

THE JOURNAL OF THE KEW GUILD

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The Association of members of the Kew staff past and present

Events of 1998

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**Royal Botanic Gardens
Kew**

CONTENTS

	Page
Trustees and Committee	221
Editorial	222
R. C. Ward, President	223
Kenwyn F. R. Pearson, Vice President	225
Annual General Meeting of the Kew Guild	225
A.G.M. Events	229
Report on the Kew Guild Annual Dinner	231
New Kew Guild Committee Members Spotlight	234
The Kew Guild Award Scheme Report for 1998	235
Peonies and Traditional Gardens of Japan	236
Travels to South-west U.S.A. in the Quest for Cacti and Succulents	237
A Travel Scholarship to America to Study Children's Education and Interpretation	237
Northeast Brazil, Land of Contrasts	238
Il Giardino	240
At the Fairest Cape, South Africa	241
A Trip to Sabah, Malaysian Borneo to Study Rafflesia in its Native Habitat	242
Four Botanical Gardens in Cuba	243
Bromeliads and Rainforests in Costa Rica	244
A Study Tour of Mexico's Endangered Habitats and Plants	246
Mine Reclamation in Western Australia	247
Travel Scholarship to La Réunion	248
Study Tour to the Southwestern United States	250
School of Horticulture, Kew Diploma Prize Day 1998 Speech	251
Presentation of Kew Diplomas and Prizes 1998 (Course 33)	254
Outgoing President's Report, Presentation of Kew Diplomas and Prizes, 1998	260
Editor's Set of Journals	260
Kew Diploma Students of Course 36	261
News of Kewites at Home and Abroad in 1998	263
Committee Deliberations during 1998	268
The Kew Mutual Improvement Society Report 1998/99	269
The Kew Students' Union Report 1998	271
The Living Collections Department at Kew and Wakehurst Place During 1998	272
Kew Presents One of the "Scents of Summer"	276
The Other Side of Kew (1971)	276
The Director's Activities During 1998	277
Appointment of New Director of Kew	278
A Journey Through Kew - on Video	279
A Wealth of Knowledge on Offer at Kew	279
Weather at Kew for 1998	280
Flowers, Flowers and Even More Flowers	282
Syon Park	282
Excerpts from the 'Kew Guardian'	283
Excerpts from the 'Kew Scientist'	296
Obituaries	298
Accounts	304
Members Address List	306
List of R.B.G. Staff, Honorary Research Associates and Students Members of the Kew Guild	314

ROYAL BOTANIC GARDENS, KEW

THE KEW GUILD

Patron: Her Royal Highness Princess Alexandra

THE KEW GUILD COMMITTEE 1998-99

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 Professor Sir Ghilleain T. Prance, F.R.S., M.A., D.Phil., Fil.Dr., F.L.S.
 M. J. S. Sands, B.Sc., C.Biol., F.I. Biol., F.L.S., F.R.G.S.
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 Events Officer: T. F. Risely

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M. Clift	Camberley
Mrs. D. Hayes	Kew
J. Winter	Cape Town

Retire 2001

Ms L. Allen	Oxford
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C. Hindmarch	Romsey
N. Taylor	Kew

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Ms J. Evans	Kew
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D. Hardman	Wakehurst Place
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K. Woolliams	U.S.A.

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 Award Scheme Chair: F. N. Hepper
 Trustee Representative: M. J. Sands
 Students' Union Representatives: Ms E. Fox and Ms J. Hirsch

EDITORIAL

Another year has gone – all too quickly. Did you get around to sending in your news to the Guild? Have you enrolled a lapsed Kewite? Did you attend last year's A.G.M. or Dinner?

As Hon. Editor *and* President this year, I feel really able to make things happen, with the help of an enthusiastic, young and lively Committee. Strings can be pulled – and legs! – and not only are our membership details more accurate, but we are discussing important items such as archives planning, Guild database, investments and funds, the Guild Committee structure etc. This latter subject has taken up many hours of deliberation and with your help at the A.G.M. I have no doubt a better Committee will emerge. Keep, therefore, the 11th September free and plan to come to Kew; and stay on for our soirée.

Good housekeeping has kept subscriptions at £15 per year, with staff at £12, Diploma students at £7.50 and £20 for Corporate membership. Paid-up Guild members may obtain half-price Friends of Kew membership for £17 per year and this offers many benefits.

There is an army of non-Committee members who help the Guild and I take this opportunity of thanking them for effecting the work that we strive to do.

Keep in touch.

Richard C. Ward
Hon. Editor

Your Guild contacts are:

Secretary: Mike Clift on 01276 20743 (telephone and fax)

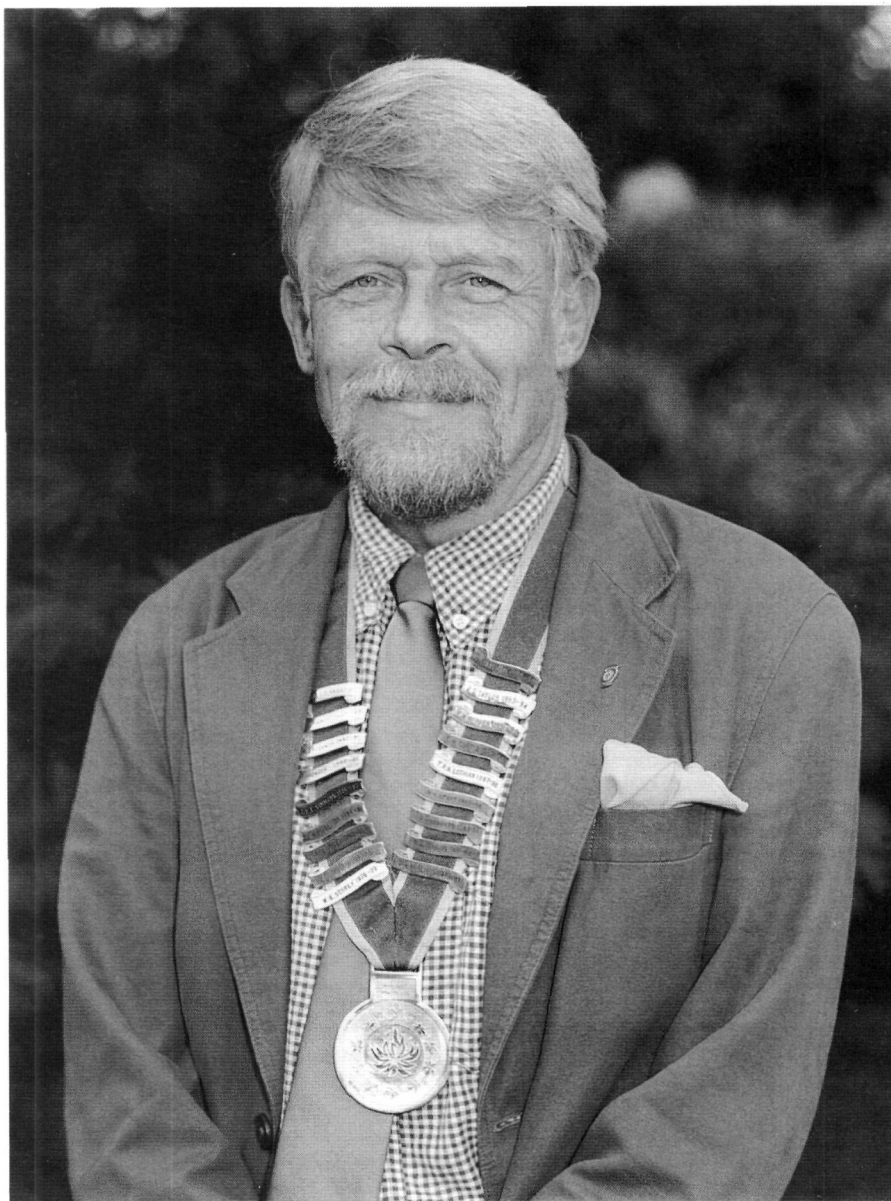
Honorary Editor: Richard Ward on 0181 878 6696 (telephone and fax)

Membership/Subscriptions: David Barnes on 0181 332 5567 (telephone), 0181 332 5580 (fax)

Addresses at the back of this Journal.

RICHARD C. WARD

President 1998/99



Photography by Andrew McRobb, R.B.G., Kew.

Over the past 23 years as Editor of your *Journal* it has been my job to extract Obituary-like pages of information to accompany photographs of our Presidents! All write-ups have been in the third person. This one is different.

I was born in Leicester on 13th December 1939. My father was a career RAF Officer and we moved house frequently. My first interest in Horticulture was inspired by my rich grandparents' Head Gardener in 1947 in Reigate where we lived. I still relish memory recalls of his garden when I see sweet peas and Mulberry trees!

Later, at public school, one was expected to be more ambitious than wanting to become a gardener, but my appetite for our profession had been whetted even more by growing radishes in the school vegetable plot. And so, bless 'em, in 1958 my parents paid for me to receive two years apprentice training at Dartington Hall Gardens near Totnes, South Devon. I then went to Hastings Parks Department in 1960 as an Improver and, having failed to get into Kew in October 1960, went to Slococks' Goldsworth Nursery at Woking for six invaluable months. Happily Kew 'saw the light' in April 1961, the penultimate Certificate course and a vintage year of students! I am sure we didn't appreciate the full value of the course at that time; and we sure worked hard.

During 1964 I attended the Institute of Park and Recreation Administration College (The Grotto), followed by one year at Harlow New Town Development Corporation as Landscape Technical Assistant. Dame Sylvia Crowe was our Consultant. Then Richmond Council advertised for a Technical Assistant in Kewite Arthur Woodward's autonomous Parks Department and I got the job. Arthur was the best boss any young Kewite could ever wish for and he is as sharp today as he was then! I left in 1970 and went to Hammersmith Council Parks Department as Senior Technical Officer (of one). I bought a flat in Kew Road in 1972 and got married, and soon afterwards rented the flat out and moved to Copenhagen. My wife, Bitten, was Danish. I worked at the Botanical Garden there, then became self-employed and, after a year of detailed planning, we spent one and a half great years travelling overland in our Mini-moke to India, Sri Lanka, shipped to Kenya and drove down to South Africa. 38,000 miles, visiting ex-Kewites, Round Table Clubs and tourist sites. We ran out of money in South Africa and were lucky to get employment in the Parks Department in Port Elizabeth for three months which enabled us to save enough to ship the car home to England and fly back ourselves. Happily a vacancy occurred at Hammersmith for Deputy Parks Manager and I got the job.

Two years later fate intervened. Firstly, my wife had sussed me out and decided to return to Denmark! Secondly, as the then Chairman of Richmond Round Table, I had organised a Two-Landrover, 11 week overland fund-raising journey to Nairobi – with Town Hall permission for extended leave of absence. But two months before departure the Manager of the Parks retired, sick, and I was asked to stand in for him. Four weeks later I resigned and successfully led the expedition to Nairobi, which raised £3,750 for a deaf and dumb school extension in Nakuru, Kenya.

Thus began Richard Ward Landscaping in 1978, working out of a basement flat in Kew Road and a dingy garage. Today, 20 years down the line, it thrives from a house in Mortlake Road and two dingy garages. It has a staff of three, including a working boss, still working six days a week and wishing he could retire one day soon. A vain hope with another wife, Wiena (Polish), and daughters Alexandra (10) and Sparkle (8)! Fate, as it turned out, was very kind, allowing me to 'escape' Local Government after 14 years, get out of the office and back to the great outdoors in all weathers to enjoy working in Horticulture. Meeting people, providing a good professional service, giving expert advice and hopefully improving the quality of life to local clients and residents alike.

Finally, I will allow myself a mention of Rotary, an equal to the Guild in Fellowship terms. I helped start the Rotary Club of Kew Gardens in 1984 and have been pleased to introduce Dianne Cooper (Friends of Kew Office) into our Club and who will become our Rotary President in 2001. Dianne and I introduced Events Officer Tom Risely into a Liverpool Rotary Club some years ago, and the Director is an Honorary member of our Club. Several Kew Guild friends have

visited our Club for a Wednesday evening meal at the Coach and Horses, either as guest or speaker. The Club sponsors a Kew student prize annually and participates in various fund-raising and other events every year with Kew – a mutually beneficial relationship.

Little did I realise that I would be in the 'hot seat' this year as Guild President, after writing to the Secretary last year suggesting a review of the Guild Committee structure. I thank all my Committee members for their on-going hard work on your behalf. There is a lot of goodwill, expertise and friendship throughout our Guild. Use it. And I hope you will go out and enrol a 'lapsed' Kewite to strengthen the Guild for posterity. We have a lot to offer.

KENWYN F. R. PEARSON

Vice President (1998-2000)

Kenwyn Pearson started in Horticulture on leaving school in 1968 and served an apprenticeship in Norfolk. He worked for Laxton and Bunyard before going on to Lancashire College to take a Certificate in Horticulture, entering Kew on the Diploma Course in 1972.

Apart from gaining a Diploma whilst at Kew, he also took an active part in the Kew Guild, the Kew Club and was President of the Students' Union from 1973 to 1974.

Since Kew he has been in many areas of employment and after a long period of time as Head Gardener with one of the large London Estates, he now works as a Consultant to local authorities, large corporate organisations, universities and private estates. He has a permanent contract with City and Guilds, visiting training providers and colleges, working with National Certificate Provisions in agriculture, animal care, equestrian studies and horticulture and work on National Vocational Qualifications. His client base is scattered over the whole of the United Kingdom – and he would love to work abroad as well!



Other qualifications have been necessary in order to progress in management and education and the challenges of modern technology have not passed him by. The mechanisms to maintain communications now used at Burgess Hill have even astounded his closest friends and colleagues.

Never one to sit around, Kenwyn has been involved in many organisations over the years. Having resigned as Secretary of the Kew Guild at the A.G.M. in 1998, he is maintaining his links at Kew on the Guild Committee; and he is carrying out an extensive review of the London Gardens Society. He has been responsible for steering many substantial changes to Governance of the Gardeners' Royal Benevolent Society and remains as Vice Chairman of the New Board of Trustees.

Because of business commitments, entertainment has slipped in recent years. However, he is still able to enjoy music, opera and the theatre and enjoys several weeks holiday in the year. He enjoys travelling abroad and still does some walking in the Lake District when time permits.

ANNUAL GENERAL MEETING OF THE KEW GUILD

by Kenwyn Pearson Secretary 1997-8

On Saturday 12th September 1998, 36 members attended the Annual General Meeting of the Kew Guild in the Jodrell Laboratory, Royal Botanic Gardens, Kew. The President, Mr. Theo Dumont, was in the chair and the Secretary, Kenwyn Pearson, recorded the minutes of the meeting.

Apologies for absence had been received from the following: L.Allen, Rosemary Angel, M. Arnold-Gilliatt, C. Atwood, E. Baverstock, R. Bower, S. Bristow, D. Coates, P. Cribb, E. Curtis,

Sir Philip Dowson, L. J. Foster, H. Flower, P. Garton, N. and S. Gilmour, Mary Grierson, Paul Green, M. Griffin, A. Hoog, S. Leche, C. Leon, Arabella Lennox-Boyd, M. Lycett, P. Maunder, D. McGuffog, B. Mowforth, R. Mowforth, G. Morgan, P. Nutt, J. O'Shea, A. Patterson, L. Pemberton, Sir G. Prance, M. Price, M. Roberts, M. Sands, Alison Scott-Brown, J. Simmons, S. Torode, J. Tregear, A. Vernon, J. Winter, Winifred Worth.

In his opening remarks to the meeting, the President welcomed everyone to the AGM and then asked the Secretary to read the deaths of Kew Guild members who had passed away since the 1997 A.G.M. A period of silence was kept. They were: T. C. Andrews (1930), L. Cook (1929), F. J. Ford (1945), Dr. R. W. J. Keay, CBE (1957), P. F. McCormack (1936), Miss M.P. Roberts (1980), H. Taylor (1933), C. J. Wilmot (1947).

The minutes of the Annual General Meeting held on 8th November 1997, which were printed in the 1997 Journal were approved as a true record. Proposed by Richard Ward and seconded by David Hardman, with unanimous approval.

The Secretary's report: Kenwyn Pearson reported that the Committee had met three times during the year since the 1997 A.G.M. and had held a Committee Meeting immediately before the 1997 A.G.M. He intimated that he was impressed by the working of the Committee and the good attendance at meetings.

He had previously announced in January that he would relinquish the post of Secretary at the 1998 A.G.M. and hoped that a successor would be found. He said that the Guild was investigating a web site on the Internet. Increased numbers were sought for the Guild to take it to over 500 members.

Kenwyn Pearson said that over the years he had followed with interest the advancement of the Award Scheme, and the range of projects that were now being supported.

The Secretary referred to the changes in Charity Legislation and the need for the Guild to modernise and update its structures. With this in mind it is hoped that the Committee will become even more positive in the future with more members having specific responsibilities and roles within the Committee. There was also the need to encourage student participation and to look more closely at membership recruitment.

Kenwyn Pearson then gave a brief detail of the work of the Secretary: responding to letters, encouraging people, and recruiting people to help and said it was a rewarding job but sadly a role he was now, through work pressures, unable to do to the best of his ability and for the greater benefit of the Guild. He thanked the Committee for its support and in particular the President, Rebecca Bower, Richard Ward, Graham Burgess, Jill Cowley and a special thanks to Sandy Atkins.

The Secretary's report was accepted by the meeting, having been proposed by John Gaggini and seconded by Pamela Holt.

The Membership Secretary's Report was presented by Jill Cowley, who confirmed that there were 486 members of the Guild, with 57 staff members, 30 student members, six corporate members, 393 standard members and 33 life members. There had been six resignations during the year and 42 members had been deleted through lack of payment. Jill Cowley confirmed that people had been notified before termination of membership and, in answer to a question on Life Membership, said that it was not available any longer due to the problems of administration.

The report was proposed for acceptance by Colin Hindmarch and seconded by David Hardman and accepted by the meeting.

In Rebecca Bower's absence the Treasurer's Report was given by Kenwyn Pearson, who stated that the abbreviated accounts of the Guild to 31st December 1997 can be seen on pages 203 and 204 of the Journal. The full Annual Report and Accounts is available from the Treasurer on request.

The first part of the Statement of Financial Activities, S.O.F.A. (page 203) shows the normal income and expenditure of the Guild and for the year there was an overall surplus of £1,444

which is satisfactory and means that there is no pressure at present to increase subscription rates.

Eleven Awards were made by the Award Scheme totalling £4,420, which is excellent.

The second part of the S.O.F.A. is where we bring in the value of our funds (or reserves). The funds we have invested in the Charities Official Investment Fund have to be valued at their 'open Market value' and updated every year. This, therefore, gives rise to the 'unrealised gains' shown on the S.O.F.A. and means that our investments are valued at £155,529 on the Balance Sheet, page 204. If anyone would like further clarification about this then please contact the Treasurer who would be happy to discuss it.

The President proposed acceptance of the report and David Cutler seconded this and it was accepted by the meeting.

The Editor's Report: Richard Ward then reported on the *Journal* and said that advertising had brought in revenue of £340. He reminded members about the future of the *Journal* and felt that he would like to retire in a year or two and so was looking for a new Editor. Nigel Hepper then led congratulations to Richard Ward for successful production of the *Journal*.

After being proposed for acceptance by Jill Cowley and seconded by Tom Wood, the report was accepted by the meeting.

The Events of the Year were reported by Tom Risely, who stated that the events were a success story for the Guild with the Annual Dinner over subscribed. He reported few complaints. He felt that the tables of four had worked well enabling people to talk to adjoining tables. The donation of Champagne from the President had been gratefully accepted and the same gesture for the A.G.M. evening was likewise accepted with thanks to Theo Dumont. The A.G.M. day was a success with members and guests looking at some aspect of Kews' work, followed by a talk and then a supper, to which the new students were invited. Tom Risely thanked the Kew staff who supported him to make the events a success. He also made reference to the proposed change for the Dinner in 1999 to be moved to the Saturday before Chelsea.

Tom Risely also reported that he had contact with Winifred Worth, a former Secretary, who sent greetings and also 'Mitch' Mitchelmore, who was unable to be present as it was his 50th Wedding Anniversary, but he and his wife sent greetings to members and friends.

The report was accepted by the meeting, having been proposed by Norman Robson and seconded by Peter Green.

The Award Scheme Report was given by Nigel Hepper the contents of his report being given elsewhere in this *Journal*.

Nigel Hepper thanked the Committee for their work and also Chris Kidd for his work as Secretary and to Annabel Chantler, who has been recruited to the Committee. Mark Sparrow has replaced Mark Pitman. Don MacGuffog has retired for health reasons and Colin Hindmarch has agreed to join the Committee. Patrick Garton has completed his term as Student Representative and Emma Fox has joined the Committee in this role. Rebecca Bower continues, as does Jean Griffin.

Nigel Hepper was thanked for the work he does with the Award Scheme and the report was accepted by the meeting having been proposed by Arthur Bell and seconded by Graham Pattison.

Students Prize Day was reported by the President, who said that he had been amazed at the changes in the Kew Course over 40 years and felt that things that were fought for in those days by the Students' Union had been realised. He was interested in the Travel Scholarship initiatives and had been impressed by the high standard of work done and displayed by students. He had listened with interest to the achievements of students given by Sir Ghillean Prance and in particular to the type of positions held throughout the world by former students. The presentation of Prizes was carried out by Sir David Attenborough, who had also spoken and a vote of thanks was given by Viscount Blakenham. Photographs had been taken of Graduates, and he had been impressed with the students and was proud to represent the Guild at Prize Day.

Kenwyn Pearson then read the names of those *Retiring from the Committee*: Roger Storr, Sylvia FitzGerald, Malcolm Leppard, Alan Cooke as Committee members and Jill Cowley as Membership Secretary and John Gaggini as Vice President and himself as Secretary. They were all thanked by the President for their contribution to the Guild and a presentation was made to Jill Cowley for her significant contribution as Membership Secretary.

Dr. Colin Hindmarch then introduced the review of the rules and the proposed restructuring of the Committee. The paper had been sent to all members in advance of this A.G.M. A thorough review had been undertaken by himself and Mike Cliff and in looking at the existing structure there was a need to reduce the size of the Committee and also to lessen the burden of work falling to the executive officers. There was a proposal to introduce a Chairman to give continuity on the Committee and to try to give all members of the Committee a specific role.

Thanks were given by the President to Colin Hindmarch and Mike Cliff for their contribution to this review.

Concerns about the Chairperson were voiced from several members present and while accepting that this person would be elected from within the Committee, many felt that this particular proposal needed to go back to the Committee for review.

Kenwyn Pearson read several members letters which agreed in principle to the proposals, but all followed the same theme, which was that the 1998 A.G.M. should agree to the changes *in principle but be subject to review by the Committee, who should bring forward a definite working proposal to the 1999 A.G.M. for adoption.*

There was considerable and active discussion by many members present. It was understood that there would be a need for rule changes to meet Charity Commission requirements and Colin Hindmarch put forward that the proposal be accepted in principle, subject to further review by the Committee. The Committee will look at all the Committee positions, to get the necessary rule changes agreed by the Charity Commission and then to return to the 1999 A.G.M. for implementation, having given due consideration to remarks made by members and, in particular, to review the differing role of the President and the proposed Chairman. Should the Committee go ahead with this latter suggestion, then suitable job descriptions must be drawn up to cover all the roles so that definition is clear. This goes for all Committee posts.

Tom Wood, in summing up the many points raised by members, said that the meeting should have confidence in the Committee to undertake a further review of the Rules and build on the points raised by members and return to the 1999 A.G.M. with a working proposal that would take the Guild forward into the next century.

On the basis that the proposal, as detailed in the Agenda Papers, was now further reviewed by the Committee into a working proposal, the President invited the membership to vote and the motion was carried unanimously there being no-one against and three abstentions.

The Officers for Election were proposed as detailed in the A.G.M. papers on an individual basis and accepted by all members present. The post of Secretary was filled by Mike Cliff who offered his services to the Guild and Richard Ward proposed acceptance with Pam Holt seconding and it was accepted unanimously by the meeting.

The Independent Examiners Report was read by Kenwyn Pearson to the effect that the Independent Examiner, Jane Ritchie, had reviewed the Accounts in January. She had found them to be satisfactory and there were no matters to which she particularly wanted to draw attention. The full wording of her report is included in the Annual Report and Accounts available from the Treasurer. Jane Ritchie has agreed to continue as independent examiner and acceptance of this report and for her to continue was proposed by Tom Wood and seconded by Pamela Holt and accepted by the meeting.

Under *Any Other Business* Colin Hindmarch drew attention to the fact that his full title was Dr. Colin Hindmarch.

David Barnes drew members' attention to the fact that he had ties for sale and other items of memorabilia, he also appealed to members for a photo of Course 1 in 1963 if any member had one.

Tom Wood proposed a vote of thanks to the Treasurer, Rebecca Bower, for the considerable work she does on behalf of the Guild in handling the Guild's accounts.

Barry Phillips urged the Committee to consider a millennium project for the Guild and asked for this to be looked at in the future Committee meetings. Professor Bell said this would receive priority and, as he was President in the year 2000, it would be high priority for him. It was suggested that a working party should be chosen at the next Committee meeting.

The *Inauguration of the New President* took place and in handing over, Theo Dumont spoke of the Honour it had been to be the President of the Kew Guild and how the Committee had helped him along the way and it was his great pleasure to hand over to Richard Ward. Richard Ward spoke of the pleasure he had in accepting the role of President of the Kew Guild. He challenged all members to encourage new members to join the Kew Guild. He also thanked the volunteers who work for the Guild particularly the Friends. He also thanked Theo for the contribution he had made to the Guild and for his regular attendance at meetings.

He said he wanted to lay more emphasis on families during his Presidential year and hoped to see families at the Annual Dinner in May.

After one or two domestic arrangements were announced for the rest of the day, Richard Ward thanked everyone for attending and closed the meeting at 4.30pm.

The Secretary confirmed that the 1999 A.G.M. would be held on Saturday 11th September 1999 at the Royal Botanic Gardens, Kew.



Outgoing President, Theo Dumont (left) hands over the Chain of Office to Richard Ward.

A.G.M. EVENTS

From Tom Risely, Events Officer



The Annual General Meeting was held on Saturday 12th September (reported above) and a programme of events was arranged for members and their guests.

Immediately following the meeting, tea was available in the School of Horticulture where there was a display of students' work (arranged for the Diploma presentations on the previous day). There followed a conducted tour of the three million pounds Lower Nursery, led by Curator Nigel Taylor (pictured left) and student Jennifer Hirsch.

We returned to the Jodrell Lecture Theatre for an illustrated lecture given by Dr. David Cutler (pictured overleaf) on his research and investigations into tree roots, with particular emphasis on their effects on structures, services, soil settlement and stability of trees.

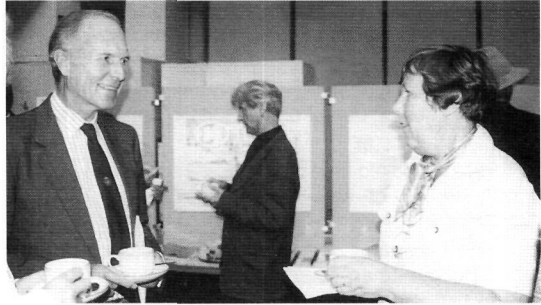
This proved to be a valuable update for the older horticulturalists present.

Finally there was a buffet reception in the Education Suite on the first floor of the newly refurbished and reopened No.1 Museum.

The Immediate Past President, Theo Dumont, again provided copious quantities of Luxembourg 'champagne' (how we shall miss him) and newly installed President, Richard Ward, presided and individually introduced to the Guild 10 of the incoming new students who had arrived at Kew on that day. Parts of the reception were televised by Flashback TV who are making a film on life at Kew Gardens.

Sixty six members, students and their guests attended the reception. The students raised £125 towards their travel fund from teas and sales.

Thanks are due to many members of the Kew staff who give freely of their time to assist Guild events. There is much behind the scenes work that is probably not noticed by those attending the events – locking and unlocking of entrance gates and premises, provision of facilities, toilets, security, lighting, floral decorations and a host of other activities essential for such one-off events to run smoothly. Thanks to everyone involved.



Nigel Hepper, Award Scheme Chairman, and Lady Ann Prance, in the School of Horticulture.



Dr. David Cutler.

Pictured below: Guild Members visiting the Lower Nursery.



THE KEW GUILD ANNUAL DINNER

by Tom Risely Events Officer

The Annual Dinner of the Kew Guild was held on Wednesday 20th May. The reception was in the Kew Gallery, where Luxembourg 'champagne', provided by President Theo Dumont, was served. The hour-long reception provided an opportunity for the President to meet members and their guests and for all present to renew acquaintance.

The dinner took place, as in recent years, in the Orangery. The toast to the President was proposed by Allen Paterson. Allen first thanked the Director for the provision of the facilities enabling the Guild to hold the reception and the Dinner in such attractive surroundings. He then recalled that he and Theo were contemporaries at Kew, as students in the fifties. However, he spared us Grimm's tales of Kew at the time on the basis of Duff Cooper's advice that "old men forget" and that what we forget we soon make up – "fabrication is the very stuff of reminiscence".

He outlined Theo's career, with the proviso that it could mostly be read in the *Journal*, recalling with affection, and mimicry, his times in the Gardens with Jack Souster and Bert Bruty. Mention was also made of George Preston and Dr. Bor's Patent Poona Smelling Salts. Allen linked his toast to Theo jointly to Theo's wife Maureen, a Geordie, who had given Theo the secret of eternal youth – evidenced by the fact that his appearance now was little changed from his student days.



President Theo Dumont, pictured centre. Maureen, his wife, is on his right hand side.

The President, in responding to the toast, asked forgiveness for any misunderstandings as he was not speaking in his natural language – French. He recalled his decision to adopt gardening as a career, partly spurred by a desire to become Lady Chatterley's Gardener. He continued to advocate gardening as a career. There is nothing wrong with having dirty hands as it is from the soil we all have lived – since the time of Adam and Eve. Many diminish gardeners by calling them landscapers and other fashionable names, but he is proud to call himself a gardener and gardening should be encouraged in all levels of society, especially amongst the young. Children like to learn new skills, they don't mind dirty hands. It is essential that all children learn how to cultivate plants and to this end the decline in allotment gardens should be reversed.

The President also paid tribute to the Director, Sir Ghillean Prance, for his support and proposed toasts to the Guild and to the Guests of the Guild.

