

THE JOURNAL OF THE KEW GUILD

Founded in 1892

The Association of members of the Kew staff past and present

Events of 1984

Published in 1985

**Volume 10
Number 89**

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

**Royal Botanic Gardens
Kew**

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ROYAL BOTANIC GARDENS, KEW

THE KEW GUILD COMMITTEE 1984-85

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Committee Members:

Retire 1985

C. B. Bamkole Nigeria
 R. Mann Torbay
 P. Maunder Portsmouth
 P. Summers Zoological Soc. T. Preston
 Regents Park

Retire 1986

T. Cole Canada
 S. Craig Brighton
 H. Fliegner Kew
 T. Preston Ealing

Retire 1987

G. Burgess Whitchurch
 J. Taylor New Zealand
 J. Whitehead Merrist Wood
 J. Woodhams Kew

Retire 1988

D. J. Breach Pinner
 D. Evemy Hanwell
 F. Hebden Australia
 W. Worth Kew

Students' Union Representatives: M. Maunder and S. Rutherford
 Events Officer: P. J. Edwards
 Badges and Emblems: S. Henchie
 Honorary Auditors: T. Reynolds and Miss J. Cowley
 Award Scheme Chairman: W. E. Storey

EDITORIAL

Since the 'Hawks' on the Kew Guild Committee have sharpened their talons I believe that the Association has benefitted. Only paid up members now have their addresses in the Journal. Are your details correct? Have you checked since last year to update your Bankers Standing Order to £7. If not you won't be getting this Journal next year!

With the expansion and accuracy of Martin Sands' News of Kewites I believe our communication is getting better, and please continue sending 'copy' to me for next year. We want to know what you have been doing out there — your job, your family etc.

Our President now has the opportunity to address the Students at Kew and to give them information about the benefits of joining — including getting the Journal, apply for Award Scheme Grants, attending the Dinner etc. We are in close touch with the Curatorial staff and the Director, as well as the Trustees, and I feel we must all scratch each others' backs. I pay tribute to Dr. Margaret Stant, our tireless Guild Secretary for many years, who has helped us all in our various jobs on Committee, and welcome Winifred Worth who works at Kew as a member of the IUCN team who is our new Secretary. Chris Bailes, outgoing Treasurer, has also done sterling work for us on the financial side.

Where possible I have given dates of events that might interest Guild members — further details may be obtained from Kew. Telephone 01-940 1171 incidentally. Any member who might be interested in joining the Guild Committee please contact the Secretary — volunteers are most welcome!

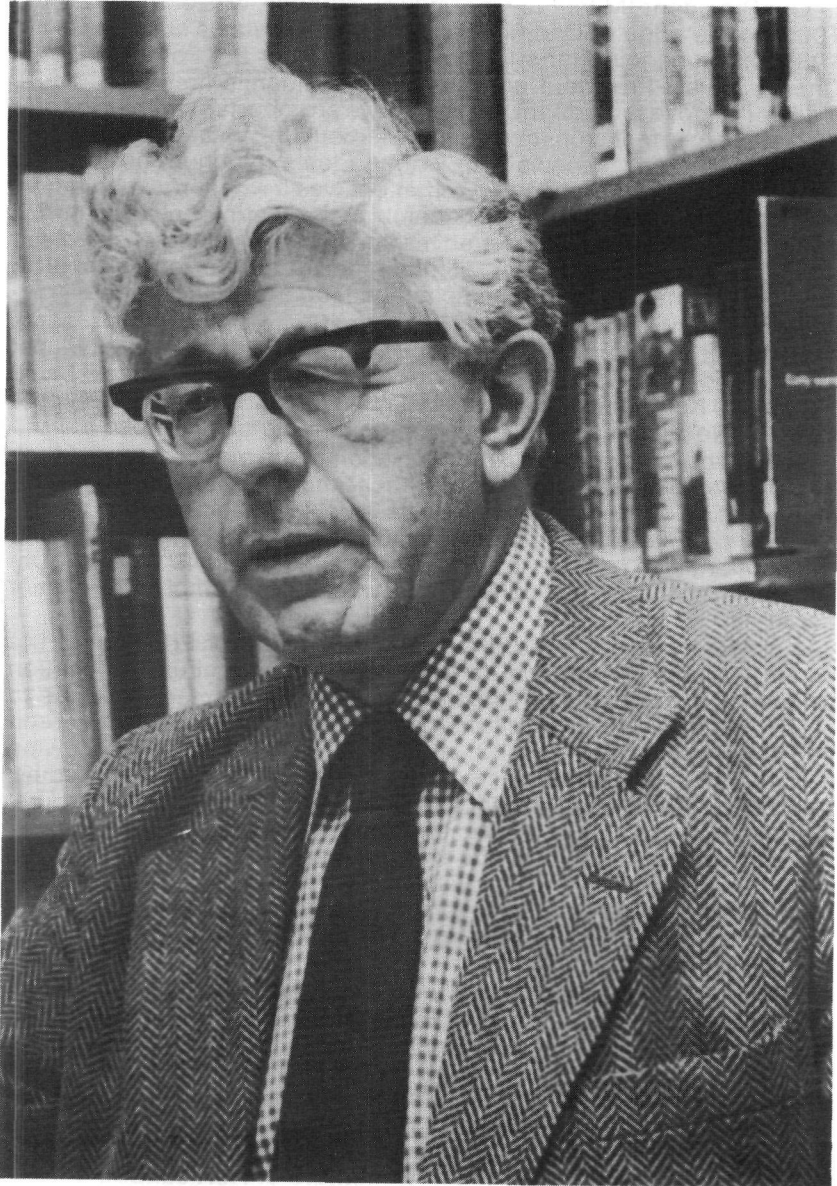
Finally, my grateful thanks to our long suffering printer, Brian Rowling, and his staff without whom I cannot do without!

Keep in touch.

Richard C. Ward
Editor

**CYRIL JAMES MITCHELMORE, N.D.H., M.I. Biol.,
M.I. Hort.**

President 1984/85



**CYRIL JAMES MITCHELMORE, N.D.H., M.I. Biol.,
M.I. Hort.**

President 1984/85

Our President "Mitch" to his family and friends, was born in January 1922 on the edge of Dartmoor and entered Kew as a Garden Boy in 1938 where he joined the Flower Garden under the Foreman Edwin Cherry, a Past-President and our new President's first boss. There followed a move to Bodnant, in those days an important training centre for glasshouse, fruit crops and general horticulture. Valuable experience was gained there, especially in writing labels (platinum chloride on zinc), for the Lord Aberconway of that era was a wonderful plantsman. Not satisfied with practical work among this wealth of plant material, our zealous Devonian broadened his horizons in the field of chemistry and physics, joining a class of pharmacists at the local technical college and thereby acquiring scientific laboratory skills as well.

"Mitch's" next move was to Manchester, working in the parks department and continuing academic studies at the University. Just after World War II had ended, our President found himself backtracking to Kew again and completed the two-year course as a student in 1947. No Diplomas and presentation ceremonies in those days!

In spite of, or perhaps as a reaction against the practical work, Mitch had always verred towards the theoretical and set his sights on a career in education, and in 1948 he was offered a lectureship at the Lancashire College of Agriculture. In addition to wide-ranging teaching commitments he was responsible for developing the horticultural station attached to the college and was soon promoted to Senior Lecturer.

In 1958 he was offered the dual appointment of Principal of the Welsh College of Horticulture and Principal Agricultural Education Officer for the county of Flintshire, now Clwyd. His main task was to build the college virtually from scratch, a worthy challenge. To his credit the college now covers 250 acres and consists of the following departments: Applied Science, Management and Computer Studies, Landscape Design and Interior Landscaping, Amenity Horticulture, Commercial Horticulture, Horticultural Marketing, Floristry and Flower Production and Machinery and Mechanisation. The staff at Northop undertake some experimental work in areas such as micropropagation, hydroponics, soil science and biological pest and disease control. The courses offered there range from National Certificate level up to Higher National Diploma.

Since 1960 the extension work has included invitations to serve on a number of committees, examining and validating bodies, including the Commercial Horticultural Committee of the Joint Committee for National Awards in Horticultural Subjects, National Certificate in Horticulture Examinations Board, Regional Education Advisory Council, National Proficiency Tests Council Horticultural Committee, Liverpool University Botanic Garden Management Committee and more recently the Steering Committee for the new Institute of Horticulture.

Mitch is not new to presidential responsibilities, having been President of the Horticultural Education Association in 1981. Fortunately his work has enabled our President to travel widely studying educational systems in many parts of the world such as Japan, U.S.A., Canada, Singapore, Australia, New Zealand, and Hawaii as well as European countries. In many of these far-flung places "I have had the great pleasure of meeting many old Kewites and seen some of the excellent work for which they have been responsible" says Mitch. Quite a testimonial.

ANNUAL GENERAL MEETING OF THE KEW GUILD

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

On Saturday, 15th September, 1984, 36 members assembled in the Jodrell Lecture Theatre at 2.30 p.m. for the Annual General Meeting. The President, Mr. A. Woodward, took the Chair, accompanied on the platform by the Hon. Secretary, Dr. M. Y. Stant, the Hon. Asst. Secretary, Mr. M. J. S. Sands and the Hon. Treasurer, Mr. C. P. Bailes.

The President welcomed everyone to the meeting and then all members stood in tribute to Kewites whose death had been made known to the Secretary since the 1983 Annual General Meeting: K. W. Braid, O.B.E. (1925) and Mrs. S. T. Lees (née Burrell) (1922), both life members of the Guild; H. J. Bruty, B.E.M. (1970) (K.G.J., 10, 88:244) and E. W. Studley (1930).

Apologies for absence were received from the following members: Prof. E. A. Bell, F. Constable, Mrs. E. J. Cowley, P. J. Edwards, H. Flower, T. Garwood, G. Ll. Lucas, E. W. B. H. Milne-Redhead, J. L. Norris, C. G. W. Poulter, W. T. Preston, S. W. Rawlings, Dr. N. K. B. Robson, J. Sales, Miss E. H. Smith, Mrs. W. Worth.

The *Minutes* of the A.G.M. of 1983 were then adopted. There were no *matters arising from the minutes*.

The Committee then reported as follows:

The Hon. Treasurer, Mr. C. P. Bailes, presented *the accounts for the year ended 31st December, 1983*, which were printed in the previous Journal, drawing particular attention to an increase in the assets of the Guild of just over £2,500 during the year. Although there had been considerable expenditure in 1983, including the cost of printing the revised Wakehurst booklet (over £2,300), Mr. Bailes was able to report that already the return exceeded £1,300 and that if sales were to continue at the same rate, the full cost of printing should be recovered after one more year with sufficient stocks for a further four to five years. Giving *the latest figures for the year commencing 1st January, 1984*, he reported the current account to be standing at £279.53, the Award Scheme deposit account at £2,244.61 (in addition to the sum

invested in the separate Charities Official Fund account) and the general deposit account at £1,982.01, a higher figure than in several previous years, reflecting a much healthier financial position for the Guild. Donations during the year, resulting from a generous response to the general appeal, totalled £1,775.43 which included a donation of £1,000 from the estate of Mr. E. C. W. Cooper, and income from subscriptions and arrears of nearly £2,000 was indicated to be almost double the figure for the previous year. The Hon. Treasurer concluded by expressing the hope that, with the improved income adequately covering its expenses, the Guild would be free to consider new enterprises in the future as well as increasing the funds available to the Award Scheme. Mr. F. N. Hepper confirmed that, despite earlier concern regarding the amount of commission on the sale of the Wakehurst booklet, it had been agreed, after the transfer of the Gardens to control by Trustees, that a sum of 15p (rather than 10p) per copy would be due to the Guild on all sales. Mr. Bailes, whose announcement that he intended to resign at the end of 1984 was received with regret, was given a unanimous vote of thanks for all his work as Hon. Treasurer during several years in office.

On behalf of Miss E. H. Smith, the Hon. Membership Treasurer, who was unable to be present at the meeting, Mr. Bailes then indicated a *Membership* of approximately 620, a figure very little different from that of the previous year. Speaking also on behalf of Mr. S. Henchie, he reported continuing steady *sales of ties and badges* of which new stocks had been acquired during the year.

The Hon. Editor, Mr. R. C. Ward, reporting on the 1983 *Journal of the Kew Guild*, pointed out that the cost had been 8% more than in the previous year, but the increase in part reflected a greater number of pages. He thanked contributors for their help and encouraged members to supply news for inclusion in the next *Journal*. Mr. Hepper reported that 120 back-numbers of the *Journal* had been sent free to Botanic Gardens and this had resulted in the sale of over £100-worth of back-numbers and several new subscriptions. The Editor was then thanked unanimously for his continuing work in maintaining the high standard of the *Journal*.

It was reported that the *Annual Dinner* had again proved to be a very successful event, although a declining trend in the numbers attending was noted and this led to consideration of possible causes, including the rising cost of the tickets. Several suggestions were made as to how to economise, while at the same time making the occasion more appealing to members, and it was agreed that the discussion should be continued in committee. Mr. P. J. Edwards, in his absence from the meeting, was thanked for organising the Dinner.

At the *Students' Prize Day*, the President of the Guild, Mr. Woodward, had been present on the platform when Mr. C. Notcutt was the guest speaker who presented the prizes and newly-designed diplomas. The ceremony had been followed by tea in Museum No. 1. For the occasion Mr. Woodward had worn the Guild insignia, but had chosen to speak

privately to the students about the Guild on the previous day. This meeting had proved useful resulting in six students agreeing to become members. It was agreed that a similar talk should be given to the new intake of students with a continuing regular contact between them and the Guild President.

The President thanked the officers and the *retiring members of the Committee*: Messrs. R. Adams, H. P. Boddington, G. L. Lucas and Dr. N. K. B. Robson as well as Mr. C. Sombrero (Students' Union Representative) and Mr. A. J. Hale as Auditor for their help and support during the year. Mr. A. Hart and Mr. A. Woodward also completed their terms of office as Vice-President and President respectively. Referring to the work of the Hon. Secretary, the President then paid special tribute, warmly endorsed by the meeting, to Dr. M. Y. Stant who would not be standing for a further term of office.

Mr. K. F. Pearson, as Chairman of *the Award Scheme* subcommittee, reported that three awards were made in 1984, to: Mr. M. J. Leppard who left Kew in 1971, for study in South Africa; Mr. D. L. Snellgrove in support of a study-visit to Bergen, Norway; and Miss C. Barker to give added support to a Thornton-Smith Scholarship covering work she was to undertake in Papua New Guinea. Mr. Pearson confirmed that, before money is allocated from the Award Scheme, applicants have to supply details of their proposed projects in order to satisfy the subcommittee that the award is to be used appropriately. The Award Scheme fund was noted to be increasing steadily with a further substantial donation of £50 recently received. Mr. Pearson expressed the thanks of the subcommittee to all those who had supported the Scheme. The raffle held at the Annual Dinner had realised £42, and the "Pagoda" evening after the last Annual General Meeting had made a profit for the Scheme of £100. A similar event, visiting Kew Palace followed by a buffet supper, was to take place that evening.

Mr. Pearson then displayed two original paintings by Leslie Greenwood, who had presented them to the Guild. The subcommittee had suggested that one or both of them should be the subject of a lottery to mark the tenth anniversary of the Award Scheme, the draw to be held at the Annual Dinner. After discussion, it was agreed that tickets would be available for sale, probably at 50p each, early in 1985. Details of mailing them and of publicising the draw would be considered in committee. It was noted that an appeal to industry would also be made and that "Readers' Digest", in which one of the Greenwood paintings had been reproduced had indicated that it would give some financial support to the Scheme.

Election of Officers, Members of the Committee and Auditor:

Mr. C. J. Mitchelmore, being the Committee's nomination was elected as President for the year 1984-85. On taking the Chair he addressed the meeting, speaking of some early recollections of his time at Kew. In proposing a vote of thanks to the retiring President, which was supported unanimously, he referred to Mr. Woodward's

valuable and successful year in office, during which the functioning of the Guild had been made known to the Board of Trustees as well as to the students. With the exception of the Hon. Secretary, the other Officers and four new Committee members were then elected *en bloc*, their names appearing at the beginning of this Journal. It was agreed that the office of Hon. Secretary, which remained vacant following Dr. Stant's decision not to stand for re-election, as well as the post of second Auditor, should be filled by election in committee.

Professor K. Jones then suggested to the meeting that, as the Gardens now had new colour monitors and a video recorder, the Guild might consider making a video film about its activities. It was agreed that the matter would be given due consideration by the Committee. Attention was drawn to the recent 80th birthday of Dr. C. R. Metcalfe, formerly Keeper of the Jodrell Laboratory and a past President of the Guild, and the sincere congratulations of the Guild were recorded. Mr. M. Clift then appealed to the Committee urgently to consider filling the post of Hon. Secretary as well as that of Hon. Treasurer early in 1985, and to assess carefully the possibility of a more even distribution of duties between members of the Committee.

There being no *other business*, the meeting closed at 3.45 p.m. and members joined their families and friends for tea in the Jodrell Common Room.

REPORT OF THE 1984 ANNUAL DINNER, 23rd MAY

by Peter Edwards, Organiser

This event was held, as in the last two years, at the Imperial College Refectory. The setting is excellent, the location easy to find and the food good so it was a bit disappointing that only 93 members and guests attended. However, there often seemed more people, as animation increased with time.

As this was the first Guild Dinner since Kew came under the Board of Trustees, the Chairman of the Board, The Hon. John D. Eccles, was first choice as our guest speaker. He revealed not only his talents as a genuinely amusing and candid after-dinner speaker but as a prolific (but alas unpublished) writer of original and well-rounded limericks. He gave us the benefit of two of them, one of which began "There was a pure legume called gene".* John ended in a serious vein, emphasising Kew's importance in the forefront of botanical science, Kew's importance to the public and their importance to Kew.

The President, Arthur Woodward, gave an amusing and informative account of his days at Kew, and Kew students of that time were pleased to be reminded of the student militancy of that age, and of characters

*The incompetent writer of this piece unfortunately mislaid the full text he especially requested, so you'll have to complete the other lines!

such as "Big Bill" Campbell. Despite Arthur's "admitted pride in being a short (5'4", his interjection!) speaker", he managed to provide entertainment for 18 minutes.

