

THE JOURNAL OF THE KEW GUILD (CIO)



Founded in 1893

*The Association of members of the Kew staff past and present, and
those interested in furthering the purposes of the Guild*

Events of 2018

Published in 2019

**Volume 17
Number 123**

Registered charity No. 1174033

ISSN 2046-1526

Editor: Sparkle Ward
Advisory Editor: Richard Ward
Email: editor@kewguild.org.uk

Printed by WPG Group Limited
Printing House, Severn Farm, Welshpool, Powys SY21 7DF

**Royal Botanic Gardens
Kew**

Cover Photos

Front: The Temperate House, on the first day of re-opening

Rear: Timelapse of the Temperate House during restoration (beginning to end, L to R). Photos kindly provided by Scott Taylor.

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The Kew Guild

Patron: Her Royal Highness Princess Alexandra

The Kew Guild Committee 2018-2019

Officers:

President:	Peter Styles
President Elect:	David Simpson
Vice President (elected 2018):	Graham Heywood
Past President:	Jean Griffin
Acting Secretary:	Sara Arnold (non-Committee post)
Voluntary Treasurer:	Linda Baharier (non-Committee post)
Membership Secretary:	Jean Griffin
Editor:	Sparkle Ward (non-Committee post)
Publicity and Promotions:	Jean Griffin
Website Manager:	Jonathan Rickards

Trustees:

Jean Griffin	Alan Stuttard
Stewart Henchie	Timothy Upson
Harold (Graham) Heywood	Chris Kidd
Tony Overland	Peter Styles
David Simpson	



Kew Guild Editor, at Nature's Window,
Kalbarri National Park, Australia

Dear fellow Guild members,

This Kew Guild year must certainly have been the busiest ever. Countless hours and days have been spent in discussion and by email by many voluntary Guild members, to bring the Guild up to what we see today.

We Editors are not Guild Committee members, although we endeavour to attend Committee meetings in an advisory capacity. As time goes on, and technology improves, we can see that the necessity for

Committee members to travel from around the country to Kew for meetings several times per year may well not be essential. Certainly the commitment by current Trustees is a big one, and we owe them our thanks.

The large subscription increase in 2015 resulted in a decrease on members, but numbers have since recovered, and we believe that the Guild is on a strong footing. However, its main strength is in its members. We urge you to encourage your fellow Kewites to join; and we urge you, as members who are reading this Journal, to put yourself forward for Committee involvement. Email our Secretary today!

And whilst you're at it, email your news to newsforkewites@kewguild.org.uk for publication in the Events of 2019 Journal.

We particularly thank Alex George for checking botanical and plant names, at very short notice, this year. And Pamela Holt for News of Kewites, and Graham Burgess for compiling Obituaries. Floreat Kew.

Sparkle Ward
Richard Ward

Editor
Advisory Editor

Flat 2, 62 Mortlake Road, Kew, Richmond, Surrey TW9 4AT
Tel/Fax: 07986802669 Email: editor@kewguild.org.uk

President
Acting Secretary
Treasurer
Membership
Events
Publicity and Promotions
Awards Scheme
News of Kewites

president@kewguild.org.uk
secretary@kewguild.org.uk
treasurer@kewguild.org.uk
membership@kewguild.org.uk
events@kewguild.org.uk
press@kewguild.org.uk
awards@kewguild.org.uk
newsforkewites@kewguild.org.uk

Peter Styles
Sara Arnold
Linda Baharier

Brian Phillips
Jean Griffin
Chris Kidd
Pamela Holt

Peter Styles

President 2018/2019



I was born and educated in Bristol and following in my father's footsteps I commenced my career in horticulture, initially as an apprentice in Bristol Zoological Gardens under John Hughes and then as a gardener at Bristol University Botanic Gardens. I later worked at Wyevale's Nurseries in Thornbury. A holiday with a friend to London in 1965, ostensibly to visit the R&B clubs the Marquee and Eel Pie Island, but also taking in Kew Gardens, introduced me to the Kew Diploma Course. The following year I applied and to my astonishment was offered a place. George Brown was on the interview panel and I remember waxing lyrical about a mature *Ginkgo biloba* I had seen growing at Bristol Botanics. Later, George Brown, appreciating my artistic temperament, gave me the opportunity to illustrate his arboricultural books.

I entered Kew as a student in 1966. It was at Kew that I met my wife Liz, nee Baylis and also through John Brookes was introduced to the heady world of landscape design and landscape architecture. A fellow student, Mike Shorey, gave me one of the early journals of the Institute of Landscape Architects and I knew instantly that this was to be my calling. John later offered me a position to work in his design studio. Leo Pemberton, John Simmons and Charles Erskine were all great mentors for me at Kew. To supplement things I worked with Roger Storr, John Lawrence and Peter Clothier in their embryonic gardening business. I recall that Richard Ward had a competing business.

In 1969 I left Kew to join the landscape group at the GLC Parks Dept. A busy time at the GLC creating new high rise social housing estates across London and working with some of the top architects of the day. At the same time I was also working freelance for Land Use Consultants on reclamation sites in Stoke-on-Trent and with garden designer David Stephens. In 1970 I enrolled on the part time evening course in landscape architecture at Thames Polytechnic. Kewites Leo Pemberton, Ben Jakobsen and Peter Hunt were also involved in that course, so it was pretty much a home from home. This was the only London based landscape architecture course at that time. I declined offered places on the Newcastle and Manchester Universities degree courses preferring to stay in London. I eventually qualified as a chartered landscape architect in 1974 and was subsequently elected Fellow of the Landscape Institute. I was also elected a Fellow of the Royal Society of Arts.

I subsequently went on to work as landscape architect with the London Borough of Ealing architects department. I didn't realise it at the time, but Tony Overland and Trevor Preston were also there in the Parks Dept. Later I moved to the London Borough of Wandsworth architects department as group leader, setting up a new team of landscape architects in the architects department. David Taber was in charge of the Parks and later Michael Wilkinson, but our paths never crossed! 1976 saw a complete change in career when I joined the practice of The Ecology and Landscape Design Partnership based in Pall Mall, London. A year later I relocated to mid Wales with Liz and our two daughters to set up a new office for the practice which was helping to develop a new town in mid Wales. Laura Ashley

featured large in our client portfolio! The intention was to stay in mid Wales for three years and then move back to London, but this never happened. The practice eventually changed its name to Lingard Farrow Styles Ltd with offices in Welshpool and Shrewsbury. Another Shropshire man, Bryan Howard, is a frequent visitor to our offices.

My work has taken me around the world with projects in South Africa, India, Florida and mainland Europe. This gives me the opportunity to meet up with other Kewites. I have been fortunate in the vast range of landscape commissions that I have received but those that give me the greatest satisfaction are the ones in the public domain. These have included social housing in Southwark, a community farm in Surrey Docklands, a winery in Shrewsbury, Aberystwyth University, special needs schools in Snowdonia and work on the National Garden Festivals. At the NGF in Ebbw Vale I successfully established a large grove of *Araucaria araucana* on the vast hills of blast furnace debris much to the chagrin of the festival organisers. I have also managed to slip in a few Chelsea Show Gardens! In 2003 I was honoured to be nominated for a special Landscape Institute Award, presented to the landscape architect who has contributed the most to the Welsh landscape over the last 25 years.

I promote the arts and science horticulture and landscape through my work, and this has led me into academia and education. I have been a studio tutor at the Bartlett School of Architecture, part time senior lecturer in art, design and landscape at Glyndwr University, external moderator for the horticulture and landscape design degree courses at Harper Adams University, landscape design course tutor at the Welsh College of Horticulture, schools mentor and role model for the Welsh Governments Big Ideas programme, sat on various Landscape Institute technical committees, chaired the Landscape Institute Wales committee and was vice chair of the Board for Oriel Davies Gallery. I also continue my role as external examiner in landscape design and construction on the Kew diploma Course and I currently mentor landscape architect students both through my office and with the Landscape Institute. I feel that the Kew Guild has much to offer to young people in helping them develop their careers and opening up new opportunities. Floreat Kew.

David Simpson President Elect

Dave was born in Lancaster but spent his formative years in the suburbs of Preston. He is very proud of his north-western roots even though he has spent over half his life in London. Although his upbringing was very suburban, he developed early interests in plants, wildlife and the countryside, with frequent outings to the Lake District and Yorkshire Dales. Childhood inspirations was a set of picture cards collected from packets of Typhoo Tea depicting British wild flowers and a copy of the Observers Book of Birds. Along with steam trains (!) these interests have been maintained and enjoyed to the present day.

Dave graduated with a BSc in Botany and Forestry from Bangor University in 1977 followed by an MSc in Plant and Fungal Taxonomy at Reading University in 1978. He then went back north to Lancaster University, working part time as an herbarium curator while researching for a PhD. A postdoc at Trinity College Dublin followed (where he met Rose, his wife, who is also a Kew botanist) and then appointment as a plant taxonomist at Kew in 1985. His career at Kew saw him progress to Keeper of the Herbarium, until that role was abolished in the 2014 Science restructure. His final role before retirement in 2015 was Head of the new Identification & Naming Department. He has also been actively involved in teaching and PhD supervision, with 23 students awarded PhDs.

Dave's research interests are focused on plant taxonomy and especially on Cyperaceae

(sedges). He has published extensively on this family, discovering and describing many new species. Kew has afforded wonderful opportunities for travel and he has visited every continent except Antarctica. Before Kew he spent two summers in Greenland. His work at Kew has focussed on Southeast Asia, with particular interests in Thailand and Indo-China. Retirement has allowed him to return to botanical research and current projects include writing taxonomic accounts of Grasses for the Flora of Thailand and Sedges for the Floras of Singapore, Peninsular Malaysia and Cambodia, Laos and Vietnam. He is still actively involved with Kew as an Associate Editor of its flagship science journal *Kew Bulletin*.

Beyond Kew Dave has been a Visiting Professor at Trinity College Dublin and Khon Kaen University (Thailand), and an Adjunct Professor at the University of New England. Currently, he is a Visiting Research Fellow at Trinity College Dublin and a member of five editorial boards, including the Flora of Thailand and Thai Forest Bulletin. Dave and Rose live in Kingston upon Thames and enjoy meeting friends old and new through both Kew and the Kew Guild.

Harold (Graham) Heywood Vice President



Graham secured his first job as apprentice horticulturist with the firm of G W Yates and Son, Seedsmen and Nurserymen who had extensive nurseries at Plumley near Knutsford and three retail shops in central Manchester. Around two and a half years later, he began formal training on a private estate near East Grinstead on a scheme called British Boys for British Horticulture (managed in conjunction with the YMCA). After completing this, he secured a place as apprentice gardener at Bangor University (attached to the Department of Botany), where he spent the next three years.

Graham entered Kew as an improver in March 1965, for the start of the first year of the new three year Diploma Course. During his time at Kew, he was also a member of the Kew Cricket Team during a couple of seasons and a member of the Mutual Improvement Society. He also led the debate (Kew/Wisley debating society) into capital punishment in 1966. On leaving Kew in September of 1968 his first post was that of Technical Assistant in the recently formed Leisure Services Department of Teesside County Borough Council. In 1972 he secured the post of Deputy Parks and Cemeteries Superintendent with Warrington Borough Council. In 1977 Graham secured the post of Deputy Director of Parks and Recreation at Bolton. Graham retired from local Government service in 1998. For the next two years, he was a part time lecturer in Leisure Services Studies on the BSc Hons. course at Salford University and in 2000 commenced eleven and a half years as Deputy Chief Officer with a local charity.

Nowadays, he spends most of his time as a volunteer Trustee, helping to run a local charity that supports parents and carers of people (18+) with autism spectrum conditions. He is actively involved in his local Church and in his spare time enjoys reading biographies, classical music and tending to his garden. Graham has been an active member of the Guild for some time, attending Committee meetings and both attending and organising Kew Guild events and has been a frequent contributor to the Guild Journal. He is excited to take on this extra responsibility with his usual level of enthusiasm and dedication.

Charitable Incorporated Organisation (CIO) Trustees

As part of the CIO change, during September 2018 at the Kew Guild AGM, the following Trustees were elected: Margaret (Jean) Griffin, Alan Stuttard, Stewart Henchie, Timothy Upson, Harold (Graham) Heywood, Chris Kidd, Tony Overland, Peter Styles, David Simpson.

Although we have always had Trustees and Committee Members the required legal change to just Trustees as part of the new CIO will benefit the Guild in greater efficiency and a tighter working group to serve the membership. The Trustees will still be supported by ex officio, non-voting members and these include, but are not exclusively limited to Secretary, Treasurer and Journal Editor. We also rely on our loyal support members to assist us in the continuance of the Kew objectives.

At every AGM of the Kew Guild one third of the Trustees will retire from office. The Trustees will remain in post for one year, and those Trustees who have been longest in office since their last appointment will retire on rotation. The Trustees can appoint new Trustees based on nominations received and considered from the membership. We have elected to have a maximum of nine Trustees. The positions of President, President Elect and Vice President will be appointed from Trustees as required by the CIO.

Minutes of the 2018 Annual General Meeting of The Kew Guild held on 8th September 2018 The Mansion, Wakehurst Place, West Sussex

Those present

Committee:

Jean Griffin (President)	Stewart Henchie
Alan Stuttard (Immediate Past President)	Graham Heywood
Peter Styles (Vice President)	Pamela Holt
Sylvia Phillips (Membership)	Tony Overland
Sara Arnold (C. Secretary)	Leo Pemberton
Linda Baharier (V. Treasurer)	Martin Sands
Chris Kidd (Award Scheme Chairman)	David Simpson
Jonathan Rickards (Website)	Tim Upson
David Hardman	

Members:

Jenny Edmonds	John Isaac	Martin Sands
Tricia Fisher	Colin Jones	Martin Staniforth
John Gaggini	Reg Leach	David Taber
Allan Hart	Jill Marsden	Paul Tompsett
Carol Hart	Brendan Mowforth	Richard Ward
Tom (Albert) Wood		

Guests:

David Edmonds	Julian Heywood	Veronica Priestley
Andrew Fisher	John Medhurst	Wendy Staniforth
Janette Gaggini	Jan Overland	Diana Stuttard
Joan Hart	Claire Pearce	Chantal Taber
Eira Heywood	Brian Phillips	Davina Wood

Apologies for absence

Committee:

Graham Burgess
David Cutler
Sal Demain

Alex George
Bob Ivison
Jim Mitchell

Susan Urpeth
Sparkle Ward (Editor)

Members:

Begona Aguirre-Hudson
Richard Bisgrove
Stephen Butler
Stuart Cave
Mark Chase
Derek Coates
Marcella Corcoran
Raymond Evison
Hugh Flower
Clive Gordon
Jenny Grundy

Judy Hancock
Colin Hindmarch
Bryan Howard
Roy Jones
Christine Leon
Helen Marriage
Brian Matthew
David Matthewman
David Morgan
Simon Owens
Rod and Jean Peach

Brian Pitcher
Clive Popham
Udai Pradhan
Graham Ross
Tony Ross
Tony Schilling
Shirley Sherwood
John Simmons
Colin Webster
Joan Woodhams

01.18 Welcome by the President Jean Griffin

The President opened the meeting at 2pm and thanked everyone for coming. There has been a good turnout.

Jean thanked members for electing her as President for this year.

02.18 Apologies for Absence

There were numerous apologies for absence (as noted above).

03.18 To approve the minutes of the Annual General Meeting of the Kew Guild unincorporated charity (registered charity number 306064) of 9th September 2017 as printed in the Journal, Volume 17 Number 122 at pages 135-147 and as previously distributed with the Notice.

04.18 Matters arising from the minutes not on the agenda

Allan Hart asked if the minutes could be circulated to members after AGM and not just printed in journal. SA to bring this to next committee meeting.

Proposed: Graham Heywood, Seconded: Sylvia Phillips.

Decision: Minutes approved and signed by Jean Griffin as a true record of the meeting.

05.18 Volunteer Treasurer's report – Linda Baharier – Financial statements printed in the Journal at pages 243-244.

Linda ran through her report.

The accounts for the year ended 31.12.2017

The restricted funds increased by £14,589 and the unrestricted funds increased by £41,708. While interest rates have remained low the value of our investments increased due to a

steady upward trend throughout the year, but this could be more volatile in 2019 due to the world market and Brexit.

Income in 2017 totalled £46,881 of which £9,567 was from subscriptions, £21,937 from our investments and £11,435 from donations and £3,942 from other. We are very grateful to the Philip & Granville Trust for their kind donation of £1,420, and to Joan Woodhams for the £10,000 legacy to be given as an award of £1,000 per year for people studying Tropics and Tropical plants. This she has presented in memory of her late husband and his interest in this field, so it will be known as the John Woodhams Award.

Awards and prizes of £11,304 were made. £4,842 was spent on producing of the Journal, which was an excellent standard. The Website cost this year was £1,169. The membership database is more as it has required some work this year, so the charge was £1,496. To go over to Direct Debit, we need to look at third parties, and there will be cost implications to this; this is because we have been advised that only large companies/charities with a turnover of £1.5 million are allowed by banks to do their own direct debits. So, the Trustees have charged the Finance Committee to look into this.

Governance costs which are now called Other Expenditure and Administrative Costs were £7,814 this year, of which £2,099 was for secretarial costs and £501 was for the archivist.

There were unrealised gains on the Guild's investments of £52,062, so the market performed well for the Guild.

The endowment funds are invested in the Charities Official Investment Fund Units. £134,864 in the endowment funds, £104,242 in restricted funds, £408,634 in designated funds and £116,186 in the unrestricted general fund have been carried forward to 2018. I would ask you to approve these accounts.

There have been some troubles with the database which will need to be addressed by the committee in the coming year.

Attachments to this report: Signed page A 2017 Accounts.pdf, Signed page B 2017 Accounts.pdf, KG Independent Examiners Report 2017

Proposed: Martin Staniforth, Seconded: Leo Pemberton.
Decision: Report and the annual accounts of 2017 approved.

06.18 Update on transfer of operations to the CIO (Charitable Incorporated Organisation), including explanation of the new rules and streamlined Board of Trustees for the 'old' charity. Presented by Jean Griffin.

The President ran through the frequently asked questions to clarify to members:

Why are there two AGMs this year?

This is part of the incorporation/transition process the Guild has been going through the last couple of years. All Guild operations have now transferred to its successor charity, the CIO, so this will be the last AGM for the OLD Guild; all future AGMs will be of the CIO. The transfer happened on 16 August 2018.

We need to hold an OLD Guild AGM this year just to go through some final administrative steps in relation to the transition process.

Is the OLD Guild still operational?

No; all Guild operations transferred to the CIO on 16 August 2018. The OLD Guild is now just a “shell” charity, with no assets.

So is the OLD Guild going to be dissolved?

Eventually, but not straight away. After obtaining legal advice, the trustees decided to keep the OLD Guild around for a period – e.g. a few years – to ensure that any legacies given to the OLD Guild in the meantime are safely received by the CIO and not lost. This is because of a well-documented technical problem with the charity legislation in this area. Many incorporating charities adopt this approach.

Are the Charity Commission ok with this approach?

They should be – charities often decide to keep the old shell charity alive for a while after incorporation for this reason and the Commission are happy to agree to that. There is a possibility that the Commission will request that the OLD Guild is dissolved, in which case the trustees may need to take that step. However we will try to ensure the OLD Guild is kept around for at least a period from now, to address the potential legacy issue.

Why do we need to make changes the OLD Guild rules (if it’s just a shell)?

This is just to make management of the shell easier and more efficient for the Guild.

The rules take out some things the OLD Guild no longer needs, e.g. a requirement for an AGM, Committee elections etc – again, these are no longer needed because all of this will happen in the CIO in future. The changes also allow the CIO to be appointed as the OLD Guild’s sole trustee going forward, which again will help the Guild manage the shell in an efficient way.

Do I need to worry about the changes?

No – again, this is all just admin in relation to the OLD ‘shell’ Guild, since all Guild operations have been transferred to the CIO.

How about my membership?

All memberships have automatically transferred to the CIO, with all current benefits. The only thing which will need to change in due course is your direct debit setup, now that you will be paying your membership fee to the CIO not the OLD Guild going forward.

Also, now the OLD Guild is a non-operational shell, everyone will stop being members of the OLD Guild – except for three selected individuals, which are required as a bare minimum. For ease of admin, these three will be Jean Griffin, Peter Styles and Tony Overland for the time being.

Why is there a motion for everyone to resign their membership (except for 3)?

As explained above, this is just to formally reduce the membership of the OLD Guild down to a small number so the shell can be managed easily going forward and, when the time comes, be dissolved straightforwardly. Again, all members have transferred to the CIO, which has taken over all Guild operations.

What about the OLD Guild Committee? I see there are resignations mentioned in the agenda.

As explained above, for ease of admin for the Guild, the CIO will become the sole trustee of the OLD Guild while it is kept alive as a shell. For the CIO to be the sole trustee, all the other Committee members need to resign. The CIO will be formally

appointed as the sole trustee after today's AGMs.

Martin Sands asked whether advisors need to resign. The President responded that in the future advisors will be invited to meetings on an ad hoc basis as and when they are needed.

07.18 New rules for approval (as previously distributed). To consider, and if deemed fit, pass the following motion:

That the draft rules tabled for consideration at the annual general meeting 2018 be and are hereby adopted as the rules of the Kew Guild in substitution for, and to the exclusion of the Kew Guild's existing rules.

Proposed: Chris Kidd, Seconded: Graham Heywood.

Votes for: 30

Votes against: None

Abstain: None

Decision: Approved

08.18 Resignation of members. All members of the Kew Guild automatically became members of the CIO as part of the transfer of operations to the CIO. In this context, to consider, and if deemed fit, pass the following motion:

That all members of the Kew Guild resign as members of the Kew Guild with immediate effect, except for the three members to be designated by the Trustees.

Proposed: Tom (Albert) Wood, Seconded: Martin Sands.

Votes for: 30

Votes against: None

Abstain: None

Decision: Approved

09.18 Acknowledgement of retirement of Trustees

The President thanked all of those Trustees who have contributed so much to the running of the Guild. There was a round of applause.

10.18 Any Other Business

Kew Guild Archives Report – Astrid Purton

Richard Ward informed members that Astrid had completed the project she was contracted to do but had unfortunately now left the Guild. Richard will be meeting with a potential new Archivist and will report to the first meeting of the new CIO.

Martin Staniforth drew the attention of the meeting to a discrepancy in the date to which subscriptions should be renewed. This is referring to the new Constitution and this point will be deferred to the new CIO.

The President proposed that the Guild's lawyer should be made aware of this.

The President thanked everyone for coming and dissolved the last meeting of the Kew Guild, charity number 306064 at 14:23. These minutes were recorded as a true record of the meeting and signed by the President, Peter Styles.

Minutes of the 2018 Annual General Meeting of The Kew Guild CIO held on 8th September 2018 The Mansion, Wakehurst Place, West Sussex

Attendance: Trustees

Peter Styles (President)

Jean Griffin (Immediate Past President)

Chris Kidd (Award Scheme Chairman)

David Hardman

Stewart Henchie

Graham Heywood

Pamela Holt

Sylvia Phillips (Membership)

Tony Overland

David Simpson (Data Protection Officer)

Alan Stuttard

Tim Upson

Those in red are retiring at this meeting and those in blue are incoming trustees subject to approval. See Minute: COI 2018-19.015.

Committee:

Sara Arnold (C. Secretary)

Linda Baharier (V. Treasurer)

Leo Pemberton

Jonathan Rickards (Website)

Martin Sands

Members:

Jenny Edmonds

Tricia Fisher

John Gaggini

Allan Hart

Carol Hart

John Isaac

Colin Jones

Reg Leach

Jill Marsden

Brendan Mowforth

Edward Neighbour

Martin Staniforth

David Taber

Paul Tompsett

Tom (Albert) Wood

Guests:

David Edmonds

Andrew Fisher

Janette Gaggini

Joan Hart

Eira Heywood

Julian Heywood

Liz Kidd

John Medhurst

Jan Overland

Claire Pearce

Brian Phillips (Voluntary Events Co-ordinator)

Veronica Priestly

Wendy Staniforth

Diana Stuttard

Chantal Taber

Davina Wood

CIO 2018-19.001

Welcome by the President

The President welcomed everyone to the first Annual General Meeting of the Kew Guild CIO.

CIO 2018-19.002

Apologies for absence

Trustees:

Susan Urpeth

Committee:

Graham Burgess
David Cutler
Sal Demain

Alex George
Bob Ivison
Jim Mitchell

Sparkle Ward (Editor)

Members:

Begona Aguirre-Hudson
Richard Bisgrove
Stephen Butler
Stuart Cave
Mark Chase
Derek Coates
Marcella Corcoran
Raymond Evison
Hugh Flower
Clive Gordon
Mike Griffin
Jenny Grundy

Judy Hancock
Colin Hindmarch
Stan Hitt
Bryan Howard
Roy Jones
Christine Leon
Helen Marriage
Brian Matthew
David Matthewman
David Morgan
Simon Owens
Rod and Jean Peach

Brian Pitcher
Clive Popham
Udai Pradhan
Graham Ross
Tony Ross
Tony Schilling
Shirley Sherwood
John Simmons
Colin Webster
Joan Woodhams

The President opened the meeting at 2:24pm. There were 30 voting members present at the meeting.

CIO 2018-19.003 Confirmation of transfer of operations from Kew Guild unincorporated charity to the CIO

Further to the previous AGM, members were asked to vote to confirm their agreement of the transfer of operations from the 'old Guild' to this new CIO.

Proposed: Graham Heywood, Seconded: Stewart Henchie. Votes for: 30

There were no objections or abstentions. Decision: Motion Carried

CIO 2018-19.004 Notice of death of members

Members who passed away during the 2017-18 Guild year are: Margaret Benham, Viscount Michael Blakenham (ex RBG Kew trustee), John Brookes (Honorary Fellow), Geoff Collins, John Halhead, Norman Hickman, Michael Lycett and Ron Rule. Members present stood for a minute's silence in honour of those passed.

CIO 2018-19.005 Consultant Secretary's report – Sara Arnold

The Kew Guild CIO met three times during 2018, the first meeting of the new CIO being in January. Meetings were well attended, and the meetings were quorate in accordance with the new CIO (three or one quarter of trustees).

It has been a privilege to work with Jean, who has worked tirelessly to get everything in order so that the transfer to the CIO went smoothly. It has been a hard year for the members involved in the CIO and I would like to thank Jennifer Alsop for being the Guild's Guru on all things CIO!

Proposed meeting dates for the new committee: Monday 15th October, Tuesday 11th December, Wednesday 6th February, Thursday 11th April and Friday 7th June.

CIO 2018-19.006 Voluntary Treasurer's report – Linda Baharier

Linda asked members present for their approval to appoint an independent examiner or auditor for the annual accounts of 2018.

Proposed: David Simpson, Seconded: Martin Staniforth. There were no objections or abstentions. Decisions: Approval to appoint an independent examiner or auditor for the annual accounts of 2018.

CIO 2018-19.007 Membership Secretary's report – Sylvia Phillips

Membership Type		2018	2017
Standard	Kew Staff	35	40
	Other	219	224
Kew Students		35	37
Library		1	1
Life		2	3
Honorary	Fellows	16	17
	Members	1	3
Total		309	325

New standard members 2017 – 2018 (9)

5 staff: Herbarium	Charlotte Couch
Economic botany	Kim Walker
Horticulture	Solène Dequiret (Palm House)
	Michael Dvorak (Arboretum)
2 ex-Kew	Nick Johnson (Manager of Public Glasshouses)
	Gerard Henry
	Peter Beagan
2 Friends of the Guild	Jean and Rod Peach
	John Isaacs

Returning lapsed members (5)

John Aldous, Douglas Brown, Ian Gayton, Anthony Rose, Anna Saltmarsh

Honorary Fellows (16)

Reduced by death of John Brookes, who died in March

Resignations (4)

Jennifer Chan	Administrator in School of Horticulture
Louise Hansen	Estates
Zena Kolbe-Saltzman	Apprentice
Ailsa Kemp	Diploma Student

Life Members

1 life member died in Sept. 2017: Margaret Benham, Norfolk, at Kew 1944 - 1945

2 current life members: Eric Grant, Windsor, at Kew 1947 - 1948
Esme McCulloch, Australia, at Kew 1937 - 1944

Students

Only 8 Diploma Students enrolled in September 2017 and currently 16 are Guild members. They are now much outnumbered by other types of student at Kew: apprentices, Specialist

Certificate students, sandwich students, MSc and Ph.D students.

Deaths

5 deaths, as already stated.

Members present discussed the membership rules, particularly Honorary Members. Under the old rules, people who have helped the Guild were not entitled to become full members, instead being offered Honorary Membership. Richard Ward asked if the Guild should now ask those Honorary Members if they would like to become full members. Sylvia said one Honorary Member has now had 10 years free membership.

Action: SA to add to agenda for first meeting of 2018-19. Proposal: To accept the membership report. Proposed: Chris Kidd, Seconded: Stewart Henchie. There were no objections or abstentions. Decision: Report approved.

CIO 2018-19.008 Events Co-ordinator's report – Brian Phillips

Summary

There has been a general misunderstanding of the role of the Events Co-ordinator. For 2016 - 2017 Pamela Holt, after having been Events Officer for many years, agreed for a further year to act as the Events Co-ordinator. Alan Stuttard approached members to organise an event and then Pamela confirmed dates, ensured they did not clash, and sent out the notices. The Events Co-ordinator role was the one for which I volunteered. However, without a significant number of volunteers to organise events, no comprehensive events programme could be published.

Two events took place:

Bodenham organised by Tony Overland

Isles of Scilly organised by Brian Phillips (myself)

Events (actual)

Bodenham - October 2017 Organised by Tony Overland.

Budgeted for minimum of 15 people

Registered 22

Total cost £173

Surplus to Guild funds £25

Isles of Scilly (19th to 23rd April 2018) Organised by Brian Phillips (myself)

Targeted for 25 people at budget price of £640 / person

Interest flyer sent August 2017 and within 24 hours over 27 had registered

Reserve list with further 22 names added

Final registered number 26 (of which 4 came from reserve list)

Final cost £17,679.53 (Average £680 / person)

Surplus to Guild funds £77.47

Events (proposed, but not run)

Gardens of South Hertfordshire - June 2018 Proposed by Bob Ivison

Date circulated early March 2018

Full Information sent end April 2018

Only 3 registrations

5 apologies noted already committed on the dates

Cancelled

Bonn - Autumn 2018

Suggestion from Markus Radscheit in Germany

Future of Events

Roles: 2017 / 2018 has shown that if the Guild is to run events then there should be a proactive member of the committee to approach / persuade members to run an event. This is best undertaken by a person who is actually the Events Officer, it is not the role of an Events Co-ordinator.

Advance programme: An outline events programme, with dates, needs to be published before Christmas so that members can at least have the dates in their diaries.

Finance: On-line access for the Treasurer to see Bank statements and to pay expenses by direct bank transfer is essential for the efficient running of events.

Example: All the Isles of Scilly funds flowed through the Guild's bank account. However, because the Treasurer did not have on-line access to the bank statements, it was impossible to confirm incoming payments in a timely manner. Expense payments (e.g. to myself as organiser), had to be via dual signatories on cheques. This necessitated posting the cheque between signatories, and then posting to myself. I then had to pay the cheque into my bank with the funds not being available until a further four days. In one instance event expenses paid on my Credit Card were not re-reimbursed until after the card payment was due. Hence on-line banking for the Treasurer is essential.

Members present thanked Brian for a very successful Scilly Isles trip and gave him a round of applause.

Brian is willing to continue in the role if nobody else comes forward.

Proposal: To accept Brian Phillips continuing in the role as volunteer events coordinator. Proposed: Sylvia Phillips, Seconded: Martin Sands. There were no objections or abstentions. Decision: Approved.

CIO 2018-19.009

Editor's report – Sparkle Ward

Sparkle had given her apologies and sent her report prior to the meeting.

The Events of 2017 Journal was published in time for the Kew Guild Dinner on 23rd May 2018, at a cost of £4,440 for 500 journals (including book proofs) including the cost of printing and Editors fee. There were 12 extra pages. The cost of the 2015 journal in comparison was £6,519, and in 2016 £4,220. Editors additional extra costs were £59.94 for envelopes.

The Editors fee increased this year from £2,000 to £2,200 - whilst printing costs have reduced, the time expended by the Editor has increased due to more content/pages including the inclusion of photographs (previously done by the printers), etc.

As always, thanks are given to contributors and others for their voluntary input, including Alex George, David Cutler, Graham Burgess, Pamela Holt and also to Sara Arnold as Secretary.

I invite Guild Members to make suggestions for the cover of the Events of 2018 Journal

to me by 30th December 2018. Please could Members send in their News of 2018, be it a new job, current developments in their field, career, family or something else. Please get in touch to discuss any ideas for articles that you may have.

Richard Ward encouraged members to contact Sparkle or himself with News of Kewites, photographs of the AGM weekend and articles for the Journal.

CIO 2018-19.010 Award Scheme report – Chris Kidd

The KGAS met twice during the year to consider applications for awards and the nomination for the George Brown Memorial Award.

Awards - MARCH

A total of £10,908 from the five named Funds and General Funds was available at the meeting to be made as awards. Thirteen applications had been made, eight were successful after individual discussion. Of the five unsuccessful applications, three were unable to be considered as under the rules of the Kew Guild the members had not fulfilled their period of prior membership (one year).

Ashleigh Davies, Training in Orchardng/London/12 days, Awarded £277.80 from Dallimore Fund
 Alison Legg, Botanical tour/ Kyrgyzstan/2 weeks, Awarded £700 from Redman Fund
 Aaron Marubbi, Beth Chatto Symposium/Essex/2 days, Awarded £225 from General Funds
 Ana Oliveira, Tour of Historic Gardens/Kyoto/2 weeks, Awarded £1000 from General Funds
 Andrea Topalovic Arthan, Wildflower meadows tour/ Kyrgyzstan/2 weeks, Awarded £700 from Redman Fund
 Kathryn Bray, Botanical expedition/ British Columbia/2 weeks, Awarded £700 from General Funds
 Richard Choksey, Community Gardens Study/USA/2 weeks, Awarded £700 from General Funds
 Sarah Demain, Succulents in design/USA/2 weeks, Awarded £1000 from Ian Leese Fund

Of a total fund availability of £10,908 for 2019, £5302.80 was awarded.