Sue Johnson, Senior Education Officer, the Royal Horticultural Society, responded to the toast on behalf of the Guests. She described her work and what the R.H.S. does for schools. (*See later article – Ed.*)

Emma Fox, the Student Representative on the Guild Committee, proposed the toast to Absent Friends. She responded to the previous speaker by saying that the current Kew Diploma Course is hard work and stressful. However, it is also enjoyable and she thanked the Guild for the Award Scheme and especially the support for overseas study and travel. She then introduced individually those students present.

The President concluded the evening by announcing the George Brown Award – to John Simmonds. (John was overseas and unable to personally receive the Award). He introduced the five past Presidents present for the occasion.

For the record there were 106 present, including 25 students and guests of the Guild. Members and their guests paid £25 each to attend and students half of that amount. The menu consisted of smoked salmon followed by chicken supreme, then individual chocolate truffles, all with accompaniments.

The students organised a multiprize raffle and an auction which raised £352 towards their travel funds.

Extracted from a speech by the Chief Guest SUSAN JOHNSON,
Senior Education Officer for the Royal Horticultural Society

I am sure that the reason for my being here this evening is as a result of your President having read an article in *The Garden* magazine on the outdoor classroom. And so I will give you some idea of what the R.H.S. is doing with schools.

The first consideration is who will be in this outdoor classroom. From your own experience you may have come to the conclusion that you can always tell a teacher – but not very much! Gardeners are, of course, quite different.

Teachers are often wary because someone is always trying to tell them what to do and how to do it. Gardeners are a much happier bunch because they are always willing to take advice and are never slow to give advice, freely and often. So this attitude to others means that whilst teachers are stressed, gardeners are calm.

Teachers are knowledgeable about children. Gardeners are knowledgeable about plants.

Some teachers are very good gardeners – after all they do get long holidays – and some gardeners are very good teachers without realising it. You, as horticulturalists, could all be good teachers. I have come across a few who would never let children near a garden but, as a teacher I have always ignored them and they are coming round.

Bringing these two disparate groups together is my aim and on In Service Training days at Wisley the process is beginning. On these days we discuss and have hands on experience of how lessons can be planned around plants. We include our medical and economic history, our local geography, which gives us a wide variety of plants, all children know about tropical rainforests.

With plants we can illustrate scientific principles and scientific method and figures generated in science can be manipulated by computers in I.T. At Wisley we have had a number of maths workshops using plants, because calculations relevant to a real life situation are often more accessible to children than abstract problems.

Many teachers visit Wisley in August in search of peace and tranquillity. If their timing is poor they may just go home with ideas for teaching because, in August, we have Family Fortnight at Wisley. Some teachers do try to avoid the first two weeks in August as do a fair number of R.H.S. members – but they don't know what they are missing and 3,000 children can't be wrong.

In Family fortnight at Wisley we have storytellers, musicians, sculptors and artists and all utilise the garden surrounding them as a means of illustrating their specialism. Teachers can use these same methods in their own school grounds.

For anyone who is not quite up to speed with the National Curriculum, I have just mentioned all of the subjects included in the National Curriculum and for every subject I have linked in plants, gardens and gardening. Bearing this in mind, you might very well ask as I did, why a trainee teacher, when teaching a lesson on the sense of smell took into her class – vinegar, shoe polish and a bottle of tomato ketchup. When I put it to her that she had not used any scented plants, she said that it had not occurred to her. Raising awareness is essential – not only for practising teachers, but those who are just learning their craft. The other half of the outdoor classroom equation are the children.

Plants suffer in a child's perception from not being warm and cuddly. Worse still, in a world of immediate gratification of wants, they take a long time to grow. One further disadvantage of showing an interest is that someone may make you eat what you grow.

Children have a different perspective on the world than many of us here tonight. Once upon a time, or should that be, not so long ago, children walked to school and could recognise plants, saw the passing seasons – of course they also got wet when it rained. Today parents are very protective of their children and so with seconds to spare, they are bundled into the car and hurtle to school. Anyone who lives near a school as I do will understand the perils of caring mothers speeding to school.

Many schools still have asphalt playgrounds and so the only plants some children see are the daisies they squash when they run across them in games lessons. Local management of school means that governors and headteachers have their own budget and can allocate funds to those grounds contractors who will do as the school requires. If they want the bottom of a hedge to remain unsprayed, all they have to do is ask. Convincing teachers that they can negotiate is now as important as encouraging the use of plants – if the contractors undo all your hard work, there is no point in motivating teachers.

So what plants are going into these marvellous school grounds? We hope that teachers who come to Wisley on In Service Days will be sufficiently inspired to go back and encourage their colleagues to look at their teaching plans, introduce plants and use them as a teaching resource. School life can be structured around plants with trails in the grounds, outdoor projects for the National Curriculum and children participating at all levels with teachers, governors and parents – so that everyone is involved. There is no point in having one enthusiastic teacher and no consensus in the staff room. When the enthusiast moves on, we are back to square one.

Teachers and their classes already come to Wisley on visits and both gain immeasurably from the experience. An example occurred to me of a teacher from Greenford in Essex who apologised for her class and their lack of knowledge. She also said that she had never seen them so lively, in fact they had asked her so many questions that morning she had not had time to teach them anything. Although it was unfamiliar to her, this teacher had been teaching in the best possible way – without the children realising that they were learning. And what had stimulated this interest? – plants.

The garden can be a catalyst for different teaching methods and a better learning environment. Our challenge is to encourage more teachers to put more plants into their school grounds and to use plants in lessons.

In the current advertising campaign to encourage more students into the teaching profession, there is the phrase, 'we all remember a good teacher', our responsibility is to let those in the future remember their best teacher as the one who introduced them to plants, gardens and gardening. I am perhaps a small compensation, for the teacher who rang me said that she had been on a school visit to Kew for years and was willing to give Wisley a chance.

The education department at Kew may thank me for taking some groups because a school visit for some teachers is the chance for us to teach their classes for an hour or so whilst they are relieved of teaching for the day.

NEW KEW GUILD COMMITTEE MEMBERS SPOTLIGHT

DAVID HARDMAN

David has been Head of Collections at Wakehurst Place since April 1997, previously being Deputy Curator at Kew from October 1992. He was educated at Moseley Hall Grammar School, Cheadle and began his career in horticulture as an apprentice with the County Borough of Stockport's Recreation Department in 1970. During this period he attended West Wythenshawe College and in 1974 became a Kew Diploma student. On completion he was awarded his Diploma and life membership of the Students Union for posts as Treasurer, printing and Cricket Secretary. As Cricket Secretary he was keen to restore the traditional staff matches on Kew Green which had lapsed, despite protestations from Kew Cricket Club he spent much time with Ron King, the Gardens Secretary, investigating the terms of their lease.



He returned to Stockport as Assistant Horticultural Officer, progressing to Senior Horticultural Officer, where his main duties included purchasing all departmental materials, plant production and staff training. During this period Stockport were joint English winners of the Britain in Bloom competition. David was involved in many other initiatives including the design and implementation of displays at the Liverpool International and Stoke National Garden Festivals. He was also Chairman for the North West/North Wales Region of I.L.A.M.

The large scale production of quality bedding plants and traditional civic floral displays for the town led to the re-organisation of the four nurseries into one main production centre. This new nursery received several major awards for energy efficiency and included many advanced technological initiatives not previously brought together in one building. The structure used a "Serac" skin and condensing boilers with under-floor and bench heating, no glass was used in the building. The resulting structure ensured plants could be grown faster and reduce energy costs without reducing quality standards. With compulsory competitive tendering David opted to work on the "contractor" side of the Department and was involved in preparing the D.S.O. team for competition as the Horticultural Manager.

In 1990 he was appointed Parks Manager for the Metropolitan Borough of Trafford where he was responsible for the management of the grounds maintenance contracts with a value in excess of £3.5 Million. As the Client Manager he prepared the specifications and tender documents, assessed and interviewed potential contractors and then managed the completion of the contracts through the client team.

With the retirement of Ian Beyer, the previous Deputy Curator at Kew, in 1992, the opportunity to return was too great to miss and David was pleased to be offered the post. He has been a member of the Kew Guild since his days as a student and is keen to contribute to its future as a member of the Committee as the next millennium approaches.

TOPHER MARTYN

"Unlike most other members of the Kew Guild, I never meant to be a gardener. I was in Bristol studying for a research degree in Classical Greek Historiography (well, someone has to), when I was introduced to an elderly couple needing help in their garden. I duly arrived to find two acres of mature trees and shrubs with a large fruit and vegetable garden, and complete freedom to do what I wanted. The learning curve was steep and I quickly changed from a student who earned a living by gardening who went to great lengths to avoid studying.

"Having spent the absolute minimum time in the library to earn my M.Litt., I started to work at the University of Bristol Botanic Garden. Here I was introduced to working in a team of enthusiastic professional gardeners – the first I had ever met – and the possibility of a career in gardening reared its head.

"A need for formal training led me to the Diploma course at Kew, where I encountered remarkable plants and even stranger people. The end of the course cast me out into the cruel world beyond and after a few months of constructive unemployment I found myself, rather to my surprise, in my present job. This is working as Head Gardener to the Duke of Northumberland at Syon Park, the rather fine pile across the river from West Arb. Here I amuse myself with cattle, gardens, fields, woodland, lakes, river frontage, a S.S.S.I., lots of fine trees and a conservatory that makes the Palm House look positively arriviste. It certainly beats a proper job."

THE KEW GUILD AWARDS SCHEME REPORT FOR 1998

By F. Nigel Hepper, Chairman

Following the resignation of Chris Kidd as the Honorary Secretary of the sub-committee, due to his taking a post in Oxfordshire, I am pleased to report that Annabel Chantler has enthusiastically agreed to take over. She lives on Kew Green (although she now works away from Kew) and is keen to keep contact with Kew through the Guild. I am also glad to say that Mark Sparrow of the Temperate House has joined the sub-committee in place of Mark Pitman. The latter considered that he had served for long enough, but we shall miss his valuable knowledge of many of the applicants for grants, so it is good that Mark Sparrow comes with similar experience. Another change is the departure of Don MacGuffog on health grounds – we wish him a long retirement and he leaves with our thanks for his loyal service to the Guild. We welcome Colin Hindmarch in his place, who is well known to Guild members. Patrick Garton and Emma Fox were the current Students' Representatives. Rebecca Bower continued to hold the purse strings as Treasurer, and Jean Griffin also continued as a member.

At the meeting on 3rd March the following Awards were agreed: Anthony Blanchfield, £500 (the Arnold Award) for Japan; Christopher Cole £400 for Arizona and Mexico; Emma Fox £500 for eastern USA; Patrick Garton £340 for Arizona; Leigh Hunt £400 for Italy; Kathleen King £200 for South African conservation conference; Helen Long £250 for Malaysia; Junko Oikawa £200 for South African conference; Iris Otto-Knapp £300 for Costa Rica; Paul Pollard £200 for Mexico; Colin Porter £300 for research degree; Marcus Radscheit £200 for South African Conference; Emmanuel Spicq £300 for Reunion.

One further application was rejected and two more were referred back.

There were an unusual number of further applications for the July meeting which is not normally time for grant awarding, but since the Treasurer reported that there were still Award funds available we were able to help eight more applicants, bringing the grand total for 1998 to £5,215 for 20 applicants: Louise Allen £200 for South African Conservation Conference; Susyn Andrews £250 for Tilia tour; Chris Crowder £300 for European Boxwood tour; Roger Fischer £200 for North America; Paul Green £100 for entomology conference; Amanda Lind £200 for South African Conference; Alison Scott-Brown £100 for pests and diseases conference; Andy Vernon £455 for Cayman Islands.

As it is several years since the rules governing the Awards Scheme were drawn up there were certain changes necessary to meet legal requirements, so a revised set of guide-lines has been drawn up by Rebecca Bower.

Applications for the annual awards, you are reminded, need to be with the Awards Scheme Secretary by the end of February each year. Individual grants are usually in the order of £50 to £500. Nine awards totalling £2,600 were given from the Edna Redman Fund, £1,000 from the Dallimore Fund and £500 from the Arnold Fund.

The following reports have been submitted for publication by recipients of Kew Guild Award Scheme finance. They appear alphabetically, by author's name. (Thanks are due to Nigel Hepper for editing and proof reading – *Ed.*)

PEONIES AND TRADITIONAL GARDENS OF JAPAN

By Anthony Blanchfield

In May 1998 I arrived on Honshu Island, Japan, to begin a five week study tour. I had several aims which included studying the cultivation and display of cultivars of the tree peony ***Paeonia suffruticosa*** and also cultivars of the herbaceous ***P. lactiflora***.

During a one week visit to Kyoto I also hoped to study the principles, elements and techniques used in the development of traditional Japanese landscape gardens. In particular I wanted to study examples of historically important gardens of secular, imperial and religious significance. Additional aims included an investigation into the ex-situ flora of Honshu Island by visiting Ofuna, Hiroasaki and Kyoto Botanic Gardens as well as an in-situ investigation into the flora and landscape of Central Honshu during a botanising expedition into the 'Japanese Alps', close to Matsumoto.

Having arrived in Tokyo I travelled west to Daikon Shima Island where Japanese peony growers graft and export over one million eight hundred thousand tree peonies each year. I was able to study the cultivation techniques used by these growers. The techniques included preferring to use the apical wedge graft technique to graft the ***Paeonia suffruticosa*** scion onto a ***P. lactiflora*** rootstock. As ***P. lactiflora*** is prone to suckering, I was also told how Japanese growers have recently begun to experiment with an alternative herbaceous rootstock known as the 'Manchurian Peony', which suckers much less. I visited a number of highly successful commercial herbaceous peony nurseries who specialised in growing peonies for both the cut flower and garden plant markets.

Japanese peony hybridisers seem to favour the semi-double flower over the full double or rose forms and this may account in part for their popularity; the stem being much better able to support the weight of the flower, especially in areas of high rainfall.

In order to study the display of peonies, I visited a number of public parks and gardens with extensive peony collections. The sites visited included Sukagawa Peony Garden close to Fukushima, the To-Sho-Go shrine in Ueno Park, Tokyo, Hanaizumi Park close to Koryama and to Ofuna Botanical Garden, made famous by the hybridiser Itoh San for his work to produce the intersectional hybrids including 'Yellow Heaven' 'Yellow Dream'.

I was able to compile a photographic record of the gardens visited and to record many named cultivars that I was fortunate to see in flower. The peonies were always planted in dedicated beds, never in mixed borders, reflecting the status.

My travel scholarship also enabled me to study the highly developed and formalised traditional gardens of Kyoto. These included visiting Katsura and Shugakuin Imperial Villas. These imperial gardens are recognised as being the finest examples of the early stroll garden and paradise garden styles; I was also able to study the informal moss garden of Saihoji, as well as the dry landscape styles of Daisen'in and Ryoanji. The gardens were all designed asymmetrically as representations of the wider natural landscape; although highly contrived the gardens appeared natural and always showed balance and proportion.

Travelling East from Kyoto I was able to conclude my scholarship by studying the flora of Central Honshu by spending two days botanising in the 'Japanese Alps' close to Matsumoto. During a three thousand metre climb to the snow line, walking through mixed deciduous woodland I encountered such plants as ***Paris japonica***, ***Pyrola incanata***, ***Parasenecio maximowciana*** as well as coming across a population in flower, of 15 plants of the widely distributed ***Paeonia japonica***, a personal highlight of my scholarship.

TRAVELS TO SOUTH-WEST U.S.A IN THE QUEST FOR CACTI AND SUCCULENTS

By Chris Cole

During the spring of 1997 I became engrossed and some might say, obsessed by the wonderful world of cacti and succulents. By April 1998 I was undertaking a travel scholarship to south-west U.S.A to study the propagation and cultivation of these plants.

This trip was supported by Kew Guild, Hozelock Limited, Bentham-Moxon Trust, David Dalziel Travel Scholarship Fund, the Royal Horticultural Society and the Merlin Trust. In addition to enabling me to experience and examine various propagation and cultivation techniques used at renowned commercial nurseries, I was also able to observe plants in their habitats, within manicured collections in botanic gardens and in other establishments. During the three and a half week stay the majority of time was spent in the state of Arizona, with a brief three day visit to neighbouring New Mexico.

The first week was spent as work experience in the heart of the Sonoran Desert in Tucson, Arizona at Aridlands greenhouses, where the proprietor, Chuck Hanson, is an expert in the culture of **Euphorbiaceae** and the difficult **Asclepiadaceae**. When temperatures rose above 30°C I had little desire to work under the polythene structure, instead I took the opportunity to botanise the surrounding wild flora. The Living Stones (Lithops) Nursery and Bach's Cactus Nursery – the oldest in Tucson, were also visited during the initial period.

Mesa Garden, the large seed producing nursery of Steven Brack, is located in Belen, New Mexico. Here an outstanding collection of the rare and endangered Mexican cacti such as **Aztekium**, **Ariocarpus**, **Lophophora**, **Strombocactus**, **Obregonia**, and **Pelecypora** were observed, along with a superb collection of the difficult **Pediocactus** and **Sclerocactus**, both native to south-west U.S.A.

The final visit on return to Tucson was to Miles Anderson's 'Miles To Go' Nursery. Miles propagates largely by grafting and micro-grafting (using minute scions). This enables him to increase the size and number of plants and seed production ten fold within a three to five year period. The result of this rapid turnover is fast, efficient distribution of the rare and endangered specimens, helping to relieve stress on plants in their habitat. He specialises in mass **Ariocarpus** production, cristate cacti and grafted plants and mails all his plants to the U.S.A. During the nursery visits contrasting propagation and cultivation methods were observed, noted and now forwarded to the Cacti and Succulent Section at the Royal Botanic Gardens, Kew, in addition to forming links between experts in the U.S and our staff.

The remainder of the tour was spent visiting establishments such as Desert Botanical Gardens, Tucson Botanical Gardens, Biosphere 2, Boyce Thompson Southwestern Arboretum, Arizona-Sonora Desert Museum and Saguaro National Park, where excellent stands of **Carnegiea gigantea** were viewed and photographed along with the superb collections in the other gardens.

I must conclude that my interest and knowledge of the plant group has been further fuelled and enhanced as a result of the travel scholarship. Finally I would like to thank the Kew Guild for their support towards the study trip.

A TRAVEL SCHOLARSHIP TO AMERICA TO STUDY CHILDREN'S EDUCATION AND INTERPRETATION

By Emma Fox

When my choice of career changed from becoming a primary school teacher to becoming a horticulturalist, I never imagined that my two interests would ever combine in a professional sense. Ironically, it wasn't until I started as a Diploma Student at Kew that I first realised this potential.

With the role of all botanic gardens becoming ever more focused on public education and increasing the awareness surrounding plant conservation, the possibilities for educators within horticulture are now great.

In June 1998 I embarked on my three week Travel Scholarship to the East Coast of the U.S.A., where I would combine my two professional interests of horticulture and education by studying Children's Education and Interpretation in Botanic Gardens. Many of the North American botanic gardens and horticultural institutions are recognised as being at the forefront of public education and interpretation, especially with regard to young children. My trip would take me to some of the best examples of education and interpretation for children that can be seen anywhere in the world today.

The first two weeks of my scholarship were spent visiting botanic gardens and horticultural institutions, where I met with educators and staff and was shown the extent of their children's programmes and interpretation. For the final week of my scholarship I attended the 1998 Annual Conference of the American Association of Botanic Gardens and Arboreta (A.A.B.G.A.).

My scholarship began in New York where I visited Brooklyn Botanic Garden (B.B.G.), an excellent starting point as B.B.G. claims its Children's Garden, initiated in 1914, to be "... the oldest such program in continuous operation ...". B.B.G.'s Education programmes have developed considerably in the 85 years since the Children's Garden first opened its gates. It now offers a range of both schools and family programming, with some of the most up to date interactive exhibits and displays found in any botanic garden.

From Brooklyn I travelled to the Bronx, another district of New York, where I visited two gardens and met with their staff and educators. I spent a day at Wave Hill, a small garden which focuses its educational programming on schools, with an emphasis on Ecological Education.

From Wave Hill I visited New York Botanical Garden (N.Y.B.G.), which is currently in the middle of a seven year, \$175 million, capital improvement project. The highlight of my time spent at N.Y.B.G. must be when I visited one of the latest stages of this improvement project – the Everett Children's Adventure Garden, which had opened only two weeks before I arrived. This garden, designed to be both educational and fun for children between the ages of 4-16, took over five years in the planning and cost more than \$12 million – a *real* investment in education in every sense of the word!!!

From New York I moved south to Philadelphia in Pennsylvania, where I visited the staff and educators at Morris Arboretum and learned about their Education Programming (I was even allowed to contribute to their Education Committee meeting!) From Pennsylvania I travelled to the state of Delaware – home to Longwood Gardens, probably more famous for its hybrid of **Victoria amazonica** than its education programming. Here I was invited to meet with the designers of the proposed new indoor Children's Garden. Mary and Tres explained just what was involved in designing a garden for children, including how they had actually interviewed a range of age groups of children to discover what it was that they really wanted from a garden especially for them, a garden designed with an emphasis on fun rather than education.

For the final week of my scholarship I returned to Philadelphia where I attended the A.A.B.G.A. Conference. I attended workshops and lectures on a range of education related topics and was able to learn from the experiences of many of the other delegates from gardens around the world.

My travel scholarship really did open my eyes to what it is possible to achieve in Children's Education. It also made me realise just how dependent any improvement of educational programming is, upon factors such as fundraising (for generating capital) and the use of volunteers (for manning and running exhibits or programmes).

On a final note I would like to thank all of the sponsors of my Travel Scholarship, especially the Kew Guild.

NORTHEAST BRAZIL, LAND OF CONTRASTS

By Patrick Garton

Having visited Brazil for the first time in 1996 I was determined to go back and visit another region of this vast country, larger than the U.S.A. excluding Alaska. On August 6th 1997 I set

off on a four week travel scholarship to visit four sites spread over three states within semi-arid Northeast Brazil. The Northeast is also the poorest region, containing one third of Brazil's 150 million people, but making up only 18 percent of the land area. It is for this reason that Plantas do Nordeste (P.N.E.), an organisation supporting projects at three of the sites I visited, have been so successful in their fund raising.

Set up by Kew in 1990, but now based in Brazil, P.N.E. is a multidisciplinary research programme contributing to the identification and sustainable use of plant resources in Northeast Brazil. It combines conservation with improving the ecosystem for the benefit of the local community.

My first port of call was the 16th century city of Recife, state capital of Pernambuco. Here at the university (U.F.R.P.E.) I joined a team collating data from a series of field collections of plant species to be found inland in areas of upland rainforest called Brejos. Rising to a maximum of 1,200m these peaks are the highest around, catching added water from the moisture laden air blowing in from the Atlantic. Consequently Brejos harbours rich plant communities which show links with the Amazon flora. Ongoing plant collecting for the herbarium at Recife is being supported by P.N.E. as part of its plant identification and recording programme.

Five hundred miles up the coast towards the equator lies another equally old city, Fortaleza, the capital of Ceará State and the next leg of this Northeast adventure. On arrival I travelled four hours west by bus to reputedly the driest town in Brazil, Sobral, lying within the most arid vegetation type in the country, caatinga. Here I met Dr. Filho of the National Goat Research Centre whose work is also being supported by P.N.E. He has conducted field trials to find the most suitable management for a land that is used primarily for browse and agroforestry.

Traditionally farmers cut and burn vegetation compounding the problems associated with this harsh climate which for at least six months of the year sees no rain. In contrast to the nomadic lifestyle in many parts of North Africa here the land is under ownership where an individual is responsible for the land he or she is on. Devising a sustainable form of agriculture Dr. Filho has come up with a system based on a 21 year cycle. On the premise that maintaining tree cover is the greatest priority, he suggests coppicing a scrub made up mainly of **Leguminosae** and for seven years cultivating crops, while using the year's regenerated growth from the stumps as green manure. For the next seven years the land is used for grazing where sheep and goats are allowed to roam. For the last seven years the land is left fallow to produce the wood required for local uses such as charcoal and fencing. Seventy percent of the fuel used in bakeries and household kitchens in the Northeast is derived from wood.

A week later I was back in Fortaleza to meet a remarkable man who has set up a number of medicinal plant nurseries, 'Living Pharmacies', within the poorest parts of the city and outside. Here homeless children and locals are encouraged to look after their own medicinal plants and, with the help of hospital technicians, produce and sell the plants as affordable medicines. I visited Quatro Varas, a nursery that also served as a hospice, held massage sessions, self-help theatre groups and a counselling service. The activities within the place appeared limitless and it was a highlight of the tour to be shown round by the warm hearted professor who knew many of those there that day. Back at his laboratory within the university was an outdoor nursery of medicinal plants that supplied not only the research material for his students but a stock of rare and common species for transplanting elsewhere including other pharmacies.

Before flying back I spent a few days in one of Brazil's most impressive national parks, the Chapada Diamantina, within Bahia State situated along the Brazilian Highlands. Weathered rock formations tower above the surrounding flat lands like the 'tepuis' of Venezuela. This is a green oasis within the dusty sertão and the astonishing display of very different plants not encountered elsewhere on the trip made it a perfect way to end a visit to a country with extremes of such magnitude.

IL GIARDINO

By Leigh Hunt

How to encapsulate a travel scholarship into just a single article? It would probably take a crowbar to squeeze in my wealth of experiences from Italy in spring (April 17th-24th 1998). Rather than making less of more, it is best to tell the highlights of the trip.

Monday morning and the start of the working week. I had left the rush hour of London's metropolis to join the habitual patterns of another. Roma Termini is at the heart of Rome's transport network and both commuters and tourists pass through in vast quantities each day. I would leave them all behind to visit Giardino di Ninfa, "The Garden of the Nymph".

Speeding out of the suburbs of Rome on the train, the glories of the countryside began to catch the eye at every opportunity. Seas of blue Borage flowing alongside the tracks with ribbons of poppies and feathery fennel foliage. Behind, the fields and olive groves filled the middle distance, whilst grey topped hills formed an eloquent full stop to the landscape of southern Italy.

Arriving at Ninfa, I was met by the head gardener, Lauro Marchetti. He welcomed me most warmly, taking me through the once ruined Town Hall to the gardens. From the great hall – complete with an Arthurian round table – the main doors were swung open onto the gardens.

The shafts of warm Italian light were blinding at first, but as my eyes adjusted I saw a small terrace with a **Rosa banksiae** 'Lutea' tumbling from above. The terrace was at the top of a flight of steps, below gushed a river. The scents of jasmine and citrus flower were instantly recognisable. Pausing to look into the river, a whole new beauty was revealed. It was crystal clear and at the bottom waterweed swayed in the current, dancing to the harmony of the garden. Later, on reflection, those doors opened to reveal an earthly paradise!

Lauro explained that it wasn't just a paradise for the gardener, but also the wildlife. Italians don't relish their native flora and fauna. So Lauro was actually trying to re-educate the locals and children that come to the garden simply by making them look and listen. Today though, the garden seemed to be open just for me; I was able to walk where I pleased, stepping over all the barriers.

Roses were all around, but my eyes went skyward to my first surprise; a ring epiphytic **Tillandsia aeranthos** growing on the bare trunk of a **Pinus pinea**. Ninfa is often quoted as an 'English' garden, but with the advantage of a Mediterranean climate so much more is possible. On the opposite bank of the river were trees of mauve blooms, **Paulownia fargesii** with bare branches and a mass of blue foxglove spikes. The bees buzzed into the trumpets, but the many flowers they visited filled a 30 foot tree. Lauro said the "one old tree had sons and now there are many"!

Everywhere one walked on meadows of daisies – why do we mow the lawn? A green swathe is dull, but a carpet of pink and white daisies snaking off into the distance is magical. The clock struck twelve . . . round the corner came a ride-on mower and the carpet went flying into a million pieces; but time continues to tick and the carpet would return in a week.

I would not return so soon though – after just sitting in different places to take in nature's movements – my time at Ninfa drew to a close. It was almost like parting with a loved one, I had been captivated by the romance of the garden and now I had to leave. I think of Ninfa often and, without a doubt, this garden and the others which I have visited (Villa d'este, Boboli, Giardino dei Semplici . . .) are already, and will continue to influence my future work.

The hallmark of a truly good experience is the desire to repeat it. I am already making plans to return to Italy! I could never have said this though, if it had not been for the equal generosity from the Kew Guild and the Merlin Trust. I can only encourage others to follow the well worn track to Italy; it has been well trodden for good reasons. Many may dismiss Italy as not 'exotic' enough, it is definitely not Brazil or New Zealand. But I couldn't imagine anyone not being thoroughly satisfied and excited by some aspect of Italian gardening and horticulture. Go, go!

AT THE FAIREST CAPE, SOUTH AFRICA

By Kathleen King

My travel scholarship adventure began in Cape Town. Within an hour of being in the city, I was on top of South Africa's most famous landmark – Table Mountain. I spent several hours just admiring the endless views and enjoying the native flora.

During the first two weeks of my scholarship I joined a colleague from Kew, Phil Griffiths. We botanised our way along the West Coast, travelling north to Springbok and south to the Cape of Good Hope. This coast line is renowned for the spring display of wildflowers. Unfortunately poor rainfall over the winter had an effect on the seasonal blooms. Sadly they were not as spectacular as the previous year. However, for a first time visit the show was still impressive. Visiting Darling, The West Coast National Park and the Namaqualand were highlights of the trip.

Darling is known for its magnificent flower reserves and farms that are open to the public each spring. We visited Duckett's Nursery, the largest orchid nursery in South Africa. The variety of plant species in the area was just a taste of what I was to see during my trip to this botanical hotspot. Favourite beauty: **Geissorhiza radians**.

The West Coast National Park covers an area of 18,000 hectares. The vegetation consists of stunted bushes, sedges, succulents and many flowering annuals. The park was beautiful, with some stunning displays and interesting wildlife. However, the soil was obviously dry and plants were suffering. Favourite beauty: **Ferraia crispa**.

The wildflower displays end at the West Coast National Park. The land known as Namaqualand lay ahead, being a rugged, mountainous plateau that overlooks a narrow, sandy coastal plain. We spent six days exploring this vast, open countryside. Namaqualand is divided into four regions – The Richtersveld, The Namaqualand Klipkoppe, The Sandveld and The Knersvlakte. During spring these parts are usually a wonderland of colour, consisting of carpets of annuals, a wide variety of **geophytes**, dwarf shrubs and succulents. The lack of rain was really apparent and wildflowers were sparse. Favourite beauties: **Aloe dichotoma**, **Lithops olivetii**, **Conophytum calculus**.

During the third week of my trip I attended the Fifth International Botanic Gardens Conservation Congress hosted by the National Botanical Institute of South Africa. The Congress was held at Kirstenbosch National Botanical Garden. The focus was the role of botanic gardens in sustainable living.