The George Brown Award was awarded to Noel Prockter.

Ken Pearson was energetically selling Kew Guild Award Scheme raffle tickets throughout the evening but when the prize winner was announced groans were very audible, for the winner was none other than Ken himself!

Throughout the proceedings our expert MC Richard Ward kept order. I think it may be unusual to have such a very willing MC, perhaps the company and wine helped.

If you missed the dinner, you shouldn't have! When I left it seemed some folk were so set up at the bar that they were likely to stay until after our licence-extension to midnight!

KEW GUILD AWARD SCHEME REPORT

by W. E. Storey, Chairman

Kenwyn Pearson stepped down from the Chair on completion of four enthusiastic years on the Committee, to be succeeded by me. His kind offer to continue to work on the appeal for funds was accepted with alacrity and he was promptly co-opted for a further year. Our grateful thanks are due to him and to the other Committee members for their sterling work throughout the year.

Those who know Kenwyn will know that he bubbles with enthusiasm and exuberance for the job in hand. Evidently these qualities and the absolute conviction with which Ken presented his discourse so impressed his employer, the Earl of Cadogan, that he donated £2,000 to the Award Scheme. Our grateful thanks go to Lord Cadogan for his generosity which enabled Ken, in almost his final action as Chairman, virtually to double our Capital sum.

Throughout the year donations of various amounts have been received with thanks but, Lord Cadogan's apart, it has to be said that welcome as they are they have been sufficient merely to preserve our Capital from the inroads of inflation. Ken's success demonstrates forcibly how effective a personal approach can be and I would ask all Guild members, if they know anyone or any firm who might be sympathetic to our cause, not to hesitate to extol our manifold virtues.

If we can raise our present Capital of £4,000 + to at least £10,000 + then we can really be in the business of making substantial awards.

Three awards were made in 1984 to assist with studies in South Africa, Norway and Papua/New Guinea. Recipients reports appear elsewhere in this Journal.

The raffle at the 1984 Annual Dinner realised £42 and the profit on the A.G.M. Soirée was around £130, both sums going to swell Capital. As an aside, profit on the bar at the Soirée amounted to only £1.60, so one wonders if a new race of abstemious Kewites is emerging!

The Soirée was voted a great success by all who attended and included a tour of Kew Palace conducted by the Custodian, to whom we extend our thanks. Now restored and furnished much as it was in the days of its Royal occupants, a tour of the Palace is a rewarding experience, with some surprises. Who would have guessed, for instance, that the many inter-connecting rooms were served discretely by stairways and 'secret' passages hidden in the thickness of the walls? We also saw the magnificent Elizabethan brick vaulting in the newly restored cellars, part of the original house on which the present structure was built in 1631. Our thanks to Graham Burgess, his wife, and other helpers who provided the splendid buffet supper to follow the tour.

1985 marks the 10th Anniversary of the Award Scheme and the Committee is launching a fresh appeal to industry for funds.

THE KEW GUILD AWARD SCHEME RAFFLE

by W. E. Storey, Chairman

A superb framed painting (approximately 21" x 15") by Leslie Greenwood featuring flowers and foliage of four Orchid species is to be raffled at the Guild A.G.M. on 14th September, 1985.

Tickets, 50p each, now available by post from K. Pearson, The Cadogan Office, 28a Cadogan Square, London SW1X0JH. Telephone: (Office) 01-584 4391. Tickets will also be on sale at the Annual Dinner. The raffle is not restricted to Guild members and volunteers willing to sell tickets outside the Guild will be welcome.

PRESENTATION OF THE KEW DIPLOMAS AND PRIZES 1984 (Course 18)

The Introduction by the Deputy Director, Professor K. Jones, was followed by an address and presentation of Diplomas by the guest of honour, Mr. Charles Notcutt.

THE KEW DIPLOMA

Honours

C. Brooks
C. Burgess
S. Morris

S. Piebenga
J. Sallis
M. Staniforth

Credit

C. Barker	A. Praill
A. Cathersides	J. Robbins
C. Clayson	T. Rogers
C. Crowder	B. von Schoenaich
J. Gaskell	D. Snellgrove
A. O'Grady	C. Sombrero
S. Phillips	T. Tan

Pass

L. Bustard	A. Griffin
I. Gayton	

International Kew Diploma

X. Jin

International Certificate

Miss S. Ho

PRIZES

The Ernest Thornton-Smith Travelling Scholarship	C. Barker
Henry Idris Mathews Scholarship	J. Priest
Hozelock-ASL Prize	J. Kempster
G. C. Johnson Memorial Prize	J. Sallis
Kingdon-Ward Prize	J. Sallis
Landsman Bookshop Prize	B. von Schoenaich
Sir Joseph Hooker Prize	J. C. Bowling
Donald Dring Memorial Prize	A. Jackson
The Metcalfe Cup	A. Snelson
John Gilbert Prize	K. Sorvig
Matilda Smith Memorial Prize	S. Morris
Dummer Memorial Prize	C. Sombrero
Proudlock Prize	C. Burgess
Prize for the best vegetable plot	C. Brooks, C. Burgess
Kew Guild Individual Study Prize	B. von Schoenaich
C. P. Raffill Prize	B. von Schoenaich
Professor Keith Jones Cup	B. von Schoenaich
George Brown Prize	C. Barker
Mutual Improvement Society's Prize	D. Cook
Lecturer's Prize	I. Gayton
Plant Identification Tests	S. Morris
Photographic Society Prize	A. Praill
Students' Union Life Membership	C. Barker, J. Gaskell, A. O'Grady, L. Snellgrove

TITLES OF MANAGEMENT PROJECTS (Course 19)

C. Barker	A proposal for a display of a West Indian Garden in the tropical conservatory at R.B.G. Kew.
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- C. Brooks An investigation into the possibility of setting up a garden shop within R.B.G. Kew, for the sale of plants.
- C. Burgess An analysis of the organisation of the National Gardens scheme.
- L. Bustard Botanical Books — from conception to publication.
- A. Cathersides The utilisation of micro-computers for staff/student training at R.B.G. Kew.
- C. Clayson The restoration of the Rhododendron beds, the Broad Walk, R.B.G. Kew.
- C. Crowder The problems of visitor management in a park on the rural/urban fringe. Walton Park — a case study.
- J. Gaskell Computers in horticultural education in England and Wales. A review of the hardware, software and tuition.
- I. Gayton An evaluation and review of the use of contract labour in the maintenance of amenity areas.
- A. Griffin The Gunnersbury Triangle — an educational nature reserve.
- S. Morris Analysis of management proposals in a market garden situated in Worcestershire.
- A. O'Grady Environmental education in the primary school curriculum.
- S. Phillips An investigation of turf maintenance at Albert Park, Abingdon.
- S. Piebenga A proposal for restoration for the parterre at Broughton Hall, Yorkshire.
- A. Prail An analysis of the use of chemicals and their application in relation to two National Trust properties.
- J. Robbins Assessment of the potential of, and recommendations for the establishment of a landscape gardening business based in Petworth, Sussex.
- T. Rogers Starting a business in freeland photography in the horticultural industry.
- J. Sallis Provision of a landscape display of orchids in the new Tropical Conservatory R.B.G. Kew.
- B. von Schoenaich Feasibility study of setting up an education centre at R.B.G. Kew.
- D. Snellgrove Video and the school of horticulture.
- C. Sombrero Evaluation of data-base software for horticultural training and administrative purposes.
- M. Staniforth The need for a policy: London Borough of Croydon shrub replacement in ornamental parks.
- T. Tan The management and maintenance of interior planting design in Seraton Skyline Hotel.



Course 19 with front row left to right: Leo Pemberton, Supervisor of Studies, Arthur Woodward, Kew Guild President, Professor Keith Jones, Deputy Director and Charles Notcutt, Guest of Honour.

THE KEW MEDAL AWARDS 1984



The Kew Medal is awarded annually to those whose achievements, contributions or services to the gardens at Kew and Wakehurst Place are considered of outstanding merit and deserving of special honour.

The medal, struck in silver-gilt, was first awarded in 1980, and is inscribed "**FOR MERIT**". The face design illustrates the Palm House (1840 to 1844) with a spray of Oak (*Quercus robur*) and Para Rubber (*Hevea brasiliensis*) leaves above representing both the knowledge and work of the staff of the Royal Botanic Gardens.

The name of the recipient is engraved on the reverse of the medal, together with the year of the award, and is encircled with vine leaves and a crown signifying Kew's links around the world.

PETER S. GREEN, B.Sc., F.L.S., F.I.Biol.



Peter Green, right, receives the Kew Medal from Charles Notcutt.

Peter Green was Keeper of the Herbarium and Deputy Director of the Gardens. Peter has been interested in plants from his earliest recollections and often visited the Gardens as a boy, but his first "official" contact with Kew was as a visitor to the Herbarium in September 1948, just after graduating at Kings College, London, and on taking up his first appointment as an Assistant Lecturer at Birmingham University. In May, 1966, however, he joined the staff of the Kew Herbarium when he and his family returned to Britain after five years in the U.S.A., where he had been horticultural taxonomist at the Arnold Arboretum of Harvard University. They decided that

they did not, after all, wish to reside permanently in America and fortunately a vacancy in the Kew Staff enabled the then Director of Kew, Sir George Taylor, to offer him an appointment. Because, before moving to the Arnold Arboretum, Peter had been a Senior Scientific Officer on the staff of the Royal Botanic Garden, Edinburgh (April 1952 to December 1960), he was able to take up his former Civil Service grade straight away in the job at Kew.

In his new post his knowledge of a wide range of cultivated plants and his experience and interest in the southwestern Pacific floras, as well as his specialist interest in taxonomy of both cultivated and wild members of the family **Oleaceae** enabled him to find a suitable "niche". He was promoted to Principal Scientific Officer on 1st January 1969 and then appointed Deputy Keeper of the Herbarium in 1971. Before there was any idea of such promotion, plans had already been made for him to represent Kew that year on the Royal Society Expedition to the New Hebrides but instead of withdrawing altogether he was permitted to take part in the first "leg" of the expedition from June to September. He returned to Kew with a brief visit, en route, to the Botany Division of DSIR at Lincoln, New Zealand, a week each on Lord Howe Island and Norfolk Island and short stops for a day or two at the Royal Botanic Gardens, Sydney, the Herbarium and the Botanic Garden at Perth, Western Australia, the Botanical Research Institute, Pretoria and the East African Herbarium at Nairobi.

Once back at Kew he took up his duties as Deputy Keeper in earnest, including the time-consuming editorship of the Kew Bulletin. In 1976

Peter was promoted to Keeper and Deputy Director of the Gardens, until his retirement in 1982.

Stephanie Joseph

In 1980-82 Stephanie was involved in planning and planting of the new Alpine House at Kew. When this house was opened to the public she maintained a high standard of presentation whilst learning to grow rock garden plants under new regimes, including the refrigerated bench with its controlled lighting. She later became responsible for propagation of rock garden and herbaceous plants used in the Order Beds.

Stephanie became a valuable assistant to her Supervisor and was able to undertake many of his responsibilities when he was absent. The Alpine Section has probably the largest collection of plants at Kew, some are under cultivation for the first time, others are rare, many are difficult. She has acquired many of the necessary skills and each year more and more plants not previously seen as living specimens at Kew are brought to flowering.

Corporal Arthur Pater

Corporal Arthur Pater, who retires at the end of September, has been the main stay of the Royal Botanic Gardens Constabulary at Wakehurst Place for several years. He joined the Gardens in 1969 — in the early years working part-time as a Constable — and was promoted to Corporal late in 1975. Arthur has been employed on a full-time basis since 1977 and was the first ever full-time member of the Wakehurst Place Constabulary.

He has a great love of plants and a wide knowledge of the plants at Wakehurst. Because of his adaptability and ever helpful nature he is very popular with the many thousands of visitors to the Gardens each year.

John Robinson

John, who is Foreman Electrician at W & L Installations, has been involved with the many electrical and glasshouse control installations at Kew for 19 years. He remembers the year he started at Kew as this was the year his daughter was born. John also has under his care, the installations at Osterley and Ham Park.

In those early years, John recalls how few glasshouses at Kew had electricity. His career working at Kew has charted the growth of glasshouse control technology, to today's integrated computer glasshouse controls.

John's always cheerful competence and reliability has been greatly appreciated, particularly by the glasshouse staff, having come to their rescue on many a breakdown and assured the safety of Kew's famous glasshouse plant collections.

SCHOOL OF HORTICULTURE LIST OF STUDENTS

We welcome this year's new students (Course 22):

Alison Bowles	Oxford Botanic Garden.
Allan Forrest	Kincorth Gardens, Forres and Threave Gardens, Nr. Castle Douglas (National Trust for Scotland).
Howard Gregory	Hampton Court and Merrist Wood.
Isabelle van Groeningen	R.H.S. Garden, Wisley and Arboretum Kalmthout, Belgium.
Penny Hammond	Erddig, Clwyd (National Trust) and R.H.S. Garden, Wisley.
Chris Hannington	Wyld Court Estate, Berkshire.
Clare Hawking	Pershore College; Welsh College of Horticulture.
Bruce Labey	Pershore College and Bush School Gardens.
Jane Lipington	Mid-Glamorgan College and Llanelli Borough Council.
Keith Parker	Nursery contracting and market gardens in Lincolnshire and Kent.
David Pearson	R.H.S. Garden, Wisley and R.B.G. Edinburgh.
Gregory Redwood	Salutation Gardens, Sandwich and Sandwich Nurseries Ltd.
Lester Searle	London Borough of Barking and Dagenham.
Gavin Smith	Garden Centre Plants Ltd., Lancs and Pershore College.
Adrian Sparrow	Northfields Nurseries Ltd., Lee Valley.
Timothy Walker	Oxford Botanic Garden; Askham Bryan College and Savill and Valley Gardens, Windsor.
Ronald Welsh	Newton Aycliffe and Havant Council.

Our four International Students are:

Alice de Nys	Whakatane District Council, New Zealand.
Upali Dhanasekera	R.B.G. Peradeniya, Sri Lanka.
Deb Reich	Denver Botanic Gardens, Colorado, U.S.A.
Ann Ryder	Indianapolis Museum of Art. Greenhouse and landscaping work.

THE KEW STUDENTS' UNION ANNUAL REPORT

by Mark Sparrow, President

The number of students enrolled annually at Kew seems to have now stabilised at 16. One hopes that the Board of Trustees will try to ensure that this number is at least maintained and that the course is kept at the high standard it has attained.

The shrinking number of students means that social and sporting events become increasingly harder to organise, as well as there being less potential participants. However a number of very good, if not always well attended, social evenings were arranged. A barn dance was held in the Lower Nursery on the evening of May 12th. A band called the "Byfleet Brewers" provided the music and everybody who attended had a swinging(!) time. The dance followed the annual sponsored litter-pick which took place during the day. About a dozen students collected litter along the towpath at Kew and at the Richmond fair Richmond green. One hundred and twenty large black polythene bags were filled and £500 was raised. Half of the money was given to the Multiple Sclerosis Society, while the S.U. kept the remainder to bolster their meagre funds.

A disco was held on June 2nd after the Kew-Wisley race. Two more parties were held in the autumn, both of which are traditional events in the Kew Student Union calendar. The first was the third year leaving party which gave the departing students a rousing send-off. The second event, organised in conjunction with the Kew Mutual Improvement Society, welcomed the coming intake of students for 1984. This was a more sedate affair and was very well attended by many staff, students, as well as the Director, Curator, Deputy Curator and other members of higher management.

With the change from the Civil Service to Trusteeship a license to sell alcohol in the gardens is now required. The Kew Club has taken responsibility for the license and this and a number of other factors have prompted the S.U. and the Kew Club to pool their resources for future social events. The first joint venture was the Christmas party held in the Lower Nursery on December 15th. The evening was very successful and was well attended. It is hoped that this is the start of a long and fruitful partnership.

Anyone who has organised any form of social function will realise the amount of time and effort required to set up and run an event smoothly. The Kew fête did not take place in 1984 and many people mourned its passing. Unfortunately the first year students, traditionally the organisers, did not feel able to cope with this enormous task, in addition to their already considerable workload. Whether the fête will be revived in the future very much depends on the staff at Kew becoming much more actively involved in the planning and running of the event. The students are very eager to participate but lack the time and manpower to run the whole show.

With regard to the Kew Diploma course, a strong feeling emerged during the year that students did not have an adequate platform to air their opinions or offer suggestions about the content of the course. This feeling culminated in a meeting of students and invited lecturers in the Jodrell Lecture Theatre. The outcome was that student representatives will now be able to attend the tri-yearly lecturers and examiners meetings and discuss specific subject matter contained in lectures directly with those concerned.

Another innovation in 1984 was the placement of students at Wakehurst Place for a three week period, to gain work experience at Kew's satellite garden. Already since the scheme started in September, three full-time and two international students have worked there. Accommodation is provided free of charge, although London weighting is not paid during the three-week period. It is intended that this will become a compulsory part of the course starting with the 1985 student intake.

Finally my thanks go to all the people who actively helped out with union activities in 1984 particularly the hard working members of last years and this years executive.

Student Union Executive Committee 1984/85

S. Thompson	Treasurer
B. Clifford	Secretary
A. Jackson	Social Secretary
M. Hurt	Sports Secretary
J. Mercy	Third Year Representative
P. Nicholson	Second Year Representative
L. Searle	First Year Representative
N. Barr	Ordinary Member
D. Reich	Fund Raising Officer
Kew Guild Representatives are: M. Maunder, S. Rutherford.	

STUDENTS' UNION SPORTS REPORT

by Martin Hurt, Sports Secretary

The calendar of sporting events during 1984 included a number of both regular annual events and some additional sporting challenges.