Awards – JULY

A total of £5605.20 from the named Funds and General Funds was available at the meeting to be made as awards. Four applications had been made, all were successful after individual discussion.

Rebecca Hilgenhof, MSc Field study course/Columbia/15 days, awarded £1,000 from John Woodhams Award
 Hugh Fletcher, Second week of travel to study Carya, Juglans, Quercus and Castanea/USA/1 week, awarded £1,000 from Redman Fund
 Harry Baldwin, Quercus field study and conference/USA/2 weeks, Awarded £1,000 Total, Dallimore (£278) General (£722)
 Mathew Rees, MSc in Biodiversity and Taxonomy of Plants/Edinburgh UK/1 year, awarded £1000 from General Funds.

Of a total fund availability of £5605.20 for July 2018, £4000 was awarded, leaving £1605.20 remaining.

Fellowship of the Kew Guild

Honorary Fellows Nominations were discussed in 2017 and carried over to the March meeting. After much discussion the committee decided to decline one nomination and unanimously accept the nomination of the second. It was felt that Mike Fitt, OBE offered

a wealth of knowledge, experience and potential for the furtherance of the Kew Guild's aims. Further, it was strongly suggested that as the Kew Guild progresses into its future as a CIO, consideration be given to offering officer, if not Trustee, roles to Fellows.

The Awards Committee proposed the nomination to the Main Committee for Mike Fitt OBE to be elected as Fellow of the Kew Guild, this was unanimously supported. Mike has accepted and will attend the Annual Dinner in 2019.

George Brown Memorial Award

Nomination was received from David Barnes for Marcella Corcoran to be awarded the George Brown Memorial Award. The Committee approved this unanimously. Chris Kidd as Chair of Awards Committee has written to Marcella formally. Award to be accepted at Kew Guild dinner 2019.

Changes to Awards Committee Function

Jean Griffin spoke at length to the Awards Committee about the potential changes to the operation of the Committee. Subsequent comments and suggestions by Martin Staniforth about the awards scheme application form will be taken on board at this review.

Sylvia Phillips suggested putting information about awards on the Kew intranet, Jean Griffin replying that as the Guild is now open to anyone, we need to reach as big an audience as possible. Action: SA to put this on agenda for next meeting.

For clarification, awards can now be made to members and non-members and welcomed applications in line with the objectives of the CIO.

Members discussed whether the Awards Scheme should operate by only awarding interest amounts, so that capital does not diminish, i.e., keep the present day value and distribute any interest sums due. This would make some awards last in perpetuity, rather than lasting only a few years before it is spent. [Note - Information provided after the AGM for clarification - Currently for all but one award, it is the annual dividend income and carried forward accrued income that is spent, the capital is not touched].

Action: The Awards Scheme Committee to consider structure of awards during the review.

Leo Pemberton added that students should be encouraged to apply for awards as this would then make further applications to other charities be possibly more successful.

Chris Kidd said he was indebted to Allan Hart for all his help and knowledge in this area.

Proposal: To accept the Award Scheme report. Proposed: David Hardman, Seconded: Leo Pemberton. There were no objections or abstentions. Decision: Approved.

CIO 2018-19.011 President's report – Jean Griffin

Where has this year disappeared to? The workload for the trustees has been consistent and labour intensive, at least on the fingers sending out and answering hundreds of emails in order to get the new CIO exact and ready for the next President to take over.

The year has seen us, as a Guild, renewing friendships and encouraging students to become more involved with the Guild. We need to be more proactive in finding interested members

who will see the Guild, not only as a yearly update in the Journal but a thriving and interesting association to belong to. With the new CIO we can spread our wings and get people to join from all areas of the gardening, scientific and botanic worlds thus enlarging our field of expertise and interest for the benefit of all.

The Scilly Isles visit proved that we can and should expand to other areas outside the historic membership of Kew and Wakehurst alumni and the Guild will benefit from this wider remit.

The Annual Dinner was a huge success following a slightly different set up to previous years, The two recipients of the Honorary Fellowships and the Kew Medal recipient all were suitably impressed with the evening. The disappointing thing for me was that there was not a representative from the Gardens to welcome them and our prestigious Guests.

The Changeover !!!

We could not have done the deed within the timescale allowed without the help of Tom Pratt our designated Charity Commission Lawyer. He, alongside Jen Alsop, has worked tirelessly in getting the work done to the satisfaction of the Charity Commission and the Trustees.

There is still more work to be done with reviews of the ways in which the Awards Committee will be administered in future as just one example. We need to be more involved with the School of Horticulture and with Wakehurst where, although it is our sister Garden, members are sadly lacking.

I have enjoyed my Presidential year despite the many pitfalls and thank wholeheartedly Sara Arnold and Linda Baharier who, along with Jen and my fellow Trustees, have kept me on the straight and narrow path without losing my sanity! I wish Peter Styles every success in continuing the process of making the Kew Guild a forward-thinking organisation whilst retaining its historic aims. I thank all those who had the courage to nominate me!

CIO 2018-19.012

Results of Prize Day

Prize day was held on Friday 7th September in the School of Horticulture. Jean Griffin attended. Jean was disappointed that the Guild was not named when the prizes were given out, although they are printed in the booklet given out on the day.

The Matilda Smith Memorial Prize: Olivia Steed-Mundin

The George Brown Prize: Loredana Vacareanu

The Kew Guild Individual Study Prize: Olivia Steed-Mundin

The Kew Guild Cup: Eliot Barden

CIO 2018-19.013

Annual subscription rates

It is proposed that subscription rates will remain at £27 for Ordinary Members and £15 for Students for the year 2018-19.

David Taber asked if members can claim Gift Aid on the tax payable. Jean Griffin replied that this is on the list of things to do for the new Constitution and will be addressed during the next year.

Action: SA to add this to agenda of the first committee meeting of 2018-19. Proposal: To accept the subscription rates are unchanged. Proposed: Chris Kidd, Seconded: Pamela Holt. There were no objections or abstentions. Decision: Approved.

CIO 2018-19.014 Retiring Trustees

Members thanked the following retiring trustees for their support: David Hardman, Pamela Holt, Sylvia Phillips, Susan Urpeth.

CIO 2018-19.015 Election of Trustees

The following two prospective Trustees were approved by the committee: Peter Styles, David Alan Simpson.

Fit and Proper Persons checks have been carried out and the Secretary confirms that both are fit and proper persons to be elected as Trustees of the Kew Guild CIO.

Proposal: To accept retirement and election of Trustees. Proposed: Leo Pemberton, Seconded: Colin Jones. There were no objections or abstentions. Decision: Approved.

Trustees of the Kew Guild CIO for 2018-19 are therefore: Margaret Jean Griffin, Stewart James Henchie, Harold Graham Heywood, Chris David Andrew Kidd, Frederick Anthony Overland, David Alan Simpson, Alan James Stuttard, Peter Styles and Timothy Upson.

Total number NINE Trustees for the year 2018-19.

CIO 2018-19.016 Any other business

Election of committee members:

Jean Griffin asked members present to nominate candidates for the following posts:

President Elect for 2019-2020: There have been two nominations: Bill Bessler and David Simpson and Jennifer Alsop has been nominated for Vice President. Allan Hart commented that these posts should have been nominated and approved ready for the AGM. Peter Styles responded that this had been overlooked and that Trustees will carry out the nomination and election process for the first meeting of the new year.

Honorary Secretary
 Honorary Treasurer
 Membership Secretary – Nomination of Jean Griffin
 Honorary Journal Editor
 Events Officer

There were no nominations, other than Jean Griffin as Membership Secretary and therefore members were asked to approve the following remaining in place:

Consultant Secretary: Sara Arnold
 Voluntary Treasurer: Linda Baharier
 Journal Editor: Sparkle Ward
 Voluntary Events Co-Ordinator: Brian Phillips

Proposal: To accept the new Membership Secretary. To accept Sara Arnold, Linda Baharier, Sparkle Ward and Brian Phillips remaining in their roles. Proposed: David Simpson, Seconded: Graham Heywood. There were no objections or abstentions. Decision: Approved.

CIO 2018-19.017 Inauguration of new President

Jean invited Peter Styles to the front of the room and presented him with the President's ribbon. Peter reciprocated with the Past President's pin for Jean, along with a big bunch of flowers. The new President thanked everyone for coming and for their continued support of the Guild. Jean would be a hard act to follow!

Peter said he was honoured to become President for the 2018-19 year and hoped that the year would bring more interaction with students and Kew in general and to carry on the hard work on the constitution and rules. He added that he had attended the Students Award Ceremony at Kew yesterday and the Director in his address had particularly mentioned that the Kewites he encountered on his many trips abroad gave great store to the continued lifelong friendships that they forged at Kew. This is why the work of the Guild is so important.

Martin Sands asked if the present system of a one-year presidential term was long enough. Jean explained, that the term of office, from Vice President, President and then to Immediate Past President, allows for the continuation.

CIO 2018-19.018 Date of next Annual General Meeting

Saturday 7th September 2019, venue to be confirmed.

275
School of Horticulture
Presentation of Kew Diploma and Prizes
7th September 2018
Course 53

Tim Hughes welcomed those present to the presentation of Kew Diplomas, Kew Specialist Certificates, Kew Apprenticeships and a whole assortment of Prizes for 2018.

He then invited the Director **Richard Deverell**, to give his welcoming address.

Richard Deverell went on to say: “RBG Kew has a certain rhythm to its year – and the Graduation ceremony is, for me, one of the highlights of the year. It is an inspiring and uplifting experience to celebrate success and learning; to know that our students are embarking on fulfilling careers in Horticulture and, I hope, to retain always fond memories of their time at Kew.

Today we celebrate the graduation of the 10 students of Course number 53 of the Kew Diploma. The Kew Diploma has always been international in scope with this year being no exception; we have a student from Australia, Sweden and Romania.

We also celebrate the achievements of our 12 students completing the one year specialist courses and our six Kew horticultural apprentices. Each has worked extremely hard, and learned a great deal, to reach this point today. The Kew Diploma is an internationally respected degree-level qualification in botanical horticulture. Not only do these students know a great deal about growing plants – including a huge diversity of exotic and rare plants – but they also have a solid grounding plant science, taxonomy and conservation.

The Diploma is famously hard work. Indeed, all of our students have worked extremely hard to reach this point today, including making a vitally important contribution to the horticultural standards and daily running of these wonderful gardens here at Kew. Our graduating students and apprentices have all secured positions following their studies, either via employment, continued further education or have decided to take time out to travel.

As part of their course the students and apprentices have undertaken various travel scholarships around the world. These trips enrich their horticultural knowledge and often tie in with their dissertation studies. Further information on travel scholarships can be found in the Prize day programme. The Kew Diploma Students also undertake two field trips to Bangor in North Wales and Eastern Andalucía in Spain. These provide them with a wealth of hands-on experience in two contrasting landscapes. I know just how important and popular these courses are – many of the students tell me the week in Wales is the highlight of the three year course.

Thank you –

Nick Wray, our guest of honour, as nominated by our graduating students.

Marcus Agius for attending and, in due course, giving a vote of thanks.

Family and friends of the students and apprentices attending the event.

The many sponsors of the prizes.

The garden staff that help in developing the students and apprentices’ practical and theoretical skills.

The science staff that link in with the students’ studies either through project work of more formal lectures.

The library staff in assisting with their studies.

All the lecturers who deliver a whole wealth of subject topics during lecture blocks.

Our students today join an influential and global network of Kew horticultural alumni. I am struck, just how often, on visiting some of the great botanic gardens of the world to be shown around by someone whose first words are ‘I studied at Kew’. They then tell me just how much hard work the Kew Diploma was when they did it as if they are somehow still scarred by the experience! They sometimes add that it’s much easier now – this is emphatically not true!

But they also go on to tell me how important it was in shaping the entire trajectory of their horticultural career and how the friendships and networks they forged at Kew have endured and proved invaluable. May I urge you to make the best of this community – to be an active part of it and, of course, to stay in touch with RBG Kew.

And may I end by repeating my very sincere congratulations for all that you have learned and achieved on your respective courses. I want to congratulate you not just on what you have already achieved – but also for what I know you will go on to achieve in your careers in horticulture. We are very proud of our horticultural students. I would like ask everyone here today to join me in congratulating them for their hard work and completing their respective courses. For each of them, it is a day of great pride – deservedly so – and a tremendous achievement.”

Richard Barley, Director of Horticulture, Learning and Operations was then invited by Tim Hughes to give his introduction.

Tim Hughes, Head of the School of Horticulture, then began the presentation ceremony by saying:

“Graduation day is very much about a celebration of the students’ and apprentices’ achievements. It is an acknowledgement of their hard work in obtaining either the Kew Diploma, a Kew Specialist Certificate or a Kew Apprenticeship. For those graduating students and apprentices, this day marks the end of one chapter in your horticultural career but also the start of something new. We wish you well in your future careers, and hope you keep in contact with the School.

So, before I turn to the presentation of certificates and prizes, thanks must go to all our sponsors of prizes, many of whom are in the audience today – thank you. I would like to thank the commitment of Kew staff, visiting lecturers and examiners who continue to give tremendous support to the School of Horticulture.

I would now like to invite our Guest Speaker, **Nick Wray**, to make the presentations.

I shall first read out the awards and prizes, followed by the name of the recipient, in alphabetical order:”

Kew Diploma Awards

The Worshipful Company of Gardeners’ Prize for the 3rd year student achieving top overall academic and practical marks with English as their additional language. The F Nigel Hepper Cup in recognition of the highest achievement in plant identification assessments.

A Kew Diploma with Honours is awarded to: **Julia Andersson**

A Kew Diploma with Credit is awarded to: **Harry Baldwin**

The Alitex Glasshouse award, awarded to the student who has demonstrated the best practical performance during their work placements under glass.

The Kew Guild Cup for obtaining the highest marks in the 1st year vegetable plot project.

Along with the Kew Diploma with Honours is awarded to: **Eliot Barden**

A Kew Diploma with Credit is awarded to: **Leon Charalambous**

A Kew Diploma with Honours is awarded to: **Chris Clowser**

A Kew Diploma with Honours is awarded to: **Keegan Hickey**

A Kew Diploma with Credit is awarded to: **Mathew Rees** (unable to join us today)

The George Conrad Johnson Memorial Prize for the best overall performance on the Kew Diploma course

The Matilda Smith Memorial Prize given to the best practical student overall

The Fred Larkbey Cup awarded to the student achieving the highest marks in their practical work placements

The Worshipful Company of Gardeners' Prize to the student attaining the top overall academic and practical marks

The Kingdon-Ward Prize awarded to the student attaining the highest marks in their final-year dissertation

The Kew Guild Individual Study Prize for the person attaining the highest marks in their Systematic Botany Project

The Donald Dring and Gilbert Memorial Prize for the student attaining the highest marks in Entomology and the Crop Protection project

The Squire's Garden Centre Prize for the best overall performance in landscape studies

The Kew Gardener Prize to the top student in Amenity Horticulture

The Freda Howson Award for excellence in Ecology and Conservation

Along with a Kew Diploma with Honours is awarded to: **Olivia Steed-Mundin**

The George Brown Prize awarded to the top student in the Arboretum and Horticultural Services Section.

The Ashley Hughes Memorial Prize for the student showing most support and congeniality to their course colleagues.

And a Kew Diploma is awarded to: **Loredana Vacareanu**

A Kew Diploma with Honours is awarded to: **Sophie Walwin**

Kew Specialist Certificates and Apprenticeship Prizes and Awards

Kew Specialist Certificates in Display & Nursery Glass are awarded to:

Brie Langley

Kath Farrell

A Kew Specialist Certificate in Kitchen Garden Production is awarded to:

Olivia Vassilaki

Kew Specialist Certificates in Ornamental Horticulture are awarded to:

Amy Newsome

Max Guzzetta

Lawrence Lewis (unable to join us today)

Dan Rosenberg (unable to join us today)

A Kew Specialist Certificate in Propagation is awarded to:

Thomas Wilson (unable to join us today)

A Kew Specialist Certificate in Arboriculture is awarded to:

Se Oba-Smith

A Kew Specialist Certificate in Orchid Cultivation is awarded to:

Jenny Forgie

Certificates of Attendance are awarded to:

Bindu Chander

George Wheldon

(Both of whom are unable to attend)

The Historic Glasshouse apprentice with the best Collection Assignment prize

The Historic Glasshouse apprentice with the highest test results in Plant Identification prize

Along with a Kew Apprenticeship with Distinction is awarded to: **Jess Snowball**

The Historic Glasshouse apprentice with the best Work Journals and Plant Profiles Prize

Along with a Kew Apprenticeship with Distinction is awarded to: **John Myers** (unable to join us today)

The Horticultural Trades Association best practical apprentice

The apprentice with the best Collection Assignment prize

The apprentice with the highest test results in Plant Identification prize

The apprentice with the best Weed Project Prize

The apprentice with the best Work Journals and Plant Profiles Prize

Along with a Kew Apprenticeship with Distinction is awarded to: **Daniel Jones**

Kew Apprenticeship with Distinction is awarded to: **Sam Ward**

Certificates of Attendance are awarded to:

Ben Meumann

Cat Maclaren

(Both of whom are unable to attend)

Other awards and prizes

The Tom Reynolds' Prize for Plant Biochemistry and Physiology awarded to the person

obtaining the highest marks in this subject, which is a first year Diploma topic.

The Chartered Institute of Horticulture Prize for top 1st year student goes to: **Faye Adams**

Gardens Illustrated Prize awarded by the magazine to a Kew Diploma student, attaining

the highest marks in their first-year practical subjects. This prize goes to: **Charles Harpur** (unable to join us today)

The Metcalf Cup for the highest academic examination marks in the 2nd year of the Kew Diploma, goes to: **Richard Choksey**

The Sir Joseph Hooker Prize is given in recognition of the work carried out by the Chairman of the Kew Mutual Improvement Society. This prize goes to: **Kathryn Bray**

Tim Hughes then invited **Nick Wray** to say a few words.

Marcus Agius, Chairman of the Board of Trustees, gave a Vote of Thanks.

Leon Charalambous of Course 53 then gave the Student Vote of Thanks.

Tim Hughes then said in closing: “I would once again like to thank Nick Wray and everyone involved in making this special day come together. While there are too many people to mention individually, none of it would be possible without the patience and support of Jennifer, Kate, Denise and Martin, the staff of the School of Horticulture – so a big thank you to you and a thank you to Alice Taylor for today’s wonderful floral displays.

If I can ask, the audience to please remain seated while the Platform Party, Diploma graduates, Student and Apprentice graduates and Prizewinners follow Kate to the Grass Garden for photographs. Later on at 5 o’clock guests are invited to enjoy a tour of the Gardens on the Kew Explorer. The tour lasts approximately 35 minutes, departs from the Grass Garden. I would like to add my final thank-you to all of you for attending today and I hope you will join us at the School of Horticulture where afternoon tea will be served.”

Text ©Tim Hughes (apart from Richard Deverell’s welcoming address speech).

Kew Students Prizegiving - Group Photo
©RBG Kew





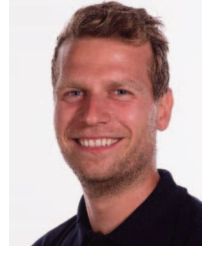
Michael Antonetti



Owen Griffiths



Michael Leach



Luigi Leoni



Francisco Lopez



Fionnuala McDermott



Amy Newsome



Mira-Marie Nübold



Georgia Sellars



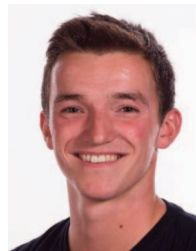
Charles Shi



Ignacio Silva de la Iglesia



Matthias Spall



Tim Stafford



Silke Strickrodt



Sam Ward

**Kew
Diploma
C56**

Student Report

by Rebecca (Bex) Lane

September 2018 saw the Graduation of Course 53, with world class pranks and an excellent leaving party gave the opportunity to initiate the August 2018 intake of apprentices. In September we welcomed Course 56 from around the world, pitting them against one another in the Clog and Apron Race, won by Charles Shi. This was followed by a well-attended BBQ in the Director's garden with staff and students from across Horticulture.



Charles Shi (R), with Richard Barley presenting the cup for the Clog and Apron Race with Course 56 in the background.

©RBG Kew

April 2018 brought another win for Kew in the annual Kew-Wisley race. The race was resurrected by Nichola Hankey in 2016, and this is the third consecutive year that Kew have won! Well done Richard Choksey and team.

October 2018 saw the start of the KMIS lecture series, run by the second year Diploma students each year. This year's student team, led by Chair Faye Adams has excelled themselves with a vibrant programme reflecting the interests and knowledge held by the Kew Diploma students. It has been a sell-out season, turning people away at the gates, to see a range of speakers from Kew's own Kit Strange, Alpine specialist, and Monty Don, whom some of you may know better as the 'Owner of Nigel the dog'. Course 54 reported back to the KMIS audience on their travel scholarships, sharing their knowledge of plants, gardens, and habitat conservation in Japan, Honduras, The Yukon, Singapore, Mozambique, Kyrgyzstan, Southern Appalachians and North East USA. Excitingly KMIS has re-instated the marking for the student travel scholarship lectures, with much thanks to the Horticulture Team for offering their time and support on Monday evenings to enable this to happen.

Course 55 have set up their travel scholarships for the coming year to New York, Armenia, Cuba, Nepal and USA. If anyone has any contacts or specialist knowledge that may be able to help them, please let us know.

In November the Second Years held the traditional Halloween Party, a chance to bring together staff members across Kew. The Theme was a Botanical Halloween, there were some spectacular costumes, including the Clockwork Orange and Japanese Knotweed.

C54's Alison Legg, who doubles her time as a pub Landlady of The Woodman in Dorset was recognised for some horticultural cross-over when the pub was voted Best Cider Pub 2018 by West Dorset CAMRA!

One of the highlights for Course 54 this year was the ecology field trip to North Wales. Under the guidance of Nigel Brown, they visited 13 different sites where they looked at their geological past, ecology and biodiversity.

In other news, the student mascot Matilda celebrated her first birthday and Bex Lane (Course 55) won first prize as a guerrilla gardener for her work on the Community Garden

in Chiswick. Very excitingly one of our team has been selected to run for England! (England Athletics ultra challenge, the 2019 Anglo Celtic Plate (ACP) 100k).

***Kew-Wisley Race** - Established in 1951, the race between the two world famous gardens has been traditionally held between competing teams from Kew and Wisley and ran continuously for 20 years. Teams from other horticultural institutions also entered from time to time. Revived after a long gap, over the history of the race Kew students have had the most wins with 2018 being no exception when the silver trophy was won by the Kew team. This year the race was run from Wisley to Kew with each team consisting of 7 runners who each run one leg of the 34km (21mile) route. It was an extremely hot day but a superb effort was put in to continue this annual tradition. - Pamela Holt.*

Kew Guild Events in 2018

Isles of Scilly

19th - 23rd April

by Sylvia Phillips

A group of 23 Kew Guild members, including our President Jean Griffin, were gathered in Cornwall on the morning of 19th April, keen to explore the remote Isles of Scilly. We were to fly there from Lands End airport, but an early morning phone call alerted us to a change of plan due to fog. Instead we were to make the three-hour voyage on the ship Scillonian III, leaving from Penzance dock. This was no problem for those of us who had spent the previous night in Penzance, but seven of our party were already at the airport. However, all was well in the end as the fog cleared by afternoon and they were able to fly out to join the main group. Some of us on the boat were lucky enough to catch a glimpse of a group of dolphins swimming nearby.

We were based on the largest island, St Mary's, staying in a converted 16th Century castle (Star Castle Hotel) on Garrison headland above Hugh Town. The castle was founded in 1593 and was very atmospheric; with splendid views down to the bay and across to the other islands. Our President even had a room built into the surrounding old stone ramparts which she happily said felt like a gardener's bothy! The food was exceptionally good, including much locally caught fish and seafood.

That afternoon most of us walked the one and a half miles through the lanes to the small Holy Vale vineyard set up by the hotel owner, Robert Francis. This is clearly run as a hobby, as they have not had a good grape harvest since 2014, but the wines are served in the hotel and we had a wine tasting at the vineyard, enjoying the sunshine and tranquil setting. Strolling back by a different route we went through the Carreg Dhu gardens, a shady oasis of fine old trees. One large silver-leaved tree had us all puzzled, so we took a few leaves to ask about it at Tresco Abbey Garden. On arriving back at the hotel there was time to relax and go for a swim in the hotel pool built inside a glasshouse, which ensured nice warm water.

The plan was that we should spend each of the remaining three days on a different island, with both an organised visit and time for members to explore on their own. Luckily we were blessed with fine weather for the whole of the trip, as this plan could easily have been ruined by stormy weather preventing the boats going out. We had our own boat reserved for each day, but all were small and open without any roof protection.

Day 2 was our day on Tresco Island, home to the famous Abbey Garden, renowned for its tender plantings which can survive outside nowhere else in the British Isles. The Gulf Stream and abundance of sunshine mean that many plants from the Mediterranean and

other warm temperate parts of the world can be cultivated in its 17 acres of terraced garden. We immediately saw a number of examples of the silver-leaved tree, which had puzzled us the day before. It turned out to be *Leucadendron argenteum* (Proteaceae) from South Africa. We were met by Mike Nelhams, the Curator, who kindly gave us a garden tour. Almost straight away we saw imported red squirrels, the greys not having reached the Scillies. The garden has many large palms, bamboos, tree ferns, Echiums, King Proteas, Cape Ericas and cacti. Particularly noteworthy were the species of Aeonium, with their large flat leaf rosettes, often growing in abundance on the old stone walls.



Our President 2018, with three past presidents. L to R: Tony Overland, Alan Stuttard, Jean Griffin, Jim Mitchell.

After lunch in the garden café members were free to spend the afternoon as they wished. Tucked away in a corner of the Abbey Garden is a fascinating collection of ships figureheads in the Valhalla Museum. These came from old shipwrecks and some were representations of real people. The path running along the east side of the island has views over the many rocks and islets towards St Martin's, and down to fine sandy beaches, deserted at this time of year. The path goes to the little hamlet of Old Grimsby, where a welcome ice cream is to be had. From there the north part of Tresco is covered in heather and gorse moorland, with the remains of old fortifications from the Civil War. Our return to St Mary's was from a different quay at a quite different part of the island, necessary because of the difference between high and low tide levels.

Day 3 was our day on St Martin's island, lying to the northeast of Tresco. Once again we landed in the morning at a different quay from where we would be departing at the end of the afternoon. We were met by Zoe Julian, who with her husband runs Scilly Flowers at Churchtown Farm, a business growing scented flowers in which orders are sent out in gift boxes by post. Most of our group set out to walk the half mile up to her farm, with those who would find the walk difficult travelling with Zoe in her vehicle. The morning was spent on a tour of the farm, comprising a number of small fields protected by tall hedges of *Pittosporum* and *Euonymus*. Their main crop is scented Narcissus, most of which had already been harvested, but they have recently started growing scented pinks as a summer crop, buying in plugs from a source on mainland Cornwall. The bulbs are grown on a five-year cycle, being dug up at the end of five years and the field put down to grass for three years to recover, when it is grazed by cattle. We were taken into the machinery sheds and shown the packing process. We were impressed by the way they have built up their niche market of scented floral gifts by post, and especially by the enthusiasm and energy of Zoe herself.

Lunch was taken at Little Arthur's Café, involving a walk down a steep grassy slope and up again to the café. This was little more than a hut with a view, but produced a surprising variety of delicious cooked and presented food. As before, the afternoon was free for members to enjoy as they wished. Some of us walked up to a prominent red and white striped daymark (for shipping) on the eastern headland, and then followed the coastal path looking down on white sand beaches and across heather moorland. There was just the sound of seabirds and the waves on the shore of this beautiful island.

Touring one of the Scilly islands



Day 4 was our last full day, and we visited the smallest of the inhabited islands, St Agnes in the southwest of the group. The boat trip over seemed quite rough in the small boat, which rocked from side to side in the waves. Members had about two hours on this small island before lunch in the pub just above the quay. The little paved lane leads past stone cottages to the church, surrounded by its graveyard in sight of the sea. This has fine stained glass windows depicting local

seamen in their boats. From the church a footpath leads up on to Wingletang Down, a heathland area with amazing rock formations, granite boulders piled up in weird configurations. The views westward extend over the uninhabited island of Annet and out into the Atlantic. The numerous rocks and islets in the foreground are terminated by the lighthouse on Bishop Rock.

After lunch in the pub we returned to the quay for a two-hour wildlife boat trip round Annet and the western rocks. We were delighted to see Atlantic grey seals lying on the rocks, and many seabirds, including a few puffins although only fleetingly. Shags were plentiful, and we learned that a group of them sitting on the sea is called a “raft”. We had a good view of Manx shearwaters wheeling above the waves. These birds have been encouraged to return to St Agnes and have bred there since 2014 after an absence of many years.

As this was our last evening in the Star Castle hotel we all dined together, with our President raising a toast to the Guild which is now in its 125th year. The flights back to the mainland the following morning went according to plan, the small propeller aircraft flying low over the sea to Land’s End airport. We all felt incredibly lucky that the weather had held, enabling us to fully appreciate the peaceful atmosphere and special way of life of these beautiful islands at the extremity of England.

Kew Guild Dinner **23rd May** by Pamela Holt

Wednesday 23rd May was a lovely warm summer day, enabling many Kew Guild members to enjoy the special arrangement of visiting the gardens where the recently restored Temperate House could be viewed in all its glory before the annual dinner. Held in Cambridge Cottage, Sparkle Ward and Pamela Holt welcomed attendees with name badges and their Kew Guild Journal as they made their way to the bar or the Dukes Garden to socialise.

Tony Overland, Master of Ceremonies, gathered everyone indoors before calling for all guests to be upstanding as our President Jean Griffin and her daughter were escorted to their table in a packed dining room of members and guests. (The event was actually oversubscribed and several potential diners were disappointed).

A splendid meal was enjoyed whilst Kew students circulated amongst the tables selling



Tim Upson (L) and Tom Hart Dyke

raffle tickets to raise funds for their annual study trip to Spain.

Tony Overland explained how long he had known Jean Griffin having both met as students at Kew. She was born in Neath, South Wales and inspired by her grandfather to take up horticulture went on to study at Studley College. More recently Jean has been active with judging the London and South East Britain in Bloom and regularly broadcasts on Radio Sussex, Kent and Surrey. She assured us that the questions on these radio phone-ins are not known in advance. So to

illustrate the point and introduce humour thus dispelling the old boy image of annual dinners, Jean and Tony re-enacted a typical scenario which had the audience in stitches.

Tom Hart Dyke, guest speaker, explained how he was inspired to work with plants at the age of three years through the gift of seeds and a trowel from his grandmother. Later it was Joyce Stewart's articles and working under Sandra Bell at Kew that Tom developed his love of orchids. At 21 years of age he won grants enabling him to travel to South East Asia where he saw orchids in the wild and later spent time in Australia and Tasmania collecting plants. However it was the year 2000 when he met up with Paul Winder in Mexico and travelled over 17,000 miles through the Darien Gap to Columbia with a guide, which proved the most riveting part of his talk. He captivated his listeners with vivid descriptions of being kidnapped by young gun-toting guerrillas in the cloud forest who held him and Paul in captivity for nine months. As Tom continued to collect orchids, his captors realised he was not a drug runner, a political activist or working for the CIA and suddenly released the pair returning all their valuables! Once safely back at his family home Lullingstone Castle in Kent, Tom created the World Garden of Plants within the two-acre walled garden as he had envisaged whilst in captivity.

Jean Griffin then presented the Kew Medal to Martin Duncan, Head Gardener at Arundel Castle owned by the Duke and Duchess of Norfolk who attended the dinner in support of Martin. From horticultural training in Ireland, National Parks work, farming, coffee plantation and advisory work in Africa to Jordan working for King Hussein, titled people in Bermuda and landscape designing in the UK; Martin now manages the ornamental and organic vegetable garden at Arundel. He is a firm believer in developing and making history, not keeping to strict historical layout or features, as his work at the castle testifies.

Honorary Fellowship was awarded to Professor Nigel Dunnnett and Professor James Hitchmough from Sheffield University who were both responsible for the landscaping of the Olympic park in London.

The President concluded the evening by thanking Tony Overland for masterminding another successful dinner with a bottle of gin; thanking all Trustees for their support and dispensed orchids to guests wives. A grand total of £405 was raised from the student raffle.



Sandy Atkins (L) and Jean Griffin

Kew Guild Wakehurst AGM and Arundel Castle Visits

8th and 9th September

by Harold (Graham) Heywood

Didn't we have a wonderful summer? (setting aside temporarily, the very real concerns about global warming). It was a great time for enjoying one's own and visiting other gardens. No less so when members, family and friends attended our Annual General Meeting of the Kew Guild on September 8th and September 9th at Wakehurst Place and Arundel Castle respectively.

If my memory serves me correctly, the weather had begun to show signs of the scorching days getting a little cooler and more tolerable in the sun. I recall hoping that this cooling of temperatures did not bode ill for our visit to Wakehurst and Arundel at which, on the Saturday, we were all looking forward to helping Leo Pemberton celebrate his upcoming 90th birthday with a special afternoon tea. Surely it was not going to rain on Leo's parade? Well no, it didn't!

On travelling down from the North West of England I was reflecting upon the first time I visited Wakehurst. It was as a student in 1967 when I, along with other students of the 1965 intake to Kew, were taken to Wakehurst to see the 'sister garden' to Kew (one of the many trips to gardens, research establishments and other places of commercial and botanical interest such as Box Hill). We were on that occasion, under the expert tuition and chaperone-ship of Leo Pemberton, and Kew had recently appointed its first Curator to Wakehurst in the form of Tony Schilling. I know it's a cliché, but I really did wonder where all those years had gone. So much had changed over the past 52 years or so.

