# THE JOURNAL OF THE KEW GUILD

# Founded in 1892

The Association of members of the Kew staff past and present

NA

あったので、「「「「「」」

# **Events of 1983**

# Published in 1984

Volume 10 Number 88

Editor: Richard C. Ward Printed by Rowling Printers, Dorking

Royal Botanic Gardens Kew

# CONTENTS

	Page
Trustees and Committee	182
Editorial	183
President	183
Kew Guild Annual General Meeting	186
Annual Dinner	188
Sale of Emblems	189
Award Scheme	190
Student Exchanges	191
Kew Diplomas and Prizes	192
Kew Medal Awards	194
The Pagoda	195
Students Union	198
Mutual Improvement Society	199
Living Collections Division 1983	201
Kew Under Trustees	205
The International Garden Festival 1984	208
Harlow Car Gardens	210
Kew's Switchboard	212
The New Tropical Conservatory	213
Birds Seen at Kew in 1983	216
Reykjavik Botanical Garden	219
Retirement of Jack Dixon	222
New Police Sergeant	222
There's Humour at Kew	223
News of Kewites at Home and Abroad in 1983	224
Royal Visitors	242
Obituaries	242
Accounts	249
Treasurer's Report	251
List of Kew Gardens Staff	252
RBG Staff and Student List	258
Address List of Guild Members	259
Unknown Addresses of Members	270
Advertisers	271

# **ROYAL BOTANIC GARDENS, KEW**

# THE KEW GUILD COMMITTEE 1983-84

#### Trustees:

Professor E. A. Bell, B.Sc., M.A., Ph.D., C.Chem., F.R.S.C., F.L.S. Professor J. P. M. Brenan, M.A., B.Sc., F.L.S., F.I.Biol. J. B. Simmons, N.D.H. Sir George Taylor, D.Sc., F.R.S., F.L.S., F.I.Biol.

#### **Officers:**

ſ

President: A. Woodward, N.D.H., F.I.L.M., Dip.P.R.A. President Elect: C. J. Mitchelmore, N.D.H., M.I.Biol. Vice-President: A. Hart, A.I.L.A., A.I.P.R.A. (Dip.) Vice-President: F. N. Hepper, B.Sc., F.L.S. Past President: P. S. Green, B.Sc., F.L.S., F.I.Biol. Honorary Secretary: Dr. M. Y. Stant, B.Sc., Ph.D., F.L.S. Honorary Treasurer: C. P. Bailes Honorary Assistant Secretary: M. J. S. Sands, B.Sc., F.R.G.S. Honorary Membership Treasurer: Miss E. H. Smith Honorary Editor: R. C. Ward, A.I.P.R.A. (Dip.) Honorary Member: R. Sealy, B.Sc., F.L.S.

#### **Committee Members:**

Retire 1984		Retire 1985	
R. Adams H. Boddington G. Ll. Lucas N. Robson	New Malden Morden Kew Natural History Museum	C. B. Bamkole R. Mann P. Maunder P. Summers	Nigeria Torbay Portsmouth Zoological Soc. Regents Park
Retire 1986		Retire 1987	

1101110 1000		100007	
T. Cole	Canada	G. Burgess	Whitchurch
S. Craig	Brighton	J. Taylor	New Zealand
H. Fleigner	Kew	J. Whitehead	Merrist Wood
T. Preston	Ealing	J. Woodhams	Kew

Students' Union Representatives: M. Reeder and C. Sombrero Events Officer: P. J. Edwards Badges and Emblems: S. Henchie Honorary Auditors: A. J. Hale and T. Reynolds Award Scheme Chairman: K. Pearson It was encouraging to have the support of all but six members of the Kew Guild when you supported the AGM decision to raise subscriptions to  $\pounds$ 7 per annum. Many life members generously made donations totalling more than  $\pounds$ 700 which all helps to put the Guild on a firmer financial footing.

Once again your Committee have discussed many and important items of interest and benefit to members, and are ever receptive to your ideas, requests and offers. Kew under Trustees may or may not have much effect on the Guild, but I hope the Guild will have some effect on the Trustees, to mutual advantage, and we wish them all well in the formative and busy months ahead.

Let's have a few more of your letters, news and experiences, and let's see more of you at the Dinner and AGM.

Keep in touch.

Richard C. Ward Editor

# ARTHUR WOODWARD, N.D.H., F.I.L.M., Dip.P.R.A. President 1983/84

Our President having elected to be born on St. Patrick's Day 1917 should have been a Roman Catholic Irishman. However his parents happened to be living in Wigan at the time, distance from the pier being unrecorded in our archives. After leaving school, Arthur began his horticultural career in the local parks department as tennis courts

ARTHUR WOODWARD, N.D.H., F.I.L.M., Dip.P.R.A. President 1983/84



attendant with additional gardening duties between bookings. Thus the seed was sown, and following correspondence courses from Kewite W. C. Ibbett, our distinguished Lancastrian emigrated from his native soil to Leggatt's Park, Potters Bar, as an Improver. In 1935 he was accepted as a Student Gardener at Cambridge University Botanic Garden under Kewite F. G. Preston, father of George. A post with Dudley Borough in Worcestershire succeeded his training period in 1937.

Then came the war, and in 1940 Arthur volunteered for the R.A.F., serving until 1945, when he came to Kew and although married, was accepted as a student: students were required to be single, if not celibate, in those days. "Big Bill", the Curator W. M. Campbell, generously connived with the provision of bedding for a flat, and Arthur began his round of the Kew departments, working under Miss Paine in the Decorative Section, Sidney Pearce Arboretum and Charlie Raffill Temperate House Pits. There followed in 1947 an appointment as Technical Assistant at Beckenham, stepping into the shoes of Kewite Harry Kruger and serving under another Kewite, C. R. Stock, until 1949 when Arthur returned to Richmond as Deputy Parks Superintendent and on the reorganisation of London Boroughs in 1965, he was made Parks Manager for the area, staying in the post until his retirement in 1982.

In spite of the irrelevant responsibilities for swimming baths and laundry, Arthur made his mark on Richmond by improving the tree care with the banning of pollarding, opening up the parks by removing gates and fences and creating 200 acres of natural parkland from gravel pits near the river, not to mention the glorious plantings of crocuses and "February Gold" daffodils along the Kew Road and the delightful Terrace Gardens with which his name is always associated. He established a central nursery at Ham and constructed a nine-hole golf course at Twickenham which is profitable to this day. As an academic side-line Arthur was a lecturer and examiner with I.L.E.A. and also for I.P.R.A., and incidentally provided preliminary training for many Kew students.

Now free from administrative chores our President has joined a London group of architects as Landscape Consultant and is revelling in this renewal of close encounters with living plants.

Arthur Woodward is no stranger to Presidential duties. He is a Past President of the University Botanic Gardens Association and Richmond Rotary Club, and is currently President of the Barnes Horticultural and Allotments Association. Yet he still finds time for sport, and having been bitten by the golf 'bug' late in life, he won the Veteran's Cup at Richmond Golf Club. The Club also value his expertise on trees which can be arranged in order to frustrate the game of fellow members. A true plantsman, Arthur considers himself lucky to have been selected for or by horticulture, a life which has brought him enormous satisfaction together with the bonus of so many helpful and valued friends.

# ANNUAL GENERAL MEETING OF THE KEW GUILD

#### by Martin J. S. Sands, Hon. Asst. Secretary

On Saturday, 10th September, 1983, 32 members assembled in the Jodrell Lecture Theatre at 2.30 p.m. for the Annual General Meeting. The President, Mr. P. S. Green, took the Chair, accompanied on the platform by the Hon. Secretary, Dr. M. Y. Stant, the Hon. Asst. Secretary, Mr. M. J. S. Sands and the Hon. Treasurer, Mr. C. P. Bailes.

The President first welcomed everyone to the meeting and then all members stood in tribute to Kewites whose death had been made known to the Secretary since the 1982 Annual General Meeting: G. H. Anderson, B.E.M. (1965) and K. Yashiroda (1926), a life member of the Guild.

Apologies for absence were received from the following members: M. Arnold-Gilliat, Miss D. M. Catling, F. Constable, Mrs. E. J. Cowley, D. Hardman, F. N. Hepper, Miss P. Holt, K. R. Jones, G. Ll. Lucas, E. W. B. H. Milne-Redhead, K. F. Pearson, S. W. Rawlings, N. K. B. Robson, J. Sales, Miss E. H. Smith, H. Taylor, P. S. Trevaskis.

The *Minutes* of the A.G.M. of 1982 were then adopted. The President, referring to the minute concerning the new subscription rate of £7, reported that letters explaining the Guild's financial position which had been sent to all members at the beginning of the year, had brought an excellent response which would be explained in detail in the Treasurer's report on the accounts. There were no other *matters arising from minutes*.

The Committee then reported as follows:

The Hon. Treasurer, Mr. C. P. Bailes, presented the accounts for the vear ended 31st December, 1983. For the half-year, the general deposit account was indicated to be standing at £1,001.99, the current account at £332.91 and the Award Scheme account at £2,067.30, in addition to the sum invested in the separate Charities Official Fund account. Mr. Bailes drew attention to the excess of income over expenditure of £413.65 in December, 1982, which by the middle of the year had risen to about £900, an increase resulting from a successful response to the letters concerning the rise in the subscription rate. £800 had been received in donations from life-members and more than 250 members had paid arrears. Only six resignations had been recorded as a direct response to the increased subscription. The Hon. Treasurer went on to report that 6,000 copies of a new edition of the Wakehurst booklet had been produced at a cost of £2,315. Six hundred and ninety had already been sold yielding a sum of £750, being approximately 30% of the outlay, so that, at a steady rate of sale, the cost would be covered after three years. Since stocks were expected to last for seven to nine years, the booklet should continue to provide a valuable source of income to the Guild. Both Mr. Bailes and the Hon. Membership Treasurer, Miss E. H. Smith were then given a unanimous vote of thanks for their work.

In the absence of Miss Smith, Mr. Bailes indicated a *Membership*, at the beginning of 1983, of 628, including 145 life-members.

Referring to the sales of ties and badges, Mr. S. Henchie reported that, since the last A.G.M., 20 ties, 2 scarves, 2 blazer badges and 9 lapel badges had been sold for a total of  $\pounds101$ . The price of a scarf had been raised to  $\pounds9$ .

The Hon. Editor, Mr. R. C. Ward, reporting on the 1982 Journal of the Kew Guild, indicated that the cost of printing had actually been £100 less than in the previous year, due to fewer pages and fewer Journals. He expressed his thanks to all contributors for their help. He then received a unanimous vote of thanks for again editing another excellent journal.

It was reported that 102 people had attended the Annual Dinner, which had been a most enjoyable occasion, and that the sum of £995 raised from the sale of tickets had resulted in a profit of £30. It was noted that the upper rooms in Imperial College had proved to be a better venue than the refectory. Mr. P. Summers was thanked for his work in organising the event.

At the *Students' Prize Day*, although the President, Mr. Green, was present on the platform, he did not have an opportunity to speak on behalf of the Guild, because Lord Dulverton, who presented the prizes, had chosen to replace his own address by showing a private film, made on his estate, demonstrating the satisfactory interplay between conservation objectives and land utilisation. However, the President was wearing the Guild insignia and the Director, from the chair, had recommended membership of the Guild, especially to the students about to leave Kew.

The President thanked the officers as well as the retiring members of the Committee: Messrs. M. R. Abrahams, A. Armony, and K. F. R. Pearson and Mrs. E. J. Cowley, as well as Miss C. Barker (Students' Union Representative) and Mr. D. V. Field as Auditor for their help and support during the year. Miss D. M. Catling and Mr. P. S. Green also completed their terms of office as Vice-President and President respectively. Attention was then drawn to the President's insignia, which, during the year, had been transferred to a ribbon of the Guild colours (green and gold), on which name-bars had been added, items kindly arranged by Mr. A. Woodward for which the meeting expressed its appreciation.

Mr. R. Adams, as Secretary of *the Award Scheme* subcommittee, reported that four awards had been made during the year using all the available money, with the recipients travelling to California, Tasmania, the Canary Islands and Jerusalem. It was again emphasised that members could apply for an award to cover a wide variety of topics as defined in the original regulations and reference to the scheme would again be included in the next journal. During the evening after the last Annual General Meeting, a visit to the renovated Temperate House, followed by supper had proved to be a very successful evening, while at the Annual Dinner a raffle had yielded a profit of over £50. Mr. Adams then concluded by drawing attention to a visit that evening to the

Pagoda followed by a buffet supper, an evening organised in aid of the Award Scheme.

Election of Officers, Members of the Committee and Auditor:

Mr. A. Woodward, being the Committee's nomination, was elected as President for the year 1983-84. On taking the Chair he briefly addressed the meeting, expressing the hope that, during the coming year and in the future, the Guild would be able to offer even more to its membership than in the past. The other Officers, four new Committee members and Auditor were then elected *en bloc*, their names appearing at the beginning of this Journal.

A vote of thanks was then given to the outgoing President, Mr. P. S. Green, for all his work for the Guild during the year, proposed by Mr. J. L. Norris, seconded by Mr. W. E. Storey and supported unanimously.

Mr. Norris then suggested that the Guild might take responsibility for cleaning and then maintaining the Gardens War Memorial, which was in need of attention. After brief discussion, it was agreed that this matter as well as the possibility of the Guild dealing with the disposal of members' book collections after their death should be considered further by the Committee. Mr. Sands then appealed for more news of members to be sent to him for incorporation in the Journal.

There being no *other business*, the meeting closed at 3.40 p.m. and members adjourned to the Jodrell Common Room to join their families and friends for tea.

**REPORT OF THE 1983 ANNUAL DINNER** 

by Toastmaster Richard Ward

The Imperial College Refectory was once again the venue for the Annual Dinner held on 25th May at 7.00 p.m. A gourmet meal of Chilled Melon, French Onion Soup and Poulet Saute à la Marenge with mixed vegetables, Peach Melba, Cheese and Biscuits and coffee was served and an excellent Bar served the alcoholic beverages. Following the Loyal Toast the toast to Our President was proposed by Dr. G. A. C. Herklots, C.B.E., V.M.H., and our President, Peter Green, replied and toasted The Kew Guild. Anthony O'Grady, Students' Union President, proposed the toast of Our Guests, and Bill Matthews, President of the British Tree Council, replied.

Our President announced that Noel Lothian, of Adelaide, Australia, had this year been awarded the George Brown Award. Past Presidents present at the Dinner were invited to stand up and be recognised. It was noted that amongst the apologies for absence Mr. H. G. Langham was not able to attend but had most generously donated the cost of two dinners so that two students could attend. The President finally thanked the various persons involved in organising the Dinner and for the lovely floral table decorations and suggested that those present should continue their enjoyable evening at the bar; which they did. The 1985 Dinner will be held on Wednesday 22nd May. Keep it free!



by S. J. Henchie, Assistant Curator, Services Section



Scarf, blazer badge, tie and Guild lapel badge available to purchase.

1983 has been a better year for the sale of emblems. Ties and lapel badges have been the biggest sellers.

Total sales are: Ties 13; Lapel Badges 11; Blazer Badges 4; and Scarves 3.

So once again check those tired and worn emblems and replace them with the latest value for money emblems.

The present costs are: Blazer Badges £4 each; Lapel Badges £1 each; Ties £3.50 but will increase to £4.50 each; Scarves £9 each.

So get out your cheque book and send for one or all the emblems, with a cheque made out to the 'Kew Guild'. Postage will be charged at cost. Send your order to Mr. S. J. Henchie, c/o Ministry of Agriculture, Fisheries and Food, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB. I would appreciate it if members could write to me with ideas/suggestions for other types of Kew Guild Emblems that they might like to have e.g. Pens, T-Shirts, Car Stickers, Beermats, Hats, Sweat Shirts, Jogging Suits, Tea Towels, the list is endless but you the members may have some better and more profitable ideas. So please let me know.

# **KEW GUILD AWARD SCHEME REPORT**

by Bob Adams

Last year Graham Burgess retired from the Committee and we express our thanks for all the work that Graham has put into the Committee, the A.G.M. evenings, and other Guild functions. In his place the Committee welcomes Ted Storey, who we feel will be equally as active as Graham was and a 'tower of strength'. Thanks also go to Ken Pearson as Chairman, and the rest of the Committee for all their work and support.

Four awards were made in 1983, the Committee helping to support a number of diverse applications. These ranged from the comparatively near to home trips to Jerusalem Botanic Gardens and the Canary Islands, to far flung California and Tasmania.

At the Annual Dinner the Award Scheme raffle, as last year, raised over £50 for the Award Scheme Fund. Thanks again to those attending the Dinner and to the President's announcement during the break, which helped to swell funds.

The now customary A.G.M. evenings entertainment was again arranged by the Award Scheme Committee. This time we went 'up in the air'. The Committee arranged a trip up the Pagoda. After the complimentary glass of wine and prior to leaving for the ascent John Simmons, the Curator, gave a short talk on the history of the Pagoda.

For those who missed last year's A.G.M. evening the route to the Pagoda was via the Temperate House, which was open. Afterwards the buffet supper was held in No. 1 Museum overlooking the Lake and Palm House. This was a change from last year being more spacious than the Jodrell Common Room.

The Committee would like to thank Kew, who generously agreed to the Pagoda being opened, and for the use of No. 1 Museum and the other facilities. Our thanks to John Simmons for the interesting talk, to Chris Bailes, Soo Tasker and John Woodhams for taking parties around and up the Pagoda. Finally to Graham Burgess for arranging the drinks and acting as 'barman' and not least to Graham's wife, Kathryn, and others for all the help with the food preparation.

In all probability there will be an A.G.M. evening again in 1984. A date for your diaries is Saturday 8th September, fuller details will be published later.

Award Scheme finances are still generally satisfactory but there is still insufficient capital which gives little money from which to make awards. A small donation was received from the Students' Fête to which we give them thanks. Hopefully the students would consider giving an annual donation from the fête funds. Thanks to Soo Tasker for manning the Information Stall at the Students' Fête.

1985 sees the 10th anniversary of the Kew Guild Award Scheme. Because of the need to increase the capital and as the Scheme will have been going for a decade the Committee hope to make another general appeal. With this and other schemes being considered we hope we can at least double our capital by the end of 1985. (See enclosed literature.)

Again the Committee would like to draw to the attention of the Guild members the availability of the Award Scheme. It is not just to support people travelling to foreign places but also to assist members to attend the Annual Dinner, or other Guild functions if finances for such trips are beyond their means, in addition to those given in last year's journal. If any member feels they would like to apply the Committee would be pleased to receive such applications — the worst that could happen is a refusal!

# THE KEW GUILD AWARD SCHEME 1975-1985

1985 sees the 10th Anniversary of YOUR Award Scheme and the Committee is launching a fresh appeal for funds to increase capital. Enclosed is the Appeal letter which the Committee plan to send to many organisations as our principle effort for raising funds. If you know of any organisation that might be interested in supporting us, would you please let the Secretary know. Or alternatively distribute to any organisations or individuals who might be interested. A tear off slip is printed on the back of the leaflet for reply, if required.

## STUDENTS EXCHANGE VISITS

#### Edinburgh Exchange

Hazel Griffiths, Stephen Gamble, Stephen Launchbury.

#### Foreign Exchange 1983

Cath Barker — Botanical Gardens, Hebrew University, Jerusalem. Sally-Ann Morris — Villa Jaronto, Italy.

Brita von Schoenaich – Munich Botanic Garden.

Anthony O'Grady - Dublin Botanic Garden, Ireland.

Douglas Lloyd Snellgrove — Inverewe Gardens.

Carlos Sombrero — Botanic Garden, Vierca y Clavijo, Canary Islands.

# PRESENTATION OF THE KEW DIPLOMAS AND PRIZES 1983 (Course 18)

The Introduction by the Director, Professor E. A. Bell, B.Sc., M.A., Ph.D., C.Chem., F.R.S.C., F.L.S., was followed by an address and presentation of Diplomas by the guest of honour, The Lord Dulverton, C.B.E., T.D., M.A., D.L. As well as his speech The Lord Dulverton showed a 30 minute colour film made by himself about conservation and wildlife on his Batsford Estate.