The annual relay race between Kew and Wisley was held this year on Saturday, June 2nd. Fewer teams than usual competed but the competition for those remaining was as fierce as ever. The winners of the Kew-Wisley Invitation Cup were 'Old Kew' a team of 'old' Diploma students with individual medals going to Paul Potter (1977) as Captain taking the first leg with the other legs in sequence run by Ben Penberthy (1967), Dave Francis (1983), Wayne Turp (1977), Colin Porter (1983) and John Hacker (1975) — yesterday's student athletic stars still proving their fitness. Second, winning the Kew-Wisley Tankard, were the team from Oaklands' (Hertfordshire College of Agriculture) and third the current Kew team. Trophies were presented by John Simmons, the Curator.

The five-a-side football tournament which followed was held in the old 'Paddock' by the Herbarium. Six teams competed, three from Kew, 'Old Kew', Merrist Wood and Oaklands. The winning team, through hard

fought rounds and a 1:0 goal final was Oaklands. They were awarded the attractive R.H.S. Five-a-side Cup with individual medals going to team members Ian Smits (Captain), Stuart Lowen, Daryl Parker, Ian Meakins and Richard Merritt. The runners-up were the Kew No. 1 Team and they were awarded the Kew Students' Union Challenge Trophy.

The day's events were concluded by a Disco held in the Wood Museum.

The later part of the summer saw a revival in interest in the gentlemanly game of cricket amongst the students. This rekindled enthusiasm was evident in the standard of play, in the few matches that were played, by the mixed staff-student side against teams as diverse as The British Museum of Natural History and The Cement and Concrete Association from Slough. The high point of the season, at least for the student element, was the close and exciting staff student match, which was in the best 'Sunday League' tradition. The staff were set exactly 100 to win, a score built on contributions by all the student players. The staff were reduced to 28 for 7 by some excellent bowling and outfield cricket. A rallying stand by Dr. Phil Cribb and Dr. Simon Owens brought the staff to within a few runs of the student total, but they were ultimately deprived of victory by two runs in the last over of the match, to enable the students to retain the coveted trophy.

The season culminated in mid August with a student expedition to the wilds of Scotland for a combined cricket/Five-a-side football competition against the students of R.B.G. Edinburgh. With transport provided by the Sherpa, and accommodation and entertainment by the Edinburgh students, the 'Team' was less than refreshed to face their challenge. However on a wet Saturday afternoon Kew took the honours in the Five-a-side, whilst the cricketers — five-a-siders in a different guise — fell to the Edinburgh students in much the same way as England to India! A great time was had by all involved and thanks must go to the drivers, Tony Kirkham and Robert Mitchell, who bore the 1,000 miles of travelling admirably.

1984 was not only a year of flailing cricket bats but also of flailing legs as the autumn saw the running of the Clog and Apron and the Round the Gardens races. The former was run in better conditions than the torrential rain on the day of the latter race, but lacked some of the media coverage of previous years. The race was, however, well attended and won by Gavin Smith with Ron Welsh second and the ever present Simon Goodenough third. A dozen runners turned out for the second race, which was won in less than ideal conditions by Ray Townsend from West Arboretum.

The only remaining sporting occasion of 1984 was the provision of a badminton facility in the Lower Nursery, courtesy of Mr. John Woodhams, and thanks to the efforts of Andy Jackson. Since its inception some use has been made of this, but the facility is open to all Garden's staff, and has plenty of scope for greater use.

THE KEW MUTUAL IMPROVEMENT SOCIETY

by Robert B. Mitchell, Chairman

The winter session of 1984 saw the end of the chairmanship of Louise Bustard. Louise was not only the first lady chairman of the Mutual, but during her two years in the job proved to be one of the best the Society has ever had. As a token of the respect and affection held for Louise, she was presented with a beautiful bouquet of flowers.

The Society hosted a wide variety of speakers during the session. John Whitehead talked of travel in Peru, John Whalley spoke on landscape and urban design, Jane Brown told us how Vita Sackville-West became a gardener and Penelope Hobhouse spoke on colour in garden design.

On the practical side, David Gilchrist talked about Plant Propagation on the scale he practices at Hilliers nursery. There was interest for the conservationists as Max Walters spoke of the conservation of the British Flora. Student lectures were presented by Louise Bustard, Anthony O'Grady, Brita von Schoenaich, Lloyd Snellgrove and Jan Woudstra.

The prizes for the 1983/84 session were as follows:

The Professor Keith Jones Cup (given at the discretion of the Kew Mutual Committee) and the S.P. Raffill Prize (for the winner of the student lecture competition) were awarded to Brita von Schoenaich.

The Sir Joseph Hooker Prize (for the person who has done most for the Kew Mutual Improvement Society) was won by Dickon Bowling.

The Kew Mutual Improvement Society Prize (for the person most active in discussion and debates) was won by David Cooke.

The George Brown Prize (for the runner-up in the student lecture competition) went to Cath Barker.

Tony Hall was presented with life membership to the Society for his participation and presentation of items of interest.

The Inter-College Quiz was once again contested in the best of humour and this time Writtle College carried away the trophy.

The Inter-Department Quiz for 1984 was won by the Conservation Monitoring Centre.

Finally, the Temperate Department won the inter-department tankard for the most items of interest.

The winter session of 1984 found the Society in a very healthy financial state and we were thus able to provide some support for the Photographic Society. There was also sufficient funds to try a more ambitious form of mutual improvement. Yitkin Seow, an international piano soloist, agreed to provide an evening's recital. A grand piano was brought into the lecture theatre and Yitkin delighted an almost capacity audience with his remarkable talents.

There were also a broad spectrum of subjects covered in the lectures. Miss P. Griffin talked on the Mary Rose, Hugh Clamp told us

about the new Museums and exhibition building. Prudence Leith-Ross spoke on the John Tradescants. Amenity horticulture was covered by John Gibson who talked about recent developments in bedding plants from seed. Conservation was highlighted by Peter Cribb who spoke on British butterflies.

Conservation of historic parks and gardens was covered by Peter Goodchild while Dr. William Stern talked about plants introduced during the last 2,000 years. Mathew Biggs, a second year student spoke on medicinal plants and Dr. Peter Reynolds told us of his work at the Butser Iron Age Farm Project.

Special thanks must go to Gary Castle who stepped in after a cancellation and spoke on John Loudon. Thanks also to Dr. Peter Brandham who filled a gap left by a change in the concert date and told us of his trip to the lost world. Su Xuehen, an international student from China, talked about the creative effect of scenery between plants and houses and Dr. Norman Bisset spoke about arrow poison and medicines.

The items of interest continued to be both entertaining and unusual as well as promoting discussion.

The Christmas Cake Competition was unfortunately very poorly supported this year and only two entries were received. These, however, were both of a very high standard and fine quality. A joint first prize was awarded to Caroline Kernan and Sue Thompson. The usual sampling of the cakes was cancelled due to lack of participation. Many thanks to Mrs. Bell and Louise Bustard for judging the competition.

GEORGE BROWN AWARD 1984

First established in 1983 to commemorate the life and work of George Brown, Assistant Curator, Arboretum, Kew 1956-77, this Award is made by the Kew Guild Committee to an individual for 'Services in Communication'. This year the recipient was Noel Prockter, Past President of the Guild. His name has been added to the Roll of Honour engraved on a brass plate on the Guild lectern. The cost of engraving is kindly borne annually by David (Jock) Coleman (1967).

SUBSCRIPTIONS UPDATE

Members should note that subscriptions were raised to £7 per annum, payable 1st January, and that Bankers standing orders should be changed. A suitable form is enclosed for this purpose.

LIVING COLLECTIONS DIVISION REPORT 1984

by Ian Beyer, Deputy Curator

Frantic telephone calls from the Editor have belatedly reminded me that copy for this year's Journal is long overdue. Reluctance on my part to get on with the job has mostly been based on the fear that to look back would result in falling off the edge of the proverbial mountain. Changes in the administration of Kew and the major projects which are currently underway has required us to keep our heads down to fight a way forward despite the gale which often seems to blow in the opposite direction. The fact that a few cobwebs have been blown away has been a mixed blessing as it has also exposed paintwork which is in need of attention.

Having completed the Temperate House refurbishment, the Australian House plantings were an obvious target for the radical element amongst us. It was agreed the time was ripe to attempt to create a more meaningful and attractive display and make better use of the space available. Side benches and paths were removed and the heating system altered so that two landscaped planting areas could be created and divided by one central path. This will allow plants to be placed so that they can be allowed to grow without crowding their neighbours or casting heavy shade over those requiring full light. Plants which had little horticultural merit have been removed to the nursery as have many specimens grown in pots on the side staging. The task was completed in the early summer and so far we have not had any adverse comments, but you can make up your own mind when you are next in the area.

The traumas resulting from the negotiations which had to be seen through before the Palm House could be renovated finally came to an end just before Christmas. In the meantime the huge span temporary Palm House on the southern edge of the Lower Nursery was completed. With some misgivings staff considered the prospect of moving the collection but careful planning and practice enabled this to be done quickly and efficiently by a very professional group of staff. It was sad to see the tree gang working with chainsaws to cut down those trees which were too large to deal with and had to be sacrificed. The **Cycads** and in particular the unique specimens of **Encephalartos longifolius** did not resist the move too much which for many was the first time they had seen the outside world as adult plants. The collection has been well laid out in the new house and has not suffered so far and visitors can still enjoy it.

Outside in the Rose Garden the renewal work of the last two or three years is paying dividends and despite a hot dry summer the display can at least be compared with the best in the country. Beds at the south end of the Palm House have been redesigned to accommodate a new planting to illustrate the history of the modern rose. This will be completed by the spring of 1985. Work also continued in the Canal Beds at both ends of the Temperate House to bring some semblance of

order to an area which has been neglected for many years. The nursery is full of wild collected material so within a short time these beds will once again become a place for the plantsman to browse and enjoy.

Moving to the north end of the Gardens and beyond the mountain of soil which dominates the skyline the new Tropical Conservatory has risen in all its glory. Excitement is rising with the prospect of creating the internal and external landscapes. Hopefully the contractors will be off site by next June, but two years will be needed to turn a building site into a living paradise which it will surely be.

In the area between Kew Palace and the Herbarium more heaps of soil have been thrown up by contractors who are currently in the throes of putting in the foundations for the new Reference Museum. At this stage it is difficult to visualise that within 18 months the construction will be completed. The five acres this opens up for public use will be planted up and maintained by the Arboretum Section who hope to start their work in the autumn of 1985.

Behind the scenes computerisation has insidiously intruded on the lives of many staff. Since 1969 the Plant Records have been held on the MAFF computer, but Kew has now been equipped with its own mini computer and the problem of transferring all the information has been taxing our minds. The VDU which sits in my office is no longer a threat, but is slowly becoming friendly as we delve into its inner workings. A test data base has been created and many improvements made so that all data we need to store is reasonably easy to get at. Pink, white and yellow index cards which in the recent years were essential to everyone's life will soon be no more having been processed for more utilitarian uses. The first part of a complete catalogue of the plant collections was published in March and with the new computer the system will be extended as quickly as possible. The Kew Hand Lists were discontinued in 1962 and we hope this catalogue will prove to be even more useful to our colleagues in other institutions who need to know what we grow.

The Senior Curatorial grades tend to stay at Kew once they have made a comfortable niche, but Supervisors and others rightly move on from time to time to greener pastures. Susan Macdonald left her job in the Palm House at the end of the year to go freelance and Chris Bailes in the Orchid Unit will be leaving us in early 1985 to take up a challenging job with the Eric Young Orchid Foundation. Sue Tasker has moved from the Temperate House to take over the Orchids and Martin Staniforth has been appointed to fill the vacancy. Susan Minter has been promoted to look after the Palm House and we wish them all well for the future.

Promenade concerts are now part of the annual calendar and two were held in the Temperate House during the year. A new departure has been a series of winter public lectures which have been sellouts and both of these activities' success are due to Harry Townsend who has been responsible for their organisation.



Front Row — left to right: Professor G. E. Fogg, Professor E. B. Robson, Professor E. A. Bell (Director), The Hon. John D. Eccles, B.A. (Chairman), W. G. R. Corkill (Secretary), Professor K. Jones (Deputy Director).
 Back row — left to right: Sir Charles Pereira, Sir Huw Wheldon, Sir Leslie Fowden, J. P. Cousins, Sir Philip M. Dawson, Professor E. C. D. Cocking, Professor W. G. Chaloner, Commander L. M. M. Saunders Watson.

REFLECTIONS ON THE INTERNATIONAL GARDEN FESTIVAL — 1984

by Leo Pemberton

The School of Horticulture hopes that many old Kewites visited the Garden Festival in Liverpool and that they enjoyed all the many events and gardens and especially the School's exhibit the "Water Margin".

By the close of the Festival the "Water Margin" went on to cover itself with glory by winning the highest Prize of Honour for the English National Theme Gardens — this was a mahogany marquetry reproduction William and Mary cabinet valued at £1,500, made by the Merseyside firm of Gostin. I was very proud to receive the award, from Lord Aberconway at the closing ceremony on behalf of the School and the Royal Botanic Gardens. The cabinet is now on display in the Wood Museum and will remain there for some months.

In addition to the prize of honour for the best garden overall; the garden was also awarded two large Gold Medals. One a Prize of Honour for the Best Design in the British Gardening Tradition and a second large Gold Medal for the British Garden Tradition Class.

To commemorate the great success we arranged a special presentation ceremony at Kew on Tuesday the 6th November, when Cyril Mitchelmore, our Guild President, presented Certificates of Merit to the five students involved in the design of the garden. The Board of Trustees was represented by the Chairman, the Hon. John Eccles, who also said a few words and Professor Elizabeth Robson. The presentations were made at the time of the Autumn Open Seminars when the papers were given by three recent holders of the Thornton-Smith Travel Scholarship — Tim Rees to Papua New Guinea, Ian Leese to the Caribbean and David Jewel to Tasmania. The new Secretary of the Bentham-Moxon Trust, Peter Cavalier, acted as Chairman. The day was a very in-house affair but served to show the strengths still very much present in contemporary students.

This winning streak has been further demonstrated by John Sallis winning for the School the first prize in the Stoke Garden Festival, Schools of Horticulture Garden Design competition. At this time it is not known whether John's garden will be constructed — it is a question of finance . . .

The five students who created the design of the "Water Margin" were also greatly involved in the detailed preliminary work as well as planting work or replacement of some of the seasonal plants. They all have successfully completed their studies and each has been awarded the Kew Diploma (which included a NEBSS component).

The students were:

M. Howard *Home address:* Bibury Trout Farm, Bibury, Cirencester, Gloucestershire.

Current Position: Horticulturist.

I. Grisenthwaite *Home address:* 38 Laurel Avenue, Twickenham, Middlesex.

- Current Position:* Self employed Landscape Construction business.
- C. Porter *Home address:* Theobalds Manor, Old Park Ride, Waltham Cross, Hertfordshire.
Current Position: Assistant Estate Manager, Capel Manor, Waltham Cross, Hertfordshire.
- A. Pyatt *Home address:* 274 Kew Road, Kew, Richmond, Surrey.
Current Position: Horticulturist.
- Miss B. von Schoenaich *Home address:* Bedford House, Chiswick Mall, London W.4.
Current Position: Development Officer, Leisure Services, London Borough of Brent.

The students received help and guidance in their submission from their course tutors:

Landscape Design — A. Blanc, F.R.I.B.A., Uphill House, Henley Drive, Kingston-on-Thames.

Landscape Construction — J. Medhurst, 72 Florida Road, Thornton Heath CR4 8EW.

Supervisor of Studies — L. A. Pemberton, N.D.H., N.Dip.Arbor., M.I. Biol., 3 Meadows End, Sunbury-on-Thames, Middlesex TW16 6SP.

The award winning garden had help in the form of sponsorship from:

Suppliers of Plants

- Alan Hardy, Hill Hurst Farm, Sandling Park, Hythe, Kent. (Tel: 0303-66516)
- Geoffrey Gorer, Suntehouse, By Sunt, Lindfield, Sussex. (Tel: 044-47-413764)
- M. Haward, c/o Bibury Trout Farm, Bibury, Cirencester, Glos.
- Crown Estates, Savill Gardens, Windsor, Berks.
- Royal Botanic Gardens, Kew and Wakehurst Place.

Suppliers of Fish (Rainbow Trout)

- Bibury Trout Farm, Bibury, Cirencester, Glos.

Suppliers 'on loan' (Pump and fitting for Waterfall)

- Water Techniques, Dawes Court Works, High Street, Esher, Surrey KT10 9QD.

The awards were presented by Lord Aberconway on Saturday 13th October (at the closing ceremony) in the Festival arena. They were received by the Supervisor of Studies on behalf of the students and the School of Horticulture, Royal Botanic Gardens, Kew.

There were 42 National Theme Gardens and the awards ranged from Certificates through to Silver, Large Silver, Gold and Large Gold Medals. The "Water Margin" received two large Gold Medals and the other School entry — from a School of Landscape Architecture — received a certificate.



Brita von Schoenaich planting the "Water Margin" in May.

LICENTIATESHIP IN CITY AND GUILDS INSTITUTE OF LONDON

Some recent students who have Advanced National Certificate of Horticulture and either the N.E.B.S.S. certificate of Supervisory Studies, or the National Diploma in Horticulture or the Diploma of the Institute of Park and Recreation Administration may be eligible to the Licentiate-ship of the City and Guilds Institute who issue a booklet on the subject. If anyone is contemplating an application please let Leo Pemberton know, as he may be able to assist.

GIFT TO BRITAIN FROM HONDURAS

by J. B. E. Simmons

At the instigation of His Excellency the Honduran Ambassador and his wife, arrangements were made for the Curator of Kew to visit Honduras and bring back a collection of Honduran plants. As Kew possessed very few plants from Honduras, and is now building an exciting new tropical conservatory, the opportunity to acquire botanically interesting specimens from the beautiful mountainous countryside of this Central American country was welcomed.

Honduras is very mountainous and its flora ranges from dense lowland forests with giant buttressed **Ceiba** (silk cotton) trees and palms, once famous for its Mahogany trees, through drier pine clad elevated valleys and hillsides to moist, high elevation cloud forest with its abundant tree ferns, bromeliads and orchids. Not surprisingly perhaps there are an estimated 600 different species of orchids — estimated since some of the eastern parts of the country are botanically little known — and, of bromeliads, Tillandsias abound, some 50 species of these 'air plants' as they are sometimes called. Many are now becoming popular as house plants because of their ease of culture, beautifully silvered foliage and flowers of many hues.