On the first day, prior to the AGM, we assembled at the rear of the Mansion House where we were introduced by the President, Jean Griffin to our guide for our tour of the grounds. It is always a joy to wander around a famous garden but an even greater joy when one has a guide able to interpret the history, and current developments and proposed ongoing changes so expertly and enthusiastically. We had such a guide in Ed Ikin, Head of Landscape and Horticulture and although many of us had visited Wakehurst previously in recent times, there seems to be much to learn with each successive visit. After a brief welcome and introduction by Ed, we proceeded to the Nursery area where we learned about a number of projects and of recent investments. Firstly, it was pointed out that the new glasshouse complex, finished in 2018 had replaced the previous wooden structure that had been in use for a number of years. This new complex had been funded by DEFRA but is seen as a 'holding situation' with new state of the art glasshouses planned for the future. 50% of Wakehurst's nursery growing is for Kew Science, verifying collections from the Global Conservation Programme, supporting UK Native Seed Hub and growing research projects for other departments such as Natural Capital and Health.

This includes a project to grow Ethiopian White Lupin (*Lupinus albidus*) to find a 'sweet strain' with lower alkaloid content. The seed of White Lupin are eaten as a staple food in Ethiopia and currently require soaking in water to leach out the alkaloids to make them palatable. In a dry and hot country such as Ethiopia it is not difficult to envisage the dramatic effect on water conservation when this project eventually succeeds, especially when one learns that it is estimated that by 2030 there will be 129 million people in Ethiopia and around 8.5 billion people on the earth.

From the glasshouse nursery we progressed to the ornamental area. Here there has been an historic review of planting design. Island beds are attractive to visitors in winter (Wakehurst is open all year) and Ed and his team are striving to achieve winter effects in

Ed Ikin addressing Guild members and friends at the start of the tour of the gardens



the winter garden via the introduction of innovative design developments. Trees of particular note included *Betula jacquemontii*, a beautiful tree that is familiar to all of us and which in the winter both frames and holds the winter garden together. There was *Cornus* ‘Baton Rouge’ and *Cornus sibirica* ‘Alba’.

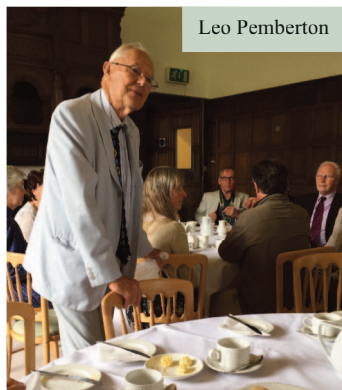
Garden Supervisor Francis Annette designed the winter garden. Over 33,000 plants have been used in the re-design so far. All plants have

been supplied by Bernhard Nurseries of Rugby. A new project will be the North American Landscape - this will be of a bold and confident style, reminiscent of the North American non woody landscape.

Ed informed us that Wakehurst staff have spent one year selecting North American plants, which selection was the subject of a research project. The collection will include plants from the wild, that will, Ed predicted, be beautiful and which will ‘tell a tale’ and yet be of conservation interest. In 2019 it is expected that the area will be planted up. Ed and his team will seek to recreate the stresses and disturbances these plant communities are used to, thus ensuring the composition is maintained. Perhaps a return Guild visit is on the cards for 2020?

On re-tracing our steps towards the Mansion House we observed some notable and very fine specimen trees including; *Emmenopterys henryi* collected by Ernest Wilson; a beautiful *Cornus kousa*; *Embothrium coccineum* and *Acer rubrum* ‘Sunset’. The author mentioned that *Emmenopterys henryi* had featured in a recent Gardeners’ World programme from Borde Hill, a botanically rich grade 11* garden run by the National Trust, and David Hardman who clearly was very familiar with Borde Hill (Borde Hill being less than 4 miles from Wakehurst) confirmed that their specimen had flowered only twice (2011 and 2018) since it was planted in 1928. In fact there are two specimens of *Emmenopterys* at Borde Hill, the aforementioned, from a collection by George Forest and the other, a micro propagation from a Wilson collected specimen at Kew. These were done in the 1980s. This tree flowered in 2010, 2011 and 2018. Our President gave a very heartfelt ‘thank you’ to Ed on behalf of members and a round of applause sealed the sentiment admirably.

Leo Pemberton



Following a break for lunch, members assembled in the Mansion House at 2pm for the AGM, the proceedings of which can now be accessed on the Guild website. Immediately following the AGM, members proceeded to the dining area to join Leo Pemberton and help celebrate his forthcoming 90th birthday one month hence. The recently installed President Peter Styles welcomed members to the tea and invited Leo to say a few words.

One could not but admire Leo for his seemingly remarkable appearance of well-being as he rose to say a few but wise words. Leo thanked all present for turning out and said he was humbled at the turnout. He said he was often asked ‘what did he say to students throughout

the many years he was responsible for the Diploma Course'. He said he often advised students to "be themselves and to grow both in knowledge and spiritually". He wanted them to find themselves and mature into fine wise adults.

As Leo was speaking, the author was recalling past times during the mid sixties and smiled to himself remembering the many occasions when students would be 'botanising' in preparation for the next plant identification test and spotting Leo walking around, clipping bits from various trees and shrubs or just to make it a little more challenging, would include parts of climbers or herbaceous plants. As soon as Leo was out of sight, students (including the author) would rush over to the plants from which Leo had taken pieces and diligently write down the plant name and family name, being assured of at least getting three or more of the plants correct in the resulting test. Or at least that was the plan, for those pieces of plants invariably did not appear in the next test, though often were included a couple of weeks later when not expected. Leo was clearly wise to our subterfuge! However, perhaps the last words that best sums up my memory of Leo and his dedication to student welfare should be those of Pat Conroy who said, "*Teach them the quiet words of kindness, to live beyond themselves. Urge them toward excellence, drive them toward gentleness, pull them deep into yourself, pull them upward toward manhood, but softly like an angel arranging clouds. Let your spirit move through them softly*". Pat Conroy, The Prince of Tides.

It is a fact that many people walk in and out of our lives, but only true friends leave a footprint in our hearts. On behalf of all those hundreds of students whose lives have been influenced by Leo, I say "thank you Leo!"

After a most enjoyable day at Wakehurst it was an early morning start to the journey to Arundel; a drive through the beautiful Countryside of the Sussex Downs, with mounting excitement at what we were to experience later that day. On reaching Arundel we headed for the intended location of our meeting place. Not so difficult one would have thought, but after driving into and out of the main car park opposite the castle's main entrance a couple of times, it was proving more of a problem for this tired out driver. A couple of stops to ask the locals for directions to the 'old cricket ground' we tried again and circumnavigated the narrow streets around the back of the castle. Just as it seemed too much of a challenge we suddenly came across our President, Jean Griffin at the junction of the 'track' leading to the 'tradesmen's' entrance to the castle gardens. "There's Jean" I cried! "We've made it!" Once re-united with our fellow members we began to exchange pleasantries and were introduced by Jean to our host for the tour, Martin Duncan, Head Gardener of these most exquisite gardens.

About Arundel Castle. Arundel Castle is the home of the Duke and Duchess of Norfolk. From the 11th Century, the castle has served as a home and has been in the ownership of



Martin Duncan addressing members and friends at the start of the tour of Arundel Gardens

the family of the Duke of Norfolk for over 400 years. It is the principal seat of the Howard family, whose heads have been first Earls of Arundel and then Dukes of Norfolk. The current Duke, a descendant of King Edward I, is the most senior lay member of the Roman Catholic Church in Britain, a crossbench peer in the House of Lords and the president of the Arundel and Littlehampton District Scouts Group. Georgina Susan Fitzalan-Howard, Duchess of Norfolk, is the wife of Edward William Fitzalan-Howard, 18th Duke of Norfolk.



View of water fountains in Italianate Gardens

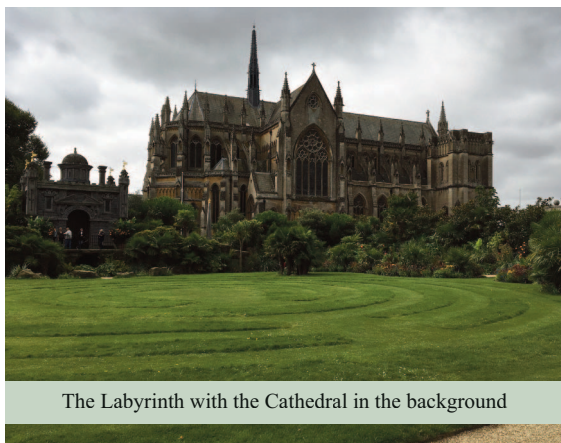
The tour of the Gardens.

Our guide for the tour around the gardens was head gardener Martin Duncan who was awarded this year's Kew Guild Medal. Martin was born in Zimbabwe, and studied horticulture in Northern Ireland and landscape design in Wales. Martin's career as a celebrated professional gardener and landscape designer has also taken him across the world – as far afield as Jordan, Bermuda and France. He joined Arundel Castle in 2009 and called receiving the medal “truly special and wonderful”.

We started our tour at the entrance of the Italianate Gardens, a formal square planted with four Indian Bean trees (*Catalpa bignonioides*) where Martin explained the background to the gardens. The Earl's Garden (as it is often referred to) is a complicated series of architectural tributes to Inigo Jones and his patron, Thomas Howard, 14th Earl of Arundel (1585 to 1646) known as “The Collector Earl”. It now features stunning weathered oak pagodas and Oberon's Palace with its unique spinning coronet, water fountains and rills depicting the local river Arun. The upper terraces are Italianate with stunning displays of spring tulips and summer agapanthus in large terracotta pots by the water rills, whilst the lower terrace has a sub-tropical planting scheme with palms, bananas, Canna lilies, crown imperials, tree ferns and echiums.

Progressing through the gardens we marvelled at the beautiful Italianate features, which are the legacy of Julia and Isabel Bannerman (who designed the more modest Stumpery at Highgrove). Designed some ten years ago and constructed of Green Oak (which weathers after about nine months into a very attractive shade of grey) brought from Woburn Abbey estate; the redesigned gardens, the passion of the then young Duchess of Norfolk were opened to great acclaim by HRH Prince Charles in June 2008.

From the Catalpas we walked through the gates to the first area with the top Italianate terraces with dog sculptured water fountains, each side of a central water rill (with gilt lion fountains cascading into the rill). A small hunting lodge leads the visitor through towards three hornbeam covered Pergolas. The next level down consists of tropical borders with four new additional borders added in 2018. Although not strictly all tropical, the borders are planted with *Canna* ‘Humbert’ and *Canna* ‘musa grande’, *Trachycarpus fortunei*,



The Labyrinth with the Cathedral in the background

Musa basjoo and other plants to give a tropical feel, taking advantage of the leaf shapes and myriad of leaf colours which also included *Butea capitata* (jelly plant) *Tamarillo* (tree tomato), *Tigrans lilies* (six different types), *Persicaria* ‘Red Dragon’, *Dahlia* ‘David Howard’, ‘Bishop of Llandaff’ and ‘Bishop of Auckland’, *Salvia patens*, *Geranium* ‘Sandringham’ and tropical *Coleus*. During our viewing we came across a fungus growing from the wooden facade of the rills. We wondered whether it was real or just another example of Martin’s imaginative influence! As many of us avidly took photos of the object, our immediate past President Jean Griffin came to our rescue and named the object as a specimen of *Laetiporus sulphureus* or *Sulpher Polypore*, commonly called ‘Chicken in the Woods’ regarded as edible so long as it is eaten

Spinning coronet activated by Martin Duncan - so that’s how it’s done!



when young. It can apparently cause vomiting and nausea in some people so care must be exercised when used in culinary dishes.

Following our marvelling at these exotic and beautiful displays, Martin then led us onto a grassed area called the labyrinth with the stunning Cathedral in the immediate background. The labyrinth is used during the summer months to host plays by Shakespeare and accommodates 500 avid Shakespeare enthusiasts. The Labyrinth receives a late sowing of meadow seeds to facilitate use as a theatre following the displays of spring bulbs.

Martin explained that later this year the gardens are to be planted with 105,000 bulbs and in the Labyrinth there will be a mixture of *Apeldoorn Tulips* (red) along with *Narcissi* ‘Thalia’ (white) to emulate a St George’s theme. All together Martin advised that close on a million bulbs had been planted since 2010. Arundel’s first tulip

planted in 2018. festival was in 2011 and is now one of the largest in the country with 60,000 tulip bulbs



The stumpery showing ‘upside down’ stumps

From the Labyrinth we progressed to Oberon’s Palace that contained a unique water feature- the spinning coronet. Now, this feature really did bring out the little boy and little girl in us because it was a stunning and a most amusing water feature, the like of which none of us had ever seen before. Of course, many of us had seen spectacular water fountains and water features before, both in this country and abroad, but this was something else! The coronet sits on top of a fountain, which rises and falls with the varying pressure of a water spout from beneath the coronet. The force of the water keeps the coronet spinning, thus delighting all visitors who linger at this feature. Having ‘dragged’ ourselves away from Oberon’s palace we then walked through a large wooden archway that leaves the Collector Earl’s garden into a Yew courtyard with the Cathedral borders to left and right and straight ahead, we viewed the classic English herbaceous borders. These

borders are highlighted by shaped hedging and centralised by a Cornish slate water feature designed and installed in 2016. Walking through the borders one comes across the Stumpery, formerly just a grassed area that Martin Duncan transformed for the Duke and Duchess of Norfolk in 2014 as a unique contemporary garden feature using ancient tree stumps, sourced by the Norfolk estate foresters from local woodlands, many of which had been left behind after the storms of 1987. These are mainly oak, yew and sweet chestnut. Perhaps uniquely, the stumps are placed with their roots upwards that shows off their stunning architectural shapes, planted up with a range of unusual plants.

After the Stumpery we walked into the wildflower garden with its thatched roundhouse, to the right of which we viewed the original Victorian Vine and Peach House (1850). This house is adjacent to the Cut Flower garden, which supplies flowers to the Castle with Hazel archways planted with sweet peas, a large selection of dahlias, peonies and other flowers for decorating the castle. Beyond the cut flower garden we admired the collection of roses, named mainly after well known gardeners such as Geoff Hamilton, Alan Titchmarsh (hasn't he been on the telly?), Graham Thomas and Gertrude Jekyll. From the end of the rose garden we progressed to the kitchen garden by which time our members' heads were awash with wonder and a mass of details that no doubt took many of us a great deal of time to process. A parting piece of information from Martin rounded off our tour of the formal gardens and that was that in an area called the 'stew ponds' there is to be created a water garden. Arundel Castle gardens as they are today are also a great tribute to the present Duke and Duchess of Norfolk and the tireless and creative imagination of head gardener, Martin Duncan and his staff. One wonders what additional delights there will be for the returning visitor next year? At this point Martin handed over to Izzy, gardener in charge of the kitchen garden but, before he departed, our President Peter Styles gave a very warm thank you to Martin and presented him with a special mug from Kew to a resounding applause from members.



The Organic Kitchen Garden. The kitchen gardens were designed by the Duchess of Norfolk who is a great exponent of organic growing and is managed by Senior Gardener Isobel (Izzy) Mckinley, who herself is passionate about organic growing and permaculture principles, along with help from student gardener Rose and colleague Joe. The kitchen garden is divided into four sections in which a variety of vegetables are grown, amongst which are planted companion plants to help keep down insect pests and to help attract pollinating insects including butterflies. The beds are crop rotated every four years and manured and cultivated with nitrogen-fixing crops following the hungrier ones such as brassicas to keep fertility of the soil at its best. Beds around the edge of the sections where the soil is much

lighter are used for growing carrots to prevent forked roots. Gourds were in good supply including a white pumpkin called 'Polar Bear' and a squash called 'Turks Turban'.

On walls are grown pear varieties, which include 'Deacons'; a pink-skinned variety from the Isle of Wight and Conference. We looked at the Sussex varieties of apples grown over apple arches, including Egremont Russet and James Grieve, Greensleeves and cooking apple Peasegood's Nonesuch. The apple trees are trained using the espalier method, which helps to ripen the fruit well and maximise the sunlight falling on them as the day passes. The Garden provides for the Duke and Duchess's household all year round. An area known as the "fledge" garden (flowers/veg) is maintained about the size of an average suburban back garden to inspire people to grow their own edibles within an ornamental garden.

Chard and *Cavolo nero* (Tuscany Kale) look beautiful against dark blue salvias and the Chard is so striking it would look well in any ornamental display.

Finally, other plants highlighted by Izzy included *Nicandra physalodes* commonly called 'shoo fly' for its ability to ward off insect pests. The seeds of this plant are used in Tibetan medicine, they are said to have an acrid taste and a cooling, very poisonous potency. The seeds are used in the treatment of contagious disorders, toothache, intestinal pain from worms and impotence. *Nicotiana*, *Dolichos lablab* (ornamental beans) and *Tagetes*, the French marigold (which is excellent for keeping whitefly away from tomatoes) are also grown in the kitchen garden.

There are just seven full time staff and two part time students in contrast to some 40 gardeners in the 1940s. In the kitchen garden we viewed the Vinery glasshouse in which were housed a memorable collection of *Pelargonium* species (so very difficult to nurture through the winter without a dedicated heated facility as the author has long found to his disappointment). In the Vinery, built in 1850 by Clarke and Hope (only one other similar utility greenhouse made of cast iron is known to exist and this is at Osborne House on the Isle of Wight) we also saw freshly plucked bunches of grapes being prepared as table decorations for the castle together with a display of peppers. On show, other plants were to be seen including pineapples, Paw Paw, Bromeliads, Bananas, Chilli collection and Cucurbits. *Phoenix roebelenii* and *Sabal bermudana* were housed in poly tunnels awaiting a permanent place in the soon to be built Tropical house. Since our visit, a new replica tropical house has been erected on the foundations of the old Thomas Messenger tropical house and built by Alitex. Pest control in both the Vinery and Tropical House is aided by the use of predatory wasp sachets, one for white fly, one for red spider mite and one for aphid control.

During the 1950/1960s the produce from the kitchen garden was sent as far away as Covent Garden in London. The garden and glasshouse have a maze of tunnels beneath which once housed coal fired boilers, providing heat for the asparagus beds above and forcing the crops out of season. The tunnels under the garden date from around 1850/1870 and have vaulted brick ceilings and beautifully engineered coal chutes. Garden boys housed in the bothy next door would stoke the boilers all hours of the day and these would heat the range of vineries, pineapple houses and pit houses that covered the site. The tunnels still exist under the garden and vinery today. They linked the packing sheds to the pit houses so flowers could be carried across the gardens to the shed without danger of frost. One could not but admire the enthusiasm and expertise of Izzy as she conducted members around the kitchen garden. What we saw was an admiral testament to her knowledge and passion for organic growing.

Our President thanked Izzy for a truly inspirational tour of 'her' pride and joy after which we departed the gardens to explore the delights of this lovely town, seek out refreshments and reflect on a truly wonderful two days.

Kew Guild Awards Scheme 2018

by Chris Kidd

The KGAS met on Thursday 8th March 2018 at 4pm and Thursday 12th July 2018 at 4pm to consider applications for awards and the nomination for the George Brown Memorial Award. These represented the final two meetings of the Awards Scheme Committee operating within the "old" Kew Guild charity; hence all applications were from within the membership.

The Chair of the Awards Committee is, as ever, greatly indebted to the other members of

the committee, all of whom should be individually praised for their help, advice, commitment and probity in operating this scheme within the rules of the Guild. Members will need no reminding that the Awards Scheme exists to make awards, not withhold funds, a task that would be made very simple indeed if applicants read the application form and guidance here: <https://kewguild.org.uk/about-awards/>

Present in March were Chris Kidd (Chairperson), Marcella Corcoran (Secretary) Dave Simpson, Allan Hart, Sal Demain, Rebecca Lane, Jean Griffin (President of the Kew Guild). It was with great pleasure we were able to greet and welcome Jean Griffin who, as President of the Kew Guild for 2017/18, holds a membership of the Awards Committee.

Apologies from: Dave Barnes, (resigned), Christopher Weddell, (resigned), Linda Baharier (Treasurer), Susyn Andrews, David Hardman, Gillian Leese, Richard Wilford, Tim Hughes.

Present in July were Allan Hart (acting Chairperson), Richard Wilford, David Simpson, Beck Lane - first year student, Sal Demain - third year student.

Apologies from: Chris Kidd (Chairperson), Marcella Corcoran (Secretary), Linda Baharier (Treasurer), David Barnes, David Hardman, Jean Griffin, Susyn Andrews, Gillian Leese.

Awards - MARCH. A total of £10,908 from the five named Funds and General Funds was available at the meeting to be made as awards. Thirteen applications had been made, eight were successful after individual discussion. Of the five unsuccessful applications, three were unable to be considered as under the rules of the Kew Guild the members had not fulfilled their period of prior membership (one year).

Ashleigh Davies - Training in Orchardring/London/12 days
Awarded £277.80 from Dallimore Fund

Alison Legg - Botanical Tour/Kyrgyzstan/two weeks
Awarded £700 from Redman Fund

Aaron Marubbi - Beth Chatto Symposium/Essex/two days
Awarded £225 from General Funds

Ana Oliveira - Tour of Historic Gardens/Kyoto/two weeks
Awarded £1000 from General Funds

Andrea Topalovic Arthan - Wildflower Meadows Tour/Kyrgyzstan/two weeks
Awarded £700 from Redman Fund

Kathryn Bray - Botanical Expedition/British Columbia/two weeks
Awarded £700 from General Funds

Richard Choksey Community Gardens Study/USA/two weeks
Awarded £700 from General Funds

Sarah Demain - Succulents in Design/USA/two weeks
Awarded £1000 from Ian Leese Fund

Of a total fund availability of £10,908 for 2019, £5302.80 was awarded.

Awards – JULY. A total of £5,605.20 from the named Funds and General Funds was available at the meeting to be made as awards. Four applications had been made, all were successful after individual discussion.

Rebecca Hilgenhof - MSc Field Study Course/Colombia/15 days
Awarded £1,000 from John Woodhams Award

Hugh Fletcher - Second week of travel to study *Carya*, *Juglans*, *Quercus* and *Castanea*/USA/one week
Awarded £1,000 from Redman Fund

Harry Baldwin - *Quercus* Field Study and Conference/USA/two weeks
Awarded £1,000 Total, Dalimore (£278), General (£722)

Mathew Rees - MSc in Biodiversity and Taxonomy of Plants/Edinburgh UK/one year
Awarded £1000 from General Funds.

Of a total fund availability of £5,605.20 for July 2018, £4,000 was awarded, leaving £1605.20 remaining.

Fellowship of the Kew Guild. Honorary Fellow's Nominations were discussed in 2017 and carried over to the March meeting. After much discussion the committee decided to decline one nomination and unanimously accept the nomination of the second. It was felt that Mike Fitt, OBE, offered a wealth of knowledge, experience and potential for the furtherance of the Kew Guild's aims. Further, it was strongly suggested that as the Kew Guild progresses into its future as a CIO, consideration be given to offering officer, if not Trustee, roles to Fellows.

The Awards Committee proposed the nomination to the Main Committee for Mike Fitt OBE to be elected as Fellow of the Kew Guild, this was unanimously supported. Mike has accepted and will attend the Annual Dinner in 2019.

George Brown Memorial Award. Nomination was received from David Barnes for Marcella Corcoran to be awarded the George Brown Memorial Award. The Committee approved this unanimously. Chris Kidd as Chair of Awards Committee has written to Marcella formally. Award to be accepted at Kew Guild dinner 2019.

Changes to Awards Committee Function. Jean Griffin spoke at length about the potential changes to the operation of the Awards Committee.

Award Scheme Reports

A Trip to Study Oaks and Conifers in a Californian Landscape with the International Oak Society

by Harry Baldwin

The applicant intended to build upon his knowledge and passion of the genus *Quercus*, by travelling to various habitats and landscapes of California, whilst attending the 9th International Oak Society Conference at UC Davis University and Arboretum. Traversing over Tioga Pass into the Sierras and over to the Inyo Mountains, and back up to the northern coast of California, enabled the author to visit a multitude of unique oak and



Quercus douglasii

conifer habitats, including; riparian, savannah, evergreen, sub-alpine and montane forests. Being able to compliment the hands-on field work whilst attending an international conference was unique, as not only did this further his knowledge, but also built important productive relationships for his career as well as for the Royal Botanic Gardens, Kew.

The tour began at the base of the Sierras where the applicant was able to view extensive groves of *Quercus douglasii* (blue oak) which blanketed the dry grass savannah. This beautiful blue leaved oak is able to thrive in extraordinary dry conditions without a drop of rain throughout most of the year. Sadly, due to many reasons such as; fire prevention, climate change, private ownership and invasive flora and fauna, this oak is prevented from undertaking successful reproduction, which explains why only one age class is present throughout most of its range.

Travelling further up into the Sierras allowed the applicant to view a change in flora, leaving behind *Q. douglasii*, *Q. chrysolepis* and *Pinus sabiniana* opening to a mixed evergreen forest of *Calocedrus decurrens*, *P. ponderosa* and *Q. kelloggii*. At the summit, the applicant was greeted with towering *Sequoiadendron giganteum* sitting in a post fire landscape, with lush young redwood growth. Passing another ancient conifer, *Juniperus grandis* alongside its small companion, *Q. vaccinifolia*, both grew in the small cracks of granite which was open to the elements, which explains why the latter was so stunted and gnarled. The trip stopped at further ancient conifer sites, including *Pinus balfouriana*, the great *P. longaeva* and the coastal redwoods, *Sequoia sempervirens*; yet, one of the applicant's favourite stops was the champion valley oak, *Q. lobata* at Covelo. This oak measured in excess of 50 metres tall, which is as tall as many tropical trees. This small grove is likely to be a small relict of a much larger population within this valley, yet since the agriculture revolution in the 1880s, huge chunks of oak forests have been logged to plant crops, which explains why it's so rare to find old groves of this species.

For the final three days, the applicant attended the conference which was rich in all matter of oak-related subjects, including; climate change, pest and disease, oaks in practical horticulture and arboriculture, conservation and scientific research. With over 35 different speakers, there was plenty packed in, but allowed a chance to gain an insight into current hot topics and meet many people within the industry worldwide.

Overall, this trip was a fantastic opportunity for the applicant to learn practically in the field, as well as theoretically by attending the oak conference. This experience has not only advanced his understanding and love for temperate trees, but also furthered his ability with identification for his post at RBG, Kew, as the Arboretum Taxonomist.

Level Three Certificate in Community Orchardling

by Ashleigh Davies

My name is Ashleigh Davies, and since graduating from Kew in 2015 I have worked at Highgrove as a production gardener in the orchard and walled kitchen garden. Earlier this year I was delighted to receive funds from the Dallimore award through the Kew Guild to attend the Level Three Certificate in Community Orchardling, delivered by The Orchard

Project and certified by the Crossfields institute.



The course took place over twelve Fridays, two per month from January to June in different locations around London. The teaching locations were very diverse, from the leafy campus of Roehampton University to a remnant orchard in a pub carpark in Ilford, where we found an air gun wrapped in a black bag! They were all interesting however and helped demonstrate the history of orchards in the city. For example the Imperial War Museum now occupies the site where Bedlam hospital once stood surrounded by large orchards both to feed the patients and

allow them to undertake therapeutic horticulture.

The course covered orchard history, plant physiology, climate change, fruit tree and apple identification, pruning, planting, group working, grafting, soil, biodiversity, surveying, design, orchards as habitats, resilient systems and organic methods. The subjects which had the most impact on me were orchards as veteran habitat and using organic methods to create a resilient orchard system. On the course I saw many examples of communities creating healthy, productive orchards using only cultural methods like thickly mulching to keep the trees as strong and healthy as possible. It is also essential in an organic system to create diverse habitats with as many flowering plants and invertebrates as possible so that pests and predators are kept in balance. I was fascinated to learn how important orchards are as veteran habitat. Certain veteran



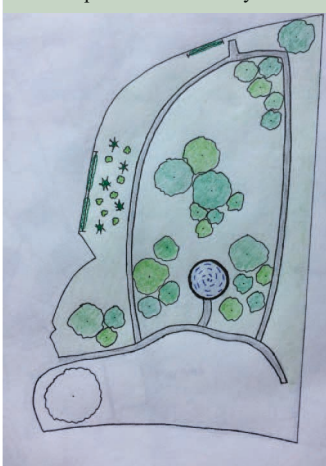
Pale tussock moth caterpillar found in orchard

features such as flaky bark or crumbling exposed heartwood, which are vital habitat for many rare invertebrates, can take 400 years to appear on an oak whereas an apple is old at 80 and so provides these characteristics much sooner.

The noble chafer beetle for example is found almost exclusively in fruit trees of 50 to 80 years of age where the larvae feed on decaying wood. Although trees on dwarfing rootstocks are very useful, their lifespan is shorter than those on vigorous rootstocks. It is therefore important when planning an orchard, if space allows, to include several full size trees in order to create a long term habitat for wildlife.

Attending the course gave me the confidence and skills to set up a community orchard in Malmesbury, where I live. I am now part of a committee working to bring this about; the Mayor and Town Council have pledged their support, a site has been identified and we are currently awaiting the legal handover of this land from Wiltshire County Council to Malmesbury Town Council so we can begin planting. My sincere thanks go to the Kew Guild and Dallimore Award for their generous financial support without which I would have been unable to complete this qualification.

Possible plan for community orchard



Nigeria: Mount Gangirwal Expedition

by Felix F. Merklinger

Vernonia chthonocephala



In 2014, when still working in the Wet Tropics of Africa (WTA) team in the herbarium at the Royal Botanic Gardens, Kew, I was invited to join an expedition to Gashaka Gumti National Park, Nigeria. This park, which is situated in central-East Nigeria along the border with Cameroon, is not only known for its rich biodiversity including numerous primate species such as chimpanzees, colobus monkeys or baboons, but also has the highest peak in West Africa at almost 2500 metres, called Mount Gangirwal, or “the mountain of death”.

With Kew’s involvement it was hoped that through further collaboration with partners in Nigeria, a recognised centre for plant diversity studies might develop (for further details see report by Merklinger & Davis 2014, RBG, Kew, 2014). Four years later, in January 2018, I returned to the park as part of a multi-disciplinary team that included anthropologists, primatologists, a science journalist, an artist and myself as a botanist. The expedition was organised and led by Prof. Volker Sommer, who was instrumental in founding the park and has worked there for 18 years in his field station at Kwano, from where many aspects of biodiversity have been studied by numerous scientists from all over the world.

The aim of this two-week expedition through the mountainous Southern sector that included an ascent to Mount Gangirwal was to assess the status of the park compared to 2014 in terms of threats such as illegal poaching, cattle grazing or logging, to survey the biodiversity (in particular the vegetation and primates), to show presence of multi-national and multi-discipline scientists (the importance of which is relevant to emphasise) and to continue the training of local rangers in botanical activities. At the same time I aimed to collect members of the Podostemaceae family for a taxonomic study together with Dr Martin Cheek at Kew, as well as members of the Asteraceae family, which are to be included in my studies toward a PhD at the University of Bonn.

Before we could set off onto the expedition, it was necessary to obtain the permission of The Emir of Gashaka. The roles of an Emir as a traditional ruler are the responsibilities of local administration and government of his domain in parallel to the state politics. Most importantly he solves disputes between his people. As such he is an important and highly respected authority and it is considered offensive to enter his lands without his prior consent.

The first days of the expedition led us through extensive stretches of Guinea Savannah – a type of wooded grassland that covers much of the lower lying areas of the Southern sector, and is comprised of plants that can tolerate fire or recover rapidly after burning. A particularly interesting pyrophytic species from the daisy family (Asteraceae) was collected here: *Vernonia chthonocephala*. This plant

Podostemaceae in watercourse





Poacher huts are burned by the rangers

emerges from the ground shortly after fires have swept through. It produces small purple inflorescences at ground level before pushing leaves in response to the rains later in the year.

Along the various watercourses, lowland seasonal hardwood forest is found to form a mosaic with Guinea Savannah. This type of vegetation cover only survives along watercourses and is continuously threatened by fire and grazing. Because these

plants are not adapted to fire, the repeated burning of the surrounding grassland results in the understorey of these forests slowly disappearing. As a result, larger trees are often not protected by surrounding vegetation and burn themselves. Losing the understorey also means that the vegetation dries out much quicker during the dry season. Notable specimens are trees of the Sapindaceae and Fabaceae families, as well as some Rubiaceae and *Pandanus candelabrum*.

One of the reasons to burn the grassland is to promote the young growth of grass, which is eaten by livestock. Cattle grazing is officially forbidden within the boundaries of the park. Yet, the Fulani people who tend to the cattle owned by influential people such as politicians (cattle as a status symbol) will frequently enter the park with the animals, often causing violent disputes and gun firing between them and the rangers.

The following days we started to ascend Mount Gangirwal. At about 1200 metres elevation and above, the montane forest begins. Very high humidity for most of the year promotes a healthy growth of mosses and lichens on the trees. Growth also becomes somewhat stunted, leading to a more dense vegetation cover. In this “jungle” one can still find a myriad of little known species, for example members of the Thymelaeaceae (*Daphne*) family (e.g. *Dicranolepis*). Numerous watercourses provide a home to a family of aquatic angiosperms. The Podostemaceae are specialised to grow in fast flowing rapids of fresh water streams. Species are often very restricted and sometimes even known only from one river.

From time to time we stumbled upon signs of poaching. Even in what we considered the most remote parks of the park, the rangers would spot sling-traps and once we even came across a yellow-backed dyker that had been caught – we managed to release it from the trap.

After six days of strenuous hiking we emerged from the forest and reached the grassland on top of Mount Gangirwal. Here we spent two nights in temperatures close to freezing, while during the day we got burned by the sun in the tree-less open.

