardens in Sarajevo are comparable to the Victory Gardens of both World Wars, not only in appearance but in that they were also born out of necessity and fostered a sense of community. "Gardening meant life," said Džehva. "It kept us busy and provided food. It kept us alive, not just with the food but as a kind of therapy. We learned to know where the snipers were, so we avoided those areas, and the gardens became a place where we could all hang out together. We would be there all day."











Despite witnessing terrible acts of war, she told me that her strongest memories were helping people, sharing, and co-operating. "If you saw that a grenade had destroyed your neighbour's garden or their crops were not doing well, you would give them something from your garden. That's how we survived."

Later that afternoon, I arranged to meet with Dario Pintaric, a professor of horticulture and forestry. He was only ten when the war started but remembers when everybody began growing vegetables on balconies and in nearby parks. "People tended to grow smaller crops like tomatoes, carrots and peppers on their balconies and larger crops outside," he said. "They would sometimes use pots, or they would just pile up earth straight onto the balcony floor." He recalled a neighbour who didn't want to use his balcony and instead carried soil up to the roof of the building.

During the siege, nearly all the trees in the city were chopped down for firewood, except for a large park near to where he lived. "Soldiers protected this park", he said, "so they stopped people from cutting the trees or growing vegetables. The trees provided cover for the soldiers, and it is one of the few places where you can see trees that grew before the war." I asked Dario what had happened to the botanic garden during the siege, and he told me that the staff stopped people from cutting down any of the trees or plants in the collection, and they even piled sandbags around some of the specimens to protect them from shrapnel damage.

It's rare for major cities to have a lot of fruit trees, but during the war, many people planted them for food, and you can still see them all around the city. I mentioned to Dario that Džehva recalled one of her neighbours planting a walnut tree, and he laughed, "Walnuts are a problem now. Many people planted them near buildings, and they grew into huge trees. They can cause structural damage, and thieves even use them to climb up and rob people's apartments."

#### Horticulture for all

Dario explained that the benefits of horticulture spanned all ages and social classes during the war. "It was essential for wellbeing because people felt like they were doing something useful", he said. "It didn't matter what profession you had, everyone did it." He went on to tell me that after the war, many people were affected by PTSD and other mental health conditions and became isolated from everyday life. It was common for healthcare professionals in Sarajevo to suggest that people spend time outside doing activities like gardening. Sadly, many other people in the country failed to receive any professional help, yet they intuitively knew that gardening would act as some form of therapy - something I was to learn about on my visit to Srebrenica the following day.

In the morning, I met with Almir Ahmetagic, who drove me to meet some families in Srebrenica. Almir is an ex-special forces soldier who told me that he had a piece of shrapnel lodged in his head that doctors couldn't remove, and for three years, he was confined to a hospital with shrapnel injuries to his spine. He was told he would never walk again but somehow managed to defy the odds.

We first stopped to meet Begija, who partnered with Funky Tours – a company with strong philanthropic values – to set up a project in

Srebrenica where tourists can have lunch with local families. Begija is a former member of parliament in the Republika Srpska – one of the two entities that make up Bosnia and Herzegovina – and is a fierce advocate for the rights of ethnic Bosniaks. She told me that for many of the genocide survivors, gardening has helped them cope with the pain and trauma they have experienced. One of her friends, Saliha, has lived alone since her husband and two sons were murdered.

#### Therapeutic benefits

Saliha grows an abundance of flowers and vegetables and spends every moment she can in her garden. "You would think it is impossible for her to look after such a big garden, but the garden keeps her alive," said Begija. Saliha has been offered a house in a complex of modern homes run by The Mothers of Srebrenica, and although she likes to drop by for a coffee with the other women, she will not move because she wants to stay with her garden. "They don't all need their gardens for produce," said Begija, "they need it for their mental health. They have found peace in it."

Begija had arranged for me to meet Lejla and her family, where we discussed the benefits of tourists having lunch with families in Srebrenica. Lejla told me that it is a valuable source of income and an opportunity for people to learn about the horrors of the genocide from those who were directly affected. She led me through an annexe, past a large wooden table for when she hosts sizeable groups, and out into her garden, which is almost entirely occupied by polytunnels. The meals she cooks for tourists are all prepared with her homegrown produce and any surplus she

Clockwise from far left: A woman tends to her vegetable plot during the siege of Sarajevo, 1995 (Katrien Mulder); Emina offers a pumpkin-based dish that is made from her homegrown ingredients, Srebrenica; Vegetable garden outside the maths faculty during the siege of Sarajevo (Emil Grebenar); Tomatoes in one of Lejla's polytunnels, Srebrenica; Lejla uses her homegrown produce to cook meals for tourists, which is a vital income stream; A surprising number of homes in Srebrenica have large polytunnels in their gardens; A selection of crops that Lejla grows in her polytunnels (all Richard Storey unless stated otherwise).





sells. During the summer, one of her polytunnels is dedicated to growing peppers and cucumbers and, in another, an astonishing variety of tomatoes. Her set-up is basic yet effective, with crops planted directly into the ground through weed membrane and irrigated with a simple driphose system. In winter, most of her growing space is used for spring onions and brassica seedlings. At the back of her garden, she grows several fruit trees, including apples, which she presses and bottles for her visitors.

Lejla is a kind and gentle woman, but her constant smile belies her pain. She was one of the refugees in the infamous UN compound, and all her male family members were murdered. I was keen to know if she experienced any therapeutic benefits from her horticultural enterprise, and she told me, "It is hard, and sometimes I cry, but it is helping."

After lunch, I met with Begija's friend Munira. She has lived alone since her husband and sons were killed and spends every available moment in her garden. "I work, sleep and work again in the garden", she said. "It gives me affection in my heart, especially when I share things from my garden with other people." Munira proudly led me around her garden, and it was clear how much it meant to her. "If I'm not in my garden, I'm going to lose my mind," she said. "It is therapy. I don't need help from doctors because I have my garden, and until I can't move my hands and legs, I will work here."

Unlike Lejla, Munira grows everything outdoors because the price of a polytunnel is too high, and I spotted a healthy crop of cabbages and pumpkins, as well as the remains of sweet corn and bell peppers. Munira has a large plot

surrounding her house – probably ten times the size of my own allotment – and it is all worked and watered by hand. As an older person, it is no mean feat to maintain a plot this size, and I sincerely hoped that she would continue to enjoy it for many more years to come.

She told me how one of her sons was killed in the house by a mortar, but "In the garden, I feel that someone alive is with me; the people I've lost. Because the garden is also alive – the flowers, the bees..."

I was conscious not to overstay my welcome, and as I was about to leave, another woman walked up the track to meet us. "Hi, how are you?" she said in a surprising American accent. Emina had lived in America for 20 years before returning home to Srebrenica, and she thrust a bowl of sticky brown cubes at me. "Try it!" she insisted. It was a variety of pumpkin cooked with apple sauce, which she had made from ingredients she had grown herself.

Emina told me that life is challenging in Srebrenica, and she relies on horticulture to make ends meet. "Gardening means everything to me," she said. "I grow all my own food – corn, wheat, cabbages, leeks…" the list went on. She gestured towards Munira's garden, "It means everything."

In Britain, social prescribing often connects people to dedicated gardening projects to improve their wellbeing, but from what I witnessed in Bosnia, therapeutic horticulture has developed organically and out of necessity, perhaps in part because such projects are almost non-existent. Indeed, gardening for wellbeing seemed to be an unconscious yet obvious choice for many of the people I spoke to.

The war in Bosnia was indisputably a dark

chapter in modern history, but horticulture emerged as a beacon of hope and resilience amidst the devastation. It provided sustenance and nurtured the human spirit, reminding us of the extraordinary ways in which people can find strength and solace in the most challenging circumstances. Bosnia's experience with horticulture during and after the war is a powerful testament to the indomitable human spirit and the importance of cultivating life, even in the face of death.

#### More info

Some of the surnames have been omitted from this article at the request of the interviewees. I would like to thank Funky Tours for arranging the interviews and providing transport and translation services for me while I was in Bosnia. Without their help, this article would not have been possible. funkytours.com

#### Richard Storev MCIHort

Richard runs his own horticultural business that specialises in habitat management and gardening for wildlife. He is also a member of the horticultural team at Treborth Botanic Garden in Bangor. He moved to Wales in 2006, where he obtained a BSc (Hons) in Marine Biology and an MRes in Ecology. He has a particular interest in plant



### **INSTITUTE NEWS**

## Jonathan Zerr wins YHoY 2024





Hestercombe House and Gardens, Taunton, Somerset was the venue for the 2024 Young Horticulturist of the Year Grand Final in May. Hestercombe was an amazing venue, and we were lucky to be bathed in sunshine all day. The knowledge across this year's finalists was spectacular, and the competition could have gone in any direction, however, it was **Jonathan Zerr**, from the Eastern Branch who pulled out in front of the pack in the last round to take the top spot.

Jonathan Zerr holds an RHS Level 4
Diploma and is currently splitting his
time between Helmingham Hall and
Benton End in Suffolk where he is
working towards his aspiration of
managing historic plant collections and
fostering cultural heritage and
biodiversity within a historic garden
setting. He became interested in
horticulture due to his love for plants
and wildlife, gaining experience and
skills at the Loki-Schmidt Garden in
Hamburg and at the RHS Garden
Wisley.