By taking seeds, cuttings or other propagules it is possible to collect without disturbing the natural populations. Material was gathered from a variety of habitats. Agaves (century plants — these only flower after seven to ten years) and cacti from dry areas, moisture loving ferns and begonias from the mountains, water lilies and bog plants from crystal clear lakes, including an attractive large white-flowered **Echinodorus** which is related to our own Water Plantain; and from the warm moist forests exotic Meliconias with their stiff flamboyant inflorescences and banana-like foliage. A number of plants, particularly orchids, were donated from private collections in Honduras. So many beautiful species, some almost gaudy, like the purples of **Laelia** or of **Cattleya** from the mid-mountain forests, and sometimes seen cultivated on a tree in a villagers garden encircling the branches with a garland of purple. Odontoglossums in variety with their ornamentally formed flowers of yellow and brown, orange Epiphyllums and the curious hollow stemmed Schomburgkias within which live guardian ants and with which village children once made musical pipes.

Amongst the many beautiful and scientifically interesting plants brought back to Kew, like the primitive **Zamia** once used as a ritual poison or a **Lecythis** whose seeds, if eaten, cause a loss of hair, are some potentially useful house plants. High on the list are some Philodendrons and two Monstera which are much more compact in growth and produce their ornamental white hooded flowers when relatively small.

Strong support was given to this visit by the Government of Honduras, through their Ministries of Culture and Tourism and Natural Resources and the United Fruit Company, which made it possible to

succeed with the demanding task of both collecting and shipping live plants to Kew. Lectures on the gardens of Britain, including Kew were well received and everyone involved was pleased to be able to help Kew acquire material so as to display Honduran plants to the people of Britain.

(From Eurogardeners News, May 1984. Editor Sue MacDonald)

CONSERVATION MONITORING CENTRE OF IUCN

It is 10 years since Kew set up its Conservation Unit in the Herbarium, organised by Gren Lucas and then under the auspices of the Threatened Plants Committee of the International Union for Conservation of Nature and Natural Resources (IUCN).

Starting with a small secretariat consisting of Hugh Syngé and two clerical assistants the unit developed both in the work undertaken, the number of staff taken on and the computerisation of the data.

Eventually, on 1st January 1983, the part of the Unit funded by IUCN, was renamed the Threatened Plants Unit and became one of the four remaining units of the IUCN's newly created Conservation Monitoring Centre. The other three units — Animals, Protected areas and Wildlife trade — are based at Cambridge but have a direct link to the Centre's Wang computer which is installed in Hanover House.

Readers may be interested to know that IUCN is a union of a governmental and non-governmental conservation organisations whose mission is to provide independent international leadership for promoting effective conservation of nature and natural resources. It works closely with the World Wildlife Fund, in fact managing all of WWF's international projects, and is perhaps best known for its Red Data Books and for the World Conservation Strategy that it prepared with help from UNEP and WWF. At present IUCN and WWF are running a major programme on plant conservation, largely designed by the team at Kew.

The job of IUCN's Conservation Monitoring Centre is to ensure the most up-to-date information is available on conservation for environmental decisions, and to provide IUCN, WWF and its members with a database on worldwide conservation.

The Director of CMC is Dr. Michael Tillman, previously Director of the U.S. Marine Mammal Laboratory in Washington State. Head of the Threatened Plants Unit, working in Hanover House is Hugh Syngé, who is also Manager of the IUCN facility at Kew.

The staff includes:

Miss C. Leon	Research Officer for Europe
S. D. Davis	Research Officer for Asia and Pacific.



Living Collections Division Staff, July 1984.



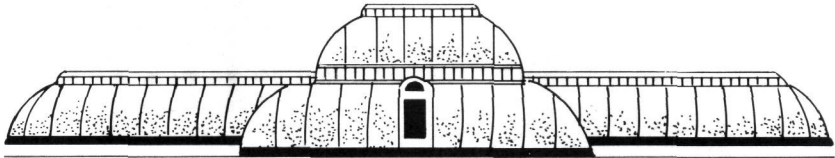
The group photo shows a large assembly of people, likely a school or organizational group, posed in front of a building with a prominent arched entrance. The individuals are arranged in many rows, with a smaller group seated in the front. The building behind them has a tiled roof and decorative architectural elements.

S. Droop	Research Officer for Africa.
D. Mackinder	Senior Programmer
N. Philipps	Assistant Programmer
Mrs. M. Beyer	Senior Typist
Mrs. W. Worth	Co-ordinator, Botanic Gardens Conservation Co-ordinating Body

The Unit's work for Central and South America is handled by Jane Lamlein at the Smithsonian Institution, Washington, D.C.

PALM HOUSE RESTORATION

by J. B. E. Simmons



The Palm House was closed from September 1984 for a period of two to three years while undergoing major repairs. During this time the collections were moved to a temporary house (near the Tea Bar) which is open to the public.

Built between 1844 and 1848 to the designs of the architect Decimus Burton (1800-1881) and the Irish engineer, Richard Turner (1798-1881) to house Kew's expanding collections, it survives today as one of the finest examples of a nineteenth century iron and glass conservatory — a brilliant piece of intuitive engineering.

A detailed engineering survey of the building in 1981 illustrated the extent of the corrosion and since that time detailed plans have been evolved for the buildings repair. Extensive consultations have been undertaken with many interested bodies, and the present scheme of work has the unreserved approval of the Royal Fine Arts Commission.

The intention is to continue to use the Palm House as a tropical botanical conservatory holding its unique collection of plants. The living reference collections within the house are used to support scientific research, conservation and education programmes and provide a public amenity. The problem for all tropical houses, however, is that the warm moist conditions required by the plants are also the most damaging to any structure. The challenge is how to keep the functions and yet preserve the house for the next 140 years. The previous repairs of the 1950's show that long term solutions are required this time.

Operating costs have risen considerably in recent years, just one example is the natural expansion and distortion of the present iron

glazing bars which break the specially curved glass. Fitting curved glass at high level is expensive and with so many breakages this bill alone is £20,000 per annum — not including the associated heat loss. Consideration has thus been given to reducing maintenance costs where possible.

Though other materials would offer economies, for conservation reasons, the building will remain as now in glass and iron. The main structural elements, (cast and wrought iron) can be repaired but the glazing bars are so corroded that they will have to be replaced. Made in high quality wrought iron (similar to steel), they were light and strong, but wrought iron has not been made anywhere in the world for the past 10 years. Such second hand material as is available for rolling is of too low a quality to give the required strength to the bars 30 foot spans. Because of the added problem of wrought iron rusting and the now very expensive need of regular painting (an impracticable task anyway in a humid greenhouse) the glazing bars will be replaced by a corrosion-free (stainless) steel, finished in white as now (the Palm House was originally painted a blue/green colour) to a virtually identical design — saving a 2mm adjustment that will allow the glass to expand without breaking.

A carefully planned propagation programme will ensure that no plant species are lost during rebuilding — many will be held as young plants while duplicates have been given to other collections, such as the new conservatory at Frankfurt. The remaining rare and aged specimens were established in large drums and containers ready for their move to a temporary Palm House (situated near the Tea Bar) which will display these plants for the public during the restoration. Kew's oldest greenhouse plant — an African cycad (***Encephalartos longifolius***) brought to Kew in 1777, has not left the Palm House since it was completed in 1848.

The plants were transferred in autumn to allow the contractors to begin work in January 1985. The detailed engineering schedules have been prepared by Posford Pavy and Partners at the direction of the Property Services Agency who are responsible for the maintenance of this building. The building work is scheduled to take two years with soil and plants to be returned in 1987.

COMMITTEE DISCUSSIONS

The Kew Guild Committee met four times during 1984, excluding the A.G.M. Subjects discussed included complimentary and copyright Journals, together with a 'subscriber' offer to world-wide institutions; the new Trustees and their future with the Guild; format of the Annual Dinner, which it decided should stay as a semi-formal function with

traditional food and speeches, but with less and shorter speeches; the War Memorial cleaning — decided against as it appears to be in good condition; Award Scheme 10th Anniversary publicity; disposal of deceased members' books; commemorative seats in the gardens; students' representation on the Committee; Wakehurst booklet printing and sales; computerisation of Guild records with a sub-committee to look into all aspects; sales of past Journals — available at 10p each plus p & p; new students to receive complimentary Journals upon arrival at Kew; Students' Prizegiving — Guild representation; advertising in the Journal — encourage.

STUDY TOUR OF BOTANIC GARDENS, SOUTH AFRICA, 1984

by Malcolm Leppard, Kew Guild Award Scheme Recipient

During September and October '84 I was fortunate enough to spend six weeks on a study tour of some of South Africa's botanic gardens travelling some 10,000 km doing so.

The purpose of my visit was to delve into most aspects of design, development, maintenance and management, but with a stronger emphasis on computerisation, visitor narrative and interpretation, staff training etc.

Due to time constraints I spent little time looking at plants as such, in any case the wealth of which would have necessitated decades not weeks.

The first stage of my journey took me from Harare, Zimbabwe, through various types of woodland, savanna woodland and tree savanna, to Mafeking via Botswana. My first impressions of South Africa were reminiscent of Australia with vast rolling plains, isolated farmsteads and plenty of large eucalyptus trees. I had expected kangaroos to bound across the landscape at any second. Towards Johannesburg the huge mining spoil heaps and abundant rubbish were all too evident. Fortunately, we were soon south at Kimberley where the diesel-electric engine was exchanged for a glorious old steam engine that puffed its way slowly across the never ending Karoo made up of short xerophytic scrub, interspersed with the occasionally flat topped hill. Those looking forward to a romantic steam locomotive ride like the 'good old days' were rudely awakened and brought back to reality by a carriage full of smoke and soot or incarcerated in a baking hot compartment with shuttered windows to keep out the filth.

Eventually we reached the mountains just north of the Cape. Once over this range the flora sparkled into life with verdant grass, pools of crystal water everywhere, masses of white **Zantedeschia** flowers, dwarf yellow and blue lupins, sprinkled with pink flamingoes and

dancing cranes. All along the track were orchards and vineyards that supply the luscious grapes to South Africa's well known wine industry.

After three days and four nights I had arrived in Cape Town.

Kirstenbosch Botanic Garden nestling on the side of the famous Table Mountain, is the 'mother' garden of the six regional botanic gardens dotted throughout South Africa, and is the oldest and the most popular. It, like its satellites, is run by a group of Trustees independent from the government although receiving 90% or more funding from it. Thus, luckily, they have a certain amount of autonomy come flexibility and their annual plant sale alone raises 50,000 Rand in one day for the garden.

Kirstenbosch is concerned exclusively with the flora of the summer high rainfall areas composed of no less than 20,000 species, exceedingly rich for such a small area.

South Africa is renowned for its **proteas** and **ericas**, but few were in flower during my short visit. Drawing the crowds, however, were large areas of brilliant annuals such as **Dimorphotheca**, **Felicia** etc., and beds of 'Crane' or 'Paradise' **Strelitzia reginae** and **S. juncea**.

A particular feature that impressed me was the trail for the blind. It consisted of a guide rope meandering through vegetation, which was spliced to indicate every point of interest and where an informative braille notice could be found. The footpath surface varied periodically from gravel, sand, woodchips and leaf litter.

On completion of my study of Kirstenbosch I briefly looked at the Company's Garden in the city centre. This, the first botanic garden in South Africa, began in 1652 as a supply garden for the replenishment of ships stores. It contains some very large original trees, but has been reduced to the status of a park. Before leaving Cape Town for Worcester and the Karoo Botanical Gardens, I managed a visit to the top of Table Mountain. Previously enshrouded, the clouds peeled back to provide glorious weather.

The Karoo Botanic Garden just north-east over the mountains, specialises in xerophytic plants of, you guessed it, the Karoo. Its 154 hectares containing over 500 species naturally occurring within its confines.

A riot of red, orange, and yellow flowers of Namaqualand daisies and vygies, greeted me. Most of the hectareage including the hills on the northern boundary, are treated as a reserve. Boasting a very large collection of Karroid plants it's difficult to believe that such a number can be maintained by so few, however, I attribute this to the low rainfall of 130-200 mm: less water, fewer weeds.

It's worth mentioning a hardscape element that I thought excellent, was the use of the gardens vertical, or near so, Malmesbury shale. This has been used upright in path construction making some of the best paths I've seen to date.

Lastly, I was quite surprised to see **Welwitschia** flowering at the tender age of five years.

Leaving Worcester I travelled up the east coast along what is known as the 'garden route', to George then onto Port Elizabeth, through an amazing variety of forests, mountains, Karoo ostrich farms, sea scapes etc.: indeed a trip of startling contrasts. From Port Elizabeth I had expected the train to continue north along the coast to Durban, but oh no! We had to circumvent Transkei and Swaziland, a mere 1,500 km.

Durban Botanic Garden began in 1849 to supply produce such as vegetables and pave the way for introduction of possible economic crops. After going through a number of bad patches it was handed over to the Durban Municipality in 1913. Fairly small in size, 20 hectares, it nevertheless is quite a delightful garden with many original trees, but no longer of botanical significance. Though only run as an amenity it has attributes that could be usefully employed in other botanic gardens. I liked the lake with its architectural planting of **Nelumbo nucifera** and **Cyperus papyrus** etc., on the island weaver birds slung their pendulous nests in trees whilst white storks waded amongst an assortment of colourful waterfowl.

Two superb male specimens of **Encephalartus woodii** collected in 1895, still stand like sentinels over the garden.

I was pleased to meet two ex Kewites, Errol Scarr and Tony Hitchcock, both with Durban Municipality.

The next garden on my list was that of the lowveld, north-east near the border of Mozambique, at Nelspruit. The main reason for choosing this garden is that its climatic conditions are very similar to our own (Zimbabwe). Comprising of 154 ha most of it is treated as a reserve which is separated from the garden by a deep gorge of precipitous rocks containing the Crocodile River. This was impressive and has a good nature trail along its course. Opened in 1971 it concentrates on the flora of the lowveld principally South Africa's.

Nelspruit has just purchased a computer for use as a data base, from proceeds of its plant sales to the public.

Another point worth mentioning here is the fact that by law all publications, common names on labels etc. must be in English and Afrikaanse on a 50/50 basis.

Finally, I looked at Pretoria's Botanic Garden, a 100% owned and government run: a distinct disadvantage compared to those run by the Trustees.

My main interest were the computer and garden layout which attempts to grow South Africa's flora using Acocks system of 12 Biomes. The impossibility of trying to cultivate the flora from such diverse habitats is quite evident, however, the nursery complex is quite large and is carrying out some good work with endangered species etc.

Lastly, I should like to thank my sponsors, without whom the study tour could not have taken place. Main sponsorship was by the Stanley-Smith Horticultural Trust with a support grant from the Kew Guild and, at the very last moment, sufficient funds to mop up rampant inflation, by the John Wakeford Trust of Zimbabwe.

WANDERINGS IN WESTERN NORWAY

by D. L. Snellgrove, Kew Guild Award Scheme recipient

As a result of the Henry Idris Mathews Scholarship and a travel award from the Kew Guild I was fortunate enough this summer to be able to spend three weeks in Bergen in western Norway at Bergen Botanic Garden and the Norwegian Arboretum.

Bergen is Norway's second largest city (after the capital Oslo) with a population of around 200,000. It lies in the south-western part of the country and compared with the rest of Norway enjoys a mild wet maritime climate. In fact soon after my arrival I was given an umbrella and quickly discovered that umbrellas are to Bergen what bicycles are to Amsterdam — essential items!

Called the “Fjord Capital” it is surrounded by countryside indented with fjords, dotted by islands and topped off with mountains. The city itself is built around seven hills and many of the older parts consist of narrow streets and wooden houses clinging to steep hillsides. Above this the hills rise to 650 metres, mostly wooded to 300 but always providing excellent recreational areas for walking, swimming and other outdoor pursuits.

The Botanic Garden, founded in 1897, is situated just south of the city centre next to the natural history museum in the University quarter. The University of Bergen is responsible for the scientific activities of both the Botanic Garden and the Arboretum. Although the garden is small and modest by our standards (0.9 hectares in size) it contains 5,000 species displayed and laid out in an attractive manner. From the small public glasshouse sited on a small hill at the south end of the garden good views are afforded over Bergen toward the wooded hills beyond.

The Norwegian Arboretum, established in 1971 as a Nordic co-operation venture, is 12 miles south-east of the city on the edge of Fanafjord. Its area of 30 hectares comprises a rugged topography with hills, rocky gorges and a small lake providing not just attractive naturalistic planting areas but also amenity and recreational potential. Walking is combined with educational nature trails and on the long shoreline there are many excellent bathing places including facilities for the disabled. Most of the arboretum consists of informal plantings, sometimes bordering on the “wild” whilst only a very small area is planted formally as one might expect in England. Various collections are grouped including **Nothofagus**, **Rhododendron**, **Acer**, **Betula**, **Ilex** and Asiatic and North American conifers. The **Ilex** are being assembled to form a decorative selection programme using plants from all over Norway.

In addition to visits to the Botanic Garden and Arboretum I took the opportunity to visit the surrounding area from which two trips in particular stand out.

The first is well known in western Norway and despite suffering from a mouthful of a name — “Norway in a nutshell” — it is a splendid scenic

journey travelling about 100 miles west into the fjords and mountains. A quick itinerary is Bergen—Voss—Myrdal—Flam (all train), Flam—Gudvangen (fjord steamer), Gudvangen—Voss (bus), Voss—Bergen (train).