The priorities and responsibilities of botanic gardens were reviewed and highlighted. It was a valuable experience. It made me aware of world-wide projects and reminded me what a big world we live in.

I spent many days admiring Kirstenbosch Botanical Garden and the magnificent backdrop of Table Mountain. The garden covers an area of 528 ha, with 36 ha reserve for the cultivation of over 4,500 plant species of southern Africa, many of which are rare and endangered. The addition of a new conservatory enables plants that cannot be grown outside to be displayed. I was fortunate to have worked for several days with the Orchid Propagator, Hildegard Crous.

I visited two other Botanic gardens. Karoo National Botanic Garden lies in the outskirts of Worcester and intersects the southern tip of the succulent Karoo. Only 10 ha have been developed for cultivation whilst the remaining 144 hectares are retained as a floral reserve. This was such a contrasting garden and very different from anywhere I have ever been. Harold Porter National Botanical Garden at Betty's Bay is set between the mountains and the sea, in the heart of the Cape Floristic Region. It covers an area of 200 ha, stretching from the surrounding Kogelberg Range to a Marine Reserve running along the coastline of the Atlantic Ocean.

I managed to see some of the sites, gardens, museums and galleries in and around Cape Town during my final week. This included Jonkershoek, a managed forest that has for years

been used for pioneer work in **fynbos** management. The wildlife here was wonderful. I stroked a hand-reared cheetah. As a part of a captive breeding programme, five cheetah are on show to promote conservation of the species. Cape of Good Hope Nature Reserve is one of South Africa's most valuable nature reserves. The display of **fynbos** was beautiful. Cape Point and Cape of Good Hope are found at the most southern tip of the reserve. I climbed Skeleton Gorge, through Kirstenbosch which was a memorable experience. The trail disappears and you find yourself climbing a waterfall just to reach the top. Robben Island, once home to thousands of political activists during their imprisonment, offers the best views of Table Mountain and Cape Town. It is quite a cultural experience.

During my stay I only had a taste of the wonderful sights, places, flavours and beautiful plants that South Africa is full of. I gained valuable experience in the field and had the opportunity to compare the similarities with the Western Australian flora. The value of habitats was particularly emphasised to me. The most important experience of my trip was seeing plants in the wild, in situ, growing in their natural habitats with associated genera. What a valuable key to successful growing and management of a collection of plants.

A TRIP TO SABAH, MALAYSIAN BORNEO TO STUDY **RAFFLESIA** IN ITS NATIVE HABITAT

By Helen Long

On June 25th 1998 I embarked on a five week study tour to Sabah, Malaysian Borneo. The main objective of this trip was to find and study **Rafflesia** in its natural habitat. Field data was collected to assist with a Systematic Botany project and also try to establish why cultivation attempts of **Rafflesia** at Kew in 1991 had failed to produce results.

In addition to visiting **Rafflesia** sites, I travelled from lowland forest, to ultrabasic rock forest and windswept rock face vegetation zones, during my climb of Mt. Kinabalu. The granite peaks of Mt. Kinabalu tower some 4,095 metres above the tropical jungles of North Borneo and it is the highest mountain between the Himalayas and New Guinea, which forms the centre piece of the 750 square kilometre Kinabalu National Park.

The staff at Kinabalu Park supervise and monitor a number of **Rafflesia** sites within and around the Park boundary. Often sites falling outside the Park are afforded protection solely at the discretion of the land owner and are consequently vulnerable to disturbance from human activities. I travelled to Poring Hot Springs, a part of the National Park located some 43 kilometres away, where I met with Mr. Johannesius Kundung, a guide at Poring, and a driver who would take us to a nearby **Rafflesia** site. The site is on land belonging to the Mamut Copper Mining Company, but is also part-owned by the Parks Department in order to afford it some protection. In order to reach the site we had to seek permission from the Mining Company to enter their land and had to pass through a series of armed checkpoints, before finally arriving at the reserve at an altitude of 1,000 metres.

As the gate was unlocked, I prepared myself to be disappointed as the recent drought and high temperatures may have resulted in these parasitic plants going into dormancy from the shock. Even if this was not the case, **Rafflesia** flowers are notoriously difficult to see, since the blooms last only five to six days at the most and take between nine to 14 months to develop from the buds. The buds often fall victim to predation by small mammals, or may simply abort themselves if climatic conditions are not right. All in all, the chances of a sighting were slim.

The trail through the site lead down a flight of steps, through the understorey and onto a series of wooden walkways, which help to prevent trampling of the area around the host plants. The flowers are borne on the stems and roots of the species of **Tetrastigma (Vitaceae)**, which grows as a large liana stretching high into the forests canopy. As I turned around on the walkway to look for evidence of buds, there right in front of me, emerging from an underground sucker or root hidden by the leaf litter was a perfect flower of **Rafflesia pricei**. The reddish perigone lobes of the flower were covered with numerous clear, bright white warts and it had a diameter of about 30 centimetres.

Following the trail for another five minutes lead us down a narrow gully and under fallen trees festooned with creepers. As we surveyed the area from the platform, I spotted a second flower on the top of a nearby ridge which measured some 31centimetres in diameter and was slightly older and more orange in colour than the previous flower.

I was ecstatic! My first trip to see **Rafflesia** in its native habitat and I had been extremely lucky to see two flowers within a few hundred metres of each other. The flowers attract carrion flies as pollinators but records of **Rafflesia** sites around Mt. Kinabalu document that the flowers here produce little or no smell, even with a nose placed right inside the flower!

The next leg of my trip took me south to Tenom and the Agricultural Research Station, where I was hosted by Mr. Tony Lamb. The Station has a number of visitor features including an orchid garden and an extensive living crop museum. Whilst at the Agriculture Park I was fortunate to be invited by Tony Lamb on a three-day field trip into the threatened Nabawan Heath Forests. He was conducting research on behalf of the W.W.F. to help get areas surveyed and fully protected. Sadly the **Rafflesia** sites around the Tenom area had been badly damaged by the long drought and severe forest fires and little evidence of the plants, or their hosts, remained.

At the end of my week in Tenom and on my way north to the capital, I managed to squeeze in another trek to see **Rafflesia** at the Sinsuron Rafflesia Centre. The Sinsuron Rafflesia Centre is a 365 hectare Virgin Jungle Rafflesia Forest Reserve gazetted in 1984 in an area adjacent to the Crocker National Park. The information centre opened in 1991 and the site aims to conserve virgin or primary forest abundant in **Rafflesia** sites.

On the morning of my visit I was lucky to be told that a flower was in bloom along one of the trails and so I set off through the jungle with a guide. Unfortunately the flower was in rapidly deteriorating condition and its entire central structure had been completely eaten away. Consequently it was impossible to determine the sex of the flower, or even if it was capable of producing any smell.

The last week of my trip took in the Fourth Flora Malesiana Symposium, held in Kuala Lumpur at the end of July. This was a fantastic opportunity for me to learn a great deal in a short time about the flora of one of the most diverse regions on earth. As part of the conference I attended the field trip to Bukit Anak Takun (Limestone Hill) and Templer Park and also made a visit to the Forest Research Institute Malaysia.

Observing rare plants such as **Rafflesia** in its native habitat, climbing mountain trails, Durian tasting and teetering on narrow tree canopy walkways, were just a few of the most memorable experiences of a spectacular country, whose people are among the most friendly that I have ever met. I would like to thank all those who assisted me on my trip, both at home and in Sabah, particularly my sponsors – the Kew Guild, the Bentham and Moxon Trust, the Merlin Trust and the Women's Farm and Garden Association.

FOUR BOTANICAL GARDENS IN CUBA

By Kay Maguire

I spent one month in total on the island of Cuba and during that time visited the four main botanic gardens. Initially based in Havana, where I stayed in lodgings owned by the University, and from there I travelled to the gardens of Cienfuegos and Soroa in the Province of Pinar del Rio. Public transport on the island is very poor – slow, crowded and unreliable, exacerbated by recent fuel shortages and it was therefore decided that garden staff would drive to Havana to collect me. The gardens are linked to governmental ministries and access to cars was therefore possible; I paid for fuel costs as the cost to Cubans in pesos was way beyond their means. The Cuban motorways are in the same worn condition as the rest of the country's roads, but much emptier. With fuel prices so high, it is rare that Cubans make journeys, even between provinces. I travelled to Santiago de Cuba from Havana by air – a slow rather precarious flight in an old propellered Aeroflot plane. The air conditioning was so dense it looked as though the clouds were coming through the windows!

Whilst in Cienfuegos and Soroa I stayed in guest houses within the gardens. Both were in incredibly beautiful positions. At Cienfuegos the old colonial building looked out onto the Escambrey Mountain Range and in Soroa, on the top floor of the guest apartment building, the view over the palm-filled mountains was breathtaking.

The first evening there was spent on the balcony, watching a rainbow before the sun set. In Santiago I stayed with a family, one of the increasing number who have obtained licenses from the government to rent rooms in their houses to tourists. Not only does this give them an extra income and one that is not controlled by the state, but it also gives them the benefit of access to U.S. dollars. It obviously also provides an excellent opportunity for the tourist – to experience Cuban life first hand and to make some good friends!

Lodging in each of the guest houses, I had a cook who would prepare enormous Cuban meals for me; in Santiago I visited various houses licensed as restaurants. Having read that the food in Cuba was appalling I had anticipated starvation and had even brought along muesli bars in case times got desperate. However, the dreadful food must only exist in the tourist areas, as all the food I tasted on the island was delicious. Rice and beans is practically the national dish and this is served with every meal. Seafood is very popular with meat scarce and expensive and many of the recipes have a strong Cajun and Caribbean influence. Fresh fruit and vegetables were also surprisingly rare considering their abundant evidence in the countryside and in the trees. The major staples of the diet, however, appeared to be coffee and sugar. As the island's most important crops they are both consumed constantly. Cuban coffee is excellent and taken very short, very strong and very black. Sugar features in just about every dessert – and lots of it!

One of the most unusual aspects of travelling around Cuba was the monetary system. The Cuban economy currently operates on a parallel market – American dollars are used by tourists and 'pesos' by the Cubans. Most enterprises along the tourist route now insist on payment in U.S. dollars, in parity with the pesos (\$1=1 peso).

My aim was to visit the botanic gardens which are situated across the island's different geographical and vegetative zones and include a fern garden and an orchid garden. Studying the living collections, I hoped to extend my knowledge of temperate and tropical plants. Further appreciation could also be obtained by observing these species in their native environment and habitat.

It was also hoped that these observations could be related to the species recovery programmes within the gardens, thus enabling a greater understanding of the roles and benefits of ex-situ and in-situ conservation.

Secondly, I wished to look at the concept of environmental education with specific reference to botanic gardens. Cuba is a leader in the Caribbean with regard to environmental education. The gardens recognise the importance of an active relationship between the botanics and their local communities and I was interested to witness the activities and entertainments they initiate as a way of drawing people into the gardens.

My trip, therefore, began and ended in the city of Havana, whilst I saw much of the island on my journeys to the botanic gardens, covering many of the provinces as I went. At each garden I was made outstandingly welcome by all the people I met who were willing to share their knowledge and enthusiasm. Not only was I taken on extensive tours around every aspect of the gardens and included in the canteen lunches and national holiday celebrations, but I was also taken into their homes and shown the country as it is for the Cuban people – from power cuts and water shortages to salsa clubs and concert evenings in the city squares.

(From the Introduction to Kay Maguire's Report)

BROMELIADS AND RAINFORESTS IN COSTA RICA

By Iris Otto-Knapp

In July/August 1998 I went on my Travel Scholarship to Costa Rica to visit several National Parks and study Bromeliads and associated epiphytic flora in their natural habitat. Costa Rica

is a small country in Central America of 51,100 square kilometres, bordered by Nicaragua to the north and Panama to the south, the Pacific Ocean to the west and the Caribbean Sea to the east. A series of volcanic mountain ranges runs through the whole country. The location between the oceans and the topography, created a wide range of habitats and rich species diversity.

My trip started in the capital, San Jose, where I visited the National Biodiversity Institute (InBio). InBio's main task is to survey the national flora and fauna, to increase knowledge on biodiversity and monitor losses, due to deforestation and other human impact, on the ecosystems of Costa Rica to help their conservation. InBio is just establishing a new Botanic Garden close to their main quarter in the suburbs of the capital. I had the opportunity to visit the garden in the middle of its development. It will display different Costa Rican habitat types for educational purposes and will introduce Costa Ricans as well as tourists to their natural surroundings and increase their awareness of environmental issues and the importance of habitat protection.

After two days in the capital, I spent a week on the research station Pitilla, in the Area Conservation Guanacaste (A.C.G.), working with two Canadian ecologists on bromeliad interactions with insects. Pitilla lies at 1,700 metre elevation and is surrounded by wet tropical rainforest. The time was spent hiking around the extensive trails systems of the station, helping the two ecologists to identify some of the bromeliads they were working on. My main interest lay in the epiphytic Bromeliad genus **Guzmania**. I managed to observe **G. monostachya**, **G. lingulata** and **G. stenostachya** in flower at Pitilla.

On my last day in the A.C.G., I visited their main quarter, the research station Santa Rosa, learning about their conservation, education and research programmes. Santa Rosa, just 40 miles away from Pitilla lies next to the Pacific Coast, where the climate is much drier resulting in a vegetation of dry deciduous tropical forest.

The next part of my trip was a visit to the Monteverde Cloud Forest Reserve. A private reserve managed by the Tropical Science Centre. It is located in the centre of the country in the Cordillera de Tilaran at 1,500 metre elevation. It lies on the continental divide, so that it extends to the Caribbean and the Pacific side of the country. The high elevation creates a much cooler environment with very high humidity and rainfall. Premontane, montane and elfin forest are found in the reserve. The high humidity in the forests resulted in a very rich epiphytic flora of mosses, lichens, ferns, orchids and bromeliads. The main genera of **Bromeliaceae** found in Monteverde are **Vriesea**, **Guzmania** and **Pitcairnia**. A lot of Bromeliads were in their fruiting stage, unfortunately the flowering peak must have been four to six weeks previous to my visit.

From Monteverde I moved on to the Biological Field Station, La Selva, run by the Organisation for Tropical Studies (O.T.S.). The O.T.S. is an organisation founded by several north and central American universities to create research facilities in tropical countries. La Selva was their first research station built in the Caribbean lowlands of Costa Rica. It encompasses an area of 1,600 ha of tropical, wet rainforest bordering on the south the Braulio Carrillo National Park, the largest National Park in Costa Rica. It offers an entirely topographical surveyed area with a variety of wetland and forest habitats, an extensive well developed trail system and accommodation, library and laboratory facilities for researchers and visitors. Being located in the Caribbean lowlands, La Selva lies in an area with no distinct dry season. The average rainfall of 400 millimetres spreads evenly throughout the year.

I spent my last week in the Orosi Valley, near Cartago, located in the Central Highlands, to visit the Tapanti National Park, a very wet area due to about 150 rivers originating in the area. In Tapanti a lot of endemic Bromeliads, mainly **Vriesea** and **Guzmania** species are found. Some species like **Guzmania skotakii** are endemic to this particular area. Unfortunately, due to the constant rainfall during my visit, I was only able to see **Guzmania desautelsii** in flower, another species endemic to Costa Rica.

On daily trips from the Orosi valley I managed to visit Lankester Botanic Garden, which holds a large collection of epiphytes. It was formerly a private garden, but today is run by the University of Costa Rica. Another trip involved climbing up Volcan Poas and Volcan Irazu, the

latter being the highest volcanic mountain in Costa Rica, with 3,432 metres above sea level displaying a paramo (alpine) vegetation close to the peak.

I highly appreciated and enjoyed this opportunity to travel to Costa Rica and learn about tropical flora and fauna, which have been a main interest during my horticultural career. I would like to take this opportunity to thank the Kew Guild for their financial support of my trip.

A STUDY TOUR OF MEXICO'S ENDANGERED HABITATS AND PLANTS

By Paul Pollard

Ever since starting a career in horticulture in 1988, I have developed a great desire to study plants in habitat. In February 1997, Mr. Philip Brewster from Jardín Botánico Francisco Xavier Clavijero (J.B.C.), Xalapa, visited the R.B.G. Kew and gave an enthusiastic lecture on the diverse habitats and plants of Mexico. This led me to pursue Mexico as an area of study. As a keen plantsman it was to be a good choice, as Mexico is a country of major bio-diversity and is home to between 10% and 12% of all living organisms on the planet (cf. Gomez-Pompa, *et al* 1994). Some authors (e.g. Mittermeier 1988) rank Mexico third in biological richness, after Brazil and Columbia.

During September 1998 I spent four weeks travelling the states Veracruz, Oaxaca Puebla and Morelos, along with Luke Hull (L.C.D., Tropical), who had been awarded a staff scholarship to the same destination.

After surviving the smog of Mexico City, we took a five hour coach trip to Xalapa, the state Capitol of Veracruz. Phil Brewster introduced Luke and myself to J.B.C. where he is Head of Garden Maintenance and Design. The garden is approximately 16 acres and is situated within a disturbed cloud forest environment at an altitude of 1,250 metres. Bordering both tropical and temperate climatic zones the garden provides the visitor with some interesting plant associations, e.g. temperate trees such as **Platanus** and **Quercus** dripping with tropical epiphytes such as orchids, cacti and bromeliads.

During the first week day trips were taken to various nearby habitats. One of my aims was to study the endemic cycad **Dioon** and to witness conservation programmes implemented to save these endangered plants. Therefore, our first visit was to a village called Monte Oscuro to see an initiative started in 1988 by Dr. Andrew Vovides (Curator, J.B.C.). After seeing huge quantities of cycad crowns being sold for ornament at local markets, Andrew managed to obtain funding to set up an in situ 'cottage industry', raising hundreds of plants from seed collected from nearby wild populations. Subsequent profits have enabled the expansion of the original nursery and the cultivation of other endemic plants such as **Chamaedorea**. The day was made complete with a worthwhile climb through jungle vegetation to see ancient, multi-headed specimens of **Dioon edule**, probably over 2,500 years old.

The second visit of the week was to one of the most beautiful natural features in Mexico – cloud forest. These habitats, which are often shrouded in mist and fog, contain predominately evergreen plants, with 50-metre trees covered in mosses, lichens, bromeliads and brilliantly coloured orchids. Unfortunately a great part of the original cloud forest has disappeared from its original zone of distribution, due to the cultivation of coffee.

After a day of rest, a journey of 250 kilometres took us to Punta Mancha on the east coast of Veracruz. Here we ventured (via boat!) through the stilt roots of the red mangrove, **Rhizophora mangle** and witnessed pelicans diving for fish in the Gulf of Mexico.

The second and third week encompassed a round trip of approximately 2,000 kilometres, covering the states of Veracruz, Oaxaca, Puebla and Morelos. Within the first couple of days I witnessed the tremendous diversity of a tropical rain forest, saw one of the last remaining sites of the endemic cycad **Dioon spinulosum** (which produces the largest cone of any gymnosperm), travelled along the precarious hair-pin roads across the Sierra de Juarez mountain range and looked in awe at the giant tree of El Tule, **Taxodium mucronatum** that, at 2,000 years old, has the largest trunk of any tree on earth, (14.04 metres/47 feet in diameter).

However, the highlight for me was travelling through the arid landscape of the Tehuacan Valley to see my favourite plants – CACTI!!! The Tehuacan Valley stretches between the states of Oaxaca and Puebla and we looked upon some stunning views of the surrounding mountains, which were dotted with columna cacti over 30 feet high. Here we took time to botanise the flora and saw huge specimens, notably **Stenocereus webberi**, **Echinocactus platycanthus** (the barrel cacti) and **Cephalocereus columnotrahanii**.

A trip up an active volcano (Popocatepetl, 5,465 metres) and visits to botanic gardens in Oaxaca, Puebla and Cuernavaca finished off a study tour that I shall never forget.

MINE RECLAMATION IN WESTERN AUSTRALIA

By Laurie Scott

In 1997 I won a travel scholarship from the Royal Botanic Gardens, Kew, for a project I submitted as part of my Kew Diploma course work. My project, '*Mine Reclamation and the Reintroduction of Native Plants in Western Australia*', looked at how land becomes degraded through mining and how the native vegetation can be restored and the ecosystem functioning reinstated.

I arrived in Perth on 1st September and began work at King's Park and Botanic Gardens. King's Park, which covers 400 ha, was established late in the last century, but it was not until 1901 that it took its present name. Seventeen ha is devoted to the Botanic Garden and the remainder is made up of bushland, dominated by Jarrah and Banksia forests. Such a large tract of bushland is quite unique for an urban situation and King's Park is very proud of this area of native flora.

My first assignment was the Escarpment Project. The escarpment is a long, narrow and very steep piece of land originally mined for limestone; Perth Town Hall was built from limestone quarried here. After extraction, the area was devoid of vegetation, leaving it susceptible to erosion. To alleviate the erosion exotic plants, such as Agaves, were introduced to stabilise the soil. These have taken over and now present a problem in themselves. The Escarpment Project aims to determine what exactly constitutes land disturbance and how this can be rectified causing the least amount of damage to the native vegetation. Few studies exist on urban bushland (which is different from normal bushland), so this was groundbreaking research. The Project is being sponsored by W.M.C., one of the very large mining concerns based in W.A., with offices in Perth's tallest building.

Our first task was to survey and map the entire area (never thought I'd use the surveying techniques I learned during my second year at Kew!). We then did a complete vegetation survey, listing the dominant trees, shrubs, herbaceous material and weeds. Working on the Escarpment Project provided me with my first trip out into the bush and my first taste of W.A.'s vast flora.

Attempts to re-establish native plants by seed were unsuccessful until the South Africans discovered that plants which are members of fire climax communities require the stimulus of fire in order to germinate. Some plants, such as hard seeded Legumes like **Acacia**, needed the heat to crack the seed coat, while others react and germinate only after exposure to smoke.

My second work assignment was in the Smoke Unit. The very resourceful staff in the Lab had assembled their own smoke machine using a small tent (like those used by BT when doing repairs in the street), which was sealed to be airtight. A hose from a Hoover led from the tent to a large metal drum. Also attached to the drum was a second hose which ran to a small pump powered by a car battery. Debris from the forest floor was piled into the drum and set alight. The pump circulated just enough air to avoid flames but still move the smoky air through the hose and into the tent which was full of seed trays. The seeds were left to smoke for one hour, or until the compost turned the colour of cardboard. We were conducting trials on the amount of time required for smoking and the efficiency of different burning material, such as **Dryandra** and **Banksia**.

I spent most of my time working on the Tip Site Project and enjoyed it the most. For many years this 50 metre by 80 metre site, in the bushland of King's Park, was used as a domestic and industrial rubbish tip; dumping was finally discontinued in 1990. King's Park Lab saw this site as an excellent opportunity to amalgamate all their information on reclamation and ecological restoration to return the site to native bushland. After many years of heavy machinery running over it, the site was assumed to be compacted. After testing, the soil was indeed very compacted and needed to be ripped. However, this action produces bare ground, a perfect surface for weed invasion.

The second part of the project involved a floral survey of the bush to establish not only which plants to include in the seed mix for the site, but the correct proportions of each plant. Again, we ran 10 transects of 100 metre through the bush. At each one metre mark we noted all vegetation, including weeds (this was a monitoring measure), giving us a total of 1,000 readings. This survey proved an excellent method for me to familiarise myself with W.A.'s flora! By the end of the first day I could recognise at least 50 plants.

While conducting the vegetation survey, we also took special note of any seed that was nearly ripe. When ripe, this seed will be gathered and, according to the results of the survey, the seed mix will be prepared. Seed provenance is very important as it protects genetic integrity and promotes variation. Therefore, seed will be gathered from as close to the Tip Site as possible. The site will be seeded, but before seeding, the hard coated seeds such as the Legumes will be boiled for one minute. The other seeds will all receive smoke treatment. The recalcitrants must be propagated by tissue culture and planted out by hand.

Towards the end of my stay in Australia, King's Park hosted the annual Wildflower Festival, which is a celebration of W.A.'s marvellous, unique flora. Many nurseries and wildflower societies staged exhibits.

Winning a scholarship at Kew and being given the opportunity to actually complete my project was a rare and unforgettable experience for me. I learned a great deal about the flora of W.A. and about land degradation and reclamation practices and how these are being used to restore the Jarrah Forest.

TRAVEL SCHOLARSHIP TO LA RÉUNION

By Emmanuel Spicq

La Réunion is an active volcanic island in the Mascarene archipelago, including Mauritius and Rodrigues, in the Indian Ocean. Its 2,512 square kilometres are very mountainous. Le Piton des Neiges (3,069 metres) and the volcano, Piton de la Fournaise (2,631 metres), are the highest points. The climate varies from lush and tropical on its windward coast, to dry and tropical on its leeward coast, with temperate and alpine conditions on the high plateau and mountains respectively. This diversity, along with the steep inaccessible slopes and ravines, has produced the richest island endemic Mascarene flora.

The purpose of my visit was to strengthen the relationship between the Royal Botanic Gardens, Kew and Réunion Island (Conservatoire Botanique National de Mascarin). The publication of the 'Flore des Mascareignes' is a joint project between Paris, Kew and Mauritius. It seems that Kew concentrates on Mauritius and Rodrigues, Paris on Réunion. I would like to see, in the future, stronger links between all parties.

Mascarin Botanic Garden (12 ha) has an extensive collection of threatened endemics, a tropical orchard and a large palm collection. My schedule involved working with Mascarin Botanic Garden, as well as meeting organisations such as the Forestry Division and the University. I also tried to discover the whole island. My highlights were:

- Studying two threatened endemics in-situ and ex-situ and producing a short paper on them: *Foetidia mauritiana* Lam. (Lecythidaceae) and *Dombeya populnea* (Cav.) Baker (Sterculiaceae).

- I tried to climb the volcano twice but the weather conditions were poor and I was forced to abandon it for safety reasons.
- The high altitude vegetation (above 2,000 metres) in the Bébou Forest, and Bélouve Forest which is planted with **Tamarin des hauts** endemic to La Réunion **Acacia heterophylla**. Then the ericoid vegetation comprising tree heather **Phyllippia** spp. and tree ferns **Cyathea** spp.
- The main agricultural industries of the island: the Vanilla Processing Company De Floris and the Vanilla Co-operative. The other visit was to the sugar cane factory of Bois Rouge, which produces 100,000 tonnes of sugar per year for France.

This trip has been a great success because I met interesting people from whom I have learned a great deal in a short time. I would like to thank everyone who assisted me in my travel, especially my sponsors – The Stanley Smith Travel Fund Scholarship, The Kew Guild, The Cooke Trust and Bill and Jane MacAlpine.

STUDY TOUR TO THE SOUTHWESTERN UNITED STATES

By Patrick Garton

The duration and time of year of one's travels can significantly determine what regions of the globe are most suitable for botanical exploration. I was able to get three weeks together which had to be taken in March. This meant it was now worth spending more on a longer haul flight, while going at this time of year was ideal for visiting a corner of the world that had always fascinated me: vibrant colours of spring flowers against clear blue skies standing out from the mysterious ochre landscape of North America's Southwest.

On the 1st March 1998 I arrived in Phoenix, Arizona. My first memories were of driving through the city that first morning fuelled with an amazement that comes while travelling through that legendary landscape of giant saguaro cacti (**Carnegiea gigantea**) which, together with yuccas, barrel cacti (**Ferocactus** spp.) and the yellow blooming paloverdes (**Cercidium** spp.), are used extensively in roadside landscaping across the Southwest. And as if this didn't seem staged enough, roadrunners and howling coyotes were to come that evening!

The visitor's first experience of that classic 'wild west' scenery can be felt at Phoenix's Desert Botanical Garden with a superb interpretative trail showing and explaining the features of Sonoran Desert plant life. This is about the northern-most limit of the low desert. Heading south and east to Tucson the higher ground and increased summer rains coming from the Gulf of Mexico produces saguaros at their densest. The Arizona-Sonora Desert Museum in the middle of the Saguaro National Monument (under 'Park' jurisdiction) is another must, introducing the visitor to the ecology, geology and natural history of this part of the desert. Sunsets from the museum's balcony are out of this world: a hazy expanse stretches out before you, broken by the sharp silhouettes of columnar cacti and all hemmed in by distant mountain ranges.

Beckoned by the reputation of spectacular spring flowers further west, I then trekked towards California, passing by the Organ Pipe Cactus National Monument. No matter how hard anybody tries to describe the endless carpet of wild flowers, the reality is still harder to believe. Here the completely unspoilt landscape is ablaze with penstemons, owl's clover (**Orthocarpus purpurascens**), Californian poppies (**Eschscholtzia californica**) and Fiddlenecks (**Amsinckia intermedia**). Towering above these are the familiar humorous forms of saguaros and organ pipe cacti (the only locality they can be seen in the U.S.A., since this lies on the Mexican border). This was not all! Further west into California lies the Anza-Borrego Desert State Park. This marks the furthest point west before reaching the 3,000 plus metre high Coastal Ranges separating it from San Diego. Getting almost all its annual rainfall in the winter, this side of the Sonora Desert is probably the richest in spring flowering species. Under leaden skies, pierced sporadically by intense shafts of sunlight, the scenery appeared almost lunar. Sparsely but uniformly dotted between creosote bushes (**Larrea tridentata**) were new acquaintances: monocultural stands of sand verbena (**Abronia villosa**) and dune primroses (**Oenothera deltoidea**).

Having come so far, two final sites had to be visited. The Joshua Tree and Death Valley National Parks still had their turn to impress with their unusual subjects. Climbing all of a sudden from low to high desert it became apparent that the Mojave Desert was very different from anything I'd experienced up till now. Slowly, from groups of different low growing yuccas (***Yucca schidigera*** and ***brevifolia***, the Joshua Tree) I noticed one of these species attaining ever increasing proportions until at the top it now reached heights of 10 to 15 metres. Surrounded by a biting clear air, some of these grotesque figures had survived 200 years. Early Mormon settlers had called it the Joshua tree because the plants seem to lift their arms in supplication like the biblical Joshua.

I then descended into Death Valley after crossing the Mojave Desert. Boldly disguising a reputation for the highest temperatures recorded in the U.S.A. and belying its title and place names within the Park such as Furnace Creek and Devil's Golf Course, the valley welcomed visitors at this time of year with an abundance of life and colour. In fact the Park authorities proclaimed this the best in 20 years for its displays of spring flowers.

An excellent Park system is provided by the National Park Service in the U.S.A. With trails and daily activities such as talks and video programmes at visitor centres and comprehensive bookshops and campsites within parks, these added to the memories and knowledge I gained from each site, making the southwestern U.S.A. one of the most enjoyable destinations that can be visited at this time of year.