"I really enjoyed the opportunity to meet like-minded gardeners at the

Grand Final. The atmosphere was filled with excitement and anticipation, and despite the competitive nature of the event, there was a strong sense of camaraderie among the finalists. Representatives of the CIH emphasised the importance of utilising the final as a networking opportunity, so throughout the day, finalists and attendees alike exchanged insights and perspectives on the challenges facing the industry," noted Jonathan.

As the winner of this year's competition, Jonathan receives the £2,500 Percy Thrower Travel Bursary, provided by the Percy Thrower Trust, which he will be able to use to fund a horticultural venture anywhere in the world.

Second place went to the Scotland Regional Finalist, **James Douglass**. James is currently a fourth year BSc (Hons) Horticulture and Plantsmanship student at the Royal Botanic Garden, Edinburgh (RBGE) and Scotland's Rural College, conducting his honours project on a fungal pathogen of Scots pine at Forest Research. He is also working part-time as a horticulture teaching

Above: Jonathan Zerr, YHoY 2024 Winner (Chris Bird). Below: The YHoY 2024 Grand Finalists (Chris Bird).

instructor for HNC and HND students at Scotland's Rural College, Edinburgh Campus. Once he has finished his degree, he will be joining the RBGE teaching team. "Once I graduate this summer, I am starting as a full-time lecturer at the Royal Botanic Garden, Edinburgh, where I hope to continue working, studying, and researching in the field of plant pathology while teaching."

Third place was picked up by the West Midlands & South Wales Regional Finalist, **Lawrence Western**. Lawrence is currently employed as a Professional



Work Placement student in the Kitchen Garden at RHS Rosemoor, Torrington. "My horticultural areas of interest including growing food to feed people, apples, hedge-laying and the management of small woods."

#### Runners up (in no particular order)

#### Frank Cooke (North West & North Wales)

Frank is currently studying towards his RHS Level 2 Certificate in Practical Horticulture at Myerscough College in Preston, Lancashire. "I have had a passion for horticulture since the age of 7, and my particular interest lies in the strange, unusual and exotic in the plant kingdom."

The CIH would like to add an extra congratulations to Frank as he is just 16 and the voungest person ever to have reached a Grand Final. I am sure we will see much more from him in the future!

#### Chloe Callanan (Ireland)

Chloe is currently in her second year of a Horticulture degree run at the National Botanic Gardens, Glasnevin and is undertaking her placement with O'Brien Landscaping in Dublin city centre. Following completion of her degree she hopes to further her studies and go on to do an honours degree abroad.

#### **Lucy Whitehead** (Northern)

Lucy is currently a Gardener at Auckland Castle which is undergoing an exciting redevelopment by Pip Morrison. Her role includes caring for the 17th-century walled garden, which produces seven tonnes of fruit and vegetables annually for the local community. "I have a strong interest in the restoration of historic gardens, using planting to interpret the story of a place."

#### Alistair Coffey (South East)

Alistair is a third-year student on the Kew Diploma in Botanical Horticulture, currently working in the Alpine/Rock Garden section.

"I'm interested in how horticulture can be used for conservation and ecological restoration."

#### Sam Hickmott (South West)

Sam is currently the head gardener at Lytes Cary Manor and Tintinhull Garden, two National Trust arts and crafts inspired gardens. He is the youngest Head Gardener in the National Trust. "I really love this role as it provides great opportunity to improve the standards at these properties and work with a range of different plants and horticultural contexts, from mixed borders to soft

fruit orchards. I hope to continue on a career path that allows for continuous learning and creative expression in a beautiful garden."

National Organiser, Victoria George, said, "I was so excited to be heading to Hestercombe for this year's final, and the day did not disappoint. We had an amazing venue, beautiful weather, and a fantastic set of finalists who really put their all into enjoying the day, networking and getting stuck into those questions!"

#### Sponsors

We are extremely grateful to all the sponsors who have supported this year's YHoY competition, and without whom this competition would not be possible.

- Shropshire Horticultural Society
- Percy Thrower Trust
- Hestercombe House and Garden
- Bord Bia (Irish Food Board)
- Bulldog Tools
- PlantNetwork
- Adrian Stockdale, Plant Names Simplified
- North of England Horticultural Society
- Harrogate Flower Show
- Hiller Nurseries
- Cherry Lane Garden Centres
- Barcham Trees
- Hardy Landscapes
- The Outdoor Room
- Scone Palace
- The National Botanic Gardens of Ireland
- National Trust
- Reaseheath College
- John Innes Centre
- Pershore College
- Easton College
- Sparsholt College

If you are interested in sponsoring the 2025 competition, please contact the Institute via email: yhoy@horticulture.org.uk.

#### Keep in touch

To follow the journey of our competitors and the 2024 competition visit us

- Facebook.com/ClHort
- Twitter.com/ClHort
- Instagram.com/cihort
- Linkedin.com/company/the-charteredinstitute-of-horticulture

A recording of the Grand Final can be found on our website.

#### Date for the diary

The 2025 Round 1 opens Saturday 1 February 2025! To find out more about the competition and how to take part next year, visit the Young Horticulturist of the Year page on our website (horticulture.org.uk/young-horticulturistof-the-year).

## An event for everyone

It was my first experience attending the YHoY Grand Final. I'd heard so much about this event, and watched it virtually last year and I knew I wanted to experience it in person. I will spare you the embarrassing low number of questions I felt able to answer. What I loved was the breadth of the questions (top marks to our setters), the encouragement of the audience, the warm camaraderie between the competitors and of course, the first class horticultural knowledge on display.

But my stand-out moment was whenever the competitor panel was stumped as a cadre, they were keen to leap in and ask what the right answer was for their own education. If that's not the epitome of active learning I don't know what is.

So why go on about it? These finalists represent all that is great about our industry. They are passionate and knowledgeable with their own specific interests and areas of depth or breadth of interest. They are resilient: having gotten through a number of rounds to get to this point, they buckled down on one of the first hot days of the year to get through 10 rounds of fierce yet fair questions.

#### Thinking ahead, how could you get involved?

But I'm too old... Many of us are out of the age range. No problem. Who is in your horticultural network who you could encourage to apply? Is there someone who you think you could gently encourage to have a go? Taking part is as much a learning experience as is winning. Could you mentor someone? Help champion them and give them a confidence boost? Or even give them a lift to the rounds? Supporting the next generation of horticulturists can come in many forms.

But I am too inexperienced... Everyone has to start somewhere – and the whole point of the competition is that is helps you to learn, to grow your network and to have an opportunity to meet more experienced people in the sector. The outcome is secondary to the experience of taking part.

But I don't like public speaking... You have my sympathies. It's not easy but with practice it does get more manageable. And remember: the audience is willing everyone to do well. The winner is horticulture and all of the competitors. And the first round is online only, so why not just give it a go and see how you get on?

#### The future of the competition

These young horticulturists are at the pinnacle of their profession for their age group. They are full of bright ideas, aspirations and ambitions. But we face some systemic issues in supporting them to realise these. These include the problem of minimum-wage level pay for expert jobs, high costs of living and working (often in rural areas where rents and fuel costs are high), to say nothing of improving accessibility and inclusion. If we want to continue to support and grow the careers of these talented folks, we need to reward it, and encourage others from all backgrounds to join them.

I don't pretend to have any answers to these questions, but I hope when this cadre are setting the questions for the Young Horticulturist of the Year in 2050 we have a resilient, vibrant, valued and inclusive sector that is recognised for the green good it brings for people, for plants, and for the

Claire Mitchell, CIH Trustee, Early Career Horticultural **Group Lead** 

## AGM Charterships, Fellowships and Awards







During the CIH AGM held in May 2024 new Chartered members, new Fellows and awards were celebrated.

#### **New Charterships**

#### **Romain Bardin**

Romain is a Senior Chartered Landscape Architect and Garden Designer. Since 2013 he has managed several award-winning projects including international show gardens and was twice winner of the 'Prolandscaper: The Next Generation 30 Under 30' in 2018 and 2021. As a member of the Chartered Institute of Horticulture and now Chartered Horticulturist, his aim is to emphasise the importance of horticulture in people's lives and wellbeing as part of his profession.

#### **Richard Barley**

Richard joined the Royal Botanic Gardens, Kew in 2013, relocating from Victoria, Australia. He was formerly Chief Executive Officer of Open Gardens Australia, and before that a Director within the Royal Botanic Gardens, Victoria - Melbourne, where he worked for 30 years. Richard has extensive experience of balancing the needs of a world-class horticultural site and visitor attraction, while maintaining and developing important scientific living collections. In his current role he has overall responsibility for the living collections and landscapes of the Kew and Wakehurst sites, and also for Kew's School of Horticulture, Learning and Participation programmes. Interpretation and Safeguarding, together with a selection of capital building programmes. He oversaw the five-year restoration of Kew's Temperate House, and currently leads the team developing the plan to conserve the iconic tropical Palm House with the aim of achieving 'net

zero' carbon status. Richard holds a degree in Applied Science (Horticulture), from Burnley College (University of Melbourne) and is a Trustee of the Castle Howard Arboretum Trust, the National Garden Scheme, and the Kew Guild; and is a Council member and Vice-President of the Institute.

#### Jason Daff

Jason is the Honorary Secretary of the Institute and Secretary of the Northern Branch. In his day job he is the Horticulture Technical Manager at the University of York. He is responsible for ensuring that the University's plant and crop science research portfolio is supported by sound horticultural practice. Jason holds a degree in horticulture, specialising in crop production from Pershore College and the University of Worcester. He has previously worked for global seed and crop-protection company Syngenta and the Sainsbury Laboratory at the University of Cambridge, where he oversaw the extensive controlled environment (CE) growing facilities. He is Vice-Chair of the UK Controlled Environment Users' Group: a collaborative network of academics and CE practitioners who advocate for best practice and knowledge sharing on the use of CE facilities in research and industry. In 2023 Jason was named The Times' Higher Education Outstanding Technician of the Year.