The train leaves Bergen and is soon passing alongside fjords and small villages, hamlets and isolated farms. On the approach to Voss the train climbs and snow covered mountain tops appear. From Voss the train continues to Flam the changing point for the Flam line. Here there was some delay but bathing in the warm mountain sun only 100 feet or so below glistening snow patches, who cared? The train arrived and moved off to make the most spectacular train journey I'll probably ever make. Through the carriage window there appeared an ever changing panorama of unique scenery, snow capped mountains, thundering waterfalls and peaceful green valley meadows. A few facts and figures will emphasize this. Myrdal station lies at 865 metres and in 45 minutes the train travels 12.4 miles down to Flam station on Aurlandfjord. Some of the gradients are heart stopping (the steepest is one metre in 18) and it comes as quite a relief to know that the carriages have five separate braking systems any one of which can stop the train. From Flam a steamer is taken to Gudvangen at the head of the neighbouring Naerøyfjord, one of the narrowest fjords in Norway. This journey was made in brilliant sunshine and only spoiled by the fact that the steamer was packed full of tourists and it's literally standing room only. Nevertheless the majesty of sheer rock hundreds of metres high rising out of the water was on occasion enough to shut anyone up! From Gudvangen buses leave for Voss through the Naerøyvalley and then up the Stalheim curves where the road achieves gradients of one in five whilst twisting around numerous hairpin bends and where (if you've the courage to look) yet more awe inspiring scenery reveals itself. After all this it's quite a relief to gently nod off to sleep on the train back to Bergen.

My second trip was to fulfill a long standing ambition to see a glacier. Here I was quite fortunate in that the Hardangerjøkulen glacier is within reasonable travelling time from Bergen, being only a good hour's walk from Finse railway station midway between Bergen and Oslo. This area lies within the newly founded national park Hardangervidda (vidda = mountain plateau), established in 1981 and encompassing an area over 3,000 sq.kms all above 1,000 metres. It is also reckoned to contain the largest wild deer population in Europe, estimated at 10,000 head in 1973.

Finse station at 1,222 metres is the highest railway station in Norway (it is inaccessible by road) and lies along a 60 mile section of track above the tree line on a bare and windswept plateau. Just before Finse the railway reaches 1,290 metres at Taugevatn, the highest point on the line where the land is largely covered by snow and any water by ice. By this time I was definitely having second thoughts. The train then stopped at Finse. Why was I the only person to get off? The rain then started to fall and it seemed especially cold and wet as a glance at the

station thermometer told me it was 5C, wonderful! But then I got lucky, the rain blew away, the sun came out and in the distance the glacier dome gleamed, shone and beckoned.

So off I went, past remnants of dirty snow left from last winter's heavy falls which still lay two metres thick in one place at the roadside. Vegetation was scarce and any plants in flower were all the more brilliant for their rarity. Yellow **Compositae**, some blue **Geraniaceae** and pink **Caryophyllaceae** was as far as my botanising went! But all formed handsome showpieces as I tramped towards the glacier jumping from rock to rock and crossing charging streams of fresh meltwater. With some trepidation I crossed several large crisp snowfields (my ice axe hadn't featured in my original summer plans!) while watching a family happily ski-ing on the slopes in the summer sunshine. The edge of the glacier proved a bit of a disappointment as dirty grey fingers of ice ended in ten metre walls surrounded by a landscape of broken and barren rock in deep valleys gouged out by previous glacial advances.

Nevertheless the day spent here wandering around streams, snow and ice in perfect sunshine and almost total isolation was the most peaceful and restful day I'd spent in a long time.

REPORT ON THE VISIT TO THE CANARY ISLANDS

by Carlos Sombrero, Kew Guild Award Scheme recipient

Introduction

The visit took place from the 24th of April to the 25th of May.

The main purpose of the visit was to investigate the conservation programme in these islands. Another objective was to collect plant material for several departments at the Royal Botanic Gardens, Kew, and for Dr. F. A. Bisby of Southampton University.

Only Gran Canaria and Tenerife were visited. It was thought unwise to visit Lanzarote and Fuerteventura on the time available, as they come under the jurisdiction of the Gran Canaria Province.

It can be said that most of the objectives were achieved, if not fully, at least partially.

The Conservation Programme in the Island of Gran Canaria

In Gran Canaria, not including other islands under its jurisdiction, 27 reserves were going to be proposed at the time of my visit; one reserve has already been approved. One is for an area to be a National Park (Pilancones-Ayagaure), six to be Natural Reserves (Parques Naturales), and 20 Sites of Scientific and Special Interest.

In accordance with the recommendations set by the World Conservation Strategy (W.C.S.), priority for conservation will be given to

endangered species that are sole representatives throughout the world, endemic taxa, and wild representatives of crop plants and other taxa of potential use to man.

One of the difficulties to establish conservation sites in the Canarian archipelago is the very complex administration system. Several Bodies are involved in the governing of the Province. These are Central Government, the City Council (Ayuntamiento), and the Insular Council (Cabildo Insular).

All conservation in Spain comes under the auspice of I.C.O.N.A. (Instituto para la Conservacion de la Naturaleza) which depends on the Ministry of Agriculture, Fisheries and Food, and therefore of Central Government. Matters concerning urbanisation in the island are controlled by the City Council, or Ayuntamiento. All other affairs are dealt with by the Insular Council (Cabildo Insular). As if this was not difficult enough, the Autonomous Government which has just been elected will also have legal powers, but what these powers will entail nobody knew at the time of its election.

A Contract of Agreement between the Insular Council and I.C.O.N.A. was signed on the 10th of March 1982, in order to unify their efforts in scientific and educational work. The validity of the Agreement is for four years, except when one of the signatories decides to terminate it earlier.

The aims of the Agreement are:

1. "The conservation of genetic resources of Canarian flora by the installation of germoplasm banks, cell/tissue culture, and other methods aimed at conservation."
2. "Ecological surveying of Gran Canaria with a view to determining the status of habitats."
3. "The planning of conservation areas in publicly owned land and the reconstruction of habitats of autochthonous flora in adequate areas."
4. "Education of the public by way of seminars, lectures, publications, etc., and the signalling of Nature Trails in areas of utmost floristic interest."

In order to implement the above aims, a Commission has been set up. The members of the Commission are:

- (i) The Director of I.C.O.N.A.
- (ii) The President of the Insular Council.
- (iii) The Regional Inspector of I.C.O.N.A.
- (iv) The Director of the Botanic Garden "Viera y Clavijo".

I.C.O.N.A. will supply the economic backing plus planners, agronomists, foresters, geologists, and other scientists, while the Insular Council, by means of its Botanic Garden "Viera y Clavijo", will provide research facilities and botanical expertise.

By law, all proposed sites have to be given a Public Hearing before they can be declared conservation areas.

Tourism, Agriculture and Forestry in Relation to Conservation

It would be reasonable to suppose that tourism, agriculture and forestry have had a damaging effect on local flora.

Due to mismanagement of the forest in the past, it is plausible that many taxa have been threatened, and perhaps some lost altogether. The most damage has been caused by the indiscriminate cutting of pine and laurel woods, which has led to erosion in most of the island.

A secondary harmful effect on the flora has been achieved indirectly by the destruction of the trees. This is because of what is termed "horizontal rain" (*lluvia horizontal*), that is to say the water deposited on the vegetation by condensation of clouds. This is thought to be a serious problem as much of the island water reserves are very low due to very little vertical rain in recent years. If the contribution made by horizontal rain is too small because of deforestation, then the island may be facing very severe consequences indeed.

Agricultural damage to lowland vegetation is difficult to assess as there is a lack of information as to which taxa were present in these areas in the first place. Even so, some losses must have occurred. Fortunately, the highest concentration of taxa is in the mountainous regions where agriculture is not as intensive as in the more profitable lowland.

The introduction by agriculture of certain alien plants such as **Agave americana**, **Opuntia** spp., **Rubus ulmifolius** and others, may prove very harmful for many local taxa as they are colonising large regions of the island and their control will have to be undertaken soon in certain floristically rich endemic sites before these invaders take over.

Agriculture uses large quantities of water which is extracted from wells and galleries all over the island. Some of these wells and galleries are located in taxa-rich areas in the mountains where the flora depends for its survival on the moisture of the rocks, as is the case with some ferns. It appears that the only way to solve this necessary evil is a more efficient use of the available water by agriculture or the alternative may be to forbid the removal of water from these areas entirely.

A serious problem that may occur due to agriculture is the contamination of water with chemicals used by this industry. Most of all the water used in the island comes from a natural subterranean reservoir. The contamination of this reservoir will not only affect plants but, more important still, people. There is already some concern in certain quarters due to the intensive and systematic use of chemicals, from fertilisers to herbicides, and the possibility of infiltration of these substances into the water cycle.

As far as tourism is concerned, most naturalists in the island regard it as harmless to conservation. This is only true in the direct sense, as indirectly tourism has done a lot of damage to at least one ecosystem: Maspalomas dunes system. The Maspalomas hotel explosion in recent years has been built inside the dunes natural system while the fresh water pond, also nearby, has been opened to the sea. All this has been

done in order to procure a sun-worshipping, mainly Northern European tourist, by an "ignorant" local landowner.

The collection of wild plants by tourists does not seem to have caused any damage to threatened taxa, as far as we are aware. That wild plants have been gathered cannot be doubted. There should be strict control on unauthorised collecting, regardless of the rarity of the plants.

Local naturalists appear rather reserved when placing any sort of blame on the tourists, as they are obviously afraid that this may harm their public image, and they usually blame any damage on the authorities for lack of public vision. Whether this is entirely true or not is difficult to estimate, but tourists can be criticised for the lack of conservation awareness that some of them show.

Conservation Awareness in Gran Canaria

There are several conservation groups in the island that operate a policing role on the environment. Among the more prominent groups is A.S.C.A.N. (Asociacion Canaria para Defensa de la Naturaleza) which, in conjunction with the Insular Council of Gran Canaria, the International Union for the Conservation of Nature (I.U.C.N.), and the World Wildlife Fund (W.W.F.), produced the Red Data Book of Renewable Natural Resources. A.S.C.A.N. can also claim the success of having a weekly column in a local newspaper as well as two hours of radio a week. This is perhaps more than similar conservation groups have achieved in this country. Despite their success with the media, some people in the local administration think that they are far too idealistic and lack problem-solving ideas.

Conservation Sites Visited

Some of the more important floristic areas were toured. These included visits to:

Los Tiles de Moya

This is thought to be a Tertiary laurel forest relic that once abounded in Southern Europe and Northern Africa. The laurel species include **Acotea foetens** (Aiton) Benth and Hook, F., **Ilex canariensis** Poir, **Laurus azorica** (Seub.) Franco, **Apollonias barbujana** (Cav.) Bornm, **Persea indica** (L.) Spreng.

The ecosystem has been given legal protection after its impoverished state was indicated by the German botanist G. Kunkel in the 70's.

The reserve covers an extension of 44 hectares and is closed to the public for picnicking, but not for walking.

At present, it has been planted with autochthonous laurel species till the natural cycle can be restored.

Many endemic plants grow in this area, among the more striking plants being **Canarina canariensis** (L.) Vatke.

Maspalomas

It is proposed to be a 20 km² reserve including 4 km² of sand dunes; the only such ecosystem in the whole archipelago. It is not a taxa-rich

area, its main asset being the dune system, endemic lizards, and being a migration zone for birds.

La Caldera de Baldama

Of ecological and floristic importance. The more important plant in this depression is **Sideroxylon marmulano** Banks, that it was thought to be extinct in the island till its recent rediscovery. The opposite has happened with **Isoplexis isabellina** (Webb. & Berth.) Masf., a Gran Canaria endemic that has been lost from this area.

Temisas

It is proposed to be a 40 hectares reserve. The main issue for its conservation being a local endemic, **Solanum lidii** Sunding.

Playa de Jinamar

This reserve site is suggested to be a few hectares in extension. In this area under the advertising placards and facing the sea, a local endemic plant grows, **Lotus kunkelii** (Steve) Bramwell & Davis. Because of its unique clamitic-edaphologic requirements, it has proven impossible to grow in cultivation as yet, and for this reason alone it is of great ecological value.

Other visits were also made to the Riscos de Guadayeque, where **Kunkeliella canariensis** Stearn is said to grow, the Pinar de Tamadaba and the proposed National Park of Pilacones-Ayagaure.

Visit to Tenerife

Five days were spent in the most botanically rich island of the whole Canarian archipelago.

A visit to La Ladera de Guimar, on the east of the island, was made in order to collect some living material. Plants collected were: **Cheilanthes pulchella**, **Monanthes brachycaulon** (Webb. & Berth.) Lowe, **Davallia canariensis** Sm. All collecting was done under the supervision of Dr. Santos Guerra of I.N.I.A. (Instituto Nacional de Investigaciones Agrarias).

A trip was also arranged by Dr. Santos Guerra to Las Canadas del Teide (Teide National Park) where many endemic taxa are legally protected. Some of the more outstanding plants seen in flower at the time were **Echium wilpretii** Pearson ex Hook. fil., **Viola cheiranthifolia** H.B. & K., **Spartocytissus supranubius** (L.) Webb. & Berth., and **Descurainia bourgeana** Webb. ex O.E. Schulz.

Near Las Canadas, in an army exercise field, **Erigeron cabrera** was located and a dry specimen was collected for the Kew Herbarium. This is a new species shortly to be published by a local botanist and only grown in this "inhospitable" habitat.

The establishing of conservation reserves in Tenerife is in a less advanced state than in Gran Canaria. The only site under legal protection being the Teide National Park. This is unfortunate since Tenerife has the highest number of species in the whole archipelago.

In the Jardin de Aclimatacion de la Orotava it was very enlightening to see many tropical plants growing quite satisfactorily outdoors. It is

therefore reasonable to suppose that botanic gardens with such favourable environmental conditions should be developed into international centres for the conservation of threatened tropical taxa without the high cost of the present conservation programme in the Northern Temperate Zone botanic gardens. The only drawback to this strategy is the lack of trained gardening personnel in regions such as the Canary Islands.

The Botanic Garden—“Viera y Clavijo”

Most of the stay in the Canary Islands was spent in this centre as a result of the Kew Student's Exchange Scheme.

The botanic garden was established in the island of Gran Canaria by the Swedish botanist E. Sventenius with the economic backing of the Insular Council (Cabildo Insular) 30 years ago.

D. Enrique, as he was known by the locals, was one of those people who merited the respect of not only his fellow scientists throughout the world but also the local people; everybody has a story to tell about this remarkable man. His name will pass to posterity if only because of **Sventenia bupleuroides** Font Quer. He discovered in the region of 70 new species in the Canarian flora, eight subspecies and about 35 varieties.

The garden has the best collection of Macaronesian flora anywhere in the world. The collection includes endemic Macaronesian taxa, Canarian endemics and a fairly large collection of cacti. It has an extension of about 20 acres and is beautifully landscaped, making maximum use of the terrain. It comprises a hillside and a valley bed. The hillside can be climbed by a series of winding paths with an ingenious layout that does not spoil the overall natural look of the slope. Another very attractive feature of the garden are the small waterfalls. The story is told that when D. Enrique was building these little cascades he would move the small pieces of rock in numerous directions until the water running past sounded harmonious — he was a great lover of classical music.

The scientific section of the garden is carrying out work on gathering data on endemic populations in order to advise the Insular Council on their present status. Other fields of work include taxonomy, pollenology, cytology, seed bank and micro-propagation. There are only five full-time biologists and 12 other scientists working on project grants, some of these projects include fauna.

As far as the botanic garden is concerned, the main problem is the total lack of trained gardening staff. For this reason the Director is considering setting up a training programme in conjunction with a local technical college to improve general gardening practice.

Conclusions

A great deal was learnt about conservation in the Canary Islands by listening to local people as well as scientists. Discussion on the establishment of conservation sites with planners, botanists, conser-

vation groups, and Governmental Bodies plus visiting proposed areas was most revealing. Four hundred transparencies were taken during the visit.

As a result of my stay in "Viera y Clavijo" a small propagation mist unit was installed, although I never saw it fully operational as one of the components wasn't in working order and it proved very difficult to acquire another in the island.

My thanks go to everybody that made this trip possible, in particular to the sponsors: Kew Student's Exchange Scheme, Kew Guild, the Biological Council and Dr. F. A. Bisby.

I would also like to thank those people that helped me while in the Canary Islands, specially the Director of "Viera y Clavijo", Dr. D. Bramwell, and Dr. Santos Guerra of I.N.I.A. who drove me personally around Tenerife.

BIRDS AT KEW GARDENS IN 1984

by Rupert Hastings

The following list includes the more notable observations for 1984. It is hoped that this layout will facilitate the finding of particular species in the account and aid comparison of different years.

Little Grebe. One was at the Lake on February 18th. Otherwise there were up to four on the Thames, a reduction on recent years.

Great Crested Grebe. A pair at the Pond from late April to early June did not stop to breed, though they were seen to carry nest material. However a separate pair at the Lake successfully raised four young.

Grey Heron. Inside the Gardens odd ones were regular evening visitors, and one also occurred at the Lake in daytime in October and early November. The most seen at one time in Syon Park was 20 on January 3rd.

Mute Swan. On the Thames the peak count was just five, on October 25th.

White-fronted Goose. A flock of about 70 flew west over the southern part of the Gardens on January 9th. This appears to be the first record for Kew.

Canada Goose. Eighteen young birds were counted in June.

Brent Goose. Over the Thames, one was reported on March 19th and seven on September 12th. Inside the Gardens a tame bird was a visitor in September and early October; this was no doubt an escape from a collection.

Mandarin Duck. A series of most unusual records at the Lake from September 25th to the year's end typically involved two or three birds

but six were seen on November 28th. All the visitors were full-winged of course, unlike Kew's pinioned birds.

Wigeon. A male of this very scarce species at Kew was visible in Syon Park on March 22nd. More surprisingly, one was at the Lake on September 10th, an early date in London for this essentially winter visitor.

Teal. At the Lake, two were present on September 6th and one on 13th. On the Thames there were peak counts of 14 on March 7th and seven on October 25th.

Shoveler. This is now annual at the Lake, where up to 13 were seen in January and nine in November. Surprisingly there were two males here on June 1st and one on 20th.

Red-crested Pochard. A male flew in from the river on March 28th. Presumably an escape.

Sparrowhawk. For the second year running a family party appeared in the Queen's Cottage Grounds in August. The nest site was never discovered. This raptor is now a well settled-in feature of the Gardens, though not easy to see at times.