SCHOOL OF HORTICULTURE KEW DIPLOMA PRIZE DAY 1998 SPEECH

By Ian Leese, Director of Studies

Your Worship, Sir David, Chairman, Director, distinguished guests, ladies and gentlemen, may I welcome you on behalf of the School of Horticulture to the main event of our year. I would like to report on some of the successes that have occurred over the past 12 months and also look ahead with those who are graduating today.

Firstly, I thank the Chairman and Board of Trustees, the Director and Deputy Director, Heads of Departments, especially the Curator, Head of Living Collections Department, his Heads of Sections, Unit Managers and other staff, for their help and support of the School of Horticulture and our students.

All lecturers, external examiners and assessors maintain the academic excellence of the course, while our overseeing body, the Independent Panel, chaired by Mr. Peter Grimby, who is in the audience today, advise on the direction of the course and provide essential links with industry.

I am indebted also to all the staff of the School of Horticulture, who help me far beyond the normal call of duty and who provide considerable assistance to our students and everyone who has contact with the School.

In academic terms, graduates of the School continue to excel. Mike Maunder, now Head of the Conservation Projects Development Unit at Kew and James Compton received Ph.D.s this academic year, from the University of Reading. Wakehurst staff member, Chris Clennett, together with Kew Diploma graduate, Janet Burnell, gained M.Sc. degrees, also from Reading, the latter at distinction level.

Last year's Kew graduates, Upaneetha Abeygunawardana, Roger Fischer, Azra Secerbegovic and Joanna Walmisley, have all succeeded in their examinations and are awaiting the results of their dissertations at the end of one-year M.Sc. courses at Reading, Writtle University College and Wye College, respectively. Marcus de la Fleur has completed the first year of a two-year Master of Landscape Architecture course at the University of Sheffield. Junko Oikawa, another graduate from last year, is working on a Ph.D at the University of Reading.

One of this year's graduates, Mikel Pagola, has accepted the offer of a place on the M.Sc. in Horticulture course of the University of Reading. Stefan Czeladzinsky from Course 31 is about to commence an M.Sc. in Advanced Methods of Taxonomy and Biodiversity at the Natural History Museum. Suzanne Michal from Course 30 has a place on the M.Sc. in Environmental and Development Education at South Bank University. Michael Klemperer has been awarded funding from the British Academy towards his Ph.D. in Landscape Archaeology at the University of Sheffield.

In career terms, Kew graduates moved rapidly to top positions in a variety of different ways within botanic gardens. Wolfgang Bopp was appointed as Curator of the new National Botanic Garden of Wales during the past year. Louise Allen was promoted from Education Officer to Deputy Superintendent at the University of Oxford Botanic Garden. Louise was also awarded a Winston Churchill Memorial Trust Travelling Fellowship to visit Italy to study interpreting historic and botanic gardens. Amanda Linda was appointed as assistant to the Managing Director at Jerusalem Botanical Gardens. At Kew, Dina Gallick gained a post in the Tropical Section, while Shelagh Kell transferred to the Conventions and Policies Section.

Several estates have Kew graduates at their helm. Last year's top student, Nick Biddle, was appointed Curator of Downe House, the former home of Charles Darwin, now owned by English Heritage, which was officially opened in April this year. In addition, Nick won the Chris Brickell Prize, given by the Merlin Trust, for his report submitted about a trip to Hawaii which was funded by the Trust. Topher Martyn, who also finished here last year, is now Head Gardener for the Duke of Northumberland at Syon Park, across the river from us here. Topher then recruited another recent Kew graduate, Jo Scrivener, to be in charge of the four hectare Woodland Garden on the estate.

Previous graduate, David Barnes, was promoted to be Head Gardener of North Kensington Amenity Trust and then took on a former Kew intern, Tiffany Cullinane, as his assistant. Rachel Martin, another graduate of a few years ago, was appointed Head Gardener of Trebah Garden Trust near Falmouth. Also in Cornwall, the 15th century Cotehele Estate, now owned by the National Trust, has John Lanyon as Head Gardener.

Gwenda Kidd was appointed Head Gardener at Canons Ashby, Northamptonshire, another National Trust garden. Her husband, Chris, was recruited as assistant by Darren Webster who in turn was promoted to the position of Head Gardener at the estate of the former Deputy Prime Minister, The Right Honourable Michael Heseltine, M.P.

Several Kew graduates pursue careers in landscaping. Peter Thurman re-designed a private university park in Japan, which was officially opened in August with great ceremony. Bruce Labey joined landscape architects Michael Felton Limited in St. Helier, Jersey. Together with another Kew graduate, Rebecca Ransom, he has launched a fund raising campaign for £5 million to create a new botanic garden on the island.

Guillaume Baltz has started work at Land Use Consultants in London, who are landscape architects for the Eden Project in Cornwall. He is also continuing the second year of a Bachelor of Landscape Architecture degree at the University of Central England.

Annabel Chantler had earlier been appointed as Landscape Assistant to Lady Lennox-Boyd and was extensively involved in her Chelsea Show garden, which won the 'Best Garden of the Show' award.

A number of Kew graduates pursue careers in commercial horticulture. At the end of her M.Sc. in European Horticulture course, Azra Secerbegovic has been appointed Sales Executive by Carmel, the Israeli company, and will deal with the commercial development of plants. John Bartlett, who has been living and working in Spain for the past few years, was recruited by the seed company Thompson and Morgan Limited for the position of International Sales Operations Manager. In Surrey, Neil Wallsgrove has set up his own Pepperpot Nursery, specialising in the production of herbs. At Kew, John Harris has been recruited to the post of Publications Marketing Manager to increase sales of scientific titles produced here.

With the example of Alan Titchmarsh and Ann Swithinbank, amongst others, before them, several Kew graduates are involved with the media. Jane Lippington has joined A.R.K. Productions which produce gardening programmes for Channel Four, including extensive broadcasts from the 1998 Chelsea Show. Matthew Biggs, who has appeared on Channel Four's 'Garden Club' series, jointly published a book on houseplants this year with Roy Lancaster, the other presenter in the series. Dan Pearson, a very successful Chelsea Show landscaper, who presented the Channel Four 'Roots Around the World' series, produced 'The Essential Garden Book' about garden design with Sir Terence Conran this year. Current second-year Kew Diploma student, Eamonn Byrne, was chosen by the Guild of Agricultural Journalists for a week-long training course for potential horticultural journalists. I know Eamonn is familiar to you, Sir David, because he helps you look after your garden in Richmond.

Some Kew graduates, like me, go into education on completion of their training here. One from last year's course, Vanessa Wells, was appointed to the position of Lecturer in Amenity Horticulture at Berkshire College.

Apart from these successes in career terms, Kew students and graduates have been widely recognised for awards by outside organisations. The Merlin Trust, organised by Valerie Finnis, V.M.H., who is in the audience, has made a number of grants to staff, students and Kew graduates over the past year towards the cost of overseas travel. Similarly, the Royal Horticultural Society's Bursaries Committee, the Coke Trust, and the Women's Farm and Garden Association have all made grants for the same purpose. A new travel scholarship fund has been established at Kew this year due to a substantial donation from The Margolas Trust. Agfa-Gevaert Limited, due to the generosity of Corporate Communications Manager, Philip Miller, who is in the audience, donated 60 rolls of film to second year students for their Landscape Construction portfolio project.

During the past year, Kew Diploma students have been involved in a number of local activities. A team of first year students formed a Gardeners' Question Time Panel for the Kew Horticultural Society in April and repeated their performance as part of the Kew Festival, held at St. Anne's Church on Kew Green in July. Another team, of second-years, will appear as a panel for the Friends of Kew later this month.

Some third year students took advantage of their final Practical Management project to produce materials under the local Agenda 21 initiative, one of the outcomes of the Convention on Biological Diversity which followed the 1992 Earth Summit. Agenda 21 aims to encourage local communities to take responsibility for the environment and find sustainable ways of development. Working with the Richmond Biodiversity Group and under the guidance of Mark Bridger, Unit Manager of Kew's South Arboretum, Tanja Kramer and Tammy Woodcock produced a wildlife leaflet for Richmond-upon-Thames, while Andrea Benson and Karthryn Kidby created a leaflet to promote green gardening and attract wildlife, which has gained the interest of the local Squires Garden Centre group.

Our students have also attracted Flashback Television to propose a series about Kew for Channel Four, which will feature the students, amongst other staff, while they undertake their academic training and practical work during the Kew Diploma course. With contracts having been signed and some filming already commenced, perhaps, Sir David, you could give some practical advice about speaking to the camera to those who will be filmed next week upon the arrival of the new course of Kew Diploma students.

In addition to all the above aspects of the Kew Diploma course, the School of Horticulture also co-ordinates a three-month internship programme of practical work experience in the gardens. Thirty-three trainees from all five continents have attended this year.

Together with other Living Collections Department colleagues, with input from staff across the whole organisation, under the management of Dr. Colin Clubbe, School of Horticulture staff have contributed to two other courses this year. A total of 18 people from around the world, including the United Kingdom Dependant Territories, participated in the Conservation of Threatened Plant Species course, funded by the government's Darwin Initiative, and the International Diploma Course in Botanic Garden Management.

Apart from these international links, the School of Horticulture is also responsible in collaboration with Kew's Corporate Training Manager, Mary Evans, for the technical training of staff of the Living Collections Department. David Barnes, my Deputy, is L.C.D.'s Staff Training Manager and during the past year he has taken and organised a vast variety of courses.

Today is a time for welcoming and saying 'goodbye'. We welcome Lord Blakenham, who was appointed Chairman of the Board of Trustees during the past 12 months. We also welcome Professor Hugh Dickinson, from the University of Oxford, as the new Chairman of the Board of Trustees' Education and Science Committee, under whose jurisdiction comes the School of Horticulture.

We say goodbye to Lady Lennox-Boyd. Her term on the Board of Trustees comes to an end in October after a total of nine years. During this time she has been the Board's representative on the Independent Panel. Throughout, she has been a staunch supporter of the School and our students at the highest levels, ensuring that we have progressed to the strong position which we hold today. I am deeply indebted to her for the amount of time and energy which she has committed to the School. The donation of the Lennox-Boyd Memorial Trust funds to the Royal Botanic Gardens, Kew, means that educational activities, especially for people from Commonwealth countries, will continue to benefit here in the years to come.

We also say goodbye to Professor Sir Ghillean and Lady Prance because, as we have heard, Professor Sir Ghillean will retire as Director of Kew next July. Both of you work tirelessly for Kew and have given immense support to the School and our students in many ways over your years here. We wish you well in your new ventures. It has been a great privilege and honour for me personally to have worked for you.

Two of our lecturers, Peter Thoday and John Sallis Chandler, have also indicated their desire to leave at this time. Peter Thoday, as Director of Horticulture of the Eden Project, no longer has the time to give his inspiring amenity landscape lectures, but we thank him for his involvement with the course over many years. John Sallis Chandler, one of the landscape design tutors, needs to spend more time in his own design business. Again, for him we wish him well in all that he does.

Finally, we say goodbye to all those from Course 33 who graduate today. You have individually worked hard, both academically and practically, throughout the three years of the course. You have already achieved the dreams of many who wish to benefit from the training and experience here. Many of you have travelled extensively during your course. Several different doors have opened to you along the way and you have already found that employment opportunities have readily come to you as a result of your time here.

We thank all of you for the tremendous contributions you have made to the corporate aims of the Royal Botanic Gardens, Kew – by your practical work in the gardens, your cross-departmental collaborations in your project research, your national and international contacts and your overall commitment to this very special place.

We wish all of you well in your future careers. We encourage you to build upon the skills and knowledge you have gained, the contacts you have made and the confidence and direction which you have found. In whatever you do in the years that lie ahead, we ask that you uphold the mission of the Royal Botanic Gardens, Kew, which is "to enable better management of the earth's environment by increasing knowledge and understanding of the plant and fungal kingdoms – the basis of life on earth".

PRESENTATION OF KEW DIPLOMAS AND PRIZES 1998 (COURSE 33)

We begin with the presentation of Kew Diplomas and prizes to third year students. I shall first read out the awards, followed by the name of the person who is to receive them. Thanks must go to all sponsors of our prizes, many of whom are in the audience today. In particular, I

must thank the Kew Guild, an association of past and present Kew staff and students, whose President, Mr. Theo Dumont, is on the platform. The Guild give several awards today, as well as in excess of £4,000 towards travel scholarships.

Thanks should also go to the Friends of Kew, whose Chairman, Mr. Richard Laphorne and his wife are in the audience. The Friends' gift of a year's free membership to each of our graduates will encourage them to keep in touch with us.

ANDREA BENSON

The Dummer Memorial Prize, sponsored by the Kew Guild, for the best Herbarium Weed Collection project.

Kew Diploma Credit grade.

PATRICK GARTON

The Donald Dring Memorial Prize, sponsored by the Bentham-Moxon Trustees, in memory of a former mycologist of Kew's Herbarium, for the student attaining the highest marks in the Crop Protection project.

The Kew Guild Individual Study Prize given to the student with the second highest marks for their Dissertation.

Kew Diploma Honours grade.

MICHAEL KERR

The Tony Kirkham Arbicultural Prize, sponsored by Matthew Vincent, a Kew Diploma graduate whose business, 'The Kew Gardener', you may have passed near Kew Gardens Station. The prize is named after the principal lecturer of the arboriculture course. On this occasion, it is a joint award for coming top in this subject.

The Plant Identification Tests Prize, donated by the Students' Union, to the person with the highest marks overall in these tests.

The F. Nigel Hepper Cup, presented for the first time this year by Nigel Hepper, a Kew botanist with a long association with the Kew Diploma course, and currently Chairman of the Kew Guild Awards Sub-Committee. Mr. Hepper has asked that this cup be given in recognition of the highest achievement in the plant identification assessments.

Kew Diploma Honours grade.

KATHRYN KIDBY

The Worshipful Company of Gardeners' Prize, awarded by the Company, and we have the Master and some past Masters with us in the audience today, to the person who has done most for the Royal Botanic Gardens, Kew during the course. This included a year as Chairman of the Student Lecture Society, the Kew Mutual Improvement Society, as well as helping with Kew's community involvement under Agenda 21.

Kew Diploma Credit grade.

TANJA KRAMER

The Prize for the Best Vegetable Plot, donated by the Kew Guild to the student obtaining the highest marks in this practical first year project.

The Landsman's Bookshop Prize awarded for the best third year Landscape Design project.

The Paul Temple, O.B.E., Prize, sponsored by the international landscape designer who, with his wife, is in the audience, for the best overall performance in landscape studies.

Kew Diploma Credit grade.



The Master of the Worshipful Company of Gardeners (centre), pictured at Prize Day with Greg Mullins (left) winner of the Gardeners' Company Prize as the top Kew student and Kathryn Kidby (right), winner of the Company's Prize for the person who has done most for R.B.G. Kew during the course.

The Matilda Smith Memorial Prize, sponsored by the Kew Guild in memory of a botanical artist at Kew and given to the best practical student.

The George Conrad Johnson Memorial Prize, administered by the Bentham-Moxon Trustees on behalf of the magazine 'The Grower', in memory of an ex-Kewite. The prize is for the best overall performance on the Kew Diploma course.

The Worshipful Company of Gardeners' Prize, given by the Company, also in recognition of the top student position.

Kew Diploma Honours grade.

MIKEL PAGOLA

The George Brown Prize, donated by the Kew Guild in memory of a former Assistant Curator, to the runner-up in the Kew Mutual Improvement Society's student lecture competition. This is a tremendous achievement for someone whose English is their third language.

Kew Diploma Credit grade.

LAURIE SCOTT

Life Membership of the Students' Union for services rendered as representative for Course 33 throughout the three years.

Kew Diploma Honours grade.

KAY MAGUIRE

Life Membership of the Students' Union for services rendered as representative for Course 33 throughout the three years.

Kew Diploma Credit grade.

GREG MULLINS

The Metcalfe Cup, donated by the late Dr. Metcalfe, a former Keeper of Jodrell Laboratory where we are today, to the student attaining the highest second-year examination marks.

The Tony Kirkham Arboricultural Prize, as mentioned previously, for coming joint-top in the examinations.

The Lecturer's Prize, donated by Dr. Nicholas Hind of Kew's Herbarium to the student gaining the highest mark for their Systematic Botany project.

Life Membership of the Students' Union for services rendered as President over the past year.

The British Friends of Jerusalem Botanical Gardens Scholarship for a third-year placement at the garden in Jerusalem. We have the donor of the award, Mrs. Della Worms, the Chairman of the British Friends, Mrs. José Dent and Mrs. Vivien Lowenstein Moss in the audience with us today.

TAMMY WOODCOCK

The Proudlock Prize, donated by the Kew Guild to the runner-up in the Herbarium Weed Collection project.

The C. P. Raffill Prize, again sponsored by the Kew Guild, to the winner of the Kew Mutual Improvement Society's student lecture competition.

The Mike Bracegirdle Prize for Ecology and Conservation for outstanding results in those subjects and donated by the main lecturer of the course, who is with us today.

The Kingdon-Ward Prize, given by Winifred Kingdon-Ward in memory of her brother, Frank, a noted plant collector, to the student attaining the highest marks in their final-year Dissertation.

The Ernest Thornton-Smith Travelling Scholarship, which is the major final-year travel award, presented by the Trustees of the Thornton-Smith and Plevins Young People's Trusts to allow a Kew Diploma graduate to travel overseas. In this case, the trip will be to Andromeda Botanic Garden, Barbados.

Kew Diploma Honours grade.

That concludes the presentations to third-year students. We turn now to second-year student awards. We begin with:

ANTHONY BLANCHFIELD

The Stanley Smith Travel Fund Scholarships, administered by the Bentham-Moxon Trust. The first scholarship has already been used to fund a trip to Japan by Anthony.



Pictured at the Spring Court Dinner of the Worshipful Company of Gardeners at Drapers Hall are (left to right) James Seymour (Member of Court), Ian Leese, Nicholas Biddle (Prizewinner for being top Kew student), Nigel Taylor and Kathryn Kibby (Prizewinner for person who has done most for R.B.G., Kew).



Pictured left to right with Professor Sir Ghilleen Prance are Course 34 travel scholarship winners: Emmanuel Spicq (Stanley Smith Travel Scholarship), Paul Pollard (Henry Idris Matthews Award) and Anthony Blanchfield (Stanley Smith Travel Scholarship).

EMMANUEL SPICQ

The second *Stanley Smith Travel Fund Scholarship* winner is away at the present time on a trip to Réunion.

Emmanuel is also the winner of *The Kew Mutual Improvement Society's Prize* awarded to the student who has taken the most active part in running the Society behind the scenes in the position of Secretary.

PAUL POLLARD

The Henry Idris Matthews Award is donated by the Bentham-Moxon Trust. This year's winner, Paul, is away in Mexico at the moment.

CHRISTOPHER COLE

The Hozelock Prize is sponsored by the manufacturers of garden irrigation equipment. A trip to Mexico and Arizona was made earlier this summer by the winner, Christopher.

EMMA FOX

The David Dalziel Travel Scholarships are donated by Mr. Dalziel, who lives in Florida. In July, Emma made a trip to the United States to look at children's education programmes, as well as attendance at the annual conference of the American Association of Botanical Gardens and Arboreta held in Philadelphia.

HELEN LONG

A trip to Sabah, Borneo, which involved the successful sighting of the world's largest flower, *Rafflesia*, together with attendance at an environmental conference was undertaken a few weeks ago by Helen, another winner of one of *The David Dalziel Travel Scholarships*.

IRIS OTTO-KNAPP

Another winner of a *David Dalziel Travel Scholarship*, Iris undertook a study tour to the rainforests of Costa Rica.

She is also the recipient of a new award, presented for the first time this year, funded by The Margolas Trust as winner of the *Margolas Trust Study Tour Award*. Two Trustees, Mr. and Mrs. Anthony Biddle, are in the audience today.

KATHLEEN KING

Kathleen, the final *David Dalziel Travel Scholarship* winner, is away on a study tour of South Africa, which will involve attendance at a major conference to be held next week, organised by Botanic Gardens Conservation International.

The Kew Mutual Improvement Society makes two further awards:

JAMES FURSE-ROBERTS

The Sir Joseph Hooker Prize is presented by the Director in memory of his famous predecessor, to the student who has done most for the Society. The prize is augmented by a cup donated by Mrs. Hazel Hyde, who retired as Administrative Officer of the School of Horticulture in 1993. The winner, James, was Chairman of the Society over the past year.

DAVID COOKE

The Professor Keith Jones Cup, donated by a former Keeper of Jodrell Laboratory who is in the audience today, is presented to the person who has given most 'items of interest' talks to the Society. This year it is jointly awarded to David, a staff member of the Committee.

CHRISTINE LAVELLE

The other joint winner of *The Professor Keith Jones Cup*, Christine is a current first-year student, who has been elected Co-Chair of the Society for next year.



Kew Diploma Course 33 students pictured with Nigel Taylor and Ian Leese, along with (front row: left to right) Richmond Mayor's consort Ray Weber, Dr. Jenny Tonge, M.P., Sir David Attenborough (Guest of Honour), Professor Sir Ghillelan Prance (Director), Viscount Blakenham (Chairman of the Board of Trustees), Richmond Mayor, Councillor Mary Weber, Professor Hugh Dickinson (Chairman of the Trustees' Science and Education Committee) and Theo Dumont (President of the Kew Guild).

Apart from Christine, the achievements of two other first-year students are also recognised today.

CLAUDIA HEIDIEKER

Due to the generosity of one of our lecturers, Mr. Tom Reynolds of Jodrell Laboratory, who is with us today, the *Tom Reynolds Prize for Plant Biochemistry and Physiology* is awarded to Claudia who is the person obtaining the highest marks in the subject in the first year.

ANDREW WYATT

The Institute of Horticulture Prize is sponsored by the Institute in recognition of the overall top first-year student.

JUSTIN TURNER

The Rotary Club of Kew Gardens Prize. Apart from academic achievement, we also have an award donated by the Rotary Club of Kew Gardens. This is given to the student who has done most work for charity during the past year. Justin has worked hard through a variety of ways, including a two-week cycle ride from Land's End to John O'Groats, to raise funds for the 'Alice Whitmore Smile Appeal'. Three-year old Alice suffers from facial paralysis on her right side which prevents her from being able to smile. The appeal is to raise sufficient funds to enable her to undergo surgery in Toronto which will correct her condition.

Gardens staff of the Living Collections Department, of which the School of Horticulture is a part, have benefited from the *John Scott-Marshall Travel Scholarships*. These are available from

a bequest of Mr. Scott-Marshall, who was a former Editor of '*Gardeners' Chronicle*', now known as the trade magazine '*Horticulture Week*'.

LUKE HULL

John Scott-Marshall Travel Scholarship. Luke is from the Department's Technical Section and is currently on his study tour to Mexico, gaining work experience at Xalapa Botanic Garden, Vera Cruz.

MARILYN KUMON

John Scott-Marshall Travel Scholarship. Earlier this year Marilyn, a member of Kew's tree unit, obtained practical training in the management of mature trees and the latest rigging techniques in California.

MARCOS SMITH

John Scott-Marshall Travel Scholarship. Marcos undertook work experience at the Royal Botanic Garden, Hamilton and the University of British Columbia Botanic Garden, Vancouver, with particular emphasis on Acer and Conifer collections.

(From Hon. Editor's notes.)

Following the Prizegiving the Guest of Honour, Sir David Attenborough, gave a stimulating address to the outgoing students. He remarked that the older one gets the more inclined one was to become interested in gardening. He thought that the students were lucky to be wise enough to strive to get to Kew in the first place. He suggested that the reason Kew is the best and most respected throughout the world is its continuity between plants, taxonomy, botany, science and botanical exploration.

Sir David expressed his regret that this would be the last Diploma Prizeday that the Director would attend in office and mentioned the huge fundamental changes that the Director had helped implement, giving Kew a new strength and openness.

Outgoing students had one of the most important jobs in the world, for we tend to lose sight of the fact that the world depends totally on plants for survival. They also feed our spirit and are the bond that tie us to the natural world.

Sir David congratulated the outgoing students and wished them well for the future.

The Viscount Blakenham, Chairman of the Board of Trustees, thanked Sir David for his efforts lent to Kew.

OUTGOING PRESIDENT'S REPORT PRESENTATION OF KEW DIPLOMAS AND PRIZES, 1998

By Theo Dumont

Having attended the presentation of diplomas and prizes, I am amazed at the changes that have taken place in the School of Horticulture in the last 40 years, all of them for the good.

What the Students' Union fought for in our days has been realised more than one hundred per cent. As Alan Cook remarked to me yesterday, all we got after two years of hard slog was a piece of paper pushed into our hands. Prizes could be counted on the fingers of one hand and travel and other scholarships were unheard of.

However, we are delighted with the progress which has been made and I, for my part, am amazed at the high standard of the student's work and their achievements.

EDITOR'S SET OF JOURNALS!

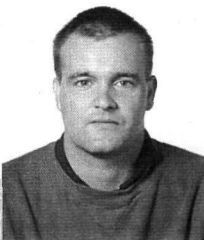
Due to the generosity of Guild members Constance Martin and Winifred Worth, your Editor now owns almost the complete set of *Guild Journals* (105 years). But I am missing 1893, 1895 and 1898. If any member has these unwanted editions I would be most interested. Needless to say, past numbers are invaluable for research purposes.



MIRCO BERENBRINKER



BJÖRN BERNADOTTE



ALEX BISHOP



JINYONG CHEN



SILVIA CRAWFORD



LASZLO CSIBA



ALYS FOWLER



TOM HOBLYN



IAN HUDSON



HELENKA JURGIELEWICZ



KEITH MOYLE



ANTONY O'ROURKE



JANE PEARSON



MATTHEW REESE

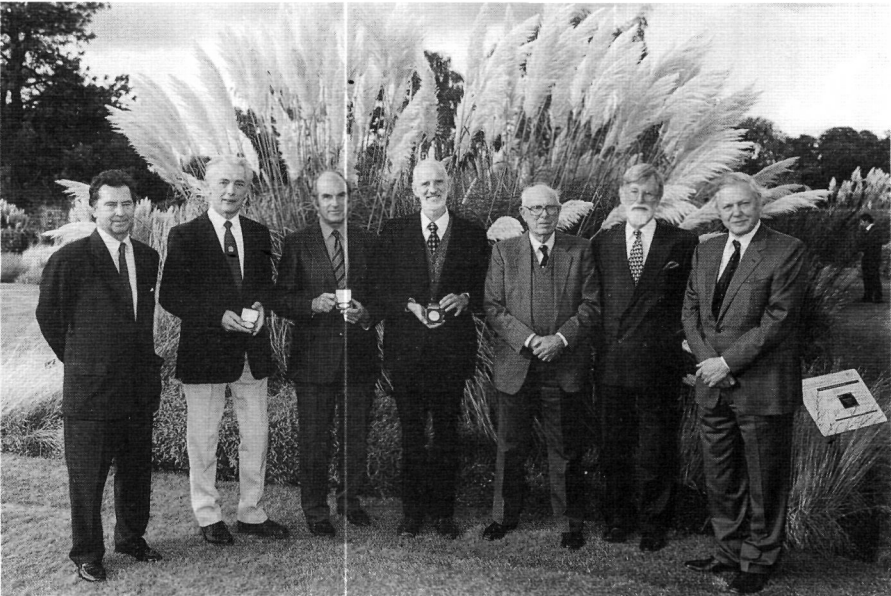


JAMES STEVENSON

COURSE 36



Course 36 ready for work on their first day at Kew with Ian Leese (seated) and David Barnes (left) on the tractor.



Many years of service to horticulture and botany were marked by the presentation of four Kew Medals. Pictured left to right are: Viscount Blakenham (Chairman of Trustees), Dr. Peter Brandham, Tudor Harwood, Dickon Bowling, Humphrey Burkill, Professor Sir Ghilleain Prance and Sir David Attenborough.

NEWS OF KEWITES AT HOME AND ABROAD IN 1998

Compiled by J.R. Woodhams

Following a rather hasty note from the compiler, **Louise Bustard** (1992) sent information about her own and **David Menzie's** (1986) work at Glasgow Botanic Garden. David, as Assistant Curator of Specialist Collections at Glasgow Botanic Garden, has responsibility for their orchids, ferns, carnivorous plants and the National Begonia Collection among others. David visited Thailand in April 1998, where he investigated forest orchids in particular. Also in 1998 David became a member of the R.H.S Orchid Committee and consequently now makes monthly trips to London.

Louise's title is Assistant Curator of Information and Customer Services and she has been part of a working team to produce education packs for teachers on all areas of environmental interest throughout Glasgow. The pack apparently includes a CD rom which details all the S.I.N.C.'s (Site of Importance for Nature Conservation) within Glasgow's city boundaries. These include 35 wildlife sites, five S.S.S.I's (Site of Special Scientific Interest) and two nature reserves. Louise has also been part of a project run by the Education Business Partnership to prepare children for the world of work. It seems there are only four of these projects currently around the world; in Washington D.C., Toronto, Oslo and Glasgow. In her letter, Louise relates that she was recently at a school in an extremely deprived area of Glasgow at a 'careers' day, though she says none of the youngsters were interested in becoming gardeners. However, she said she perked up when she heard one boy say "It must be great working in the Botanic Gardens". Louise enthusiastically agreed but he then went on "Yeah, being able to pick your own Cannabis every day, great!" Louise recalled that this even rendered her speechless. Thank you Louise for the information.

Ernie Chantler (1939) wrote to Richard Ward on 12th June commencing his letter "Whoopie! the *Journal* has arrived, time to throw up hats in the air". Ernie thought the 1997 *Journal* seemed to touch in all the right places and gave back the feeling of belonging – belonging to something vital. His letter continued in the same vein "news of big people doing important things and students putting their hearts into evolving careers – as well as enjoying themselves. God bless them all". Ernie expressed his thanks to Richard and the team who put the *Journal* together and signed off "One of the Oldies".