#### THE KEW DIPLOMA

#### Honours

A Coombes I. Grisenthwaite M. Haward

# Credit

S. Bell D. Clayton D. Francis R. Golby M. Owen

C. Porter

G. Potts A. Pyatt A. Rôbin H. Sheldon D. Jeweli

一下 15 線線 読べたくう

#### Pass

D. Spink

#### International Certificate

Abdus Salem from Bangladesh T. K. Bhattacharva from Nepal I. Ibafidon from Nigeria M. Mohamad from Kuala Lumpur

#### PRIZES

The Ernest Thornton-Smith Travelling Scholarship D. Jewell
Henry Idris Mathews Scholarship C. Barker, L. Snellgrove
G. C. Johnson Memorial Prize A. Coombes
Kingdon-Ward Prize I. Grisenthwaite
Landsman Bookshop Prize M. Haward
Sir Joseph Hooker Prize L. Bustard
Donald Dring Memorial Prize M. Reeder
The Metcalfe Cup M. Staniforth
John Gilbert Prize J. Woudstra
Matilda Smith Memorial Prize I. Grisenthwaite
Dummer Memorial Prize D. Jewell
Proudlock Prize I. Grisenthwaite
Prise for the best vegetable plot A. Coombes
Kew Guild Individual Study Prize A. Rôbin
C. P. Raffill Prize S. Phillips
Professor Keith Jones Cup S. Phillips



Course 18.

# **TITLES OF MANAGEMENT PROJECTS (Course 18)**

S. Bell	The feasibility of introducing horticultural therapy at The Royal Star and Garter Home, Richmond.
D. Clayton	The planning and development of a children's playground/amenity area at St. Luke's, Kew.
A. Coombes	A feasibility study for an information centre at Insh Marshes.
D. Francis	Recommendations to improve staff training at Albert Park, Abingdon.
R. Golby	Conservation and restoration of Adderbury House Lakes.
I. Grisenthwaite	A review of the efficiency in the management of waste at R.B.G. Kew.
M. Haward	An analysis of the gardens of The Royal Ballet School, formally White Lodge, Richmond Park.

D. Jewell	Vehicle utilisation and requirements for the Grosvenor Gardens Department.
M. Owen	Assessing the potential for the establishment of a landscaping and garden maintenance business in the Kew/Richmond area.
C. Porter	A review of Management Activity Associated with Paxton's Rock Garden at Chatsworth.
G. Potts and Mode	The therapeutic value of a herb nursery to 'Roots and Shoots'.
A. Pyatt	An investigation into the problems associated with the supervision of 16-19 year olds on M.S.C. Youth Opportunity Schemes related to horticulture.
A. Rôbin	A feasibility study on the setting up of a specialist plant nursery and landscape business.
H. Sheldon D. Spink	The management of the Kew Fête. A case study into the Countryside Commissions Demonstration Farms Project.

# THE KEW MEDAL AWARDS



Struck in silver-gilt (silver gilded with gold) and first awarded in 1980, this medal is simply inscribed '**FOR MERIT**'. On the advice of a Selection Committee, representing all Divisions at Kew, it is awarded annually by the Trustees of the Gardens Trust to those whose achievements, contributions, or services to the gardens at Kew and Wakehurst Place are considered of outstanding merit and deserving of special honour.

The face design of the medal illustrates the Palm House (1840 to 1844)) and has above a spray of Oak and Para Rubber, **Hevea brasiliensis**, leaves representing both the knowledge and work of Kew staff. The reverse has a circle of vine leaves and a crown, signifying the Royal Botanic Gardens, Kew, and its links around the world. Within the vine circle is a space for engraving the name of recipients and the year of the award.

**M. A. Allen**, Consultant Engineer, Posford Pavry & Partners. In recognition of his contribution to the restoration of the Temperate House.

**Mr. B. Southgate**, Entomology Lecturer, Kew Diploma Course. For exceptional services given to the Kew Diploma Course.

**Mr. S. G. S. Stride**, Gardener Special, Wakehurst Place. For his dedication and efficient management of nursery stock and garden stores.

**Mrs. J. Hammond**, the Telephonist, Royal Botanic Gardens, Kew. For providing a service of the highest standard to staff and public.

# MESSAGE RECEIVED FROM KEWITE WHO MISSED THE MAIN PARTY AT THE KEW GUILD AWARD SCHEME EVENING TRIP UP THE PAGODA

by G. Burgess

Sorry I missed you all But glad I found my own way To the special event of today The climb up the Kew Pergola. It is more difficult when you're alone To climb the pillar of brick And the roses they do tend to prick When one climbs up the Kew Pergola.

I thought I was going to fall Whilst balancing along the beam But beneath me what a rich scene When viewed from the Kew Pergola.

I can see why the public are banned Large numbers would be at some risk But thanks to the Guild I've been there But I wish

You were with me

When I climbed the Kew Pergola.

(Having double checked all the spelling your Editor is convinced that Graham Burgess has only produced this offering as a further sign of his extrovert nature! Ed.)

# THE PAGODA — ROYAL BOTANIC GARDENS, KEW

On the evening of the 1983 A.G.M. the Guild arranged a visit for members and guests to the top of the Pagoda with the Curator acting as

guide. For this occasion John Simmons provided members with the following digest which we publish here for your interest — given the Curator's proviso that this is a quickly compiled and not researched account taken from published works in the R.B.G. Kew and Richmond libraries and Kewensia archives. (£125 was raised for Award Scheme funds.)

The word 'Pagoda' was brought to Europe by the Portugese many centuries ago, they used it to describe any form of oriental temple and the idols enshrined therein. Picturesque elements of the Chinese scene were first written about in England by John Nieuhoff, who accompanied Dutch ambassadors on an abortive mission to Peking and later published an engraving of the Porcelain Pagoda of Nanking in 1669. Chinoiserie was the name given to objects from China or those which looked or were decorated in the Chinese fashion. Chinoiserie became the rage in the Court of Louis XIV but it was the youthful William Chambers' (1723-1796) design for the 'House of Confucius' (also known as the India House) undertaken in 1749 for Frederick, Prince of Wales that produced one of the early examples of Chinoiserie in England. On a plan of Kew, dated 1763 the building is sited on the location of the present Museum No. 1 at Kew, but in that same year, seemingly ashamed of this youthful folly. Chambers alleged that it was "built I believe to the designs of Mr. Goupy". By the middle of the 18th Century it had become fashionable for the rich landed gentry of the day to have such decorative buildings erected in their gardens and on their estates for their pleasure. In 1757 Chambers published 'Designs for Chinese Buildings' in which the Pagoda was featured and, with the advantage of having visited China, produced a book of authority and scholarship in design which caught the attention of the Royal Family.

William Chambers (of English parents with business interests in Sweden) had at the age of 17, joined the Swedish East India Company as a cadet (by his third voyage in 1748 he had been promoted to 3rd supercargo, that is he managed sales and cargo in a merchant ship), and gained the opportunity to sail both to India and China where he visited the city of Canton on his second and third trips staying several months on his first visit. There he made a number of architectural drawings, which were later to be incorporated or adapted in his publication. Although he had no training at this time, as an architect, the drawings were nonetheless the most accurate to have appeared by that date.

After nine years with the Swedish East India Company, and at the age of 26, Chambers decided to leave and train as an architect. However, before starting his serious studies in Rome and France, he paid a brief visit to England in the autumn of 1749 where he was presented to Frederick, Prince of Wales, and his wife the Princess Augusta. On completion of his training he returned to England where after a number of successful commissions were accomplished, he was able to renew his acquaintance with the Dowager Princess of Wales and her son Prince George and publish his invaluable 'Treatise on Civil

Architecture' (1759). He also met and enjoyed the patronage of Lord Bute who was a very close friend and adviser of the Princess. His royal appointments involved three mornings a week as architectural tutor to the Prince, with the Dowager Princess taking the rest of the week as she was, to use Chambers' words, "forever adding new embellishments at Kew".

The Dowager Princess had lost her chance to be Queen when her husband, Frederick died suddenly in 1751, after having caught a 'cold' which turned to pleurisy through, it is said, standing in the wet to see some trees planted at Kew while wearing an unaired greatcoat. Though there are various versions of this tale; a severe chest abscess being another cause. Her sadness was further increased in 1760 when her father-in-law, King George II, died; her son, then 22 years old, became King George III of England. Both Princess Augusta and George III were presented unsympathetically by the writings of Horace Walpole. George III was said to be backward but there is proof that he could read and write in both English and German when only eight years old.

The Dowager Princess Augusta followed her late husband's influence by surrounding herself with beautiful objects and buildings including a passion for fashionable oriental exotica, and commissioned William Chambers to design and construct many buildings for her garden at Kew including a Mosque and Alhambra, several classical temples, a mock ruined Roman arch and finally the Great Pagoda itself.

Chambers, it should be said, simply saw Chinese buildings as 'toys' of architecture unfit for the English climate, but thought they had a place in great and extensive gardens where a great variety of scenes were required. And so it came to be with the Kew commission.

All eves were upon Chambers and his bricklayer Solomon Brown as the great structure took shape. Horace Walpole, then living in Twickenham's Montpelier Row and writing to the Earl of Strafford on July 5th 1761 said "We begin to perceive the tower of Kew from Montpelier Row; in a fortnight you will be able to see it in Yorkshire". Started in the summer of 1761 it was finished the following spring. With its octagonal ten storey form it has a classical rigidity of shape and was then the most accurate imitation of a Chinese building in Europe. The eight sides of each storey have round headed recesses alternatively alazed except for the top floor. The ground floor is 49' in diameter and the first storey 26' in diameter and 18' high with each succeeding storey diminishing by 1' in both diameter and height: the ninth storey being 18' x 10'. The roofs were covered with varnished iron plates and on each roof edge sat an iron dragon, 80 in all, each covered with coloured glass and possessing a bell in its mouth. The top feature was double gilded and the whole building must have glinted and glittered in the sun and chimed with the wind.

The hard multi-coloured greystock bricks were perfectly laid and show no sign of deterioration after more than 200 years. The timber too is in good condition though there is some woodworm in the upper floors. Its condition today is a considerable tribute to Chambers' skills. His great 'Treatise on Civil Architecture' published in 1759 became a work of standard authority. The first two volumes were re-issued in 1791 as 'A Treatise on the Decorative Part of Civil Architecture'. He undertook a variety of commissions of which Somerset House (1776) may be the best known. He became Surveyor General in 1782 and was also the first Treasurer of the Royal Academy. His knighthood (Knight of the Polar Star) was awarded by King Gustav III of Sweden in 1770 and this title was later recognised in England following an application to the King — of which Walpole said Chambers has "Sir Williamised himself". Interestingly, for his main residence, Chambers leased the late Duke of Argyll's Palladian villa and pleasure grounds at Whitton (from whence had come many trees to the Princess's Arboretum at Kew) from the Gostling family following their purchase in 1765 of the estate.

In July 1843 Decimus Burton, with Hooker's support, suggested the full restoration of the Pagoda's roof plates and dragons but at a cost of  $\pounds$ 4,350, including painting, this proposal was never implemented. Subsequent Directors of Kew have similarly endeavoured to initiate such restoration — but with as yet no success.

The building's subsequent history has been primarily to uniquely distinguish Kew's landscape. More sadly in the 1870's, when it was said to be open to public access, there is an anecdotal story of a man throwing himself to his death from the top storey. Before doing so, according to local hearsay he first carefully hung his watch and chain over the rail — where it was then allowed to remain for years as a witness to his act. During the Second World War holes were let into each floor so that the designers of bombs could drop models of their latest inventions from top to bottom and so study their flight.

Pagodas were built in Europe before Kew's Great Pagoda, Le Roi Soleil erected a Chinese Pavilion (Trianon de porcelaine) at Versailles during the winter of 1670-1 and the Elector Max Emanuel of Bavaria erected a two storey *Pagodenburg* at Nymphenburg (1715-18). Subsequently too, as with the short-lived Nash designed Pagoda, set up in St. James's Park to mark the allied victory of 1814 which was burnt down by its own firework display on the night of the victory celebrations! But Kew's Pagoda, now 222 years old still holds its place as one of the garden wonders of Europe.

THE KEW STUDENTS' UNION ANNUAL REPORT

by Anthony O'Grady, President 1982/83

The hard working executive of last year consisted in the main of:

Anthony O'Grady Dave Spink Lloyd Snellgrove President Past President General Secretary Caroline Burgess Colin Clayson Jeff Gaskell Martin Haward Cath Barker Mike Maunder Treasurer Social Secretary Sports Secretary Third Year Representative Second Year Representative First Year Representative

It goes without saying that many other students helped out with functions both sporting and social when the occasion arose. The main function of the Students' Union is to attempt to improve the social, sporting and educational character of the member students! The Union endeavoured to achieve this maxim by organising the now usual round of social functions, which although popular and varied in content were inevitable financial disasters. However, new tactics were employed with a few events being organised in conjunction with the Kew Club and the Greyhound Pub, this could be the way for the future.

The traditional Kew sporting events again came under the auspices of Jeff Gaskell who did a wonderful job. It must be noted that a large student contingent helped Kew win this year's M.A.F.F. sportsday team event.

The hard earned money from the fête was again dished out liberally and helped finance student trips to Holland, Exmoor, North Wales and Yorkshire. Money was also given to this year's ill fated 'Kew Revue' and the newly re-formed Photographic Society which surfaced amid the demise of the Badminton Club.

Dave Spink has hopefully been the first of many students who will enjoy the opportunity to work for a while at Wakehurst, the bothy now being suitable for habitation.

On a more serious note, the diploma course has been dramatically affected by the cuts. A drastic 25% reduction in the student intake has had obvious effects on the student morale, not to mention the Union's finances!

To conclude, a good year in 1983, and 1984? Well, Big Brother a.Ka. Leo Pemberton will still be watching us.

## THE KEW MUTUAL IMPROVEMENT SOCIETY

by Louise Bustard, Chairman

The spring of 1983 saw the Society 'blooming' both in terms of finance and membership. Continuing the trend of extending our external publicity has proved very successful. In fact, on one occasion our judgement of the number of programmes to be printed was vastly overshadowed by the great demand. We are also very pleased to note the regular attendance of groups of students from Wisley, Merrist Wood and Hadlow Colleges. The lectures for the spring session included talks on landscaping by George Perkins and Charles Funke, organic gardening by Lawrence Hills and water in the garden by Stuart Phillips (student). The travel spots were filled by Ray Desmond on the gardens of India, visits to the Pyrenees by Lizzie Potts and Colin Porter (both students), Castille in Spain by Carlos Sombrero (student), European folklore by Dave Simson, Hawaii by Professor Brenan and a rather topical talk on the Falkland Islands by Mike Park, an ex-Kew student.

The inter-college quiz was won by Oaklands College, St. Albans.

Prize winners for the year were as follows:

The C. P. Raffill prize (for the winner of the student lecture competition) and the Keith Jones Cup (given at the discretion of the Kew Mutual Committee) both won by Stuart Phillips.

The George Brown prize (for the runner-up in the student lecture competition) won by Carlos Sombrero.

The Sir Joseph Hooker Memorial prize (for the student who has done most for the K.M.I.S.) was won by Louise Bustard.

The Kew Mutual prize (for the student most active in discussion) was won by Sophieke Piebenga.

The autumn 1983 session started off with the emphasis on horticultural books from Rosemary Verey and Alan Titchmarsh. Still in a literary vein those very popular writers Graham Stuart Thomas and Christopher Lloyd gave talks on old shrub roses and north-west America and Canada respectively. America was also the subject chosen by Mark Reeder(student), whilst islands came to the fore with Simon Goodenough telling of his visit to St. Helena and Carlos Sombrero (student) reporting on his exchange visit to the Canary Islands. Other students who gave talks were Cath Barker on Israel and Michael Maunder who crossed the barrier into agriculture to tell us the history of British livestock. The Director, Professor Bell asked, "What can chemistry tell us about the evolution of Beans", and Mr. J. R. Gingell discussed, "Grey and silver foliaged plants for the garden". Finally, we heard about large-scale parks and gardens from Allan Ruff with Tom Wright talking on the management of European historic gardens.

The 'Items of Interest' spot prior to the lectures have taken on an entertainment value all of their own throughout 1983. With items ranging from explosive chemical experiments, a regular cookery lesson to a rendering of "We wish you a merry Christmas" on the bassoon. These seem to draw almost as many people as do the lectures. This is also probably enhanced by the growing 'friendly' rivalry between the Alpine and Temperate Departments as to who can give the most items — however, you will have to wait for the 1984 issue to discover who was victorious!

The inter-departmental quiz was won by Alpine.

Finally, with eight entries in the Christmas Cake Competition this year the judges were faced with a daunting task. However, they did a

marvellous job and the prize winners were as follows: First: Sarah Cook — for the second year running Second: Netta Praill — for the third year running Third: Simon Goodenough

# COMMITTEE DISCUSSIONS

Items discussed by the Committee during 1983 included subscription arrears, Guild notepaper, Wakehurst booklet, President's jewel detail, investment of funds, computerisation of records, extending membership to Liaison Botanists and others, new Trustees, preaddressing Journals, complimentary and copyright Journal distribution.

# **GEORGE BROWN AWARD**

Announced at the Dinner, the Award, for services in communication, was made to Mr. Noel Lothian, Adelaide, Australia. The Guild Committee decided not to provide any tangible recognition to award winners, other than engraving of their name on the lectern, but will provide a photographic record at the Dinner if specifically requested.

# COMMEMORATIVE SEATS

It may be noted that standard type of seats, with commemorative plaques attached, may be donated to Kew Gardens, to remember Guild members or others. Further information from the Director's office. The approximate cost in 1983 is £210 for seat and plaque.

# LIVING COLLECTIONS DIVISION

by lan Beyer

Those who remember the halcyon days when the major preoccupation in the Gardens was to just keep pace with the seasons and calm was only interrupted by the occasional flurry of activity when it was necessary, for example, to renovate or replace a glasshouse, must now look with some disbelief at the major upheaval taking place at Kew. The Kewite who has neglected to pay his/her subscription (shame) and so has not read the *'Kew Guild Journal'* lately, returning after years of absence, will undoubtedly be shocked to find that a familiar landmark has disappeared. It is not my intention here to attempt to detail the many reasons for what is happening other than to say that the newlyrestored Temperate House stands as evidence of current policy — and nobody can deny it looks better these days. For at least a decade the inadequate and inefficient glasshouses forming the T-Range and Ferneries have been under threat of redevelopment. Lengthy and tortuous negotiations finally convinced the Ministry that it was a good idea to start again and during the spring we witnessed the first step towards the dream of a tropical display complex which would provide facilities unique to Kew. The dream, however, could have turned out to be a nightmare, for having removed all the plants and landscape materials from the T-Range ready for demolition, a constant stream of rumours filtered through which led us to believe that money for the project was by no means certain. These rumours were not dispelled until the demolition contractor arrived with his bulldozer and erased what we all remember as a very familiar part of Kew, namely the T-Range. Even then cold shivers travelled down one's spine at the thought of the further delay but the main contractor eventually turned up with his site hut and we all slept a little easier.

The new glasshouse complex will provide ten separate climatic zones progressing from hot humid through to cool arid with varying planting levels within to create an interesting landscape. The structure itself will be supported by a steel portal frame which will be pre-treated against corrosion before erection and the whole complex will be larger in area than the Temperate House. To ensure that all the component parts fitted together and to establish that the design detail was correct, a prototype section has been erected in the Lower Nursery. Besides being an excellent testbed this will also allow the landscaping detail to be worked out as well as providing the curious an opportunity to see what the full-scale building will look like. Two scale models were commissioned, one showing external landscape and design features, the other the internal layout detail. Both have been on public display and used extensively to illustrate the scheme for TV and Press coverage.

Because of limited space around the site we were immediately faced with the problem of storing the soil in particularly large quantities excavated from the areas planned to accommodate the main service area which will be underground. It was decided to build a heap on the lawn to the west of the site and immediately adjacent to the Broad Walk. Initial calculations proved to be wrong and the proverbial molehill grew into a sizeable mountain. We are told a considerable amount will be required for both internal and external contouring but if by some remote chance we end up with more than required, it may be necessary to build another mound somewhere, over which no doubt our successors will ponder as to its origin and purpose.

The building programme is now well under way with the concrete foundations due to be completed by the spring to be followed by the erection of the steel portal frame during the summer of 1984. Hopefully the whole scheme will be completed for an official opening sometime during 1986 so we still have a long and steep path to climb.

My first memory as a student was to be given a charge in the Palm House (1955) prior to work starting on renovation. Unfortunately that repair work did not arrest the corrosion problem so once again this wonderful glasshouse has to undergo extensive repairs. Falling glass and ornate metalwork have encouraged consultant engineers to urgently and carefully examine the structure and make formal recommendations for a complete refurbishment. They have found the state of the decay so extensive that it has been decided it will be necessary to strip down and treat the main framework and perhaps replace the alazing system completely. The extent of the required work is thus far greater than in 1955/57 and it will be necessary to remove all the plants while it is carried out. Various temporary housing options for the plants were looked into and finally there appeared no alternative but to build a large standard glasshouse (c1400 m<sup>2</sup> area) on the boundary of the Lower Nursery for this purpose. Whilst this solution is expensive the plant collection is priceless and must be housed securely. When all the large specimens are properly installed we intend to open the temporary house to the public in part as compensation for the loss of our most popular public display facility. We have no immediate long-term use for this large building but if there is sufficient interest it could be available for the 1987 Kew Guild Tea or would make a good indoor cricket school!