Buzzard. One was reported on June 10th.

Lapwing. Up to eight were seen on five dates, in January, July, September and October.

Woodcock. Two were flushed in the Queen's Cottage Grounds about March 14th. This very elusive bird appears to be an annual visitor to Kew.

Snipe. Only seen over Syon Park, where there were six on November 23rd.

Greenshank. One flew over the Lake, calling, on August 8th.

Green Sandpiper. One was a surprising sight disturbed by a boat along the Thames on April 19th. This seems to be the second record for Kew.

Common Sandpiper. Annual along the Thames in both spring and autumn. Seen twice in April-May and up to just two on various dates from July to September 19th.

Black-headed Gull. Unusually, three were alighting on Horse Chestnuts to take unknown prey on October 16th. It would be interesting to know what this seabird finds to eat in a tree!

Kittiwake. One floating down river on January 27th was the fourth record for Kew. The first was only in 1979.

Common Tern. Over the Gardens there was one on May 9th and six flew west on September 10th. Along the Thames there were singles on April 19th and May 3rd and two on May 1st.

Stock Dove. Only seen away from the winter months, from March to October. This species very probably breeds in the area but evidence has not been forthcoming to date.

Woodpigeon. A large concentration of 200 was noted on November 23rd along Syon Vista.

Collared Dove. For the first time this species bred at Kew. The nest was discovered on April 6th, near the Marianne North Gallery. Two young birds eventually appeared but they only lasted about two days before vanishing, perhaps at the hands of a predator. Between June and October one or two birds could sometimes be seen at the north end of the Gardens. Previously this was a rare annual visitor to Kew.

Ring-necked Parakeet. This remains a feature of the Gardens with up to six being seen on many dates, usually just passing over.

Cuckoo. Single males occurred on April 19th and in late May.

Kingfisher. For the first time in many years there was no nesting attempt inside the Gardens. Only one was seen along the Thames, on March 22nd, before three together occurred there on October 26th, suggesting that breeding perhaps took place somewhere in the area.

Green Woodpecker. Juveniles were seen in August.

Lesser Spotted Woodpecker. Only noted on two dates, January 20th and May 21st.

Skylark. Passage over the Gardens was seen on March 22nd and on five dates, with up to four birds, between October 11th and November 1st, a larger movement than usual.

Sand Martin. Always scarce at Kew, just one was seen, on April 26th.

Meadow Pipit. Up to nine flew over on five dates from March 21st to April 16th; then there were singles on four dates between September 26th and October 24th.

Fieldfare. The largest count was 43, feeding on the golf course, on March 16th.

Redwing. One hundred and five were counted on the golf course and at the southern end of the Gardens on March 16th. Late in the year, there was an abrupt peak of 125 in the central part of the Gardens on December 4th.

Blackcap. Five singing males were present in June.

Lesser Whitethroat. The sole record was of one near King William's Temple on April 23rd.

Chiffchaff. An adult was seen with three juveniles on July 30th; this warbler is rarely proved to have bred here, though males are present every summer.

Willow Warbler. Only recorded in April and August, when on passage.

Goldcrest. An adult and two juveniles were seen on September 3rd.

Firecrest. One in the Berberis Dell on February 9th was the fourth record for Kew. Three have now occurred in winter, and one in spring.

Spotted Flycatcher. Present at five sites in June.

Pied Flycatcher. A female stayed near the Azalea Garden on April 16th and 17th.

Long-tailed Tit. A better than average total of four nests was found in the spring.

Jay. The peak was late this year, being 18 birds on December 4th.

Jackdaw. A scarce annual visitor; there was one on January 30th, four flew west on March 28th, one on October 10th and two on November 9th.

Tree Sparrow. The sole record was of two on May 14th, a poor showing.

Brambling. Just one was found, on March 16th, in the Queen's Cottage grounds.

Siskin. Numbers were poor at both ends of the year, with no more than four at one time.

Redpoll. Seen up to May 14th but as usual it appeared to be absent in summer.

Reed Bunting. Single males sang over in Syon Park but this remains a bird that I have never seen alighted inside Kew Gardens, in spite of the fact that it now occurs in dryer habitats than it used to, including private gardens.

Last but not least, there was the remarkable occurrence of a free-flying *Black Swan* in August and September. This succeeded in finding Kew's pinioned pair; the 50% increase in *Black Swans* at the Lake was known to make people do a double take! Another pleasant sight was a fine *Red-crested Cardinal* from the New World that graced the Gardens for three days in mid-April. There was also a tame full-winged female *Ruddy Shelduck* that took up residence with Kew's male at the Lake from August through to the end of the year. I had previously seen this bird in Barnes.

Finally I would like to thank all the 21 people who reported sightings to me. I am most grateful for their interest and assistance.

EXCERPTS FROM KEW NEWSLETTERS DURING 1984

with acknowledgement to Editors, Mrs. J. Stubbs and Mr. R. B. Hastings

Flood Defence?

The following extract from a local paper in Papua New Guinea was sent to the Director.

"Queuing up. Pharos International, the official journal of the Cremation Society of Great Britain, has issued a denial that the level of Kew Gardens is rising because so many people have requested to have their ashes scattered there."

(We understand there is no connection between the above society and the huge 'compost heap' in the Stable Yard.)

(January 1984)

The Goodbye/Hello Party

Our move from the Ministry and the Civil Service into Trusteeship was marked by the Party in the Temperate House on March 29th. It was prefaced by a sip of sherry for some 80 or so distinguished guests in the Marianne North Gallery amongst whom were the Minister of Agriculture and many of those with whom we have had a happy association over the years. Mr. John Eccles, the Chairman of our Board of Trustees, and most of the members of the Board were also present with their wives allowing a most pleasant mingling of 'past' and 'present' employers.

At six o'clock the guests joined with almost 300 members of staff including their wives and guests, in the Temperate House to partake of wine and a sumptuous buffet prepared by Mr. Paynter in his usual efficient manner and served by his bevy of delightful waitresses. Music was provided by an excellent brass quintet named 'The Temperate Five' whose sound seemed most appropriate amongst the trees and in keeping with the atmosphere of the remarkable house.

Professor Bell and Mr. Eccles made suitable speeches during the evening commenting on both the long period during which Kew has been a part of MAFF and on the exciting and challenging future which lies before us.

In total, the company, the setting, the music and the refreshment combined to make the party a most enjoyable and memorable occasion and yet so simple to arrange that it would seem that we do not need to wait for special occasions to arrange another.

(Keith Jones — *April*)

Go Down to Kew in Lilac-Time

The full original version has been found and contributed by Brian Halliwell. Apparently it was made into a music-hall song with rather different words.

From 'The Barrel-Organ' by Alfred Noyes:

Go down to Kew in lilac-time, in lilac-time, in lilac-time.

Go down to Kew in lilac-time (it isn't far from London!),
And you shall wander hand in hand with love in summer's wonderland.

Go down to Kew in lilac-time (it isn't far from London).

The cherry-trees are seas of bloom and soft perfume and sweet perfume,

The cherry-trees are seas of bloom (and oh, so near to London)
And there they say when dawn is high and all the world's a blaze of sky,
The cuckoo, though he's very shy, will sing a song for London.

The Dorian nightingale is rare, and yet they say you'll hear him there

At Kew, at Kew in lilac-time (and oh, so near to London!),
The linnets and the throstle too, and after dark the long halloo
And golden-eyed tu-whit, tu-whoo, of owls that ogle London.

For Noah hardly knew a bird of any kind that isn't heard

At Kew, at Kew in lilac-time (and oh, so near to London!),
And when the rose begins to pout and all the chestnut spires are out
You'll hear the rest without a doubt, all chorussing for London!

Come down to Kew in lilac-time, in lilac-time, in lilac-time:
 Come down to Kew in lilac-time (it isn't far from London!),
 And you shall wander hand in hand with love in summer's wonderland;
 Come down to Kew in lilac-time (it isn't far from London!).

(May)

Museums Division

What a fantastic exhibit! Superb! The best in the show! Absolutely fascinating! You should have got a medal! Hope you'll do it again next year. What about having it at Kew? Beautifully designed and arranged. Whose idea was it? Definitely the most interesting in the show! Congratulations! and so the comments went on and on during the whole of the Chelsea Show week. The subject under discussion was the exhibit L.C.D. and the Museums put up in the Scientific Section and the comments were those directed at various Kew staff who were manning the stand. For anyone who didn't see it at Chelsea (or during its brief sojourn in the Orangery) the exhibit showed about 50 plants commonly used for food in some form or other, which can be bought in shops in this country. Samples of the part eaten and/or product obtained were displayed in a case next to the plant; descriptive labels included information on country of origin, areas of cultivation etc. The exhibit was crowded the whole time and people seemed genuinely excited by it. Arrowroot (**Maranta arundinacea**) was particularly appreciated; the arrowroot biscuits and packets of starch set people off on long nostalgic reminiscences of their experiences with arrowroot in days gone by. The Chinese Gooseberry or Kiwi fruit (**Acinidia chinensis**) was under constant discussion as was the Cape Gooseberry (**Physalis peruviana**). One woman was amazed by the buckwheat plant (**Fagopyron esculentum**), she had no idea it looked like that! Another had longed all her life to see a sesame plant (**Sesamum indicum**) and now her wish had been granted! There was great excitement and nostalgia too over the tiger nuts (**Cyperus esculentus**) and locust beans (**Ceratonia siliqua**).

All the plants were grown specially for the exhibit and the fresh specimens and products were obtained by certain members of the Museums staff in well-known supermarkets and in various shops in Southall and Shepherds Bush etc., or from their own kitchen cupboards. Museums staff got many curious glances from fellow shoppers as they spent much of the time peering at lists of ingredients on the tins etc. Did it say "flavour" or "flavoured" (a big distinction). Was E410 or E412 listed? (Locust bean gum and Guar (**Gyamopsis**) gum respectively). A caraway cake was baked by Joyce Heath of the Museums and weathered its enforced stay in a display case remarkably well; in fact it was still moist by the end of the show and was consumed with great relish and delight by Museums staff; some pronounced it the best caraway cake ever tasted!

(Laura Ponsonby — June)

Kew Moves North

Received from Italy, a letter addressed to:

Royal Botanical Gardens,
Sir George Taylor,
Kew, Southport,
INGHILTERRA.

(August)

Manoeuvres at Kew

Spotted by Bill Bailey in the *Sunday Times* of August 26th:

'THE DEFENCE DIARIES OF W. MORGAN PETTY

Edited by Brian Bethell; Part Two:

Thursday January 26

Two letters this morning. The first is from the Royal Botanic Gardens, Kew . . .

Dear Mr. Petty

Thank you for your letter of 9 January.

I'm afraid that the terms under which I accepted responsibility for the Royal Botanic Gardens preclude their use for military exercises.

Yours sincerely

Professor E. A. Bell
Director

The strange epistle which prompted this reply is reproduced below:

Dear Professor Bell,

I hope you will forgive me writing to you like this but in February of 1983 I, W. Morgan Petty, took over from The Ministry of Defence, responsibility for my own international security. One of my first acts was to declare the above address a nuclear free zone although I am maintaining the strongest of conventional forces. These consist at present of myself and Roger, who comes in to help with the garden armed with a nearly new garden fork and a bayonet that Roger's grandfather brought back from the 1914-1918 war. I have been offered to supplement this formidable array of weaponry a Swedish Cavalry Officer's sword courtesy of Field Marshal Lord Carver and a four foot long, curved steel scythe courtesy of Admiral Of The Fleet Lord Hill-Norton. I am also negotiating the purchase of a new Challenge Tank and intend building, with the help of The Manpower Services Commission, our own multi-role combat aircraft, The Squirrel.

Having read the above you may be wondering what all this has to do with you. Well there has been much talk of late about the effect that exploding large numbers of nuclear weapons will have on the climate. Roger tells me that one group of scientists is convinced that this will produce a 'nuclear winter', whilst another thinks that the results will leave the planet subtropical. We would naturally wish to prepare conventional military response scenarios for whatever course the

weather might choose to take and are therefore planning exercises to accommodate these extremes. We have approached The Canadian Prime Minister, Mr. Trudeau, for permission to do our winter training in the frozen wastes of Canada and his office tell us that this is still under consideration by The Minister of National Defence, Jean-Jacques Blais. The question of tropical training is proving more difficult. Roger suggested that we spend a few weeks up The Amazon but with all there is to do in the garden I am not sure that we can spare the time. My idea was to turn the heater full up on the garden greenhouse and prepare an exercise in there. Unfortunately when we tried that Roger went all blotchy in the heat (it is only eight foot by six) and has suffered from headaches ever since. What we really need is the use of a bigger greenhouse and so I was wondering if you would let us use one of yours. We would want to practice counter-insurgency and anywhere with a few **Monstera deliciosa** or **Ficus elastica** will do. Because of the nature of the exercise we will not be bringing our tank.

Perhaps you could consider my proposals and respond.

I look forward to your early reply,

Yours faithfully,

W. Morgan Petty.

(September)

Kew Open Days 1985

Open Days will be held on Friday 10th May and Saturday 11th May 1985 with Staff Preview Day on Thursday 9th May.

(Susan Archer, Secretary, Open Day Committee — November)

Around The Gardens Race

A very inclement evening on October 24th saw the running of this year's 'Around the Gardens Race'. Despite the weather conditions, a dozen brave people turned out for the event.

The race was won by Ray Townsend in a time of 16 minutes 37 seconds, with the first four runners finishing within the space of only 15 seconds. Second and third were Rob Nash and Paul Morgan whilst the honour of first lady home was shared by Jane Beaumont and Ann Kenton, both with a time of 22 minutes 43 seconds. This put the Director in a predicament on presentation of winners' medals. But everyone will be pleased to hear that the winner's trophy remained intact on this occasion!

(Martin Hurt, S.U. Sports Secretary — November)

How do Botanists do it?

The imminence of this year's festive season reminds me that at the last Herbarium Christmas party some serious attempts were made to hold a "symposium" (= drinking party — if you doubt this look up the word) on the topic of botanical job-descriptions.

It was felt that lawyers (who can make it stand up in Court), photographers (who do it in the dark) etc. should not have it all their

own way and that botanists and others at Kew might also be shown to do things in a special way.

Paper was affixed to the Staff Room wall and suggestions were invited — some of the printable ones were the following — in alphabetical order:

Agaricologists have a gilled complex
 Agrostologists do it glume-ily
 Batologists do it for pricks
 Conservationists do it sparingly
 Constables do it uniformly
 Directors do it indirectly
 Engravers do it incisively
 Gardeners do it in beds
 Guide-lecturers lead them up the garden path
 Keepers are no use without finders
 Kew students do it Diplomatically
 Messengers do it transitorily
 Micropropagators make a little go a long way
 Nomenclaturists do it according to the code
 (they also do it in new combinations)
 Pollen morphologists do it with no stigma attached
 Pomologists are faithful to the cores
 Propagators make much of things
 Sandwich students do it in-between
 Some taxonomists keep it in the family
 Ustilaginologists tell smutty stories
 Wing Commanders keep visitors at bay
 and, "Nomenclature Rules, I.K."

(Bill Bailey — December)

How's about some Kew Guild contributions for the next Journal? Ed.

Lady Gardeners of 1898

You will no doubt have seen the postcard on sale in the Orangery of "Three of the first lady gardeners at Kew in 1898 dressed in breeches as decreed after the excitement their bloomer costume caused in 1896" . . . or as Wilfrid Blunt puts it in 'In for a Penny':

They gardened in bloomers the newspapers said,
 So to Kew without waiting all Londoners sped;
 From the tops of the buses they had a fine view,
 Of the ladies in bloomers who gardened at Kew.

From left to right they are Alice Hutchings (later Mrs. Patterson), Gertrude Cope and Eleanor Morland (laters Mrs. Shewell).

A daughter of Eleanor Shewell recently saw the postcard in the Orangery and wrote asking for news of the other two in the photograph. The lives of these first lady gardeners at Kew are probably best told by reprinting from The Journal of the Kew Guild 'In Memoriam'.

ALICE HUTCHINGS entered Kew in 1895, being one of the first women to be employed as an "Improver" in the Gardens. She started

her gardening career by gaining a Kent County Council Scholarship to Swanley Horticultural College, and obtained the College Diploma at the end of the two years' course.

At that time the Swanley Council persuaded the then Director of Kew, Sir W. Thiselton-Dyer, to try the experiment of employing two Swanley Students as Improvers in the Gardens, and Miss Hutchings was one of the lucky ones to be sent by the Council, and the other was probably Miss Gulvin. She obviously "made good" as she was later appointed a sub-forewoman in the Alpine Pits under Mr. Irving, and she stayed long enough at Kew to welcome other women students, including myself, who came later. On leaving Kew, she went as gardener to Mrs. Cranfield, near Ipswich.

In 1902, Miss Hutchings married Mr. William Henry Patterson. A year after their marriage Mr. Patterson obtained a Government Post at the Agricultural School of St. Vincent in the West Indies and his wife went out with him. They left St. Vincent in 1912, as Mr. Patterson was transferred to West Africa, being appointed Government Entomologist for the Gold Coast, a position he held for nearly 20 years.

Mrs. Patterson was keenly interested in her husband's work, and accompanied him on his numerous trekking expeditions, sometimes into native districts where no white woman had previously travelled. After his retirement from Government service Mr. Patterson helped in a C.M.S. Mission School at Kampala, Uganda. At the time of her death, which occurred on January 24th, 1944, Mrs. Patterson was staying with her daughter in England. She had hoped to go out to her husband again in Uganda after the war.

(J. Kew Guild 1944 p. 403)

GERTRUDE COPE, N.D.H., one of the oldest members of the Kew Guild, died peacefully in her sleep on the morning of January 28th, 1959, at her home in Chandlers Ford, Hampshire.