Ernie wrote again in October 1998 expressing thanks to those responsible for making available to Kew Guild Members the *Kew Guardian* and *Kew Scientist*. He wrote, "To read of the proposals, hopes, ambitions and plans of so many people with diverse and exciting futures can be truly exhilarating". He recommends that fellow Guild members devote sufficient time to read these publications and be aware of their content. Ernie commented that, sadly, there is always a moving-on process and mentioned in particular the retirement of **Roger Polhill**. He wrote "Next July we are informed the **Director, Professor Sir Ghilleain Prance** will retire. For far more important reasons than his undoubted photogenic charm Sir Ghilleain will be sadly missed". Ernie reminisced about lectures given to the students by **Dr Turrill** stating "Dr Turrill, at the start of each series



Ernest Chantler

of his inimitable lectures, used to impress on students the necessity to have on desk or table three essential documents: Dictionary, Atlas and Bible. His update I feel sure would be to allow copies of the *Kew Guardian* and the *Kew Scientist* to rest on a three legged stool nearby". The

compiler wrote to Ernie Chantler to ask if comment from the letters could be used in the *Journal* and to request a photo if one was at hand. Promptly the reply came back in the affirmative, together with an excellent photograph. Ernie commented "It seems a happy coincidence that your letter arrived on November 16th, my starting date at Kew in 1936". Ernie remembers arriving at the green door to the Melon Yard on that morning, just behind fellow Kewite **Roy Hudson** (see Obituary in *Guild Journal* Vol. 11 Number 96:62) and writes "Roy was ever smiling, full of vitality and energy, all of which was to stand him in very good stead during the war years. Many days on a raft in the Pacific Ocean would have had fatal consequences had not Roy been physically strong". In conclusion Ernie says that he often thinks of an unsung hero, **John Offley**, Foreman in the Palm House, during his time at Kew. He says that John thrived on hard work and with gusto supervised the re-tubbing of numerous palm species and the movement of vast amounts of potting compost. Ernie was given responsibility for House 15 during his time under John's supervision. Thank you Ernie for the information and the photo.

Walter Dunnenberger (1959) wrote to **Jill Cowley** enclosing his membership subscription and to say that he reads the various publications that are sent with great interest, especially the *Guild Journal*. Walter said "I was surprised to see the photograph of **Bob Adams** as Vice President (1996-97). Together with **Brian Carter** (1959), we three climbed a few peaks in the Swiss Alps in July/August 1961, including Weisse Frau (3,655 metres – Bernese Oberland) and the Stahl Horn (4,191 metres – Zermatt)". Walter says he hopes to visit his friends and especially Kew Gardens in the near future (letter dated 6.2.98). Lastly he indicates that he and his wife will be moving to Hungary in about a year's time – new address to follow! The letter brought back many memories for **Bob Adams** (1959), to whom it was passed before forwarding to the compiler.

Under the auspices of the British Executive Services Overseas, **Hans Fliegner** (1995) spent two and a half weeks in December with the Guangxi Institute of Botany and Botanic Garden, Yanshan, Guilin, China, to advise on various aspects of development and management of the Botanic Garden. Hans writes "This garden is one of 12 botanic gardens which belong to the Chinese Academy of Sciences. It was founded in 1958 and covers an area of 67 hectares with a collection of c.2,100 taxa. The unique limestone hills in Guangxi Province are the main attraction for a lot of tourists to Guilin and it is hoped that further developments in the Botanic Garden will lead to an increase of visitors in the future".

In response to a request for a few lines for the *Journal*, **Simon Goodenough** provided some interesting information about his involvement with the Ventnor Botanic Garden on the Isle of Wight. Simon also mentions the involvement of his wife **Deb**, who was an International Intern at Kew in 1984 and subsequently worked with **Hugh Syngé** at the Conservation Monitoring Centre during 1985-86. Simon writes: "After taking the post of Curator at the Ventnor Botanic Garden in 1986 I had the misfortune of seeing the garden destroyed by the worst winter in 200 years on the Isle of Wight (1986/87). Thinking things couldn't get worse, the infamous storm of October 1987 finished the job, so basically since 1988 I have been responsible for putting the garden back together. Deb joined me at Ventnor and worked as Nursery Manager for 10 years. In 1996 she took up the post of Regional Horticultural Officer for English Heritage (South East), with specific responsibility as Head Gardener at Osborne House, where she is responsible, with a staff of seven, for the major restoration of the Victorian Gardens. This includes the Royal Children's vegetable plots at Swiss Cottage, the re-development of the formal parterres and the restoration of Queen Victoria's Walled Garden (we also now live on the estate).

"At Ventnor I have been fortunate in obtaining a Millennium Grant for the development of a new Visitor Interpretation Centre. We are currently making the final arrangements prior to the building contractors arriving to start work. During 1999 we will be a building site! It is hoped we will be up-and-running in spring 2000. The garden at Ventnor is now visited by nearly 300,000 people a year and it has always been my wish to be able to present to the visitors an overview of the importance of plants to mankind. This project will go a long way toward meeting that wish. A small website has been created to enable people to get a flavour of the garden at Ventnor and can be found on www.botanic.co.uk".

Simon mentions that he and Deb went to the Island thinking they would try it for three or so years. However, 13 years and two sons on he says it is probable they have made the decision that they like it! Simon concludes, "Visitors are always welcome here. I am a serving member of the PlantNet Committee (the Plant Collection Network of Britain and Ireland), so I do not just stay on the Island".

Nigel Hepper, sometime President and Honorary Secretary of the Guild, is still keeping his hand in with plant taxonomy, in spite of being retired for several years. His latest publication is *Solanaceae* for the 'Flora of Egypt' (in *Taekholmia* add. ser.6, 165 pp., 1998). Also the new U.K. and U.S. hardback editions of his '*Planting a Bible Garden*' has been translated into Swedish, Norwegian, Dutch and German.

Antoine Hoog (1981?) included a few notes on a card to **Leo** and **Melda Pemberton** about his horticultural business in Holland in December. The business has moved to larger premises, including a packhouse, plus a hectare of land for growing bulbs and herbaceous plants. Land drainage had to be renewed after which planting commenced. Antoine indicated that business is growing, as they now run in the region of 1,500 stock lines and this year exported bulbs to China.

The Institute of Horticulture in collaboration with R.B.G. Kew held the 1998 Eric Gardener Memorial Lecture in the Jodrell Lecture Theatre on Saturday 24th October. The Speaker was **Peter Thoday**, his subject 'The Eden Project in Cornwall'. The compiler attended with wife **Joan** and noted quite a number of ex Kew Students and Guild Members also there including: **Graham Burgess** (1972); **Clifford Iles** (1969) along with **Brian Nash** (1967); **Rose Angel**, who retired as Head of Museums Department at Kew in 1985; **Jim Buckland**, Head Gardener for the Edward James Foundation at West Dean Garden in Sussex and his wife **Sarah**; **Chris Bailey** (1995), now Head Gardener at the Staunton Country Park in Hampshire; **Ian Leese** Head of the School of Horticulture at Kew, attended to organisational matters on the afternoon. The compiler apologises to anyone he may have missed.

Jim Mitchell (1966) wrote from Darwin, Australia, primarily to renew his subscription to the Guild and to say he had moved from Sydney, New South Wales, to Darwin in the Northern Territory; "A bit like moving from the Temperate House to the Palm House", Jim writes, adding "the months spent in those two fine glasshouses, some 30 years ago, has certainly proven worthwhile". Jim drove the 6,000 kilometres to Darwin in the family motor home, the journey being memorable and allowing visits to a number of botanic gardens in a variety of climatic zones. Along the journey they met up with **Jim Thomas** (not a Guild member? *Ed.*), who was at Kew in 1946 and is still very active, though retired as Director of Parks at Townsville in Queensland some 10 years ago. He was in post there for some 19 years and established a Pinetum of world standard. He also spent time as a Consultant to the City of Darwin, following the devastation caused by Cyclone Tracey in 1974.

Jim adds that he enjoys receiving news of Kew and circulates it widely in Australia. As a P.S. to his letter he says "If anyone from the gardens is visiting Australia we would love to hear from them. The Northern Territory, with its World Heritage listed National Park at Kakadu, is well worth a visit".

Patrick Nutt (1953) leads a very active life since retiring from his post at Longwood Gardens, Kennett Square, Pennsylvania. Patrick has sent three mailings to the compiler during the year enclosing information on his travels, lectures and athletic endeavours etc. From February 18th to 28th, 1998, Patrick participated in a *Victoria amazonica* seed and data collecting trip to the Amazon. The expedition was obviously a success, with seeds collected and distributed to Longwood Gardens, R.B.G. Kew and other botanical centres. To reach the particular areas where they were to collect, a vessel (the Harpy Eagle) and helpers were hired. Patrick writes, "We were very fortunate in having a very knowledgeable captain, Mocer Fortes, an excellent vessel with three long-boats and very good maps, provided by Professor Sir Ghilleen Prance, Director of Kew and one of the world authorities on this particular genus". Patrick has lectured on the Amazon visit with one such presentation given at the Washington and

Baltimore Water Lily Symposium held in July, where he also participated in work sessions regarding the propagation of Tropical Water Lilies. At the end of the symposium, delegates were bussed to Longwood, where Patrick and colleagues gave behind the scenes tours.

Patrick visited the U.K. twice during the year, once in early June with a colleague visiting, among others, West Dean College (The Edward James Foundation) in Sussex and staying with **Sarah** and **Jim Buckland** (1982), Threave Gardens in Scotland, R.B.G. Kew and the R.H.S. Garden at Wisley. In the latest mailing (September) Patrick writes that he and Ann are enjoying their 40th Wedding Anniversary in the U.K.

Patrick enjoys his running again, after a down spell in the early 1990s. He enclosed a Certificate of Participation in some eight events in 1997 in the Mid-Atlantic Association of U.S.A.T.I.F.'s Grand Prix Circuit, with race distances from five to 20 kilometres. Patrick was named top runner in the 65-69 age group and pictured in the press with a race trophy and the family dog! In his first mailing he included a photocopy letter from **Michael Dodge** (1964) (not a member? *Ed.*). Michael wrote to Patrick and Ann at some length about his year (1997). Michael had visited England in the early part of the year to see his mother and sister and in May, a trip to Holland to photograph the bulbs and meet up with friends; returning again to Holland in September to photograph late summer gardens. Michael mentioned that his 26 year employment at White Flower Farm ended in November and he has plans to become a garden consultant, photographer and garden writer. December would see him back in England enjoying a trip to the Lake District.

Topher Martyn (1997) is now Head Gardener for the Duke of Northumberland at Syon Park. Topher intends to work closely with R.B.G. Kew with regard to providing, as far as possible, more diverse wildlife habitats at Syon, especially to encourage our native butterflies. **Sandra Bell** (Orchid Unit Manager at Kew) informs the compiler that the Royal Mid Surrey Golf Course also intend to link in with the other two establishments, thereby creating a considerable and varied habitat devoted to our native butterfly species.

Professor Sir Ghilleain Prance hosted the then Minister of Agriculture, Dr. Jack Cunningham, when he visited Kew on 7th July, 1998. Dr. Cunningham was shown some of Kew's work and buildings, including the new Herbarium extension, the rebuilt Japanese Gateway and Garden, Museum No. 1 and the Jodrell Laboratory. Dr. Cunningham also officially opened the new Lower Nursery development. This project was almost totally M.A.F.F. funded, though a private donation

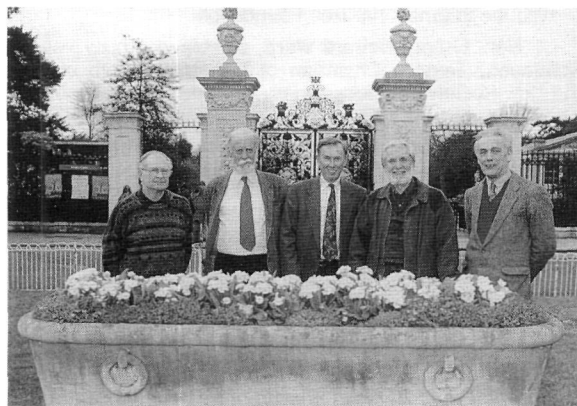


Dr. Jack Cunningham officially opening the rebuilt Lower Nursery.

was generously made by Mrs. Thiemann to fund the Orchid House facility. The new nursery glasshouse complex occupies a larger area than the old glasshouses and growing facility and, with the individual plant zones linked by a wide corridor, all aspects of cultivation can be undertaken within the covered environment. Tropical Section staff are pleased to have their plant collections back in one place, after having to utilise space in various other areas at Kew during the period of rebuilding. The Director and members of Kew's management team and Tropical Section staff were in attendance for the opening ceremony. The compiler and wife Joan were pleased to be at the official opening. In the photograph are (left to right): **Jennifer Hirsch**, student on the Kew Diploma Course; **Peter Bradley**, Unit Manager Ferns/Succulents, Tropical Section; **John Woodhams** (retired), A/C Tropical Section; **Sandra Bell**, Unit Manager, Orchids, Tropical Section; **Jeremy Bayliss**, Chief Executive R.B.G. Foundation and Friends, **Mrs. Thiemann** and **Michael Godfrey** (retired), Manager of the Friends Organisation and currently Secretary of the Bentham Moxon Trust.



The *Kew Scientist*, April 1998, Issue 13 page 6, featured information relating to an unusual number of changes in scientific staff and awards to scientists working at Kew. **Dr. Mark Chase** was awarded the Linnean Medal by the Linnean Society, in recognition of his outstanding contribution to higher level angiosperm systematics. Six Ph.D. theses were defended successfully, three of these by Kew staff: **Eimear Nic Lughadha** undertook 'Systematic studies in *Gomedesia* (Myrtaceae); **Mike Maunder** researched the 'Botanic Garden response to the Biodiversity Crisis: Implications for Threatened Species Management' and **Peter Roberts** studied the 'Morphological and Molecular Systematics of the Ceratobasidiales'. Under 'changes' page 6 informed that a number of Kew's senior botanists had officially retired, though many are continuing their research at Kew and so



continue to pass on their experience and enthusiasm. Pictured left are (left to right) **Dr. Roger Polhill**, who retired as Assistant Keeper (Dicots 1) in November 1997; **Alan Radcliffe-Smith**, an expert in *Euphorbiaceae*, retired in January 1998; **Dr. Keith Ferguson**, retired as Deputy Keeper of the Herbarium and Assistant Keeper (Dicots 2) in February 1998; **Mark Coode**, an authority on *Elaeocarpaceae*, retired in September 1997 and **Dr. Peter Brandham**, retired as Head of Cytogenetics in October 1998.

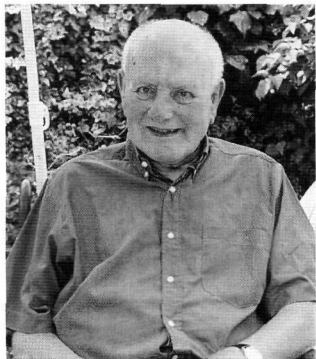
John Simmons (1958-1995) continued his support to the Castle Howard Arboretum Trust, particularly preparing for its initial weekend openings in 1999 – Castle Howard's Tercentenary Year. Work for R.H.S. Tours allowed leadership of a pleasant spring cruise around the British Isles visiting gardens followed by an autumn return to western Sichuan, managing a tour for the British Clematis

Society. He also continued with his private consultancy work and support to various charities. A part of the latter was in the joint authorship of a book published in 1998 on *'The Gardens of William Morris'* for which income goes to Flora for Fauna. The subject of this book was also delivered in the Festival Hall to the National Trust, as a joint lecture with Jill Duchess of Hamilton.

John was also given a special award by the Institute of Horticulture in recognition of his services to botanic gardens and plant conservation.

Mark Sparrow, presently Unit Manager for the Temperate House, Palm House and the Evolution House at R.B.G. Kew, is moving (January 1999) to take over as Curator of Horticulture at Chester Zoo. Mark will be following **Dez Evans**, who moved there after completing the Student Course at Kew in 1962. Possibly others from Kew have been associated with Chester Zoo over the years. Mark indicated that the Zoo is embarking on a policy of using plants to create more naturalistic habitats for the animals, where that is possible, and they also wish to see botanically interesting and relevant plant subjects used to boost the general collections and plantings there.

Saturday afternoon on the 20th June, 1998, saw a group of well wishers gathered at 88 Latchmere Road, Kingston, to celebrate the 80th birthday of **William (Ted) Storey** (1952). Since Ted's stroke (which made him dependant on a wheelchair) he was looked after by Tina and Bashir Dilmehomed, who shared the house with Ted, though more recently by his resident helper, Wendy. Wendy organised the party which Ted appeared to thoroughly enjoy (see photo left). **John** and **Joan Woodhams** were invited along and **Kenwyn Pearson** sent a card on behalf of the Guild. It was good to meet **Penny Cudd**, who visits Ted from time to time. Members will recall the untimely death of **Mike Cudd** in May 1984 (see Obituaries in *Guild Journal*, Vol. 10, Number 89: 359). One of Mike and Penny's sons is following his late father and pursuing a horticultural career.



Ian Turner (1992) has moved from the Staunton Country Park and is now Horticulturist at the Paignton Zoo in Devon. The compiler hears that Ian is working to develop the plant collections there and building links back to R.B.G. Kew, to Knightshayes Garden, also in Devon and with the International Tree Foundation.

Hon. Editor, **Richard Ward**, combined a busy year of Presidency of The Kew Guild; Community Service Chairman of the Rotary Club of Kew Gardens; Committee member of the Kew Society and occasionally went out with his two staff members to try to earn a living as a landscaper and garden maintenance specialist!

John Woodhams (1995) devoted time during the year to a project to refurbish an interesting, possibly turn of the century, 11 metre long Fernery attached to a private house on the Kew Road in Richmond. Though the original upper wood structure had deteriorated the sculpted Tufa planting wall and associated stream were in surprisingly good condition. Once structural refurbishment was completed, planting was undertaken and, with a new heating system, lighting and controls in place, a tranquil haven from a past era has acquired a new lease of life.

COMMITTEE DELIBERATIONS DURING 1998

Your Committee met in January, March, July and October. Varied matters were discussed including: Trustees; Award Scheme and rules; membership; Friends of Kew help; organisation of Guild events/venues/dinner; Guild Room use; Committee membership; subscription arrears, *Journal* format and advertising; students and the Guild; insurance; review of Committee structure; Guild website and database; Guild finances and investments; Guild prizes to students; patron; millennium ideas; Christmas cards; Charity Commission; subsidies for possible regional Guild meetings and students; archives.

THE KEW MUTUAL IMPROVEMENT SOCIETY REPORT 1998/99 Around the World in Thirty Lectures

By Christopher Weddell and Christine Lavelle

It seems so long ago, back in April, that the present Committee was proposed and elected. The whole Committee, of international flavour, consisting of Co-Chairmen Christopher Weddell and Christine Lavelle (the comedy duo of old), Honorary Secretaries Claudia Heideker and Jennifer Hirsch and Honorary Treasurer, Rosminah Brown, got down to the unenviable task of contacting possible lecturers: people they knew were just aching to meet the Kew Mutual, but just didn't know it!

Through hard work, perseverance and a lot of luck, much to our surprise the lecture dates filled out; to such great success that in a moment of weakness it was decided the season would be extended for a further four weeks so as to accommodate as many speakers as possible. Unfortunately, the line had to be drawn somewhere and as a result we had to leave many excellent speakers banging at the doors. The organisers just hope that this decision does not come back to haunt them with half the series still to go!

The brain-storming sessions at the start of the season revealed to the Committee that the Kew Mutual really needed dragging into the 20th century, particularly as the 21st century is rapidly approaching! So, bang up to date, the Society now boasts a membership list held on a database devised and maintained by William Macalpine; firstly to assist in tracking membership numbers and, more importantly, to help the Committee to keep in touch with their members. Mailshots to members are to be organised for the start of each season in order to give the Society the attention it so richly deserves.

Also in the pipeline is a database of past, present and future lecturers, both professional and academic, which will serve to ease the annual transition between the retiring Committee and the eager new faces of the next year.

Last, but not least, to help publicise the Society and the lecture series, we now have our own dedicated web pages on both the internal and external Kew sites (<http://www.rbgkew.org.uk/>).

With 32 events to go, the season started in familiar territory with the Cheese and Wine Party for the incoming First Year Diploma Students, held in the grounds of Cambridge Cottage. For the third year running this was an all-singing, all-dancing, full-blown barbecue and was well supported by students, staff and members alike. For the first time the event was filmed for television as part of the documentary series to be shown on Channel 4. Soon it may well be Kew Mutual Improvement Society 'As Seen on TV!'

Starting with a bang, the first lecture was one to remember. Roy Lancaster seemed to make time stand still when he presented an expert lecture on 'Plants, People and Places'. He started with tales of his childhood and moved on to stories of plant hunters and their great expeditions. In all he managed to talk easily for over 90 minutes – his enthusiasm was infectious and the time passed in a blink of an eye.

This season we had to wait until the fourth lecture for the first of the travel scholarship reports. As always, these lectures have been especially well attended and the audience has not been disappointed, either with the content of the lectures, or with their delivery. The standard just seems to get higher every lecture: our student lecturers can easily give professional lecturers a run for their money! So far this season we have travelled around the world: Trevor Wiltshire took us to Turkey with his informative talk about alpinists; we were shown Kenya's disappearing flora with Bernard Riley and, at our Christmas Lecture, Michael Lavelle (the long-suffering husband of Christine) took us to Zimbabwe with a superb lecture on land sustainability, all without leaving the Jodrell Lecture Theatre!

The Third Year Students took us even further afield. Emma Fox and Chris Cole both went to America to look at education and cacti respectively. Kathy King travelled to South Africa to look at its flora. But the prize for the most air-miles travelled has to go to Anthony Blanchfield, who went all the way to Japan to investigate peony gardens.

Two excellent lectures were given on plant medicine. The first was by Linda Pilgrim, who introduced us to **Theriatic**, the ancient cure for almost all illnesses, poisonings and hangovers (attendees were seen to be taking copious notes on this one – for future reference maybe?!). Sue Minter gave us the big picture on the theme of natural remedies with a lecture on the 'Conservation of Medicinal Plants'.

The 'items of interest' section has been a great success this year, with many people clamouring to present short items before the main lecture. At times gentle arm twisting has been required, but many have seen it not as an ordeal to go through, but as a great opportunity to practise public speaking in front of a gentle audience. This year the section has been themed on the 'A-Z of Plants'. At times the links to this theme have been tenuous to say the least, but the talks have in every case been interesting and highly informative.

Unfortunately, by the Christmas break the Society had lost two of its permanent Committee members. As the saying goes: to lose one could be said to be unfortunate, but to lose two is carelessness. The Committee certainly felt the loss – the help and support of both Dr. Peter Brandham and Dickon Bowling will be greatly missed. They were both very active in the society, both behind the scenes and in the public eye. Dickon, who retired from Kew at Christmas, was always to be found with the slide projector in the centre of the lecture theatre, helping people with their slides for the items of interest. Peter, who retired from Kew in 1996, left at the start of the lecture series due to the development of his own lecturing career. He found he could not give the Society the time he felt it deserved, but he will always be remembered for his excellent lectures on photography, that have obviously been heeded by many of the students, especially those with travel scholarships, whose slides have been superb.

Each of the retiring Committee members was given a hearty send-off. Dickon seemed to get the more outlandish farewell, with the appearance of W.P.C. Galore (aka Christine Lavelle) to complete the presentation.

The gaps in the Committee have been filled by William Macalpine and Tom Reynolds, whose contribution to the running of the Society will be gratefully and enthusiastically received. Brave men.

At the time of writing, future lectures promise a wealth of information. Four more student lecturers will be taking us even further afield: to the **Bromeliads** in Costa Rica with Iris Otto-Knapp; the **Cycads** of Mexico with Paul Pollard; **Rafflesia** hunting in Borneo with Helen Long and to the Indian Ocean Island of Reunion with Emmanuel Spicq.

Still to come we also have Timothy Walker, talking about one of his favourite plants, **Euphorbias**; Christopher Crowder on 'The Topiarist's Tale'; Nicholas Wray on the 'Plants of the Southern Cape', as well as four Kew staff: Sandra Bell and the Orchid Crew, Peter Gasson, Colin Clubbe and Tony Kirkham talking on **Orchids**, the wildlife of Australia, the flora of Monserrat and the flora of south-eastern Asia respectively.

We feel it has been a great season with some wonderful and interesting talks given by dedicated and enthusiastic speakers, all giving their lectures for free. Without them, the Kew Mutual Improvement Society would not be the success it is, and we give our sincere thanks for their valued contribution.

The number of people attending each week has been steadily rising over the last few years, and this year has been no exception. Many staff from all areas of Kew, not only from the Garden, Kew Interns and Diploma Students and the students of R.H.S. Wisley, as well as the general public, have been attending. If you are interested and wish to attend, the first lecture of the 1999-2000 season is due on 20th September 1999. The diary can be found on the web pages or the School of Horticulture can be contacted on 0181-332 5545 for diary requests by post. Remember, the Kew Mutual Improvement Society is your society and welcomes your support.

THE KEW STUDENTS' UNION ANNUAL REPORT 1998

By Rob Allison, President

Following on from the departure of Course 33, elections for new Student Union positions and Course Representatives were held in August. Courses 34 and 35 were present. Rob Allison was voted in as President; Christine Lavelle (Course 35) as Treasurer; Sarah Horne (Course 35) as Secretary and Chris Burnett as Sports and Social Representative. Sadly Chris left the course in September and returned to Leeds where he now works. A recent addition to Course 34 is Dan Slack, returning to the Diploma in January 1998, following a long illness after originally starting with Course 32. Dan has fitted in well with Course 34, surprising colleagues on his knowledge of smew.

This year's study tour took place in March, with Course 33 splitting into small groups and visiting varied locations including Arizona, Kerala (Southern India), and Florida. The proposed study tour for 1999 will be to Almeria in Southern Spain. Course 34 will join Reading University students and complete a variety of ecology based projects. The tour is partly funded through scholarships, the rest of the money being raised by the students through plant sales, plant auctions and raffles.

Travel scholarships in 1998 saw students from Course 34 visiting a variety of countries and habitats. The Americas proved a popular destination for many: Chris Cole travelled to Arizona, studying the propagation of **cacti** and **succulents**, including a visit to Biosphere 2; Iris Otto-Knapp visited Costa Rica to look at **Heliconias**; Emma Fox looked at education techniques, travelling to New York and Philadelphia and Paul Pollard looked at the conservation of endangered habitats in Mexico, following an inspirational meeting with **cacti** expert, Brian Goodey. Other countries visited included Borneo, where Helen Long studied cultivation and propagation techniques of **Rafflesia**; Emmanuel Spicq visited Reunion and studied conservation policies of threatened Mascarene flora; Tony Blanchfield looked at the techniques for growing **Paeonies** in Japan and Kathy 'Gunga' King studied the flora of South Africa, as well as attending the B.G.C.I. Conference held at Kirstenbosch.



Course 36 pictured at the start of the Clog and Apron Race.



Mirco Berenbrinker, winner of the Clog and Apron Race for Course 36.

Greg Mullins (Course 33) spent five weeks in Jerusalem after winning the Jerusalem Botanic Garden Scholarship. Leigh Hunt (Course 34), following scholarship funding from The Kew Guild and The Merlin Trust, was able to visit and study the plants and gardens of Italy. Similarly, James Furse-Roberts (Course 34) received funding and was able to travel around England studying British flora.

In August Justin Turner (Course 34) completed a two week cycle ride from Land's End to John O'Groats. This helped to raise £1,200 for the Alice Whitmore Smile Appeal. Three year old Alice suffers from facial paralysis on her right side which prevents her from being able to smile.

Student representation from all three years continues to be a major and important facet of the student body. This includes regular curatorial meetings with Ian Leese (Principle S.O.H) and Nigel Taylor (Curator), as well as representation on the six monthly independent panel meeting. These meetings allow students to provide useful feedback and voice their

views on a variety of subjects. The outcome of the meetings often lead to changes within the course, which is very important, allowing the Diploma to continually evolve.

No information on Students' Sports and Social Events was submitted this year (Ed.).

THE LIVING COLLECTIONS DEPARTMENT AT KEW AND WAKEHURST PLACE DURING 1998

By Nigel Taylor and David Hardman

KEW

Weather and its effects

1998 will, perhaps, be best remembered as the end of a three-year period of drought, or rather as the year of the great soak. However, the first quarter did not give us any hints as to what was to come – neither January nor March were particularly wet and an exceptionally mild February was one of the driest ever, with only 5.4 mm recorded. Then came April, with over 100 mm, followed by a dry and bright May, when it looked as if the drought might return. June was an unwelcome repeat of the previous year, being very wet (126.7 mm!) and cool, which seemed to set the tone for the remainder of 1998, only a brief spell of hot weather in August serving to break the monotony of rain and more rain. By the close of the year the total rainfall had reached 762 mm, which is 26% above average and the wettest year since Kew began recording the weather in 1980.

Starting a report with the weather may seem a particularly British trait, but in truth it did determine quite a lot of what was done in the Living Collections in 1998. Early in the year extra resources were made available to help combat the effects of long-term drought in the Arboretum and Herbaceous Sections. First, much of the sward areas at the Kew site were visited by a tractor driven Vertidrain machine, hired in to perforate and aerate our compacted soils and allow any water that fell to penetrate down to where it was needed. Secondly, *previous periods of prolonged dry weather had taught us that irrigation can be troublesome in that mains water pressure tends to fall rather low and the visiting public are apt to comment adversely on our use of the water, as well as the inconvenience that trailing hose-pipes can*

cause. Therefore, we decided to bury our old hoses in the ground, out-of-sight, and connect these to trickle irrigation lines that function well when the water pressure is low. Thirdly, a new practice of mulching selected mature trees was adopted, the process beginning with the use of a Terravent machine, which injects nitrogen gas into the ground at high pressure to aid decompaction and at the same time introduces beneficial fungal mycorrhizae spores. Finally, it was thought that a longer term solution to our problems might be to locate our own supply of water, so the Buildings and Maintenance Department arranged for a bore hole to be sunk into the chalk deep below the ground near the Stable Yard. Unfortunately, this drought-stimulated project seems to have been the only one to have had more limited success, since the bore hole has realised less water than had been hoped for.

Visitor numbers were strongly depressed for the second year running and it is true that the frequently inclement weather did not help, although many similar attractions in the U.K. also seem to have suffered reduced numbers, perhaps in part a result of the strength of Sterling having discouraged foreign tourists.