Until some decades ago much of the Gangirwal escarpment (as well as the entire Cameroonian highlands) were still covered in montane forest. However, forest clearing, cattle herding and burning to promote the fresh re-growth sought by livestock has led to significant loss. Such practices are severely impacting floral diversity in the lowland and highland areas, where some plants such as the African dropseed (*Sporobolus africanus*) have become dominant. In fact, in many places, and in particular on top of the escarpment,

all that remains is grass. This is continuously nibbled on by herds of cattle and once it is gone, the slopes will start eroding. As a result, entire mountainsides will turn into a desert-like wasteland – a process that has already taken its course in much of the Mambilla plateau adjacent to the park. Another omni-present species, especially at the forest edge, is the invasive weed *Chromolaena odorata* (Asteraceae) native to South America.

On our way down we crossed valleys that to our knowledge no foreigner had ever visited before. Here we did not even see signs of poachers. But we did see dozens of freshly made chimp nests, raising our hopes of the presence of a stable population of these primates. We also spotted signs of water buffalos along the watercourses. Finding these intact tracts of forest raised our hopes for the prolonged survival of this park.

Given the cultural importance of pastoralism in Nigeria as well as the newly added threat of logging by Chinese companies, it seems unlikely that much of the park can be protected from destructive anthropogenic practices. Any attempt to stop illegal grazing, to “manage” burning and to identify top priority protection or restoration areas will have to rely on assessments of key vegetation elements. More systematic surveying and future botanical work will no doubt identify many more interesting plants, provide clues about their ecological intricacies and thus create much needed attention for the floristic importance of the wider Gashaka area. I am deeply grateful to the Kew Guild for their ongoing support and for the funding received toward this expedition.

A Trip to the Wonders of Japanese Historic Gardens

by Ana Oliveira

As a Kew Diploma student, my travel scholarship headed to Kyoto to see historic gardens. Although I’m passionate about them, it would also relate to my dissertation about whether Japanese historic gardens can show us how to reduce stress in an outdoor environment. The Japanese have been designing gardens with the aim to slow down, meditate, or contemplate, and I wanted to know if their principles could be incorporated into a contemporary design. I headed to Kyoto to see many gardens while minimizing travel, including the *karesansui* (gravel gardens), *shakkei* (borrowed scenery), or *Kaiyu-shiki-teien* (stroll gardens). I saw 23 in total, which enabled me to see patterns and distinguishing features, but also allowed me to contemplate, write, or merely observe how the Japanese experience each place.



The *karesansui* at Tofuku-ji

With the help from Yuri Ugaya, a specialist in Kyoto gardens, I also learned that, while in the West a garden is mainly an aesthetic exercise, in Japan a garden without meaning is pointless. A group of rocks can be a fish swimming up a stream to turn into a dragon, for instance. Plants are also metaphors, and conifers can symbolize long life (cuttings don’t wilt).

What interested me mostly was how a garden can slow us down and relax... Narrow paths or stepping stones force us to walk slowly. In



Shugakuin, a *shakkei* garden



The view from the temple at Enko-ji

Katsura the stepping stones are used to draw the eyes away from the garden. As the visitor arrives at a wider stone and looks around, they are surprised as they see a wonderful view.

Zen gardens are also soothing. They seem like another temple room and are only seen from a single side of the building. Like a live painting with a designated seated area. One is persuaded to sit, contemplate, and slow down. The comfort of a building also protects from the harsh weather.

Another widespread feature are waterfalls. They often recall a mountain stream or cascade, but they add sound and mask surrounding noises (especially vehicle traffic). A garden with views doesn't have to be large either. Muri-an is a small stroll/borrowed scenery garden that provides views and surprises through careful landscaping and planting design. I could also tell the Japanese still enjoy the old gardens as a haven for tranquillity. At Shisen-dō there were a few Japanese who went for some tranquillity after a working day. Contemporary gardens can be also similar to historic ones. Zuihoin (1961) looked remarkably like

much older gardens like Ryoan-ji (XV Century). With this trip I learned I could incorporate some principles in a western garden. Running water, manipulating views, or laying paths to slow us down, are strategies that soothe the human mind. A contemplating garden doesn't mean a large space either as many Japanese gardens are often a small enclosed outdoor room.

These strategies may be applied in urban pocket gardens, hospitals, mental health facilities, or dense urban environments. The trip proved historic gardens can inspire future designs after all.

The Kew Guild Honorary Membership

by Allan Hart

The thirteenth year of the Fellowship has been marred by the deaths of two of its most prominent members. Derek Edwards (2006), a pioneer of innovative methods for growing high quality turf on an industrial scale. John Brookes, one of the world's leading Modernist garden designers. Both Derek and John regarded their election to the Fellowship as a great honour and privilege. Full reports of their careers are recorded in the Obituary section of the Journal.

Current Honorary Fellows are:

Elected 2006	Roy Lancaster, John Melmoe, Tim Smit, Ed Wolf
2007	Dennis McGlade, Anna Pavord
2009	Richard Bisgrove, Niall Kirkwood
2010	Shirley Sherwood
2011	Adil Güner
2012	John Massey, Graham Ross
2013	Piet Oudolph
2014	Peter Thoday
2015	Raymond Evison
2016	No appointment
2017	James Hitchmough, Nigel Dunnett
2018	Michael Fitt

Michael Fitt

Michael was Former Deputy Chief Executive and Director of Parks for The Royal Parks, where he was responsible for the day to day management and maintenance of London's eight Royal Parks. Since taking early retirement, his involvement with The Royal Parks continues through his work as Honorary Archivist and Chairman of The Royal Parks' Guild.

Currently he is involved with a wide range of green space organisations across London and beyond, being President of Parks for London and Chair of its Access and Inclusion Working Group, a Trustee/Director of London in Bloom, Trustee/Director of The London Parks and Gardens Trust and a Trustee/Director of The Gardeners Royal Benevolent Society (Perennial).

He has a particular interest in an accessible London and works with a diverse range of disability/special needs organisations. Michael is currently working with others in the horticultural industry to raise the profile and importance of apprenticeships for young people coming into horticulture.

He is a tremendous ambassador for horticulture and is an 'In Bloom'/horticultural judge for various organisations, including London in Bloom, South & South East In Bloom, Flowers in the City, London Gardens Society and is a Green Flag judge.

Other 'extra mural' activities include - Patron of Holly Lodge Centre, 'Special Needs in a Special Place', Richmond Park, Trustee for London Wildlife Trust, Trustee of the Richmond Park Charitable Trust, Vice President of PHAB (charity for people with disabilities), External adviser to Black Environment Network, Fellow of The Chartered Institute of Horticulture, Freeman of the City of London and a Liveryman of The Worshipful Company of Gardeners.

News of Honorary Fellows**Tim Smit**

Rarely have I had a busier year than 2018 as Eden's work at our home in Cornwall and around the world continues at an exhilarating pace. We've boldly stated our ambition to have an Eden Project in every inhabited continent and with this in mind, a major moment came in February during the Prime Minister's trade delegation to China. My close



∞ Blue, created by Alexander Groves and Azusa Murakami of Studio Swine. ©Eden Project

colleague David Harland, Eden Project International Limited Chief Executive, signed an agreement with China Jinmao Holdings Limited, our partners in the landmark new attraction we are building in the coastal city of Qingdao.

Elsewhere we have made great progress as part of the advisory group working on plans for the Sustainability Pavilion at Expo 2020 Dubai, United Arab Emirates.

Closer to home, in October we announced a ground-breaking educational hub for the City of Derry~Londonderry, working with a

group of partners looking to transform lands on the banks of the River Foyle into a new cultural tourism, and community asset helping to drive social, economic and environmental regeneration in the city.

At Eden, we unveiled our latest great work of art. It's called ∞ Blue (Infinity Blue) and it is an immersive, 20-tonne installation that pays homage to cyanobacteria. The giant ceramic is the centerpiece of *Invisible Worlds*, our exhibition revealing the untold and unseen stories of our planet beyond our senses. It is an artwork of quite transcendent magnificence which we are confident captivates all who see it. I hope you can be among them in 2019. ©Eden Project.

Anna Pavord

Last year was relatively quiet. We went to Mexico in February to see the migration of the Monarch butterflies. The butterflies were splendid, hanging rather like beeswarms in great clusters from the pine trees, but I was not expecting such a razzmatazz of stalls and exploitation. But then, why not? Tourists exist to provide a living. The countryside around was very disappointing. Vast areas covered in polytunnels, growing blackberries for the American market. We spent the whole two weeks in the Central Mexican Highlands, but sadly, my chief memory is of the appalling mounds of litter everywhere.

In April I travelled in the Netherlands with a very lively group of Australians and talked to them about tulips and other things. It was a very well organised trip (by an Australian outfit called Botanica) and I was particularly impressed with the Hortus Bulborum at Lisse. I'd been there a few times before, but on this trip, the timing was perfect and the ancient flowers looked superb.

During the year, I wrote a series of three pieces for *Gardens Illustrated* about Folly Farm in Berkshire, originally laid out by Edwin Lutyens. Simon Goodenough, formerly curator of the Ventnor Botanic Garden, is now the estate manager at Folly Farm and it is looking absolutely superb, after restoration by the Oppenheims. It's not often open, but go if you get a chance. The gardening team are completely brilliant.

I was also at Plas Brondanw last summer, which I wrote about for *House and Garden*. It is a most extraordinary place, designed by the architect Clough Williams-Ellis, with vistas wonderfully planned to centre on various peaks of Snowdonia. Highly recommend.

The whole of November we spent in Sikkim, which I have written before in these notes.

This was our seventh journey. It was as astonishing as ever, although the roads are far worse than when we first went there 14 years ago. The people though are the kindest you could ever hope to meet.

Niall Kirkwood (FASLA)



Professor Weimin Zhuang, Dean School of Architecture and Professor Kirkwood



ASLA Award of Excellence 2018

This Spring I led a design studio studying the land and landscape implications of the unification of the Korean Peninsula. Sponsored by Lotte Corporation of Seoul, Republic of Korea, twelve graduate landscape students from Harvard Design School travelled with me to the Demilitarised Zone (DMZ) between North and South Korea to carry out site analysis and document the agricultural, forest and urban landscapes which also included a visit to the Korea Furniture Museum and Private Traditional Gardens in Seongbuk-gu, Seoul. The resulting student design work was the recipient of the American Society of Landscape Architects (ASLA) Student Award of Excellence in Communications, 2018 and was featured in the awards ceremony during the ASLA Annual Convention in Philadelphia, PA.

In October I received a courtesy appointment as Distinguished Visiting Professor of the Department of Landscape Architecture, School of Architecture, Tsinghua University in a ceremony in Beijing, China and gave a keynote lecture at Tsinghua University and Beijing University.

Adil Güner

Most of my time this year has been taken up as General Editor of 'Resimli Türkiye Florası', (Illustrated Flora of Turkey), an ambitious project coordinated from the Nezahat Gökyiğit Botanic Garden (NGBB) in Istanbul where I am Director. Following the APGIII classification system, Volume 2 was published in March and provides a key to all the Turkish Vascular plant families and covers lycopods, pteridophytes, gymnosperms and some initial angiosperm families including Liliaceae. This weighty volume of 1054 pages is also available online. A team of over 40 Turkish artists provided full page illustrations of 95% of the 424 taxa, 42 are in colour. We held an exhibition of some of the illustrations in the Botanic Garden and work continues on Volumes 3 and 4.

In connection with the Flora project, I made three visits to the Kew Herbarium, the first, enabled me to attend an enjoyable evening at the Guild dinner. I also visited RHS Wisley to meet up with Fergus Garrett who continues to inspire us and to visit NGBB regularly. July saw me at the Edinburgh Herbarium and a month later in St Petersburg. I attended the World Flora Online (WFO) meeting in Bogotá, Colombia in June and Dublin in December. Closer to home were two visits to the recently reopened Çukurova Botanic

Garden, Adana to see their new Herbarium, Library and teaching facility.

The Garden continues to attract over 200,000 visitors annually with almost 3,000 children and adults registering for education projects. Children's gardening projects and summer school programmes are popular. A thriving Botanical Illustration group meet in the Garden and the Certificate in Practical Horticulture (CPH) courses are always fully booked.

Peter Thoday

Like other Guild members I started my career growing wild plants. Wild collected accessions in a botanic garden. For the next 50 years cultivars took over but now in my dotage native species have returned and weeds have metamorphosed into wild flowers.

In 2018 I have had the pleasure of close links with The Eden Project's resurrected National Wild Flower Centre, and manager Richard Scott's vast fund of knowledge. Such specialist skills usually ensure an initial success with establishing wild flowers in urban public green-space. But it is in the follow-up management of these species enriched sites that things go wrong. This may seem surprising when mowing is the only husbandry tool used; however the timing, frequency and height of cut introduce enough interrelated variables to invite disaster, particularly when specific star-turn species are wanted. I am learning that ecological husbandry requires the manipulation of the same factors as growing any crop; spacing, compaction, competition, nutritional levels, aspect and shade.

My favourite project in my new incarnation as a weed grower is on our doorstep, the site of a pub destroyed by a gas explosion in the 1950s. It has a superb view across By Brook valley and was recently acquired by a very dedicated group who will retain the site as public open space. The area will be maintained as a forb rich sward of species native to this area of Wiltshire. Our local low fertility oolitic limestone brash being replaced by the debris of the public bar! Now where did I put that seed list!

Raymond Evison



The Raymond Evison Clematis exhibit at the International Horticulture Goyang Korea 2018 Show

2018 was yet again a progressive year for our businesses worldwide and in our breeding work in Guernsey, where over 2,000 new cultivars were flowered for the first time, some going on for further trials in the future. Having attended trade shows in both the USA and Germany during January, I spent time in South Korea and China in April, in Seoul at the "International Horticulture Goyang Korea 2018" show, I staged our companies' first ever exhibit in Korea with clematis that had been grown in South Korea under licence.

All the clematis seedlings taken this November which will be evaluated in April 2019



A week later our exhibit at The Hongyue Horticulture Corp, "World Garden Show" was seen by many thousands of people and our Clematis 'Bijou' (tm) Evpo030 (n) was awarded the Gold Award beating all other plants from around the world in the New Plant Competition, a great honour.

September and October saw visits to China, South

Korea and Japan again on business although I was able to get into the mountains of North Beijing and also in Yunnan in search of native plants and of course clematis species.

Most of my time in China was devoted to the detail of the Clematis Garden that I have designed for the Beijing Florascape Co. Ltd. This 270 square metre clematis garden is currently being built at the International Expo site North of Beijing and will run from May until September 2019. This is indeed a great honour to have been asked to design such a large garden for a Chinese company which will feature many clematis bred in Guernsey.



Clematis Bijou (tm) Evipo030 (n)

The George Brown Memorial Award

For furthering communication and diplomacy in the true spirit of the Kew Guild

Sandy Atkins

by Allan Hart



Sandy Atkins was educated at Tiffin Girls School, Kingston, and at Westminster College. Sandy worked as a botanist at Kew from 1981 until 2004. During this time she worked in the Herbarium, mainly on the taxonomy and classification of the Verbenaceae family. She made many plant collections and travelled to Turkey, Brazil and Indonesia.

She became a member of the Kew Guild in 1991 and at the same time became its Honorary Secretary. She remained in this capacity until 1994. The committee decided that the work of the Secretary had become too much for one person. It was decided to share the burden and Kenwyn Pearson took on the role of Hon. Secretary while Sandy became the Vice Secretary, which she served until 1998.

She was a member of the committee from 2001 to 2004 and was elected Vice President for 2004-2005. During her time as Vice President, she put forward the idea that the Kew Guild should fund an area of the gardens at Kew, to be known as 'The Kew Guild Garden'. This idea was carried forward by Allan Hart, and became the very successful Kew Gardens vegetable plots; completely re-designed by Allan Hart, and for the first time, open to the public as part of Kew.

In 2010, along with Jill Cowley, John Dransfield and Keith Ferguson, she organised a Kew Guild event, visiting the gardens of retired Kew staff living in the Welsh borders. Although no longer sitting on the committee, Sandy is still a keen member of the Kew Guild and follows events closely.

The Kew Guild would like to formally acknowledge her work, help and interest over many years. Sandy has been a wonderful ambassador and an outstanding member of the Guild both during her time at Kew and in retirement. The George Brown Memorial Award is therefore given as a just recognition of her achievements.

‘Kew And You’ is the weekly newsletter produced by and for Kew’s volunteers and also available for staff. Volunteer Editor Amanda Le Poer-Trench has kindly agreed to allow the Guild to publish excerpts, which will undoubtedly be of great interest to Kewites around the world. All copyright belongs to RBG Kew. Once again précised by Richard Ward.

January

Building a new Arboretum Nursery at Kew Gardens. If you’ve been down to the Arboretum Nursery at Kew Gardens recently you will have noticed some changes. Fences have been constructed, trees and shrubs moved, and buildings emptied of staff and equipment. All this is in preparation for the replacement of all the nursery, propagation and staff facilities with brand new buildings.

This project will provide two facilities, the first being a purpose-built glasshouse facility with six temperature-regulated zones and the latest environmental controls for propagating and growing temperate trees and shrubs for the Arboretum collections and gardens. The second facility will be the much-needed Arboretum HQ and staff welfare facilities to replace the old wooden dysfunctional messroom in the Stable Yard. This building will also incorporate a suite of offices, meeting room, plant records and a training room for up to thirty staff/students. – Richard Deverell

Global deal with Procter and Gamble signed. I am really delighted to announce that RBG Kew has signed a global ten-year deal with Procter and Gamble to develop a range of Kew-licensed skincare, haircare and beauty products. Procter and Gamble are a large, global consumer goods company with headquarters in Cincinnati in the USA. The company was founded in 1837 and currently employs nearly 100,000 staff with \$65bn of sales.

We have had a long term relationship with P&G and have entered this new partnership because we were very impressed by the degree of commitment shown by P&G to invest in the relationship with Kew and to develop a global range of products that they, and we, will be proud of. They will bring tremendous resources to this including an impressive culture of innovation and a great focus on delivery to high standards. I am hugely excited by this partnership and will do all I can to ensure it flourishes. It has the potential to generate very significant income for Kew over the coming years. – Richard Deverell

Keeping The Hive at Kew. I am delighted to let you know that The Hive, Wolfgang Buttress’ award winning installation, initially created for the Milan Expo in 2015, will be staying at Kew Gardens for the foreseeable future. RBG Kew actually owns The Hive and we have decided, given its tremendous popularity and the evident impact it has had since it opened here in June 2016, that it should stay for a far longer period than the two years initially anticipated. We will need to apply for planning permission to extend its stay – so our decision is contingent upon this being successful. – Richard Deverell

February

Reducing carbon emissions and saving energy. During the first three quarters of 2017-18 we’ve achieved a reduction in energy-related carbon emissions of 10% and reduced

our energy consumption by 6%, compared to the same period last year. We used 184,338 kWh less electricity (a 3% reduction) and 898,108 kWh less in heating (a 6% reduction). In total, energy consumption has been 6% lower than during the same period in 2016-17. The energy-related carbon emissions graph shows the total is 4,581 tonnes for April to December, 534 tonnes less than April to December in the 2016-17 financial year. These are combined figures for Kew Gardens and Wakehurst.

This means we're on track to beat our 230 tonne annual carbon reduction target and to achieve the 32% reduction needed to meet the 2020 Greening Government target. We're making progress, but there's more to come. As the Temperate House comes back into full use, its new biomass boiler will help to reduce the impact of the re-opening on our heating consumption. Sustainability is also a key consideration in Kew's other capital projects. Everyone can contribute to these successes. Our new computers will save 18 tonnes of carbon emissions. Remembering to switch them off when not in use as well as switching off lights, printers and other devices when not needed will help us meet our targets. The sustainability team carry out spot checks as part of the ISO14001 internal auditing process so we can identify and reduce energy waste. Thank you all for your commitment to making Kew's work as sustainable as possible.

Brazilian graduate to take up artistic scholarship at Kew. The Margaret Mee Fellowship Programme Artist Scholarship for 2018 has been awarded to Brazilian biology graduate Gustavo Surlo who at 21 is the youngest ever winner of the award and the first entrant from Bahia State.

The programme enables Brazilian botanical illustrators to study in the UK and was inspired by Margaret Mee whose work drew attention to the importance of the flora of the Amazon rainforest. Sixty of her pictures, the 'Amazon Collection' are held in perpetuity at Kew. The funding enables one scholar to be tutored at Kew for five months by botanical artist Christabel King during which they produce ten plant watercolour portraits which are exhibited at the end of their time at Kew. 22 artist scholarships have been awarded since 1997. Entry is via online submission judged by a panel in Kew and Brazil. Gustavo will take up his scholarship just after Easter. Contact: Dr Nicholas Hind Chairman of the Margaret Mee Fellowship Programme'.

March

Alan Paton (Head of Science Collections) writes: **The 10-year Kew Science Collections Strategy** includes what collections are currently available, and which represent critical research priorities. It also confirms how the collections need to be managed and how to increase global access to them. Kew's vast scientific collections of plants and fungi from across the globe cover an estimated 95% of vascular plant genera and 60% of fungal genera and are fundamental to describing and understanding plant and fungal life on Earth. They lie at the heart of the organisation and are critical to helping to find solutions to some of the greatest challenges faced by humanity as they underpin research into climate change, food security and disease.

What are the science collections at Kew? Herbarium – 7 million pressed plant specimens; Spirit Collection – 76,000 specimens preserved in spirit; Fungarium – 1.25 million specimens of dried fungi & over 1,000 fungal cultures in liquid nitrogen; Economic Botany Collection – 100,000 samples documenting use of plants by humans; Seed Collection at the Millennium Seed Bank – 86,000 collections & over two billion seeds; DNA and Tissue Bank – 48,000 samples of plant genomic DNA & 10,000 tissue samples; Microscope Slide Collection – 150,000 microscope slides of plant and fungal anatomy; In Vitro Collection – 6,000 living plant and fungal cultures in jars of agar.

Some of Kew's aims for 2028 are to have:

- digitised Kew's 8.5 million science collections.
- made all specimen data accessible via online portals.
- stored seed from all plant genera, 50% of all priority species of crop wild relatives and 60% of tree species that have bankable seeds, in the Millennium Seed Bank or banked by in-country partners.
- opened a 'Kew Cryosphere' storage facility at the Millennium Seed Bank at Wakehurst, providing greatly extended cryogenic storage and training facilities and the ability to bank key desiccation-intolerant tropical and temperate tree species.
- increased representation of plant and fungal species from target areas in Sub-Saharan Africa, Central and South America and South-East Asia, particularly endemic, threatened, and ecologically or economically important species.
- a global reference collection of wood specimens for tree genera threatened by international trade.
- improved infrastructure for the collection, curation, and storage of genomic and transcriptomic data.
- run crowd sourcing initiatives to increase data capture, analysis, and citizen scientist engagement with all collections.

The primary audiences for the strategy will be Kew and other UK scientists, the global community of researchers in plant and fungal science, governments and policy-makers looking for data to inform policies on use, as well as non-governmental organisations in conservation and sustainable development.

The healing powers of Kew. The evidence of Kew's apparently substantial healing powers is growing stronger week by week. Lourdes may soon have a significant rival, writes Richard Barley in the Executive Board blog. Among the thousands of personal items picked up or handed in to Kew's Constabulary team each year are mobility aids such as crutches, walking sticks and even walking frames. One can only conclude that a proportion of our visitors who arrive with a level of mobility impairment are throwing aside their walking aids after taking in the essence of Kew, to then no doubt depart with a jaunty spring in their step. Wheelchairs, too, are left abandoned at the farthest reaches of the site, no longer needed after the Kew atmosphere takes effect.

For many more people, a mountain of evidence also suggests that the gift of good eyesight is being restored. Over the past couple of years, no fewer than 380 pairs of glasses have been abandoned by visitors at Kew, as their previous owners depart with new-found ocular acuity. Surely there can be no other sensible explanation for so many pairs of specs being left behind, never to be reclaimed! Hearing aids are no longer required after a stroll amid Kew's botanical splendours... these too are cast aside! Never before has such ample and irrefutable evidence for the benefits of garden visiting on people's wellbeing been so clear. I feel a scientific paper in the air... (And by the way, the discarded items, if not reclaimed by their owners, are donated to charities...).

April

Volunteering Results 2017 – 2018 – Congratulations and thanks to you all for your sterling contribution to our work. Kew recognises the vital and integral role our volunteers play in our work and the value you contribute to the Kew community. We have a record of working with volunteers since 1992 and currently enjoy the invaluable support of 756 volunteers and a team of volunteers associated with our Grow Wild project, which takes our volunteer numbers to over 800. We also benefit from the support of 80 Honorary Researchers. Last year our core 756 RBG Kew volunteers donated a range of diverse skills

and more than 120,000 hours to Kew's mission. Although this equates to a value of £1.89 million that the organisation would have had to spend on an equivalent contribution of staff time, more important still is all the qualitative data and feedback that we receive concerning the value that you, our sterling volunteer task force brings to Kew – your commitment, knowledge, enthusiasm, and energy. The 2,825 'volunteer led guided tours' last year were a testimony to the added value you bring to the visitor experience across both the Kew and Wakehurst sites.

With an average volunteer donation of 4.4 working weeks a year, our volunteer roles encompass support to every aspect of our work, including science, horticulture, our schools, families and visitor programmes. New volunteer programmes introduced this year include Galleries and Exhibition Stewards and a Youth Explorer Volunteer Programme for young people aged 14 to 17 years aligned to a Duke of Edinburgh Award or CREST Award.

We also hosted our first 'Visiteering' day in our Digital Collections Unit as part of WeDigBio (Worldwide Engagement for Digitizing Biocollections) where volunteers spent a day learning about our work and transcribing Herbarium specimen labels online. We also promoted environmental volunteering by hosting 'Employee Volunteering Days' for the corporate sector. Last year 180 volunteers took part in corporate volunteering activities over 10 days – Amanda Le Poer Trench.

Kew hosts visit by Commonwealth VIPs. Recently, as part of the Commonwealth Heads of Government Meeting in the UK, Kew put on a programme that demonstrated our international reach and partnerships across the Commonwealth. Let me start with an anecdote from Friday. Richard told me: 'Philip May, the Prime Minister's husband told me at the end of the visit: "We had very high expectations for our visit to Kew – and you have exceeded them".' The event on Friday was part of the Spouses' Programme, hence Philip May was one of our key guests. Others included The Countess of Wessex, Mr. Mawhinney, (husband of the Baroness Scotland, the Secretary General of the Commonwealth) and Ms. Wheeler, (the UK Foreign Secretary's wife) and we also welcomed about 35 spouses and partners of the 53 Commonwealth Heads of Government.

You may wonder why we wanted to welcome the spouses of the Heads of Government to Kew. There are two main reasons. Firstly, most of the guests have their own profile and use their platforms for charity and campaigning. I spoke with one guest from an African nation who was passionate about forest conservation and so I introduced her to Iain Darbyshire to see whether Kew was already working in her country. Tim Uttridge had a fruitful conversation with another guest about finding a way through some national bureaucracy in a South East Asian country. The second reason is that the UK Government and the Royal Family wanted this Commonwealth Summit to be exceptionally high quality. By hosting such a successful event we have solidified our reputation with No. 10, the Foreign Office and the Royal Household. – David Cope.

May

Temperate House: thank you from Marcus Agius, Chair, Board of Trustees following the opening event. Last night, I was unbelievably proud of Kew, Kew's people and our magnificent Temperate House. As I walked among our guests, it was evident that the room was awash with goodwill. Everyone was astonished to have the beauty of the building so powerfully exposed in the blessed evening light and, one after the other, they expressed their recognition of the extraordinary achievement of the glorious restoration. I know I speak for all the trustees when I say how grateful I am to all those involved in the project – up to and including a hugely successful opening party.

Richard Deverell: Last week we unveiled the rejuvenated Temperate House after its closure for 5 years for the most thorough restoration in its 155-year history. It is a remarkable and very beautiful building. At more than 190 metres long it is twice the size of the Palm House. Grade 1 listed, it is the largest surviving Victorian glasshouse in the world. It is one of the architectural highlights of Kew and integral to our UNESCO World Heritage Site status. Designed by Decimus Burton, work commenced in 1859 with the central block and the two elegant octagons opening in 1863. It took nearly a further 40 years, and much more lobbying of Government, before the north and south wings were completed in 1899. The ‘plinth’ of sand and gravel, on which it stands, was excavated from the Kew site – creating the lake as a wonderful by-product! This has been a remarkably complex undertaking. It is seven years since planning commenced and more than 1,000 people have been involved.

The total budget was £42 million making it 10 times bigger than any other project at Kew when it started. It has been completed on time and to the very highest standards. I would love to say it was also on budget but guttering and windows (there are more than 400 of them) were far more decayed than originally understood, resulting in an overspend of about 15% on the original budget. We are still fund-raising and hope to close at least some of this gap.

Last week we had the BBC Today Programme live from the Temperate House from 6am. Sky News, BBC Breakfast and Al Jazeera were all broadcasting live through the day from Kew. The Press and PR team ably led by Ciara with great help from Jo have done truly heroic work. We also had the formal opening to thank all those who made it possible. Sir David Attenborough was our guest of honour with a wonderful array of guests attending – more than 600 in total.

The Foundation organised this event, admirably led by Laura Coates. On Friday and Saturday evening we had ticketed gala receptions and on Saturday, at 8am, the doors opened for our Friends with day paying guests accessing it from 10am. I hope everyone at Kew, whether or not you have been personally involved, will take great pride in its completion. It was a hugely ambitious and complex undertaking. It required determination and years of collaborative working to deliver it. We have restored one of the great assets of Kew Gardens and we have done so on time and to the very highest standards. It is truly magnificent.

June

Mapping the oldest and most important trees in the UK.

Welcome to the Ancient Tree Inventory, mapping the oldest and most important trees in the UK. They are among the oldest organisms on the planet. They can live for thousands of years. And there are more of them in the UK than many other European countries. Yet most are not protected. Help protect our valuable tree heritage. Let us know if you see any ancient or old trees and put them on the map. There are already 160,000 trees listed but there are thousands more to add. We need your help to find them. Add a tree, search a tree, explore the UK’s ancient tree heritage with the map plus you can view any trees you’ve added. <https://ati.woodlandtrust.org.uk/>

Tree gang on a rescue mission to the British Virgin Islands. The Tree Gang travelled to the British Virgin Islands in the Caribbean to undertake hurricane recovery work in the JR O’Neal Botanic Garden and Government House on Tortola.

The British Virgin Islands were devastated by the enormous category 5 Hurricane Irma in September 2017. The impacts were severe on the main island of Tortola. The JR O’Neal

Botanic Garden on Tortola was virtually destroyed with many trees felled and many left in a dangerous condition. Equally badly hit was Government House, the site of the UK Governor's office and residence together with the Old Government House Museum and Gardens. The National Parks Trust of the Virgin Islands who manage the JR O'Neal Botanic Garden are a long-term partner with Kew and we are currently working with them and the BVI Government on a TIPAs project and seed collecting programme.

As part of our post-hurricane recovery support for the BVI we secured funding from Defra via JNCC to enable the Tree Gang to go to BVI for 2 weeks to undertake a full risk assessment of the trees in both the botanic garden and in Government House. Having assessed the trees, the team are undertaking the appropriate remedial actions, felling or pruning, and providing training for the botanic garden staff who are working alongside the team.

The Tree Gang, Kevin Martin, Wil Harding, Thomas Fry and Seafra Oba-Smith are currently in full swing in the BVI and we hear that they are making great progress. All diplomatic niceties have been extended to them and they enjoyed a welcome tea with the Governor and his wife on Monday. The Governor, Gus Jaspert, tweeted "Delighted to welcome what I hereby name the International Tree Rescue Squad! Arborists from Kew Gardens working with #BVI National Parks Trust to give our storm shaken trees some much needed TLC. Thanks to all those who fund their work."

July

Prince Charles visits Kew Gardens. On his second visit to Kew since becoming its patron, The Prince of Wales enjoyed a private tour of the recently re-opened Temperate House on Thursday. He was delighted and fascinated by the quality of the restoration and thoroughly enjoyed hearing a few of the stories of the 1,500 plant species inside.

He also visited Great Pagoda, which has been closed for two years and reopened on Friday to the public following its magnificent restoration by our good friends at Historic Royal Palaces. Prince Charles made it to the top – 253 steps! The restoration is absolutely stunning. I am sure many of you will have seen the glorious and exuberant dragons (last seen on the Pagoda in 1784) but I would urge you to visit and step inside. HRP have done an amazing job in bringing the building alive and making a visit an inspiring and unexpected experience.

It's rather inspiring to accompany Prince Charles on this sort of visit. He is extremely good at engaging with everyone he meets and conveys a warmth and genuine curiosity in their contribution and thoughts about the project. He is also remarkably knowledgeable about plants. Before we had even entered the Temperate House he was asking if we had a particular critically endangered species within it. His commitment to plant conservation is hugely impressive.

On his walk through the Temperate House, Prince Charles was particularly intrigued by rare species from UK Territories, in particular the *Dombeya mauritiana* from Mauritius, and the extinct St. Helena olive. He was keenly interested in the 'loneliest plant in the world', the *Encephalartos woodii* cycad, the story of which Kew's veteran glasshouse manager David Cooke explained, as well as how it was cared for during the restoration. The walk through the Africa section of the glasshouse included an opportunity to learn about the five-year drought-resistant Enset plant which he was shown by Kew Scientist Tim Utteridge, who also explained the monumental task of compiling the Flora of Tropical East Africa.

Another highlight of the visit was meeting some of the young staff and apprentices working in the Temperate House, Hannah Button, Corin Golding and Cheyenne Eastwood, who were trained as part of this historic project. HRH chatted with them about their work caring for some of the world's rarest plants, and the incredible experience they've gained in this specialist field. HRH also met Kew's Head of Interpretation, Sharon Willoughby, who created the panels within the glasshouse that teach visitors about the plants. The event concluded with a reception in a nearby marquee where he met several hundred guests and a group of schoolchildren who are part of a Kew inspired community arts project.