Miss Cope was 83 and was one of the first Girl Students to enter Kew. As a pioneer Girl Student it was an achievement to overcome the prejudices of the day and enter the male stronghold of Kew. When, together with Mrs. Patterson and Mrs. Eleanor Shewell these young girls followed the familiar trail through herbaceous grounds, tropical ferneries and "Melon Yard" etc., it is understood that the Director of the day insisted that they must be dressed as boys. Miss Cope was, I believe, the first woman to pass for the N.D.H. Exam., the first time it was held. On leaving Kew, Miss Cope went to work at George Cadbury's, The Manor House, Northfield, and became Head Gardener. After 20 years here, Miss Cope left to enter commercial horticulture in a Market Garden of her own at Chandlers Ford in Hampshire.

Miss Cope was a remarkable and talented woman, well loved and respected by all who knew her. She took a lively interest in local affairs and devoted much of her life to the well being of young people in Boys and Girls Clubs, Boy Scouts and other social work. Although crippled with arthritis in the last few years she maintained a close association

with the local Gardeners Club and Women's Institute.

(J. Kew Guild 1959 p. 704)

MRS. ELEANOR SHEWELL (née Morland) died on March 24th, 1959, at the age of 84.

Eleanor Morland, daughter of John Morland, J.P., and Mary Morland, was born on October 12th, 1874. She lived the early part of her life at Glastonbury, Somerset. That beautiful part of the country led to many botanising walks and to a great love of nature. She was educated at The Mount School, York, from 1889 to 1892. Her entry into Kew was in 1896 at the age of 21. There followed in 1899 a period of teaching in Swanley Horticultural College. Later, upon leaving, she did much planning in her father's beautiful garden and worked in an uncle's garden nearby.

Her marriage to Mr. Joseph Bernard Shewell took place in May, 1906. They lived for many years near Birmingham. There were two sons and three daughters. Their elder son, John, was shot down and killed over Germany in 1942.

In 1949 Mr. and Mrs. Shewell moved to Alcester in Warwickshire. There the garden was a great delight to her and her many friends. Their Golden Wedding was celebrated in 1956 with both the children and grandchildren present.

(J. Kew Guild 1959 p. 704)

TEACHERS FOR BLIND GARDENERS WANTED

Many people probably imagine that a blind person derives most pleasure from gardens through the senses of touch, smell and even hearing in a rather passive way. They rarely imagine a blind person mowing the lawn, weeding the border, pruning fruit trees or propagating house plants; things that they themselves do without thinking.

However, many blind people tend their gardens capably and fully; but until quite recently, when the indefatigable Miss Kathleen Fleet started *The Gardener* magazine (for blind gardeners) there was little organised teaching or communication, or ways in which techniques and ideas could be taught. The Advisory Committee for Blind Gardeners, of which I am Chairman, was formed by the Southern and Western Regional Association for the Blind about 10 years ago with the intentions of teaching blind people how to garden, and of training sighted instructors.

This is achieved by the encouragement of organised Gardening Groups, by exhibits at such events as the Liverpool Garden Festival or the Royal Show at Stoneleigh, by media publicity and by the production and distribution of leaflets and booklets; and, very practically, by

running residential weekends and one day courses for blind gardeners and for instructors. These cover the country from Devon to Derbyshire, Yorkshire to Wales.

But we need more tutors, instructors and assistants; they are the limiting factor in all that is done.

I would be very grateful if anybody interested in helping in any way in this very rewarding (and not over arduous) task, for which training would be given quite informally, could contact Harry Townsend, Assistant Curator, Technical Section, R.B.G. Kew (01-940 1171) as soon as possible. You will be very welcome, because help in every area of the country is required.

'LANDGIRLS' AT KEW



Peter Maunder (1954), Guild Committee member, sent in this photograph of 'Landgirls' who were at Kew in 1940-41. If any member can help identify any of these ladies please contact Peter at 185 Havant Road, Drayton, Portsmouth, Hants. Next year, hopefully, we will be able to print the photo with all the names attached! Ed.

OMAR KHAYYAM'S ROSE

From a talk by Frank Knight to Woodbridge Rotary Club on October 5th, 1984

A matter of great local interest in Woodbridge and District is that Edward Fitzgerald was born on the 31st March 1809, and died on 14th June 1883, is buried in Boulge Churchyard. He was the translator of Omar Khayyam's Rubaiyat. It is about Omar Khayyam's Rose, known botanically as **Rosa damascena var Omar Khayyam** that I wish to talk. I feel that some members of our Rotary Club may know something about this, but perhaps we may all go away from this meeting having taken a refresher course and feel that as Woodbridge Rotarians we can be expected to answer questions, particularly from visitors, about Fitzgerald's grave and the rose bushes which have grown there since October 7th, 1893.

The metal plaque attached to the wire guard surrounding the present bush bears these words:

"This Rose tree raised in Kew Gardens from seed brought by Wm. Simpson, Artist-Traveller from the grave of Omar Khayyam at Nashipur was planted by a few admirers of Edward Fitzgerald in the name of the Omar Khayyam Club on the 7th October 1893".

Now let us start with William Simpson, who lived from 1823 to 1899. He was a Scot and liked to refer to himself as "Clyde-built". Like many Scots he came to London to work, this was in 1851, and in 1854, he accepted a commission to go to the Crimea War as an artist to make sketches. He witnessed the horrors of Balaclava and was at the fall of Sebastopol. He was known among his friends as "Crimean Simpson". His admirable sketches brought him under the notice of Queen Victoria, and it is thought some of his drawings may hang in Windsor Castle.

It was when acting as the special artist for the *Illustrated London News* on the Afghan Boundary Commission in 1884, that he rode to Nashipur in Persia to make a drawing of the tomb of Omar Khayyam. A reproduction of his drawing appeared in the *Illustrated London News* on 19th January 1957. It was on that trip that he gathered hips from a rose bush growing near the tomb. These were sent to Bernard Quaritch the publisher of Fitzgerald's translation of the Rubaiyat. Simpson told of an incident which happened at Dover on one of his return visits from abroad. He heard the following dialogue between a lady and a Customs Officer, "Have you anything to declare madam?". "No, there is only wearing apparel in my trunk". "I must ask you to open it". The examination disclosed a row of bottles of brandy. "Do you call these wearing apparel madam?", "Oh yes! They are my husband's night caps".

But I digress, so back to the rose. I must read the letter dated October 27th, 1884, which Simpson wrote to Bernard Quaritch from Nashipur:

Nashipur,
Persia,

27th October 1884

Dear Mr. Quaritch,

I arrived here on my way to the African Frontier this morning, and I have just visited and sketched the Tomb of Omar Khayyam. After finishing the sketch I found a row of roses growing only a few yards in front of the tomb. Whether put there out of sympathy with the Tent stitchers love of that flower I cannot say, I felt inclined to suppose they had been planted by some admirers of the Poet. It is most fitting that they should be there. The roses at this time of the year were gone, and most of the leaves had also fallen, but a few still remained. I feel sure you will be pleased to receive a few. Here they are enclosed, you will have one or two to spare for any friend you think will appreciate them on account of Omar Khayyam. I also found one or two of the hips still left, these I secured, and enclosed are *all the seeds*. If you have not the means of raising them you may find someone of Omar's admirers who can. I send these with one condition, that should they grow I would like to have a slip to grow in my own garden.

I am sending the sketch of the Tomb home to the *London News*, you will see it there. So I will not describe it here. If I have time I will try to send a description to *Daily News*.

You will get all the details from these quarters. It was quite new to me to find the Tomb was still known.

Glad to say I am well and enjoying this camp life. I send from this very out of the way place my best Salaam to Mr. Thompson, the Wymans and all my friends that belong to "odd vols".

With Salaam to yourself, Believe me

Yours very truly,
William Simpson

Bernard Quaritch sent the seeds to Mr. J. G. Baker, the Keeper of the Herbarium at the Royal Botanic Gardens, Kew with the following letter:

15 Piccadilly,
London,

December 6th, 1884

J. G. Baker, Esq., Kew Gardens

I send you annexed a letter from my friend Mr. Simpson, the Artist.

You may not be aware that the Persian Poet, Omar Khayyam, now dead 700 years is admired and almost worshipped by many English and American refined thinkers.

It is therefore a matter of sentiment on the part of Mr. Simpson to have sent me the seeds of a Rose-tree still growing on Omar's grave.

Could and would you oblige me and others by planting these seeds so that admirers of Omar might have an off-shoot.

Yours dear Sir, Very truly,
Bernard Quaritch



Frank Knight and *Rosa damascena* var. *Omar Khayyam*.

Baker states in the Historical Introduction to "The Genus Rosa" by Ellen Willmott Vol. I, 1914, "The rose reared at Kew proved to be *Rosa damascena*, and a shoot from the Kew plant has now been planted on the tomb of his first English translator Edward Fitzgerald". The origin of the specific name **damascena** remains a mystery. It has been said it comes from Damascus.

The origin of the various bushes, which have been planted at different times on the grave all originating from William Simpson's seed has baffled me. Baker stated a shoot from Kew formed the first plant at Boulge, but Kenneth Read of Holmleigh, Wickham Market, writes in April 1950 that in 'Memories' by Edward Clodd, published in 1926, it is recorded that Clodd was helped in his investigations about the origin of the Boulge rose by Sir Wm. Thistelton-Dyer, the Director at Kew from 1885-1905, who stated that the resultant plants there from Simpson's seeds were so puny in growth that the plant sent from Kew was actually grafted on to a Sweet Briar Stock.

All this to me, as the one time Arboretum Propagator at Kew, is of considerable academic interest, but need not concern us unduly here. There is support for Wm. Clodd's findings in a verse inspired by a visit to Fitzgerald's grave by Grant Allen which reads:

"Here on Fitzgerald's grave from Omar's Tomb
To pay fit tribute pilgrim singers flock,
Long with a double fragrance may it bloom,
This Rose from Iran on an English stock."

My first visit to the grave was on October 10th, 1945, and this was followed by visits on 16th June 1946 and the 26th March 1947, when I was accompanied by John Crane who was in charge of the Propagating Department at Notcutts. On that occasion we collected some grafting wood but this was very weak for the plant was nearly dead. Some of you may remember that was one of the most severe winter's we ever experienced. I was the guest at The Omar Khayyam Club's Luncheon at The Bull Hotel on the 19th July 1947, and in the afternoon we visited Fitzgerald's grave. Lord Horder was in the Chair to begin with, but was succeeded from that day by Kenneth Bird, the Editor of *Punch*. This visit was followed soon after by Jim Eade, a very skilful rose budder from Notcutts and it was really from the material he took that Omar Khayyam's rose became generally re-established. I visited again on the 5th February 1948 and I have a note in my diary that on Sunday, 7th November 1948, we planted a single young bush in a special border which with Joyce, my elder daughter, we maintained at the rear of The Old House in Cumberland Street.

It must be recorded that parallel with all this activity, similar successful efforts were being made to propagate new plants at Kew from the plant in the Collection there.

This is a fascinating story of a real incident in plant conservation. Omar Khayyam's Rose is saved, and the bed of fine plants in Elmhurst Park raised by Notcutts confirms this.

I visited Fitzgerald's grave on Sunday, August 12th 1984, to find the small bush there in need of attention. The briar stock threatened to take over, and I was without a suitable knife or secateurs for the removal of this, but I was in luck for among the five visitors in the Churchyard that afternoon was a man with a very good composite knife which had among other gadgets a tiny, very sharp saw, and with this I cut away the invader. It left however a very weak plant and I hope that Charles Notcutt may realise that perhaps this part of my report is meant for him!

Editor's note: as at January 1985 we are told that this rose is no longer cultivated at Kew. It is, however, stocked by Notcutts.

FORESTRY AND HORTICULTURE IN THE FALKLAND ISLANDS

by Frank Knight, V.M.H., F.L.S.

During the 60 years that I have been a member of the Kew Guild I have also been a member of the Edinburgh Royal Botanic Garden Guild. I am not alone in this, and noteworthy in the past was that R. Harrow, the Curator at Edinburgh was also a Kewite and in fact, like him, I became a member of the R.H.S. Garden Club. But this lead-in is simply to say that I feel I may be the only man now alive who knew the three men who were engaged in trying to establish plants in the Falkland Islands. Two were from Edinburgh and one from Kew. It was when I was looking at the television screen at pictures of the 150th Anniversary of the British occupation of the Islands that I noticed the first real tree screen. Previously only odd trees had appeared in illustrations, and these usually in close association with buildings.

My quest for relevant information about professional planting on the Islands inspired me to delve into the past. I was privileged to examine the file entitled "Falkland Islands (Miscellaneous) 1841-1928", in the Kew Archives. I had much real help from the Director, Librarian and Assistant Librarian and was helped too by the Regius Keeper of the Royal Botanic Garden Edinburgh.

I established that, in May 1909, A. W. Benton, a student gardener at Kew was selected by Sir David Prain as the most suitable of four applicants for the position of Superintendent Gardener at Government House, Port Stanley. Cecil Parkinson, from Edinburgh, succeeded Benton in 1926, and James Reid, the Forest Officer, was selected by Professor Isaac Bayley Balfour, then Regius Keeper of the Royal Botanic Garden, Edinburgh, in 1920. I would like to start with James Reid who worked as a young forester in the Balfour Estate at Balbirnie in Fife. He gained a place in the three year course of training at Edinburgh in 1913 but this was interrupted by the World War. He served in the 5th Cameron Highlanders from September 1914 to January 1919. He then returned to complete the course. I met him first at Edinburgh when I joined the course in December 1919. His appointment as Forest Officer to the Falkland Islands was confirmed by a telegram from the Under Secretary of State for the Colonies to Professor Balfour on 14th September 1920. The post was for five years at a salary of £250 per year rising to £300, with free quarters and a horse allowance.

He received instructions that, if he passed the Medical Examination, he should meet William Dallimore of Kew at Dickson's Nurseries, Chester, to select young trees to take to the Islands.

Reid reported on 6th January 1921 that the following trees were unpacked at Port Stanley:

2,000	Alder (Common)
1,000	<i>Alnus incana</i>

1,000	Ash (Common)
500	Mountain Ash
500	Austrian Pine
1,000	Corsican Pine
2,000	Scots Pine
2,000	Sitka Spruce
2,000	Common Spruce
2,000	Sycamore
2,000	Birch
1,000	English Elm
1,000	Wych Elm
1,000	Black Italian Poplar

In addition there were eight different willows, seven poplars, acorns of English and Turkey Oak and 28 plants of New Zealand Flax. These had been accidentally smeared with tar on arrival. A progress report was submitted on 24th April 1922. I wonder why Sea Buckthorn was not included.

The Kew file contains much about the relationships with the farmers on the Islands, the ready co-operation of some and the hesitation of others to give up valuable sheep feeding areas. Most of the trees perished in the early stages, those which survived were stunted. Reid described how the wind seemed to strike down with a swirling motion and tore the young trees out of the ground. He returned to Scotland and when I saw him again he was the Head Forester at Meikleour in Perthshire.

William Benton worked in the Kew Arboretum when I was the Arboretum Propagator and retired in 1947. My friend Cecil Parkinson, whom I first met as a boy at Limekilns in Fife, worked at Government House Port Stanley from 1926 to 1933; then for several years at Government House Gibraltar, and then for many years in Nigeria. His account of the native flora of the Falklands in the Edinburgh Guild Journal (1935) makes interesting reading. He now lives at Maidstone in Kent and we meet now and then at the R. H. S. Shows at Vincent Square.

Interest is continuing in Forestry and Horticulture and I anticipate we shall be reading about the results of more recent attempts to establish trees.

I feel I should not end without mentioning that an old Wisley student gardener, David Stokes of the Department of the Environment has recently been in the Falkland Islands to advise about the establishment of sports grounds. It was on 24th July 1957 that William Campbell, the Curator from Kew, and myself as Director at Wisley, sat on the Appointments Board at East Africa House in London and selected David for a position in the Parks Department in Nairobi.

PHENOLOGICAL OBSERVATIONS AT KEW

by F. Nigel Hepper

Phenology is defined as the study of recurring natural phenomena, and for me that means recording plant flowering and leafing dates year by year at Kew and in my garden at Richmond. Meteorologists frown upon the study of phenology as being too simple and unscientific yet, in my opinion, it is a neglected science simply because it requires long-term dedication, and the collection of a long series of data is the basis on which theoretical calculations may be based. Let me explain.

While standard meteorological records are of rainfall, temperatures and so on, a plant is an organism that measures its environmental conditions by its growth and behaviour patterns. Temperature is usually the over-riding factor in Britain, but in tropical and desert conditions the presence of sufficient moisture affects growth and flowering. Phenologists record the first flower to open on the same plant since it is relatively easily observed and in practice is a good indication that the whole plant will soon be in flower. This is proved by the correlation of comparative records year by year which can show up surprisingly small variations in weather conditions. Strictly, anthesis (liberation of pollen) should be the state at which records are made but in practice it is often difficult and time-consuming to observe it precisely — the opening of the corolla is usually sufficiently accurate. Observations on the same individual plants year by year help to cut out microclimate variations in the same garden such as occur on warmer western slopes, in cool depressions or in shady positions. It also avoids genetic variation such as is seen along a beech hedge where an individual breaks leaf well before its neighbours.

Comparison of the seasons graphically

As explained in an article in *Kew Bulletin* 30(4):699 (1975) it is possible to present phenological data in the form of a graph. By selecting a range of species that start flowering in winter, spring, summer and autumn (or at least in spring and summer) and plotting them according to their flowering date against each year an interesting comparison may be made which shows up periodic trends of the seasons. Even two or three years' records provide sufficient data for direct comparison. For example, during the spring of 1984 the season was late with **Erythronium dens-canis** and **Kerria japonica** beginning to flower 11 days later than in 1983, and **Magnolia stellata** was 16 days later. But then the sun began to shine and a pear tree burst into flower only five days later, while the horse-chestnuts on Kew Green flowering were about equal to 1983 although their leaf-buds had had a late start. The gap narrowed as temperatures rose later in April and actually overtook 1983, so that **Aethionema coridifolium** flowered four days earlier, to be followed by **Trillium grandiflorum** nine days earlier. This heat-wave was short-lived and a cool east wind during May set back **Clematis** 'Nellie Moser' two days on 1983 and foxglove four days later. A similar separation continued into June with **Iris sibirica**

two days and **Pyacantha** three days later than 1983. Compare this with former years, such as the early season on 1980 when both of the latter species were eight or nine days earlier than 1984 — a year comparable with 1979 which also had a late spring. Later in June '84 a warm spell enabled **Lonicera japonica**, **Geranium grandiflorum** and **Trachelospermum jasminoides** to overtake 1983 by a week: both years then had a hot summer. Notice that whereas earlier in the year there may be annual phenological discrepancies of many days or even weeks, but by the time summer comes there is only a day or two difference, hence accuracy of recording is even more important.