Arboretum and Horticultural Operations Sections

A mild spring followed by the damp summer saw vigorous growth of many trees and shrubs, whose leaf-cover and leaf-size were notable compared to earlier dry years. The Arboretum Unit were once again kept busy removing dead and ailing trees – the legacy of the three-year drought – but elsewhere the Gardens were being renewed, with the opening of a refurbished and re-interpreted **Philadelphus** Collection in June and the completion of the new Lilac Display ready for opening in 1999. The mulching of about 15 of the more outstanding trees already referred to was supported by explanatory interpretation and this attracted favourable comment from the visiting public. The Arb Unit were not only busy on site, but also get called upon to give courses abroad. In 1998 such locations included Bahrain and Argentina! The Arboretum attracted interest from the press when a new guide to the world's endangered trees was released in late summer. Amongst others they focused on the U.K. endemic, **Sorbus pseudofennica**, whose brightly coloured fruit subsequently gained it an Award of Merit when exhibited at the R.H.S. Another occasion that saw Kew in a positive light in the press, was the May visit of the Emperor of Japan, whose tour included the Japanese Gateway and surrounding Landscape. Star of the occasion was Jennifer Kirkham, eight year old daughter of Tony (the Head of Hort. Operations), who charmed the Empress and press alike.

The great glasshouses: Tropical and Temperate Sections

It would be remiss not to record here the 150th anniversary of the opening of the Palm House, which was duly celebrated one weekend in mid October, by staff dressing up in appropriate early Victorian gear. Although the weather forecast had predicted a wash out, all turned out fine and Kew gained much needed publicity, not to mention plenty of visitors. As one house reached a century and a half, behind the scenes the brand new and shiny Lower Nursery began to fill up with tropical greenery and was formally opened and admired by Dr. Jack Cunningham, Minister of Agriculture, on 7th July. A repeat ministerial visit occurred in December, when his successor, Nick Brown, toured this impressive 6,500 square metre facility and also the Evolution House. The Orchid Festival during February and March built on the success of previous years and was once again a welcome boost to visitor numbers, aided by unusually mild early spring weather. Later, the Princess of Wales Conservatory (P.o.W.C) saw a visit from the President of Peru, who came to view an exhibition of very life-like statues of amazonian indians, whose presence amongst the tropical luxuriance was an entertaining, as well as appropriate, setting that many a schoolchild visitor will long remember.

In the Temperate House, which in 1999 will celebrate 100 years since its completion, a number of changes have been effected. First, the South African display in the South Octagon has had a new lease of life and is growing vigorously. Secondly, the New Zealand display in the North Octagon has been thinned and much improved by the addition of a beach-like mulch of large pebbles. Thirdly, the Australian collections in the central section of the house were replanted and

augmented with material donated from a Chelsea Flower Show exhibit mounted by King's Park, Perth. The balance of their material formed a temporary display at the North End of the P.o.W.C. and was considered a very good exchange for the help Kew staff gave to King's Park at the Show.

Herbaceous and Technical Sections and conservation activities

Spring came very early in 1998 and Herbaceous Section staff were kept busy on a variety of projects additional to their normal duties. One of these was the preparation, in some haste, of the plantings around the Palm House Pond in time for the re-opening of the refurbished Museum No.1 by the Princess Royal in May. Another was the re-opening in June of the Queen's Garden behind Kew Palace, which attracted good media coverage, reflecting the current interest in herbal remedies, as are described in the well interpreted Nosegay Section of the garden. Other developments, included the planting of a Robinsonian Meadow near the Temporary Cycad House, generously sponsored by a Kew Friend and the first phase of a new **Peony** reference collection, also achieved with sponsorship via the Kew Foundation. As in other years, the section was rather successful in obtaining awards for plants exhibited at the R.H.S. and it was also particularly pleasing that Tony Hall was awarded the Foster Memorial Plaque by the British Iris Society in September. Outstanding and in receipt of frequent praise was the Grass Garden, which responded very positively to the abundance of moisture and the constant care lavished upon it by Mary Thorpe. The 'summer' bedding along the Broad Walk and Palm House Parterre was a success despite the lack of good summer weather, a fact which had various other gardens enquiring about our methods.

Conservation is a significant area of Kew's business nowadays and none less so than in the Living Collections Department (L.C.D.). Much of this is co-ordinated through the Herbaceous and Technical Sections and involves a variety of research techniques and capacity building activities. In Technical's Conservation Genetics Unit (located in the Jodrell Laboratory), a range of 'high-tech' investigations is revealing the status of various endangered taxa, both in the U.K. and abroad, while in the Micropropagation Unit tiny orchid seedlings, amongst many other plants, are raised for re-introduction to the wild, partly supported by English Nature. The Conservation Projects Development Unit, a part of Herbaceous Section, is involved in many projects overseas, including the U.K.'s own dependent territories (now renamed Overseas Territories) as well as East Africa and Mauritius. During the year staff both visited and received visitors for training purposes from many of these locations, an activity which frequently involved staff from the Temperate Section also. The current project encompassing most aspects of L.C.D.'s conservation expertise is our Kew Friends sponsored Threatened Plants Appeal, supporting work on 10 endangered species found amongst the Living Collections. This has been so successful that we have recently decided to select a further 10 species for action, three of these being British, one of which is actually native on our Wakehurst Place estate: the moss, **Orthodontium gracile**.

The Kew segment of this report would not be complete without reference and acknowledgement to two individuals from Technical Section who retired in 1998, both after completing more than 30 years' service at Kew. The first to retire, in August, was Jim Keesing, who has been the backbone of Kew's public enquiry provision and phytosanitary controls for as long as anyone could remember. The second was Dickon Bowling, Scientific Officer in the Micropropagation Unit, who is best known for his contribution to the Mutual Improvement Society and for recording the last 19 years of Kew weather. We will miss both of these well known characters and wish them happy retirements!

WAKEHURST PLACE, 1998

By David Hardman, Head of Collections

For the first time, Wakehurst Place became the National Trust's number one visited garden with annual visitor numbers in excess of 305,000. This is attributable to the continued improvements in the garden, since the great storm, by Wakehurst Place's dedicated team of staff.

The unusually mild winter weather in February saw one of the best ever displays of winter and early spring flowers which received much acclaim by staff and visitors alike. All the magnolias were spectacular with special mention to the **stellata** types. The mild weather and lack of long periods of frost ensured flowers of **camellias** and early **rhododendrons** were not damaged. The fragrances of the **Daphne bholua** and **Sarcococca** plantings in Westwood Valley were carried on the balmy winter air through the Slips, so that visitors were greeted by this evocative scent well before they reached the plantings. The Winter Garden was sensational with flower, foliage, coloured stems, barks and wonderful perfumes filling the air – a pleasurable attack on all the senses.

The Wakehurst Place Landscape Plan was published in March and gives the aspirational vision for the long term development of the gardens. Similarly, the *Schedule of Special Qualities*, which recognises qualities and values of the estate and expresses them as significances was completed.

Summer weather resulted in an amazing amount of new growth compared to previous years, although the very high temperatures recorded in August did cause scorching to some young trees in open situations. Concern focused on whether this new wood would ripen sufficiently to withstand the winter. This is particularly important for species that are borderline in their hardiness and those that often put on extensive lamas growth. For example the **Nothofagus** collections gathered from the Kew expedition to Argentina in 1993 and subsequent contacts in Chile, have all established well with **N. betuloides**, **N. dombeyi**, **N. obliqua** and **N. nervosa**, all putting on extension growth between one and two metres each year. The Chilean provenance of **N. obliqua** often continues growing much later than the Argentinean stock and may flush in September, finally dropping its leaves in December. This unripened wood is often lost during the winter.

Bloomers Valley was given a boost by the establishment of trees from the 1995 Kew expedition to Pakistan and the Howick and Macnamara collections from north east India. Groups of **Corylus jacquemontii**, **Acer cappadocicum**, **Acer acuminatum**, **Crataegus songarica**, **Prunus cornuta** and **Juglans regia**, **Betula utilis** var. **jacquemontii** have all established well.

Material from our collections of **Eucryphia** was displayed for Committee members of the R.H.S. Floral B Committee as part of a review of the genus. Development work continued in the Ditch Beds ('Lady Price's Bog Garden'), the West Mansion Border and the Specimen Beds, in line with the Five-Year Plan. Christmas tree sales increased by 20% and 3,600 trees were added to the plantations. The Scots and lodgepole pines seem the most robust and problem free.

The **Stewartia sinensis** on the lawn in front of the Mansion has been declining since the 1987 storm. Garden staff decompacted the soil using nitrogen injection and mulched a three metre area around the trunk. This tree may be one of the original plants introduced into cultivation by Wilson.

Receipts from The Friends' Plant Auction in June will pay for new oak signage in the gardens. The Bluebells Weekend in May and the Autumn Colour Weekend in October were again very successful events, with visitors enjoying vehicular tours given by horticultural staff and Rangers and Guides providing their informative guided tours.

The August Bank holiday weather was kind, allowing good attendances on each day of the Craft Fayre with a Robin Hood theme used to attract interest to this regular event. Woodland Skills Day on 6th September saw new skills demonstrated, including steam bending and ancient woodworking. The educational theme was expanded to include components of sculptures and story telling.

"*The Dendrologist's*" Alan Mitchell Annual Memorial Lecture was hosted by Wakehurst Place on 7th November and included an illustrated talk, followed by conducted tours of the gardens.

Even a very wet evening was no deterrent to the visitors attending the Carols' Concert alongside the largest lit "Christmas Trees" in Sussex. They sang heartily in the Carriage Ring, to the accompaniment of the Burgess Hill Salvation Army Band and three choirs, again Master of Ceremonies was David Hardman.

A first time visitor to the Loder Valley Reserve was a Little Egret which could be observed feeding for three weeks in July. A total of 24 species of butterfly were recorded there this year. Lastly, Keith Boyer retired after 50 years of association with the Wakehurst Place estate and 18 years as L.V.R. Warden.

KEW PRESENTS ONE OF THE "SCENTS OF SUMMER"

Philadelphus gets a Prominent New Display

Sponsorship amounting to £25,000 has enabled the Royal Botanic Gardens, Kew, to turn its collection of **Philadelphus**, often known as "mock orange", into a major feature in a part of Kew Gardens – around the base of the Pagoda – never used as the site of a collection before.

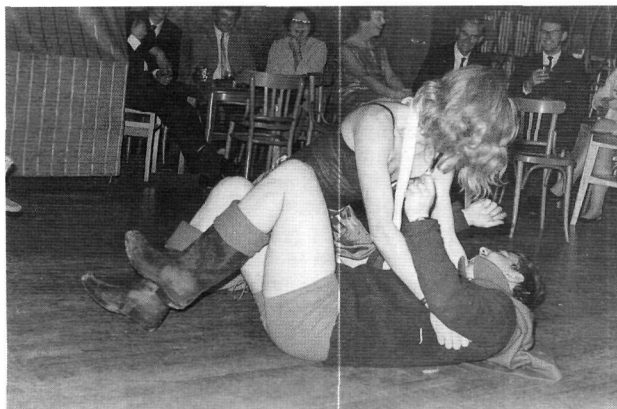
The collection which, since the 1930s, had been accommodated in two beds in the south of the Gardens, suffered from lack of space so that all the original plants sent to Kew by collectors eventually died off. The hybrids that remained were of poor scientific value.

The new feature consists of 19 beds, 14 of them for species and five for cultivars. All of the species have been through a verification programme run by Kew's Herbarium. Fifty-six per cent of the known woody species are represented.

Mark Bridger, Unit Manager of Kew's South Arboretum, who had much to do with the creation of the new feature, says the generosity of the sponsors, Mr. Giles Coode-Adams, former Chief Executive of the Kew Foundation, and Mrs. Coode-Adams and Mr. Philip Gwyn, Chairman of Christies Group plc and Mrs. Gwyn, enabled the Gardens to display the wonderful range of highly-scented **Philadelphus** which is found in many parts of the world. "At the same time," he adds, "we have utilised a focal point of the gardens at the end of the long vista looking towards the Pagoda."

THE OTHER SIDE OF KEW (1971)

A New Series of Exposés from Graham Burgess



Supervisor of Studies Leo Pemberton looks proudly on as two of his students complete an essential part of the Study Course, possibly on the "Management of Staff".

An unknown male in women's clothing is about to do something to Don Every.

Dr. Cutler's presence in the background may have something to do with his work on Anatomy, his specialism.

THE DIRECTOR'S ACTIVITIES DURING 1998

By Eleanor Bunnell, Director's Secretary

This last year has been as busy as ever for the Director, Sir Ghillean Prance. During 1998, he has attended external meetings on behalf of Kew, given lectures, welcomed visitors and V.I.P.s, pursued his research – all this whilst running Kew at the same time.

The building of the Millennium Seed Bank at Wakehurst Place is going well and is on schedule and will be completed during Summer 2000 and the seed collecting is on target. It has been exciting to see this whole project coming together and the staff involved are working extremely hard.

The Director travelled to Paris and Mexico to attend DIVERSITAS meetings. He received the prestigious International Award of Excellence from the Botanical Research Institute of Texas in March and received an honorary doctorate from Lehman College, City University New York.

He attended systematic symposia at Stockholm and St Louis, Missouri, a Society for Economic Botany meeting at Aarhus, Denmark, the B.G.C.I. Conference in South Africa and the Latin American Botanical Congress in Mexico. He also travelled to Brazil for research and meetings and to Japan as a member of the Advisory Board for the International Prize for Biology.

Sir Iain gave about 30 lectures this year, the majority of which were on the work of Kew or about the Millennium Seed Bank. He travelled to Norfolk, Virginia, to give the President's Lecture at the Old Dominion University. He gave the Admiral Arthur Phillip address at St. Mary-le-Bow in the City of London and the Annual Lecture at the Royal Agricultural Society of England. He also lectured at the Universities of Oxford, Cambridge, Reading, Strathclyde, Canterbury and Kingston. Included in the list of lectures given are ones to the Tibetan Peace Garden Appeal, Hertfordshire Garden Trust, Institute of Biology, Mole Valley District Council and the National Trust for Scotland.

The Director has been to Edinburgh several times to advise about the recruitment of the Regius Keeper of the Royal Botanic Gardens, Edinburgh. He has had many interviews with the media this year and joined the 'Mid-week' programme on BBC Radio 4 in July. He also received an honorary doctorate from the University of Liverpool, which means he now has a total of 10 honorary doctorates!

OTHER NEWS

Flashback TV are filming a year in the life of the School of Horticulture Diploma students for Channel 4, which should be interesting to see when it is shown on T.V. Three three-day training and planning workshops have been held for Heads of Departments, which have been particularly fruitful and very useful.

There have been many important visitors to Kew during 1998, particularly in May, when the Princess Royal came to open Museum No. 1 and the Japanese Emperor and Empress visited. The Director was later invited to tea with the Emperor and Empress in Tokyo when he was there on behalf of the Committee for the International Prize for Biology. He also met the Emperor in his capacity as President of the Linnean Society of London and joined the Emperor on a visit to Wells Farm in Buckinghamshire. The President of Peru came in July and gave a lecture. The Rt. Hon. Jack Cunningham as Minister of Agriculture, Food and Fisheries, visited in July and his successor, the Rt. Hon. Nick Brown, in December. Dr. David Shannon, the M.A.F.F. Chief Scientist, opened the new Herbarium extension in November. Princess Sirindhorn of Thailand came to Kew to give the 1998 Environmental Lecture in December. Professor Victor Kuzevanov from Irkutsk Botanical Garden visited Kew for a study period of 10 weeks and was a popular figure who mingled well with Kew and its staff.

Giles Cooder-Adams and David Hassett received the Kew Award this year for the work they have done for Kew. Sir David Attenborough gave the prizes at the School of Horticulture Prize Giving in September. A very successful weekend was held celebrating the 150th anniversary of the Palm House and it received excellent press coverage.



Lady Lennox-Boyd, Lord Selborne and Mr. Bob Bauman retired from the Board of Trustees. Mr. Bauman has remained on the Board of R.B.G. Kew Enterprises. The new Trustees are Mr. Iain Oag of Allied Domecq, Mrs. Rosalyn Franklin, a garden designer and Mr. Richard Laphorne of British Aerospace, who is well known to the Foundation and Friends of Kew. Sir Jeffery Bowman was appointed the Queen's Trustee in place of Lord Selborne.

Mr Roger Smith has been appointed Head of the Millennium Seed Bank, which was established as a new Department. During this year the senior staff who retired were Keith Ferguson, Martin Sands and David Pegler.

Sir Ghillean will be retiring from the Directorship of the Royal Botanic Gardens, Kew in July 1999 and his successor is Dr. Peter Crane, FRS.

Pictured left: Professor Sir Ghillean Prance, the Director, beside the Palm House during Victorian Day, the 18th October 1998.

APPOINTMENT OF NEW DIRECTOR OF KEW

Professor Peter Crane has been appointed to succeed Professor Sir Ghillean Prance as Director of the Royal Botanic Gardens, Kew, when Sir Ghillean retires in July 1999 on his 62nd birthday.

Professor Crane is currently the Director of Field Museum of Chicago and Vice-President of Academic Affairs. He is also a professor in the Department of the Geophysical Sciences at the University of Chicago and a Fellow of the Royal Society in Britain. British by birth and a botanist by training he has worked for the last 18 years in the United States, 17 of these at the Field. He is 44 years old and is married with two children.

The Chairman of the Kew Board of Trustees, Michael Blakenham, commented: "The value of Sir Ghillean's contribution to Kew's development cannot be overstated and the Trustees knew how vital it was to find a successor of Peter Crane's calibre. Peter's scientific achievements and international management experience make him ideal for the job. He is superbly equipped to lead Kew's crucial scientific work at a time of increasing world awareness of the necessity of defending the fragile environment on which we all depend".

Sir Ghillean Prance said: "I am absolutely delighted with this appointment and am sure that Peter Crane is the right person to lead Kew into the 21st century".

Professor Crane said: "It is a privilege to be able to follow Professor Prance in leading the Royal Botanic Gardens, Kew, especially at a time when the key importance of plants to all our lives is becoming increasingly recognised. The role of Kew in broadening knowledge and public understanding of the plant kingdom has never been more relevant as we face the challenges of the new millennium".

PETER R. CRANE, F.R.S.

Peter R. Crane is A. Watson Armour III Curator and Vice President for Academic Affairs as well as Director of the Field Museum, Chicago. He is also a Professor in the Department of the Geophysical Sciences at the University of Chicago. He was elected to the Royal Society – the U.K. Academy of Sciences – in 1998.

Dr. Crane is a native of the U.K. and received his B.Sc. and Ph.D. degrees in botany from the University of Reading, U.K. He was also on the faculty of the University of Reading from 1978 to 1981. From 1981 to 1982 he was a post-doctoral scholar in the Department of Biology at Indiana University. Dr. Crane joined the Field Museum in 1982 as Assistant Curator in the Department of Geology and since 1992 has had overall responsibility for the Museum's collection and research programmes, including more than 200 staff, students and other resident scientists. The Field Museum is one of the world's largest natural history museums with more than 20 million anthropological, biological and geological specimens in its collections.

Dr. Crane has been a Visiting Professor at the University of Zurich, University of Massachusetts and the University of Vienna. He is currently the President of the Paleontological Society and serves on the editorial boards of *International Journal of Plant Sciences* and *Plant Systematics and Evolution*. He has also been a Senior Mellon Fellow at the National Museum of Natural History, Smithsonian Institution, a Visiting Research Fellow at The Natural History Museum in London and Fellow of the Japan Society for the Promotion of Science at Kagawa University. He received the Bicentenary Medal of the Linnean Society of London in 1984, the Schuchert Award of the Paleontological Society in 1993, and the Henry Allan Gleason Award of the New York Botanical Garden in 1998.

Since taking an expanded administrative role at the Field Museum, Dr. Crane has been concerned with the strategic development of the Museum's programmes in collections and research. He has also continued his own research, which integrates studies of living and fossil plants to understand large-scale patterns and processes of plant evolution. He is the author of more than 100 scientific publications, including several books on plant evolution.

"A JOURNEY THROUGH KEW" – ON VIDEO

The entrancing landscapes of Kew Gardens and their many intriguing architectural gems feature in a new official video, *A Journey Through Kew*.

Using rare archival material and breathtaking aerial footage, the video, introduced by Anna Ford, a Trustee of Kew, takes a tour through the 300 acres of the world's leading botanical garden – from the tranquillity of the Woodland Garden to the tropical interiors of the glasshouses.

A Journey Through Kew costs £14.99 (plus £2 postage and packing) and is available from Kew and most good garden centres or by mail from: The Newnham Video Collection, P.O. Box 17, Plympton, Devon PL7 5YG; telephone credit cardline: 01752 345424 or by e-mailing enq@twofour.co.uk.

A WEALTH OF KNOWLEDGE ON OFFER AT KEW

Instruction in subjects ranging from plant propagation to painting flowers in water-colour and from paper-making to creating useful products from hazel branches, is available at the Royal Botanic Gardens, Kew, under the 1999 Adult Education Programme.

Leaflets containing full details of all the courses and the fees can be obtained from the Adult Education Co-ordinator, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB. Tel: 0181-332 5626 Fax 0181-332 5640.

YEARLY WEATHER SUMMARY FOR R.B.G. KEW 1998

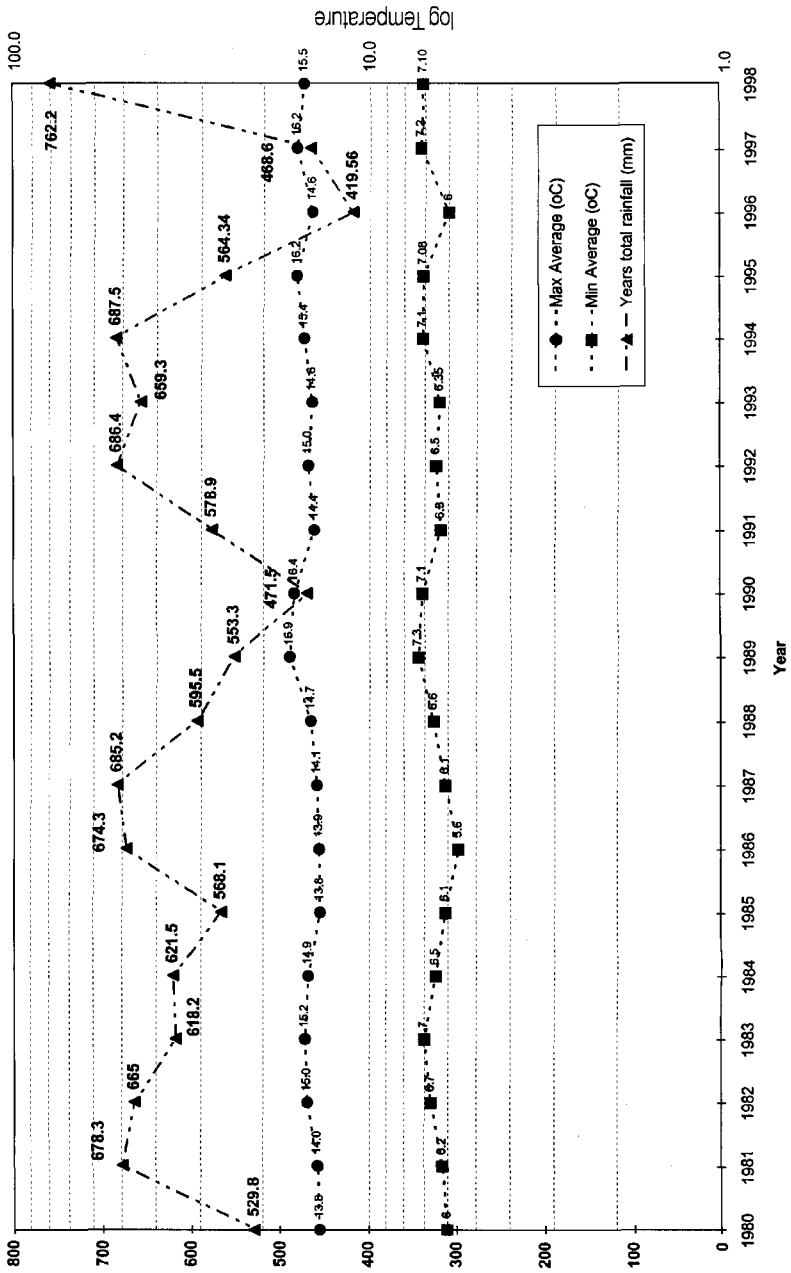
from Tim Wilkinson, Micropropagation Unit, Aiton House, Kew

1998	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year t(Totals)
Month's Total rainfall (mm)	71.3	5.4	52.7	100.5	25.0	126.7	29.2	24.9	96.7	107.0	64.5	58.3	**762.2
Most rain in one day	12.3	12.9	12.0	14.0	9.9	29.5	9.5	9.1	26.6	27.1	12.5	9.2	29.5
Highest temp. Max.	13.6	18.8	18.0	23.5	26.0	28.1	26.0	30.2	25.9	19.3	16.4	14.7	30.2
Lowest temp. Max.	4.2	3.5	8.4	6.1	9.9	14.2	16.8	17.2	16.0	9.3	5.1	3.9	13.5
Lowest temp. Min.	-3.2	-5.0	-2.5	-1.5	1.0	5.3	8.6	7.2	6.2	0.6	-3.2	-4.4	-5
Highest temp. Min.	10.3	8.7	12.9	9.5	15.7	16.4	16.3	16.1	16.0	15.3	9.2	12.0	16.4
Max Average	9.1	11.9	12.5	13.0	19.8	19.7	21.1	23.7	20.5	14.9	9.6	9.7	15.5
Min Average	2.5	2.1	5.1	4.9	9.5	11.6	12.3	11.7	12.1	8.3	2.0	3.1	7.1
10cm Average	4.5	4.6	7.5	9.5	15.2	16.7	17.9	18.3	15.6	10.9	5.4	5.0	10.9
20cm Average	5.0	5.0	7.7	9.4	14.4	16.1	17.1	18.0	15.6	11.3	6.3	5.4	10.9
30cm Average	5.7	5.5	8.3	10.6	14.4	16.6	17.7	18.2	16.3	12.2	7.2	5.9	11.6
100cm Average	7.5	6.8	8.4	10.0	12.8	14.9	16.2	16.8	15.9	13.6	10.0	7.6	11.7
Snow days	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Hail days	1.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
Thunder days	1.0	0.0	0.0	5.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	1.0	13.0
Gale days	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
Lowest grass temp.	-8.5	-9.4	-7.9	-4.7	-4.0	1.1	4.0	2.1	2.5	-3.5	-8.1	-9.6	-9.6
Lowest concrete temp.	-5.2	-6.7	-4.5	-2.7	-0.6	3.0	7.5	5.4	4.0	-2.6	-5.7	-7.4	-7.4
No. days air min < 0°C.	6.0	8.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	7.0	40.0
No. days grass min < 0°C.	18.0	16.0	10.0	12.0	2.0	0.0	0.0	0.0	0.0	5.0	21.0	17.0	101.0
No. days concrete min< 0°C.	16.0	16.0	9.0	4.0	1.0	0.0	0.0	0.0	0.0	3.0	18.0	11.0	78.0
Rain hours A	98.0	13.0	67.0	154.0	25.0	132.0	52.0	35.0	106.4	125.0	94.0	94.0	995.4
*Rain hours B	55.2	21.0	40.8	89.4	9.6	76.8	22.3	12.5	52.9	78.7	62.4	69.9	591.5
Hours sunshine	63.9	113.2	85.9	121.1	236.6	165.3	191.3	261.1	139.5	97.4	70.6	38.1	1584.0
Av. Mean sun per day	2.1	4.0	2.8	4.0	7.6	5.5	6.2	8.4	4.7	3.1	2.4	1.2	4.3
Fastest wind speed (knots)	34.0	27.0	18.0	20.0	18.0	16.0	22.0	20.0	24.0	30.0	18.0	40.0	40.0
And Gusts	50.0	40.0	38.0	34.0	26.0	26.0	30.0	32.0	31.0	42.0	26.0	47.0	50.0
And Direction	WSW	WSW	WSW	SSW	WSW	WSW	WNW	WNW	WNW	WSW	WSW	WSW	WSW
No. of days with no sun	8.0	5.0	11.0	4.0	1.0	2.0	3.0	2.0	1.0	8.0	9.0	13.0	67.0
No. of days with no rain	12.0	20.0	12.0	2.0	19.0	6.0	12.0	22.0	9.0	7.0	9.0	4.0	134.0
Snow depth	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fog days	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
Most sun in one day	6.0	9.2	9.9	12.1	14.6	14.1	12.2	14.2	9.9	8.7	8.1	5.8	14.6
pH Range	4.66-6.57	6.3	4.7-6.35	4.59-6.14	4.12-6.68	4.15-6.38	4.15-6.03	5.2-6.24	4.45-6.33	5.63-6.42	4.51-6.2	4.72-7.10	4.12-7.10
pH Average	5.8	6.3	5.9	5.7	5.4	5.2	4.9	5.7	5.6	6.0	5.7	6.2	5.7
pH No. Tests	10.0	1.0	9.0	15.0	4.0	16.0	5.0	2.0	9.0	11.0	10.0	12.0	104.0

*Bold shows adjusted figures

**Indicates record figure since 1980

Kew Weather 1980-1998



FLOWERS, FLOWERS AND EVEN MORE FLOWERS

By Louise Allen

In September 1998 I visited South Africa where I attended the Fifth International Botanic Gardens Conservation Congress at Kirstenbosch. Prior to the Congress, I took part in a pre-congress tour along the West Coast heading up to Namaqualand.

En route we stopped at many different places including Waylands Farm, where bright blue **Heliophila africana** was sprinkled throughout with what appeared to be a thick mat of yellow **Ursinia anthemoides**. Growing in between these plants were botanical treats such as **Wurmbea marginata**, **Wachendorfia brachyandra** and species after species of **Geissorhiza**, the bright blue and vivid red flowers known locally as red wine cups. A 30 minute stop soon turned into two hours and this became typical of the whole visit as there was almost always much more to see than we had time for.

The Quaggaskop Succulent Reserve was our first taste of the desert. The reserve was actually a quartz desert, littered with thousands and thousands of **Lithops sp.**, **Conophytum sp.** and **Oophytum sp.** So many so that one had no choice but to walk on them. I vowed and declared that I would rush back to Oxford and insist that our Succulent House be transformed into a sea of living stones! It is this level of inspiration that can never be achieved by merely visiting other gardens.

As we left the coach the first thing that struck me was how bright everything looked and how few woody species were visible. I should correct this statement by saying that there were no woody species present. Yet this didn't matter because, as we started to get our "eye in", we realised just how much was growing in this patch of desert. It was almost as though the more we looked the more we saw. The ability of these plants to survive in such a hostile environment is admirable.

Namaqualand is well known for its spring-time display of annual flowers. But from the word go we were warned that the winter rains had not materialised and the display of flowers was not to be. But everything is relative and if you have never seen Namaqualand before, anything would be good. And it was. Shortly after lunch on our day in Namaqualand we drove into the mountains near Kamieskroon. As we approached the area that we were about to explore we could see a thick band of what looked like orange paint. At this point we began to walk and walk and walk and walk. After 30 minutes we reached a thick band of **Arctotis venusta**, **Arctotis hirsuta**, **Othonna petiolaris** and **Ursinia calendiflora**. Breathtaking!