In memory of the occasion, Kew presented HRH with the gift of an oriental beech tree, *Fagus orientalis*, which was wild collected from a Kew expedition to the Caucasus in 2014 and chosen to add to his existing extensive collection at Highgrove. I was tremendously proud of the day – the Temperate House and Great Pagoda both looked stunning; we have a great partnership with HRP; and the many teams at Kew involved in organising and delivering the event did a brilliant job. As ever, the following is terribly incomplete, but I would like to thank in particular the Foundation Events team with Laura Coates leading; the External Affairs team – in particular Sarah Roberts and Liz West; and John Deer and the Constabulary. It's extremely important these events run smoothly – and it did. Thank you. – Richard Deverell

August

005 of a Millennium. Richard Barley, Director of Horticulture writes, 'It hit me with a jolt this week – I have been at Kew for five years. We (the three Barleys) arrived in the midst of persistent summer rain at Kew looking somewhat bedraggled from our 23-hour journey from Australia, on 31 July 2013. My first day in the office was August 5. How tempus has fugit! While I acknowledge that five years is but a tick of the clock for truly long-serving staff, some of whose careers have spanned at least two centuries at Kew, for me it has been a significant period, and quite a milestone.

At the minimum, I feel that I may now graduate from being 'the new boy', though thereby losing the protections and excuses of ignorance that newness may have afforded me up to this point... In seriousness, it has been a very exciting, challenging and fulfilling five years. I have had the privilege of working with a wonderfully inspiring team of people within our own Horticulture, Learning & Operations directorate, but also more broadly collaborating across the whole organization to achieve some truly outstanding and memorable things together. I feel very proud of what we have collectively achieved within this five-year period. It has been busy, and at times fast-paced (at other times frustratingly not!). I wish to thank every colleague at Kew for all of your contributions, challenges and support over this half-decade, and I look forward to seeing what we can do together in the next compelling chapter.

Oh, and by the way, over this period the Barley family has thoroughly enjoyed exploring this extraordinary island. We have visited a myriad of historic and beautiful places, amazing houses, galleries and museums, been entertained by brilliant theatrical performances, met genuinely fascinating people, and (as I realised recently) spent time in every English county except Norfolk! There is no valid reason for excluding Norfolk, though the consensus from workmates and others (including Noël Coward) seems to be that it is flat... We will go there shortly to confirm. Thank you all.'

Zac Goldsmith, MP for Richmond Park and government Champion for the Illegal Wildlife Trade conference, visited Kew Gardens recently to hear about our work on rare and illegally traded plants and the importance of plants being fully represented at the international conference this October in London.

While tackling illegal wildlife trade generally focuses on the animal kingdom – elephants, rhinos and tigers in particular – illegal trade of plant material is a huge issue. The illegal trade of rosewood timber represents about 35% of the total illegal trade in wildlife and in the last ten years the number of tree species regulated under CITES has increased dramatically.

There's also widespread illegal trade in orchids and cacti. As the designated UK Scientific Authority for CITES (Convention on International Trade in Endangered Species) RBG Kew plays a vital role in this area, providing scientific advice on CITES policy to Defra and enforcement agencies, identifying, holding and disposing of seized plant material and carrying out research into plants affected by international trade.

Zac met Kew scientists Clive Hayter, Sonia Dhanda and Bente Klitgard for an overview of what we do on CITES and illegal trade, with facts and figures on seizures derived from our State of the World's Plants data, and heard about some Science projects related to illegal trade, including work we're doing on rosewood.

September

Chihuly at Kew: Reflections on Nature's official: celebrated contemporary glass artist Dale Chihuly will again bring his work to Kew Gardens, in a major exhibition opening next April.

The exhibition of 32 unique art installations will be situated right across the Gardens. Entering through Victoria Gate, visitors will see Sapphire Star, the individual blown glass forms of which will radiate outward to create a celestial visual experience. The vibrant blue colour of Sapphire Star is highly concentrated at the centre, where the individual glass elements meet and become increasingly opaque. The installation's translucent, achromatic tips reflect light and add to its intense radiance. The Shirley Sherwood Gallery of Botanical Art will host 12 bodies of work developed over 40 years, as well as a film detailing Chihuly's creative process.

Visitors to the gallery will experience the expressive lines and abstract forms of Chihuly's drawings, as well as the Rotolo series – the most technically challenging work Chihuly and his team have ever created, and Seaforms, delicate undulating forms that conjure underwater life, among others. Other locations include the Waterlily House and the Palm House lake while the Temperate House will be home to a brand new, specially designed sculpture, inspired by the cathedral like space, as well as nine other installations. A series of Chihuly Nights, running from mid-August to October, will offer visitors the opportunity to see the artwork in a different light, and admire the illuminated sculptures as the sun sets. There will also be an interactive trail designed for families and family activities during the Easter, May half term and summer holidays, that will reflect on the science behind the beauty of our amazing plant collection.

Seattle-based iconic artist Dale Chihuly's work has been exhibited in 240 museums around the world over his 50-year career. As well as glass, Chihuly uses paint, charcoal, graphite, neon, ice, and Polyvintro to explore possibilities and realise his vision. He is known for revolutionising the Studio Glass movement and elevating perceptions of glass. Chihuly is renowned for his ambitious architectural installations around the world, in historic cities, museums and gardens. His work is included in more than 200 museum collections worldwide including the Metropolitan Museum of Art, the Smithsonian American Art Museum and the Corning Museum of Glass. Dale Chihuly said: 'I am honoured to bring my work once again to Kew, with its magnificent landscape and extraordinary glasshouses – structures which have always captivated me. How do you describe a beautiful building

like the Palm House or the Temperate House? We are planning something special for the centre of the newly-restored Temperate House and I'm excited to see it come to fruition.'

Tony Kirkham clocks up forty years at Kew. Today Tony Kirkham is marking his 40th anniversary of working at RBG Kew, arriving here as a diploma student in 1978. This is an impressive achievement and one that marks a deep and enduring commitment to our organisation. To me, Tony embodies many of the best attributes that distinguish Kew people. He has acquired a deep knowledge of his subject over years of study and practical application. This knowledge is matched only by his great passion for his work; he radiates love for trees and for Kew Gardens. He freely shares his expertise through formal teaching but also in his day to day interactions with the staff, students and volunteers at Kew and our visitors.

He is a wonderful ambassador and advocate for Kew, both nationally and globally. He communicates brilliantly, usually through stories, giving individual biographies of the trees he loves. He works tirelessly, including, when needed, evenings and weekends, to promote Kew and to fundraise for Kew. He is ambitious for our organisation and believes, as I do, that Kew should always strive for excellence. He has an open, collaborative manner, is always willing to try something new and nearly always has a smile on his face. For me personally he has always been a wonderfully supportive colleague whom I can rely upon to be direct and honest with me about both things that are working, and those that are not. I value this tremendously.

For all these reasons Tony is hugely respected within RBG Kew and beyond. Many congratulations Tony on this special day. You are a great colleague and I hope you will still be striding the grounds with Jet 40 years hence! – Richard Deverell

October

Brexit. I am sure many of you, like me, are watching the news on Brexit closely as we move towards the EU withdrawal date of 29 March 2019 and remain concerned as to the current levels of uncertainty as to what Brexit will mean for all of us.

At the time of the referendum, we released a public statement and the sentiments in that statement remain very much true today:

- Kew has always been, and will always be, an outward looking and welcoming organisation.
- Many staff, volunteers and partners are from EU countries beyond the UK and many other countries around the world: you are valued colleagues and friends.
- This remains an unsettling and uncertain time for many of us, but Kew is a stronger organisation than it has been in recent history and we are confident about our success into the future.

I am continuing to work with the Executive Board on Brexit risks including following up any concerns for our people. We are closely monitoring the situation and will deal with impacts as things becomes clearer. We will be doing some planning over coming months on a possible no deal scenario, what that could mean to Kew and any contingency plans we might want to put in place. We are also considering the no deal notices which the Government are now issuing where relevant to Kew, and updates from Defra. This includes the recent notification on the import/export of plants if there is no deal which we will work through and look at any action required. I will update you all on a regular basis over the next six months and as the situation becomes clearer. – Fern Stoner.

Professor Alex Antonelli appointed Director of Science. Alex is currently Professor in

systematics and biodiversity, and the Director of the Gothenburg Global Biodiversity Centre, at the University of Gothenburg. He is also the Scientific Curator of the Gothenburg Botanical Garden. His research specialism is the evolution and distribution of biodiversity, in particular the role of both biotic and abiotic forces in driving diversity. He has a particular interest in tropical ecosystems, especially those of South America. Alex has an extremely impressive track record in high-impact publications. This is based, in part, on extensive field research. He runs his own inter-disciplinary research group at Gothenburg. He recently completed a 6-month sabbatical at Harvard.

Alex will oversee the delivery of the current Science Strategy and, with the team at Kew, shape the strategy for the next 5 year period (2020-25). He will lead our major projects in Science including the refurbishment and extension of the Herbarium and our desire to grow our post-graduate student community. I also hope Alex will draw outstanding scientists to Kew from around the world: as he said in his presentation, ‘great science requires great scientists’. That is absolutely true – attracting brilliant people to Kew will continue to be a priority. Finally, Alex will look to the culture of Kew Science, ensuring everyone has an acceptable work-life balance and finds joy in their work, and feels fully supported in their scientific curiosity and endeavours. Above all, I know he will ensure we maintain our ambition to deliver scientific excellence. Alex will play a tremendously important role at Kew in the coming years. I am personally hugely optimistic regarding the potential for Kew’s science in the coming decade under Alex’s leadership. Please join me in welcoming him to RBG Kew when he starts early next year. – Richard Deverell

November

Remembrance and Hope: memorial bench unveiled at Kew. A new bench, crafted from Kew’s Verdun Oak, commemorating Kew staff who fell in the First World War was unveiled last week at Kew Gardens, three days before the centenary of the Armistice on Sunday 11 November. The project was initiated by Tony Kirkham, inspired by the loss of one of our most treasured trees, the Verdun Oak, in a 2013 storm. Tony also planted a new tree grafted from the oak at the ceremony. Guests at the ceremony included representatives of the War Graves Commission and Simon Burvill of Gaze Burvill who crafted the bench. The Verdun Oak was one of two planted at Kew Gardens, grown from acorns gathered from the battlefield. The Verdun Bench unveiled in 2016 was made from the same fallen oak tree. Creating the new bench involved milling and drying the timber and the painstaking hewing of oak boards before being turned into the new monumental seat.

Kew remembrance wreath laid at Cenotaph. Kew’s customary remembrance wreath, including a plant from each of Britain’s overseas territories, was sent to the Foreign Office to be laid at the Cenotaph on Remembrance Sunday. The wreath was the only one laid at the Cenotaph made from living plants and flowers. A second wreath was also laid at Kew’s own memorial, commemorating members of the Kew Guild and staff who fell in both World Wars, on the north-eastern side of Victoria Plaza where visitors and staff can place their poppies in remembrance. Created by Carlos Magdalena, who has been making the wreath each year since 2006, and Alice Taylor, the wreath includes at least one plant from each of the fourteen overseas territories. There is no set design or pattern: each year’s wreath is different depending on what plants are in flower. Some of the plants, such as the Ascension Island Fern, are unique to that territory. Other plants in this year’s wreath include Hooker’s Anthurium from Montserrat, Cayman Islands Sage, Bermuda snowberry, and St Helena ebony.

Visiting the Eden Project. A small delegation from RBG Kew visited the Eden Project in Cornwall recently to learn more about Eden’s work and to build relations with the senior team there, including exploring some potential collaborative projects. The Kew team

consisted of Tony Sweeney, Lorraine Lecourtois, Fern Stoner, Sandra Botterell and me. If you have not visited Eden, I would recommend it highly. Opened in 2002 it is an 80-hectare site in what was once an abandoned china clay pit. They have built two huge 'biomes' – tropical rainforest and Mediterranean which are surrounded by a series of gardens. Our hosts at Eden were Gordon Seabright, the Project Director who joined in 2014 and Dr Mike Maunder, Director of Life Sciences, who joined in 2016. Some of you might know Mike as he spent 12 years working for RBG Kew at both Wakehurst and Kew Gardens. – Richard Deverell

December

Christmas at Kew. At Kew Gardens, Christmas at Kew is now in its sixth year. From memory I think we had 120,000 visitors in our first year. I hope (if the weather is kind to us) we will reach 270,000 visitors this year. That's about 96% of total capacity – a remarkable achievement. This year's trail is, I think, more subtle and more diverse than previous years. I also appreciate the efforts made to ensure the Gardens look smart for the daytime visitor. The feedback for both Glow Wild and Christmas at Kew has been uniformly positive – and mostly absolutely glowing. Indeed, one of the very few complaints we get is that slots are sold out and people are frustrated they can't attend. – Richard Deverell

Record breaking Week for Kew Retail! Kew Retail had its biggest week EVER last week, taking £230,000 compared to £185,000 in the same week last year. Many thanks to all staff & volunteers who shopped with us last week and contributed to this outstanding result! Sales are on the increase on line too. We received 1500 orders last week which is double the number received this time last year. Your support is really appreciated, and every penny of profits goes to support RBG Kew work.

An update for the Kew Guild provided by Director Richard Deverell

Kew Guild 2018: Director's Foreword. 2018 has been another busy year for Kew and I am extremely proud of what has been achieved this year.

Our first major event of the year was the annual Orchids Festival which this year was held from 9 February to 10 March. This was the 23rd Orchids Festival and the theme was a celebration of the exotic flora and colourful culture of Thailand. The guest of honour at the evening reception was Princess Maha Chakri Sirindhorn, the sister of the Thai King and a long-term friend of RBG Kew. The event was organised in collaboration with the Thai Embassy in London and was also attended by HRH Princess Alexandra who has been involved with Kew for many decades and has been a particular supporter of the Kew Guild.

In March Kew published its first ever Science Collections Strategy, setting out our vision for managing and developing our vast and diverse collections over the next decade and beyond to ensure that they remain relevant and accessible. Kew's Science Collections represent a global research resource with the potential to provide solutions to some of the critical challenges facing humanity today and I would encourage you all to read the Strategy, available on Kew's website.

In April Kew welcomed 35 spouses and partners of the 53 Commonwealth Heads of Government (CHOG) as part of our contribution to support the biennial Commonwealth Summit hosted by the UK in 2018. The centrepiece of the visit was an exhibition in the Orangery showcasing the ways that different teams across Kew engage with some of the



Commonwealth Nations around the world. The Countess of Wessex planted a Copper Beech tree in front of Kew Palace to commemorate the visit. The tree was dedicated to the Queen's Commonwealth Canopy initiative which was launched at the CHOG meeting in Malta in 2015 to unite the Commonwealth family and save one of the world's most important natural habitats by creating a pan-Commonwealth network of forest conservation projects.

In May we celebrated the re-opening of the Temperate House after completion of a five-year restoration of the largest Victorian glasshouse in the world. The result is a truly magnificent building restored to its former glory and updated to improve lighting and ventilation for the 10,000 temperate plants it houses. It was very pleasing to see our efforts recognised as the Temperate House was awarded Best UK New National Treasure at the 2018 National Geographic Traveller magazine reader awards.

The re-opening of the Great Pagoda followed in July after an extensive restoration by Historic Royal Palaces to return this iconic building to its original Georgian splendour. We were delighted that our Patron HRH Prince of Wales was able to attend the official re-opening on 13th July. On the same day HRH also enjoyed a private tour of the newly restored Temperate House and was intrigued by the stories about some of the rare and endangered species curated within it. The day concluded with a reception and HRH was presented with an oriental beech tree, *Fagus orientalis* collected from a Kew expedition to Caucasus in 2014, to add to his collection at Highgrove.

On the weekend of 21st and 22nd July we held our fourth Science Festival at Wakehurst. This event was launched in 2016 and this was the second time it was held at Wakehurst. The festival was an outstanding demonstration of the breadth and depth of Kew Science with a myriad of activities for visitors to participate in, including plant DNA extraction, wild seed collecting and x-raying and making a herbarium sheet. It was really inspiring to

see our scientists engaging directly with visitors, especially children, vividly bringing to life the work they do and why it matters.

We were particularly proud that our Kew Gin picked up three medals at the 2018 International Wine & Spirit awards also held in July. Kew's Explorers' Strength Gin took a gold medal in the Gin & Tonic category while our organic gin, horseradish vodka and triple sec also picked up awards.





More recognition followed in the form of the Council on Botanical and Horticultural Libraries 2018 Award of Excellence in Plant Identification and Field-Guides for an identification guide on Chinese Medicinal Plants, Herbal Drugs and Substitutes by Chris Leon and Lin Yu-Lin.

In September Kew won 1st prize at the 2018 European Garden Heritage Network awards for historic parks and gardens that have been subject to exemplary restoration, enhancement or development.

And in November the Temperate House was acclaimed the Best UK New National Treasure at the 2018 National Geographic Traveller magazine reader awards. All of these awards are a tremendous vote of confidence in Kew's achievements.

The first Annual State of the World's Fungi (SOTWF) report was published in September. The report and associated symposium on 13th and 14th September generated widespread media interest both nationally and internationally. The key message from the report and symposium is that we are only just beginning to understand this incredible kingdom and need to continue to promote the importance of mycological research to unlock the potential of these incredibly important organisms.

Professor Kathy Willis left RBG Kew following the SOTWF symposium to take up the role of Principal at St Edmund Hall, at Oxford University having completed her five-year secondment to Kew. Kathy was a tireless advocate and ambassador for Kew both nationally and international and made a huge contribution to the quality and impact of Kew Science. Her achievements in communicating scientific ideas were recognised with the award of the Michael Faraday prize in 2015 and a CBE in the 2018 Honours List. I am pleased to announce that we have recently appointed Professor Alex Antonelli as our new Director of Science. Alex was formerly Director of the Gothenburg Global Biodiversity Centre and took up post in February 2019.

We were very proud to announce in October that the recipient of the 2018 Kew International Medal is Mary Robinson. The medal is awarded to individuals for distinguished, internationally-recognised work aligned with the mission of RBG Kew. Through her Foundation, Mary has achieved transformational change to build climate resilience and food security in communities at risk across the world. The award will be presented on 26 March 2019 in London when Mary will give a lecture on climate justice and biodiversity.

As the end of 2018 approached we witnessed the completion of groundworks and landscaping for the reinvention of the Winter Garden at Wakehurst which was officially opened in January 2019. In its original form it was one of the first of many such Winter Gardens in Britain and is another significant milestone in the rejuvenation of Wakehurst's 30-year old landscape.

The new Arboretum Nursery completed in December marking the first milestone in our long-term capital development programme, funding for which was provided by our parent department DEFRA. During the year we continued to progress our ambitious improvement plans which in the short term are focussed on developing the Family Landscape at Kew Gardens with the opening of the Children's Garden scheduled for April 2019 and plans being developed for a new Family café and retail outlet. Work also continued on the

replacement for the old Pavilion restaurant adjacent to the Temperate House which is scheduled to open in May 2019.

Our annual Christmas lights festival, now in its sixth year, was more popular than ever in 2018, with 282,000 visitors joining us to celebrate the festive season. Feedback from visitors was extraordinary with many commenting that it was an unforgettable family experience. December is now our busiest month of the year for visitors at both Kew and Wakehurst. Almost 2.2 million people visited either Kew Gardens or Wakehurst during 2018, just ahead of the total of 2.1 million for the previous year. The continued success of our commercial events and visitor offer reflects the dedication and commitment of our staff and commercial partners and I extend my sincere thanks to all of them. 2018 was an excellent year for Kew and I look forward to 2019 our 260th anniversary year, and the new successes it will bring. ©RBG Kew

2018: A Review of the Wakehurst Year

by Ed Ikin (Head of Landscape & Horticulture)

The Boardwalk Wakehurst wetlands



Rarely was the weather on our side in 2018: from the deep freeze of late February and early March to relentless rain in April and the brutal eight-week drought in July and August, it's been a year of battling the elements.

The drought challenged horticultural conventions and it was unsettling to see established trees suffering from water stress; keeping our plants alive was our only summer priority. Softer

conditions eventually arrived in September, but the reservoir remains lower than we'd like.

Some plants thrived in 2018: there was a brief, glorious moment of concerted flowering in May, where plants held back by the cold spring flourished alongside early summer performers, set within richly floristic meadows.

Later in the summer, there were exciting surprises from trees used to hot summers, including a flowering *Franklinia* and a spectacular display from our *Emmenopterys henryi*.



Whilst the heat of the summer kept some people away, it's been another strong year for visitors overall, with over 300,000 visits across the calendar year. *The Science Festival* at Wakehurst was a huge success, showcasing the diversity and global impact of Kew Science's work and attracting new audiences to Wakehurst and the Millennium Seed Bank. Our Easter partnership with Peter Rabbit ensured huge crowds from Good Friday to Bank Holiday Monday, nobly braving the rain. Glow Wild, our wonderful, soulful lantern festival continues to grow and expanded to 16 nights in 2018, with all 58,000 tickets selling out. Despite a couple of torrentially wet nights, it was a great success, with glowing feedback on social media and no incidents to report.

2018 was a year of renewal in the landscape with new paths constructed through our temperate woodlands in Bethlehem Wood and Westwood Valley. It was a challenge to manage major construction work and paths were closed for longer than we'd like, but the result was a huge improvement, making Wakehurst more accessible in any conditions. The crowing glory of this programme was a brand-new boardwalk, snaking sinuously through the Wetlands. A bespoke creation, hand cut from kiln-dried oak, it embodies everything special about Wakehurst and gives our visitors a new perspective on one of our wildest spaces.

The renewal continued in the Winter Garden, with the site cleared and a new design, created by Garden Supervisor Francis Annette, installed in the first half of the year. Bold, rhythmic and designed to stir the soul and stimulate the senses, the Winter Garden has generated significant publicity for Wakehurst and it's been delightful to see the mainstream press talking about the value of gardens and horticulture. The new design contains 33,000 plants, including 35 mature *Betula* and *Prunus* trees and it's remarkable to think of the summer they endured as we look across an already beautiful and established garden.

Finally, it was a pleasure to host the Kew Guild AGM in September. I took a large group of notable Guild members around Wakehurst, sharing current developments and looking ahead to the future. It was a delightful tour and a pleasure to draw upon the group's extensive knowledge and experience of Wakehurst.



Wakehurst Place Weather 2018

Wakehurst Place Weather:	January 2018	Wakehurst Place Weather:	February 2018
Month's total rainfall:	96.6 mm	Month's total rainfall:	54.8 mm
Rainiest day:	12.2 mm on 2 nd	Rainiest day:	12.7 mm on 14th
Rainless days:	6	Rainless days:	6
Highest Max Temp:	12.3 °C on 4 th	Highest Max Temp:	12.3 °C on 17th
Lowest Max Temp:	5 °C on 8 th	Lowest Max Temp:	0.6 °C on 28th
Highest Min Temp:	9.3 °C on 29 th	Highest Min Temp:	6.9 °C on 20th
Lowest Min Temp:	0.4 °C on 19 th & 27 th	Lowest Min Temp:	-6.6 °C on 28th
Nights with air temp below freezing (0.0 °C and below):	0	Nights with air temp below freezing (0.0 °C and below):	11
Windiest day date: 24 th Direction: S.S.W. Wind speed: 29 MPH		Windiest day date: 14th Direction: S.E Wind speed: 26 MPH	
Wakehurst Place Weather:	March 2018	Wakehurst Place Weather:	April 2018
Month's total rainfall:	106.1 mm	Month's total rainfall:	83.5 mm
Rainiest day:	15.4 mm on 14th	Rainiest day:	15.2 mm on 2nd
Rainless days:	4	Rainless days:	11
Highest Max Temp:	17.4 °C on 11th	Highest Max Temp:	30.9 °C on 19th
Lowest Max Temp:	0.0 °C on 1st	Lowest Max Temp:	8.4 °C on 29th
Highest Min Temp:	8.1 °C on 12th	Highest Min Temp:	14.1 °C on 19th
Lowest Min Temp:	-5.0° C on 1st	Lowest Min Temp:	3.7 °C on 1st
Nights with air temp below freezing (0.0 °C and below):	7	Nights with air temp below freezing (0.0 °C and below):	0
Windiest day date: 20th Direction: N.N.E Wind speed: 24 MPH		Windiest day date: 30th Direction: N.N.E Wind speed: 24 MPH	
Wakehurst Place Weather:	May 2018	Wakehurst Place Weather:	June 2018
Month's total rainfall:	49.7 mm	Month's total rainfall:	1.4 mm
Rainiest day:	10.9 mm on the 29th	Rainiest day:	0.5 mm on the 7 th & 14 th
Rainless days:	20	Rainless days:	24
Highest Max Temp:	31.5° C on the 7th	Highest Max Temp:	32.6 °C on the 25th
Lowest Max Temp:	14.4° C on 1st	Lowest Max Temp:	18.3° C on the 17th
Highest Min Temp:	15.9° C on 27th	Highest Min Temp:	16.0° C on the 19th
Lowest Min Temp:	2.3° C on 1st	Lowest Min Temp:	8.4° C on the 13th
Nights with air temp below freezing (0.0 °C and below):	0	Nights with air temp below freezing (0.0 °C and below):	0
Windiest day date: 1 st & 16th Direction: S.W & N Wind speed: 20MPH		Windiest day date: 29th Direction: N.N.E Wind speed: 18 MPH	
Wakehurst Place Weather:	July 2018	Wakehurst Place Weather:	August 2018
Month's total rainfall:	44.6 mm	Month's total rainfall:	72.6 mm
Rainiest day:	24.5 mm on 29th	Rainiest day:	22.5 mm on the 26th
Rainless days:	27	Rainless days:	18
Highest Max Temp:	36.4° C on the 26th	Highest Max Temp:	34.1° C on the 3rd
Lowest Max Temp:	18.3° C on the 29th	Lowest Max Temp:	17.2° C on the 26th
Highest Min Temp:	19.6° C on the 27th	Highest Min Temp:	19.2° C on the 4th
Lowest Min Temp:	12.4° C on the 17th	Lowest Min Temp:	6.7° C on the 25th
Nights with air temp below freezing (0.0 °C and below):	0	Nights with air temp below freezing (0.0 °C and below):	0
Windiest day date: 30th Direction: S.S.W Wind speed: 21 MPH		Windiest day date: 11th Direction: S. Wind speed: 18 MPH	
Wakehurst Place Weather:	September 2018	Wakehurst Place Weather:	October 2018
Month's total rainfall:	34.5 mm	Month's total rainfall:	41.6 mm
Rainiest day:	17.3 mm on the 22nd	Rainiest day:	17.8 mm on 14 th
Rainless days:	21	Rainless days:	19
Highest Max Temp:	27° C on the 2 nd & 3rd	Highest Max Temp:	25.9 °C on 10 th
Lowest Max Temp:	14.2° C on the 22nd	Lowest Max Temp:	8.4 °C on 27 th
Highest Min Temp:	16.4° C on the 19 & 20	Highest Min Temp:	16.9 °C on 13 th
Lowest Min Temp:	5.3° C on the 24th	Lowest Min Temp:	1.3 °C on 27 th
Nights with air temp below freezing (0.0 °C and below):	0	Nights with air temp below freezing (0.0 °C and below):	0
Windiest day date: 20 th & 21st Direction: S.S.W & W.S.W Wind speed: 23 MPH		Windiest day date: 7 th Direction: NNW Wind speed: 27 MPH	
Wakehurst Place Weather:	November 2018	Wakehurst Place Weather:	December 2018
Month's total rainfall:	159.7 mm	Month's total rainfall:	115.0 mm
Rainiest day:	23.9 mm on 10 th	Rainiest day:	20.0 mm on 18 th
Rainless days:	7	Rainless days:	8
Highest Max Temp:	17.8 °C on 5 th	Highest Max Temp:	13.2 °C on 2 nd
Lowest Max Temp:	4.2 °C on 20 th	Lowest Max Temp:	4.6 °C on 14 th
Highest Min Temp:	10.5 °C on 6 th & 7 th	Highest Min Temp:	10.7 °C on 10, 7, 3 rd & 7 th
Lowest Min Temp:	0.4 °C on 21 st	Lowest Min Temp:	-1.3 °C on 14 th
Nights with air temp below freezing (0.0 °C and below):	0	Nights with air temp below freezing (0.0 °C and below):	1
Windiest day date: 29 th Direction: SSE Wind speed: 24 MPH		Windiest day date: 19th Direction: S Wind speed: 30 MPH	

Kew Guild Medal Recipient Martin Duncan

by Jean Griffin

Martin Duncan was born and brought up in Zimbabwe where his father was a doctor and his mother a teacher. His national service was spent with the National Parks Service, Zimbabwe, where his first interest and love of flora and fauna started.

He left Africa to study horticulture at Greenmount College in Northern Ireland. Having completed his studies he returned to Zimbabwe and worked as an advisor on horticultural crops, including tea and coffee. He left Africa to develop his career in horticulture and management by finishing his studies at the Welsh College of Horticulture with an emphasis on landscape design.

After working as a Head Gardener at a private London garden he was offered the post as Head Gardener to the late King Hussein and Queen Noor of Jordan at their private palace in Jordan, and was later promoted to Landscape Designer for the Royal Court working on a number of garden projects. On returning with his wife and young son to the UK he worked as the Head Gardener for English Heritage at Audley End House and Gardens, a Grade 1 listed site in Essex. With his team of gardeners, contractors and volunteers ensured that the garden landscape was maintained and restored following a five-year renewable management plan. Martin was commissioned to consult on a garden restoration project at a château in France. Martin was given the wonderful opportunity to work in Bermuda as the Senior Superintendent for the Department of Parks where he was responsible for overseeing the Botanical Gardens, Government House Gardens (home of the Governor of Bermuda) along with the island's national parks. His team carried out numerous projects throughout the island, one of which resulted in being given a Bermuda National Trust award for planting up an island with native and endemic trees and plants to form a new conservation area.

On returning to the UK he worked as a Head Gardener for a private family in Hampshire where the gardens and estate were being restored. In 2009 Martin took up the fantastic opportunity of heading up the gardens at Arundel Castle, which have undergone a great deal of change over the past six years. Martin writes a garden article for the West Sussex on a fortnightly basis, has also been on BBC Radio Sussex and Surrey, and at the South of England Spring show for 'Gardeners Question Time'.

Over several years I have watched the gardens at Arundel Castle expand under the leadership of Martin Duncan. He is an inspirational character, passionate about plants and the gardens he tends. His staff respect him and therefore work well under his guidance. Martin is keen to provide opportunities for young people and encourages volunteers of all ages.

Wasp spiders at Kew

by Sandra Bell

It is widely believed that our warming climate is influencing the distribution of the UK's flora and fauna benefitting some species, whilst being detrimental to others. One beneficiary is the magnificent Wasp spider, *Argiope bruennichi*. Like most invertebrate would-be colonisers from Europe the Wasp spider first established itself in Britain on the South coast. The first record was made near Rye, East Sussex in 1922 where it established a toehold and for over 50 years remained quite localised along the coastline, yet once it began to spread northwards in the 1990s it did so rapidly. The first London record was in 2002 and over the next 10 years the Wasp spider reached Derbyshire over 100 miles further



north. The most obvious trigger for its rapid northward expansion is climate change.

A fully-grown female *Argiope bruennichi* is one of our largest and most spectacular spiders. The newly-hatched spring spiderlings may start the season very tiny and the males remain only a few millimetres long but by the end of summer a female may be as much as two centimetres from her head to the tip of her abdomen whilst her legs may span as much as five centimetres. After the last moult her legs are brightly banded in black, amber and yellow. Her abdomen is also striped in

white, grey, black and yellow and yet the Wasp spider can be surprisingly difficult to spot as she straddles her orb web, head downwards waiting for prey. The stripes make for very effective camouflage among the light and shadows of the intertwined stems of tall grass amongst which the web is spun. All kinds of grassland invertebrates are eaten after capture in the Wasp spider's web with grasshoppers being one of the commonest prey. In years when food is abundant and full-size is achieved each female spins a densely-woven egg sac, larger than her own body, in the shape of a Grecian urn, low down among the plants. This will survive the winter weather long after the parents have died.

At Kew the first Wasp spider recorded was a female with her egg sac in late September 2004. She was found by contractor Ian Sturgess, while he was maintaining the Colour Palette, a temporary floral display, close to the Broad Walk. Wasp spiders evidently found this to their liking as Ian found them there in 2005 and 2006 as well. Since then single specimens have been found in long grass close to Elizabeth Gate, near Queen Charlotte's Cottage and in the Ancient Meadow closest to Isleworth Gate but their undoubted stronghold has become the new meadow surrounding the Quarantine House. This provides a warm sheltered microclimate, a low level of disturbance, food of all sizes especially grasshoppers and, since it is out of the public eye mowing can be tailored to their needs. The grass is cut by scythe in October and the long stalks of cut grass, which may include the egg sacs, loosely raked into heaps on site which allows maximum hatching the following spring and is also good for a wide range of wildlife. In the summer of 2017 over 20 large females were easily seen in the meadow and most produced egg sacs. In 2018 there were at least a dozen females present but most remained below breeding size possibly because the grass became so dry during the long, hot drought that grasshoppers and other invertebrate prey were unable to grow either and food was scarce.

Their superb camouflage and preference for undisturbed areas almost certainly result in under-recording both at Kew and other favoured sites. There is little doubt that over the last 15 years Wasp spiders have gone from being pioneering newcomers to established Kew residents.

Book review for Kew Guild Journal - Shades of Green by David Cutler

Shades of Green - My life as the National Trust's Head of Gardens
Negotiating change - care, repair, renewal

By John Sales.

UNICORN, 2018. 328 pages; profusely illustrated. £25.

What a pleasure it is to read and recommend such an excellent book by one of Kew's former Student Gardeners! Before you visit one of the fifty National Trust gardens

included, you would be well advised to dip into this scholarly and entertaining work. It is well produced and is illustrated with numerous high quality colour photographs and some historic images in black and white. The real delight is in seeing the significance of the history of each garden, and why it looks as it does now. The joys of finding and recognising lost or hidden plant treasures add to the interest; it is the sort of book that keen horticulturists will love.

John Sales was appointed by the National Trust in 1971, first as gardens adviser, later becoming Head of Gardens. He describes his background and learning curve, his involvement in conservation planning, encounters with donors, the impact of the famous great storm on some properties, and restoration work.