Not content with these two immense projects Kew has been given approval for a new museum, to be built between Kew Palace and the Herbarium which will bring further landscape changes. The building is covered by a roof garden, features an internal conservatory and is surrounded by five acres of garden which includes a large water feature. Needless to say the Gardens have insisted on having their way in deciding the landscape form and will be carrying out all the planting. If these major programmes keep on target, this landscape work will be undertaken after the completion of the new glasshouse project, but it looks as if the gardening staff will be asked yet again to perform miracles.

The expanding Orchid collection is now causing some of the Lower Nursery glasshouses to bulge at the seams, a fact which Lady Sainsbury has noted on her regular visits to see the collection. During one visit she was told of much needed space for species needing cooler growing conditions and promptly offered to pay for a new glasshouse. This is currently under construction and will be completed by the spring. The generous support which Lady Sainsbury has given to the Gardens in recent years is reflected in both orchid research and development of the Kew collection which is now becoming one area of excellence.

The above building works in the Lower Nursery unfortunately interfered with the Weather Station and it has been necessary to move this into the Gardens where surrounding features will not affect recordings required by the Meteorological Office. The new site is near the lilac plantings on the large lawn opposite Kew Palace and we intend to provide a notice for the public to explain what this installation is all about. Finally the conversion of part of the Accommodation building in the Lower Nursery originally designed as a tool store and later used as the first home for the Micropropagation Unit has been converted for use by staff in the Technical section. Messrs. Townsend and Keesing will now have more congenial surroundings and bring plant reception and dispatch nearer the Records and Micropropagation Units, which will be a distinct advantage.

At long last inroads are being made into sorting out problems in some of the Arboretum areas. Beds in the Rose Garden have been completely excavated and re-soiled, an expensive but necessary task owing to the poor condition of the soil and major alterations made to the Canal Beds at the southern end of the Gardens. Careful checking and evaluation showed that there was an abundance of questionable plant material, so much of this has been removed to be eventually replaced by natural source plants either collected by Kew staff or acquired from others. The colour planting near House No. 4 has been extended and during the winter the Wistaria cage will be enhanced by paving the interior with granite setts and fitting a garden seat to make it an attractive alcove.

It is extremely pleasing to record the award in the New Year's Honours List of the B.E.M. to Alan Cook in recognition of his work in the Alpine and Herbaceous Section. Peter Tindley, Propagator, is also to be congratulated for achieving a B.A. Degree through the Open University. Once again however we had to say a sad but a fond farewell to a loyal friend in Jack Dixon who retired in August. Jack started work at Kew in the Arboretum section in 1947 and became Transport Officer in 1968. Paul Summers, Supervisor, Studies Section will be leaving Kew in January to take on the position of Head Gardener at London Zoo and we wish him well.

Travel to foreign parts was enjoyed by several members of staff during the year. Tony Kirkham, Supervisor, Arboretum, visited a number of outstanding Rose Gardens in North Europe to look at presentation and layout which we hope to improve at Kew. John Woodhams, Assistant Curator, and Mike Marsh, Supervisor, Tropical Section, also travelled to Europe to look at Botanic Gardens to evaluate important tropical collections and their display and Leo Pemberton attended the American Association of Botanic Gardens meeting in San Diego and took the opportunity to visit gardens on the West Coast.

At Wakehurst Place a new nursery workshop and storage area was built to provide a much needed facility and the dredging of Westwood Lake has been completed. The flowering of Rhododendrons was exceptional even for Wakehurst but the greatest spectacle was the flowering of a massive group of **Cardiocrinum giganteum**. Some 115 flowering spikes were produced each with an average of 14 flowers. Tony Schilling calculates that upwards of three-quarters of a million seeds were formed, of which 75% were viable. One is left to conjecture if these were germinated and grown on and further seed collected how long it would be before Sussex was completely covered with this admirable exotic plant. Compiling this report which must be kept reasonably short to avoid the Editor's blue pencil has forced me to reflect back on what must be one of the most challenging years I have experienced during my 25 year association with the Royal Botanic Gardens, Kew. Out of necessity I have had to omit many snippets which in less-demanding times would have received mention and I am sure if I am asked again next year to summarise the happenings in L.C.D. I will be faced with an even greater problem. The effects of leaving the Ministry of Agriculture, Fisheries and Food to become independent under the guidance of a Board of Trustees will inevitably bring with it problems but also new challenges. We will have to learn new ways of manipulating the machine but our aim is to preserve and where possible improve the standing of Kew. It is raining, it may snow and freeze but spring is getting nearer so I must dash away and clear my desk in readiness.

P.S. Our new mini computer has just arrived and they have just delivered my VDU — HELP!

# **KEW UNDER TRUSTEES**

by the Director, Professor E. A. Bell

It is 146 years since John Lindley first suggested that the Royal Botanic Gardens should be provided with a Board of Trustees to further their interests and act as their governing body. At last his advice has been acted upon and under the National Heritage Act of 1983 provision has been made for the Ministry of Agriculture, Fisheries and Food to transfer responsibility for the Gardens at Kew and Wakehurst Place to a Board of Trustees. The Trustees have now been appointed; one by Her Majesty The Queen and 11 by the Minister of Agriculture, Fisheries and Food. The first meeting of the Trustees took place on 21st October and they will assume full control of the Gardens on 1st April, 1984.

The question being asked on all sides is "How will the transfer to trustees affect the Gardens and their staff?" In the short term, it is unlikely that any major discernible difference will be apparent to our colleagues in sister institutions throughout the world or to the public who visit Kew and Wakehurst Place. The Gardens will continue to receive their major funding from central government in the form of a "Grant-in-Aid" allocated by the Minister of Agriculture. This 'Grant-in-Aid', we are assured, will be fixed at a level which will enable the Gardens to maintain their present standards and activities. To handle this 'Grant-in-Aid', however, the Gardens must of necessity recruit additional staff on the finance side. Under present restrictions within the Civil Service, such recruitment can only be made within a manpower ceiling established by the Ministry for the Royal Botanic Gardens. Additional staff can therefore only be taken on at the expense of other work in the Gardens; a situation which we all deplore. Following the transfer to Trustee status in April 1984, however, needful recruitment will be limited by the availability of funds rather than by manpower limits and it will be a matter for the Trustees to decide how best to spend their resources in the interests of the Gardens.

In two matters, the Minister has retained his control in the Gardens. The Trustees may not alter the admission charges nor may they change the hours during which the Gardens are open to the public without the Minister's consent. In these ways the Government has sought to reassure the public that Kew will still be available to them in the future as in the past.

With respect to the staff at Kew, conditions under Trustees will, "taken as a whole", be no less favourable than they are under the Ministry. Clearly there will be many readjustments to be made in the months to come, but if we look upon this change as an opportunity rather than a nuisance, then Kew will not only survive the change but emerge with new enthusiasm and vigour. The Trustees will, I know, do all they can to help us to achieve that end.

- 「日本教育部門内部の」で

요즘 옷을 찍는 것이 같이 많이 많이 했다.

# TRUSTEESHIP FOR KEW

The Royal Botanic Gardens at Kew, together with the satellite garden at Wakehurst Place, Sussex, is at present part of the Ministry of Agriculture, Fisheries and Food. The Director is Professor Arthur Bell: there are some 400 staff at Kew and 50 at Wakehurst Place.

Responsibility for running the Royal Botanic Gardens will on 1st April 1984 be transferred from the Ministry to the new Board of Trustees set up under the provisions of the National Heritage Act 1983. The Board will meet first on 21st October 1983 to prepare for taking over Kew and Wakehurst Place. Under a provision of the Act, the Board will be making offers of employment to all staff on terms and conditions no less favourable than those in the Civil Service.

The Royal Botanic Gardens will continue to be funded by the Government through a grant-in-aid from the Ministry of Agriculture, Fisheries and Food.

The Government's proposal to place the Royal Botanic Gardens under the Trustees was announced to Parliament by Mr. Peter Walker, the then Minister of Agriculture, Fisheries and Food on 21st April 1982.

Announcing on 6th October 1983 the names of the Chairman and members of the new Board of Trustees of the Royal Botanic Gardens, Kew, the Minister of Agriculture, Fisheries and Food, Mr. Michael Jopling, said:

"Under the National Heritage Act 1983, Her Majesty the Queen and I are appointing the first Board of Trustees of the Royal Botanic Gardens, Kew. I am delighted that the Honourable John Eccles has agreed to serve as Chairman. The Board will, in accordance with the Act, be taking over the management of the Gardens both at Kew and at Wakehurst Place on 1st April 1984. As was made clear in Parliament, I will continue to be the responsible Minister and will provide the necessary funding through a grant-in-aid. Existing staff will be offered employment on terms and conditions no less favourable than they enjoy at present, though they will no longer be part of my own Ministry. I welcome members of the new Board to their posts, and offer them my good wishes in an important and challenging task. I look forward to a continuing partnership between the Royal Botanic Gardens and the Ministry of Agriculture, Fisheries and Food."

The complete membership of the Board is as follows:

#### Chairman Appointed by the Minister The Hon. John D. Eccles

Member Appointed by Her Majesty The Queen Sir Leslie Fowden, F.R.S.

Other Members Appointed by the Minister Professor William G. Chaloner, F.R.S. Professor Edward C. D. Cocking, F.R.S. Mr. John P. Cousins Sir Philip M. Dowson, C.B.E., A.R.A. Professor Gordon E. Fogg, C.B.E., F.R.S. Professor Vernon H. Heywood, Ph.D., D.Sc. Sir Charles Pereira, D.Sc., F.R.S. Professor Elizabeth B. Robson, Ph.D. Commander L. Michael M. Saunders Watson, R.N. (Retired), D.L. Sir Huw Wheldon, O.B.E., M.C.

#### **BIOGRAPHICAL NOTES ON TRUSTEES**

The Hon. John D. Eccles (Chairman of the Board) is a Director of Glynwed Ltd., and a member of the Monopolies and Mergers Commission, of which he had been Deputy Chairman since 1981. He is also a member of the Commonwealth Development Corporation. Mr. Eccles, who is the son of Viscount Eccles, is 52 and lives in Yorkshire.

**Sir Leslie Fowden, F.R.S.** (who is appointed to the Board by Her Majesty The Queen) has been Director of Rothamsted Experimental Station since 1973. He is a member of the Kew Scientific Advisory Panel, and is an expert in plant biochemistry in an agricultural context. Sir Leslie is 57.

**Professor William G. Chaloner, F. R. S.** is Hildred Carlile Professor of Botany and Head of Department of Botany, Bedford College, University of London. Professor Chaloner, who is 54, is a specialist on palaeobotany.

**Professor Edward C. D. Cocking, F.R.S.** is Professor of Botany at the University of Nottingham, and is a specialist in plant genetic engineering, cell biology and tissue culture. His appointment to the

Fellowship of the Royal Society was announced this year. Professor Cocking is 52.

**Mr. John P. Cousins** has been Director of Personnel at Plessey Telecommunications and Office Systems Ltd. and John Brown & Co. Ltd. until recently. He was a full time official with the Transport and General Workers Union between 1963 and 1975. He has been a member of the Countryside Commission since 1972. Mr. Cousins, who is the son of the Rt. Hon. Frank Cousins, is 51.

**Sir Philip M. Dowson, C.B.E., A.R.A.** is a founder partner of Arup Associates and has recently served as an assessor for the new museum building at Kew. He received the Royal Gold Medal for Architecture in 1981. Sir Philip is 59.

**Professor Gordon E. Fogg, C.B.E., F.R.S.** is 64. He is Professor and Head of the Department of Marine Biology, University College of North Wales. He has been since 1975 a Trustee of the British Museum (Natural History): and is currently Chairman of the Kew Scientific Advisory Panel.

**Professor Vernon H. Heywood, Ph.D., D.Sc.** is Head of the Department of Botany at the University of Reading and a former Dean of Science. Professor Heywood's field of expertise is plant taxonomy and systematics and he is currently a member of the Kew Scientific Advisory Panel. He is 55.

**Sir Charles Pereira, D.Sc., F.R.S.** was Chief Scientist at the Ministry of Agriculture, Fisheries and Food between 1972 and 1977. He is currently a member of the Kew Scientific Advisory Panel, and a consultant on tropical agricultural research. Sir Charles is 70.

**Professor Elizabeth B. Robson, Ph.D.** is Galton Professor of Human Genetics and Head of the Department of Genetics and Biometry at University College, London. Her particular interests are in biochemical genetics and human gene mapping. Professor Robson is 54 and lives in Richmond near Kew Gardens.

**Commander L. Michael M. Saunders Watson, R. N. (Retired)** has been President of the Historic Houses Association since 1982, having been Deputy President between 1978 and 1982. He retired from the Royal Navy in 1971 on his succession to the Rockingham Castle Estate. He is a member of the Heritage Committee of the British Tourist Authority. Mr. Saunders Watson is 48.

**Sir Huw Wheldon, O.B.E., M.C.** formerly Managing Director of BBC Television, from which he retired in 1976, is now Chairman of the Court of Governors of the London School of Economics. He lives in Richmond near Kew Gardens. Sir Huw is 67.

# THE INTERNATIONAL GARDEN FESTIVAL 1984

by Leo Pemberton, Supervisor of Studies

By the time your journal arrives the first National and International Garden Festival in the British Isles will have opened. The event has been compared with the Great Exhibition of 1851 and the Festival of Britain 1951. Whilst I am not aware of any significant involvement by the Botanic Gardens with either of the two earlier events there is a real Kew presence at the Garden Festival in 1984. This representation is through the School of Horticulture because of the excellent combined work of four students who won the Schools and Colleges of Horticulture Design competition for a water garden to a budget not exceeding  $\pounds 20,000$ .

The four students — Brita von Schoenaich, Martin Haward, Ian Grisenthwaite and Colin Porter, together with the Landscape Design tutor, John Medhurst, produced an excellent design upon which the judges commented most favourably (no doubt many will have read the article in *The Garden*, March 1984 which refers to the design). Not only did the students have to spend a lot of time and effort as a team to produce the design and other details they have had to subsequently become involved in all the other details including the actual planting of most of the plants — excepting the trees. The co-ordinator, Phil Deeley, has tried to ensure that their involvement is as complete as possible. This at times proved difficult, such as contacting the key person — Phil Deeley had anything from three to four meetings a day and the appropriate Kew student was inevitably working in the Arboretum (why is it that when someone is needed urgently they are working in the Arboretum?).

Many lessons will have been learned by the students — of the difficulties of designing without the benefits of plant availability (especially sizes of plants). The difficulties of obtaining sponsorship; the students were fortunate in having Festival money for most of the requirements for the site — but if it had been necessary for 100% sponsorship how much harder they would have had to work. The runner-up in this competition did remark at the prize presentation that he was glad to have come second and that we had won — I know what he meant — but hopefully we shall have volunteers for the competition for the Stoke Garden Festival, in 1986.

The School of Horticulture is planning a tour to the Garden Festival and to some of the North West Centres of Horticulture and I am sure this horticultural landmark should be visited by ALL who have an interest in horticulture. The tremendous influence and effect the European Garden Festivals have had can be best seen in West Germany — and now in the British Isles I expect to see a blossoming of interest and a revival in the design and use of our great public parks. There is a tremendous opportunity for our public open spaces to be more attractive, more used and not necessarily being totally concerned with physical exercise as some would have us think.

I hope you too will enjoy the Festival!

# HARLOW CAR GARDENS

by Philip Swindells

The gardens at Harlow Car provide a major contribution to the understanding of the plant kingdom by a wide cross section of the public and provide training at different levels in botanical and horticultural skills.

To understand the garden better it is useful to relate its establishment in the early 1950s by the embryo Northern Horticultural Society on open farmland on a hostile site on the edge of moorland just outside the spa town of Harrogate. On 64 acres the Society took on the task of creating a trial and demonstration garden for people living in the north. The site comprised an area of mixed oak and birch woodland, a stream and a derelict Victorian Bath House, all situated on a cold, uncompromising and exceedingly acid clay. Indeed, the garden is situated upon a geological fault which can give rise to sulpher springs appearing at random throughout the garden. On such a site the Northern Horticultural Society not only set out to establish a garden, but attract public support.

Apart from free access to the gardens and library of the Society, members benefit from the annual seed distribution and quarterly journal. Advice on gardening matters is available and lectures and demonstrations are held.

Groups with specialist interests operate within the Society, covering plant groups as diverse as vegetables, orchids, alpines and heathers. These groups hold various demonstrations, shows and lectures.

The gardens embrace all these activities, and while being laid out in an attractive manner, each area of the garden performs additional educational functions. The most obvious of these is the trial area, where a number of widely varying trials and demonstrations are undertaken for the benefit of the home gardener and the nursery trade. New introductions of annual flowers and vegetables are grown alongside one another for comparison. Often it is possible to obtain seed of a cultivar in advance of its formal introduction to the public, thus gardeners have an opportunity of assessing its merits before it becomes available in the seed catalogues.

Trials containing older cultivars are important, for only by comparison can the merits of new kinds be fully appreciated. A single plant genus is taken and all the available old and modern cultivars grown alongside one another for comparison. Longer term trials and demonstrations of shrubs and perennials are undertaken, but mostly with plant groups that are known to do well in the north. Hardiness and performance trials for the Royal National Rose Society, International Cammellia Society and British Fuchsia Society find their place here, together with the breeding programme of the Delphinium Society.

A standard allotment demonstrates traditional gardening with traditional cultivars, while not far distant a computer planned plot illustrates one of the latest developments available to home gardeners. Old vegetable cultivars are conserved in the vegetable sanctuary and seeds of "illegal" old kinds made available quite legally to members through the seed distribution. Experiments are undertaken with Asian vegetables, soil conditioners and a wide variety of soft fruits. Top fruits are grown and a collection of historic and modern apple varieties seem likely to vie shortly for attention with the 70 cultivar assemblage of rhubarb.

Conservation of garden flowers is undertaken and the gardens house the national collection of hypericums and northern reference collection of erica and calluna. Clonal variation and selection is demonstrated, together with demonstrations of hedging and ground cover, as well as extensive bulb trials and displays. Separate outcrops of different rock types planted with suitable material are probably unique in a major garden and an added dimension is given by the new time walk bed which displays its plants in order of introduction.

The main body of the decorative garden contains a collection of plants that are the equal of any botanical establishment in the north of England. Rock gardens in local millstone grit and Westmorland limestone house all manner of alpine gems, while the peat terraces accommodate many subjects that would find the cold clay soil of Harrogate uncompromising.

Herbaceous and shrub borders flank broad sweeping lawns that lead to the extensive rose garden. The streamside is crowded with marsh plants, including the famous Harlow Car strain of primulas. A garden for flower arrangers, winter display border and borders of dahlias, hostas and sweet peas provide a cavalcade of colour throughout the year.

The woodland and arboretum are separated from the main body of the garden by a stream. The woodland section is old and comprised of oak and birch, part of the ancient forest of Knaresborough and now home for over 400 different species and varieties of rhododendron. Bulbs carpet the ground in spring and the flame and orange colours of the deciduous "azaleas" light up the rides in autumn.

The arboretum is undergoing replanting as the original layout was not very satisfactory. Trees are being planted to illustrate the diversity of the tree kingdom and yet arranged in a system which allows for the development of interpretive material. Thus one trail leads the visitor around native species, another economic trees and a third exotic varieties. Within these groupings are examples of species with their hybrids, trees of garden merit, primitive trees, trees arranged geographically and so on.

Both the woodland and arboretum offer a unique opportunity for the development of an educational facility for school children. The natural history aspects have been monitored and interpretive material is in preparation. Surveys of the flora, birds, moths, butterflies, arthropods, fungi and lichens have been completed and others are continuing. A bird hide has been constructed overlooking a pool planted with native aquatics and a further hide with wheelchair access is planned. Bees are kept for demonstration purposes and a new weather station will provide opportunities for school children to undertake some practical work on the climate.

The conversion of the bath house into a library and study centre has given the gardens a much valued facility for serious botanical and horticultural studies. School children can use the facility under the direction of their teachers who have access to a developing collection of associated plant materials such as cones and woods. Examples for practical work as well as reference material are being maintained together with interpretive material produced by the University of Leeds Plant Sciences Department.