#### **New Fellowships**

#### **Chris Collins**

Chris joined the Institute in 2015 and is currently in his 42nd year as a horticulturist. He served a four-year apprenticeship with Brighton Parks Department and completed his City and Guilds qualification at Plumpton Agricultural College. He spent a further two years with Giles Landscapes

before studying at The Royal Botanic Gardens, Edinburgh (RBGE), where academic study was backed up by practical work experience working in all the gardens various horticultural departments. Chris undertook the Diploma of Horticulture course at the RBGE in the early 90s.

During his time in Edinburgh Chris discovered travel. He continued his studies at Limbe Botanic Garden in the Cameroon as a student intern being involved in staff training and maintaining the important plant collection.

After spending seven months in West Africa, Chris moved to Japan and spent the next two years working for the Mitsukoshi Department Store in Tokyo. During this period he was involved in giving lectures and demonstrations as well as garden design and construction. Chris then continued his studies, completing a post graduate qualification at Nihon University, his main thesis submission was in 'Study of Utilising Horticulture'

In 1997 he returned to the UK to take up a post as Deputy Manager of South Arboretum at The Royal Botanic Gardens, Kew. In 2001 Chris took up the post of Head Gardener at Westminster Abbey and was in charge of managing the 900-year-old gardens for the next four years.

In 2003 he formed his own consultancy business which included taking up the role of the *Blue Peter* Gardener on BBC. At this time, it was the nations' favourite children's television programme. During this period, he was a medal winner at Chelsea and Hampton Court Flower Shows. Over the years Chris has made many television and radio appearances as well as contributing many articles to a range of publications. In 2012 he published his first book, *Grow Your Own for Kids*, in collaboration with the RHS.

In recent years he was awarded the

Above, left to right: The new Chartered Horticulturists Romain Bardin, Richard Barley and Jason Daff.









Above, left to right: The new Fellows Chris Collins, Stephen McCallum, Michael McQuade and Sue Wood.

Prince Phillip City and Guilds Medal for Contribution to Horticulture and is an Honorary member of the HTA and is currently Head of Horticulture for Garden Organic.

Chris still loves nothing more than speaking to and encouraging young people to engage with horticulture through his many talks and presentations to schools, horticultural groups and giving presentations at various horticultural events throughout the country.

#### Stephen McCallum

Stephen joined the Institute in 2014 and has had a long and varied career in various aspects of the horticultural sector since 1995.

Stephen started his horticultural career in the north-east of Scotland at Ben Reid Garden Centre and Nursery and then progressed on to Christe Elite Tree Nursery as a nursery operator.

In 1997, Stephen worked for Tern Television, initially as a gardener at The Beechgrove Garden, just outside Aberdeen and then in 2000 he became Head Gardener. During this period Beechgrove really cemented its status as Scotland's national television gardening programme and when networked on BBC 2 it attracted an increasingly wider audience. During his time at the garden at Beechgrove, Stephen project-managed many of the significant changes including the construction and development of many new garden features responding to Tern Television requirements.

In 2007, he became Head of Gardens at The MacRobert Trust in rural Aberdeenshire. This Charitable Trust manages a 2,913ha estate of which the training garden at Douneside is an integral part. The garden includes a walled garden, greenhouses, production area, wider ornamental areas and woodland. In recent years, much of the garden has been remodelled and the plant collection greatly enhanced. The trust funds invaluable practical horticultural student placements and as well as managing the garden and horticultural staff, Stephen manages the student placements. Many of the past students are now employed in gardens across the Scotland and the UK.

In recognition of his significant contribution to Scottish horticulture, in 2001 Stephen was awarded the Royal Caledonian Horticultural Society's Scottish Horticulture Medal and also became a Chartered Horticulturist in 2016. He was previously an active member on the CIH Scottish committee until standing down due to personal reasons in 2023

#### Michael McQuade

Mike is the Vice-Chair of the Northern Branch and is a long-term supporter of the Northern Branch and the Institute having been an active committee member for many years. In this time, he has contributed greatly to the Institute's objectives through the organisation of Branch events using his extensive network of contacts in the north east of England.

The majority of Mike's professional career was as a Lecturer at Askham Bryan College in York and in its regional centre's in Guisborough and Stewart Park, Middlesbrough. Here he was a full-time Lecturer and Course Manager in Horticulture and Land-based studies, working predominantly across the Further Education curricula, teaching City & Guilds Horticulture to Level 3, the RHS General Certificate and a range of short and adult education courses.

For 17 years Mike was the face of horticulture education in the Middlesbrough Borough, which was the major training provider in the area. As Course Manager he was also responsible for the promotion of the courses which involved the creation of show gardens and exhibits at the Stokesley and Cleveland Shows, promoting the college and horticulture training more widely.

He oversaw the establishment of the regional centre at Stewart Park, transforming it from an amenity park into a thriving training centre with the necessary teaching resources to support a broad curriculum. The centre, under Mike's leadership, has gone on to produce numerous talented horticulturists supporting the industry in the region including the current Head Gardeners at Wynyard Hall and Mount Grace Priory.

Prior to his teaching career Mike was a nurseryman, having worked on successful wholesale and retail nurseries in the north east. He also worked for several landscape contracting businesses, giving him a broad experience base to draw upon when teaching.

Since his retirement from the education sector Mike has gained considerable experience as a garden manager and consultant. Working as a Team Leader for 'Gardens Revitalised' and subsequently as a self-employed consultant, Mike leads garden masterplanning, maintenance, and design and construction projects in many large private gardens and estates in the north east. With responsibility for up to 20 gardeners, he is able to continue his mentoring and development of junior horticulturists in his charge.

#### **Sue Wood**

Sue's horticultural career started at Sheffield City Council's Recreation Department 40 years ago for her preentry year before studying for a Higher National Diploma in Amenity Horticulture at Writtle College, Essex. Sue gained further practical experience at Bolton Metropolitan Borough Council in a sandwich year placement and upon graduating, worked as a technical assistant at East Lothian District Council.

In 1988 Sue was employed by
Harrogate Borough Council, initially as
the Parks Technical Officer where her
responsibilities included the preparation
for compulsory competitive tendering
contracts and designing and preparing
bedding schedules for the whole
District. Later, Sue became the
Community Liaison Officer, liaising with
eight local 'in Bloom' groups across
Harrogate, many of which she has
supported and mentored in the Britain
in Bloom and Entente Florale (Europe in
Bloom) campaigns.

Sue's current role is Horticultural Development Officer which includes designing landscape schemes across the district and consulting with organisations on landscaping schemes for planning applications and working with community groups on various projects.

Sue has been a judge for over 20 years and trustee, for Yorkshire in Bloom. Sue was also an RHS Britain in Bloom judge for 11 years and now judges for the RHS Windlesham Trophy (Prison Gardens) which she says is very rewarding.

An avid plantsperson, she has been a member of several RHS plant trial panels, including the Rudbeckia trials at RHS Harlow Carr and the Primula panel at RHS Bridgewater. Sue is also a member of the RHS Tender Ornamental Plant Committee.

An early member of the Institute, Sue has been one of the longest serving Northern Branch committee members. When she retired from the committee in 2021, she was Branch Correspondent and until last year was Branch Secretary. Sue was awarded the Northern Branch Commendation in 2022.

#### **Aberconway Award**

#### **Daniel Jones**

The Aberconway Award is presented to what is judged to be the best undergraduate horticultural dissertation. It is a cash prize of £500 established in the name of Lord Aberconway, who contributed personally and financially to the establishment of the Institute of Horticulture. This year the Award is made to Daniel Jones, from Writtle University College, whose thesis was 'Fantastic Frass? Investigating the Impacts of Insect Frass on Microbial Activity and Soil Fertility for Sustainable Crop Production was selected as the winner after long considerations and deliberation'.

The judging panel applauded Daniel's work stating, 'The rationale for this project was well presented, justified and prescient: the research themes circular systems, reducing synthetic fertiliser dependence and contribution to sustainable food production are high on the global sustainability agenda'.

Daniel's experimental work using both fresh and aged black doldier fly frass examined their effects on soil microbial activity and soil fertility. In reference to Daniel's experimental procedures a



judge stated: 'Some beautiful soil science conducted by the author. Demonstrating an excellent understanding of the respective experimental procedures for determining the various soil nutrient concentrations, Systems on Modules/ Systems on Chip (SOM/SOC), and water-holding capacity (WHC). Excellent experimental skills to have for a future career in applied science.'

#### **President's Award**

#### **Michael Fitt**

Mike is a lifelong horticulturist having begun his career as a Royal Parks apprentice at Regents Park. After spending time working in the West Country he moved back to London to work at Capel Manor College for eight years. Returning to his alma mater, he rejoined the Royal Parks in 1983, taking up residence in Hyde Park as Park Superintendent and after a series of promotions finally became Deputy CEO and Director of Parks.

He has a special interest in community engagement through horticulture and environmental initiatives, particularly in relation to parks and green spaces. He is a keen advocate and supporter of horticultural training through apprenticeships and outreach projects such as Future Gardeners, a pre-apprenticeship training scheme that began as an idea of his, engaging with the long-term unemployed and those who faced challenges in their lives. He was also instrumental in setting up the Holly Lodge Centre in Richmond Park, an environmental learning centre for all but especially for those with special educational needs and disabilities.