In 1971 the Trust was getting to grips with the wide range of gardens and landscape parks it had acquired, and was becoming responsible for more and more. Then as now there was a continuous struggle to release or find adequate funding to support the necessary work. We can read how over the years John had the delicate job of encouraging both the previous donors (some of whom remained in residence) and the Trust itself to retain, conserve and in many cases restore the most important historic aspects of each garden or landscape. We can see how in doing this he sometimes had to initiate changes that had minimum impact on those aims while improving visitor access to ever increasing numbers of people. His efforts to keep catering and trading interests in their place, and to locate car parks with sensitivity make interesting reading. Gardens evolve by human and natural intervention, and we can read how restoration choices were made to recognise and accommodate both.

Some may know or have known people referred to and will be very interested in John Sales's comments and assessments. There is a reasonably even balance between praise and criticism! On the whole, people rather than institutions get the praise. He recognised talented gardeners and did his best to appoint them to appropriate key positions in the gardens of the National Trust. If you know John, you can hear him speak through the written word. The volume I am reading belongs to the Kew Guild. I will be buying my own copy.

Sweetpea Seed Production in New Zealand

by David Matthewman

Further to my article last year on the detail of our business producing and selling sweetpea seed, the following outlines the production of seed from New Zealand.

In the 20th Century, one of the great sweetpea breeders was Charles Unwin, son of William Unwin, both of whom were involved with the famous company W.J Unwin Ltd of Histon,

Sweetpeas growing in New Zealand for seed production



now known as Unwin's seeds (although today the Company is owned by Westlands.)

In the 1950s Charles Unwin's daughter Pat emigrated to New Zealand to be a school teacher, settling in Gisborne North Island. With her background and upbringing Pat had been involved with sweetpeas and had taken seeds with her for cultivation. She found that they grew extremely well in the favourable climate and that

they produced seed easily and in good quantities. She passed her experiences on to her father to see if he would be interested in sending some of Unwins varieties for her to test for commercial production but at first Charles declined the offer. However, he visited Pat in 1958 and realised that there was indeed great potential. One big advantage was that seed



of new varieties harvested in the UK in July/August could be sent immediately to New Zealand for sowing in September. The following seed crop would mature January/February and be ready for the UK markets a year earlier than that produced at home. In addition there was the opportunity to have two seed crops per year (a godsend if the home crop had had a difficult season). Charles started to send more and more cultivars out to Pat for seeding and soon realised that the New Zealand crop was much more fruitful than the UK. Pat became a full time seed producer and Unwins UK crop production declined. Other Companies became interested in sending stock to New Zealand for bulking and Pat was in danger of being overwhelmed. She therefore set up a sort of co-operative thereby giving some local growers the opportunity to take on contract growing whilst remaining under her watchful eye with regard to essential tasks which needed to be carried out.

We became involved with Pat and her daughter Bridget in the mid 1990s when our business was expanding and we came to realise that we could not produce the required amount of seed ourselves at home. We contacted them and sent out a range of cultivars for bulking. The seeds need to arrive in New Zealand before September so that they can be sown directly into the ground during that month.

We were fortunate enough to have visited New Zealand a time or two enabling us to see our seed growing in situ and being harvested. The light levels in North Island are amazing, which helps produce heavy crops. The strange thing is that the plants themselves do not grow very tall, stopping at about five feet, which gives the growers an advantage when picking the seed and especially as wind can be a particular problem.

How privileged we were when Pat and Bridget invited us to stay with them at their farm just outside Gisborne and they entertained us for several days. Their day starts very early, particularly for Bridget as she nurtures a large number of sheep and also a sizeable herd of cattle before embarking on the seed cultivation.

My wife, Pauline, and I regularly assisted in the picking which is all done by hand and we were amazed at the length of the seed rows, up to 300 metres for one variety. We were asked to inspect the rows for rogue plants, which is of massive importance with sweetpeas as customers require cultivars to be true. The colour ordered must be the colour supplied. As expected, the rogues were negligible. When the seed pods are collected they are transferred very carefully by variety into hessian sacks and placed on the floor of a large and airy barn. These sacks are turned daily ensuring even ripening. As this process takes some weeks, we were privy to the actual threshing of the seed, which is carried out on a small portable machine. After threshing, the seed is packed for despatch, about April time,

ready for the consumer market in the UK. New Zealand will then await the next consignment to be sown. All in all a very efficient process, started by Pat Unwin nearly seventy years ago.

Nowadays, in our retirement our business is mainly mail order, so we can produce sufficient seed in Yorkshire to satisfy the needs of our many customers.

After hiring a car we continued our journey through North Island New Zealand, stopping off at wherever took our fancy. We came across some incredible places, some well off the beaten track, like Raglan, an amazingly unspoilt coastal resort. Regrettably, we had to make our way home. Yet again, we had only managed to visit North Island and its many wonders, with a promise to visit again. Who knows what the future holds!

Exploring the wonders of Vietnam and Laos

by Mathew Rees (Course 53)

My name is Mathew Rees, I'm one of the Kew Diploma students on Course 53, now in my final year and ready to graduate in September. Originally from France, I grew up in



Train street in Hanoi

Nancy, in the North East, and studied horticulture and botany before travelling to South America to do field work on aroids and passionflowers. I decided to do the Kew Diploma to get involved in research, with fantastic opportunities to meet some world class experts in the Jodrell laboratories and the Herbarium. I'm passionate about plant evolution and taxonomy and currently focus my work on the genetics of Boraginaceae with a special interest in forget-me-nots.

In early February 2018, I travelled to the Indo-Chinese peninsula with my partner in crime and plant aficionado, Toral Shah, botanist for the Millennium Seed Bank. The purpose of the trip was to explore some of the central regions of Vietnam, where the Annamite Ranges originate at their most northern extent and separate the two countries of Vietnam and Laos over 700 miles further down South. We then would cross the border into Laos and travel to the cultural capital, Luang Prabang, to deliver a seed collecting training in Pha Tad Ke, the first botanic garden in Laos.



Water Temple in Trang An

Vietnam and Laos are two biological wonders of South East Asia. They extend over vast latitudes, bringing a combination of both tropical and temperate floras with marked seasonality during the dry period and winter. After arriving in Hanoi and getting a

taste of the local cuisine, we set off towards Cuc Phong National Park, the first protected area designated by Ho Chi Minh in 1962 and the largest nature reserve in the country. The park is home to an astonishing variety of life, with around 97 species of mammals, 300 species of birds, just under 2000 species of plants and a number of insects yet to be named. In the heart of the park sits the thousand year old tree, an immense *Terminalia myriocarpa*, dominating the canopy. The park also hosts a conservation centre for primates, turtles, small carnivores and pangolins.

In the Province of Ninh Binh, lie other fantastic sites such as the old capital of Hoa Lu, dating back to the 10th Century; the gigantic Buddhist complex of Bai Dinh, and the tranquil waters of Trang An, all inscribed as UNESCO World Heritage Sites.

Further South, we reached the legendary Annamite Ranges, a complex geological formation dominated by karst and sandstones, home to rare species such as the recently discovered Annamite rabbit and the Saola, the Douc langur, the Indochinese tiger and the majestic Chinese swamp cypress. Our base camp was located near Con Cuong, in the tiny village of Yen Khe: homestay Hoa Tu, named after the owners Hoa and her husband Tu. Communication was essentially hand gestures accompanied by Google translate. But in these regions where Hmong dialect is predominant over the formal Vietnamese, Google translate throws out some pretty interesting conversations - let's leave it at that...

Author and *Amorphophallus* umbrella



An impressive *Ficus* with Toral for scale

After four days of intense jungle exploration, we were ready to make our way into Laos. Whereas Vietnam was cold because of the winter season, Laos was hot and dry almost instantly after passing the border! This is mainly due to the fact that Laos is a land locked country and the Annamite Ranges act as a barrier to the winds from the South Chinese sea that bring moisture onto the west steep slopes, giving Pu Mat National Park such a lush vegetation.

Laos is officially the most bombed country in history, with more than two million tons of bombs dropped during the Vietnam war. This equals to a planeload of bombs every eight minutes for 24 hours a day, during nine years. Up to a third of the bombs dropped did not explode, leaving the country essentially in a state of no man's land filled with unexploded ordnances (UXO). This partially explains why most of Laos has remained so pristine. The old name of Lang Xan signifies "Land of the Million elephants" but in recent years, with

the clearing of the UXO, forests have been cut and the elephants have disappeared. Today only 700 elephants remain in the wild constantly under pressure from poachers for the logging industry and farmers wanting to use them for so called “Elephant Ride EcoTourism”.

After an eight hour bus ride on some of the windiest roads I have ever seen, we finally arrived in Luang Prabang, Laos’s number one cultural and touristic attraction. The city is set on the banks of the mighty Mekong River, originating in the Tibetan plateau and flowing 2700 miles south to the Mekong Delta. We were met by Bryony Smart, botanist at Pha Tad Ke Botanic Garden. We had heard of Bryony’s work through her episode on the In Defense of Plants podcast, only to realise that she had previously worked at Kew before moving to Laos. Pha Tad Ke is the first botanic garden in Laos and was opened to the public in 2008. It contains central collections of native plants including gingers, orchids, bamboos and palms, with information on their traditional ethobotanical uses which are in desperate need of being recorded as these are passed down mainly orally and have very little records in the literature.

We delivered a presentation on seed collecting, drying and storing with a focus on low budget options for starting a local seed bank. We look forward to coming back to Laos and exploring the northern forests where much remains to be described.

Kew Guild CIO – a brief overview

by Peter Styles

Members will be aware that since 2014, the Trustees, with the support of the committee have been working with the Charity Commission to agree a new CIO (Charitable Incorporated Organisation) model. This CIO model is a new legal form for a charity and its adoption was essential to ensure that the Kew Guild’s charitable status is preserved, together with its assets, which represent a significant capital resource. The main work to achieve this position was initiated by Bob Ivison and continued with the past Presidents David Hardman, Tony Overland and Alan Stuttard with the help from our consultant solicitors and the invaluable support of our member Jen Alsop.

To fully comply with the requirements of the Charity Commission there were necessary changes to be made to the Guild byelaws. As reported by immediate past President Jean Griffin at the 2018 AGM, these changes were successfully completed with the transfer of our assets to the new CIO almost complete.

We can now look forward to our new Kew Guild, retaining the benefits of the old Guild, safeguarding our assets and allowing us to open up the membership and awards applications to a new wider membership. Members may know that we have a new registered charity number (1174033) which reflect the deregistered old Guild charity.

The Kew Guild CIO is now a corporate body with additional legal protection and as such must comply with extra regulations to meet the requirements of the law. The legal responsibility is held by the new nine trustees who manage the affairs of the CIO on behalf of the membership. The trustees are supported by the voluntary and paid committee positions and advisors which includes membership, journal editor, secretary, archives, awards committee, website, and student representatives. This supersedes the old structure of officers and committee.

One of the main activities of the Guild is the Awards. This will continue through the Awards Committee under the leadership of Chris Kidd, but we can expect a larger number of applications in the years ahead as we expand our membership.

The main objectives of the Guild remain except that we now have expanded our remit to include members of the public as required by the Charity Commission.

- The advancement of horticulture, mycological and botanical knowledge for the benefit of the public, particularly (without limitation) in connection with the work of the Royal Botanic Gardens, Kew.

- The encouragement and advancement of horticulture and botanical education for the benefit of the public, in particular at the Royal Botanic Gardens, Kew, including (without limitation) by the provision of awards, prizes and grants to schools and students.

- To promote the improvement, preservation and sound management for the benefit of the public of places of natural beauty, gardens and lands of ecological, horticultural, mycological or botanical importance or interest.

The members will be pleased to hear that we will continue with our well organised events and annual dinner programme which we all appreciate and enjoy. If any of the members require further clarification of the work of the Guild under the new CIO, please contact me or our secretary Sara Arnold.

This has been an extraordinary time for the Guild and the trustees have worked tirelessly to ensure that the Guild's best interests are met in the changeover. Thank you for your patience and understanding during this time and I look forward to representing you in the months ahead.

Temperate House Restoration

by Scott Taylor

It's been a few months since the Temperate House (TH) reopened after its thorough restoration. Now the dust has settled it has given me time to reflect on the magnitude of the job.

Construction work began in 2014 but the horticultural elements started much earlier. I'd been working in the Palm House for nearly four years when the opportunity came up to join the Temperate House team. I seized it. In March 2012 I joined the team and we began to assess the plants growing inside the TH, approximately 1000 different species, all with different needs, age, size, etc.

Root pruning palms before transplanting to pots



We studied each plant and came up with a strategy as to how we treat them. Some would be left in situ during construction works, some would be kept as specimens and taken to our nurseries to grow on, but most plants would be propagated by every imaginable way. As well as developing a strategy and method for each species we developed work schedules and met with stakeholders outside the horticultural team who included construction, science, interpretation, activities, events, marketing and press, all of which had important parts to play in this mammoth job.

Once the plans had been laid out, work began. I

clearly remember the first plant we lifted out of the ground and potted up. It was one of the tree ferns, *Dicksonia antarctica* which had been growing in the TH for decades. At this stage there was little nursery space available, so we transformed the north octagon to store plants. The lifting and propagation gathered pace quickly after this and by spring 2014 we were ready to move out of the TH. A dedicated nursery had been constructed and we could use other nursery spaces around Kew. Moving the plants from the TH to the nurseries was much quicker than I had thought and in a few weeks we had emptied the entire TH and set ourselves up to grow and maintain the plants for the next few years ex-situ.



Building the centre block water feature

The propagating, lifting and transporting of plants were very exciting times as they involved machinery, heavy work and all out action. The next phase was also exciting but on a different level. We kept up the propagation to bulk up our stock and carried out all necessary tasks to keep plants happy: repotting, feeding and pest management in addition to sourcing new plants and developing content for the future display. We wanted to put more diversity back into the TH than we'd taken out and increase the number of species to 1500. The Millennium Seed Bank (MSB) proved a vital resource. Seed of some of the rarest plants are stored there and we picked out hundreds of seeds from this amazing library in order to fill some of the gaps in our plant collection and add new plants to showcase the important work carried out by Science colleagues.

The nursery phase lasted about three years during which delays to the construction works amassed. The original plan was to move back into a completely restored glasshouse in early May 2017 which would give us a year to replace the soil, landscape the planting beds, transport the thousands of plants we'd grown and replant them ready for the reopening in May 2018.

The delays meant a reduction our working time, and in order to meet our targets, it was decided to hire a landscape contractor to aid with installing the soil, landscape the beds, build water features and assist with transporting the largest plants from our nurseries to the Temperate House. The contractor also helped with transporting all the rocks previously removed from the TH to build the new water features.

The big move started late 2017 and the first tree, a bitter orange, was planted in October. We planted largest specimens first for ease of access and infilled later with smaller plants. Construction works went sequentially so the planting followed the same sequence, north block finished and planted first, then south block and finishing in the centre block. It was a push to complete the job on time but happily we did. There were many stressful moments and sleepless nights thinking about how precious some of our plants are and how would we get them through the doors. We had issues with some of the larger cycads such as *Encephalartos woodii* which is also one of our rarest plants due to their large size and the small doors. Other plants that proved difficult were the *Handroanthus impetiginosus* and *Barringtonia acutangula*, the first due to its height, nearly 10 metres including its pot and the second due to its weight. Various methods and machinery were discussed to achieve

Tree ferns return to centre block after four years in nursery



the task of getting these plants through doors no more than 3.5 metres tall but in the end a team of strong gardeners carried each large specimen on their sides through the doors before standing them back up inside.

Most of the planting was complete by the end of April which allowed for a big clean up and tidy before the

opening event on May 3rd which was attended by stakeholders, funders and VIPs such as David Attenborough who gave a speech and declared the building open. This day also saw a large press launch which was attended by journalists from all over the world and involved planting the last plant of the restoration, a *Solanum laciniatum*.

Since then we have seen thousands of visitors come through the doors with very positive feedback on how the building looks as well as the planting. The plants have settled in well with minimal losses and some have grown much larger and faster than we'd originally hoped. We are still many years away from having trees brushing the ceiling of the centre block as they did before the restoration, but it allows visitors to enjoy the cathedral-like nature of the building and hopefully to see the growth of plants by revisiting over the next few years. A long journey with some challenging times but worth every second!

Kew's outreach initiative engages millions more people

by Philip Turvil, Grow Wild's programme director

Grow Wild has shared Kew messages far and wide for five years – engaging four million people across the UK. They have brought people together to value and enjoy UK native wildflowers and fungi. Kew has now published extracts from their evaluation with cheery infographics and videos about the scale and impact of this flagship outreach initiative. Visit growwilduk.com/why-grow-wild



Grow Wild Parade ©RBG Kew

Grow Wild is motivated by declining wildflower populations and millions of undiscovered fungi species. Plus frightening research about how little action people take to protect their environment. Through Grow Wild, Kew has inspired people to grow as a group, get active and learn about nature. This includes activities with wildflower seed kits, grow-your-own fungus kits, youth/community

funding, and digital/event campaigns. Grow Wild helps Kew achieve its mission to build an understanding of the world's plants and fungi upon which our lives depend. They also help Kew deliver benefits for wellbeing and community cohesion that, in turn, trigger more learning and sustain behavioral changes.

To deliver activities, Grow Wild has experts in communication, engagement and evaluation. They work with other teams across Kew and Wakehurst, including the scientific expertise from Kew's UK Native Seed Hub and Kew's mycology (fungi) experts. Kew has won multiple national awards that recognise Grow Wild's scale and impact, including being publicly voted the UK's best environmental project in 2016. This is all made possible thanks to the kind support of the Big Lottery Fund and private contributors.



Flats with wildflowers in front ©RBG Kew

To discuss development opportunities and consultancy, please contact Grow Wild's programme director, Philip Turvil.

What Grow Wilders say:

1. "I learnt that all these flowers are not really weeds, unwanted stuff. I need to think of them as part of a bigger picture."
2. "The young people had never grown anything before, but this initiative has sparked an interest in nature that was not there before."
3. "We're going to do a fungus watch in the autumn and we will grow mushrooms again. We never thought about doing this before."
4. "It made everyone feel proud of the neighbourhood and brought the young and old together over a common interest!"

Top Grow Wild achievements with UK native wildflowers and fungi

1. Engaged 57,000 volunteer groups and 1m+ young people aged 12-25
2. Shared enough seeds for 2.2m people to cover 1,000 football pitches with wildflowers
3. Shared enough fungi for 52,000 people to grow their own mushrooms
4. Distributed £900k in project grants to 158 young people and 294 community groups
5. Inspired 3.2m digital interactions and attracted 60,000 social media followers
6. Reached the UK's 30% most deprived areas with 28% of seed kits and 48% of community projects

Impact attributed to Kew's Grow Wild activities, based on reports from independent evaluators.

Before groups engaged

- 75% wouldn't have grown wildflowers (before seed kits)
- Nearly half had little or any involvement with nature (before community project funding)
- 88% had poor knowledge of fungi (before fungus kits)

Because groups engaged

- 88% learnt new things about wildflowers and 65% built connections to the local

neighbourhood (after seed kits)

- Most now think differently about wildflowers and positively changed their attitudes towards other people (after community project funding)
- 76% increased their knowledge about fungi (after fungus kits)

After groups engaged

- 73% got into nature more often and 80% successfully transformed their space (after seed kits)
- 76% did more for nature and 82% did more for their community (after community project funding)
- 57% were inspired to look for fungi outside (after fungus kits)

After 12-18 months

- 95% said there were enduring impacts with better understanding of wildflowers and better connections with other people (after seed kits)
- About half increased connections to nature and two-thirds increased connections with their community (after community project funding)

©RBG Kew.

Kew Guild Journal 100 years ago

by Richard Ward

The December 1918 Journal was reduced to 30 pages, partly due to paper shortages near the end of WW1. The 1917 AGM report talked of a memorial for those Kewites who had fallen in the war, but the matter was deferred. There were heartrending reports from the front line, and from those who returned. The Guild annual subscription was 5s (25p today.) Mr J. Weather suggested a Kew Guild badge. Rule 1V did not allow ladies to represent Kewites on the Committee. But the Kew Mutual Improvement Society had taken on their first lady Secretary. 20 Kewites in America had held their second annual reunion and banquet in New York.

Guild Committee deliberations in 2018

by Richard Ward

The main Committee met five times during the year. By far the most time was spent on discussions about the Guild's application to the Charity Commission for Charity Incorporated Organisation status.

Other matters included the Guild website; the Kew Guild medal; Archives improvements; Finance income, spend and commitments; Honorary membership; Annual Dinner improvements; Outside visits; Data Protection matters; Journal costs and ideas; Kew Guild Awards; Student year representation on the Committee; Past President badges.

My Career

Stephen Butler

I retired in 2018, bang on my 65th birthday, the timing seemed right. The previous year had been busy, so catching up with lots of things was one first task, including chasing the Guild membership which had lapsed, blame the bank! On reading through a couple of kindly sent Journals I realised I should probably do a wee career note too...

I joined the Royal Parks Apprenticeship Scheme in 1969, serving in Hampton Court

Palace, with George Cook as Apprentice Master. Good times, excellent training, should never have been stopped, and good that it is back! Spent a further two years as a Grade 1 gardener in the tree and shrub nursery there, where we still used wheelbarrows for haulage, dug up five metre trees by hand, hand dug an acre or so for spring bedding production, adding rotted leaf mould from the Courts trees (stacked by hand to make a heap four metres tall and twelve metres square), and didn't use any weedkiller apart from something phenolic in the container yard. I can still remember the backache from 'spading' in a wet winter/spring, literally using a spade to turn weeds under the soil by only an inch or two. You kept the spade horizontal, using the inside of the knee to help push it into the soil. After 20 minutes you could hardly stand up, after six hours you had to, but couldn't, agony, but it did control the annual weeds!

Off to Kew in 1974, after being pushed in that direction by another Kewite, Geoff Collins. Great times, company, training, and experience, but my family broke up during that time and I left after the course for 'foreign parts', probably to escape, and served as a volunteer with VSO in Bangladesh. What a change, no rain from October to April. Nothing but rain from May to September. Planting potatoes in November to lift in January (by hand, literally, silty soil, pulled apart with fingers to avoid damage to tubers). Sowing wheat in November to crop in March.

After a year I took up a full time job with the Lutheran World Service as one of their Administrators, but with horticulture my input for all areas. I had a working area tight against the Indian border, about 50 miles long and 10 miles wide, and a staff of 120 Bengali lads. We were encouraging diversifying crops, growing more winter wheat, small scale irrigation, tree planting (for which we used local men who did this already, like a mini nursery) – 60,000 road side trees in one year as food for work in a drought, and growing more vegetables. The greenest crop in spring was the seed beds of tobacco! The hardest part was watching crops die of lack of water if the rains were late, and no irrigation was done because they had prayed for rain, irrigation thus showed a lack of faith. Fair play to them to have that faith, but they lost the early rice crop as seedlings died. I'll always remember watching hand jetting for a tubewell, going down 20 metres with a 50 mm pipe, using a hand on top as a suction pad, lift hand going down, lower hand going up to suck up silt. All silt of course, they'd be surprised to find a 10 mm stone in it. The pipe itself was all hand made – bamboo and coconut fibre for the filter, with bitumen on the top seven metres to make it waterproof. It worked too.

Reading the Journal, I was very near another Kewite but unfortunately did not know, Udai Pradhan in Kalimpong, West Bengal. Whatever the road distance, getting visas to travel then was not so easy, had to bluff my way across the border once! If Udai had drifted down the Teesta River I could have met him in Lalmanirhat, probably at the Teesta Bridge, a railway bridge we used for Landrovers too – you had to be very careful though to keep the wheels on the railway sleepers laid either side along the rail – for a half mile! One lad had to reverse back half way too when he met a train...

I married a sweet Irish colleen out there, great wedding, eight different religions or branches thereof represented, and ten different countries. And only twelve guests! Whole wedding cost about £10, with £1 to make two gold rings into one. The goldsmiths worked on one street, at the end of which one man panned for gold in the drainage ditch, he made a living too. Different world. Our son was born there, but I had to pay the delivery cash up front in the military hospital! Mark was born with a cleft lip which meant he could not feed properly. We came home when he was six weeks old and one pound lighter than when he was born. Difficult times, very hard on Frances.

Home to Ireland. Bad times here then, with little work. Landed on my feet though with a

very simple job (at that time) in Dublin Zoo, three staff, hedges, roses, bedding, grass, no horticultural challenge at all apart from the depredations of the animals or the visitors, but very isolated – it was the only zoo in the Irish Republic at that time. Our son was also diagnosed with Downs Syndrome. This put the full stop on any chance of travelling, you have to play the cards you're dealt, but it knocks your confidence. Once the kids (a sister joined our son) were big enough, and less work, I started to do other work, joining in more fully local garden organisations such as the Irish Garden Plant Society (linked to Plant Heritage) and pushing the Professional Gardeners Guild. All good stuff, and incredibly worthwhile. I am now doing more for the IGPS chasing Irish cultivars, keeping them in cultivation, the hardest part is verification especially of herbaceous plants. A classic case for us is *Aconitum* 'Newry Blue', many people have 'it', but they look different, which one, if any, is 'true', and it is even available commercially as seed...how can that then be true? Work in hand!

I wrote here in 2004 about the zoo horticultural groups, first in Britain and Ireland, then in Europe. This developed incredibly well. For the BIAZA British and Irish Association of Zoos and Aquaria I had done a Keepers Course horticulture chapter, and have revised and increased/improved that twice since. For the EAZA European Association of Zoos and Aquaria I have been active in organising conferences about our work for colleagues, held three times in Dublin, and submitted entries notes to their plant web site www.zooplants.net. This built on what we had started years before, but is web based and accessible by all. Immensely, immeasurably, useful. You can search on a plant or animal, and see what other people have already noted, edible, non palatable, or poisonous issues, and an awful lot on what is good fodder or browse, brilliant, proves the power of the web. Through email you can ask a question to all members of the group and within the hour often have several answers or assistance, invaluable support. Over the years various group members have included other Kewites, Mark Sparrow (Chester Zoo), Ian Turner (Paignton Zoo), and Paul Shippies (Bristol and Chester Zoo), plus people from Edinburgh Botanical Garden and others, and this botanical background has certainly helped push us forward as a group.

I was also asked to join the Editorial Board of Zoolex www.zoolex.org an international design organisation with – wait for it – WAZA, yes, the World Association of Zoos and Aquaria. 700 million people visit zoos worldwide each year, what an audience to see good planting, never mind the animals!

At Dublin, with government funding for development, and a change in how the animals were kept – the word is animal wellness - the zoo went from quite bad to, now, extremely good. Planting is designed to provide screening, from visitors or other animals, maybe enrichment – providing some natural food finding or even finding insects on the plants, dense cover to allow scatter feeding and searching – throwing food into dense growth, and natural climbing, always better on a swaying branch not a rigid perch. I normally say when I joined the zoo it looked tired and old and worn out while I was young and fit and energetic. Now the zoo looks young and fit and I look old and worn out. The animals used to be in cages, then enclosures, then exhibits, now in habitats.

One important aim of the zoo is obviously conservation, and presenting the animals in a naturalistic habitat hopefully inspires visitors to think of conserving wild habitats, thus conserving all flora and fauna where it should be. Visitor numbers have gone from 300,000 in mid 1980s to 1.2 million in 2017. Animal areas are themed within a masterplan to try to make them look their native habitat, so for example masses of bamboo for Asia, a great range of African plants (so many to choose from) in our African savanna, loads of conifers for our North American sea lion habitat, and often large-leaved tropical looking plants everywhere.

Savannah habitat, the southern white rhinoceros habitat. Many African plants used in stand off area.



the animals. We now know they do not eat *Salix purpurea* (planted as not eaten by rabbits), or *Pterocarya fraxinifolia* (but I don't know why exactly, though it is a family full of chemicals), or scented *Choisya* or *Laurus*, or prickly *Berberis* (though they very carefully tease the flowers off!). A long list of not eaten, and an equally long list of eaten but not ruined – for instance they enjoy breaking open the springtime buds of *Gunnera manicata* and eating the flowers, or pulling out the flower stems of *Carex pendula* and eating just the bottom 50 mm. The best reaction started in spring 2017 when the gorillas were seen eating the non edible willow, what were they doing? Eating the catkins, and only the catkins, no young leaf or bark damaged. Perfect enrichment.

Similar planting in a new orangutan habitat worked equally as well, but watching the orangutans break off the lower leaves of *Cynara* (probably too bitter for gorillas or orangutans to eat) to make day beds was great enrichment. The *Cynara* leaves are thick and felty, like a blanket on the ground. Another discovery was that there are plants that

Gorilla habitat on right, visitor trail on left, well hidden among the planting, viewing to the gorillas only in certain areas.



height, a nice green background with no need to stop elephants from eating it. They don't like *Paulownia* either, woolly leaves?

There are occasional international conferences on zoo design, the most recent in Wroclaw, Poland in 2017, organised by Zoolex. I was asked to talk and chose two topics, our gorilla habitat, and our efforts at preventing soil compaction with various hoofstock, bongo and

The biggest challenge was the gorilla habitat, where we wanted a densely planted and varied planting palette but where some plants would hopefully be left alone, more often you see just grass, not natural, and little chance for enrichment for

elephants will not eat, though you need to keep them away from their feet. *Leycesteria formosa* is not eaten by anything, which makes it a darn nuisance of an introduced alien in woodland, but very useful for a zoo if allowed to use it. If designing an elephant habitat again I'd have *Leycesteria* as the backdrop, maybe through a supporting mesh fence for extra

okapi particularly where we had lost several trees, using heavy duty plastic mesh as used in car parks on grass, but with 50 mm depth on top of a 50/50 by 6 mm and 10 mm round stone mix and 20% tree chips in it, with grass sown as usual. Works incredibly well, no mud, healthy trees, easy access for staff even in a wet winter. After my gorilla talk I was surprised by a queue of zoo directors and curators who had seen Dublin Zoo the previous year, and just wanted to congratulate me on the planting, a very pleasant and totally unexpected experience indeed!

The other big issue when I first joined Dublin Zoo had been goose damage to almost everything, even young trees were stripped of bark. We found edges of *Carex pendula* worked, not damaged, but boring. Then we started using *Libertia chilensis*, brilliant, again no damage once established, and a bit of colour, well white. Then I thought, what other *Libertia* are out there? The more accessions I acquired the more confusing it became, the names were hopelessly muddled. Eventually, with other people asking too, I ended up preparing herbarium specimens for all the different plants I had, and the RHS botany team revised the genus using Dublin Zoo's collection after a quick visit. During the review the botanists realised there were a group of hybrids between *L. chilensis* and *L. ixiooides* which needed a name, so, in recognition of the effort I'd put into it all, we now have *Libertia x butleri* to group them together, but the only one regularly seen is *Libertia x butleri* 'Amazing Grace'. All those pressed weeds during the course paid off at last!

I thoroughly enjoyed the Kew Guild visit in 2015, Dave Hardman and I were in the same year (and the same flat for a year, but we've recovered) and he twisted my arm to organise the trip, but I was too busy to join them for all the garden visits. Other visits over the years to see what we have done at Dublin Zoo have included many times various Irish garden societies, staff have been sent in from other gardens – including the National Botanic Gardens Glasnevin, and colleges – we even had students from Niagara College of Horticulture, Canada. In 2018 we had our first international garden group visit with 40 Dutch Friends of Esveld Nursery, something I would not have even dreamed of when I joined Dublin Zoo in 1981.

Another aspect I would never have thought possible when I started at Dublin Zoo has been various published articles. RHS Registrar Julian Shaw reviewing our *Libertia* collection appeared in RHS *The Plantsman* June 2015 Vol 14 Part 2. After various emails to the editor who was having trouble understanding some of our problems, I wrote an article on planting in zoos – March 2016 Vol 15 Part 1. An article in one of the national broadsheets here (of several over the years) on our planting prompted the Editor of *International Zoo News* to request one too – Nov/Dec 2013 Vol 60/6 No 403. This magazine goes around the world zoos, for animal managers, and I had the first only plant article they had ever commissioned, with our rhino habitat on their front cover, though you have to look hard to see the rhinos amongst the plants, excellent, and this all helps keep plants in peoples minds although they are zoo orientated.

The EAZA Zoo Horticulture Group has been a real life saver, regular contact through email groups, sharing information and experience, an annual conference held all over Europe – I've been fortunate to visit Rotterdam, Amsterdam, Arnhem, Berlin, Randers (Denmark), Zurich, Rome, Barcelona, Budapest and many zoos in the UK too. Of course wherever you go there are almost always Botanic Gardens nearby too, and the host zoo arranged field trips, often to additional zoos of course, all very interesting and useful. No matter the language, plants were the link between us all and I've made many good friends. Isn't horticulture a great career. Floreat zoo!

Esme McCulloch

I did a bit of secretarial work for all of these names. Dr John Hutchinson, Dr R. Melville, Dr F. N. Howes, Dr. Metcalfe at the Laboratory, and at least two Curators (I believe that



Gerald and Esme McCulloch on their wedding day, 1943

©Esme McCulloch

the first was killed on the Kew Road when crossing). I also worked for the Keeper of the Herbarium and the then Director, Sir Arthur Hill (who was killed in a horse riding accident while riding in Old Deer Park), and his successor Sir Geoffrey Evans.

I worked most of the time in my own little room in Cambridge Cottage, which consisted of writing up accounts of new plants, the

Genera Plantarum and latterly helping Dr. Melville round up Boy Scouts and in fact everyone capable of collecting Rose hips to be reduced to a source of Vitamin C, which was getting very scarce towards the end of the war. A lot of the time I typed up Dr Hutchinson's 'A Botanist in Southern Africa', which was subsequently published and he gave me a copy, of which I still have his signed appreciation on the fly leaf. During the middle of the war I was loaned to the Ministry of Agriculture in Whitehall, where we spent the nights during very frequent air raids on lines of beds in the basement. As we were situated just opposite the Admiralty it is a wonder that we were not bombed, although bombing took place around us day and night. Latterly I returned to Kew during the time of the "doodle bugs" which were the greatly hated unmanned bombs. We could hear them approaching and when the sound ceased we waited for the crash.