Much of this work may seem rather sophisticated for the home gardener, but demonstrations in practical horticultural techniques are being increasingly undertaken, covering such subjects as pruning propagation and plant identification. Close liaison is kept with bodies with specific horticultural interests and training courses are held under the auspices of the Agricultural Training Board and with organisations like the North Regional Association for the Blind who run day schools for blind gardeners. Similar day schools are organised for Womens Institutes and Townswomen's Guilds as well as horticultural societies.

By displays, exhibitions and the improvement of the collection it is hoped to educate and gain sympathy from the public for plant conservation both wild and cultivated. Gardeners will hopefully gain from demonstrations of new plants, materials and techniques, and school children from a general introduction to natural history. However, the greatest benefit will come from the training of young people in "botanic garden horticulture" — the maintaining of living collections with sympathy for the needs of the researcher and conservationist. Such technicians are in very short supply and it is hoped that the increasing part being played by Harlow Car Gardens in the formal training of students will go some way towards alleviating that shortfall.

The Northern Horticultural Society is an educational charity funded solely by public subscription. It is worthy of the support of botanists, gardeners and the general public to ensure its continued prosperity. The past 30 years has seen an infant pass through adolescence and become an adult. Harlow Car is poised to become a major force in international horticultural education.

# **KEW'S SWITCHBOARD**

by Joan Hammond

Switchboards have changed a great deal in recent years, but the basic needs remain the same. The old GPO motto when training as an operator was "Courtesy, Efficiency and Speed". That I feel is still good to work by, although the main essence today seems to be all speed.

Many years ago the Royal Botanic Gardens, Kew was served by one telephonist and one switchboard which was a small plug and cord variety, but as the amount of "traffic" increased an additional board was added and a second operator required.

It has always been an extremely busy exchange with no two working days alike. Enquiries from the public vary greatly as one has dealings with visitors from so many different countries. Overloading put the two old boards under such pressure that the request for engineers to repair faults on the ancient apparatus became so frequent that it was decided that they required replacing. The new equipment selected to carry Kew's 200 extensions and 14 outside lines was to be an ITT Unimat 4080 exchange, a computerised apparatus. A far cry from the number 9 doll's eye switchboard which I first operated. That stood six feet high and you sat with your feet on a brass rail about ten inches off the floor.

The changeover was an involved process as the new boards were to be located in the rebuilt Pooley's Cottage with the engineering equipment in the basement below. All the telephones in the Gardens had to be checked and some required modification. All the extensions had to be given new four figure numbers which meant having to relearn them.

The new switchboard became operational in March 1982. It was nostalgic to see the old boards dismantled and removed — apparently to be installed in the British Telecom Museum! There were teething problems but once these were sorted out there was no comparison between the old and the new. With the new installation, transmission improved 100% and the actual switchboard proved very efficient. The work was, once again, handled by one operator.

We also have a paging "bleep" machine whereby botanists and librarians in the Herbarium and Library can be contacted should they be away from their departments. Now more recently, internal staff can use the telephone to dial into the system to "bleep" the person they require without having to contact the operator.

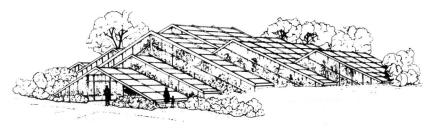
The following statistics may be of interest:

On the old exchange an average of 246 calls an hour were handled between two operators. On the new equipment an average of 60 calls an hour are dealt by the single operator, which shows the benefit of recent automation.

(Joan was one of the Kew Medal recipients in 1983. See details elsewhere — Ed.)

### THE NEW TROPICAL CONSERVATORY

Designed as a replacement for the Ferneries and 'T' Range complexes which comprised some 26 ageing houses on two adjacent



sites, this new house combines the requirements for a diversity of tropical plants within ten computer-controlled environments. This merging also gives scope for additional exciting habitat displays with mangrove swamp, aquaria, Namib Desert area, cloud forest and dry tropical forest. In area, though not in volume, this house will be the largest at Kew, 4,490 m<sup>2</sup>, compared to the Temperate House (4,451 m<sup>2</sup>) or Palm House (2,489 m<sup>2</sup>).

**Design Team:** Directorate of Civil Accommodation, Property Services Agency, Croydon.

Project Manager, Gordon Wilson, Principal Architect P.S.A.

Client: Living Collections Division, Royal Botanic Gardens, Kew.

The collections of living plants at Kew can be likened to a museum in terms of function since they are used as an international source of reference, for research, as a bank of genetic resources for conservation and crop utilisation, for education (Kew has its own School of Horticulture) and interpretation and for public amenity. The new house contributes to all of these functions but will hold more extensive collections than any of the other greenhouses at Kew and display a great many rare and endangered species from Madagascan succulents to Canary Island endemics.

The project has been developed over many years from initial proposals in 1970 and its first client brief in 1972. The Directorate of Civil Accommodation undertook the detailed feasibility studies which eventually led to approval for the planning phase which commenced in 1980. The conservatory, as now designed, takes its inspiration from the multitude of straight-roofed houses it replaces but brings them together harmoniously with greatly improved function.

In plan the conservatory is roughly diamond-shaped and designed to allow deep penetration of low angle winter light through its vertical faces formed as the spans drop in height and number towards the southern end. In contrast solar gain in summer can be excessive for delicate plants, such as the ferns and begonias, and so a roof-slope of 26.5° has been chosen for the east-west faces since this slightly reduces high angle lighting by reflection. For reasons of durability and safety, a 6 mm thick glass has been chosen as the glazing material; double glazing with glass cannot be shown to have an economic pay-back on its capital cost. Depending on costs the glazing bars will either be aluminium or PVC (with a steel core) since both have their separate advantages; the steel framework will be specially assembled and treated against corrosion.

Internally, partitions will separate the various environments, the hottest of which will be at the centre of the conservatory — for reasons of heat saving. Similarly the multispan design which reduces the overall volume compared to a clear span, will save comparatively on energy costs as will the central light-dependant microprocessor monitoring precisely the heat and ventilation. A new humidity system which produces a fog of fine droplets from water jets fed by pressurised air lines is also energy saving.

**The internal landscape** is quite complex. The levels will rise centrally to give a fine viewing point over the cascade that will fall to the giant Amazon water-lily pool, which at a yet lower level features an underwater viewing window and associated aquaria. The previous 'T' Range pool was not large enough for a full grown plant of this enormous water-lily which also needs specially treated and warmed water. Heating is also provided for the soil under the **Welwitschia** for this primitive two-leaved succulent grows naturally in the hot sands of the Namib Desert and grows best when its roots are warmed to 75°F.

The ever popular carnivorous plants will have their own cool well lit area and the orchids and ferns will each have two separate zones situated at the shadier northern end, adjacent to the northern entrance with its more formal floral displays. The succulent plants will be displayed at the sunniest southern end of the house in a large scale planting around a central oasis with the restored Mojave Desert diorama (from the old 'T' Range) set as an entrance feature.

The new conservatory, as with the other main buildings at Kew, will be framed by its own landscape. A new path system will bring the entrances to an axial approach — to the south through the woodland garden and to the north through the mature trees of the arboretum. To the east a new alpine meadow will link to the existing rock garden and to the west the ice house mound will be extended to form a viewing area above a formal terraced garden with colourful summer herbaceous plantings.

Hopefully much of the building work will be completed by 1985. The landscape and planting work will take a further year but as soon as any part is complete it will be opened to the public.

(Additional details were published in the *New Scientist*, 11th August 1983 by John Simmons, Curator — Ed.)

## **RE-LOCATION OF METEOROLOGICAL STATION**

With the erection of the temporary Palm House now well under way it became necessary to move the Meteorological Station from its position in the Lower Nursery as the statutory surrounding area of open ground was encroached upon.

Few areas exist within Kew that were deemed suitable by a representative from the Met. Office. A site was finally agreed upon between the Orangery and the **Syringa** collection.

The surprisingly arduous task of re-establishment was undertaken by members of the Technical Section and Planning Unit under the eagle eye of two Met. Office officials. Dickon Bowling now proudly resides over the station within its temporary corral.

The location of this essentially formal collection of instruments within the informal landscape of the arboretum posed something of a problem. To the surprise but eventual agreement of our Met. Office friends it is proposed that the Station is not surrounded by the conventional rectangular fence but sympathetically included into the landscape as an island bed.

This will involve the retention of a statutory grass area in the middle bounded by a planting of ground-hugging shrubs and enclosed by a discreet curved post and cable fence.

(Eurogardeners News, December 1983. Acknowledged with thanks — Ed.)

## BIRDS SEEN AT KEW IN 1983

by Rupert Hastings

The following is an account of some of the 93 species of bird seen at Kew in 1983. The majority of observations were made by the author at lunchtimes so refer to just one hour per day in the field, time nearly always spent in the northern half of the Gardens as the southern half is out of reach!

Considering the breeding season first, the most notable event was the nesting of *Lesser Whitethroats* for the second time ever, the first occasion having been just back in 1982. This year the pair selected a clump of **Caprifoliaceae** between the Temperate House and King William's Temple. As in 1982, breeding was successful and at least one juvenile was seen in June. In the Queen's Cottage Grounds, three young *Sparrowhawks* appeared in early August, certainly from a local nest though whether or not this was inside the Gardens remains unknown. The presence of young was especially good news after the death of an adult female in March, apparently from shotgun wounds. Also in the Queen's Cottage Grounds, a pair of *Kingfishers* raised two young in spring but strangely they did not return to produce their usual second brood in the summer. Early in the year, at least five *Tawny Owls* had been found roosting and it was pleasant in August to hear of two families; three juveniles were seen near the Azalea Garden and two juveniles were in the Queen's Cottage Grounds. The latter site, in fact, produced further interesting breeding records for a young *Great Spotted Woodpecker* was seen there in June and a female *Blackcap* with two young was seen in July. At some times of year these Grounds appear a little short of birds but it is clear that they have considerable value in the breeding season, acting as a wilderness in the way no doubt intended by Queen Victoria.

In May a *Long-tailed Tit* nest with sitting adult was found near the tennis courts and a pair of this species with seven young was seen near King William's Temple. In June and July, young *Spotted Flycatchers* were present in at least three parts of the Gardens. On the debit side, it is a pity to record the continued absence of nesting grebes at the Lake. A single *Little* and a single *Great Crested* appeared in March but neither stayed.

Turning to winter, this is a rewarding time of year to see birds at Kew. There are more individuals about of certain species that arrive here from elsewhere in Britain or from the Continent and the barer landscape makes the residents easier to find. In December I counted all the birds I could see or hear along three non-overlapping routes through the Gardens, not including those on the river or beyond. In the case of Moorhen (total 75) and Canada Goose (70) I probably saw all the individuals present. For other species the proportion found depends on their size and behaviour. Blackbird was by far the commonest with a total of 244; followed by Blue Tit (96), Feral Pigeon (70), Great Tit (57), Woodpigeon and House Sparrow (both 50), and Robin (43). Dunnock was surprisingly rare with only nine found, even when allowance is made for their skulking behaviour. Jays had a good total of 30, perhaps more than usual as southern England received hundreds of immigrants from the Continent in the autumn, some of which may have remained in the London area. The Blackbird total presumably also includes some winter visitors.

Thirty-three *Redwings* were counted but these come and go throughout the winter months and the largest gathering noted was 58 on December 19th. Other peaks included about 150 *Carrion Crows* over the river on January 27th, 18 *Herons* in Syon Park on December 29th, 18 *Magpies* on January 25th, 15 *Stock Doves* passing over on January 25th also, and 11 *Teal* on the river on February 22nd.

Four species were seen early in the year that are rare inland anywhere in England. First was a *Red-necked Grebe* on the river on February 7th, 8th and 22nd, quickly followed by a *Firecrest* near King William's Temple on February 8th. Cold, windy weather then produced an adult *Kittiwake* low over the Lake on February 17th; this was my third sighting at Kew of this normally coastal gull. Last but hardly least was a *Guillemot* on the river at Kew Bridge in mid-March, almost certainly one of the two that had been on the Thames between Chiswick and Putney for several weeks previously. *Guillemots* are very rare inland but there had been a wreck of them and other auks in eastern England in the second week of February.

At the Lake, *Gadwall* were unusually frequent visitors for seven weeks, with a peak of nine on January 18th. A *Woodcock* was seen in the Queen's Cottage Grounds in January and on March 29th. Late in the year, a male *Blackcap* put in a rare winter appearance on November 30th and the year's only *Brambling* was seen briefly on December 14th.

Migrants are difficult to observe at Kew where there is so much cover in the essentially open woodland habitat. I have yet to find a spot where warblers can be found regularly and, of course, open country birds tend not to alight here. Nevertheless, spring and autumn can be expected to produce a few interesting birds on passage, especially if enough time is spent searching them out. As usual, Meadow Pipits were passing over in March and April, with a peak of 14 going west on both April 5th and 7th. The first Chiffchaff was heard on March 31st, followed by Blackcap and Willow Warbler both on April 11th. The year's second Firecrest, and Kew's third ever, was in the Holm Oaks along Syon Vista on April 5th and 6th. On April 11th a pair of Hawfinches fed for a short while near the Hornbeams before being disturbed; this bird used to breed at Kew but is now a rare visitor. Perhaps the most beautiful bird of the spring was a male *Pied Flycatcher* near the Restaurant on April 19th, no doubt a good place to feed up before continuing one's journey; surprisingly a female also occurred, by the towpath on April 29th. As usual the first half of May was full of activity with single males of Cuckoo, Sedge Warbler, Reed Warbler, Garden Warbler and Whitethroat all in good voice to announce their presence. In the same period at least ten singing *Blackcaps* were encountered, certainly more than usual.

Migration is more protracted in autumn than in spring and lacks any particularly busy period. A *Curlew* high over the Lake on August 9th was the first oddity. One or two *Willow Warblers* were about on seven dates in August and remarkably the third *Pied Flycatcher* of the year was seen in Syon Vista on 25th. *House Martins* failed to put in their usual large movement in September but *Swallows* made up for it with an impressive 78 flying south-east in one hour on September 23rd. On 27th two *Sandwich Terns* were by the river opposite the Brentford Ferry Gate to provide the autumn's biggest surprise. Visible movement was impressive again when 37 *Meadow Pipits* passed over on October 6th and 75 *Skylarks* flew west on November 3rd. An extraordinary aerial display of ducks on October 6th included 4 *Gadwall*, 2 *Teal* and 24 *Shoveler*, perhaps disturbed from the lake in Syon Park. The year's only two *Jackdaws* also appeared by the river on October 6th and stayed until early November.

I am very grateful to those people who reported sightings to me during the year; without the help of those 23 observers this account would be less extensive and more incomplete.

## REYKJAVIK BOTANICAL GARDEN IS WHERE WILLIAM HOOKER SAW WASHER-WOMEN

by F. Nigel Hepper

Not many Kewites have visited Iceland since William Hooker went there in 1809 and Joseph Banks in 1772. Neither of them was associated with Kew at the time but both had not a little to do with it later and may well be termed founder Kewites. Unlike Hooker who took weeks to get there by ship, my holiday flight took a few hours and as we flew low over the south west corner of Iceland I could see ice-capped mountains and the rugged, treeless country streaked by immensely long cracks and covered with the grey moss **Grimmia canescens**. Where were the flowering plants I had come to see? And wherever could there be a botanical garden? This was certainly going to be a change from tropical Africa, my usual study area.

Although the summer of 1983 was the hottest for some years for most of Europe, it was the coldest and wettest since about 1880 in Reykjavik. Having left temperatures in the upper 20's centigrade it was a shock to find the thermometer each day about eight or nine degrees in mid August. Even in a good year summer temperatures are not much more, so the growing season is short. This has a limiting factor on what may be grown in Reykjavik Botanical Garden.

This delightful oasis was opened in 1961 and is situated in the Laugar Valley near the hot springs where the washer-women gathered in Hooker's day. Now there is an international sports stadium. Unfortunately the proximity of hot springs does not affect the climate which is best described as harsh, but the piped hot water does heat the long greenhouses and staff rooms. Outside the searing wind is blunted by close-growing trees and shrubs such as **Salix caprea** (from Denmark), **Larix sibirica** (from Siberia) and **Populus trichocarpa** (from Alaska). By dividing up the interior of the garden into small areas like private gardens the wind is broken even more and there one finds a wealth of plants.



Iceland flora beds at Reykyavik Botanical Garden.

A small rock garden is planted solely with Icelandic species as a demonstration of their own flora. Each is labelled with both the Icelandic and scientific names. As there is very little latitudinal zonation in the country anything can be grown there at sea-level. In fact Hooker's comment was that the Icelandic flora was much like that of Ben Nevis.



Iceland flora beds at Reykjavik Botanical Garden.

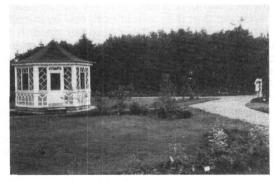
The few woody species such as Salix lanata. Sorbus aucuparia and **Betula pubescens** are also grown. The last two are about the only indigenous tree species on the island and seen only here and there as thickets or light woodland. It is said that the early settlers soon burnt the trees and ensured that they would not grow by introducing sheep. Experiments are conducted in the botanical garden to find other species hardy in Iceland so that they can be used elsewhere. Certainly Populus trichocarpa seems to have caught on as I saw it widely planted in northern gardens. A few of the pines reach more than 2 m high, while Abies, Tsuga, Juniperus, Larix, Chamaecyparis and **Thuia** species are surviving as small plants less than a meter high. Some Sitka spruce, Picea sitchensis, have actually formed a littel copse 5 m high. Young plants were taken to Iceland in 1924 and seeds were imported in 1943, so Sitka spruce is now successfully grown in gardens. Larix sibirica also does quite well, the tallest tree being 16 m high since its introduction in 1913.

Herbaceous plants in the order beds were quite colourful. These narrow beds are divided by grit paths and the species are planted back to back and separated by stone blocks. Looking round in August I tried to decide on the equivalent season at Kew and concluded that it would be late May or early June yet there were certain anomalies. Foxgloves were just flowering yet there were some chrysanthemums out too. However, there were few other compositae we associate with late summer, and in fact as the growing season concludes at the end of August there was a huge gap of species we would consider to be summer flowering. To get over this, bedding plants had been put outside and although next to the glasshouse they were not happy, especially the Brompton stocks which had yellow leaves. In other parts



The Order Beds, Reykjavik Botanical Garden.

of Reykjavik where the local authority maintains flower beds the same had happened to the stocks; the **Schizanthus**, **Petunia** and **Antirrhinum** did better, and **Calendula** made a fine show. The best display I noticed was in the garden of the Danish Embassy where a wealth of species were grown. The favourite garden plants generally are **Hesperis matronalis**, **Lilium umbellatum**, **Lupinus**, **Meconopsis nudicaule** and **Silene dioica**.



Reykjavik Botanical Garden.

Returning to the botanical garden, I fear I cannot do it justice in a short article especially as I could not spend time examining the contents of the frames where many more tender plants are grown. The Director is Mr. S. A. Jonsson and the botanist is Mrs. G. Johannesdottir, it is open every day from June to September, free of charge. There is another botanical garden in Akurere on the north coast which was founded as long ago as 1913. The road journey takes all day and passes through spectacular scenery — indeed the scenery of Iceland is spectacular and often quite fantastic — but that's another story. (Photographs by F. N. Hepper, August 1983).

#### THE RETIREMENT OF JACK DIXON

by Liz Gibson

It was with sadness that we all said farewell to Jack on the 11th August on his retirement. He started at Kew in 1947 in the Arboretum Section, and was at that time the youngest member of staff in the Section. Later he also joined the tree gang.

In 1968 Jack became Transport Officer, a position which he made his own until he retired.

A presentation took place in the Services Section at which the Curator presented Jack with a carriage clock, a framed photograph of he and his colleagues, a copy of '*Kew for Science and Pleasure*' and an undisclosed gift of money. He was a popular and well-liked member of staff, who will be greatly missed.

From all the staff of Kew we wish him many happy years of retirement, and hope that he will not forget to come and see us on occasions.

(From *Eurogardeners News*, August 1983.)

## NEW POLICE SERGEANT TAKES POST (Sic! Ed.)



Sergeant Ernest Killick took up the post as Sergeant of the Royal Botanic Gardens Constabulary on Monday 14th November. He is in charge of the Force which is responsible for maintaining law and order within the Gardens at Kew and the satellite Gardens at Wakehurst Place, Ardingly, Sussex.