He is particularly proud of reintroducing heavy horses back into the Royal Parks during 1993, after their absence of over 50 years. They are now a regular feature working across the Royal Parks and other green spaces in London. It was during this time that much to his own amazement he learnt to ride a horse.

After taking early retirement in 2005 he set up the Royal Parks Guild, a membership body supporting the Royal Parks and the 'wider Guild family', of which he is the current chair. He devised the Guild's 'Discovery Day' initiative aimed at bringing together horticultural apprentices and trainees to learn more about their chosen career. This began as a series of apprentice masterclasses in 2010 and has now grown into an event hosted by leading horticultural establishments, attracting over 225 delegates on the day, including 50 schoolchildren, drawn from local secondary schools, who come along to

meet the apprentices and learn about a career in horticulture.

He continues to be involved with a wide range of green space organisations across London and beyond, including on the Isle of Wight where he now lives. He is a Liveryman of the Worshipful Company of Gardeners and an Honorary Fellow of the Kew Guild. Mike is a Fellow of the Institute, having been one of its founder members and is a Fellow of the Chartered Management Institute. He is a trustee of the Future Gardeners Charity and also of the Hearsum Heritage Collection in Richmond Park. He is the Founding Patron of the Holly Lodge Centre in Richmond Park, President of Parks for London and a Vice-President of the Physically Handicapped and Able Bodied Charity (PHAB). He holds the title of Honorary Historian for the Royal Parks and is patron of the Friends of Ventnor Botanic Garden and also of the Friends of Appley Park.

He is a judge and adviser for various In Bloom competitions in London and on the Isle of Wight. He is a former chair of Parks for London and chaired the 'Maritime Greenwich' World Heritage Site Executive Group during its formation and early years. He served on the Governing Board at Capel Manor College. For over 20 years he was an external assessor for the Kew Diploma. He is a former trustee of London Wildlife Trust, Perennial (GRBS), London Gardens Trust, Richmond Park Charitable Trust and London In Bloom.

Mike was awarded an OBE in the 2003 New Year's Honours List for services to the Royal Parks. In 2004 he was presented with the City & Guilds Prince Philip commendation in recognition 'of his contribution to conserving wildlife and championing learning within the horticultural industry'. In 2005 he was presented with a lifetime achievement award by *Hort Week*.

More recently he was presented with a lifetime achievement award and awarded the freedom of Ryde, his home town, for services to horticulture on the Isle of Wight.



## **Social and Therapeutic Horticulture**

The CIH Social and Therapeutic Horticulture (STH) special interest group report follows its activities from February to June 2024.

The group now has a dedicated page on the CIH website (horticulture.org.uk/cih-social-and-therapeutic-horticulture). Here we collate recent research relating to STH and provide a link to book places on our quarterly webinars. Those working in STH can also complete a form with their details if they would like to connect with other CIH members to collaborate in research, mentoring, placements and general networking. This information is shared behind the CIH members portal on the STH page, which also contains recordings of previous STH webinars.

#### **Online Webinars**

#### **Green Social Prescribing (GSP)**

This meeting in February was attended by 66 people (a mix of members and non-members). We had presentations from three speakers, all of whom have been involved in one of the seven Green Social Prescribing (GSP) pilots set up through Natural England. These pilots delivered and evaluated a range of programmes that used therapeutic horticulture to support individuals 'prescribed' gardening activities to improve their physical or mental health.

Our speakers were: Silvana Devine,

investigator for an evaluation of the Humber and North Yorkshire GSP test and learn programme, which was undertaken in partnership with Humber NHS Foundation Trust and HeySMILE, and Hayley Watson, Social and Therapeutic Horticulture Practitioner and owner of the Social Enterprise 'Get up and Grow' in Rochdale, also part of the Greater Manchester GSP Pilot.

Attendees asked a range of questions and shared their own experiences of

PIER STH Practitioner at Petrus, based

Coventry, Professor of Environment and

in Rochdale and part of the Greater

Health at University of York and lead

Manchester GSP Pilot; Dr Peter

Attendees asked a range of questions and shared their own experiences of being involved in GSP programmes in their local areas.

#### STH for Special Education Needs

This online meeting held in May explored the impact of social and therapeutic horticulture on individuals with Special Educational Needs through the experiences of three STH practitioners. Some 31 people attended from across the UK and Ireland.

Christine Falconer is Head of Social & Therapeutic Horticulture at Parklea Branching Out in Port Glasgow. Parklea Branching Out have been supporting adults and young people with additional support needs through horticultural

activities for 27 years. Christine explained how her organisation has created an inclusive environment, and how activities are adapted for their wide range of clients.

Leila Alcalde Banet is the Horticulture Trainer Lead at Share Community in London. Her organisation is a leading provider of specialist programmes and activities for adults with learning disabilities, autism and mental health needs, based in Share's 1ha garden in the grounds of Springfield University Hospital.

Mark Emery, STH Practitioner with Thrive, works directly with children with Special Educational Needs and Disabilities (SEND) using STH and has wide-ranging experience with over six years working as a practitioner.

Attendees asked practical questions on delivering to Special Needs client groups and how funding was sourced for the different organisations.

Our next webinar on Monday 9 September at 6pm will focus on the use of STH within Palliative Care. You can book a place on the website.

If you would like to join the STH emailing list or have any general queries about our activities please contact the group on cihsth@horticulture/org.uk Sue Jeffries MCIHort, Chair of the Organising Committee for the STH Special Interest Group

## **Roots Into Horticulture 2024**



## The CIH is delighted to be involved with the Roots Into Horticulture event for 2024.

Back for its third year this is an all-day event connecting people and growing careers in horticulture and this year partnering with CIH. It has a great line up of speakers, whose horticultural careers cover planting and garden design, flower and vegetable farming and garden photography. There are also talks and guidance from professional trade and training bodies to help participants make the next or first move in their horticultural careers

The event is set in the beautiful grounds of Chiddingstone Castle in Kent, a listed historic house set in 14ha of informal gardens with views of the North Downs. Features include a Victorian orangery, maze, courtyard rose garden, woodland and a serene fishing lake. A guided tour of the rose garden is included within the programme of talks.

All day refreshments and a picnic lunch are provided and tickets are available from tickettailor.com/events/charteredinstituteofhorticulture/1276526.

## People, plants and places









#### **New Chairman for PGT**

Stephen Anderton, Garden Writer for the *Times* since 1993 and former National Gardens Manager for English Heritage, has become Chairman of the Professional Gardeners' Trust (PGT). The PGT was set up to help fund training for working gardeners who wish to further their careers and skills. The Trust celebrates its 20th anniversary this year, having provided support to almost 800 gardeners through the generosity of the horticultural charities and individuals which support it.

#### Rose of the Year® 2025

Rose of the Year® 2025 You're My Everything® (Weksecunk) was launched a few months ago and will be available from rose nurseries and garden centres in autumn. Bred by Weeks Roses, US and represented in the UK by Keith Jones (C & K Jones), it has pink-edged, soft-cream pointed buds that open to reveal a yellow glow at their base highlighting the yellow stamens at their heart. When fully open, the frilly petals darken to a deeper pink.

Flowers are produced singly or in clusters. Showing good disease resistance, the foliage is warm red when new, maturing to dark green with a slight gloss. The rose grows to a height and spread of 75-90cms x 60cms and is recommended for garden borders or containers.

rosesuk.com

#### From NT to Eden

The Eden Project has announced that Andy Jasper will be its new Group Chief Executive Officer, replacing Rob Chatwin who will step down in September after nearly three years in the role. Andy will join the Eden Project in September from the National Trust where he is currently Director of Gardens and Parklands. He joins at an exciting new phase in the Eden

Above, left to right: New Chairman of the Professional Gardeners' Trust. Stephen Anderton: Rose of the Year 2025, You're My Everything (Weksecunk); National Trust Director of Gardens & Parklands Andy Jasper (National Trust Images / Paul Harris); Hillier Award winner Chris Trimmer of Plant Conservation Centre (National Trust Images / James Dobson) Below: Wow! Wow!! Wow!!! by Adrian

Project's history, with Eden Project Morecambe about to go to tender and Eden Project Dundee having been recently granted planning permission. This will be Andy's second period at the Eden Project, having previously spent 13 years as the project's Head of Research and Evaluation where he specialised in understanding and communicating the social and economic impact of the Eden Project in Cornwall.

#### **Hillier Award**

Chris Trimmer, who manages the National Trust's Plant Conservation Centre (PCC) in Devon, was recently awarded the Sir Harold Hillier Award presented by the RHS Woody Plant Committee in recognition of significant personal achievement relating to hardy trees and shrubs. The PCC was established by Chris 40 years ago and he has managed it ever since. The PCC has attracted news attention recently for its role in successfully propagating seedlings of the felled Sycamore Gap tree. To date 6,146 different species and cultivars have been successfully propagated at the PCC, all peat free everything from the ancient Ankerwyck Yew to Newton's apple tree, extremely rare narcissus bulbs and native black poplars.