Mollie Kierans, who worked for many years in the Herbarium, did firewatch duty overnight with me. We became very close friends, and she became one of my bridesmaids when I married my Gerald, a young mining engineer, in 1943. We had done a lot of our courting in Kew and after our wedding he did firewatch duty in the museums with me. Gerald had to go overseas for the government to the then named Gold Coast. There was no room for women on the convoy of ships, so I remained behind working at Kew.

Eventually I left Kew when Gerald returned to England and we moved to Newcastle on Tyne, where he worked for the Ministry of Fuel searching for much needed supplies of coal. During that time we had our first son Eric who is now well over 70 years of age. Two years later we had another son, Michael, who is now a very comfortably retired dentist.

We moved to South Africa, to the asbestos mines in Kuruman, we both now suffer some lung deficiency as a result. Many other people there died from the asbestos. We moved to Kimberly where Gerald



©Esme McCulloch



Esme and Gerald McCulloch - 75th Wedding Anniversary
©Peter McCulloch

became mine manager to their De Beers diamond mines. He tells me he produced about \$1,000,000 of diamonds annually. After about fourteen years in South Africa we decided that the political situation was getting steadily worse especially because we now had seven children, four sons and three daughters who had no prospects being white, English speaking Catholics, who were not acceptable to the status quo. We all sailed up the east coast of Africa stopping at every port then to the Seychelles and on to Bombay.

We thoroughly enjoyed ourselves living on the Kolar Goldfield with a household of devoted servants, and a wonderful ayah to help with the children. Gerald searched throughout India for diamonds for the Indian Government while I remained with the family. All of our children initially were able to go to Indian schools, but the boys' high schools did not want white boys so we sent Eric and Michael to boarding school in England. We all were unhappy at being forced to separate to different schools so eventually we decided to settle together in Australia, where we have remained except for many happy holidays in different parts of the world. Gerald worked for the Australian Government and is now long retired. We have had quite an interesting and adventurous life. These are just a few rough notes. Kew was a quiet and very beautiful and interesting place while I was fortunate to work there. ©Esme McCulloch.

Esme passed away peacefully on 12 March 2019. We send our condolences to her family. Esme's career write up and News of Kewites are published in this Journal as submitted. A full Obituary will appear in the Events of 2019 Journal. - Ed

Anthony Rose

Working life history since Kew Studentship in 1961-1963. When I left Kew in early 1963, I went to the LCC (shortly to become the GLC) as a landscape architect. As I always did 'foreigners' during my spare time at this juncture to supplement my income, I met up with David Attenborough and his brother Richard.



This is the house that Tony built

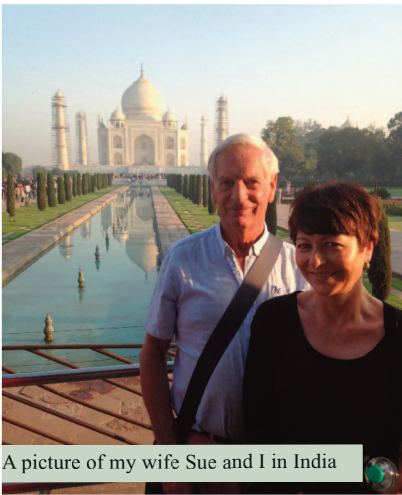
'Dickie' Attenborough offered to help finance the setting up of a landscape company with me, if I wished to leave the GLC (where I was very contented). So after two and a half years with the GLC I resigned to commence a business known as Richmond Landscapes. I ran the business for about three years, mostly working 12-14 hour days, seven days a week. Although the business was successful it was, as you can imagine, very exhausting.

During this period I was approached by the Institute of Park and Recreation



This is a view of part of my garden at the rear

Administration, who asked me if I would take up the position of lecturer in Landscape Architecture, which involved me travelling from Richmond to Goring-on-Thames for one day a week. I performed this function for some six months until the time involved conflicted with my business.



A picture of my wife Sue and I in India

After three years or so I decided I needed a break so I took off to Paris, France. There I took up oil painting and became an artist. I sold a few paintings, but realising after four months that I wasn't going to be the next Picasso and as my savings were running out, I applied to several French landscaping firms for a job as 'paysagiste' or landscape and garden designer. A firm on the outskirts of Paris took me on and over a period of some three years I became the head of the business, which I thoroughly enjoyed, although the pay was not great.

I decided that in order to benefit from all of my qualifications, I would have to go to America or return to the UK. A few letters to California ensued and I received wonderful replies saying they would love to have me but they could not employ me under state law as I was a foreigner and not of specialist trade. I then noticed in the Journal of the Institute of Park and Recreation Administration, a job advertised as Chief Landscape Architect for the City of Liverpool. By special appointment, I came from Paris to see the Director of Parks and Recreation at Liverpool, a wonderful gentleman by the name of Mr. McCormack. After about three hours of chat he offered me the job and I moved to Liverpool a month later.



One of 70 paintings I have done, titled Barcelona. It is a study of some of Gaudí's work as he is an icon of mine.

During my first year in Liverpool, I designed and built my first house in my spare time, carrying out all the work myself except for plastering (which I have never attempted).

So, in 1971/72 I began my long sojourn in Liverpool to this day. I continued running my large department for the City Council with up to a dozen design assistants for the next nine years. During this time, Liverpool underwent a huge transformation from empty bombed out sites to green areas and playgrounds and much needed new housing. During this period I embarked upon my second love of architecture and building, constructing three new houses of my own and for a client who had asked me to do so. This was in my spare time whilst working for Liverpool City Council. I decided I was happier working for myself and that I could earn a lot more doing so. After nine years therefore I resigned and started my business as an architect designing and building some 22 buildings, since then at the same time carrying out garden design and construction.

In the latter years I have concentrated on the garden design and construction side of my business, which I then handed over to my son to continue some five years ago. I now live with my wife of two years, in a house I built seven years ago and cultivate many exotic species in my two pavilions, which go into my garden in the summer.

In travelling widely, during many years, I have a great love of plants and of course garden design of which winning a gold medal at the Southport Flower show in 2016, a very pleasant success.

News of Kewites in 2018

by Pamela Holt and others

Sandra Bell (1980): Having worked at Kew for over 30 years Sandra is now freelancing on biological recordings. She has written articles for *The Plantsman* notably on *Radermachera sinica* in June 2018 and *The Independent* on Pesticides and harm to bees March 2018 as spokesman for Friends of the Earth.

Wolfgang Bopp (1992): After 15 years as Curator then Director at the Sir Harold Hillier Gardens, Romsey in Hampshire, Wolfgang was appointed Director of Christchurch Botanic Gardens and Parks, New Zealand, on 3rd July 2018. He will take up his new position in the Spring of 2019.

Rebecca Bower: 2018 has been another good year and I've had several excellent holidays. The first one was at the end of February/early March when my sister and I went on an Indian Ocean cruise, though on a smallish boat of only 100 passengers, so not too big. We started in Mauritius, then via Reunion went to the north-east coast of Madagascar (which we hadn't visited on our trip to Madagascar in 2016) and continued on through some of the islands of the Seychelles, seeing some great wildlife both on land and in the sea.



In May I went to Sicily for a walking holiday on some of the volcanic islands, as well as a couple of days on the slopes of Mount Etna itself. July saw me in Malaysian Borneo on a two week tour of Sabah and Sarawak – I was delighted to see Orangutans not only at a sanctuary but also in the wild – a brilliant experience.

I spent three weeks in Botswana in September on a volunteer working holiday. We were based on the edge of the Okavango Delta and were doing surveys of mammals along various fixed transects. I really enjoyed it and on our days off they took us into Moremi Game Reserve and we saw some fantastic wildlife – I was



and Devon Wildlife Trust.

particularly excited to see wild dogs on three occasions having only seen them once before in all my years of going on safari. Also lucky enough to see a pangolin – a first!

The final holiday of the year was a week on Madeira where we did lots of walking, most of which seemed to be steeply uphill or steeply downhill!

Back in the UK I've been busy with my various voluntary activities including continuing as a Trustee of the Bentham-Moxon Trust so go back to Kew for its meetings and take the opportunity to look around the Gardens - I love the newly restored Temperate House and the splendid dragons on the Pagoda. It was great to go to the Kew Guild Dinner in May too. I retired from the Trustee Board of Thrive in September after five years service, and back home in Exeter I'm now on the Board of Exeter St James Community Trust and volunteer regularly at the Foodbank

So with all that, plus visits to friends and family, the year has flown by and I'm now looking forward to 2019!

Jim Emerton: Approaching 70 years, I am busy with the media of articles, interviews and journals. The books have sold in many countries including India and the Lebanon. Walking 15 miles per week, I chat to many people in the community, and like to keep buzzing. My consciousness is a constant stream of creative ideas, which are objectified in acceptable media. Any Kewites may contact at any time. The essence of life is to live it to the full! Born with the genetic potential to write, you must embrace life to the full in a profound and sensitive way. I have managed to engage my mind and senses in around 60 countries and islands on planet earth. Eleven years of study in academia cultivated the discipline to churn out essays, articles and projects. Now a specialist writer for *Mensa*, I have benefited by studying *Roget's Thesaurus*, and the great writers of the past. In my long life, I have relished writing in a prolific stream of diverse subjects, including 16 for *Mensa*, and my eight books from Philosophy to Poetry to Pigeon racing are read across the world.

I have had the experience of knowing, and sometimes living with some great rural characters like Kenzie The Wild Goose Man and Sir Montague, Cocker Smith. We learned about nature, rough shooting in all its episodes, country pursuits and wildfowling on the Wash marshes. My book *Countryman* tells vivid tales of rough shooting, wildfowling, hunting with dogs, poaching etc and depicts my passions for people, the great outdoors and lust for life over many years. The book is illustrated by original photos and some beautiful natural poetry. All original stuff, I hope you



enjoy it, as much as I lived it! In part it depicts my exciting adventures in around 60 countries and islands of the natural and cultural world. A ghost writer is creating my autobiography. It will depict my 70 years and reveal the truth of a colourful, diverse and interesting life as countryman, pigeon man, traveller, academic and very many interests. When released on Amazon etc I do hope you enjoy it.

Alex George: This year the Kew Connection for me materialised with a visit of Richard and Wiena Ward and their daughter Sparkle in October/November. They stayed with me

L to R, Richard Ward, Sparkle Ward and Alex George



for a few days at the start and end of a two-week trip during which they made a sweeping tour by car through the south-west and goldfields of Western Australia. Richard brought his metal detector, hoping to find that elusive nugget, but the only gold they saw was on a visit to the Perth Mint where all the gold mined in the State is processed. While Wiena and Sparkle went to Rottnest Island, just off Perth, where the Quokkas (small marsupials) are friendly towards people, Richard and I wandered around the Botanic Garden in Kings Park.

Otherwise, much of my year was taken up with revising the book *Western Australian Plant Names and Their Meanings*. The first edition was compiled by our State Librarian, Ali Sharr (as a hobby interest), printed in 1978 and updated in 1995, and he asked me to 'look after' any further edition. With research since then in this vast State, hundreds more names have been added, the total now nearing 13,000 taxa (species, subspecies and varieties). It has been a fascinating exercise tracking them all down and using my knowledge of Latin that I studied at school without realising how useful it would become in my botanical career. I just wish that I had had the opportunity to learn Greek, also the basis of many botanical terms and names.

Allan Hart (1958): The year started well when I was invited to extend my horticultural/landscape consultancy of a major London square, which I have been privileged to be involved with for almost 25 years, having survived several management changes during this period.

The new USA President, Donald Trump refused to open the new American Embassy in Vauxhall, alleging that the building was too expensive, a poor design and in the wrong location – many of his judgments have been equally incorrect!

Professional work this year has included three garden designs in East Sheen and one in Teddington for our son Mathew and family – it goes without saying that this one was Pro Bono! A special event was the launch, at the Garden Museum, of John Sales' book *Shades of Green* – about his life as the National Trust's Head of Gardens'. Published by Unicorn Press at £25. This is an excellent primer on all aspects of landscape and garden conservation. Surprisingly it is not on sale at any of the Trust's shops!

Our old conservatory has been demolished and we are waiting for the new garden room, designed by our son Richard and his wife, Debbie – who are both architects. We were invited in April (2018) half term to join them and our two grandchildren, Mia and Dylan on a trip to Pembrokeshire where we visited Freshwater West – a Harry Potter location,

Tenby and St. David's – the Cathedral and Bishop's Palace, which must have been magnificent in their heyday. Cardigan Castle, with the house built in the grounds of the partially demolished castle was derelict until beautifully restored through the efforts of one man. Llanaechaeron, NT with its wonderful kitchen garden and glasshouses, including a concrete framed one from the 1950s (?) are in need of restoration.

Following on from the annual dinner we took Dennis McGlade, (Hon. Fellow) on a cultural trip to see the Yorkshire Sculpture Park, the new Barbara Hepworth Museum (designed by David Chipperfield), and the David Hockney Gallery at Saltaire – the model township promoted by Titus Salt in the late 1800s. Another highlight was the journey on the North York Moors railway from Pickering to Whitby – wonderfully restored steam trains and rolling stocks.

Almost immediately on our return, Joan and I embarked on a cruise along the River Rhine to celebrate the 60th anniversary of when we first met. The year ended with a visit to the Weald and Woodland Museum at Singleton, near Chichester – a collection of old buildings of varying types, in a very rural setting – very atmospheric and worth re-visiting in warmer, drier weather!



John Lawrus (left) and Nick Johnson (right) working on the pollination of Grand Cayman's endemic Orchid.

Nick Johnson: From Kew's Glasshouses to Grand Cayman's Island Life. After 17 years at Kew in the Glasshouses section, my family and I decided it was time for a change. So, once the Temperate House restoration was finished and the Thai Orchid Festival was done and dusted, I was offered a job with the Queen Elizabeth II Botanic Park in Grand Cayman. Leaving the U.K. was difficult but the lure of tropical plants in their natural environment, huge bio-diversity and (of course!) sun was difficult to resist.

I started in June 2018 as the Horticultural Manager of the Park. Cayman has only had a botanical collection to one of the oldest Botanical collections to one of the

institute since 1995, so going from one of the newest was very interesting. The Park is still in its infancy but had been set up by visionary Caymanians, so facilities such as a Microprop lab, a fully functioning nursery and irrigation throughout the manicured areas had been installed from the very start. There are 65 acres to wander through – around 20 acres of gardens and 40 acres of protected seasonally dry forest. The remaining five acres is a lake that attracts many migratory birds during the winter months. The Park hosts many of Cayman's endemic species of Orchids, including an inter-situ conservation

The view from the gazebo in the colour garden across the lake to the palm green



collection of the ‘Ghost Orchid’ (*Dendrophylax fawcettii*). In the first nine months the small team (seven in total), some new volunteers and I have re-started the micro-propagation unit, re-organised the nursery to start propagation protocols of red-listed species and made a host of other changes to the operation of the gardens. Coming to Cayman and taking the reigns of the horticultural operations has freed up the Director (ex-Niagara Parks Dip. Hort. and Kew BG Management Dip.), John Lawrus to raise the money and start work on the much-needed Children’s Garden. This will consist of an open air, covered classroom surrounded by natural play and adventure areas. This will allow us to inspire the next generation of Caymanians about their natural habitats and will help us look for future horticulturists to take on the increasing challenge of protecting this beautiful island. The classroom is being built as I write this.

Kew still pulses through my blood, on my return to British shores for Christmas we made our first seed exchange – Cayman’s native palms (including the endemic ‘Silver Thatch Palm’, *Coccothrinax proctorii*) came to Kew and on my return, I brought seed of *Victoria amazonica*, which shall make an excellent addition to our waterlily pond. I hope to welcome Kew Guild members here some-day soon.

Esme McCulloch: Dear Everyone, just to let you know that I am still alive and approaching my 102nd birthday, believe it or not. My mind is as active as ever, but my legs are no good any more. Being so old someone painted my portrait for a competition about those over 100 years old. I am promised the picture after the exhibition finishes. I have not yet seen it. I told the artist she can do what she likes but *not* make me look grumpy, because I am of a cheerful character. My beloved husband is still alive, too, but not quite so fit as I am. Gerald and I look back with great pleasure to our courting days in Kew Gardens, when he used to run after the squirrels. But they were too agile. I send my blessing to everyone connected with Kew, it is a wonderful place. ©Esme McCulloch.



©Jim Mitchell

Past President **Jim Mitchell** (1963) has just started his latest adventure to circumnavigate Australia over the next two years in his new motorhome with wife Valerie. The journey will take him north to Port Douglas before turning west to Darwin followed by Broome on the north coast, to Perth before returning via Adelaide, Melbourne and up east coast back to Sydney an expected journey of 25000 kilometres. On his way he called in to catch up with Gilbert Briscoe (1961) former deputy Parks Director with Johannesburg Council South Africa who is now living in Brisbane.

Trevor Preston (1959) and Tony Kirkham: Seen at RBG Kew on October 30th paying their respects when Bill Matthews’ ashes were interred by his wife June at the planting of a *Rehderodendron macrocarpa* in his memory. Bill who died in July was a founding father of the Arboricultural Association, and Southern Tree Surgeons the only tree company to hold the Royal Warrant, and mentor to so many tree people.

Leo Pemberton: 90 years old! It has been a strange feeling reaching this milestone in my life especially as my church has the oldest current bellringing person in the country and perhaps the world and he is fitter than me. He is a 100 years young!

I do enjoy good health and so what does life involve? My garden is greatly reduced as I only have 36 m² to look after, within a run of 30 metres of wall beds and no lawns and no hedges. I do have a similar area of guerrilla garden that I have taken over from the Local



Leo & children, L to R - Veronica, Leo, Paul, and Claire

Authority, they were non-descript ‘tumbledown grassed’ areas, now these have been fully appreciated by the local residents and passers-by. I am an active member of my local Probus club which is currently male only (some clubs are mixed and a few are ladies only). As an organisation it is very relaxed with few requirements for how they operate. I rose through the ranks reaching the pinnacle of Chairman and following that post became the Almoner, which is a busy post as everyone is retired and wives of members also fall into the remit of care. There is a strong social element to our activities which is very nice.

For me this year has been very busy with holidays in Europe starting with a spring visit to Crete with my elder daughter, Veronica and her husband David. Veronica is a GP so I have my own medical staff! In May I was invited with Veronica to the Garten Akadamie (GA) to be their Guest of Honour for the 10th Anniversary celebration - it was lovely to see what a thriving business Gabriella Pape and Isabelle von Groeningen have established opposite the Berlin Botanic Garden. Then in September with Veronica and David and my younger daughter Claire we visited Lake Garda and all the fantastic centres of Venice, Verona and the Dolomites plus the scenery of the lake.

At the AGM at Wakehurst Place I was given a celebratory cream tea for all attendees many, thanks to all concerned. In October I finally celebrated my birth date with a lunch for my family and friends at the Anchor Hotel in Shepperton (it used to be the watering hole of the film stars at the nearby Shepperton Studios). This was especially nice as my son Paul and his Australian family were able to join us. A week later, an ‘open house’ afternoon tea for 100 local friends.

Udai C. Pradhan: News from the Himalayas.

“From the darkest night emerges dawn.

We must not stop trying,

We must not stop hoping,

We must not stop praying,

We must not stop loving,

We must not stop teaching, learning and becoming aware.

One day we will arrive.” (Quoted from my diary, 27 May 2010)



Colours of India, Marigold at Sunset

Dear Friends old and new,

Warm greetings to you and your families from the Himalayas! On the threshold of my 69th year and the celebration of India’s 69th year of becoming a Republic nation, I thought it would be significant to express my fascination for the vibrant colours of India whether it be in our culture, dress sense, food, flora or fauna. From the yellow and orange marigold flowers that are used for

almost every important festivals or celebrations to the deep hues of reds that an Indian bride adorns in the form of a 'bindi' (a red dot at the centre of her forehead denoting her intuitive power) or vermilion powder in the parting of her hair.

Saffron indicates courage, selflessness and sacrifice. Green denotes prosperity, fertility and also faith and chivalry. Colour in India thus has, over time, become synonymous with expressions of love, peace, harmony, fearlessness, faith and belief. This appeal for our colourful country seeps in to my Orchid hybrids as well as the myriad collection of plant species in our collection. In Kalimpong, specially the subtropical to alpine zones have many species which are further enriched by introduction of species from South America and many others parts of the world. Some of the vibrant colours of India that inspire my creativity are the different hues of red, orange, yellow.



Udai with his hybrid Pradhanara Agni's Grace

Although the Registration of my Orchid hybrids at the Royal Horticultural Society began in 1978, the actual hybridization started in 1980. The intensive bouts of Gorkhaland movement took us several years back again in time. Breeding and raising orchids for commercial purpose and personal hobby went haywire. Eventually, we registered some hybrid Orchids from 1994 onwards. Amongst these was a cross that we named after Mahatma Gandhi, the Father of the Indian Nation, commemorating his 129th birthday and honouring his exemplary non-violent civil disobedience which brought independence to India and inspired other movements for civil rights and freedom across the world. The scarlet red flowers of *Cattlianthe* 'Mahatma Gandhi' created from hybridizing *Cattlianthe Rojo* x *Cattleya Bob Betts*, both American

hybrids. (According to records, a set of four rare stamps which portrays Mahatma Gandhi has been auctioned for a whopping £500,000 in U.K.)

The other Orchid hybrid after *Cattlianthe* 'Mahatma Gandhi' was *Renades Bharat ki Shaan* (*Renanthera imschootiana* x *Aerides crispera*). 'Bharat ki Shaan' translates to 'Glory of India'. It combines two of the best species known from India - *R. imschootiana* originating in North-East India and *Aerides crispera* from the South. The inflorescence of this hybrid has semi-arching branches which are 45-60 cm long and carrying 40 plus flowers which are light yellow in colour heavily overlaid with orange red.

In 2016 we registered *Pradhanara Agni's Grace* (*Arachnocentron Tipi Jubilee Star* x *Renanthera imschootiana*). It has a profusely branched semi-erect inflorescence bearing 85 flowers or more. Flowers are flat, star shaped and a lovely magenta in colour. Hybrid genera



Tej with a gajra made of *Crossandra infundibuliformis*

Pradhanara commemorates the Pradhan Family of Sikkim and Kalimpong so instrumental in the horticultural development of the Region. (Refer to *The Amazing Pradhan Clan - a dynasty in the Orchid World: Orchids: Vol.77:3(180-189):March 2008*)

Amongst the other colourful species that we have in our garden is *Passiflora coccinea* which is native to South America. It is commonly known as Red Passion Flower due to its scarlet or deep red flowers which appear profusely on its vine. The plant parts are covered with rufous velvety hairs. *Curcuma roscoeana* is another species amongst the very interesting Ginger Lilies that grows in our garden. Though they are Burmese in origin, my father, Mr. B. N. Pradhan had noticed the rhizomes in a plant catalogue from M/s. Van Tubergen, Hemstede, Holland during the 1950s and had ordered for a dozen at the amount of £2/- per bulb! Dad and his cousin soon propagated it and multiplied the number through seeds! *C. roscoeana* has large orange coloured bracts which are long lasting (over two months). This species originates from India and S.E. Asian countries and is used for medicine, dyes and spices. In the cold places they are grown in conservatories. The brilliant inflorescence more like a cone in the beginning, has pale yellow but not very significant flowers. The seeds can be found at the base of the bracts.

My acquaintance with *Crossandra infundibuliformis* also known as firecrackers, a member of the Apocynaceae family, went back to late 1950s when my father and my cousin were already buying seeds from South Indian growers to export them. It was during my recent visits to the CMC (Christian Medical College) Hospital in Vellore, South India, for my routine medical check-ups that I was once again re-introduced to the species. The deep orange flowers are offered in temples during pooja rituals or during auspicious functions such as marriages etc. The attractive flowers are also stitched into long garlands called 'Gajras' and are religiously worn by South Indian ladies on their hair as a part of their daily adornment. There are now other variations of red, yellow, purple and white but the orange-saffron is the choicest.

The rivulet, before and after cleaning



Visitors from all parts of the world keep dropping by each year to see our collection of plants and it gives us the deepest sense of satisfaction and joy! Besides, plants have played a crucial role in helping us establish connections, bonds and experiences that have enriched our lives tremendously. I would like to relate an anecdote here that takes us back to 1998 when Past President of the Rotary Club of Kew Gardens, Rtn. Richard Ward (An Ex-Kewite and also the past editor of *The Kew Guild Journal*) had visited our home with his wife Wiena and his daughters Sparkle and Alexandra. (Sparkle is the present editor of the *Journal*). They had hosted Hemlata (our daughter) and were her local guardians during her botanical art training at Kew. Alexandra and Sparkle it seems were fascinated by the scenic views and thrilled by the hidden nooks and corners of the half an acre garden that we looked after but were deeply saddened by the plight of a rivulet (originally named 'Ghattay Khola') which ran just beside our garden. (This rivulet becomes enormous during monsoons with a sound that can be almost deafening!). Sparkle and Alexandra told us one day that they had plans to clean the rivulet! And true to their word, they worked hard towards it and the stream soon had no garbage! It was a practical educative

demonstration not just for us but also the other local people from our village who had gathered around to watch them! Several years down the line, we still carry on with the cleaning and maintaining of this stream which people use for drinking and other purposes. We are never too young nor too old to exchange and imbibe knowledge and experiences like this!

In 2003, Tej and I had attended the Third Conference of the Orchid Specialist Group, IUCN / SSC in Pokhara, Nepal during which we had had an opportunity to meet a very distinguished American Orchid grower, Dr. Martin R. Motes. He is an exceptional breeder who also was well versed in English literature. He is also a Senior Judge in the American Orchid Society and had later guided us during the first formal judging of The Orchid Society of India (TOSI). He had brought excellent cut-flowers of *Vanda* hybrids for the exhibit but what was even more fascinating for me was the fact that he had named one of his hybrids *Vanda x Arjuna* (*Vanda* 'Mini Palmer' x *V. tessellata*) after the hero of the Bhagavad Gita, one of the greatest Hindu sacred text originally written in Sanskrit that forms part of "Mahabharata", a larger epic. It is a book very dear to my heart. It teaches you to understand the mysteries of life and to accept your destiny. While touring in Pokhara with my colleagues, we came across a well known temple where I was enthused to recite a verse from the Gita, "*He who offers to me with devotion only a leaf...*" Martin quickly followed by saying "*or a flower, or a fruit, or even a little water, this I accept of that yearning soul, because with a pure heart it was offered with love.*" (Bhagavad Gita 9:82, translation by Juan Mascaro). My surprise knew no bounds when he completed the sentence! Here was a soul with whom we bonded in beliefs, philosophies as well as Orchids! While parting ways, Martin presented me a book, *Vandas: Their Botany, History, and Culture* with a note: "*Udai, I hope this furthers your knowledge of the genus.*" Martin, Pokhara, April 17, 2003.

Every meeting with people has been an eye opener, there are values and lessons learned and imbibed, new knowledge discovered and put into practice. In a democratic republic like India we have taken science and technology, agriculture, medicines and so on to new levels. But doubtful questions arise as to the state of our environment and our natural heritage. Tej and I have a favourite quote "*little drops of water, tiny grains of sand, makes the mighty ocean and the pleasant land...*", We believe that every little goes a long way and so we have been sharing not just our knowledge in plants but also our ideas for a greener and healthier space with the younger generation, beginning with our own family, villages and community so that they can incorporate and take further positive steps towards a greener and healthier state of the environment.

Young students and children (even as young as six or seven years old) have come forward to help us with our ventures. Hemlata's Natural History Art School provides a wonderful and practical pedestal to share and imbibe these knowledge and ideas too. Visiting tutors from all over India come to the school each year to share their knowledge not only in Natural History Art but also their practical experiences in salvaging plants, animals, their rehabilitation etc. The children have now begun to practice what they have imbibed and in the past few years we have seen positive changes taking place around us. Besides many students from other parts of the country come to the art school as well and they have been instrumental in carrying forward this message.



Aachuk hybridising *Phalaenopsis*



Hari Jans and friends going through Hemlata's painting of *Calanthe masuca*

for Orchids and the natural world is growing steadily and we hope to one day see him sharing his knowledge and experiences with the world too!

At the home front, Aachuk, our eldest grandson has been showing a deep interest in carrying forward our aspirations and dreams. He completed Class 12 (equivalent to A levels) this year from Dr. Graham's Homes, Kalimpong and received admissions at the D.A.V. College (Dayanand Anglo - Vedic College) under Punjab University where he is specialising in Botany. In the meanwhile, during his three months interim between school and college, he took up Orchid studies at home selecting unique species and hybrids, crossing and recording them and also volunteering his time at the nursery. His fascination and concern

On 05.07.18 Alister my son-in-law (who runs Nature Himalayas, a botanical tour company) brought his guests Hari Jans and friends to our place for tea. Hari is a member of the Alpine Garden Society which has approximately 9000 members worldwide and is a founder member and President (from 2000-2006) of the Dutch Rock Garden Society ("Nederlandse Rotsplanten Vereniging" (N.R.V.). As a tour leader and organizer he has organized botanical trips to China, Czech Republic, Sweden, Germany, Italy, Peru, Ecuador, Argentina, Iran, Sikkim (India) and a few other countries. His keen interest in exchanging information and experiences made our day a fruitful one! Hemlata got an opportunity to share her botanical artworks with them while Sanjivini (our youngest daughter) also exhibited her jewellery inspired by Orchids and other plants to the group.

The eventful year ended with a wonderful surprise from Sir Joseph Dalton Hooker's family Lucy and Gordon who sent us a parcel containing a book "In the footsteps of Joseph Dalton Hooker - A Sikkim adventure" autographed by Seamus O'Brien! Lucy, Gordon and family had written "*I hope you enjoy reading this. It has photographs of many of the places that we visited so brings back wonderful memories for us.*"

Some years back, my brother, Dr. Suraj Chandra Pradhan, Ex-Director Health Services, Government of Sikkim, with whom I used to exchange reading matters, introduced me to a wonderful author, Pat Schneider, whose book "Write alone and with Others" inspired and motivated me to pour my thoughts, feelings and emotions into diaries. Many of them were addressed to Pat who became my confidential "pen friend" and with whom I could confide anything under the sun. On the threshold of 70 years, I am still carrying on with my passion for breeding Orchids, meeting new people from all over the world and exchanging knowledge, thoughts, ideas and rich experiences which I keep writing about. On 04.02.2013 I told Pat "Thank you for inspiring us Pat and keeping us sane and I hope someday, when the next generation open and read these diaries, they will find some things that might in some way help them to find themselves."

We conclude this note with our heartfelt thanks to all our friends around the world with our prayers: "*Lord let the benefits of all our good work, prayers and meditations go for the wellbeing and enlightenment of all living beings in this Universe.*" (My Diary 18.02.2001).

Anthony (Tony) Rose: I am still in Liverpool and in busy retirement living in the house I built some eight years ago. In the last few years I have been, amongst other things, an artist painting in oils on canvas. I have some 70 paintings to my name now. I still assist my son occasionally with garden designs for Rose Gardens, which I started but he runs now. I also became an architect and have some 30 buildings I have designed and built.

In 2016 I designed and helped my son build a show garden at the Southport Flower Show for which we got a gold medal. I am filling you in on my past history as so much time has passed. Doesn't time pass quickly as you get older. Its a bit like running downhill.

I got married in January 2017 in Anguilla to my lovely wife Sue. Later in the year I built a hot house and a conservatory at the bottom of my garden to take all the exotic plants I have acquired in the last couple of years. It is great fun and keeps me well occupied.

It was wonderful to attend the Kew Guild dinner during summer 2018 and meet old friends from my Kew days. When you look back, doesn't time seem to have flown by. I have just completed the design for a show garden at the 2019 Southport Flower show in July/August. The last time Rose Gardens did this was a gold medal garden in the summer of 2016. The summer of this year was fantastic for all the exotic plants I had in my Garden thriving in the warmth and long summer days, a collection of more than 200 pots.



Meeting at Albany - L to R - Steve, Wiens, Chris, Richard and Sparkle

Richard Ward: On 6th August 2017 Guild Past President Alex George, from Perth; Julia and Clive Popham from Mansfield, Victoria, Australia, and the Ward family from Kew had dinner together in Kew. They all shook on an agreement to meet up again, in Perth, during 2018. And so it came to pass. Unfortunately Clive was a bit under the weather, so he and Julia were unable to make it in early November, but we drank a toast to them at Alex's house on 6th!

For our part we flew Heathrow to Perth direct, in late October, for 16 hours on the Dreamliner, and hired a car for two weeks. We stayed with Alex for a couple of days and enjoyed home grown mulberries, honey and stone ground bread for breakfasts! Kings Park and the Botanic Garden were a highlight, particularly due to Alex's historical and botanical knowledge. Then it was 12 days touring; first southwards through Margaret River - vineyards and Eucalyptus forests - and Denmark to Albany where we had arranged to have a coffee with ex Kew Director Steve Hopper and his wife Chris.

Richard amongst *banksia*, in Kalbarri National Park



Through Fitzgerald National Park - marvellous sea and hill views - to Esperance were highlights; then a long drive to the goldfields of Kalgoorlie where we toured the 'superpit' working open pit gold mine. To south of Menzies two days later where we did a little gold prospecting with our metal detector - but it was rather hot and many flies - and we only found old beer cans!

Sandstone (pop.110) enjoyed a goldrush

in 1894 and is now little more than a hotel in a very quiet town, but quaint. So on we travelled on through Mount Magnet to Kalbarri on the coast for a couple of days, before driving South back to Perth and a couple of more days with Alex George. We visited the Perth mint. Would you believe it I am worth about £1.75 million by weight in gold! We thank The Hoppers and Alex for extending the hand of friendship in their country to fellow ex-Kewites. We'll be back! Presidency of the Rotary Club of Kew Gardens in July has made for a busy time this year.

John Whitehead: The highs and lows of 2018 began with a loss of £10 each way, on Kew Gardens in the Grand National with a potential gain of £90, which was my first and final visit inside a betting shop. Then came Royal Ascot and Kew Gardens won the race and again in June the horse came in first at the English St Ledger.