That day was incredible. Plants that I had never before experienced outside a botanic garden came to life, including **Aloe dichotoma**. I felt as if I had always known this plant but to me it was a small succulent that grows in a glasshouse. In South Africa they grow half way up a mountain (mountaineering skills required) and they are huge (well, taller than I am). Our final ecstasy that day was the discovery of a new plant. With 34 botanists it was inevitable that a new discovery was going to be made and it was on this very special day that it happened. One of our group discovered a colony of **Eucomis sp.** – the first time **Eucomis** had been discovered in Namaqualand – our pre-congress trip would go down in history.

SYON PARK

By Topher Martyn

There have been gardens at Syon Park for over 500 years and, while few traces remain of the earliest days, there is still much to see. The first gardens at Syon Park were the orchards and collection of medicinal herbs attached to the Abbey, which was the first building on the site. This was probably the basis of the botanic garden developed in the early 16th century by William Turner, 'The Father of British Botany', who wrote his '*Names of Herbes*' while living at Syon as physician to the Duke of Somerset.

The estate came into the hands of the Percy family, the current owners, in the late 16th century and major work was carried out by the 9th and 10th Earls of Northumberland, including the planting in 1622 of a number of **Mulberry** trees – some of which are still flourishing – and the establishment of a large area of formal gardens.

A great frost struck Syon in 1739, killing many of the trees and shrubs of the formal gardens and, as a result, there was much scope for renovation when it passed to Hugh Smithson, the recently created 1st Duke of Northumberland. As a man of taste who saw himself at the forefront of fashion, the 1st Duke engaged Robert Adam to redevelop the interior of the house and Lancelot 'Capability' Brown to transform the old formal gardens into the grand sweep of parkland and lawns that forms the basis of the landscape today. The Royal Gardens at Kew were also landscaped by Brown at the same time, to produce the only example of two adjacent Brown landscapes.

Glasshouses and a Wilderness were introduced in the late 18th century and gardeners such as James Meader, William Forsyth and Thomas Hoy continued to develop the gardens. The next major impact on Syon was the work of the 3rd Duke, who shared his grandfather's passion for gardening. It was at this time that the Great Conservatory was built and the collection developed to the extent that, in 1831, Richard Forrest listed over 3,000 species of plants from all over the world.

In the late 19th century the gardens at Syon increasingly revolved around social requirements. Flowers were grown to decorate the family town house and the Ducal dining table at Syon, while the grounds were frequently used for marquees and grand entertainments. During this period, the parkland was developed into a model farm, completed with Highland cattle and ornate dairy, but otherwise the rate of change in the gardens slowed, compounded by the social upheavals resulting from the Great War.

The Syon Park estate, as it stands now, is a compound of all of these historical periods. While commercial pressures have led to the growth of various commercial enterprises, the form of the park, with its fields, lakes and cattle, is still essentially the work of 'Capability' Brown. The Great Conservatory is now entirely unheated, but is a remarkable and influential piece of architecture and many of the trees planted in the late 18th and early 19th centuries, are now reaching maturity. These include extremely large specimens of **Lindodendron**, **Zelkova**, **Liquidambar**, **Corylus columnna** and some spectacular **Taxodiums**, with pneumatophores over a metre in height.

Between Syon House and the river is the Tide Meadow, the only S.S.S.I. on the tidal Thames and the only significant area of flood meadow on the river. From here there are views along the Syon vista to the west front of the Palm House and to the Royal Botanic Gardens, which is, in Syon's terms, a rather recent arrival.

EXCERPTS FROM THE 'KEW GUARDIAN'

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Although Kew Guild members receive the *Kew Guardian*, the Guild Committee have determined that excerpts should be reproduced in the *Kew Guild Journal* for posterity. The choice of items is left entirely to the Hon. Editor's discretion!

CORPORATE PLAN

December 1997/January 1998

The R.B.G. Kew Draft Corporate Plan covering the five years from April 1998 to March 2003 is to be published on the Kew Web later this month and has been approved by the R.B.G. Kew Trustees, subject to some detailed refinement to the financial projections. The draft is with the Ministry of Agriculture, and a final draft will be produced in mid-January.

"Senior managers have put in a tremendous amount of work to bring the timing of the Corporate Plan forward, so that for the first time it is available to staff before they complete their

Annual Management Returns." said Operations Director, John Lavin. "So the A.M.R.s – they are the annual plans for the coming year's work – will be able to take full account of and be consistent with the strategy set out in the latest Corporate Plan."

The detail of the financial aspects of the Corporate Plan will not be able to be completed until Kew is notified by M.A.F.F. of the Grant-in-Aid for 1998-9, this year it is not likely to be known until after the New Year. "However it is important to remember that the Corporate Plan is not a resource document," said Lavin. "It is the document which focuses our resource decisions by outlining the strategic issues that the organisation aims to address."

RETIREMENT OF ROGER POLHILL

December 1997/January 1998

Colleagues past and present packed into Cambridge Cottage Lounge on November 21st to mark the retirement of a man who was clearly one of the R.B.G.'s most respected botanists,



Roger Polhill. Among those paying tribute to Roger's career was former East African Herbarium Keeper, Bernard Verdcourt, while colleagues from Roger's 36 year botanical career came to Kew for the occasion from Russia and from Kenya – where he started his career in the East African Herbarium in Nairobi. Gwil Lewis, currently on assignment in Ecuador, was also present.

R.B.G. Kew Director, Sir Ghilleen Prance, said Roger had made a wonderful contribution to Kew's work.

"To see so many people here, from so many countries, is testament to his reputation," he said. "Among his many achievements, the volumes on legume systematics are regarded as landmark works".

RBG GOES WILD

February

R.B.G. Kew's new Wildlife Recording Group is asking staff who know their crested newts from their pearl-bordered fritillaries to help them keep track of the wild plants and animals that live in, or visit, Kew Gardens and Wakehurst Place.

The Group was recently formalised as a means of helping to support the strategy, outlined in the Corporate Plan, of maintaining and enhancing the diversity of native plants, animals and fungi at Kew and Wakehurst.

"One of the aims is to bring together all the existing records which have been kept by various members of staff over the last 100 years," said group member, Sandra Bell. "It is about a century since the first records began to be made and they have been published regularly in the *Kew Bulletin*."

"However, they have all been made from personal observations and while some groups of organisms, such as butterflies, wild flowers and birds have been quite well recorded, we know that there are many other groups of wildlife for which we have very little data about the species present here."

Sandra said that a number of keen individuals, such as Bernard Verdcourt, had kept some meticulous wildlife records, including information given to him by other staff members. "But not everyone at Kew has been aware of his work on this," she said. "In addition, most of the existing records are on card indexes rather than computer so are not always readily accessible."

Kew has given a clear commitment that it will aim, where possible, to manage the estates to encourage the native biodiversity already present, but this is only possible with an accurate

picture of what is there. The Director has now stated that the members of the Wildlife Group can spend appropriate core time setting up a database of wildlife records.

"We will start setting up a database from existing records this year," explained Sandra, "And we will be asking staff to submit any existing or new records to us – a record is any sighting of a plant, animal or fungus that has been correctly identified." The Group will make available forms for interested staff to use for the purpose.

Sandra herself will be concentrating on surveying Kew's **Lichen** population with the ultimate aim of producing a visitor's trail.

She says that over 2,000 species of fungi have been recorded at Kew but records need collating. "Neither do we know much about our spiders, some of the insect groups, nor pond life," she said.

Among the most unusual sightings are the crabs that some staff have reported seeing, which may either have been dropped by gulls, or possibly have crawled out of the Thames after a strong incoming tide. The rarest animal to be recorded was a bird, a water-rail, caught by Jenny Evans' cat. "Luckily the bird was unharmed, but this is a very secretive species and we may never have known it was here if the cat hadn't caught it," says Sandra.

However, she points out that the group is not just looking for the unusual, the aim is to record everything that is here.

The members of the Group are: Brian Spooner (chair), Laura Hastings (secretary), Andy Jackson, Sandra Bell, Mark Bridger, Tom Cope, Peter Edwards, Bernard Verdcourt, Philip Cribb.



The Annual R.B.G. Kew Staff Pancake Race on the Broadwalk on Shrove Tuesday (February 24th) was won by Sarah Horne. Here we show contenders before the race. *March*



HOW TO EXPECT THE UNEXPECTED

March

Accidents and other emergencies are, by their very nature, unexpected events. But a new set of emergency plans being developed by R.B.G. Kew aims to minimise the chances of emergencies as well as to help all staff to cope and minimise the effects, should the worst happen.

The plan is being co-ordinated through Bill Webb, Head of Administration, with help from consultant Chris Chubb (*pictured left*), a former police superintendent, who says that while Kew has some unique problems – such as its priceless and internationally significant botanical collections which may need protecting in emergencies – the approach to emergency planning is basically the same as for any large organisation.

WE HEAR*April*

The contract for the main building work on the Millennium Seed Bank project has been awarded to James Longley & Co. Ltd., a Sussex based company. Work is expected to begin in April and should be completed by December 1999.

INNOVATION LECTURE PRESENTS NEW THINKING ON PLANT CLASSIFICATION*July*

Mark Chase, Paula Rudall and Alan Paton will present a new system of classification of flowering plants to Kew staff at a Kew Science Innovation Lecture on July 24th.

Recent work at Kew, especially that involving genetic and anatomical data, has 'rudely shattered' ideas about plant classification that have been relatively stable since the late 1970s, says lecture organiser, Paul Wilkin.

Work on DNA sequences and plant anatomy in the Jodrell Laboratory is revealing the phylogeny, or evolutionary relationships, between different groups of plants in increasing detail, with the result that some groups previously thought to be closely related (based, for example, on similarities of appearance) are not so, while other apparently dissimilar groups are in fact more closely related than previously believed. The lecture will look at the development of molecular analysis and its role in the new system of flowering plant classification and review the important contribution of two other groups of Kew scientists – in the Herbarium and the Jodrell's Anatomy Section.

HIGHER EDUCATION COURSES*July*

The new Education Facilities in Museum No 1 host their first two long term higher education courses from July 6th.

The 5th R.B.G. Kew Botanic Garden Management Course is taking 14 participants from Europe, Australasia, U.S.A., South America, Japan, Russia, Mauritius and North Africa. The course, which lasts six weeks and incorporates lectures, workshops and individual project work, is

taught by staff from a number of R.B.G. Kew departments as well as by some specialists from outside the institution.

Running in parallel and for the same length of time, is the 3rd Darwin Initiative funded R.B.G. Kew course in Cultivation and Conservation of Threatened Plant Species of U.K. Dependent Territories. As usual it is taking five participants, from Montserrat, The Falklands, Turks and Caicos Islands, Anguilla, and Pitcairn. The course is a very practical one and participants will spend time working with staff in L.C.D. to learn practical skills as well as visiting commercial propagation nurseries and other horticultural facilities and institutions.

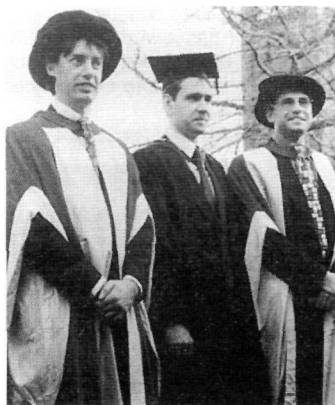
Both Courses are run by a team from the Education Department and the School of Horticulture. "The presence of so many professional botanic garden and conservation staff from overseas is a good opportunity for R.B.G. Kew staff who want to make links with those countries," commented Colin Clubbe of the Education Department. "Many of them are also involved in projects which already have Kew links."

PEOPLE IN FOCUS

Giles Coode-Adams who, from 1991 to 1997, was Chief Executive of the Royal Botanic Gardens, Kew, Foundation and Friends, was awarded the O.B.E. in the Queen's Birthday Honours List.

The Director Professor Sir Ghilleain Prance, said: "No honour was more deserved. Mr. Coode-Adams raised millions of pounds on behalf of the vital conservation work of Kew, notably for the Millennium Seed Bank, and for many features within the Gardens."

Pictured right: Tim Upson (left), formerly of R.B.G. Kew, Chris Clennet (centre), Nursery Manager, Wakehurst Place and Mike Maunder (right), L.C.D. Conservation Unit, at the last Graduation Day at Reading University. Mike Maunder received his Ph.D. Degree and Chris Clennet his M.Sc., both obtained while working full time at Kew. Tim Upson read for an M.Sc. at Reading and is currently Curator at Cambridge Botanic Garden.



MESSAGE FROM THE DIRECTOR – THE TRUTH ABOUT BUDGET RELIEF

August

Kew's Director, Professor Sir Ghilleain Prance, writes:

One of the ways in which we are able to ensure a balanced budget each year at R.B.G. Kew is through obtaining finances for some of our activities that would normally be paid for by our core funding – this is known as budget relief. It is increasingly important that in our fundraising we try to obtain a certain amount of budget relief, not necessarily in the same place each year, and our five-year forecasts assume an increasing amount of budget relief will be obtained each year. If this money is not obtained then we will have insufficient income to meet the resources allocated to departments in the Corporate Plan. It is therefore essential that this budget relief is obtained, otherwise savings will have to be made by Departments to make up for any shortfall.

The Financial Controller, the Heads of Department and the Chief Executive of the Foundation and Friends, have prepared the following definition of Budget Relief to help staff involved in fundraising for their work:

Definitions

Budget Relief: Money used to fund existing core activity but additional to the core funding R.B.G. Kew receives or generates.

Core Activity: Any programme activity that is within the Corporate Plan and is carried out using baseline resources allocated to Departments as part of the Annual Management Returns process.

Core Funding: Consists mainly of Grant in Aid, interest and profits from admissions, catering and R.B.G. Kew Enterprises.

Examples of Budget Relief:

Welcome to Kew Map. This is the map provided free to visitors on entry to the Gardens. We are committed to giving this and so budget for it each year in the marketing budget. If we obtain sponsorship for the map, in return for example for placing the sponsors logo on it, the money received is budget relief as we no longer have to use our own money to produce the map – the same result is achieved for less direct cost to R.B.G. Kew.

Staff Time: Funding is obtained for a project which includes 10 per cent of the time of an existing member of staff. The full cost of that person is already budgeted for as part of our staff costs budget for the year, so this element of the external funding is budget relief – but only if it is paid into central funds and not available for use on the project.

FILMING TO BEGIN FOR KEW TV SERIES

August

Following long consultation with many members of Kew staff, particularly those in L.C.D., the Director has awarded a contract for a new TV series about R.B.G. Kew to Flashback TV who will make a series of four programmes for Channel 4. The series will look at the work of both new students and experienced staff.

INFORMATION INFRASTRUCTURE GROUP

August



"I believe this is one of the most important projects taking place at Kew at the moment," said Bill Webb, Head of Corporate Services (left). "Information is the lifeblood of this organisation and we need to ensure that Kew has in place systems that will enable it to both manage and distribute the information to as wide an audience as possible.

"Our own integrated information network of course has other benefits – one of which will be to allow us to upgrade our own security systems so that we can effectively protect the collections in our charge and the people looking after them."

The project, directed by John Lavin with a team consisting of Bill as Project Manager, Tom Bailey, Alyson Prior, Ken Bailey, Malcolm Anderson and Bob Potter, has a £1.4m budget and started in September last year. "Our first priority was establishing what we have already got and what we might need in the future," said Bill. "Some staff will have witnessed the trenching work that took place in the gardens recently, which was aimed at strengthening our network and information system backbone. It was vital that this work was done first as we realise that we have had some problems with a lack of capacity in certain areas. Our new system will have significantly improved capacity."

The project has now moved into the design phase and Kew has contracted with the consultants, Masons Communications, who will work at Kew over the next few months undertaking surveys and doing more detailed work on the security systems.

"We hope the project will yield some real benefits for Kew by the end of this financial year, with the installation of a new security control room, access controls fitted to at least one building and some new security systems for the shops," said Webb.

"These are ambitious targets and the amount of work involved is daunting, but everyone in the team believes it is worthwhile because it is so strategically important for Kew that we get it right."

More information about the project can be obtained from Bill Webb on x5114.

PROGRESS WITH INTERNAL AUDIT

August

In June 1996, R.B.G. Kew appointed the accountancy firm Price Waterhouse (now PricewaterhouseCoopers) to provide the organisation with an internal audit service. Head of Corporate Services, Bill Webb, reviews progress.

PricewaterhouseCoopers recently presented its Annual Report to our Audit Committee, summarising the results of the work done for us. The reviews have covered such areas as Kew's financial systems, security, marketing and promotion, recruitment and staff turnover, and buildings and maintenance.

In many areas the reviews have reassured us that arrangements for our internal control are adequate, but they have made more than 100 recommendations for improvement, particularly:

- The Financial Information System. This will be addressed by the implementation of the new financial information computer system.

- Some aspects of payroll and overtime reporting and authorisation processes. These are currently being reviewed.
- Building and maintenance, particularly the processes and documentation for contracting with advisors and construction firms. New procedures are now largely in place.

Areas planned for review later this year and next include: Health and safety; Performance appraisal and training; I.T. strategy and communication infrastructure management; science programme management and control. PricewaterhouseCoopers is also scheduled to audit some of the financial systems within R.B.G. Kew Enterprises Ltd.

The main purpose of the Internal Audit is to provide assurance to the Accounting Officer (The Director of Kew) that adequate systems of internal control are being maintained. It is not the same as a consultancy exercise or staff inspection review. However, the auditors do try to make suggestions for improvements and help management develop better control procedures.

The PricewaterhouseCoopers team remains the same, headed by Frank Hailstones (Partner) and Jon Gorrie (Senior Manager). Staff with queries or concerns about the internal audit service should call me on x5114.

STAFF TRAINING SURVEY RESULTS PUBLISHED

August

Over the past few years, R.B.G. Kew have been working to implement effective planning and training/development systems for the whole organisation. When established as an integral part of the practices of the organisation these will not only ensure a professional and focused approach to the overall running of R.B.G. Kew and to its training and development activities, but will also support the organisation's effort to attain accreditation under the Investors in People National Standard.

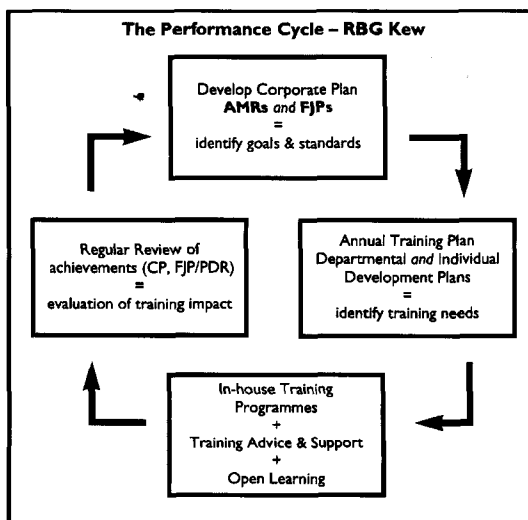
The systems include: Corporate Planning; Forward Job Plans and Performance and Development Reviews; and a variety of training and development initiatives.

A staff survey in June aimed to test the degree to which these systems are perceived to be working within the R.B.G. Kew and to highlight areas which now need further work.

Almost 40 per cent of staff responded with a roughly equal split between those who manage staff and those who do not and this is a sufficiently large sample on which to draw reliable conclusions.

"Many people included additional comments which contributed valuable information to the survey data" said Mary Evans, Staff Development Manager. "It was particularly interesting to see the high level of consistency in responses, regardless of whether or not the person was a manager."

The underlying principle of Investors in People is that people need to have training and development that enables them to contribute effectively to the organisation's objectives. However, the overall result of the survey suggested that staff are insufficiently clear about the cyclical relationship between planning, training, performance and evaluation at organisational, team and individual levels.



"These activities do occur," said Evans, "But they are not effectively linked in people's minds. We need to be clearer about what is expected from the outset – what difference you expect training to make to your work – then review it afterwards to see if training has delivered the right result. This means checking the training has affected your performance in the job with the result that both the individual and the section have benefitted."

The diagram on the previous page shows how this is expected to work within R.B.G. Kew.

Points 1 and 2 are generally well established. In House training programmes, advice and support are being developed further by Evans, who wants to encourage more staff to use these facilities. "The weakest area is the regular review of achievements and evaluation of training impact, because we have few mechanisms which address evaluation in this sense," said Evans. "We are now working on this to assist line managers with the process of training evaluation."

Significant work is also being done to help ensure that all training needs are appropriately identified throughout the organisation. For example, individual development plans are under review as part of the FJP analysis and the Heads of Department are to review the Annual Training Plan for January 1999.

Help and assistance to determine what training resources are available to meet specific requirements are available through your line manager from Mary Evans in P.P.D.D. on x5137. Information is also available on the P.P.D.D. internal Web Page. As well as making use of existing internal and open learning training packages it is possible to arrange training with a number of organisations outside R.B.G. Kew and Evans will work closely with staff to identify the most appropriate training from the most appropriate source to meet needs.

WORK BEGINS ON SOFTWARE UPDATE

August

Work has begun on the largest project ever undertaken by R.B.G. Kew's Information Services Department – the Installation of the new Windows NT operating system for desktop computers on R.B.G. networks. Staff in the Computer Section have been preparing for the change-over for some time and work on installation will begin in September. Here they report on the need for the new system and how you can help ensure a smooth change-over.

The Computer Unit is currently undertaking a project to upgrade all desktop computers at Kew and Wakehurst to Windows NT 4 Workstation.

This article has been written with the aim of explaining what we are doing, why we are doing it, when we are doing it and the benefits to you, the user. Further information with regular updates can be found on the internal web by following the link to News and Updates from the main page or by going straight to http://lion/~dm00kg/nt/web_main.htm. Please check out these pages regularly so you keep current with the progress of the project.

What is Windows NT 4 Workstation?

Windows NT 4 Workstation (a.k.a. NT4W) is the latest incarnation of Microsoft's Windows Graphical User Interface (GUI). At Kew we currently use Windows 3.1.

Why change from Windows 3.1?

Windows 3.1 is now over 6 years old.

It was designed to run on computers that are now out-of-date.

No further development is being carried out on Windows 3.1.

Windows 3.1 is not able to run the latest versions of popular software. Applications such as Word, Excel and Access have been updated and improved but will not run under Windows 3.1.

Windows 3.1 does not make best use of the capabilities of the new computers we are now buying.

Windows 3.1 is bad at managing memory. You have no doubt suffered problems with "Out of memory" error messages.

NT4W is Year 2000 compliant.

What are the benefits of NT4W?

NT4W is a 32-bit Operating System. In plain English this means that it has been designed to take full advantage of the processing power of modern computers.

NT4W allows you to run the latest versions of Microsoft Office and other 32-bit programs.

NT4W manages memory far better than Windows 3.1. This will vastly reduce the "Out of memory" errors you have encountered and enable you to run more applications concurrently.

NT4W is more stable than Windows 3.1. In the past you may have encountered a problem which crashed your whole system. This is caused by one application behaving badly. With NT4W only the misbehaving application is closed down. The rest of your system remains functional.

NT4W has better support for networking. Including a File Manager type interface and mapped drives allows easier copying and moving of files between your Novell server and the UNIX server. E.g. results of database searches and maintaining Web pages.

NT4W and Microsoft Office will be installed on the local hard disk. Until now you have run these applications from the network file server. Installing them locally will give increased performance and enable you to use Word and Excel even when the file server is unavailable! (NOTE: You should still store all your data files on the S: drive, not on the C: drive. This will ensure that they are secure and regularly backed up).

Is the 'look and feel' of NT4W different from Windows 3.1?

Yes. But if you are familiar with using Windows 3.1 it will not take you long to become comfortable with the new interface.

The applications you use: Microsoft Word, Excel, Access and Pegasus email will not change and will operate as they have done before.

We are organising day training courses for all interested users in the new NT4W interface. These will be held in the training room of Hanover House. Please see the <http://lion/~dm00kg/nt/training.htm> page on the internal web for more details and information on how to book a place.

Will my PC run NT4W?

There is a minimum specification required to install and run NT4W. This is a computer with a 486 processor, 12MB RAM and a 270MB Hard Disk. We are aiming to replace around 100 old computers, which are below this minimum specification, as part of the NT4W roll out project.

Obviously, the older the computer the slower the performance. If you regularly run processor intensive applications such as databases you might want to consider swapping your computer with a colleague who has a newer one and only uses it primarily for word-processing. This should be a Departmental decision but the Support Section will be on hand to advise on these situations.

In addition, the more memory installed in a computer the better that computer will perform. As we wish to give you the fullest benefit possible from this upgrade we have purchased an additional RAM memory for all Elonex computers with only 16MB to double their capacity. This memory upgrade will be done at the same time NT4W is installed on your computer.

What about my portable computer?

We do intend to upgrade all portable computers, above a minimum specification, as well. However, this will be done as a separate project after we have installed NT4W on all desktop computers. We will keep you informed on these Web pages with updated news.

Okay, sounds good. What's the catch? Only two!

1. As mentioned above some older computers will not run NT4W at all. We are planning to replace these as part of the rollout project. Other older computers will run NT4W but performance will be slower than on newer computers.

2. Some DOS programs or hardware drivers may wish to access the hardware directly, which is a definite no-no to NT4W! We are trying to identify and test these programs and drivers and your help in this matter would be much appreciated (more later).

We are using Microsoft Project 98 to manage and progress the rollout. We are still in the testing stage. We want to ensure that the rollout occurs as smoothly as possible. However, we are committed to completing the rollout before the end of the financial year.

Great! When do I get it?

We have decided to approach the rollout on a Departmental/Section basis. Our planned installation timetable is shown in the table below.

Installation starts	Duration	Department/Section
Mid August 1998	5 days	Library
Mid August 1998	1 day	CAPS
Late August 1998	2 days	ISD – Bank's Building
Mid August 1998	20 days	Jodrell
Late September 1998	4 days	Foundation & Friends
*Late September 1998	5 days	* CEB – Bank's Building
** Early October 1998	5 days	** Museum No 1
*Mid October 1998	2 days	*Enterprises
**Mid October 1998	10 days	* Wakehurst Place
Late October 1998	15 days	LCD – Aiton House, Studies, Gardens
Late November 1998	2 days	PPD
Late November 1998	1 day	Central Services
Late November 1998	1 day	Directorate
Late November 1998	1 day	Constabulary
Early December 1998	3 days	Finance
Early December 1998	20 days	Herbarium
Early January 1999	5 days	Mycology
Mid January 1999	3 days	B & M

We hope to shorten the actual rollout phase of the project to install to all Departments by the end of December 1998. However, we are still in the testing, information gathering and resource assembly phase of the project and will not know for certain until August. We will update the table above to reflect changes to the schedule so please visit this page regularly.

What do I need to do?

You can help us to successfully complete this mammoth project and your help will be greatly appreciated. Some things you can do:

1. If you use any software packages other than those listed below please email support@rbgkew.org.uk so that it may be tested to ensure it will work under NT4W. If it doesn't work we may be able to obtain an upgrade or suggest alternatives.
 - i. Microsoft Office (Word, Excel, Access, Powerpoint)
 - ii. Pegasus email
 - iii. Netscape Navigator
 - iv. Terminal (Telnet)
2. If you have special hardware connected to your computer such as scientific equipment please email support@rbgkew.org.uk so that it may be tested to ensure it will work under NT4W. Some items may require updated software drivers.
3. **IMPORTANT:** When we install NT4W on your computer it will **OVERWRITE** everything on your local hard disk (drive C:). You should only have the operating system and network

drivers on drive C: so this will not be a problem for the majority of you. However, if you have saved any information to your C: drive you must ensure that it is moved to the file server or backed up on floppy disks before we install NT4W.

Email support@rbgkew.org.uk if you have any questions or are unsure about this.

4. Keep an eye on the training web page at <http://lion/~dm00kg/nt/training.htm>. Once we have full details we will be posting information on when these courses will be running and you will have a chance to book a place.
5. We intend to install NT4W on a number of test-bed computers prior to the full rollout. This will give you a chance to have a look and play with NT4W before it is installed on your computer. Information on where these test-bed computers are located will be published on the internal web at <http://lion/~dm00kg/nt/test-beds.htm>. If you get a chance go and have a look at one.

What about Microsoft Office?

For the moment we will be retaining our current version of Microsoft Office (Word 6, Excel 5, Access 2). We plan to upgrade to the latest 32-bit version in the next financial year. We will publish more information concerning this nearer to the time.

Summary

The NT4W rollout is the largest, most complex project undertaken by the Support Section. We aim to make the transition as painless as possible and hope you will enjoy the benefits the new system will bring. In all projects this size there are bound to be teething problems and we hope you will bear with us whilst these are resolved. Thank you.

VISITORS FLOCK TO REOPENED MUSEUM

September

In his book 'In for a Penny', published in 1978, Wilfred Blunt describes visiting Museum No. 1 on a wet afternoon and finding himself alone but for just one other visitor. All that has now changed: after 10 years' closure and extensive renovation, Museum No 1 and the 'Plants & People' exhibition is buzzing with people. In just three months since the exhibition opened, more than 56,000 visitors have come through the doors – with over 1,200 on one Sunday alone.

Many visitors remember the Museum as it used to be and have appreciated seeing the building restored and the economic botany artifacts on display once again. They have also expressed their enthusiasm for the interactives – both the low tech hands-on exhibits and the more thought provoking multimedia challenges. Among the many complimentary remarks from the visitors' book, many comments show that the message of the exhibition is reaching the audience – "I didn't know plants had so many uses", "Good for helping to make people aware that we need plants for our existence here on earth" and "Attending this exhibition should be compulsory for those leading people from all over the world who contribute to the destruction of the environment".

Pat Griggs

POLLEN AND SPORES CONFERENCE

September

The fourth in an occasional series of palynological conferences organised under the auspices of the Linnean Society, in collaboration with the R.B.G. Kew, Natural History Museum and the Systematics Association, was held at Kew and the N.H.M. in July.

The Scientific programme included two special sessions: Pollen development, commemorating Professor Jack Heslop-Harrison, and pollen-pollinator and pollen-stigma interactions, commemorating Professor Bruce Knox. The other sessions represented a wide range of pollen and spore studies: Experimental and living systems; Systematics and evolution; Evolutionary trends and phylogeny; pre-cretaceous; Cretaceous and Tertiary; Quaternary; plus a small session on pollen variability and another development in the genus **Nelumbo**.