He served with the North Riding Constabulary and its predecessor Forces for 30 years until his retirement in September. He retired as an Inspector. During his service he received nine commendations and was awarded the Police Long Service and Good Conduct Medals.

Sergeant Killick and his wife will live within the Gardens.

THE BLUE APRON. George Catt, 1929, has asked that his contribution on page 130 of the last Journal be attributed to the author — it had been published in a previous Journal — Ed.

## THERE'S HUMOUR AT KEW

On Wednesday 6th July 71.1 mm of rain fell on the Gardens between 2 and 4.15 p.m. The Editors of the July Newsletter, Jane Stubbs and Rupert Hastings, invited readers to write in and to express it (depth, volume, weight?) in an interesting or amusing way. With those Editors' permission I reprint the replies for your interest!

The rainfall of 2¼ hours duration on 6th July amounted to 10.5 tons of water per second over the whole area. The total was almost a third as much as all the water we used at Kew for watering the Gardens during the 1975/1976 drought (full year). Enough water to make about 572 million cups of tea. We must measure in cups of tea until 1st April 1984! Jim Keesing

Having just arrived back after my holiday I immediately read the Newsletter and hurriedly calculated that the rain that fell on Kew on 6th July weighed the same as 17,000 five ton elephants.

**Dick Parmenter** 

P.S. London Zoo has confirmed that five tons is the weight of a bull African Elephant, tusks and all.

#### A wet day at Kew

On Kew's 300 acres There recently did fall A prodig-i-ous amount of rain -Near three in-chès in all: It really chucked it down that day (July the 6th it was): The drought was surely broke. And furthermore, because It came in Two-and-a-quarter hours It fill-èd the drains! And damag-èd the flowers! Thus 84,000 tons of water Fell then upon our plot And you'll agree or oughter That's really quite a lot! But compared with really wet spots Like Cilaos or Cherrapunii Its really only rather damp But it made the ground quite gunji!

#### A. Radcliffe-Smith

1. 71.1 mm of rain = 0.0711 cu.m. of water per m<sup>2</sup> (a). The area of the Gardens is 120 hectares = 1,200,000 m<sup>2</sup> (b). The total volume of rainwater that fell on the Gardens is therefore a x b = 85,320 cu.m. The volume of the Palm House has been given (Ref. 'Glasshouse Technical Information' Planning Unit LCD) as 22,830 cu.m.

Imagine the Palm House turned upside down and filled with water. The rainfall on 6th July was 3.737 Palm House-fulls over the Gardens as a whole.

2. Of course, it so happens that 0.0711 cu.m. of water is 71.1 litres, which is almost 100 wine bottles full.

Imagine 100 wine bottles per square metre all over Kew — 120 million bottles. Imagine them full of wine and not water!

Bill Bailey

On July 6th water fell from a great height on to the L.C.D. to a depth of 71.1 mm. It is a sobering thought that it would take the micturating staff of the Herbarium and Administration 1,147 years to equal this impertinence.

On July 6th there were about 1,300,375,735,200 raindrops which gave their all for RBG Kew. If you placed one on top of another, the albeit uncertain pile would be 6,501,878.676 km high, or if it had the misfortune to fall over it would wrap itself around the world 167 and a half times.

Joe Ruddy

이 아파에는 동안을 들을

NEWS OF KEWITES AT HOME AND ABROAD IN 1983

Compiled by MARTIN J. S. SANDS

Sadly we record the death of **George Anderson** (1965) on 12th June 1983. He came to Kew from the Channel Isles, where he had had commercial experience in horticulture, and eventually became Foreman of the Palm House. In 1961 he was awarded the B.E.M. for his services to Kew and retired in 1965 to live his remaining years at Harmans Water, Bracknell, Berkshire.

**Gregory Armstrong**, an American student who left Kew in 1970 and is now a member of the A.A.B.G.A. North American Diploma in Horticulture Certification Committee, left his position of Director of the Smith College Botanical Garden, Massachusetts, to take up the post of Director of the Wisconsin Arboretum, Madison, on 15th August 1983.

**Penny Atkin**, Librarian responsible for the day-to-day work on Indexes and Information retrieval, left Kew to take up another appointment on 31st January 1983.

**Chris Bailes** (Garden Supervisor, Tropical Orchid Unit and Treasurer of the Guild) left on 30th March 1983, with Dr. Phillip Cribb (q.v.), on an orchid collecting trip in Sabah, East Malaysia, including some time in the Kinabalu National Park. The area has over 1,000 orchid species including the rare **Paphiopedalum rothschildiana** and **Dimorphorchis Iowii**. He returned to Kew in early May.

**Rachel Baker** (Seed Bank, Wakehurst Place) accompanied Raymond Harley (q.v.) and Simon Linington (q.v.) for five weeks in June and July 1983, to collect seeds in the semi-arid zone in N.E. Brazil. Later in the year she left her post as an Assistant Scientific Officer on 11th November.

**Sergeant Ball**, who received a British Empire Medal in 1979, retired from his post as Sergeant Constable on 29th March 1983.

**Cath Barker**, now a third year student in the Living Collections Division, was supported in 1983 by a Kew Guild Award on her student exchange visit to Jerusalem Botanical Gardens, which occupy two campus areas of the Hebrew University and will be opened to the public in 1986. At the 60 acre Givat Ram site most phytogeographical regions of the world will be represented while the native flora will be displayed at the smaller garden on Mount Scopus which overlooks the Judean desert, the Dead Sea and the Jordan valley. While in Israel, Cath Barker was also able to see some of the diverse flora around the Dead Sea, in the Negav Desert and in the hills of Galilee.

The Director, **Professor Arthur Bell**, who is a Trustee of the Guild, left in January 1983 to spend two weeks in the United States during which, in Irvine, he attended and gave a paper at the American-Mexican symposium of chemicals from desert plants, and visited Santa Barbara as well as the University of Texas at Austin where, formerly, he had been Professor of Botany. Later in the year, in May, he spent three weeks in Zambia and Zimbabwe, representing and giving talks on behalf of the Royal Agricultural Society of the Commonwealth, while in November he went to Senegal for a week to attend a conference on the parasite *Striga*.

With deep regret, we sadly record the sudden death of **Thalia Bence** (Herbarium) on 11th November after a cerebral haemorrhage. Thalia came to Kew at the end of 1959, aged 21, to work as a Scientific Assistant under the late Noel Sandwith in what was then the American Section of the Herbarium, and in October 1965 she transferred on promotion to the team working on the Index Kewensis to learn the exacting work of compiling the Index under Miss Skan. She later was promoted to Higher Scientific Officer and in 1982 was awarded a Kew Medal. Many colleagues attended her funeral on 24th November at which a tribute to her was spoken by Peter Green (Immediate Past President of the Guild) and a passage from the Bible read by Mark Coode (Herbarium). A beautiful floral tribute in the form of a book was made by Christine Brandt (Herbarium) on behalf of Kew.

**Irene Blewett**, who retired from the Herbarium staff in September 1982, returned in 1983 to continue her work on a part-time voluntary basis compiling an "atlas" of hand writing of former workers in the Herbarium. She now lives in Rottingdean near Brighton.

In February 1983, **Barrie Blewett** transferred on promotion to Scientific Officer from Rosewarne Experimental Station in Cornwall, to take charge of the General Services Unit of the Herbarium, a post previously held by Irene Blewett (no relation!) who retired in 1982 (q.v.). **Jean Bowden** (Herbarium) left on 14th December 1983, for a sixweek private visit to New Zealand where she travelled around both the North and South islands. Among her memories of the visit are the Kauri forests of the North Island. On her way home she spent two days in Singapore.

**Christine Brandt**, who previously owned her own florist shop, joined the Herbarium staff in February 1983, as a Clerical Officer in the General Services Unit.

**Professor J. P. M. Brenan**, formerly Director and a past President of the Guild, visited the Paris Herbarium in March 1983, for discussions in connection with publication of the "Flore des Mascareignes" and in the early part of 1983 he was appointed an Honorary Research Associate of Kew.

**Elizabeth Brentnall** (Special Gardener, Tropical Section) who has special responsibility for the *Begonia* stock collection, left on 22nd February 1983, for a four week visit to Sabah, East Malaysia to collect Begonias, Orchids and some other plants. She first spent a few days in Singapore and visited the Botanic Garden where she met Jenny Yip (q.v.) and Serina Sng (1982), before flying to Kota Kinabalu in Sabah from where she began her fieldwork in the Kinabalu National Park and on Parnol Plantation as well as areas of tropical lowland forest.

**Steve Bristow** (1979) is now working in the Nile Province of the Sudan and in December reported that in the vicinity of the project on which he was working, there had been no rain for two years, temperatures of over 50°C and hand dug wells 100 m. deep.

An account in the last Journal (KGJ 10, 87: 185), recorded the retirement of Mr. Stanley Brookes from his post as Secretary to the Gardens, and Principal heading the Administration Division, on 23rd December when his wife, Jean, also retired from her position as Secretary of the Bentham-Moxon Trust. It may now be of interest to add, that, in a farewell message in the Gardens Newsletter for December 1982, he recalled that he had been a regular visitor to the Gardens since 1940. However, his first official connection began later when he called on the Director at the time, the late Sir Edward Salisbury, to bring up to Treasury standard the catering facilities for staff which included messrooms for the Constabulary and Gardening staff and the provision of cooking stores in the Herbarium. Museums and Director's Office, most of which are still in use. He became Secretary in September 1976, since when he was associated with securing funds and preparing the way for several major building projects which it is hoped will come to fruition in the next few years. Once again we wish Stanley and his wife, who are both members of the Guild, a long and happy retirement.

With deep regret we record the death of **H. Bruty** on 29th December, 1983. He entered Kew in 1946 and became Foreman Gardener in the Ferneries. He was later awarded a British Empire Medal, and left Kew in 1970. **Jim Buckland** (1982) arrived in Victoria, Australia on 3rd January 1983, at the height of the summer and during one of the worst droughts for years. At first he moved to Coleraine, about 200 miles west of Melbourne and during the first two months experienced dust storms, bush fires and temperatures up to 40°C. While attempting to find a permanent job he worked as a labourer for a time and with Mike Looker (1982) as an odd-job man at La Trobe University. Eventually, on 11th April he took up an appointment as Head Gardener at Parliament House, Melbourne and on 16th April was married to Sarah Wain who had worked in the Temperate Nursery at Kew. The three and a half acres of garden for which he is responsible includes a bowling green and tennis court and is laid out in a Victorian English style with subtropical additions.

Arthur Buckley (1938) retired in 1973 as Consulting Arborist for the National Capital Commission in Ottawa and the City of Nepean in Ontario, after specialising in horticulture for 35 years. His main project was the study and evaluation of woody plants. He received formal training at the John Innes Horticultural Institution and at Kew. His professional accomplishments have earned him the Queen's Coronation Medal, the Silver Medal of the Ontario Horticultural Society, the Canadian Ornamental Plant Foundation's Bronze Plaque and the Linnaean Society of Canada's Award of Merit. In 1980 he received the Maple Leaf and several other awards. He is known for his weekly column carried in more than 100 daily newspapers and has written books.

Allen Bush, who left Kew in 1979 after completing his term as an international trainee, has been running his own nursery for the past four years at Fletcher in the mountains of North Carolina. He is hoping that eventually, if the business continues to grow he will be seeking a production manager.

On 30th March 1983, **Corporal L. M. Butfoy** took charge of the Gardens Constabulary on promotion to Sergeant Constable, replacing Sergeant Ball who retired on the previous day (q.v.).

In a letter received in the autumn of 1982 from Trevor Cole (1960) it was noted with regret that **Mrs. R. A. Bysouth** had died. She left Kew in 1919, was a life-member of the Guild and, at the time of her death was living in Lloydminster, Alberta, Canada.

**Mrs. Pauline Churcher** took over as Secretary to the Director when Gillian Hughes (q.v.) transferred to Whitehall Place in April and on 27th June was promoted to the grade of Personal Secretary.

Mark Clements, on loan from the National Botanic Garden, Canberra, started an 18 month project at Kew in 1983 on the growing of endangered European Orchids from seed.

**Jim Comber** (1955) who lives in Tretes, E. Java, again visited the Orchid herbarium at Kew in July 1983, to continue his studies on Indonesian orchids.

Frank Constable (1949) retired from his post as City Parks and Recreation Officer for Derby City Council, in 1983, He spent 22 years at Derby where he was responsible for recreation and extensive landscaping and maintenance work. In this capacity he was listed in the Civic Trust Awards in 1969 for the landscaping of the Derby Inner Ring Road. Before moving to Derby he was Deputy Chief Officer at Bolton and Sheffield, also spending some time working for Leeds Corporation and on the estates of the Duke of Devonshire and Lord Rothschild. He qualified at the former school of Agriculture, Sutton Bonington, His activities have included being a member of the Joint Committee for National Awards. (HND and OND). Chairman of the Amenities subcommittee, an executive member of the National Certificate in Horticultural Examinations Board, and a committee member of the Roval Horticultural Examination Board. He is also an advisor to the National Joint Council on Parks and Plaving Fields Staff and a Derbyshire District Council Representative on the East Midlands Sports Council Planning Panel. He is actively involved in several Societies. Clubs and Associations and is Governor of Derby Agricultural College and Chairman of the Horticultural Advisory Panel.

Congratulations to Alan Cook (Garden Supervisor, Herbaceous Section) on being awarded the British Empire Medal in the Queen's 1983 New Year's Honour's List, a further mark of Alan's very special achievements in a working horticultural lifetime that started in 1937. In pre-war days he worked in private estates with their demanding need for skills in vineries and peach houses. He then volunteered for service in the BAF, which took him into the Burma campaign, where he refused promotion so that he could remain solely responsible for the certain operation of all the cannons on every Spitfire in the squadron. When illness brought him back early to England, he gained further experience at Rivers of Sawbridgeworth and then at Bodnant before becoming a Kew student when the course resumed after the war. Following his training, he returned to Kew after a time at Swansea, and has looked after most parts of the Alpine and Herbaceous Section. Most recently, the re-creation of the Grass Garden owes everything to the accumulated skill and knowledge of this valued horticulturist and plantsman.

At the end of 1983, **Sarah Cook**, Special Gardener in the Herbaceous Section, secured an appointment in the National Trust Garden at Sissinghurst Castle.

With regret we record the death in 1983 of **E. C. W. Cooper**, who left Kew in 1925, was a life member of the Guild and had been awarded an R.H.S. Victoria Medal of Honour.

**Dr. Phillip Cribb** (Herbarium) who was promoted to Principal Scientific Officer with effect from 1st January 1983, spent several weeks collecting orchids in Sabah accompanied by Chris Bailes (q.v.) before spending most of March with Jim Comber (1955) in Java. In June Phillip travelled privately to China where he climbed Mount Omei, contacted C. S. Tang (1982) (q.v.) in Canton and, while in Peking, met Dr. Chen, who spent some time at Kew a few years ago. In August and

September he spent six weeks in Australia, lecturing to the 8th Australian Orchid Conference, and joining expeditions to Cape York Peninsular and to South Western Australia. During his stay he discovered a new species of Orchid.

John Crowther (1982) is now working on a garden in the Cotswolds.

**Dr. Barbara Croxall** (Fern Section, Herbarium) travelled to Zambia in August 1983, to spend about five weeks collecting ferns.

In the early part of 1983, **Dr. David Cutler** (Jodrell Laboratory) gave a paper on the genus *Haworthia* at the Dutch Botanical Society Symposium held at the University of Amsterdam.

Regrettably we record the retirement of **Jack Dixon** on 11th August 1983, from his post as Transport Supervisor, Services Section. He started work at Kew in 1947 in the Arboretum Section, in which at that time he was the youngest member of staff. Later he joined the tree gang and became Transport Officer in 1968. In 1982 he received a Kew Medal and as a popular and well-liked member of staff he will be greatly missed.

Between 28th February and 5th March 1983, **Dr. John Dransfield** (Herbarium) visited the Paris Herbarium to study type specimens of Madagascan palms as part of his preparation of a Genera Palmarum, work which he continued in collaboration with Dr. Natalie Uhl during visits to the Bailey Hortorium, Cornell University, from 12th May to 16th June and from 6th October to 10th November.

On 3rd October **Stephen Droop** began work in the Conservation Unit at Kew as Research Officer for Africa. He replaces Charlie Jarvis, who moved to the Natural History Museum in 1981, and his work involves compiling information on threatened plants in Africa.

On 25th November, **Miss J. Durbin** completed her time as an Assistant Scientific Officer in the Jodrell Laboratory.

Sadly we record the death, on 19th September, of **Dick Edwards** who, for 11 years, was in service at Kew, retiring from his post as Senior Messenger in the Herbarium in March 1976.

In a letter from Ian McDowell (q.v.), received in April 1983, it was with deep regret that he had to report the death of **John Edwards** (1948) on 24th December 1982, in New Plymouth, New Zealand. He was born in Gloucestershire, England in 1920 and was fourth in a family of six. During the 1939-45 war he was a sergeant and, because of his Christian beliefs, served in the Royal Army Medical Corps. After the war he studied horticulture at the American Forces University at Barritz, Germany, and upon returning to England in 1946, trained at Kew and became a life member of the Guild. In 1948 he emigrated to New Zealand with a view to establishing a nursery in Whangarei where he leased some land. Unfortunately this plan did not materialise but he did marry his wife Joan and the nursery turned out to be a domestic one. In 1953 he joined the grounds staff at the New Plymouth Hospital and later became head gardener for almost 25 years. Highlights of his work involved the design and planting of carpet bedding displays to denote

the Jubilee of the Girls' and Boys' Brigade, and his special involvement in the establishment of the Jean Sandel Memorial Garden alongside the chapel. John was a very active Christian and was an ardent supporter of the Christian Men's Combined Churches Fellowship, visiting the prison and helping with Alcoholics Anonymous. He was also a member of the North Taranaki Branch of the Royal New Zealand Insitite of Horticulture and travelled widely to attend conferences. John loved meeting people and found great pleasure in conversing with the various members of the hospital staff as well as patients and those visiting. The Guild offers its sympathy to his wife, Joan, a son, three daughters and their husbands and one grandchild.

Congratulations to **Peter Edwards** (Herbarium) on his promotion to Scientific Officer with effect from the 1st January 1983.

**Dr. Keith Ferguson** (Palynology Unit, Herbarium) travelled to Kenya in May to spend five weeks studying pollination in *Indigofera* and other Legumes. From 17th to 20th July, he attended and gave a paper at a Symposium of the International Organisation of Plant Biosystematics at McGill University, Montreal and in October in Paris worked with the Association of French-speaking Palynologists.

**Rex Filson** left Kew in August 1983, after completing his term of office as Australian Botanical Liaison Officer, and returned to his post at the Royal Botanic Garden, Melbourne.

From 26th to 30th September 1983, **Sylvia Fitzgerald** (Chief Librarian and Archivist) attended a European Science Foundation meeting in Vienna to discuss developments in botanical information systems, and in particular the system for the European flora being developed at Reading University under the direction of Professor Heywood.

Taking the place of Dawn Scott (q.v.) as Deputy Librarian, we welcome **John Flanagan**, who began his duties on 12th September 1983. Previously he worked for some years at the Tropical Products Institute and then at the Ministry of Defence before moving to Papua New Guinea for three years.

With regret we have to record the death in 1983 of **Ernst Floto** (1928) who was a life member of the Guild and was, at first, Assistant Curator and then Curator of the University Botanic Garden, Copenhagen until his retirement in 1969.

Alfred Fordham (1937) retired from the staff of the Arnold Arboretum of Harvard University in 1977 and has since spent his retirement actively lecturing, consulting and writing. He started his career in the Arboretum as a Student Trainee in 1929, and progressed to Assistant Propagator and then Assistant Superintendent, before becoming a Plant Propagator and a Research Horticulturist. His career spanned almost 50 years and during this time he studied barriers hindering germination of woody plant seeds, on the role of physiological juvenility in plant propagation and on methods of seed dispersal. He researched the reasons for dwarfing in conifers and also microclimates as they relate to plant survival. The results of all these findings have been published in many journals and periodicals and his achievements recognised by many amateurs and professional organisations. He is an Honorary Life Member of the International Plant Propagation Society, from which he has received an award and is also the receipient of the American Horticultural Society Professional Citation. His other awards include a Certificate of Appreciation of the Eastern Regional Nurserymen's Association and the Award of Merit of the Lilac Society. He is an Honorary Member of the Massachusetts Horticultural Society from whom he has received the Jackson Dawson Gold Medal and its Certificate of Appreciation.