#### **Brickell Award**

The Mathers Foundation won the prestigious Brickell Award 2024 at RHS Hampton Court Palace Garden Festival for outstanding orchid conservation. The annual award – named after Plant Heritage's founding member and Vice-President Chris Brickell – celebrates excellence in cultivated plant conservation and has been awarded to Gill Mathers, David Mathers and Jim Durrant, in recognition of their outstanding orchid conservation work. The Mathers Foundation

in West Sussex is home to three National Plant Collections of orchids (Oncidium: Pleione: Stanhopea and Acineta spp and hybrids), including two that were rescued when their original Collection Holder was no longer able to maintain them. Chair Gill Mathers, Founder David Mathers, and Nursery Manager Jim Durrant (recognised as an Associate of Honour by the RHS last year) have been awarded for using sustainable growing techniques, minimal chemical use and for their active laboratory propagation programme of existing and new cultivar seedlings. The judges also commended the Foundation for using the 17,000 plants within their care to support research, including tracking, identification and photographic logging of all of their plants and studying improved methods of growing and propagation.

#### New children's book

At 84 Adrian Bloom has published his first book for children entitled *Wow! Wow!! Wow!!!* It is the story of 'the giants of the earth and the rather small Chickaree'. Adrian has a long-standing relationship to some of the earth's giants, including the Californian High Sierra's redwood, *Sequoiadendron giganteum*. He planted a seedling from California in sight of his Norfolk home in 1964. Now 60 years on the tree is over 30m tall.

foggybottomgardens.co.uk

#### **New editor**

John Grimshaw MBE, editor of treesandshrubsonline, has been appointed Editor-in-Chief of *Curtis's Botanical Magazine*, which he will take over from Martyn Rix in October. Curtis's is the longest-running botanical publication and John will be its 19th editor. John leaves the Yorkshire Arboretum, where he has been director for the past 12 years.



### **BRANCH REPORTS**

Northern 25 | West Midlands & South Wales 26 | North West & North Wales 26

#### **NORTHERN**

#### From the Chair

This year I hope to concentrate on promoting horticultural education and training within our region. To that end I have organised a Grow Careers Day North Conference with employers, the trade, fellow professionals and education and training organisations and their learners/students to see how the branch can be of help.

**Clive Parker** 

#### **YHoY Regional Final**

The Northern Branch Regional Final of the Young Horticulturist of the Year Competition took place in March at the Whitburn Coastal Conservation Centre, Whitburn, Tyne & Wear. It was a closely contested final with Lucy Whitehead pulling away in the end, with a solid score in the identification rounds. Lucy went on to represent the branch in the Grand Final held at Hestercombe House and Gardens. I would like to thank all those who supported the competition this year with special thanks for all those people on the day who offered their time and assistance running the event.

Cailean Iain Stewart

#### NEHS Spring Flower Show Advisory Bureau

Members of the branch staffed the ioint North of England Horticultural Society/CIH advisory stand at their annual Spring Show. Members advised show visitors on a range of horticultural topics at the stand during the four days of the show. The committee would like to thank all those who volunteered. Volunteers also raised more than £500 from the stand towards sponsorship of the YHoY competition from plant sales provided by Jason Daff and Mike Hirst. Many thanks to Nick Smith for organising space and location of the stand at the show.

#### **NEHS Award**

The branch would also like to congratulate **Graham Porter** who was presented with the North of England Horticultural Society's Honorary Life Membership Award for his outstanding



Above: Young Horticulturist of the Year Northern Branch winner Lucy Whitehead (centre) at the Regional Final. contribution to the horticultural industry in the Northern Region at the President's lunch held at the show. **Phil Airey** from Horticap, a former recipient of the CIH Northern Branch Commendation Award, was also presented with the Life Membership Award. Well done to you both.

#### Horticulture Education Conference: Grow Careers Day North

Harewood House near Leeds provided the venue for the Grow Careers Day North event held in May.

The event was aimed at young and career change horticulturists who were encouraged to interact with traders and organisations and discover the broad range of opportunities within the horticultural industry. Presentations included: 'Horticultural Inspiration', Chaired by Sarah Owen-Hughes MCIHort, Head Gardener, Rudding Park Hotel; 'Growing green skills for a sustainable future' by Corrina Urguhart, Director of External Relations, Lantra; 'A Career Story' by Katy Merrington, Cultural Gardener, The Hepworth Gallery, Wakefield; 'Sustainable Crop Protection and Pollination with Beneficial Insects' by Dr Niall Conboy and Tim Crittenden, Advisors for

Biobest UK; 'Opportunities at Harewood House' by Trevor Nicholson; Georgia Gilbert, Technical Manager, John Chambers Wildflower Seeds; Brad Bingham, Head Gardener at Norton Conyers; 'A Career Story' by Katie Rushworth Garden Designer and ITV's Love Your Garden; 'A Career Story' by Matthew Wilson, ex RHS Harlow Carr Curator, Channel 4 broadcaster and author, who closed the event with his Keynote speech.

The event attracted more than 20 trade stands, and a series of workshops, and presentations from horticultural traders. The Branch Committee would like to thank all the traders and organisations that attended and made the day such a success.

There were six workshops to choose from: Social Therapeutic Horticulture; Husqvarna Electric Products; The Himalayan Garden; Harewood Plant Collection; Johnson's Nurseries; and Stihl Electric Products.

The keen interest shown by learners was noticeable throughout the day in their interactions with traders and horticultural organisations who had pitched their stands for the day to show the wide range and types of career opportunities available within the wider horticultural industry. After the event, a



number of learners told the staff and organisers how much they had enjoyed the day. The event was fully subscribed with over 150 learners and staff, and additional virtual attendees who were unable to be present in person.

The Branch Committee would like to thank all those involved in organising the event, in particular the Branch Secretary Jason Daff, Branch Chair, Clive Parker, and committee member Trevor Nicholson, Head Gardener at Harewood House, for arranging facilities and access to the event with the Harewood Estate.

#### Forthcoming events

#### 21 August

Visit to Raby Castle: visit to the newly reopened garden at Raby Castle, Staindrop, Darlington DL2 3AH. Includes the remodelled walled gardens by world renowned Luciano Giubbilei.

#### 13-15 September

Harrogate Autumn Flower Show Garden Advice Bureau at Newby Hall. Volunteers required. Please contact Jason Daff and Mike Hirst.

#### **TBC September**

Visit to Auckland Castle Walled Garden (Bishop Auckland) to see the redevelopment of the stunning Walled Garden, originally built in the 17th century by the Prince Bishop of Durham gardens and grounds.

#### 18 October

Join us for a celebratory dinner to mark the 40th Anniversary of the Branch and Chartered Institute of Horticulture. Venue at The Bridge Hotel, Walshford near Wetherby LS22 5HS and Branch Annual Meeting and pre-anniversary Dinner.

#### TBC Autumn

40th Anniversary Lecture TBC November

Anniversary tree planting
Mike Hirst FCIHort FLS
Branch Correspondent
northern@horticulture.org.uk

Above: Trevor Nicholson with the Himalayan Garden Group at the Grow Careers Day North event.

## WEST MIDLANDS & SOUTH WAI FS

#### **Cardiff Parks Central Nursery**

Even though **Kevin Thomas** who with his colleague, **Ginny**, led our tour, explained that the budget was limited and staffing limited as well, it was very impressive to see the quality work being carried out both traditional and up-to-date commercial practices.

We saw an impressive outside holding area for hardening off summer bedding, 30,000 bedding geraniums grown from seed, and nursery stock including mature trees. This helps give the apprentices a good traditional training.

Under glass, cell packs are sown by machine and a full range of vegetive propagation methods are in use for shrubs, hardy perennials, bedding and pot plants. Bio control is used throughout, with some small scale, limited use pesticide.

Two of the glass houses were full of bedding, plugs and a mix of pot plants for County Hall. Poinsettia and cyclamen are grown with 3,000 for sale to local garden centres and used in Country Hall. This is possibly the only large scale unit in Wales growing poinsettia. Interestingly there was no need for supplementary lighting. No external lights are allowed around the site.

Trials are on-going for potting compost with most including for seed sowing preferring M2/M3 peat-reduced. Generally there was dissatisfaction relating to coir products, with preference being for local bark-based material.

Ginny showed us her herb and micro salad area which she manages on organic principles. The herbs are pot grown and then used in local community projects. Salads are handsown to order from the Cardiff Community salad project in polytunnels on site, and featured on national TV recently. The nursery team work with all groups and nationalities in the Cardiff area to supply fresh salads all year round. Delivery of the salads to local people and restaurants are made via ebike. After a lunch at the on-site café David gave us a talk on the history of Bute Park.

#### **Future events**

#### 14 September

Visit to Greenjjam Nurseries, Evesham in the morning and The Picton Garden, Malvern in the afternoon.

#### 16 October

Annual Branch Meeting. Details TBC.

David Butt ACIHort

Committee member

westmidlands@horticulture.org.uk

## NORTH WEST & NORTH WALES

#### YHoY Regional Final

The Regional Final was held at Reaseheath College in March. The eight finalists were drawn from a range of organisations in the region.

There was a definite buzz of excitement as they arrived, with some trepidation mixed in. While the friends and family that had come to support drank coffee and tea, the contestants tackled the identification rounds. There was a short interlude while the ident results were checked and entered into the system. Then the real part of the competition started.

The excitement continued, with a hotly contested competition, especially in the buzzer rounds. As a bit of relief, the samples were put on the screen, and the audience asked to identify them. They were moderately successful, often needing to be prompted by the contestants!

By the midpoint, a clear leader was emerging; a pattern that continued right through to the final quick-fire buzzer round. At that point the hot competition was for second and third. At the end of the round and the competition there was just one point between **Richard Carden** on 42 points and **Matthew Chesterman** on 43. A brilliant and exciting finish.

But the clear winner was **Frank Cooke**, with a margin of 26 points ahead of second place. His score of 69 showed excellent knowledge and the ability to operate well under pressure. Huge congratulations to him and we look forward to seeing him at the Grand Final.