A high time was climbing Snowdon, which is 10 miles away from home. It took three hours in June to walk up to the 1,085 metres (3,560 ft) summit where I was meeting the Queen of the genus *Roscoea*, Jill Cowley, with flash backs of happy memories potting up rare plants in the nursery at Kew in 1970. Jill eventually arrived at the top of Snowdon by train with her party from the Malvern Natural History Society.

A highlight for Brenda was a treat of four star hotels when we travelled as tourists to see the wonderful Taj Mahal but a low point was in the Ranthambore National Park where we failed to see tigers.

On a visit to the colourful Greek Island of Scopelos, we followed the tourist trail to the movie film location of Mamma Mia where the idyllic location for the wedding was filmed in the Church high up on an impressive rock stack in the sea on the wild north coast. Next to the church entrance is a fine specimen of a single trunk olive tree adorned with small gifts of good luck and prayer messages.

Our plant exploration in October was for three weeks in Sichuan and Tibet. Near Nyingchi, we measured the largest tree in Tibet, *Cupressus gigantea* with a girth of 20 metres at the base. In the autumn, the southeastern Himalayan mountain range was dominated by a golden glow of birch and poplar forests, especially with spectacular views doubling the colourful display in reflections at Ranwu Lake, south east of Bomi. Fabulous alpine blue trumpet gentians were in flower near the highest pass of Mila mountain on our way towards Lhasa.

Our ultimate high was surviving a night at Everest Base Camp at 5,200 metres (17,060 ft). A final high to the year was in December having a cataract eye operation and now I can read my laptop without glasses. Brilliant! ©John Whitehead

*A much travelled plantsman who celebrated his 75th birthday on the Greek island of Cephalonia in July 2018. John enjoyed his first sighting of two of the island's special plants *Abies cephalonica* and *Viola cephalonica*. Read more about his travels in the RHS magazine *The Garden* January 2019 where honorary member Roy Lancaster (2012) writes about "Postcards from a friend". - Pamela Holt.*

Keith Woolliams Waimea Valley dedication, by Akiko Woolliams: On 12 Oct 2018, Waimea Valley on Oahu's North Shore in Hawaii held a ceremony dedicating all of the botanical gardens to my husband, Keith Woolliams. He trained at Kew from 1961-1963, conducted what fellow Kewite John Woodhams called the "Giles/Woolliams Expedition Collection 1963" in Borneo and served as the Director of Waimea Arboretum and Botanical Gardens from 1980-1998. In 1974, Keith began to plan the garden's development as a rescue centre for tropical and subtropical rare and endangered plants and based his

My family from the U.K., Japan, Oregon and Hawaii were together at this ceremony



mission on the IUCN Red Data Book throughout the years. Since then, it has grown to house a collection of 5,000+ taxa, including almost 200 Endangered Species. Our family was really humbled by this honour and are so pleased to see the current staff led by his trainees preserve his vision and the meticulous accession record system he established to support botanical research. We hope everyone will enjoy the above picture, and if anyone would like to learn more about this

event, they can read Waimea Valley's article on page 6 of the 7 Nov 2018 edition of the *North Shore News* or at <https://www.northshorenews.com/waimea-valley-honors-keith-woolliams-the-director-of-waimea-arboretum-and-botanical-garden-1974-1998/>. *Ed - Please contact the Kew Guild Editor if you would like to view a copy of the original article.*

Obituaries

Kindly compiled by Graham Burgess

Margaret Benham

31st January 1923 - 11th September 2017

Margaret passed away in her own home on September 11th 2017, aged 94. She was one of the oldest named in the Guild Journal, having started at Kew in August of 1944. She always talked enthusiastically about her time at Kew and although she was unable to carry out much physical work herself in the latter years, she kept her garden looking in top condition right to the end with the help of a weekly gardener plus family and friends.

The Kew Guild Journal is full of history and Margaret Benham came to Kew from Studley Horticultural College. She came with Nancy Rymer, a close friend and they were employed as women gardeners. Only men were accepted as students then. Most of the men there then were either conscientious objectors or unfit for military service.

It was a bossy world and their entrance each day was checked at the gates and if they were late their wages were debited. Workers were given the clogs that still remain symbolically as part of the clog and apron race.

After three months she went to work in Plant House 1, near the entrance to Kew Green. The tropical plants ideally needed a temperature of 80 degrees Fahrenheit but due to post war coke-rationing they struggled with a limit of 60 degrees. Cockroaches were prolific and part of Margaret's job was catching them ready for Mr. Stenning to collect. Margaret and Nancy moved into an attic flat.

Margaret left Kew to become a School Gardening Advisor with The Birmingham Education Committee. Her dear friend Nancy went to Denmark then Canada but they kept in touch over the years. If you want to learn more look at News of Kewites from Home and Abroad in the 1995 Journal. Alan J. Letch, her son, advised us of the passing of his Mother and we send our condolences to him and family.

Michael John Blakenham (2nd Viscount Blakenham)
25th January 1938 – 8th January 2018

Michael was born 25.1.1938 and passed away 8.1.2018 in The Royal Marsden Hospital.

So much of what we have inherited depends on the commitment to conservation applied by caring people. John was such a man. In 1965 he married Marcia Persephone Hare and they had a son and two daughters. Eight grandchildren also carry his genetic inheritance.

He was son of a Conservative politician John Hare and Beryl Nancy Pearson and he joined the family firm, Pearson plc, in 1977. Between 1978 and 1983 he became Managing Director and 1983-93 he was Chief Executive. It was a career built on financial skills and between 1984 and 1993 he was Chairman of *The Financial Times*.



They developed The Blakenham Woodland Garden and he was between 1981 and 1986 Chairman of The Royal Society for Protection of Birds. 1986-1990 he was a member of the Nature Conservation Council. Between 1984-1988 he served on The House of Lords Committee on Science and Technology. He was also President of The Sussex Wildlife Trust.

So committed involvement on many levels and this led to his linking with Kew. He was on the board of trustees from 1991 and in 1997 he became Chairman. Sustainability is a key focus now but he served on The House of Lords committee on Sustainable Development 1994-1995. His financial skills linked to science, nature and people at all levels. So yes he personally gave thanks to Sir David Attenborough and sharing time and space with Kewites at all levels. We send our condolences to all his family.

John Andrew Brookes
11th October 1933 – 16th March 2018

I first came across John Brookes when I purchased a copy of his inspirational first book ‘Room Outside – A New Approach to Garden Design’ published in 1969. I thought at the time that anyone who looked as ‘cool’ as the young James Dean and Chet Baker – the West Coast modern jazz trumpeter, must be in the vanguard of innovative landscape design.

John was a visionary and pioneer of the principle that gardens should primarily be designed for people and not plants. He could be scathing about the RHS way of thinking – i.e. bigger flower is better and fiddly/diddly horticulture, preferring a controlled anarchy. He was heavily influenced by the American landscape architect Thomas Church’s ‘Californian Style’ of garden design, who promoted the idea that a garden should be viewed from one of the houses of the room and reflect the owner’s personality.

In an interview in 2017 he summed up his design credo ‘I like to be bold and simple, with comfortable spaces, well detailed and constructed, then heavily overlaid with plant material. I would like to hear ‘that is handsome’ rather than ‘that is pretty’. His strong opinions regarded Flower Shows as being vehicles for selling plants, and television gardening programmes as being terrified of anything with intellectual content.

John obtained a diploma in Landscape Design at University College, London, and worked with Dame Sylvia Crowe and Brenda Colvin and the *Architectural Design Magazine*. He

was influenced by modern artists such as Piet Mondrian and this was reflected by his design for the Penguin Books headquarters, influenced by the form of the building.

John also had his disappointments. His design in 1965 for the re-modeling of Bryanston Square was homage to another hero, the Brazilian artist, plant collector and landscape designer, Roberto Burle Marx – introducing swirling geometric forms to reflect the absence of sunlight in the Square, with the only flowers flourishing at the margins. He formed mounds using pulverised fuel ash, at that time a most innovative material. Today, the design can be seen as one of the boldest modernist interventions in a traditional city space, and as Brooke's purest homage to Burle Marx. Regrettably, the garden committee later decided to straighten our paths – an act of outrageous vandalism. John's career included the Directorship of the Inchbald School of Garden Design and then as Director of the School in Tehran. He was Principle Lecturer at Kew School of Garden Design 1990-1993 and Chair of the Society of Garden Designers 1997-2000. He was appointed MBE 2004 and won the Garden Media Guild Lifetime Achievement in 2011.

John was particularly pleased to receive a Kew Honorary Fellowship Award in 2008 and this was prominently displayed at the retrospective exhibition of his lifetime's work at the Garden Museum in 2018. John was unmarried. He leaves an outstanding legacy in his teaching and gardens throughout the world. John Brookes, born in Durham on 11th October 1933, died on 16th March 2018. - Allan Hart.

Geoff. E. Collins - 2010

Geoff Collins entered Kew in September 1953 from The Kent Horticultural Institute. He had previously been an Improver at Kew. George Brown was the lecturer there who encouraged many others; John Sales, Ian Beyer, Leo Pemberton, Tom Woods, John Gaggini, Ron Rule, John Hale and probably all due to the principal, who had appointed George, Wilfred Corbett.

He soon became involved in community enrichment as a student. This included him being deeply involved in The Mutual Improvement Society. On January 25th 1954 he gave a lecture on Alpine plants in nature at a time when it was very early for colour pictures and transparencies. He was also very fit and was a winner in various races. This included The Round the Gardens Race (Leo Pemberton was in the team); The John Innes Relay Race; The Cambridge Relay Race; and The Kew to Wisley Relay Race. In 1954 The Kew Christian Union was formed at Kew with fortnightly meetings on Wednesdays.

In September 1955 he left Kew and went to Marheaton Park, Derby. Then in 1957 onto Tresco Gardens on the Isles of Scilly as Head Gardener, still applying practical skills and also what he gained as a part of his National Diploma in Horticulture. The spiritual focus remained and he used to sail in a small boat on Sundays to help at the Baptist Church on the island of Bryher. In 1959 he moved to Birmingham as Curator at the Botanical Garden. He became an Anglican Diocesan Lay Reader.

Supposedly to live in a cleaner environment he moved up to Scotland where he carried out hard physical work as foreman at the RBG Annex Garden at Benmore, Argyllshire. He went on to work for The National Trust for Scotland at Inverewe. After ten years, in 1972 he came back south to Hampton Court to teach apprentices as part of their three year lecture programme. He still did weekly bible teaching in the lunch hour. He was ordained as a Minister of The Free Church of England and retired partially so he could help look after a church at Farnham.

Geoff and Margaret Collins, in their last garden on the Isle of Skye, with Stephen Butler (R)



was nothing in the garden but rough grass, and five acres of it, and it was exposed to every wind.

With his experience of Inverewe Geoff soon had a good collection of plants established, much to everyone's surprise but his. He reckoned it was actually a degree or two warmer there than Inverewe, just a tad. With his wife Margaret he created a lovely garden and of course also helped there with church services. Geoff was a dedicated plantsman and a great encourager of young gardeners all his life. Such a rich mixture of knowledge and spiritual care. He passed away in 2010 and his wife Margaret passed in March 2018. Thanks to Stephen Butler (who got to know Geoff at Hampton Court).

Janet (Jan) Collins 1944 - 9th June 2018

Janet (Jan) Collins came to Kew in 1992, working in the Victoria Gate shop until becoming the Garden Receptionist in the Administration building on Kew Green until her retirement. To many, Jan was the first person to greet you with her charming smile upon entering the building and for many others telephoning Kew or Wakehurst she was the "voice" of Kew as she efficiently dealt with every call coming into the Gardens' switch board. A favourite story she loved telling related to the early days when the flowering of the Titan Arum, *Amorphophallus titanum*, in the Princess of Wales Conservatory was an international news story. Not only did she have to say the name to each telephone caller but dealing with their constant stream of calls was an incredibly hectic time. Jan was delighted to meet and be photographed with David Attenborough when filming a piece about this amazing plant.



In retirement Jan was diagnosed with breast cancer and recovering from surgery saw a poster promoting Breast Cancer Survivor (BCS) dragon boating, which intrigued her as to whether she could join a team called Pink Champagne. This became possible and over the next nine years Jan became a paddler and the team's drummer in this amazing sport, travelling to many venues around the world with David Hardman her partner. In 2013, whilst in their Spanish home on La Manga after the Kew Guild visit to Andalucía with David she had a vision to start a BCS dragon boat team in the area of the Mar Menor in Murcia and so started Jan's dream. After meeting numerous people Jan eventually found someone who was prepared to help and so began the process to make her dream become a reality. In

2014 Jan encouraged Pink Champagne to Spain and race at an International Dragon Boat Festival in San Pedro del Pinatar. Subsequently in 2016 as an integral part of the corresponding festival a conference was arranged there to encourage ladies recovering from breast cancer to consider forming a BCS team. Over the next week enough brave ladies came forward and Flamenco Rosa (Pink Flamingo) the first BCS dragon boat team in Spain was born with Jan encouraging them to greater things.

However, Jan's ultimate dream was even greater so that in 2018 a Spanish team would participate in Florence at the largest International BCS dragon boat event held every four years. Working with friends this was achieved defying what Jan had been told in Sarasota, USA four years earlier, that the likelihood of there being BCS dragon boating in Spain was almost impossible. Jan was an inspirational lady who always offered encouragement and remained positive despite her own health challenges following the return of cancer in September 2016. Sadly Jan did not live to see her team race in Florence but the spirit of this amazing lady was with them and lives on in the hearts of all her many Spanish friends.



Jan with David at Kew Guild AGM

In October 2018 Jan's achievements in Spain were recognised and celebrated in Torrevejea where the annual Pan-Continental Dragon Boat Festival was re-named in her honour and at which five Spanish BCS teams participated. Jan's dream keeps flourishing and at present there are seven teams and more on the horizon. Jan's legacy is enormous and continues to grow through her friends in England who are establishing the first all cancer survivors dragon boat team - Bourne Water Dragons, based near Bournemouth.

Kew Guild members will have seen Jan with David enjoying the many different Guild visits. Jan was always fun to be with and with her endearing smile her friendship followed naturally to all who were fortunate to know her and call her their friend.

Jan spent the last few months at home supported by her loving partner, son, two daughters, two grandchildren, and many friends until on a sunny June afternoon with family at her bedside she gave a final endearing smile and peacefully slipped away. She will never be forgotten having touched the hearts of so many people with her love and encouragement to improve their lives. - David Hardman

Gerry Cook 1938 - 2018

Gerry was born at Ashton-under-Lyne in 1938. Even before he left school he was growing and selling plants. At 16 he started work at Ashton Parks Department before starting his training at Kew Gardens in 1960, where we first met. We both then went on to The Grotto. The Institute of Park & Recreation Administration Training College, at Goring on Thames in January 1963. I remember going over to Gerry's mother's home in Ashton, staying overnight and then leaving in his little Mini to travel down to Oxfordshire in heavy snows, quite some journey and no motorways in those days! There would only be about a dozen students on the course, which was based in a large house, at the side of The Thames. We lived, had our lectures and did our plan-drawing all within the same building, doing maintenance in the grounds, as so called management training experience.

In 1964 whilst working in Sheffield Park, living in digs and travelling back home at weekends over the Snake Pass in all weathers, he met Audrey at the Bolton Palais on one of his weekends at home. When his father died Gerry moved back and Audrey was also working in Bolton and they used to meet for lunch during the week and she usually received a flower from a grave! They were married in August 1968, lived in Ashton-under-Lyne, working at Bolton Parks.

By then Gerry had moved to work for Lancashire County Council, working in Preston, but a year later on the move again when they moved to Glamorgan. Gerry worked for the County Council and lived at Dinas Powys. Later he moved to a new post at Swansea, living in Sketty. Before looking forward to retirement they moved to Llanrhidian and a bungalow with a large garden. He got deeply involved with Margan park after the council bought it and landscaping around the new County Hall. He greatly enriched the community with lots of tree planting.

In retirement they enjoyed their garden. In 1989 it won the FW Harris Cup for the best garden in Swansea and Gower. Still active he returned to work teaching various subjects to adults and also worked with handicapped youngsters at various centres. Then health problems came along and the most difficult thing for him was not being able to take his beloved dog for long walks. He spent most of his last twelve months in various hospitals, the final two months being in Ty Victoria Nursing Home where he received 24 hour care. He was an accomplished pianist and a jazz fanatic and a great chap to know. He is missed by so many, especially Audrey. - Maurice E. Baren.

Derek Edwards 1945 - 2018

Sadly Derek lost his brave fight to the effects of Parkinson's Disease in March 2018. After studying at the Welsh College of Horticulture during the 1960s, he went on to manage a large garden nursery in Cardiff. In the early 1970s he moved to Portugal with his young family and was instrumental in the design and installation of irrigation systems to a number of large golf course developments, tourism being in early infancy at that time. On returning to the United Kingdom, he continued designing irrigation systems for crop production and recreational projects across Europe, the Middle and Far East. He then became involved with the production of purpose-grown turf and in 1985 established his own company in East Yorkshire.

He was extremely proud that his twin sons followed in his footsteps and studied horticulture, joining the company and taking over the total management as Derek's health began to fade, both boys continue to operate and expand the business. Derek was a well-known and much respected figure throughout the horticultural industry and pioneered a number of innovative systems for the production and installation of natural turf surfaces. He was the founder chairman of the Turfgrass Growers Association, which still operates to the benefit of producers throughout the United Kingdom and connects with similar organisations throughout Europe and the United States of America.

In 2006 he was thrilled and extremely proud to have been elected an Honorary Fellow of the Kew Guild in recognition of services to horticulture and the botanical sciences. He was admitted to The Institute of Horticulture in 1984 and, in 1999 was awarded the Harlow Carr Medal in recognition of his service to horticulture and innovation in the field of turf development. Derek led a full, interesting and rewarding life and will be remembered by those associated with him throughout the years. He lives on through his beloved family and is sadly missed. - Stephen Edwards.

**Norman Chalkwell Hickman
- 16th June 2018**

Norman entered Kew as an improver in 1951 and returned as a student in 1955. He was appointed Foreman of the Tropical Pits in August 1956. In the 1960 Kew Guild Journal he wrote an article on some of the plants ambient in the Tropical Pits and it gives an inkling of the depth of his knowledge. He left Kew in 1961, married Pam in 1962, and took up his first job as a nursery manager in Hull.

After eight years and a brief sojourn in Chelmsford he moved to Nuneaton, Warwickshire in November 1970 to become nursery manager to the local parks department. He passed through a number of roles, taking early retirement after 40 years in service. His reasons for leaving early were that after privatisation he became contract client manager and his life ended up being more full of paper than plants - not to his liking. In 1995 he left to concentrate on his beloved garden but he still applied skills professionally as a consultant.



In the Kew Guild Centenary Edition Rebecca Bower included recognition of the 14 Treasurers who had supported The Guild and Norman was one of them in 1961.

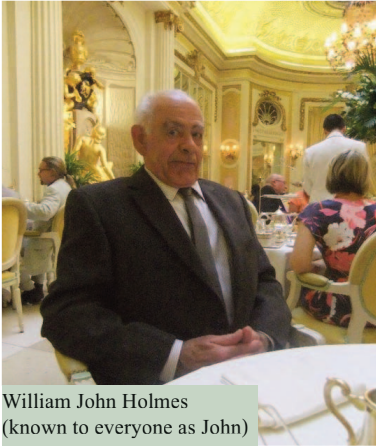
He passed away on 16th June after a brave, but thankfully short battle with brain cancer. We send our condolences to Pam and his sons Chris and Paul.

**William John Holmes
22nd April 1938 - 15th December 2018**

Childhood. Born on 22nd April 1938 in Sefton Park Hospital, Liverpool, Merseyside. John had two elder sisters, Doreen and Rita. Their Dad disappeared leaving their Mum to try and bring them up, which she couldn't. All three were put into a Barnardo's Children's Home in North Wales. John never had contact with his Dad, and his Mum only sent Christmas cards late in her life in the 1970s. John's Mum was buried in the same graveyard in Walton, Liverpool in 1980 where previously Paul McCartney met John Lennon for the first time at a village fete, when John was playing with his then band, The Quarrymen. They of course went on to form The Beatles.

All three children were given the opportunity to move to Australia, when John was only five years old in the early 1940s. Doreen and Rita chose to go to Australia, but John chose to stay in the U.K. That was the last John saw of his sisters back then. Luckily John was taken in by his Aunt Flo Moye and Uncle Arthur Moye in Southport, Merseyside. At the time of writing, Doreen still lives in Australia, and Rita moved to San Francisco then finally changing her name to Sharma Kumaran in 1981 and now lives and works in a Hindu Temple on the Hawaiian island of Kauai, renouncing her life and family prior to that time.

First job. After an unhappy time at boarding School, John worked for Vincent's Garden Nursery from about age 14 or 15 and also at the Rotten Row Flower Show. Vincent's Garden Nursery is still in existence in Scarisbrick, just outside of Southport at the same location. During this time he used to frequent the Southport Funfair, and enjoyed seeing



William John Holmes
(known to everyone as John)

the planes landing on the beach or flying over from the nearby R.A.F. Woodvale airfield. On seeing the “Wall of Death” at the Funfair this got John interested in motorbikes and over the years he owned a few, alongside usually getting around by bicycle.

Army. John then did his National Service in the Army (the Paratroopers) based in Catterick, Yorkshire, and also in Marchwood, Hampshire, before serving in the conflict in Cyprus. He also represented the Army in Cross Country running, winning a medal. During his time in the Army he also experienced colleagues parachuting but becoming ‘Roman Candles’ where the parachute does not open properly, wraps around them and they drop to the ground. Many died in these circumstances, as parachutes were very basic in the

1950s. Whilst based in Catterick, Yorkshire, they worked with the Royal Signals to clear some beaches/land of mines that had been no-go areas after the Second World War until cleared. In Cyprus, John was involved in an accident in an Army lorry that went over a cliff with John and others inside. John broke both legs and was in Princess Alexandra Military Hospital for some time. Many of his colleagues died in this incident.

Moving South. John returned to Southport, and enjoyed going to the Cavern Club in Mathew Street, Liverpool to see traditional jazz gigs prior to the Beatles and Merseybeat era. John moved with his Aunt Flo and Uncle Arthur to Marksbury Avenue, Kew, Surrey at the start of the 1960s and got a job working at Kew Gardens where he ended up working for 41 years. John’s Aunt Flo and Uncle Arthur decided Kew was not for them so relocated to St. Anne’s, Lancashire (between Southport and Blackpool). John was offered the chance to move there with them but decided to stay in Kew, continuing his job at Kew Gardens. John lived “in digs” in Grove Avenue, Twickenham for a while.

John and Sheila - Early years. At the start of the 1960s John met Sheila Ann Carter (born 1st September 1943) at a club on the Molesey side of the River Thames near Hampton Court. They also enjoyed going to the Eel Pie jazz club on Eel Pie Island. After a dispute with his landlady John moved into 124 Third Cross Road in 1962 to live with Sheila and her parents, Arthur Carter and Gertrude May Carter. Sheila’s family had lived there since 1928, and in fact had lived in the same road since at least the 1901 census. John and Sheila married on 31st August 1963 at All Saints Church, Campbell Road, Twickenham, and they went on their honeymoon to Bournemouth, Dorset. John and Sheila then moved to 90B Staines Road, Twickenham, living above “Peter Powell The Butcher” shop. John and Sheila enjoyed going to see the motorbike racing at the old Crystal Palace racetrack, and took several holidays to places like Jersey in the Channel Islands, Austria, Germany and Switzerland. Whilst John continued to work at Kew Gardens, cycling there and home again daily (approximately 10-miles per day) as well as doing the daily manual work, he also undertook a few other gardening jobs alongside. These included being the gardener for Calvert Smith & Sutcliffe Solicitors at Onslow House, 9 The Green, Richmond-upon-Thames and neighbouring buildings bordering Richmond Green for in excess of 40 years. John’s wife Sheila worked for Calvert Smith & Sutcliffe Solicitors for 47 years.

At Kew Gardens in the late 1960s one of John’s gardening students was, then future television presenter, Alan Titchmarsh. At Kew Gardens one of John’s work colleagues was also gardening television presenter Chris Collins. John met Princess Diana at the opening



Sheila Holmes and William John Holmes - married for 50 years

of the Princess Diana glasshouse, and also his last big project was the restoration and landscaping of the Japanese Gateway, opened by the Emperor of Japan. At Kew Gardens during his lunch hours John would spend time learning the latin names of all the trees and plants, and had his own allotment hidden from public view.

John and Sheila, plus son Roger. John and Sheila moved to 7 Norcutt Road, Twickenham, prior to their son Roger being born on 26th January 1970 in West Middlesex Hospital, Isleworth. In 1974 they moved to 8 Lincoln Avenue, Twickenham which as of December 2018

is the same house John owns and had been living in until 20th May 2018, over 44 years on from when they moved in. Out of all of the places John lived, this was definitely his “home”. In 1975 Sheila had cancer and was treated by groundbreaking treatment, of which only 2% that had this survived, and had a big operation at the Middlesex Hospital in Goodge Street, London, and John visited Sheila every evening without fail. This period also put considerable pressure on John to pay the bills. For a number of years he had to work 7-days per week as Sheila had to only work part-time. Many years later Sheila returned to full time work. Sheila’s parents were of great support during this time, and helped considerably with the daily routine of Roger, whilst Sheila was too ill and John worked all the hours that he could. In 1976 during the extremely hot Summer, John brought home a tortoise that had been found wandering around Kew. The tortoise was very early on given the name Speedy. As of December 2018 John still owned the tortoise although due to John’s dementia, Roger had to re-home Speedy at his own home, none other than the 124 Third Cross Road address that Sheila’s family have lived in since 1928.

As a family John, Sheila, and Roger enjoyed a great many days out visiting castles, palaces, stately homes, zoos, parks, museums, air shows, military events, theatre and other shows. The family also enjoyed many “bucket and spade” type holidays in the U.K. to the likes of Puckpool in Isle Of Wight, Leysdown in Isle Of Sheppey, Hayling Island, Southport in Lancashire, Selsey Bill, Camber Sands, Bracklesham Bay in Sussex, Dovercourt Bay in Suffolk, and others. As a family they frequently travelled to France and Belgium, and took holidays in Holland, and Italy together. John walked up two active volcanoes, Mount Etna and Mount Vesuvius. For approximately twenty years John used to enjoy meeting up with some friends at the local Residents Association hall to play snooker on Friday evenings. From 1993 onwards John and Sheila welcomed Roger’s partner Sharon Pegg and treated her like their own daughter and all four went to Italy on holiday, plus visits to France, and Belgium. All four of them enjoyed many days out, plus took holidays together in Southport, Lancashire, and Folkestone, Kent. Sharon Pegg continues to play a very big part in Roger’s and of course John’s life as of December 2018.

John and Sheila - Later years. Later on John and Sheila (without Roger) also took holidays in France, Belgium, Italy, Spain, Malta, Austria, and Switzerland. John and Sheila also visited the Czech Republic, and Liechtenstein. They also undertook a Rhine river cruise mostly through Germany, and two Mediterranean sea cruises visiting many of the Greek islands, Portugal, Spain, Italy, France, Gibraltar, Monaco. Holidays to Italy remained their favourite, visiting places all over Italy, whilst of course enjoying the excellent Italian food and red wine! John and Sheila went to the theatre regularly, occasionally the cinema, and once a year to the Holland Park Opera with Sheila’s work colleagues. John and Sheila

took two enjoyable trips on the Orient Express Pullman steam train. John and Sheila also went with Roger and his partner Sharon Pegg to take afternoon tea at the Savoy Hotel and the Ritz.

After John retired from Kew Gardens after 41 years he took on a few smaller private gardening jobs, and continued to enjoy gardening immensely. John would happily go to any event, shopping, or whatever Sheila took him to as long as he was “fed and watered”. In 2004 Sheila had cancer for a second time and this time was treated and had a big operation at the Royal Marsden Hospital in Kensington, London, operated on by the surgeon Jeremy Thompson who would later also operate on Roger in 2011 and 2012 at the Chelsea and Westminster Hospital in London. Again John did not miss seeing Sheila in Hospital for a single day.

Over the years, John continued to like traditional jazz music of the likes of Chris Barber, Kenny Ball, Acker Bilk, Ken Colyer, plus singers like Bing Crosby, and Dean Martin. John also went to see a number of concerts, including the Hollies, Cliff Richard, Paul McCartney, Eagles, Rolling Stones, Mavericks, Rod Stewart, Bert Weedon, Chris Barber, Acker Bilk, Kenny Ball, Russell Watson, and Luciano Pavarotti. In 2013 Sheila got cancer for a third time and was part of a groundbreaking treatment programme at the Royal Marsden Hospital in Kensington, London, but unfortunately she passed away on 9th June 2013 in West Middlesex Hospital, Isleworth. As Sheila went downhill John cared for her non-stop.

John (after Sheila). After Sheila passed away John got in routine of household chores at 8 Lincoln Avenue in Twickenham, doing his front and back garden which he loved, and feeding and spending time being chased around the garden by the tortoise Speedy. He enjoyed watching some quiz shows and the old War Films or Westerns. John also went to the Holland Park Opera with Sheila’s former work colleagues. As dementia took hold, John often thought Sheila was still alive and as a comfort thing would often talk to her. John also thought Roger still lived at his house, although Roger had moved to 124 Third Cross Road, Twickenham, in 1994. It is so clear how much John missed Sheila and that he had depression since that time. From December 2014 onwards John welcomed Jayden, a boy Roger and Sharon adopted from the Isle Of Wight. John was proud to call six-year old Jayden his grandson, and loved a special 3rd Birthday trip to Marwell Zoo in 2015, plus many trips to Café Venice, a favourite Italian restaurant in Whitton. In June 2018, John moved into Charlotte House care home in Isleworth, Middlesex. John settled in well and was looked after extremely well there. Sadly John’s dementia worsened and he passed away in Charlotte House in Isleworth, Middlesex on 15th December 2018, with his funeral taking place at South West Middlesex Crematorium on 4th January 2019. - Roger Holmes

THE KEW GUILD STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2018

		UNRESTRICTED FUNDS	RESTRICTED FUNDS	ENDOWMENT FUNDS	TOTAL 2018	TOTAL 2017
	Note	£	£	£	£	£
INCOME AND ENDOWMENTS FROM:						
Incoming resources from generated funds						
Donations and legacies	2	1,572			1,572	1,435
Income from Investments						
Investment income and deposit interest	3	14,921	7,587		22,508	21,937
Income from charitable activities						
<i>Advancement of horticultural and botanical knowledge</i>						
Events and other membership activities:						
Membership subscriptions		9,640			9,640	9,567
Annual Dinner		4,632	-		4,632	3,729
AGM Soiree		358	-		358	-
Other events and income		18,110	-		18,110	213
<i>Encouragement of horticultural and botanical education</i>						
Awards and prizes:						
Donations and legacies	4	-	-		-	10,000
Total income and endowments		49,233	7,587	-	56,820	46,881
EXPENDITURE ON:						
Expenditure on Charitable activities						
<i>Advancement of horticultural and botanical knowledge</i>						
Events and membership activities:						
Website project		280	-		280	1,169
Journal of The Kew Guild		5,005	-		5,005	4,842
Annual Dinner		4,864	-		4,864	3,709
AGM Soiree		486	-		486	-
Newsletter		101	-		101	172
Presidents' name bars		-	-		-	98
Presidents' medals		-	-		-	38
Archivist		-	-		-	501
Other events and membership activities		18,059	-		18,059	179
<i>Encouragement of horticultural and botanical education</i>						
Award making: Awards	5		8,732		8,732	10,674
Prizes	5	395	25		420	630
Student fellowship		125	-		125	180
Kew Guild Medal		359	-		359	384
Other Expenditure						
Membership database		1,495	-		1,495	1,496
Administrative costs		11,823	-		11,823	7,789
Other expenditure		-	-		-	25
Total expenditure		42,992	8,757	-	51,749	31,886
Net gains/(losses) on investments:						
Unrealised movements on investment assets	8	(11,882)	(2,427)	(3,727)	(18,036)	52,062
Net income/(expenditure)		(5,641)	(3,597)	(3,727)	(12,965)	67,057
Net movement in funds for the year						
Reconciliation of funds		(5,641)	(3,597)	(3,727)	(12,965)	67,057
Total funds brought forward as restated	12	524,820	104,242	134,864	763,926	696,869
Total funds carried forward	12	519,179	100,645	131,137	750,961	763,926

**THE KEW GUILD BALANCE SHEET
AS AT 31 DECEMBER 2018**

	Note	2018		2017	
		£	£	£	£
Fixed assets					
Investments	8		634,520		652,556
Current assets					
Stock of Kew Guild medals		359		718	
Debtors	9	5,372		8,173	
Cash at bank and in hand	10	118,179		115,759	
Total current assets		123,910		124,650	
Liabilities					
Creditors: amounts falling due within one year	11	(7,469)		(13,280)	
Net current assets or liabilities			116,441		111,370
Total net assets or liabilities			750,961		763,926
 The Funds of the Charity:					
Endowment funds	12		131,137		134,864
Restricted funds	12		100,645		104,242
Unrestricted general fund	12	119,260		116,186	
Unrestricted designated funds	12	399,919		408,634	
Total unrestricted funds			519,179		524,820
Total Charity funds			750,961		763,926

The financial statements will be approved by The Trustees on 7 June 2019 following the completion of the independent examination. These summarised accounts may not contain sufficient information to allow for a full understanding of the Guild's financial affairs. For further information the full Annual Report and Financial Statements, including the Independent Examiner's Report, should be consulted. Copies of these can be obtained from Linda Baharier, 1 Castlehill Cottages, Outwood Lane, Bletchingley, Surrey, RH1 4LR.

The accounts for the original Kew Guild charity (306064) and the new Kew Guild CIO charity (1174033) will be provided as separate financial records to the Charity Commission. However for ease of reference they have been combined together for the Journal.



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Volume 17

ISSN: 2046-1526

Number 123

2018

KEW GUILD JOURNAL 2018

**THE JOURNAL OF
THE KEW GUILD
(CIO)**