Approximately 140 delegates attended the meeting, more than 80% of them from overseas. Most were active participants – more than 90 spoken and poster presentations were made.

The conference was timed to coincide with the retirement of Keith Ferguson, founder and first secretary of the Linnean Palynology Group and founder of the Palynology Group at Kew.

The organising committee (Madeline Harley, Paula Rudall, Lisa von Schlippe and Hannah Banks at Kew; Cynthia Morton at Reading University and Stephen Blackmore at the N.H.M.) is indebted to numerous colleagues and friends for their help, including participants, chairpersons, Peter Stafford (N.H.M.), Kew student volunteers, Anne Morley Smith and Vivien Munday (Kew), the Friends of Kew and many others who contributed to the success of the conference.

The conference proceedings will be published by Kew before the end of next year.

PRANCE ADDS WEIGHT TO EDEN PROJECT'S SCIENCE

September

Kew's Director, Professor Sir Ghillean Prance, has taken on the role of Director of Science for the Eden Project, a major new botanical education and conservation project in Cornwall. He is currently working with the project team on a consultancy basis but will step up his involvement following his retirement from Kew next July.



Professor Sir Ghillean Prance with the Eden Project team: (left to right) Peter Thoday, Tim Smit, Evelyn Thurlby, Philip McMillan, Browse.

The Eden Project is based around a huge new public greenhouse being built in a worked-out china clay pit in Cornwall. It consists of two 'biomes' for rainforest and mediterranean plants and will be large enough for the tallest rainforest trees to grow to mature size. The project has received £37m from the Millennium Commission.

Sir Ghillean commented: "This area of conservatory for growing plants has never been seen before. It is an opportunity to grow exotic plants in large numbers and make an important contribution to science and conservation at the same time.

"My role will be to help develop the scientific mission for the project. It is important that a sound scientific basis and a commitment to conservation and sustainable land use is established."

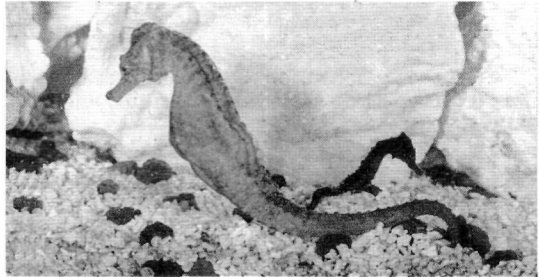
SEAHORSE SUCCESS

September

Pete Morris of the Marine Display is hoping that the British native seahorses that he has successfully bred in captivity in the 'nursery tanks' of the Marine Display Unit, will play their part in a reintroduction programme on the south coast of England next summer.

"British seahorses depend on coastal seagrass beds," said Morris, "But since the 1920s these have been in decline because of disease and pollution.

"However, some areas are now protected and the seagrass is recovering. There is a particularly



Tropical seahorses have already been bred successfully at Kew.

good area at Studland, Dorset, and this is where we want to reintroduce Kew's animals."

Morris has already had success with tropical seahorses, native ones have been breeding at Kew for the past six months. The young will be acclimatised in chilled water tanks before being released next June.

MEDAL HONOURS FOR FOUR KEW PEOPLE

October

Dickon Bowling, Peter Brandham, Humphrey Burkill and Tudor Harwood are this year's recipients of the Kew Medal, awarded to people who have made particularly significant contributions to the life, work or mission of R.B.G.Kew.

Dickon Bowling received his medal for his work pioneering the propagation of orchids in culture without the need for symbiotic fungi to be present (asymbiotic culture). He has also made many significant contributions to the Kew Mutual Improvement Society, serving as a member of the Committee for many years and helping to ensure that these lectures remain popular events. *Kew Guardian* readers will also know that Dickon has for many years been recording the weather at Kew, and has been sending data to the Meteorological Office since 1980.

Dr. Peter Brandham, whose distinguished scientific career at Kew spanned some 30 years, continues to work in his retirement towards the publication of a number of research projects. He continues to be an outstanding ambassador for Kew, through his membership of the R.H.S. Committee on

Narcissus and Tulips and through his extensive lecturing engagements. As a lecturer on the R.B.G. Kew Diploma course his help, friendship and scientific guidance to the students has been exemplary.

Humphrey Burkill spent his working life as Director of the Singapore Botanic Gardens but for the last 30 years has worked in a very active retirement in the Herbarium at Kew, on the seminal publication '*Useful Plants of West Tropical Africa*', the fifth and final volume of which will appear this year. His work is marked by care and attention to detail, making this an immensely important reference work which helps to bring Kew's work to the attention of a wider audience of anthropologists, ethnobotanists and medical practitioners and researchers.

Tudor Harwood, formerly R.B.G. Kew's chief photographer, put a great deal of work into modernisation of the Kew Picture Index of some 20,000 images, transferring it from a card index system to a readily accessible electronic format on CD-ROM. This has enabled this unique collection to become even more easily available to Kew's own staff and visiting researchers. Tudor has also returned to Kew regularly to help in the photographic section when other staff are on leave or overseas assignment.

The medals were presented on Prize Day by Sir David Attenborough, himself a Kew Medal holder.

The Kew Medal committee this year was Bill Webb – Chairman, Jenny Evans, Sandy Atkins, Jennifer Alsop, Christine Brandt, Paul Gasson, Roger Thompson.



Left to right: Peter Brandham, Tudor Harwood, Dickon Bowling and Humphrey Burkill.

KEW AT THE INTERNATIONAL BOTANIC GARDENS CONSERVATION CONGRESS

October



Six Kew staff presented papers at the Fifth International Botanic Gardens Conservation Congress, held at Kirstenbosch from September 14th to 18th. Other Kew staff were among the 350 delegates from 65 countries at this important international conference.

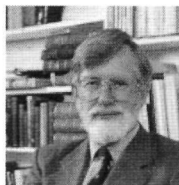
Pictured left: Interior of the new public conservatory at Kirstenbosch, officially opened last month.

EXCERPTS FROM 'KEW SCIENTIST'

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DIRECTOR'S MESSAGE – Funding

October



During my 10 years as Director, Kew has moved strongly from government to mixed funding. However, the Ministry of Agriculture, Fisheries and Food (M.A.F.F.) continues to be our most important funding source, contributing about 70% to our current year's budget. On 7th July we were pleased to receive the last M.A.F.F. Minister, Dr. Jack Cunningham, on a visit to Kew which included the new Herbarium extension, the Japanese Garden, Museum No. 1 and the Jodrell Laboratory. Dr. Cunningham also opened the new Lower Nursery complex which was almost totally M.A.F.F.-funded, apart from a private

donation for the Orchid House. During the past two years, M.A.F.F.'s considerable capital funding has really helped us move forward. M.A.F.F. funds were used for the renovation of the Melon Yard nursery, the Herbarium extension and contributed towards Museum No. 1. The rest of the funding for the latter project came from the National Heritage Memorial Fund of the National Lottery (50%), the Wolfson Foundation and the Weston Family. This is a fine example of mixed funding which has become so important to achieve our goals.

The Millennium Seed Bank is another project which is largely funded externally. Our highly successful campaign has now raised the funds necessary to release the £30 million lottery funds. The Seed Bank has become a major part of Kew's work and I am pleased to announce its change of status to a department within the Kew administrative structure. Congratulations to Roger Smith who was



Jack Cunningham (right) touring the new M.A.F.F.-funded Lower Nursery complex with the Curator.

appointed as the new head following an international search for the position. As we have evolved to mixed funding, the work of the Foundation and Friends has been crucial. This was recognised by the award of an O.B.E. to Giles Coode-Adams, the Foundation's last Chief Executive. I am glad to see Jeremy Baylis continuing this work and I am also grateful to the many staff who have become involved with fund raising. I appreciate the time this takes but it is well worthwhile to keep the momentum going and to fulfill the goals of both Kew 2020 and our Corporate Plan.

Prof. Sir Ghilleain Prance, Director

POISONOUS FUNGI

October

Since October 1995, hospital staff have been able to quickly and accurately identify plants implicated in cases of human poisoning by using an award-winning CD-ROM produced jointly by Kew and the Poisons Unit of Guy's and St Thomas' Hospital Trust. Soon they will be able to use the same innovative software to identify fungi as well using the *Poisonous Plants and Fungi in Britain and Ireland* CD-ROM. Using conventional methods, such as books, hospital staff only correctly identify 40% of plants and fungi. The CD-ROM fills this identification gap, enabling medical professionals to determine which plant or fungus has been eaten and how toxic it is. Treatment advice is provided to ensure that patients receive the best attention. The CD-ROM can also be used by parents who want to know which plants in their garden are safe, local council departments responsible for school grounds, garden centres concerned about public awareness, and foragers wishing to check that a fungus is safe to eat.

Contact: Dr. Liz Dauncey (0181-332 5699)

GRANTS FOR COMMONWEALTH SCIENTISTS

October

Since August 1996, the Kew Foundation has administered The Lennox-Boyd Memorial Trust to fund a programme to support botanic gardens and other botanic institutions in Commonwealth countries overseas. The Trust's funds are used to help students come to Kew to attend courses or undertake research, or fund Kew staff to visit Commonwealth countries to teach students there and from surrounding countries on subjects related to the work of botanic gardens. The Trust also assists botanic gardens in Commonwealth countries with publication costs and buying books.

Contact: Gail Bromley (0181-332 5613)

Editor's Note – Due to late receipt of November-December Guardians it was not possible to produce excerpts this year.

OBITUARIES

HENRY GEORGE BUTCHER

Henry was born in Maidenhead in 1913, where he grew up and eventually went into training at various local establishments. He entered Kew in September 1919 from the Heathlings Garden in Bill Hill. He worked in the Tropical Section and the T Range.

After training at Kew he went first to Regents Park Botanic Garden and then, in 1927, onto Roath Parks Department in Cardiff, Wales, where he took up the post of General Foreman.

In 1931 he became Deputy at Gunnersbury Park and in the same year joined the Institute of Parks and Recreation Administration. Parks was to be his chosen career and in 1938 he became the first Superintendent of Epsom and Ewell, a post he was to hold until his retirement in 1964. In 1961 he was Vice-President of the I.P.R.A. and later became Vice-President of the Guild.

He was a long serving member of the Committee of United Horticultural Benevolent and Provident Society.

During his 34 years of retirement he became a keen bowler. He passed away peacefully on the 28th November 1998. Aged 99 years.

GORDON R. GROVES O.B.E

Gordon Groves was born in North London in 1910. The family moved to Norfolk in 1918 where his father developed a fruit farm. In 1927 he gained his Diploma at the University of Reading.

Gordon Groves left Cambridge Botanic Gardens and entered Kew on the 23rd October 1933. In his first year he worked under Stenning in the great Palm House. During his training he experienced one of the great droughts and the Thames was very low. In the same year (1934) 160 Kewites sat down to dinner at the Clarendon Restaurant at Hammersmith. At this dinner and as part of the Presidential address, William Hales gave a very interesting talk on the History of Guilds.

Between 1935 and 1937 Gordon worked as Deputy in the Ferneries.

As part of his interest in work abroad he joined the British Colonial Agricultural Service.

Late in 1937 he made an exciting step and left for Bermuda to take up the post of Horticulturalist to the Department of Agriculture. He married his first wife Olive in April 1940. In 1943 they sailed west to South America where he became Curator of the botanic garden in what was then British Guiana and which later became Guyana. In addition to the botanic work, he ran a large commercial nursery, building on early experience at his father's nursery, but this time producing tropical fruits. He communicated regularly with Kew and wrote about his exploits in the 1943 *Journal*. In 1946 he applied for the job of Horticultural Secretary of Holland (Lincs.) County Branch of the N.F.U. and on 1st June 1946 beat 60 other applicants to the post.

In April 1949 the tropical warmth beckoned him back to Bermuda where he became Assistant Director of Agriculture until he became Director in 1955.

In his absence Bermuda had suffered a major catastrophe due to scale insects decimating almost all the ancient Cedar forests. The job of clearance and re-planting and seeding fell upon Gordon's department. He revived *The Agricultural Bulletin* in his first year in office as Director and this remains as a vital organ of Bermudan life. The Agricultural Exhibition, now a feature accepted as an essential part of the spring calendar, exists due to his energy.

In 1961 he became Director of Agriculture and Fisheries and under his thorough husbandry the fishing industry grew to become a vital part of the island's industry. Under him The Conservation Division formed the basis of the National Parks System.

In 1961 he was awarded an Associate of Honour by The Royal Horticultural Society and in 1963 Her Majesty The Queen bestowed on him the O.B.E.

Olive died in March 1973, the year in which Gordon was President Elect to the Guild. In 1974 he wrote extensively in the *Journal* about the Bermuda Botanic Gardens and in the same year he attended the A.G.M. On the 14th December he married Rosemary Gutteridge.

He was a Kewite through and through and hosted many visits including one by Professor Metcalfe and his wife, when Bermuda Kewites were proudly shown photographs of the new Jodrell Laboratory.

It was sad that after such an active life he was ill for so long before he finally passed away on 19th July 1998 aged 88 years. It is impossible to record the impact this man had on the island of Bermuda in terms of its natural and ornamental landscape and its industry.

To his wife Rosemary and his family we send our deepest condolences.

PROFESSOR JOHN HESLOP-HARRISON

Botanist who transformed Kew from a traditional garden into a modern research institution and established rules for pollination.

Professor John 'Jack' Heslop-Harrison, who has died aged 78, was one of the leading plant scientists of his generation; he was Director of Kew Gardens from 1971 to 1976.

Heslop-Harrison had vast knowledge of the plant and animal kingdom, which allowed him to see quickly to the heart of a biological problem and enabled him for more than 50 years to make important contributions in a range of botanical fields.

He was almost single-handedly responsible for bringing the study of reproductive biology to the centre of modern plant science.

John Heslop-Harrison, the son of a distinguished zoologist, was born on February 10th 1920. As a boy he helped his father with experiments on moths brought home for 'safe keeping'.

From Chester-le-Street Grammar School he went to King's College (Durham University) at Newcastle upon Tyne, where his father had previously been a lecturer, to study botany, zoology and chemistry.

During the Second World War, Heslop-Harrison found himself in the Orkneys, working in the new sciences of radar and electronics. Later, he was attached to the S.H.A.E.F., helping to evaluate the technical capabilities of the German forces.

After the war, Heslop-Harrison returned to his lectureship at King's College, before moving, in 1946, to the Queen's University of Belfast. There he completed his doctorate work on flowering physiology, in the process establishing the groundwork for much of the post war research in the field.

He then took up a post at University College, London, where he set to work on the application of new systems of classification to practical systematics. His book, *New Concepts in Flowering Plant Taxonomy*, remained a key text on the subject for the next 25 years.

By 1954, Heslop-Harrison's reputation was such that he was invited to return to Belfast as Professor of Botany. He set about reorganising his department, and started a strand of research which remained with him for the rest of his life: the cellular physiology of reproduction in the grasses.

Then in 1959, he moved to Birmingham, where he presided over the formation of the School of Biological Sciences, the first of its type. He took to the new technology of electron microscopy with enthusiasm and was eventually able to set up one of the first units in Britain specialising in plant ultrastructure.

As well as revealing the spectacular events which take place within plant reproductive cells, his work led to his proposal of a model – still current today – for the structure which carries out photosynthesis in plants.

In 1967, Heslop-Harrison went to America to join the Institute of Plant Development which was being set up on the Madison campus of the University of Wisconsin. While there, he travelled widely, advising government bodies, including Nasa, and drawing attention to the increasing importance of biodiversity conservation and the use of biologically-sound practices in agriculture.

By 1971, his concern with policy issues and a desire to foster plant science back in Britain, led him to accept the Directorship of the Royal Botanic Gardens at Kew. He proceeded slowly to turn Kew from a somewhat old-fashioned botanic garden into a modern institution with a more visible public role and a reputation for the best methods in plant science.

Heslop-Harrison relished the tremendous variety of plants available at Kew and, working with his wife (also a botanist), extended his studies of pollination systems to the identification of the underlying processes common to particular groups of plants. These 'rules' of pollination have since proved essential to plant breeders and researchers alike.

Heslop-Harrison continued to champion the cause of the conservation of biodiversity, served on numerous committees promoting the intelligent application of plant science, and raised questions on energy conservation which have only recently been fully addressed.

When it became clear that his programme for Kew was not going to receive the government support he had hoped for, Heslop-Harrison left, in 1976 to become Royal Society Research Professor at the then Welsh Plant Breeding Station, at Aberystwyth.

There, he and his wife turned their attention to the biology of the pollen tube and its interaction with the female parts of the flower – work which found Heslop-Harrison in his element, as it required immense technical skill, an ability to think creatively, and comprehensive knowledge of botany.

After retiring from his Royal Society Professorship in 1985 he continued his research, first at Aberystwyth and then from a laboratory in the basement of his home in Leominster.

His contributions to plant science were recognised in the early 1990s with the award of the Gold Medals of both the Royal and the Linnean Societies. He leaves behind a vast literature including unparalleled reviews of plant sexuality.

Formidable both in physique and intellect, Jack Heslop-Harrison could be intimidating on first acquaintance.

His breadth of knowledge inspired awe, but his willingness to listen and his infectious sense of humour would soon have the most junior researcher airing his most questionable theories. Many of his past students now occupy the highest positions in plant science.

He married, in 1950, Yolande Massey; they had a son.

We thank The Daily Telegraph newspaper for permission to publish this obituary.

Addendum

An example of Heslop-Harrison's scientific approach is revealed in a Kew story. Picture a scene in the Queen's garden where Ian Beyer is trying to persuade the Director that certain arboricultural works are needed to an **Ailanthus** mentioned in Elwes and Henry.

"If someone was out here in a storm and they stood under this tree to light their pipe they would be in danger", said Ian.

"That Mr Beyer" said Heslop-Harrison, "is a negative correlation".

RONALD WILLIAM KEAY

Ronald Keay (writes Nigel Hepper) was born on 20th May 1920 in Richmond, Surrey, where his father was a grocer. At King's College School, Wimbledon, he developed a keen interest in natural history.

In 1939 he gained a scholarship to St. John's College, Oxford to study botany. Even in wartime the Colonial Office was recruiting for the Colonial Service, so Ronald joined as a Forest Officer for Nigeria. On his arrival on 31st December 1942 he was posted to the North, where his priorities were "to learn Hausa, learn my trees and learn to ride a horse". Later he went south, where he was based at the Forest Department's H.Q. in Ibadan.

In 1951 he was seconded to the Kew Herbarium to prepare a revised edition of the *'Flora of West Tropical Africa'*. The first, written by J. Hutchinson and J. M. Dalziel and published as two volumes between 1927 and 1936, was a pioneer work and widely used but outdated by subsequent field work, much of it done by Ronald and colleagues at the Forest Herbarium, Ibadan. The Director of Kew, Sir Edward Salisbury, suggested the unrealistic time schedule of two years attachment to Kew for the revision – in fact, the last part of Volume 3 was published in 1972, some 21 years later.

As a novice taxonomist I had the privilege of working with him and he became both my mentor and friend until his death. He stayed until early 1957 completing the first volume and starting the next one, which I continued as editor and co-author with others.

It was important that Ronald should take up his post in Nigeria or he would miss promotion. He returned as Deputy Director of the Federal Department of Forest Research and later became Director. This gave him the opportunity to expand research from "green" to "brown" study as he used to say, namely from forest and herbarium taxonomy to the assessment of the properties of trees until then not used for timber and other forest products. This widened the economic use of indigenous forests, making them more useful and sustainable, since it was the job of the Forest Department "Conservators" to conserve for exploitation (in the best sense) the forest under their care. Introduced timber trees were investigated for their potential, even such a well-known species as teak, **Tectona grandis**.

Nigerian independence had taken place in 1960 and by 1962 he felt it was time to leave the country and he obtained the prestigious post of Deputy Executive Secretary at the Royal Society in London. In due course he succeeded Sir David Martin as Executive Secretary and was obliged to live in grand accommodation above the offices in Carlton House Terrace, which overlooks The Mall.

When Ronald retired from the Royal Society in 1985, he immediately set about revising his 'Nigerian Trees'. In order to do that, he renewed contact with the Kew Herbarium and made a further visit to Nigeria, where he received a great welcome from his former colleagues and students who were by then in senior positions.

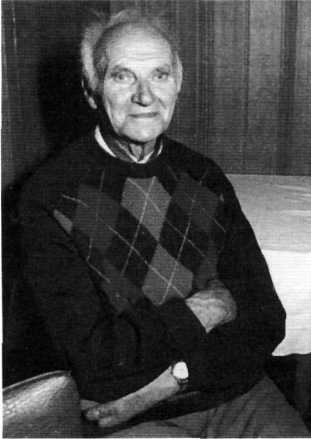
In 1987 he became Vice-President of the Nigerian Field Society, being already Chairman of the U.K. branch. He had always been closely involved with A.E.T.F.A.T. (Association pour l'Etude Taxonomique de l'Afrique Tropicale); he was the President of the African Studies Association, 1971-72 and then President of the Institute of Biology, 1988-90 and finally Treasurer of the Linnean Society of London, 1989-95. As a convinced Christian he was Church Warden at St. Martins-in-the-Fields, where he not only helped to raise nearly half a million pounds for renovation, (half of it raised from a sculpture used as a door stop in the church which he arranged to be sold to the Victoria and Albert Museum!), but he and his wife were involved in several of the church's caring activities.

He died of cancer on 7th April 1998 and is survived by his wife, Joan, two daughters and a son. His field note-books are in the Kew Archive but his kindly presence will be sadly missed.

WILLIAM PORTER

This was a very active man. He was interested in horticulture and bee keeping from a very early age. Bill recalled taking his first swarm at the age of six and winning prizes for vegetables at the village show at nine. After a village education and local employment as a gardener working at Brasted Park and Cambridge Botanical Gardens, he was accepted for training at Kew.

He entered Kew on the 23rd July 1928, at a very vibrant time in Kew's history. There were 41 Student Gardeners and he proved to be one of the fittest of the bunch. In 1929 the Arboretum and Temperate House Staff challenged the rest of the gardens to a running race. Running was his forté and his name often appeared amongst the honours. He held the records for the 10 mile cross country county championship; four mile track county championship and the one mile track championship. He won the five and seven mile cross country races and the seven mile road race. Bill was an all-round sportsman and a member of the Kew swimming club, an organisation which did not baulk at swimming in the nearby River Thames.



In that year the penny charge to Kew was removed and 15,000 schoolchildren used the Kew facilities. W. J. Bean retired in the same year.

Bill's Mutual was on Cambridge Botanical Gardens. The collection of wildflowers presented to The British Botany Club gained 95 points out of possible 100 and was voted best collection. This fine assemblage, added to over the years, is now in the care of Southampton University.

Whilst at Kew he found a more precious flower in Ena Woodrow, friend of a fellow student's sister. In 1930 he went to Middlesex County Council to oversee the landscaping of the new Great North Road. He continued his running and joined the famous Finchley Harriers, where he won even more medals. In 1933 he married Ena.

In 1936 he moved to Southampton as Assistant Parks Superintendent. Soon the war was to start and Bill volunteered for the Royal Military Police. After sailing round the Cape to Suez in the Queen Mary "six decks below the water line" he served with the Eighth Army (the Desert Rats), later going up through Italy and into Yugoslavia as escort to the G.O.C Eighth Army, Lt. General McCrery. He was mentioned in dispatches in the London Gazette on 11th January 1945.

Late in 1945 he was demobbed and returned to Southampton. Initially he covered the whole of his area of responsibility on a bicycle only later taking the first step into the motorised world with a Cyclemaster.

In 1965 he became Superintendent, a post held until his retirement in 1969. During his years at Southampton he was responsible for the planting of trees which now form the backbone of the landscape in the city parks, housing estates and recreation areas. The floral displays he initiated still brighten up the city and the rose he selected to celebrate the name of Southampton grows there and in many gardens throughout Britain.

Bill was an active member of the Beekeepers Association and only gave up his hives (and winning prizes) at the age of 90. Widowed in 1987 Bill passed quietly away on 31st October 1998, aged 95 years.

Ever a countryman at heart, his honesty, integrity and strength of character will be long remembered with affection by his sons, grandchildren, great grandchildren and all those other folk fortunate to have known him.

The Guild received notification of the passing of **T.C.ANDREWS** (1930) from the Isle of Wight but, despite enquiries, no further information has been forthcoming.

Our thanks go to Guild Committee member Graham Burgess for researching and collating information on departed Guild Members. Much of this is obtained from past *Journals*. Why not write in to provide us with your 'Life-Story' together with a photograph? Non Guild members' deaths will be mentioned in Personalia Notes – News of Kewites, in your *Journal*.

THE KEW GUILD STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31st DECEMBER 1998

	AWARD SCHEME			Total 1998 £	Total 1997 £
	General Fund £	Restricted Funds £	Endowment Funds £		
INCOMING RESOURCES					
Subscriptions	7,150.41			7,150.41	6,699.82
Donations and Legacies		10.00		10.00	10.00
Investment Income – COIF	1,366.76	4,531.66		5,898.42	5,898.42
– Interest	1,061.30			1,061.30	859.88
Annual Dinner	2,162.50			2,162.50	2,498.00
A.G.M. Day	656.50			656.50	840.00
Sale of "Kew Plantsmen"	292.00			292.00	390.00
Sale of Emblems	28.00			28.00	0.00
Journal Adverts	340.00			340.00	600.00
	13,057.47	4,541.66	0.00	17,599.13	17,796.12
RESOURCES EXPENDED					
Direct charitable expenditure:					
Kew Guild Journal	5,292.00			5,292.00	6,007.23
Prizes	382.00			382.00	381.00
Awards		5,490.00		5,490.00	4,420.00
Annual Dinner	2,393.98			2,393.98	2,595.05
A.G.M. Day	892.38			892.38	1,138.43
Postage	1,518.87			1,518.87	1,064.02
Other expenditure:					
Cost of "Kew Plantsmen"	134.85			134.85	181.35
Cost of Emblems	19.78			19.78	0.00
Insurance	38.06			38.06	42.19
Honorary Officers' Expenses	92.00			92.00	80.00
Past Presidents Badges	550.37			550.37	0.00
Sundry	141.15			141.15	442.07
Transfer between funds	1,115.21	-1,115.21		0.00	0.00
	12,570.65	4,374.79	0.00	16,945.44	16,351.34
NET INCOMING RESOURCES	486.82	166.87	0.00	653.69	1,444.78
OTHER RECOGNISED GAINS					
Gains on investments:					
Unrealised	4,140.16	5,210.55	8,669.93	18,020.64	23,213.95
NET MOVEMENT IN FUNDS	4,626.98	5,377.42	8,669.93	18,674.33	24,658.73
Balances brought forward at 1 January 1998	53,290.49	45,095.75	74,827.06	173,213.30	148,554.57
BALANCES CARRIED FORWARD AT 31 DECEMBER 1998	57,917.47	50,473.17	83,496.99	191,887.63	173,213.30

**THE KEW GUILD BALANCE SHEET
AS AT 31st DECEMBER 1998**

	1998		1997	
	£	£	£	£
FIXED ASSETS				
Investments		173,550.39		155,529.75
CURRENT ASSETS				
Stocks – Emblems	565.20		584.98	
– Centenary of Kew Plantmen ..	2,883.00		3,017.85	
		3,448.20		3,602.83
Debtors	322.16		217.27	
Charities Deposit Fund	15,800.00		14,500.00	
Cash at Bank	109.67		464.33	
		19,680.03		18,784.43
LIABILITIES				
Life Subscriptions	59.33		62.48	
Creditors	1,283.46		1,038.40	
		-1,342.79		-1,100.88
NET CURRENT ASSETS		18,337.24		17,683.55
NET ASSETS		191,887.63		173,213.30
FUNDS				
General		57,917.47		53,290.49
Restricted		50,473.17		45,095.75
Endowment		83,496.99		74,827.06
		191,887.63		173,213.30

These are summarised accounts extracted from the Annual Report and Accounts of the Kew Guild. The Annual Accounts were approved on 19th January 1999 and have been submitted to the Charity Commission.

These summarised accounts may not contain sufficient information to allow for a full understanding of the Guild's financial affairs. For further information the full Annual Report and Accounts including the Independent Examiner's Report should be consulted. Copies of these can be obtained from Rebecca Bower, The Kew Guild, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB.

LIST OF R.B.G. STAFF AND HONORARY RESEARCH ASSOCIATE MEMBERS OF THE KEW GUILD

(as at 31st December, 1998)

Staff:

Andrews, Roselle	Dampier, Shaun	Leese, Ian
Andrews, Miss S.	Davies, Steve	Leon, Christine
Atkins, Mrs. Sandy	Dempsey, Clare	Madill, Graham
Barnes, David	Done, Mary	Morley, James
Beentje, Henk	Edwards, P. J.	Owens, Dr. Simon
Bell, Miss S.	Evans, Jenny	Parry, Belinda
Bidgood, Sally	Ferguson, Ian Keith	Pope, Gerald
Bower, Rebecca M.	FitzGerald, Miss S. M.	† Prance, Professor Sir G. T.
Boyce, Peter	Foster, Clive	Ravenhall, Mrs. T.
Brent, Mrs. Helen	Gardner, David	† Sands, M. J.
Brett, Robert	Godfrey, Michael	Scott-Brown, Alison
Bridson, Diane M.	Green, Paul W. C.	Sparrow, Mark
Brown, E. W.	Hardman, David	Staniforth, Martin
Brummitt, R. K.	Hastings, Laura	Subiotto, Toby
Cooper, Mrs. Dianne	Hayes, Mrs. D.	Swinburne, Marina
Cowley, Mrs. Jill	Henchie, Stewart J.	Taylor, Nigel P.
Cribb, P. J.	Johns, Professor Bob	Vernon, Andy
Crow, Emma	Johnson, Margaret	Walley, D. A.
Cutler, Dr. D. F.	Kell, Shelagh P.	Weekly, R. J.

LIST OF R.B.G. STUDENT MEMBERS OF THE KEW GUILD

(as at 31st December, 1998)

Students:

Bird, Gareth	Heidieker, Claudia	Mengel, Bernd
Blanchfield, Anthony	Hirsch, Jennifer	Otto-Knapp, Iris
Brown, Rosminah	Horne, Sarah	Pollard, Paul
Byrne, Eamonn	Hunt, Leigh	Slack, Daniel
Cole, Christopher	Jones, Karen	Spicq, Emmanuel
Csiba, Mr. Laszlo	King, Kathleen	Turner, Justin
Fox, Emma	Lavelle, Christine	Weddell, Christopher
Furse-Roberts, James	Long, Helen	Wyatt, Andrew