We would like to thank Reaseheath College for hosting the event. **Sue Nicholas** had done a splendid job of liaising with the college and organising an excellent lunch for contestants and supporters.

Thanks also go to **Rob Mackey** (quiz master) Sue Nicholas (adjudicator) **Gareth Manning** (manual scorer) and **Victoria George** who brought the scoring equipment down from Scotland and operated it throughout the competition.

Thanks must go to all the contestants. They contributed to an exciting competition. We hope that they all enjoyed it and feel that they want to try again next year, except for one who won't be able to but has offered to become involved in the organisation of the competition next year.

Robert Mackey MCIH robertlmackey@gmail.com

#### **ABM**

The 2023 ABM was held in February via Zoom. After welcoming the attendees to the meeting Gareth Manning, the Regional Chair presented the Chairs report to the meeting. He reiterated the aims of the CIH and the regional groups as the promotion of horticulture and the professionalism of those working in the industry. This is achieved generally by attendance at professional events and flower shows such as Southport where we can engage with amateurs and professionals alike.

The opportunities within the region to engage with other professional bodies this year have been few and far between, however the Chairman did attend the Lantra/Landex learner awards in November enabling him to network with industry leaders from across the land-based sector. He also attended a networking seminar via Zoom on LGBTQ+ within horticulture (not as Branch Chair).

Opportunities are always sought to engage with other professional bodies and this year, with a renewed interest in the YHoY competition, stronger links have been forged with the colleges in the North West and North Wales region

through contacting the college Heads of Horticulture and encouraging them to promote the competition. This has already elicited some positive responses and as a result 2024 has had regional heats running in some colleges.

With regard to the CIH recognising the status for professionally qualified and experienced horticulturists, noone from the branch has been recognised with an award this year and it was agreed that the criteria for nominations would be circulated to regional members in order to attract some nominations for the coming year.

Overall, 2023 had proved to be a challenging year for the branch with planned visits being cancelled due to external forces, and attendance at the Southport Flower Show being cancelled due to lack of volunteers. A full diary of activities is being planned for 2024.

Planning is in place for the Broadbent lecture as a branch event for the Institutes 40th anniversary with celebrations running from Autumn 2024 through 2025.

The Biddulph Grange visit on 3rd August is still in the planning stage and the branch is confident that this will be an interesting study visit.

The YHoY is getting underway and

Kent

Gabrielle Beaty 14

Aberdeenshire

Helen Belcher 9

Robert Mackey commented on the poor engagement figures of 2023. Figures for 2024 are looking much better due to some good work by Victoria George and her group in making it more accessible and ensuring fairness across the board. A comprehensive bank of questions has been developed and there has been some excellent selling of the event to colleges and outside bodies resulting in a good number of contestants for this year's regional final at Reaseheath College.

The ABM concluded with the Chair thanking the committee for their help over last 12 months.

#### **Election of officers**

Chair: Gareth Manning; Secretary: Robert Mackey; Treasurer: Susan Nicholas: YHoY Co-ordinator: Robert Mackey; Branch Representative: Gareth Manning; Publicity: Richard Lewis: Branch Correspondent: Richard Lewis; Student representative/Membership Secretary: Helen Baxter; Education representative: Craig Bailey; Commercial representative: Victor Criddle.

**Richard Lewis MCIH Branch correspondent** richard.lewis30@live.co.uk

#### **NEW MEMBERS**

The Activity Field categorisations have recently been updated.

- Journalism
- 2. Production (Non-Food)
- Education
- Arboriculture 5.
- Garden Design 6. Garden Retail
- Greenspace
- Management Landscaping
- Ornamental & Amenity
- 10. Production (Food)
- 11. Research
- 12. Advisory &
- Consultancy
- 13. Allied 14. Botanic Garden
- 15. Social & Therapeutic Horticulture (STH)

#### **PRIZEWINNER**

Lawrence Weston 10 Professional Work Placement Edibles Worcestershire

Tim Bembridge 8 Director Hampshire Will Carter 9 Deputy Head Gardener Norfolk Sian Cooper 7 Gardens Manager Warwickshire Lewis Cornell 5 Head Gardener Essex **Kurt Crow 6** Manager Shetland Islands

Thomas Dawson 12 Owner East Sussex Suzanne Mbi Enoh-Arthur 15 Team Manager Bedfordshire

Richard Goldsmith 3 Trainer/Assessor

Gloucestershire Ian Graham 10 Horticulturist Cork

Jane Graham 5 Garden Designer Wiltshire

John Guy 3 Curriculum Manager Northumberland Kav Hawkins 5

Horticulturist Northamptonshire Leo Hood 12 **Educator Cornwall** 

Thomas Malone 3 Lecturer West Lothian **Trevor Nicholson 12** Head of Gardens & Grounds West

Yorkshire Thomas Nolan 5 Garden Designer Essex

John Ritchie 8 Managing Director Surrey Jason Saul 9 Head Gardener East Sussex Julian Slater 7

Proprietor Essex Matthew Smith 8 Director Wiltshire Paul Smith 9 Estate Manager North Frank Sutory 8 Partner Oxfordshire Sally Tierney 5 MD North Yorkshire Jack White 12 National Account Manager Herefordshire Samantha Wright 5 Head Gardener Lincolnshire

#### **ASSOCIATE**

Dawn Parker 15 Project and Volunteer Co-ordinator Mid-Glamorgan
Tony Smith 5 Lead Creative Monmouthshire

#### CAREER BUILDER

Camila Iturra 12 Senior Donor Programme Manager Cambridgeshire Kieran Meehan 7 Deputy Grounds Team Leader South Yorkshire. Melanie Taylor 5 Creative Director

Suffolk

Ingrid Bailey 14 London Jemimah Baird 9 Adien Barton 14 Kerrie Bascombe 9

Oxfordshire Kate Bibby 15 Cheshire Callum Booth 8 North Yorkshire Ethan Bourne 7 Surrey Stefanie Bradfield 12 Hampshire Lauren Brown 5 Derbyshire Diane Brun 6 Edinburgh Lucie Brun-Naujalis 14 London Becky Burns 5 Cheshire Nicola Buttress 2 Staffordshire Kelly Cable 14 Merseyside Nathan Caplen 14 Hampshire Lucy Carr 2 Hampshire Hillary Christie 15 Hampshire
Pierce Clarke 2 Co Down Katy Coats 15 Glasgow Christopher Cole 12 West Yorkshire Fraser Cook 11 London Hazel Copeland 9 Worcestershire **Rob Coulson 9** 

Alice Crick 5 Kent

Alexa Crow 5 West Yorkshire Isobel Curran 14 Somerset Anne Dawson 5 South Yorkshire Louie de Witt 14 Surrey Benjamin DeLee 14 London Annmarie Dixon 5 West Yorkshire Colin Dorricott 7 Merseyside Tom Eagling 14 Isabel Earle 15 Wiltshire Helena Fofonjka 10 Carlow Scarlett Frewin 5 Devon Eileen Gahan 14 Wexford Deesh Grewal 14 London Esther Grimes 5 Kent Clare Gurney 5 Merseyside Liam Hopkins 15 North Yorkshire Kian Iorio 12 Cork Thomas Julyan 3 Hampshire Ann Kelleher 15 Carlow Khanyisile Lee 10 London Katarzyna Litwa 14 Surrey Aston MacRae 3 Angus Angus McCombe 2

Co Antrim Emma Mcloughlin 14 Surrey Lynne Moores 12 Lancashire **Muhammed Moosa** 14 London Dawn Mortiboy 12 Oxfordshire Michael Nelson 15 Lancashire Phil Norris 9 Merseyside

Janice O'Connell 14 Victoria O'Dea 15 Merseyside Sonia O'Hara 3 Clwyd Manuel Ordonez Villar 12 Somerset Laura Oxley 14 Surrey Adesola Oyeusi 10 Essex Emma Paley 15 London Veronica Parker 15 Lucy Peacock 14 London Aimee Philipson 1 County Durham Carina Quayle 8 Holly Radford 14 Merseyside Hallie Reynolds 14 Devon Suzanne Robertson 10 Merseyside Naomi Rose 14 Cambridgeshire Anja Seymour 14

Florence Shine-Clark 12 Buckinghamshire **Z**hasmina Siromahova 8 London Ofentse Skosana 8 Eastern Cape Kirsteen Smithson 3 Lancashire Leif Starkey 14 London Elizabeth Stevenson 5 West Midlands Lucy Stokes 10 West Yorkshire Katharine Thomason 14 Cheshire **Christopher Tomlin 9** Oxfordshire Ryan Varey 7 North Yorkshire Benjamin Wells 5 Kent Samantha Whetton 10 London Anne Wilkinson 12 North Yorkshire Debbie Wilkinson 5 Cheshire Melanie Wilkinson 9 Worcestershire Robert Wilson 14 Co Down Joel Winter 15 London Phillis Wong 3 Cheshire Martyna Wowra 7 Merseyside Daryl Young 8 Co Down

Worcestershire

## HORTICULTURAL RESEARCH

## **FRUIT CROPS**

A review of productivity in strawberry: do the plants need larger canopies, more flowers, or higher CO<sub>2</sub> assimilation for higher yields? Menzel C M, 2022. *The Journal of Horticultural Science and Biotechnology*, 97: 674.