**Roy Forster**, who left Kew in 1957, is Director of the Van Dusen Botanic Gardens in Vancouver.

In a press release on 15th May 1983, it was announced that **Truman Fossum** (1936) of "Marketing Facts for Floriculture", Washington D.C., had accepted an appointment to become a Citizen Ambassador for Ornamental Horticulture to the People's Republic of China. It was planned that initially he would participate in a three week exposure to tropical and sub-tropical agriculture in Southeastern Asia by means of professional meetings, formal and informal seminars, field trips and other guided observation. Among other considerations it was understood that his appointment was made as a result of his association with Kew, Cornell University and the National Agricultural Library of the U.S. Department of Agriculture. The U.S. team, including Truman Fossum, were to assemble in Honolulu for an introductory session conducted under the dissection of Dr. Jaw-Kai Wang from the faculty of the College of Tropical Agriculture and Human Resources of the University of Hawaii at Manoa.

After completing his time as a student in 1983, **David Francis** is now working at the Springfield Park Training Centre.

**George Fuller** (1953) is Curator of the Pukekwa Park, New Plymouth, New Zealand, and is very active in making the local North Taranaki district well known in Orchid circles for the proliferation of *Disa* seedlings. He also achieves success in growing members of the *Proteaceae*, and some outstanding named clones of *Leucospermum cordifolium* have been propagated for several years.

Regrettably we record the resignation on the 10th October 1983, of **Mrs. Rowena Gale**, a Higher Scientific Officer who, for 14 years, had worked in the Anatomy Section of the Jodrell Laboratory.

**Tom Garwood**, who left Kew in 1947, lives in Cambridge. In a letter in August 1983, he sent best wishes to all at Kew.

**Pamela Gibbons** (1980) works as a plant propagator in Oamaru, New Zealand, and in between her propagating work, seed collecting takes place from time to time. In 1983 parties were organised to obtain Walnut and Chestnut seed in Mackenzie Country.

**Neil Gilmour**, who left Kew in 1952, is Chief Officer for Recreation, Culture and Health for the South Yorkshire County Council and is first Vice President of the Institute of Leisure and Amenity Management. Congratulations to **Dr. Hugh Glen** (who completed two years as South African Botanical Liaison Officer in the Herbarium in 1982) and to his wife on the birth of a daughter in December 1983.

In May 1983, **Mrs. Murial Glover** retired as Supervisor of Mounters in the Herbarium after 23 years of valuable service mounting specimens. She had been Supervisor since 1977 and we extend our best wishes on her retirement.

As briefly reported in the last Journal (10, 87: 146), **Simon Goodenough** (Supervisor of the Temperate Nursery), spent five weeks in the early part of 1983 on the south Atlantic island of St. Helena, working closely with ODA on a project to conserve the rare and endemic flora of the island. In the flora there is an unusually large representation of arborescent *Compositae*, several of which, like some other rarities, are near extinction. Having established a mist bench, many endemics were soon established including several extremely rare species, such as *Nesiota elliptica*, the St. Helena Olive, and *Commidendron rotundifolia*. During his visit he was also engaged in giving talks and demonstrations about conservation and propagating methods.

**Mrs. Valerie Goring** (née Mulford) of Swindon, who until 1970 worked in the Herbarium as an Assistant Scientific Officer, returned to Kew on 9th August 1983, to name specimens she had collected in Thailand.

With regret we record the death of **Albert Gould** on 19th April 1982, at the age of 94. He was a life member of the Guild and even after he was 90 he was still active as a consultant and speaker in California where he lived.

**Peter Green**, immediate past President of the Guild, who retired from his post as Deputy Director at the end of 1982 was appointed an Honorary Research Associate of Kew early in 1983. Later, on 10th June, he left for a two week visit to the Hawaiian Islands, where he took part in meetings of the Publications Committee of the Pacific Tropical Botanic Garden.

Congratulations to **Sue Gregory** (Supervisor in the Palm House) on her marriage on 3rd December 1983, to Brian Macdonald (Course 17) (q.v.).

In April 1983, **Dr. Chris Grey-Wilson** (Herbarium) spent three weeks privately in Andalucia.

Congratulations to **Mrs. Joan Hammond** (Telephonist) on being a recipient of a Kew Medal in 1983, "for providing a service of the highest standard to staff and public".

**Dr. Raymond Harley** (Herbarium) left for Brazil on 3rd June 1983, with Simon Linington and Rachel Baker (q.v.), to spend about five weeks collecting seeds of plants from the semi-arid zone in N.E. Brazil. These may be of potential value for establishment in similar areas of the world and the work was carried out in collaboration with the Survey of Economic Plants for Arid and Semi-arid Tropics (S.E.P.A.S.A.T.). During

his visit he paid a brief visit to the University of São Paulo. On 19th September he left for a two week cultural exchange visit to East Berlin under the auspices of the British Council. He visited the Botanic Garden, Museum für Naturkunde, Berlin and the Haussknecht Herbarium, Jena to examine modern collections of *Labiatae* from Cuba.

From 24th October to 8th November, **Nigel Hepper**, an Assistant Keeper in the Herbarium and a Vice-President of the Guild, visited Copenhagen and West Berlin in connection with his revision of Forsskal's herbarium. Forty years after bombs destroyed the Berlin Herbarium, he happened to arrive on the day (7th November) that rebuilding started.

**Mrs. Gillian Hughes**, a Senior Personal Secretary and Secretary to the Director, transferred to Whitehall Place East on the 22nd April 1983.

Congratulations to **David Hunt** (Herbarium) on gaining his Ph.D in December 1983.

**Ibrahim Ibafidon** left Kew in 1983 and is now working in the Department of Bio/Sciences, University of Sokoto, Nigeria. When writing in December 1983, he described their winter season, called Harmattan, as lasting from September to February.

In September 1983, **Mike Innes** (1981) took up an appointment as Assistant Gardens Advisor to the National Trust for Scotland. Earlier in the year he had been involved in the restoration of Painshill Park.

**P. Jackson** (1980) presented a paper at a Kew seminar on 22nd February 1983, about the 20 acre tomato complex at Camblesforth in North Yorkshire where he is a trainee manager. The glasshouse complex is of interest in that it is situated alongside the 1980 megawatt coal-fired Central Electricity Board Drax Power Station. Its heating system is designed to operate exclusively on the heat from the power station, which is normally lost through the cooling towers, resulting in a 50% cost saving compared with conventional methods. The nutrient film technique is used which allows optimum control of the root environment.

Welcome to **Dr. Surrey Jacobs** of the Royal Botanic Gardens, Sydney who took over his duties as Australian Botanical Liaison Officer in August, from Rex Filson (q.v.). Dr. Jacobs is a specialist in grasses.

**Dr. Frances Jarrett**, a Principal Scientific Officer and a member of the Guild, retired on 30th November because of ill-health. She joined the Herbarium staff in 1959 and became head of the Fern Section in 1962, in which, apart from her studies on African and Indian ferns, she spent a considerable amount of time on bringing the collection into curatorial order. In recent years she has been engaged in a major computer-based classification of the leptosporangiate ferns, work which she is now continuing at Cambridge in her retirement.

**David Jewell**, while still a third year student in 1983, received a Kew Guild Award in support of his travels to Tasmania.

**Xiobai Jin**, on his final year of the Kew Diploma, left for a nine week holiday in Peking on 4th January 1983. He visited his family and the Botanic Gardens before completing his studies at Kew including a special project on *Homerocallis*.

Early in 1983 **Professor Keith Jones**, Deputy Director and a past President of the Guild, visited the New York Botanic Garden to represent Kew at an event organised in honour of Professor Krukov, and from 17th to 21st July he attended and gave a paper at a Symposium of the International Organisation of Plant Biosystematics at McGill University in Montreal, entitled "Plant Biosystematics : 40 years later".

Congratulations to **Ann Kenton** (Jodrell Laboratory) on the award of a Ph.D. from the University of Reading in 1983. In the autumn she travelled around Mexico for a month with Paula Rudall (q.v.), to collect living material of *Iridaceae* and *Commelinaceae* for cytological and anatomical research. In Jalapa, they visited the Botanic Garden at Inireb, meeting Graham Pattison (q.v.).

**Sandra Leche** (1977), who has worked in Chile for three years, indicated in December 1983 that her contract had been renewed for another year (1984-85) and that her house would be ready before Christmas.

Sadly we record the death in 1983 of **Mrs. Lees** (née Burrell) who left Kew in 1922 and was a life member of the Guild.

In 1983, **Ian Leese** (1982) travelled to Barbados and Martinique on the Thornton-Smith Scholarship.

Congratulations to **Gwilym Lewis** (Herbarium) on his promotion to Higher Scientific Officer with effect from 1 st January 1983. Later in the year, from 5th to 25th September, he visited herbaria in Germany and Belgium to study Bahian *Leguminosae*.

In June and July 1983, **Simon Linington** (Seed Bank, Wakehurst Place) joined Raymond Harley (q.v.) and Rachel Baker (also of the Seed Bank) for five weeks to collect seeds in the semi-arid zone in N.E. Brazil. Later, from 5th to 31st October he joined Dr. Gerald Wickens (q.v.) and James Aronson from the Ben Gurian University of the Negev to collect seed of potentially economic species, in Somalia for the Seed Bank.

Welcome to **Bill Loader**, who took up his appointment on 10th January 1983 as a Senior Executive Officer in charge of computers at Kew.

On 24th August 1983, **Mrs. Doreen Lower** retired after working for 15 years at Kew. She was initially employed in the Seed Testing Unit under Dr. Thompson, but transferred to the Herbarium Mounting Unit when the Seed Department moved to Wakehurst Place.

**Gren Lucas**, Acting Keeper of the Herbarium and a member of the Guild Committee, was in Botswana from 23rd April until 3rd May for a meeting of C.I.T.E.S. (Convention on International Trade in Endangered Species) and after a short time back at Kew flew to Johannesburg on

18th May to attend and chair a meeting of a symposium on Endangered Wildlife. Before returning home on 2nd June he travelled to several areas in South Africa and returned briefly to Kirstenbosch Botanic Gardens to give a lecture on 26th August. From 26th to 30th September he attended a European Science Foundation meeting in Vienna to discuss developments in botanical information systems, particularly the system for the European flora being developed at Reading University.

**Philip Lusby** (1981), as part of his studies at Aberdeen University, visited the Kew Library during the Easter vacation in 1983 to research into botanical illustration.

Congratulations to **Brian Macdonald** (1982) and Sue Gregory (q.v.) who were married on 3rd December 1983. Very many past and present staff and students travelled to Bishopstone, Wiltshire to attend the wedding, and to join in the celebrations, sing them a specially composed good luck song and present them with a great many gifts. Brian is now restoring a small Victorian Park in Abingdon where they live and we wish them a long and happy life together.

**Ian McDowell** (1960), Deputy Director of the Parks and Recreation Department of New Plymouth City Council in New Zealand, wrote in April 1983 with news of several Kewites and claimed that his New Plymouth Department, for the size of the town, "still contains... the broadest range of plants in the world. Plant enthusiasts abound and horticulture is making inroads on the provinces dairy farms, diversification being the name of the game. Subtropical fruits grown include Feijoas, Babaco, Kiwi fruit (Actinidia), Tamarillos and Pepinos".

**Mrs. Sue McMillan**, who worked in the Library from 1973 to 1977, returned for short periods in 1983 to work as a casual part-time Assistant Librarian.

**Roger Mann** (1969) has recently moved to Devon, where he has been appointed Parks Services Officer with Torbay Council. His visits to Kew will be less frequent than in the past but he has expressed his willingness to continue supporting the Guild as much as possible.

**Wessel Marais** (Herbarium) visited the Paris Herbarium from 28th February to 9th March in connection with his work on the "Flore des Mascareignes".

In October **Mike Marsh** (Garden Supervisor, Tropical Section) travelled with John Woodhams (q.v.) to visit several Botanic Gardens in the Netherlands and West Germany.

Sadly we have to record the death in 1983 of **R. E. Mason**, who left Kew in 1920 and was a life member of the Guild.

In June 1983, **Brian Mathew** (Herbarium) joined an Alpine Garden Society expedition to Sikkim which is now part of the Indian Himalaya.

**Peter Maunder**, who left Kew in 1954 and lives in Portsmouth, was presented with the "Elizabeth" Medal in September 1983, by Neil Gilmour (1952) (q.v.). The medal, which is restricted nationally to 16,

represents the number of years Her Majesty Queen Elizabeth the Queen Mother reigned as Queen. The award has been made to members of the Institute of Park and Recreation Administration for distinguised service in the field of public parks. An earlier member of the family, the late Fred Maunder entered Kew in 1941 and the current representative in the Gardens is Michael.

On 21 st January 1983, **Simon Mayo** (Herbarium), accompanied by his wife Anne (formerly Arboretum staff, now Herbarium), left for Brazil to participate in the 34th Brazilian Botanical Congress in Porto Alegre, and then to undertake general plant collecting in Rio Grande do Sul, between Porto Alegre and Rio de Janeiro.

Best wishes to **Desmond Meikle** (Herbarium) on his retirement in 1983 after 36 years of distinguised service to taxonomy at Kew. On his birthday on 18th May, a memorable dinner to mark the event was held in the Gardens restaurant, and we congratulate him on being awarded the O.B.E. in the Queen's Birthday Honours a few weeks later. At his retirement dinner he presented to Kew a drawing by Walter Fitch, the former Kew artist. It was not of a plant but of a cat clawing at a disappearing mouse and was one of the humorous illustrations of animals done for Sir William Hooker's son (presumably Joseph, the next Director of Kew). The drawing had been given to Desmond Meikle by Fitch's son 30 years ago.

**David Menzies** (Tropical Section, Living Collections Division) visited Thailand from 11th February to 30th March 1983, to persue his interest in orchids. He visited Bangkok and joined David DuPuy (Birmingham University) to go to the Chiang Mai region and the peninsular area before accompanying a group of Botanists from Copenhagen to the north-east part of the country.

**John Morgan** (1980), writing from the School of Environmental Studies, University of East Anglia, Norwich where he completed his degree in 1983, announced that he was to be married (with Peter Jackson (1980) acting as best man) at the end of the summer term before taking up an appointment with the Cumbria Constabulary.

Felix Naef, an international trainee who left Kew in 1982, wrote early in 1983, indicating that for eight months he was to be in charge of the Cactus, Temperate and Tropical glasshouses at the Botanic Garden at the University of Bern, Switzerland. On 28th June he married Jenny MacMichael, also an international trainee, and in the autumn he hoped to start a Landscape Design Course at the Interkantonales Technikum van Rapperswil.

Belatedly it is reported that **Patrick Nutt** (1953), who lives in Pennsylvania and is Collections Foreman at Longwood Gardens, received from his Director a 25 year service anniversary plaque on 1st February 1982.

Sarah Oldfield (Conservation Unit), spent one week in Zimbabwe in April to attend meetings of the Species Survival Commission during which she chaired a session on threatened plants. From Zimbabwe she travelled to Botswana for two weeks to take part in meetings of C.I.T.E.S. (Convention on International Trade in Endangered Species).

Writing in November, **Frank Parker** (1952) records that he is currently employed as a horticulturist to a group of hospitals in Georgia.

**John Parkinson**, who joined the Library staff in 1978, transferred to the Ministry Laboratories at Slough on 31st July 1983. His place was taken by Andrew Woolfson (q.v.) who was previously at Writtle Agricultural College.

**William Parkinson** (1971), has now moved to Loughborough in Leicestershire and has taken up the position as Parks Manager with Charnwood Borough Council.

**Dick Parmenter**, who returned after a period away from Kew, was reinstated as a Clerical Officer on 7th February 1983, and at the end of the year was promoted to Executive Officer. In the summer he travelled to India on holiday.

**Graham Pattison** (1981), formerly Supervisor in the Tropical Section and Events Officer of the Guild, wrote early in 1983 from Xalapa, Mexico, where he is Curator of the Botanic Garden of the Instituto Nacional de Investigaciones Sobre Recursos Broticas. In the previous year he acquired a new glasshouse and was placed in full financial control of the garden salaries, there being at one stage 28 members of staff working under him. In 1982 they had received 10,000 visitors and shown a good profit on the garden shop and landscape section. He reported that he had been running two courses in horticulture lasting two weeks in which a total of 30 people from all over Mexico attended. Later in the year he reported that four new projects were being set up and that an Association of Botanic Gardens had been formed.

From 26th August to 9th September, **Dr. David Pegler** (Herbarium), with Dr. Derek Reid (q.v.), attended the Third International Mycological Congress held in Tokyo. Shortly afterwards, from 21st to 28th September, he attended, as invited guest, the joint meeting of the Nordic Mycological Congress/Dutch Jubilee Foray at Kindrogan Field Station.

In September, **Leo Pemberton**, Supervisor of Studies and Vice-President of the Guild, attended the Annual Conference of the Association of American Botanic Gardens and Arboreta in Sandiago. He then visited Los Angeles, San Francisco (meeting Dan Campbell (1979), Manager of the University of Berkley Botanic Garden) and Vancouver where he met Roy Forster (1957) (q.v.).

**David Philcox** (Herbarium) left on 25th February 1983, for a four week visit to the National Herbarium of Zimbabwe, Harare, where he continued his studies of *Scrophulariaceae* for a "Flora Zambesiaca" account.

In March 1983, **Cherry Phillips** moved from the Library at the Office of Fair Trading, to take up a librarian post at Kew responsible for information retrieval in place of Penny Atkin (q.v.).

Linda Phillips (1981) is Manager of "Roots and Shoots" training workshop, which provides training and work experience in horticulture and craft skills including woodwork, painting, bricklaying and pottery for 18 students, aged from 16 to 25. It is expected to run for a number of years sponsored by the Lady Margaret Hall Settlement, and funded by the Manpower Services Commission and the Lambeth Inner City Partnership Programme as well as a number of charitable trusts.

**Colin Porter**, who completed his final year as a student at Kew in 1983, travelled to Ecuador in the autumn, sending his first consignment of plants and seeds to Kew from the capital city, Quito. Journeying into the south of the country, he met an American orchid scholar who provided him with 14 plants including Equador's rarest orchid as well as a recent new discovery. Colin is now working at Capel Manor, Enfield.

Lizzie Potts, after three years as a Kew student, left in 1983 to begin a period of 12 months in South America, funded partly by the Chocolate and Cocoa Alliance. Writing from the Galapagos islands where she was based for three months at the Charles Darwin Research Station, she reported that her early impressions were dominated by the wealth of exotic bird life and before long she encountered giant tortoises and iguanas. After exploring the islands, she planned to return to the mainland of Ecuador where she would undertake a study of the environmental conditions under which cocoa grows, with the hope of improving cultural knowledge and thus the success rate of grafted cocoa cultivars elsewhere in the world. After completing her work she was hoping to return home through Australasia, Asia and Europe.

Welcome to **Miss F. G. Prendergast**, who joined the staff at Wakehurst Place as an Assistant Scientific Officer on 3rd October 1983.,

On 15th June 1983, **Alan Radcliffe-Smith** (Herbarium), flew to Colombo, Sri Lanka, to give evidence at a magistrates' court in a *Cannabis*-smuggling case.

**Dr. Derek Reid** (Herbarium) left on the 26th August with Dr. David Pegler (q.v.) to attend the Third International Mycological Congress held in Tokyo until the 9th September.

**Philip Robinson** (1978) has spent four years in charge of an outside section at the National Botanic Gardens, Glasnevin, in Ireland, being responsible for order beds, native plant collections and shrub, economic and herb collections, as well as being actively involved in natural source seed collection. With his immediate superior he has also been responsible for international seed exchange. He would now like further experience abroad and, at the time of writing, was pursuing the idea of a position in Israel, possibly working in the Botanic Gardens attached to the University in Jerusalem.

Congratulations to **Paula Rudall** (Jodrell Laboratory) on her promotion to Higher Scientific Officer with effect from 1st January 1983. Later in the year, she travelled for a month in Mexico with Anne Kenton (q.v.) to collect living material of *Iridaceae* and *Commelinaceae* for laboratory research back at Kew. In October, **Martin Sands**, Co-ordinator in the Herbarium and Honorary Assistant Secretary to the Guild, spent three weeks in West Germany working on *Begoniaceae* in the herbaria of Berlin and Munich. It is of interest to note that, because all the specimens were away on loan at the time, *Begoniaceae* is almost the only phanerogamic family to have survived in its entirety the destruction of the Berlin Herbarium during the war.

On 2nd May 1983, **Dawn Scott**, who was appointed as Deputy Librarian at Kew in November 1974, transferred, on promotion, to the Veterinary Laboratories, Weybridge. Since her departure she had returned to Kew on several occasions to consult the Library in connection with her dissertation on literature sources on the Palm and Temperate Houses.