This substantial review on strawberry production considers the relative importance of plant traits such as vigour, canopy size and CO₂ assimilation in determining yield, and concludes that cultivars achieve high yields in different ways. A second review by this author in 2023 (*The Journal of Horticultural Science and Biotechnology*, 998: 409) concludes that global warming can be expected to reduce strawberry yields and give smaller, less sweet fruits.

Effect of shading determined by photovoltaic panels installed above the vines on the performance of cv. Corvina (*Vitis vinifera* L.). Ferrara G, Boselli M, Palasciano M & Mazzeo A, 2023. *Scientia Horticulturae*, 308: article 111595.

This paper reports on agrivoltaic (AV) production of grapevines in the field under photovoltaic panels in Northern Italy. Metabolic activity tended to be depressed early in the day but was largely compensated for by reduced stress and higher metabolic activity as temperatures rose. Yields and anthocyanins / polyphenols were somewhat reduced but were well compensated for by the associated energy production.

Identification of postharvest fruit biocontrol strain *Burkholderia contaminans* against fungi decay. Shi J & Du J, 2023. *European Journal of Horticultural Science*, 88 (1): 1-12 (DOI: 10.17660/ eJHS.2023/002) (open access). A bacterium, *Burkholderia contaminans*, isolated from the surface of apricot fruits, is considered to have a theoretical potential to control postharvest fungal diseases. It was shown to produce superoxide dismutase which inhibited mycelial growth of a range of fungal pathogens *in vitro*. Crude protein extracts also inhibited grey mould on grape and strawberry fruits contaminated with *Botrytis cinerea*.

Mechanisms of exogenous GA3-induced inhibition of seed development in southern highbush blueberry (Vaccinium darrowii). Hu L, Wang X, Liu H, ... Lyu L & Li W, 2023. Scientia Horticulturae, 322: article 112430. Consumers prefer blueberries without seeds, and applications of 100 mg/l gibberellic acid to inflorescences in this study were shown to induce seed abortion by inhibiting endosperm development, without adversely affecting fruit size. 16 genes were identified as potentially regulating blueberry seed abortion, providing a theoretical basis for alternative approaches.

Mitigating grapevine winter damage in cold climate areas. Rahemi A, Fisher H, Carter K & Taghavi T, 2022. Horticultural Science (Prague), 49: 59 (open access).

This paper reviews damage mitigation in grapevine production in cold climates from a Canadian perspective, including the use of cold-hardy cultivars and scion-rootstock combinations to combine earlier autumn acclimation to avoid winter cold damage with later de-acclimation to counter spring frosts. Appropriate crop management can also reduce the loss of thermal energy from vines during cold spells.

Physiological and metabolomic analyses reveal the effects of different NH₄⁺: NO₃⁻ ratios on blackberry fruit quality. Wei Z, Yang H, Duan Y, ... Lyu L & Li W, 2023. Scientia Horticulturae, 318: article 112124.

Large differences were found in fruit quality and physiological characteristics of blackberries grown with five different ratios of NH<sub>4</sub>\*:NO<sub>3</sub>-. A 50:50 ratio was judged best for large fruits with good flavour. Excessive NO<sub>3</sub>- greatly decreased fruit quality, whilst increasing NH<sub>4</sub>\* raised the contents of sugars, anthocyanins and antioxidants. 100% NH<sub>4</sub>\* was best for fruit storage.

Plastic mulches improve yield and reduce spotted-wing drosophila in primocane raspberry. McIntosh H, Guédot C & Atucha A, 2023. *Scientia Horticulturae*, 320: article 112203.

Substantial yield benefits without adverse effects on quality were shown in primocane raspberry field trials in Wisconsin by using black, white or metallic plastic mulches. Black mulch was best for extended cropping, probably by increasing soil temperatures. Unmarketable fruit was greatly reduced in all treatments due to a 40-71% reduction in spotted-wing drosophila larval infestation.

Salicylic acid treatment inhibits ethylene synthesis and starch-sugar conversion to maintain apple fruit quality during shelf life. Yuan R, Mao L, Min T, ... Wang H & Lin Q, 2023. Scientia Horticulturae, 308: article 111586. Post-harvest applications of salicylic acid (SA) to apples were shown to maintain fruit firmness, reduce weight loss and prolong shelf life. These effects were given by a promotion of endogenous SA activity which inhibited ethylene biosynthesis and starch to sugar conversion. SA as a preservative is claimed to be non-toxic, low cost and residue free.

Specific wavelength LED light pulses modify vitamin C and organic acids content in raspberry and blackberry fruit during postharvest. Ganganelli I, Agostini M C M, Galatro A & Grozeff G E G, 2023. The Journal of Horticultural Science and Biotechnology, 98: 649. Short-duration (15 mins every 2 h) green or red LED light pulses at 30 µmol/m²/s PPFD significantly increased the post-harvest life of raspberries stored at 4°C for 7 days. Internal fruit breakdown was reduced and quinic acid, malic acid and ascorbic acid contents were stimulated. These benefits were not shown for blackberry indicating differences in processes underlying ripening and light interactions.

Supplemental red light more than other wavebands activates antioxidant defenses in greenhouse-cultivated *Fragaria* × *ananassa* var. Elsanta plants. Lauria G, Lo Piccolo E, Ceccanti C, ... Vernieri P & Landi M, 2023. *Scientia Horticulturae*, 321: article 112319.

This Italian study found that red light (R) was more effective than other supplementary light sources in stimulating plant antioxidant defences in strawberry and promoting high levels of  $H_2O_2$  and MDA. This, together with a higher tolerance of *Botrytis cinerea* found in earlier studies, points to a possible role for R as a priming eustress in growing protocols with reduced agrochemical inputs.

## HORTICULTURAL RESEARCH

## **EDIBLE CROPS**

Effects of microbial inoculants on agronomic characters, physicochemical properties and nutritional qualities of lettuce and celery in hydroponic cultivation. Wang Q-Y, Zhao M-R, Wang J-Q, ... Qin Y & Zhang G-Q, 2023. Scientia Horticulturae. 320. article 112202.

Hydroponic production of leafy vegetables is growing rapidly and this study examined the combined effects of two potential bacterial inoculants (strains of Arthrobacter pascens and Bacillus subtilis), identified in earlier in vitro tests as having growth promoting properties. These increased nutrient uptake and leaf photosynthesis, boosting final yield and nutritional quality.

Elevated atmospheric ethylene and high temperature independently inhibit fruit set but not vegetative growth in tomato. Hudelson T J, Westmoreland F M & Bugbee B. 2023. HortScience 58: 247 (open access).

Atmospheric ethylene rarely exceeds 5 nmol.mol<sup>-1</sup> in the field but can be much higher under protection. In this study, concentrations of up to 40 nmol.mol<sup>-1</sup> progressively inhibited floral development and fruit set in tomato independently of temperature, but had little effect on vegetative growth. Filtering of ethylene to below 20 nmol.mol<sup>-1</sup>, regardless of temperature, was judged necessary to achieve normal fruit set and yield.

End-of-production ultraviolet A and blue light similarly increase lettuce coloration and phytochemical concentrations. Kelly N and Runkle E S, 2023. HortScience 58: 525 (open access).

Anthocyanins responsible for the pigmentation of red-leaf lettuce have human health-promoting properties. Their concentrations can be promoted by lighting with UVA or blue light during production, but this can limit cellular expansion and reduce overall biomass. However, this research found that these light sources were equally beneficial and without yield penalty when applied during just the final six days prior to harvest.

Gibberellin-induced stem elongation and apical bud growth acceleration without decreased yield in Broccoli (Brassica oleracea L. var. italica). Nakajima K M, Ohishi M, Sato F & Takahashi M, 2023. The Horticulture Journal, 92:281 (open access).

Mechanical harvesting can be a problem with shortstemmed broccoli cultivars. This was overcome in this Japanese study by the application of weekly sprays of the plant growth regulator, GA3. These increased stem length by up to 54% depending on concentration. There was no decrease in yield and the overall growth period was beneficially reduced by around 20% in the autumn crop.

Overwatering may be as detrimental as underwatering in container-grown kale (Brassica oleracea L. acephala). Brazel S R, Olorunwa O J, Barickman T C, Sams C E & Wilson J C, 2023. Scientia Horticulturae, 316, article 111961.

This US study found that under- and over-watering using sensor-based irrigation similarly reduced final fresh weight and major nutrient content of kale plants. However, whilst under-watering had little negative effect on the content of nutritionally important secondary metabolites and mineral nutrients, over-watering reduced the levels of these, further reducing final nutritional value.

Iron and zinc biofortification and bioaccessibility in carrot 'Dordogne': Comparison between foliar applications of chelate and sulphate forms. Buturi C V, Mauro R P, Fogliano V, Leonardi C & Giuffrida F, 2023. Scientia Horticulturae, 312, article 111851,

Biofortification of vegetables could help counter problems of iron and zinc deficiency in the human diet. Carrot crops were sprayed with these minerals either as inorganic salts (FeSO<sub>4</sub> and ZnSO<sub>4</sub>) or as chelates (Fe-DTPA and Zn-EDTA). The salt gave best iron biofortification, but the chelate was best for zinc. However, chelates were judged best overall for both since these were found to be more readily assimilated during digestion.

Melatonin and stress tolerance in horticultural crops: Insights into gene regulation, epigenetic modifications, and hormonal interplay. Kaya C & Ugurlar F. 2023. Scientia Horticulturae, 322, article 112432.

Melatonin (MT) appears to have great potential for moderating plant stress responses and this review concentrates on possible mechanisms of action and interactions with other key phytohormones. Among other effects, MT appears to enhance stress tolerance by regulating the expression of genes involved in stress response pathways such as those relating to reactive oxygen species, chaperones and transcription factors.