Sadly we record the death, on 3rd May 1983, of **Mrs. I. Scott**. For many years she worked on various indices in the Kew Herbarium.

**Graeme Smith** (1968) is Curator of the Pukeiti Rhododendron Trust Reserve In Taranaki, New Zealand. He is continuing to expand the activities of the Trust and the annual sale to members of rare rhododendrons, including Malaysian species, is an added incentive to join the Trust.

**Carlos Sombrero**, a second year student in 1983, took part in a student exchange to the Botanic Garden on Las Palmas in the Canary Islands, partly supported by a Kew Guild Award.

**Kim Sorvig** (1981), who lives in Philadelphia, has been running a design business, after returning from some travelling around the United States, and is now working for a Masters Degree at the University of Pennsylvania.

Congratulations to **Brian Spooner** (Herbarium) on his promotion to Senior Scientific Officer from 1st January 1983.

Congratulations to **Brian Stannard** (Herbarium) on being awarded a B.A. degree in German by London University in July 1983.

**Geoff Stebbings** (1982), who lives in Worthing, West Sussex, is now employed at the "Vesutor" Bromeliad Nursery, Billingshurst Lane, Ashington.

**Charles Stirton**, on a long-term Krukoff Fellowship to study Legumes in the Herbarium, spent October and early November in the United States of America, visiting Thibodoux, Baton Rouge, St. Louis, Washington, Boston and New York. In St. Louis he attended a meeting on Phylogenetic Systematics and discussed planning and arrangements for a bilateral Kew-St. Louis International Conference on Legume biology to be held in St. Louis in 1986.

Congratulations to **Stan Stride**, a Special Grade Gardener at Wakehurst Place on being awarded a Kew Medal in 1983, for "his dedication and efficient management of nursery stock and garden stores".

**Don Sumithraarachchi**, an international trainee who left Kew in 1981, wrote in 1983 indicating that he and his family returned in the previous October to Peradeniya, Sri Lanka where he is Superintendent of the Royal Botanic Gardens. The Gardens consist of the Residence and office gardens of H.E. the President and the Hon. Prime Minister, the Commonwealth Wargraves and some other lands of historic importance. Despite staff shortages he is commencing training and conservation programmes. Later in 1983 he visited Japan and Singapore.

**Paul Summers**, Staff Training Officer in the Studies Section of the Living Collections Division and Events Officer of the Guild, secured an appointment at the end of 1983 to take up the post of Head Gardener at London Zoo.

**C. Z. Tang** (1982) is now Director of the South China Botanic Garden in Canton.

**Nigel Taylor**, a Scientific Officer in the Herbarium, aided by a grant from the Guild's Award Scheme, paid a four week visit to the peninsula of Baja, California, Mexico, in April 1983. The chief objective was to study the taxonomically difficult species of *Ferocactus* (Cactaceae). All but one of the taxa endemic to the mainland part of the peninsula were located and herbarium material and seeds collected. Seedlings of each taxon will be presented to the Living Collections Division in due course.

Les Thornton (1981), based in Jeddah since October 1982, works as a Nursery, Landscape and Maintenance Manager for "Naheel Plantscapes" a firm that, in 1983, completed a project for King Fahd's son's palace. His work has taken him to the outskirts of Mecca and Medina and, to give instructions to the work-force of Arabs, Filipinos and Thailanders, he has been learning a little of the various languages. He has been in contact with Chris Bennet (1980) in Riyadh and Jeff Dykes (1973) in Jeddah.

Although familiar to Kewites in Britain, overseas Guild members may be interested to know that, for some years, **Alan Titchmarsh** has been pursuing a career of writing and broadcasting on horticultural matters. He has had his own series of programmes on television and currently appears regularly on a breakfast-time programme. A former Kew student, he became a Garden Supervisor before leaving in 1974.

Journal Hon. Editor, **Richard Ward** (1963), is primarily responsible for forming a new Rotary Club, the Rotary Club of Kew Gardens, which will meet at the Kew Gardens Hotel on Wednesday evenings. He is currently a member of the Twickenham-upon-Thames Club and will eventually join the Kew Gardens Club. No actual Kew Gardens staff have yet been persuaded to attend!

**Dr. Gerald Wickens**, who is responsible for work on the Survey of Economic Plants for Arid and Semi-arid Tropics (S.E.P.A.S.A.T.) in the Herbarium, attended a meeting of The World Health Organisation Scientific Working Group on Plant Molluscicides, in Geneva from 31st

January to 2nd February 1983. Later, from 16th to 21st April, he was in Cairo, attending the third Symposium for Environmental Sciences in Developing Countries, where he presented a paper on 'The Role of S.E.P.A.S.A.T. in Developing Countries', and in June he visited arid land research projects in Texas and Arizona. From 5th to 31st October he visited Somalia, accompanied by Simon Linington (Wakehurst Place) (q.v.) and James Aronson from the Ben Gurian University of the Negev, in order to collect seed for the Seed Bank of potentially economic species.

**T. W. Wiltshire** (1925), a life member of the Guild, wrote in January 1983: "... Kew is a happy memory of its associations as a student. I feel how much I owe to Kew for setting my feet on the path to a happy career in horticulture and a debt to those kindly folk who gave us guidance. I refer to Jock Coutts, Dr. Turrill, Charlie Hubbard and very many others not ommitting William Dallimore".

**Heather Wood**, at one time an Assistant Scientific Officer in the Herbarium and now a botanical artist, returned in April 1983 to make illustrations of *Caralluma* (Asclepiadaceae).

In October, **John Woodhams** (Assistant Curator, Tropical Section) spent two weeks accompanied by Mike Marsh (q.v.), visiting gardens in the Netherlands and West Germany. Their objective was to learn more about the ways in which each garden displayed its tropical plants, having in mind the new large glass complex currently being constructed at Kew. During their travels they visited eight Botanic Gardens including the long established Garden at Leiden, the University Garden at Utrecht, the Frankfurt Palmengarten and the Wilhelm Zoological and Botanical Garden at Stuttgart. They were particularly impressed by the small garden of the University of Bonn, where much of the glass is being replaced and where the standard of display and maintenance is excellent.

Welcome to **Andrew Woolfson**, on his appointment as an Assistant Librarian at Kew on 1st August 1983, replacing John Parkinson (q.v.). Andrew was previously at Writtle Agricultural College.

**Keith Woolliams** (1963), who is Director of the Waimea Arboretum and Botanic Garden in Hawaii, briefly visited the Kew Herbarium last summer.

**Jennifer Yip** (1981) is working with an American Landscape Consultant Company in Singapore.

**Judith Zuk**, an ex English Speaking Union U.S. student at Kew, was appointed Director of the Arthur Voyt Scott Horticultural Foundation, Swathmore College, Pennsylvania as from 15th August 1983. She was previously a Doctorial candidate and Educational Co-ordinator at Cornwell University.

In late June, the Gardens were honoured with an informal visit by H.R.H. Princess Margaret, with members of the Royal Family and friends, who spent a few hours enjoying the Gardens away from their more formal duties.

On the 5th July, Nanny Barbara Barnes together with Prince William in push-chair enjoyed an hour's stroll through the Gardens, unnoticed by the many other visitors of the day. We hope His Royal Highness enjoyed his visit.

(From Eurogardeners News July 1983)

## STATE VISIT

On the 24th March the R.B.G. received a visit from Her Excellency Mrs. Kaunda, wife of the President of the Republic of Zambia, attended by the Hon. Mary Morrison (Lady-in-Waiting). The party was met inside the Main Gates near the Circle Bed on the Broad Walk by Professor Bell. Professor Jones and the Curator.

Mrs. Kaunda planted an Assamese Chestnut Tree - Aesculus assamica - opposite the Circle Bed to commemorate her visit after which she was introduced to Messrs. Corkill, Beyer and Erskine. A motorcade tour was then taken round the gardens stopping at the Palm House and Temperate House, here Mrs. Kaunda was introduced to Hans Fliegner and a bouquet was presented to her by Soo Tasker (Supervisor, Temperate House). At the end of the tour Professor Bell presented Mrs. Kaunda with a copy of the Kew book 'Kew for Science and Pleasure'. real examples for the

(From Eurogardeners News April 1983)

计计算机 医白素 化合金

OBITUARIES

and a state of the second s Second second

#### MR. G. H. ANDERSON

We sadly report the death on 12th June 1983, of George Anderson at the age of 83 years.

George was born at Ash, near Deal, and at the early age of 15 volunteered to fight on the battle fields of France. He served on the Somme and at Ypres, but following complaints from his mother that he was too young, he was sent home.

He served a two year spell in India later on.

His wife Dolly, the same age as George, used to deliver milk in a jug from a milk cart and one of her customers was George. In 1917 on Boxing Day he asked her out and thus began a long and happy relationship which has been blessed with ten grandchildren and four great-grandchildren.



The depression, after the First World War, forced George to go to Jersey in search of work. In 1922 Dolly and he were married on the island. In 1940 they evacuated due to the German Invasion. They lived in Richmond and George entered Kew initially as a General Labourer.

His enthusiasm and skill soon came to the fore and eventually he became Foreman in the Palm House and No. 15 Tropical Water Lily House.

Towards the end of the Second World War the tropical houses were under pressure due to a shortage of fuel and the absence of glass due to bombing. The houses were periodically filled with splintered glass.

When the Palm House was first re-furbished, George was involved in moving all the plants so that the house could be reconstructed a third at a time.

He moved plants to the Chelsea Flower Show and even as far as Edinburgh for the festival there.

George was presented to Her Majesty the Queen when she visited Kew with H.R.H. The Duke of Edinburgh in 1959.

In 1961 he was awarded the British Empire Medal.

Four years later he retired from Kew.

In 1982 George and Dolly celebrated their Diamond Wedding Anniversary surrounded by family and friends. Amongst the congratulatory telegrams was one from Her Majesty the Queen. Many of the plants that George cared for still remain at Kew and we can be sure that many happy memories of the life and work of this staunch Kew man will remain in the minds of family and friends.

To his wife, Dolly, and the children and other relations, we pass on our condolences.

The photograph shows George and Dolly admiring his British Empire Medal.

#### HERBERT JOHN BRUTY

Foreman of the Fernery R.B.G., Kew 1st September 1948 to 30th September 1970



Herbert John Bruty, Bert Bruty to his friends and colleagues at Kew died on 29th December 1983.

Bert was born on 6th April 1910 at Stoke by Clare in Suffolk and commenced his horticultural career in May 1924 in private service near to where he was born and brought up. He was working as Propagator Gardener for Dowager Lady Loch at Stoke College at the time he was called up for war service in September 1939. Bert served in D. Company 5th Battalion Suffolk Regiment and saw service in S.E. Asia where he was taken prisoner of war by the Japanese and worked in forced labour camps. This was of course a period of great difficulties and hardship but the experience of tropical conditions and plant life was of great benefit in Bert's work with the collections at Kew.

Bert came out of the army in April 1946 and entered R.B.G. Kew that same year. He was awarded the British Empire Medal in the New Year Honours list in 1964. The medal was presented to Bert on 29th April at a ceremony in the Duke's Garden at Kew by the Lord Lieutenant of Surrey, Lord Munster. The citation says much about Bert's character and dedicated efforts with the collections at Kew. Parts of the citation read as follows: "Mr. Bruty was so keen to work at Kew that despite his considerable gardening experience he joined the staff in the only available vacancy in 1946 as a Labourer. After a year in that grade he became a Grade II Gardener and a year later in 1948 he was promoted to Gardener Grade I. Three months later Mr. Bruty became a Temporary Foreman and was established in that grade in 1951. This was rapid promotion even for someone as well qualified as him". The text goes on to say he was "one of the foremost specialists in fern cultivation in the country, a fact widely known in horticultural circles. He has been responsible for developing the collection at Kew by intensive propagation and under his care there has been a tremendous increase in the range and variety of the collection. This has been achieved by his special skill in propagating material from spores".

It is also of interest that Bert Bruty made it possible for Professor Manton to carry out a great deal of cytological work on tropical ferns by his efforts to keep them in cultivation at Kew. He managed to grow on ferns collected by her in (Ceylon) Sri Lanka, along with other consignments from Professor Holttum from Malaya and from C. D. Adams who was then collecting in the (Gold Coast) Ghana. The renewed activity in fern phylogeny and classification was increasing apace, with cytology proving of particular help and significance.

Bert retired from Kew on 30th September 1970 but continued to 'look in' on the fern collection on the annual British Pteridological Society visits each spring.

To his wife, Doris, and his daughter we offer our kindest thoughts. From John Woodhams, who attended Bert's cremation on behalf of the Guild.

#### ERNST FLOTO

Ernst Floto was a student, 1927-28, and retired from the post of Curator of Copenhagen Botanics many years ago.

He died on 3rd July 1983, aged 80 years. Those who knew him may well have thought he was immune from sickness, whether he was wandering in the icy Alps or in Scotland's rain and mist. It was his life's philosophy that what comes naturally disappears naturally. He was a lover of nature.

On his sixtieth birthday Ernst Floto said "since my youth I have been able to work with what interests me most — plants! Plants are my hobby".

Keith Bate, Copenhagen

#### MRS. S. T. LEES (NÈE E. L. BURRELL)

It is with deep sorrow that we hear of the death of Esther Leonore Lees who died suddenly at her home in Burwash, Sussex on 16th September 1983 aged 81.

She was one of the lady gardeners trained at the Royal Botanic Gardens during the period when W. Watson was the Curator of the Gardens.

On leaving Kew in 1922 she started a nursery garden for the growing of Alpine Plants with a friend which enabled her to continue her love and enthusiasm for the growing of plants for a period of time until she married. She was a great supporter of the Kew Guild, and on many occasions would attend the Annual Dinner and the Annual General Meetings and Tea Party, making other frequent visits to the Gardens with her family when in the London area.

She was the daughter of Dr. Burrell who had a practice in one of the large houses in the Kew Road overlooking the Gardens, and in those days was looked upon as the 'Garden Doctor' for the students.

Outside horticulture she had a keen interest in the 'Scouting Movement' and was a Scout Leader for 50 years, which she shared with her husband, who died in December of the previous year. Among her other interests were the raising of money for 'Animal Welfare', particularly horses, and in sport had the distinction of being a county hockey player. While in the Women's Institute was past President and President of the Produce Guild, as well as being an active member on the Parish Council and a Governor of the local school.

To her two married sons we offer our sincere sympathy for their bereavement.

(This obituary was prepared by Mr. George H. Preston, a close friend of the family.)

## 

A lasting memorial to his professional abilities was left by a former Nelson City Council Parks and Reserves Superintendent who died in the city on 18th June after a short illness.

Among many other fine pieces of work the development of the previously neglected Isel Park and Broadgreen remains a tribute to Mr. Dennis Leigh, who served the Council from 1946 to 1974.

The financial success of the Marsden Valley Cemetery was often attributed in part to the attractive way in which Mr. Leigh landscaped the area.

For eight years before he came to Nelson he was Curator of the Ashburton domain and reserves, and the town's reputation of having among the finest parks of small towns in New Zealand was largely due to him.

Mr. Leigh was born in the picturesque Lake District in England and studied at the renowned Aldenham Gardens in Hertfordshire before entering Kew. Three years later he left for New Zealand. Whilst at Kew he won the British Botany Prize.

He went to New Zealand and took a position as Foreman of the Dunedin Botanic Gardens.

When he arrived at Nelson his staff numbered ten and the annual expenditure for the 100 ha of parks was about \$10,000. On his retirement he had a staff of 40 and an area of responsibility of about 2,212 ha for which the annual budget was \$230,000.

Mr. Leigh was a past President of the Nelson Horticultural Society and Honorary Secretary to the New Zealand Institute of Park Administration as well as a past Vice-President of the Royal New Zealand Institute of Horticulture.

A keen mountaineer and tramper, he discovered in the Darran Range in western Otaga a plant which was named after him — Aciphylla Leighii.

During the war he served three years in the Pacific with the NZEF. Among his duties was teaching jungle survival to air force commandos in forward areas. Mr. Leigh had lived among the natives studying the plants which were edible.

An accomplished artist, he sold some of his paintings to the American forces.

He wrote and illustrated the history of the 36th battalion.

Mr. Leigh, who recently turned 74, is survived by his wife, Joan, his son Christopher, his daughter Rebecca Bowater, and nine grand-children.

#### **ROBERT E. MASON**

Robert E. Mason, who left Kew about 1923, died on the 30th August this year aged 87. He entered Kew from the then Reading University College trial grounds at Shinfield near Reading and was delegated to the Alpine and Herbaceous Beds Department under Mr. W. Irvine.

Leaving Kew, he entered 'private service' eventually joining the staff at Long Ashton. He then obtained an appointment in New Zealand in a nursery. A problem of failing eyesight caused him to return to England where the National Institute for the Blind helped him to obtain light work. Unfortunately his vision became more impaired and he was sent to a Home for the Blind at Leatherhead. Here he met his future wife who had been blind from birth. They were provided with a flat belonging to the Institute at Epsom where they lived for many happy years. Mrs. Mason died a few years ago and latterly, being unable to cope for himself, he was transferred to a home for the elderly at Horley, Surrey, where he passed away very peacefully. Whilst at Epsom he attended a number of A.G.M.'s with Harry Butcher, a dear friend. He was always very interested in Kew affairs and these meetings were very happy occasions to him, especially when meeting someone he knew. He was always so cheerful despite his blindness.

#### THALIA BENCE

Thalia, whose death on 11th November after a cerebral haemorrhage stunned us all, came to Kew at the end of 1959, aged 21, to work as a Scientific Assistant under the late Noel Sandwith in what was then the American Section of the Herbarium. She soon showed many skills and qualities ideally suited to her duties, having a genuine love of plants, being conscientious, methodical and meticulous in everything she did, and having an artistic eye which found expression not only in drawing but in the preparation of superb herbarium specimens and in her stylish handwriting.

Thalia's qualities marked her out as a potential 'Index Kewensis girl' and in October 1965 she accepted a transfer with promotion to the I.K. team, to learn the exacting work of compiling the famous index under Miss Skan. Though rather reluctant to give up working directly with plants, she soon became absorbed in her new work, in partnership with Lesley Pinner until Lesley's own untimely death, and subsequently with Rosemary Davies. Thalia shunned the limelight, but inspired the high respect and warm affection of her colleagues, whose admiration and gratitude was tangibly expressed in the award of the Kew Medal in 1982.

Thalia was a very 'private' person and spoke little of her many hobbies and interests outside Kew, many of them shared these past ten years with Richard Strong. As a girl, she won awards as a ballet dancer and sang in the choir at St. Marylebone Church, and latterly her hobbies ranged from bird-watching to book-binding and bonsai, and from classical music to cats and cacti. She regularly visited Miss Skan in her retirement, and was a most dutiful and loving daughter to her mother, who has lived for some years at one of the Abbeyfield houses in Kew.

The funeral, at South-West Middlesex Crematorium on 24th November, was attended by many Kew friends and colleagues as well as family and other friends. A tribute to Thalia was spoken by Peter Green and one of the biblical readings by Mark Coode. A beautiful floral tribute in the form of an opened book was made by Christine Brandt on behalf of Kew.

We offer our heartfelt sympathy to Richard, and to Mrs. Bence and their relatives.

In Rosemary Davies, Kew is lucky to have someone who has already proved herself diligent, meticulous and quick to learn, and worthy and able to continue the demanding work of Index Kewensis. She has our confidence and good wishes as she addresses herself to the additional responsibility she has so unexpectedly to bear.

(RBG December 1983 Newsletter - David Hunt)

**E. W. COOPER** (1925) died on 8th June. He generously left a legacy of  $\pounds$ 1,000 to the Kew Guild, to be used for general Guild purposes.

The Guild has also received news of the death of **MRS. R. A. BYSOUTH** (1919), **ALBERT GOULD** and **J. H. EDWARDS** (1947).

Information concerning deceased members should be sent to The Kew Guild Secretary.

## **INCOME AND EXPENDITURE ACCOUNT FOR**

•

1982		1983	
£	DEBIT	£	5 £
	То:		
1,785.00	Kew Guild Journal: Printing 1982 Journal inc. blocks Wakehurst Booklet:		1,600.00
	Reprinting Less value of stock	2,315.00 1,936.16	318.84
73.00	Prizes awarded by the Guild		84.00
69.73	Hon. Officers' expenses		113.25
15.00	Benevolent payments		
587.75	General Printing, Postage, Stationery etc.		415.88
89.61	Guild Emblems		
366.75	George Brown Memorial Lectern: Engraving etc.		
100.00	Award Scheme: Prizes, Printing etc		360.00
6.00	Insurance		11.45
291.74	Annual Dinner Deficit		_
9.00	A.G.M. Tea Deficit		-
3,393.58			2,963.42

## BALANCE SHEET FOR THE YEAR

1982		19	83
£	LIABILITIES	£	£
	Capital Fund:		
10,275.34	As per attached statement of assets		12,808.86
	Current Liabilities:           Life Subscriptions:           48 @ £1.00 Half Rate           41 @ £2.00 Half Rate           73 @ £3.15 Half Rate           4 @ £5.25           7 NO RECORD	24.00 41.00 114.97 21.00	
211.97			200.97
10,487.31			13,009.83

249

## THE YEAR ENDED 31st DECEMBER, 1983

1982		198	33
£	CREDIT	£	£
n e l	By: Annual subscription and arrears Donations — General Award Scheme Donations	1,970.78 1,775.43 124.27	, ŝio - j
1,416.53	Dividends:		3,870.48
	From Charities Investment Fund General Fund Award Scheme	537.40 201.20	
658.08	Interest from Barclays Bank:		738.60
	General Deposit Account Award Scheme Deposit Account	82.64 129.14	
328.05			211.78
160.80	Wakehurst Booklet: Receipts from Sale (less value of stock)	- 1 - 1 - 1	687.46
154.17	Sale of Emblems	1.11.20	103.03
	Award Scheme Soiree and Raffle		182.08
8.00	Sale of Christmas Cards		
-	Annual Dinner Surplus A.G.M. Tea Surplus		45.01 20.40
2,979.93			5,871.24
	Balance at 1.1.1983 Plus Reduction of Life Sub. Liabilities Plus Excess Income over Expenditure	10,275.34 11.00 2,907.82	
	Sub Total	13,194.16	
	Less Nominal Value of Journalstock written off	385.30	
		12,808.86	

## ENDED 31 st DECEMBER, 1983

1982		198	3
£	INVESTED ASSETS	£	£
6,000.00	Charities Official Investment Fund Shares at Cost: General Fund Award Scheme Fund	4,000.00 2,000.00	6,000.00
	CURRENT ASSETS		
472.19	Emblems — Purchase Value	399.11	
707.90	(Purchase Value) Nominal Value of Journal assets written off	1,936.16	
707.80			2,335.27
1.049.99	Cash at Barclays Bank: General Deposit Account	1,759.68	
2,252.70	Award Scheme Deposit Account	2,529.39	
			4,674.56
10,487.31			13,009.83

Audited and found correct:

Signed by: A. J. Hale T. Reynolds 29th February 1984

- - - -

## TREASURER'S REPORT - 1983

by Christopher Bailes (Hon. Treasurer)

The last year has been busy for your Treasurer and Membership Secretary, as we have grappled with the change in subscription rates, and have attempted to set the Guild once again upon a sound financial footing. I would like to take this opportunity to thank all those members and Life Members who have responded so handsomely to our appeal for funds, and to the raising of the subscription rate. Income from subscriptions and donations more than doubled during 1983, allowing the Guild to afford the reprinting of the Wakehurst Booklet in numbers large enough to ensure that the Guilds' funds will benefit from this exercise for some years to come, and a handsome return upon our investment can already be seen during the last year. The principal aim of the increase in the subscription, namely that the basic running costs of the Guild should be covered by this income, which it had failed to do for the previous two years, (leading to net deficits and a reduction in our assets), has been achieved.

## **ROYAL BOTANIC GARDENS, KEW**

#### SCIENTIFIC, TECHNICAL AND ADMINISTRATIVE STAFF

(31st December 1983)

This list will be printed in the Journal every second year — alternating with the Rules of the Kew Guild.

**Director:** Professor E. A. Bell, M.A., B.Sc., F.L.S., C.Chem., F.R.S.C. Personal Secretary: Mrs. M. P. Churcher

Deputy Director: Professor K. Jones, B.Sc., Ph.D., F.L.S., F.I.Biol.

#### ADMINISTRATION

Secretary: W. G. R. Corkill, O.B.E.

SEO W. Loader

HEO M. A. Arnold Gilliat, Miss J. A. Collins, R. E. R. Gegg (Wakehurst Place)

#### Personnel

- EO Mrs. K. J. Pratt
- CO Miss E. A. Wingrove, Miss C. T. Town
- CA Mrs. Q. Shafiuddin, Mrs. I. Cragg (Wakehurst Place), Miss J. M. Whyte (P/T) (Wakehurst Place)

#### Finance

- EO Mrs. H. E. W. Ford, R. Parmenter
- CO A. B. Skinner, Mrs. S. Reeves, Mrs. P. D. Turpin (Wakehurst Place)
- CA Miss M. Roberts

#### Public Relations

- EO Miss M. Parker
- CO Miss S. B. Archer
- CA Mrs. A. Henry, Mrs. E. J. Pearce (P/T)
  - Mrs. M. E. Shah-Dayan (P/T), Mrs. K. Hughes (P/T)

#### Computer Project Management

EO M. Jackson

#### **Common Services & Accommodation**

- EO Mrs. M. D. Norman
- Office Keeper: Miss C. E. Lodge
- CO A. P. Lister

CA S. Banner, Miss C. A. Duggan, Mrs. P. V. Gill

Senior Superintendent of Typists: Mrs. M. J. Brind

Specialist Typists: Mrs. E. J. Greenaway (Admin.), Mrs. A. Lucas, Mrs. V. M. Whitby, Mrs. P. F. Arnold (P/T), Mrs. J. L. Ronald (P/T), Mrs. P. Bloomfield (Wakehurst Place), Mrs. E. N. Attwood (P/T), Mrs. J. D. Johnston, Mrs. I. G. Thorp, Mrs. L. T. Knight (P/T) (Herbarium)

Copy Typists: Mrs. J. A. Curtis, Ms B. Reid (P/T), Miss V. Horwill (Jodrell), Miss D. M. Howard (P/T), Mrs. A. C. Magee (P/T) (Library)

小标 使自己 病子

Telephone Operator: Mrs. J. Hammond Senior Messenger: Miss S. Glover Messengers: 5 Packer: 1 Porter: 1

Nightwatchmen: 1

#### Constabulary

Sergeant: E. G. Killick
Corporals: L. M. Butfoy, P. C. Donovan, R. C. Marillat, J. H. Ogilvie, A. S. Pater (Wakehurst Place)
Constables: 25
Constables (P/T): 3
Supervisor of Housestewards: R. L. Godbold
House Stewards: 6

#### HERBARIUM

Acting Keeper of the Herbarium SPSO G. Ll. Lucas, O.B.E., B.Sc., F.L.S. Deputy Keeper Honorary Research Associate Professor R. E. Holttum, M.A. R. W. G. Dennis, B.Sc., Ph.D. Dr. C. R. Metcalfe

#### Wing A

- PSO L. L. Forman, B.Sc., F.L.S. (Assistant Keeper) C. Grey-Wilson, B.Sc., Ph.D., R. M. Polhill, B.A., Ph.D., F.L.S., B. F. Mathew, F.L.S.
- SSO M. J. S. Sands, B.Sc., F.R.G.S.
- HSO G. P. Lewis, B.Sc.
- SO Mrs. D. M. Polhill (P/T), B. L. Stannard, Miss S. Andrews
- ASO Mrs. S. Dickerson

#### Wing B

- PSO C. C. Townsend (Assistant Keeper)
  - R. M. Harley, M.A., D.Phil., F.L.S., C. Jeffrey, B.A.
- SSO F. G. Davies, M.A., Ph.D., F.L.S., Mrs. D. M. Bridson
- SO Miss P. Halliday, Miss M. Bywater
- ASO Miss S. E. Dawson, Miss S. T. Zmarzty, B.Sc.

#### Wing C

- PSO F. N. Hepper, B.Sc., F.I.Biol., F.L.S. (Assistant Keeper)
   R. K. Brummitt, B.Sc., Ph.D., F.L.S., D. Philcox, M.Sc., M.I.Biol., A. Radcliffe-Smith, B.Sc., B. Verdcourt, B.Sc., Ph.D.
- SSO D. V. Field, B.Sc., M.Phil., F.L.S., Mrs. S. Holmes, M.Sc. (P/T)
- SO Mrs. G. L. R. Bromley, B.Sc.
- ASO Mrs. G. S. Bidgood, Miss C. M. Wilmot-Dear, B.Sc., Miss B. Swain

#### Wing D

- SPSO W. D. Clayton, B.Sc., Ph.D., A.R.C.S. (Assistant Keeper)
- PSO Miss S. S. Hooper, B.Sc., F.L.S., Dr. D. R. Hunt, M.A., F. M. Jarrett, M.A., Ph.D., F.L.S., W. Marais, M.Sc., R. D. Meikle, B.A., L.L.B., F.L.S., P. G. Taylor, F.L.S., J. Dransfield, M.A., Ph.D., F.L.S., Dr. P. J. Cribb, B.Sc., Ph.D.
- SSO S. A. Renvoize, B.Sc., M.Phil.
- HSO T. A. Cope, B.Sc., Ph.D., S. J. Mayo, B.Sc., Dr. B. S. P. Croxall, B.Sc., M.Sc., Ph.D.
- SO Mrs. E. J. Cowley, J. J. Wood, P. J. Edwards
- ASO Miss L. Fitt, Mrs. G. R. Lee (P/T)

#### Mycology

PSO D. A. Reid, B.Sc., Ph.D. (Assistant Keeper) D. N. Pegler, M.Sc., Ph.D., F.L.S.

#### 253

HSO B. M. Spooner, B.Sc. Miss H. A. Preston ASO

#### Quarantine

PSO A. G. Bailey, B.Sc.

#### Flora Zambesiaca

(British Museum - Natural History) E. Launert, D.R., R.E.R., N.A.T., F.L.S. **PSO** ASO Miss C. B. Davey

#### Palynology Unit

PSO I. K. Ferguson, B.A., Ph.D., F.L.S. SO Mrs. M. M. Harley

#### General Service Unit and Office

SO ASO	J. B. J. Blewett Miss S. A. Waltham, B.Sc.	an an the state of t
CO	Ms C. Brandt	Mars M. O. M. Davibb
CA	Miss M. J. O'Flaherty, Mrs. J. Simmons,	Mrs. M. G. W. Smith

#### **Conservation Unit**

SPSO	G. Ll. Lucas, B.Sc., F.L.S.
SO	Mrs. S. F. Pearson, B.Sc.
CA	Miss S. Lyall

#### Kew Bulletin

PSO M. J. E. Coode, M.A., F.L.S.

Miss J. K. Bowden, B.Sc., F.L.S., Mrs. V. Chidzey HSO

#### SEPASAT

G. E. Wickens, M.Sc., Ph.D., F.L.S. PSO

#### Index Kewensis and Kew Record

SO Miss R. A. Davies

#### Garden Verifications

SO N. Taylor, B.Sc.

#### Mounters

Mrs. M. J. Freeman (Supervisor), Mrs. P. A. Evans, Mrs. G. E. Maryon, 1 A Mrs. D. McLachlan, Mrs. R. Midgley, Mrs. E. M. Robertson

#### Senior Photographer

M. Svanderlik

#### Liaison Botanists

- E. R. Guest (Iraqi Government)
- B. M. Wadhwa (Indian Government)
- B. M. Wadhwa (Indian Government) P. H. Linder (South African Government)
- R. B. Filson (Australian Government)

#### LIBRARY

Chief Librarian and Archivist: Miss S. M. D. Fitzgerald, B.A., A.L.A. Deputy Librarian: J. P. Flanagan Librarian: Mrs. C. Phillips Assistant Librarians: A. S. Woolfson, Miss K. E. W. Rattue, A.L.A., Miss H. C. Morris, Miss L. Thompson

지수는 제 없었다. 이 문문

- わざ時読録の 夕戸にもしい 日日

The Hamilton

an and the set of the

and the second second second

, 가 2010년(1996년 31년 - 113) - 1179년 국 4월 - 2년48일 (\* 113)

indenter and statements that a second

255

- CO Mrs. F. Hunt, Miss M. J. Ward, Mrs. E. D. Smith
- CA Miss A. M. B. E. Ramsey

Photoprinter II: Mrs. E. Drabik

#### JODRELL LABORATORY

#### Keeper and Deputy Director:

DCSO Professor K. Jones, B.Sc., Ph.D., F.L.S., F.I.Biol. Honorary Research Associate: C. R. Metcalfe, O.B.E., M.A., Ph.D., F.L.S., F.I.Biol.

#### Anatomy Section

- PSO D. F. Cutler, B.Sc., Ph.D., D.I.C., F.L.S. (Head of Section) Miss M. Y. Stant, B.Sc., Ph.D., F.L.S.
- SSO Miss M. Gregory, B.A.
- HSO Miss P. Rudall, B.Sc., Ph.D.
- SO Miss S. McGrath, B.Sc.
- ASO P. Gasson, B.Sc.
- LA Mrs. P. C. Monger (P/T), Mrs. E. Turrell (P/T)

#### Cytogenetics Section

- PSO P. E. Brandham, B.Sc., Ph.D.
- SSO S. J. Owens, B.Sc., Ph.D.
- HSO Miss A. Kenton, M.I.Biol., Ph.D.
- SO Miss M. A. T. Johnson

#### **Biochemistry Section**

- PSO T. Reynolds, B.Sc., M.Sc., D.I.C., A.R.C.S. (Head of Section) Miss L. E. Fellows, B.Sc., Ph.D.
- SO S. V. Evans, Ph.D.
- ASO Miss J. V. Dring

#### Workshop

Laboratory Craftsman: E. B. Borez

#### Photography

Principal Photographer: T. A. Harwood, A.R.P.S.

#### Physiology Section and Seed Bank (Wakehurst Place)

- PSO R. D. Smith, B.Sc., M.Sc., (Head of Section)
  SSO D. J. C. Fox, M.I.T.E., T.E.N.G. (C.E.I.)
  HSO J. B. Dickie, B.A., Ph.D., H. Pritchard, B.Sc.
- SO R. J. Probert, B.Sc., S. H. Linington, B.Sc., M.Sc.
- ASO E. A. M. Ormerod, T. J. Lawrence, B.Sc., Miss F. Prendergast LA Mrs. J. Peschiera (P/T)

#### LIVING COLLECTIONS DIVISION

Curator: J. B. Simmons, N.D.H., L.I.Biol. Deputy Curator: R. I. Beyer

#### Planning and Information Support Unit

Gardens Supervisor: W. Jennison CA Mrs. C. A. Hall (P/T)

#### Hardy Wood (Arboretum) Section

Assistant Curator: C. M. Erskine Gardens Supervisors: J. H. Mateer, A. S. Kirkham, P. G. E. Smallcombe

#### **Services Section**

Assistant Curator: S. J. Henchie Gardens Supervisor: R. W. Howard, B. J. Oakes

#### **Hardy Herbaceous Section**

Assistant Curator: B. Halliwell, N.D.H. Gardens Supervisors: A. G. Cook, T. Hall, G. P. Smith

#### Tender Herbaceous (Tropical) Section

Assistant Curator: J. R. Woodhams Gardens Supervisors: C. P. Bailes, M. Marsh, A. J. Hale

#### Tender Woody (Temperate) Section

Assistant Curator: H. J. Fliegner Gardens Supervisors: Mrs. S. MacDonald, S. Goodenough, Miss S. Tasker

#### Wakehurst Place

ş

Deputy Curator: A. D. Schilling, D.I.P., A.R.B. Gardens Supervisors: F. G. Greenough, J. Lonsdale, N.D.H., M. Bovey

#### **Technical Section**

Assistant Curator: D. W. H. Towsend, N.D.H. Gardens Supervisor: Mrs. A. M. Woods, B.Sc. HSO J. L. S. Keesing, B.Sc.

#### Staff and Student Training

Supervisor of Studies: L. A. Pemberton, N.D.H., Dip. Arb. Gardens Supervisor: P. R. Summers CO Mrs. H. M. Hyde

#### Industrial Grade Staff

(total at Kew and Wakehurst Place including students) Full Time: 173 Part Time: 10

#### **MUSEUMS DIVISION**

PSO Miss R. C. R. Angel, B.Sc., Dip.Hort. S.C. Exhibition Officer: P. Reid
Guide Lecturers:
HSO Miss L. M. Ponsonby, A.G.S.M., Mrs. J. A. Stubbs, B.Sc., M.Phil.
ASO R. B. Hastings, B.Sc.
Graphics Officer IV: Miss L. Giuffrida, D.I.P.A.D.
Museums Technician III: J. M. Ruddy, N.D.D., A.T.D., R. Strong
CA Mrs. J. B. Heath (P/T)

#### **BENTHAM-MOXON TRUST**

Trustees: Professor E. A. Bell, M.A., B.Sc., F.L.S., C.Chem., F.R.S.C., Sir Alfred John Digby Winnifrith, K.C.B., Sir George Taylor, F.R.S., D.S.C., L.L.D., F.R.S.E., F.L.S., V.M.H., P. S. Green, B.Sc., F.L.S., F.I.Biol., Mrs. M. Wickens (Secretary)

Appointees:

H. K. Airy-Shaw, B.A. (Taxonomist) Mrs. A. M. Beyer (Conservation Unit IUCN) Miss C. King (Botanical Magazine) G. Pope (BA Krukoff Curator of African Botany, Flora Zambesiaca BM) Mrs. S. Marsh, B.Sc. (Plant Quarantine) A. H. M. Synge, B.Sc. (Conservation Unit IUCN) S. Davis (Conservation Unit IUCN) Mrs. W. Worth (Conservation Unit IUCN) Miss C. Leon (Conservation Unit IUCN) Miss F. E. M. Booth (SEPASAT) Miss I. N. J. Storey (SEPASAT) Mrs. K. E. Lee (SEPASAT) Mrs. E. Egginton (PADU) Mr. S. Davis (TPC) Mr. I. Taylor, B.Sc. (PADU - Marine) Mrs. M. M. Wickens (Date Palm Literature Survey) Mrs. A. Mayo (TPC) J. Harrison (PADU) Miss J. Powell (Jodrell, Wakehurst) A. N. E. Birch (Jodrell) H. Wilkinson, Ph.D. (Jodrell)

and the second second

### LIST OF R.B.G. STAFF AND STUDENT MEMBERS OF THE KEW GUILD

(as at 31st December, 1983)

#### Staff:

Airy-Shaw, H. K. Angel, Miss R. C. R. Arnold-Gilliatt, M. Bailes, C. Bell, Professor E. A. Beyer, R. I. Bovey, M. (Wakehurst Place) Brummit, Dr. R. K. Burkill, H. M. Cooke, A. Corkhill, R. Cowley, Mrs. E. J. Cutler, Dr. D. F. Edwards, P. J. Field, D. V. Fleigner, H. J. Gardiner, Mrs. T. Goodenough, S. Gregory, Miss G. **7.** 1997 - Senta Contractoria Hale, A. J. Harwood, T. A. Henchie, S. J. Hepper, F. N. Hooper, Miss S. S. Jones, Dr. K. Lucas, G. L. Owen, Dr. S. J. Pegler, Dr. D. N.

> ល់ក្នុងស្ថិត ស្ថិត ស្ថិត ស្ថិត ស្ថិត ស្ថិត សេថា ស្ថិត ស្ថិត

and the state of the second second

Pemberton, L. A. Reynolds, T. Sands, M. J. Schilling, A. D. (Wakehurst Place) Simmons, J. B. Stant. Dr. M. Y. Tasker, Miss S. Taylor, P. Townsend, D. W. H. Wickens, Dr. G. E. Woodhams, J. R. Worth, Mrs. W. Woods, Mrs. A. M.

#### Students

Barker, Miss C. Bustard, Miss L. Cathersides, A. Crowder, C. J. Morris, Miss S. A. O'Grady, A. Piebenga, Miss S. Praill, Miss A. D. Reeder, M. Snellgrove, D. L. Sombrero, C.

and a second s

## Landscape Management

Landscape - Construction - Layout - Planting & Maintenance

11 Sheen Park · Richmond Surrey · TW9 1 UN. Telephone: 01-948 2460

T. R. B. Storr, N.D.H., Dip. Hort. Kew (Hons.)

# Minotaur Designs

# — the worlds only company devoted to the Art of Maze Design

Kewites enquiries especially welcomed

## 40 Whitecroft, St. Albans, Hertfordshire, England.

A Booklet, "Celebration of Mazes", is available for £2 sterling from the same address.

# **Artscapes Aqua**

## 6 Church Street, Whitchurch, Hampshire, England.

Artscapes Aqua was pleased to bring the results of a Kew training to the aquatic landscaping at Britain's First International Festival Garden in Liverpool.