Methylcyclopropene treatment retards the yellowing in pak choi (Brassica rapa subsp. chinensis) through modulating the programmed cell death during storage at 20°C. Song L, Yu H & Yu Z, 2023. Scientia Horticulturae, 312, article 111885.

Treatment with methylcyclopropene (1-MCP) has previously been shown to delay the post-harvest yellowing of pak choi leaves. It appears from this study that the mechanism of action is related to interactions with the natural process of programmed cell death, involving the regulation of ROS metabolism, membrane lipid degradation, antioxidant status and ethylene production.

Reactive oxygen species homeostasis and carbohydrate metabolism involved in wound healing of carrot induced by hot water treatment. Jiang H, Kong R, Zheng X, ... Gong D & Prusky D, 2024. Scientia Horticulturae, 326, article 112721.

Carrots are easily wounded during harvesting, but shortduration hot water dips can accelerate wound healing by inducing suberin and lignin deposition. This study indicates that the hot water treatment (45°C for 5 mins) has its beneficial effect by regulating ROS (reactive oxygen species) homeostasis and activating sucrose metabolism, glycolosis and the pentose phosphate pathway.

Reduced daily light integral at the end of production can delay tipburn incidence with a yield penalty in indoor lettuce production. Ertle J and Kubota C, 2023. HortScience 58: 1217 (open access).

Tipburn (necrotic leaf margins) is commonly encountered towards the end of production in lettuce crops growing in controlled environments when growth outstrips calcium supply. Reducing the daily light integral during the final 12 days of production reduced tipburn severity in this study.

Some recent horticultural publications have been briefly summarised by Dr Allen Langton FCIHort, an Honorary Research Fellow at the Warwick Crop Centre, School of Life Sciences, University of Warwick.



It is planned that all of the major horticultural commodity areas will be covered in this way over the course of the coming year. Of necessity, the selection represents a personal choice. Three dots in the author list of a citation indicates that there are additional authors whose names have not been shown here, but this omission will not hinder anyone locating a paper.

Please note: HortScience and Journal of the American Society for Horticultural Science are now open access journals. Articles in Scientia Horticulturae after Vol. 255 are now identified by article number rather than page number.

## John Main tribute

## John D Main MHort (RHS) FCIHort DHE SHM 1940-2024

John had a lifelong interest in horticulture beginning with a short time at Carlisle Parks Department for two years, followed as a student at Askham Bryan Agricultural College, York, then as a student at the Royal Botanic Garden, Edinburgh (RBGE), gaining the Diploma of Higher Education, Edinburgh. He remained at the garden as a foreman in the Alpine Department until 1975. He then took up the post of Superintendent at the Northern Horticulture Society at Harlow Carr, Harrogate, until 1980.

The next move was to the RHS Garden Wisley where he was Curator. During his time there he built outdoor exhibits at Chelsea on several occasions. He was responsible for the design and building of the British exhibit at the International Garden Expo 83 in Munich, which was awarded a Gold Medal. The following year he was involved in designing and the construction of the British exhibit at Liverpool. He was part of the AGS expedition to Sikkim in 1983. He was Consultant Editor of the RHS Gardeners' Calendar, a book written in collaboration with the RSH and the long-running series for Granada Television.

In 1988 he returned to Royal Botanic Garden, Edinburgh as Director of Horticulture, a post that he held until he retired in 2000. He was President of The Caley (the Royal Caledonian Horticultural Society) from 1992 until 1996. In 2001 he was awarded the Scottish Horticulture Medal for outstanding contribution to Scottish horticulture. He was involved with a number of international exhibitions held in Scotland, as well as the World Orchid Conference in 1993, during which he was associated with the Gardens Partnership with the Kunming Institute of Botany, Yunnan, China. This led to the RBGE representing the British Government at the 1999 International Horticulture Exhibition, Kunming. The garden team built the British exhibit. This was followed by the building of the Chinese Hillside at Royal

He was a great friend and colleague to many and will be much missed by his family and those whose lives were touched by him.

to lecture and judge both in Britain and worldwide.

Botanic Garden, Edinburgh. During this period, he continued

**lain Main** 



## **Book review**

## A Flower Garden for Pollinators by Rachel de Thame

Illustrations by Lauren Lusk Photography by Jonathan Buckley Greenfinch/Quercus, £25 ISBN 9781529422146

This is a beautifully presented book rich in photographs that illustrate the plants that Rachel has chosen as examples of those which help support the forage for pollinators. Pollinators are recognised as including the whole range of pollinators in the UK, i.e. butterflies, moths, beetles, bees and hoverflies. There has been a massive decline in pollinators over the last 20 years or more and Rachel explains in the introduction the need to provide for them by ensuring that the planting gives pollen and nectar over most of the year and that different parts of the lifecycles of pollinators' needs are met. Caterpillars and other larvae may well need different forage.

Often a less disturbed garden with more wild places can benefit nature and specifically pollinators as Rachel suggests. She goes on to say that the move to a more relaxed garden is something that she enjoys. She suggests that some cultivars have longer flowering that some of the natives. A garden with a mix of habitats even microhabitats is useful for pollinators. Diversity of provision is essential for a diversity of pollinators. The mouthparts of bees vary greatly and some need a specific shape of flower. Rachel recommends that pesticides should not be used.

There are over 80 suggestions for pollinator friendly plants listed by season with notes for each and full page illustrations (by Rachel's daughter, Lauren

Lusk). Their value to design as well as pollinators is included, as are notes on their cultivation. A lovely and informative book. Just one thing that is missing for me and that is the need for nesting sites for ground nesting bees. To some extent this is covered by having some messy areas as Rachel says, but ground nesting bees need undisturbed bare ground which is south-facing and actually quite difficult for gardeners to provide. Weeds need to be removed by hand when small as hoeing will destroy the surface of the nests. It's a difficult ask for gardeners but important and well worth it for this major group of pollinators.

Heather Barrett-Mold OBE CHort FCIHort CSci CEnv, Vice Chair Pollinating London Together, Vice President IES, Past President CIH, Past Master of the Worshipful Company of Gardeners



## **Cleaning Ground Cover**

## Why GeotexPRO is the Superior Choice

## Transform your cleaning process with advanced Geo-textile Technology

## We Understand the Challenge of Manual Cleaning

Maintaining clean and efficient ground cover is critical in commercial growing environments, but traditional methods like manual sweeping and cleaning ground cover can be labour-intensive, time-consuming, and inefficient.

### 7 Reasons Why GeotexPRO by Terrazzamc is the Solution:

- Efficient, with rapid cleaning & consistent results.
- Cost-effective, reducing labour costs, and creating long-term savings.
- Enhanced cleaning performance, removing debris, and improving hygiene.
- Designed for ease of use, requiring minimal training for effective operation.
- Environmentally friendly, reducing the need for chemical cleaners.
- Durable, reducing the need for frequent replacements and minimising waste.
- Versatile, customisable solutions to suit your unique requirements.



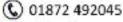




## Ready to Revolutionise your Cleaning Process?

Switching to GeotexPRO by Terrazzamc offers an efficient, cost-effective, and sustainable approach to cleaning ground cover in your commercial growing environment. Experience the cleanliness and productivity of your operation while reducing labour costs and improving overall crop health.

#### Get in touch to organise a free demonstration







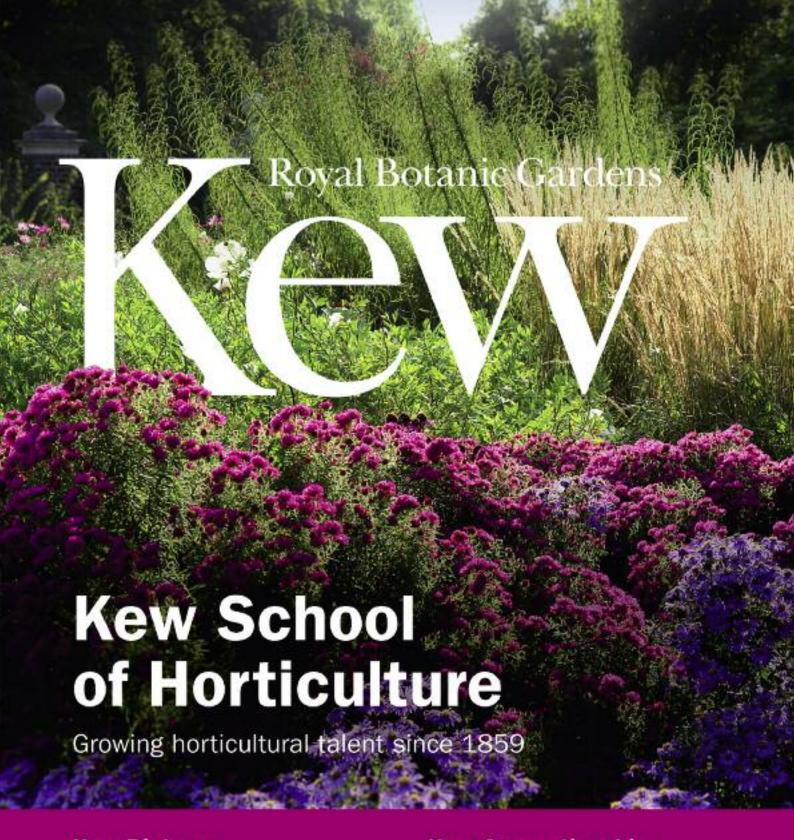
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