Phenological enquiries

At Kew we have an enquiry unit that answers queries from correspondents all over the world. Some of these letters relate to phenological information that is difficult to supply because very little information has been recorded and the enquiries usually find their way to me to answer as best as I can. One enquiry related to the flowering times of Rosaceous trees, especially **Sorbus** which are infected by fireblight at the time of flowering. When do the various species flower, in what order and for how long? Another wanted to know when certain combinations of species flowered in order to decide which ones should be planted together to make the best display.

Other enquiries relate to the flowering of bee plants and to aerial pollen for hay fever sufferers and the prediction of flowering of the species concerned.

Turning to observations on vegetative phenomena such as leaf expansion and leaf-fall, these too are of value but harder to observe and therefore seldom recorded. Leaf-fall is dependent on weather conditions in the same way as flowering but the development of the abscission layer may be delayed for obscure reasons. One enquiry from North America concerned the premature induction of the abscission layer to hasten leaf fall of woody species in order to bring forward the transplanting period before winter frosts harden the ground and make tree planting impossible. The enquirer realised that artificial defoliation before the abscission layer had formed would leave wounds open to infection, whereas defoliation a week or two before normal leaf-fall would mean that the abscission layer would be sufficiently developed to give protection. The problem, however, was to know when this point has been reached for each species.

Phenological Records at Kew

My own records started in the 1950's mainly for herbaceous plants in the Rock Garden where there is the greatest concentration of species. Unfortunately the continuity of records is liable to be broken at any time owing to holidays, botanical expeditions or illness. It would be ideal if each zone of Kew was covered by its own staff but this has not happened and it is not easy to organise.

In 1984 I extended from the Rock Garden to Kew as a whole (except greenhouses) including trees and shrubs although it is impossible to

cover everywhere consistently. Instead of index cards we hope to use the records for a phenological data base on the Kew computer with easy retrieval of information. Again the practical aspects are formidable but the noting of records needs to continue as time will not stand still.

Phenology is an ideal study for horticulturists, especially those associated with botanical gardens where a wide range of plants is grown and probably never recorded before. It adds interest as well as obtaining original data from the collections. Why not start this year in your own garden?

ARID ZONE FORESTRY IN THE SUDAN

by Steve Bristow (Ed Damer, Nile Province, Sudan, December 1984)

The nomadic pastoralists of the Hasaniya mountains in Nile Province, Northern Sudan, live on the edge of the Sahel region in an area that traditionally receives an average of 150 mm rainfall each year. This is sufficient to support the growth of perennial tabas grasses in the wadis and a number of annual herbs, as well as the sparse tree growth that furnishes fuel wood, building materials, and fodder for the animals.

In common with other parts of the region, the rains have failed yet again this year (1984), making this the fourth drought year in succession. Although the wells contain plenty of water the water table is deep and the vegetation has all but stopped growing. The almost complete lack of fodder has forced most family groups to move to the edges of the agricultural land by the Nile, putting pressure on already stretched resources there.

This project has been in this area for three years now and involves working with the nomads planting small woodlots in suitable desert sites, irrigating and protecting the trees until they have established and start to provide fodder. Also, micro-catchments are constructed at the sites to trap rain water when it does eventually fall. At the larger sites nomads are employed to do this work, but more and more family groups are requesting trees to plant by their homes which they will take care of as an investment for their future benefit.

The project is also involved with local schools in starting tree clubs, and is undertaking research into tree growth, fodder crops, etc., and has introduced an improved charcoal stove to the river communities.

In the desert the species most widely used is mesquite (***Prosopis chilensis***), but now trials are being started with native species raised from locally collected seed, including ***Balanites aegyptiaca***, ***Acacia tortilis* ssp. *raddiana***, ***A. albida***, ***Zizyphus spina-christi***, ***Maerua crassifolia*** and ***Capparis decidua***.

The possibility of using ***Calotropis procera*** as a fodder crop is being investigated as it is one of the very few native species that is

unpalatable to stock when growing, and therefore grows unmolested and yet appears to be at least partly palatable when dried.

Steve is Project Manager for Green Deserts Ltd. and has been working in Sudan since November 1983. See "News of Kewites" section also. Ed.

WHY I BECAME INTERESTED IN VARIEGATED PLANTS

by Douglas Dawson

"Tell us," said the Editor at the A.G.M., "why you became interested in variegated plants." Yes, why, oh why and why again did I say I would, because I don't know, and after that fine piece of English grammar there can't be any readers left, so why go on?!

I recall that in one of my first jobs at the nursery in Harrow, the chrysanthemum-grower, foreman or whatever he really was, but who answered to the rather delightful Welsh name of Owen Roland Owen, said apropos nothing so far as I can recall, after 48 years (or was it something?), that there was a man in Pinner in whose garden were a lot of variegated plants. This is the truth, and the only time I'm sure, in nearly 50 years, that I did not follow up such a remark and I still do not know where exactly it was! Could it by any chance have been the late H. H. Crane of violetta fame? He lived at Eastcote but that is near Pinner notwithstanding. So I'm still wondering about it, but in or near Pinner? Such a garden is now probably a block of high-rise flats or a close of small, otherwise desirable residences, but having since had a collection of some 500 variegated forms, give or take a few at all times plants being what they are, like a large family never all there when you want them, (especially when Auntie Edie or Cousin May is coming), I probably did not miss a lot. Although that is open to question, there being forms now difficult to track down, if indeed they still exist, for instance a variegated *Bergenia* (did you say you have one? Do please 'phone me, am open 24 hours a day). However, the interest had been kindled, or was it there even before that?

An interest in plants in toto had been aroused and fostered by my mother from — I do so well remember it — the age of four years. The plants that come to mind are white phlox and rose 'George Dixon' and the scent of that rose transfers me back undeniably and nostalgically all those sixty-odd years, just as Farrer said when he discovered *Chimonanthus praecox*, "I was transported upon the wings of an ineffable fragrance," — so am I. The phlox does the same.

A long break comes now and when at the John Innes Institute as Assistant Curator in the 50's and 60's, the late Professor C. D. Darlington, wanted a collection of variegated plants for genetic investigation I was a willing helper and participant. But he left eventually

and went to Oxford University where another collection was assembled. When I had the great good fortune to join the National Westminster Bank, who had a staff training college at Ware, Hertfordshire, I was able to give vent to at least one personal interest and soon many plants in the gardens there were variegated! An even greater opportunity came later when the Bank purchased a property in Oxfordshire and 400 odd acres with two walled gardens, inter alia, in 1970. This presented me during the process of restoration of the gardens and grounds, for many years in a state of neglect to say the least, with great opportunities, and an entirely free hand in all respects. One very large border is devoted entirely to variegated plants and there is also an avenue of variegated trees close by which all compares very favourably with any other such collection in this country.

One is occasionally asked if one has personally produced (or induced) and variegated forms one's self (heaven preserve us from such questions!). Of course one can be the lucky first person to spot a new mutation, or aberration, and propagate it, etc., distribute it to one's friends or even others if they've got something you want yourself! The only real claim to such fame I can make is a plant I found in my brother-in-law's garden in Holland (and he was no plantsman!) some 25 to 30 years ago and like to have called *Brunnera macrophylla* 'Dawson's White' to distinguish it from another form nothing to do with me.

Now in retirement thanks to amenable relationships all round I am still able to add to the collection I have tended for the Bank and also keep a fair number in my own private backyard, or garden I call a pocket handkerchief, and a greenhouse of PVC nicknamed "my plastic bag", as the urge to acquire variegated plants goes irresistibly on; after all we all have to have some idiosyncracies, another way of describing a "nutter", but how boring a "non-nutter" — someone with no peculiarities, if only that of collecting variegated plants and other "wierdies".

BOTANIC GARDEN AT AL SAFF, EGYPT

As described in a letter to the Curator in June 1984 from Jonathan Rickards

During March this year I was able to briefly visit a private botanical garden of great interest at Al Saff in Upper Egypt. I write not only for the general interest of Kewites, but also in alarm to record that its status is likely to change in the near future with the retirement of its present owners.

The garden lies approximately 100 km to the south of Cairo on the East bank of the Nile, and is owned by Dr. Warda Bleser-Bircher, daughter of the founder of the garden, Alfred Bircher, and now in her seventies.

Alfred Bircher came to Egypt from Switzerland in 1892 to work in the family gypsum manufacturing concern. Shortly after his arrival, the works moved to Al Wedy, near Al Saff, but by the First World War the course of the Nile was changed by shifting sandbanks and loading and transportation difficulties prevented further expansion. Already having developed a small garden, Mr. Bircher began to demolish the old works now in decline, and build the present garden, utilizing the old walls and the occasional building, most of which exist today. In 1912 there were already 80 different species of tropical trees and by 1936, when the factory was closed, the garden was receiving seed from all over the world for trial and almost covered the present seven hectares.

Although less emphasis is placed today on the rôle of living collections, Al Saff represents a unique range of introductions to Egypt and early correspondence with botanical gardens and institutions including Singapore under H. N. Ridley, Peradeniya under H. F. Macmillan and many in Africa and South America, make it not so surprising to see so many varied species.

The present owner, Dr. Warda Bleser-Bircher, and her husband still supervise some of the garden maintenance and although much renovation work is required, the evidence and atmosphere of past glory still pervades. On my visit she told me of some of the difficulties associated with running the garden in the past, in particular the flooding in the 1950's caused by the release of water during the construction of the High Dam at Aswan. With only 20 mm of rainfall, the garden, as all Egypt, relies on the Nile but its fluctuations, often due to pumping difficulties, make it difficult to manage the water table to the advantage of both semi-arid and tropical species at the same time.

For two years during the 1960's, the garden was in the hands of the Agrarian Reform whilst socialist ideals were in favour. This and the general lack of skilled garden labour in Egypt has caused the loss of a great many smaller species. But a great many large trees remain and their survival points to their potential success in other parts, away from the garden environment.

My personal interest has been in introductions to Saudi Arabia for landscape use, but fruit trees and other economic timber trees feature very much in the garden and I was surprised to see **Averrhoa carambola** successfully fruiting. I enclose a list of those species I was able to note and also include a garden list.

A number of choices remain open as regards the future of the garden and a future connection with Cairo University would be the happiest outcome. However, at present resources and resolve are not sufficient to ensure this occurs and the land and buildings may be sold with the grounds hopefully remaining much as they are, as the major asset, for some type of limited development.

A fuller account of the garden's development and a dictionary of plants grown there was published by Dr. Bleser-Bircher in 1960 based

on the notes of Alfred Bircher. Named "Gardens of the Hesperides" I first saw a copy in the Herbarium Library.

P.O. Box 388,
Al Khobar,
Saudi Arabia.

MEMBERSHIP LIST — GEOGRAPHICAL ARRANGEMENT

During the year the Kew Guild Committee discussed a suggestion from Graham Burgess that the address list in the Journal could also be arranged in geographical areas. This idea was deferred until current consideration of computerisation of Guild records is finished. However, Graham has his lists available for the use of any members if they would like to write to him.

ADDRESS LIST

Just take a look through the members address list and unknown addresses of paid up members, and let the Membership Treasurer know of any spelling mistakes, omissions, changes of address, or even potential Guild members! Write to Eirene Smith, Membership Treasurer, 13 Mortlake Road, Kew, Richmond, Surrey. Non members are not listed.

ADVERTISING

Look at the adverts at the back of the Journal. £220 was produced by advertisers which was donated to the Award Scheme fund. This cost goes against tax, you ex-Kew businessmen! It is hoped that members will support those advertisers, where possible, and other members might offer an advert and a donation to the Guild, via the Editor, c/o R.B.G., Kew, Richmond, Surrey (Tel: 01-876 6577).

NEWS OF KEWITES AT HOME AND ABROAD IN 1984

Compiled by **MARTIN J. S. SANDS**

Dick Andrews (1947), retired on 21st September, 1984, from his post as head of the Recreation Division of the Wycombe District Council after 31½ years in High Wycombe. We offer our best wishes for his retirement, during which he intends to continue his interest in the Wycombe Show and the Wycombe District Association for Sport for the Disabled.

In August, **Trevor Arnold** of the Botanical Research Institute, Pretoria, who was South African Liaison Officer from 1976-1978, spent two weeks at Kew researching arid land crops, especially **Sorghum** and Millets.

Congratulations to **Stephen Ashworth** (1980) and Ursula Knöpfel who were married in the summer of 1984 at the Church of Müleberg, Switzerland.

At the beginning of December, **Sandy Atkins** transferred from the Herbaceous Department to the Herbarium, taking up an Assistant Scientific Officer appointment in the General Services Unit.

Chris Bailes (Garden Supervisor, Tropical Orchid Unit and Guild Treasurer) attended the World Orchid Conference in Miami during March 1984, and in November spent some time collecting in Nepal.

The Director, **Professor Arthur Bell** (a Trustee of the Guild) gave away the prizes at his old School, Dame Allan's, Newcastle-upon-Tyne at the end of January, 1984 and in February attended a two-day seminar in Paris of the Consultative group on the 'Ecology of Noxious Bruchids'. He delivered a paper at the 2nd Australian-United States Symposium on Poisonous Plants in Brisbane in May and in July went on a Commonwealth War Graves Commission tour of cemeteries in Holland, Belgium and France, in his capacity as Botanical Adviser to the Commission. He took part in a Phytochemical Society of Europe meeting in Ghent in August and on 23rd October, accompanied by Mrs. Bell, he attended the State Banquet at Buckingham Palace in honour of the President of France and Mme. Mitterand.

Ian Beyer (Deputy Curator) attended the first European and Mediterranean Region meeting of the International Association of Botanic Gardens in Nancy, France, during September.

Jean Bowden resigned from her post in the Herbarium on 15th October after 35 years at Kew where, at one time, she worked in the Museum. Our best wishes go with her in her new job as Curator of the Jane Austen Museum, Chawton, Hampshire.

Roger Bowen (1966) is Parks Manager in the Wycombe District Council where he has worked for some years in association with Dick Andrews (q.v.).

Diane Bridson (Herbarium) left on 2nd August to collect in the Uzungwa Mountains, Tanzania for about six weeks under the auspices of the National Geographical Society (U.S.). She was collaborating with

Mr. Jon Lovett (W.W.F./I.U.C.N.) who had been surveying both the Uzungwa and the Usambara Mountains for conservation purposes and had found an amazing number of new and interesting species including many species of **Rubiaceae**. During her visit Diane made better collections of some of them, proceeding first from Mufindi to Sanje in early September.

Steve Bristow (1979) as reported in the last Journal (88: 10, 226) has been working in the Nile Province of the Sudan where he began work in November 1983. Shortly afterwards his wife, Andrea, and son followed him and they settled into a house near a market where they grew dates, loofahs and henna among other plants. He has reported that the Sudanese nomads were especially welcoming and on his trips to the desert he always spent some time eating, chatting and drinking tea with them.

Congratulations to **Gail Bromley** (Herbarium) on her promotion at the beginning of 1984 to the grade of Higher Scientific Officer. In October she flew to Brazil where she was joined by Dr. Ray Harley and Brian Stannard (q.v.) to take part in field work on the montane 'campo rupestre' flora of eastern Brazil, in conjunction with the Department of Botany, University of São Paulo. She returned before Christmas after a successful seven weeks in the state of Rio examining the Atlantic forest vegetation for the World Wildlife Fund and collecting for the Herbarium.

On 16th March, **Dr. Dick Brummit** (Herbarium) left to attend a conference on African Teak (**Baikiaea plurijuga**) forest organised by the Zambia Forestry Department in Livingstone. Later he joined Sylvesta Chisumpa to collect **Proteas** in Zambia and paid a brief visit to Malawi. On 10th September he gave a brief talk about George Bentham at a party held in the Wood Museum to mark the centenary of Bentham's death.

Graham Burgess (1972) who is currently a member of the Guild committee, was deeply involved in the Liverpool International Garden Festival in 1984, as a Sponsor, Designer and Contractor. In his capacity as a partner in 'Minotaur Designs' (Maze designers) he organised the construction of the Beate Maze Garden which won one of the ten Premier Awards and picked up two Gold medals. Graham had the honour of being presented to Her Majesty the Queen and His Royal Highness, the Duke of Edinburgh. At the Festival, as a Contractor, his Aquatic Company 'Artscapes Aqua' (Agricult. Ltd.) carried out most of the aquatic planting much of which will remain in position.

Stephen Butler (1977) is working at 'Dublin 200' in Ireland as the Head Gardener. The garden is just 30 acres in area, with a staff of six.

Dorothy Catling, a past Vice-President of the Guild, who has been working in the Metropolitan Police Forensic Science Laboratories since she left the Jodrell Laboratory, Kew in 1970, is working for her PhD on the anatomy of **Proteaceae**.

Best wishes to **Jim Chant** for a happy retirement at his new home in Herne Bay. In June, Jim completed eight years service as official packer for the Herbarium and Library.

Mark Clements, of the National Botanic Gardens, Canberra, left on 1st August to return to Australia after 18 months working at Kew on the micropropagation of endangered European orchids. Earlier in the year, in March, he joined several members of the Kew staff to attend the World Orchid Conference in Miami and, breaking his journey home, he spent some time undertaking fieldwork in Sabah, E. Malaysia.

Trevor Cole (1960) of the Ottawa Research Station, Ontario, has been circulating a letter to Kewites he could locate in an attempt to reinstate the Kewites of North America Association. From the returns to his letters he has compiled a list and was hoping to arrange a Kew gathering in Edmonton, Alberta in 1984.

Barbara Coleman who looked after the Memorial Garden at Wakehurst Place, left at the end of 1984 after working there for nine years. We wish her a successful future.

Sadly we record the death on 15th February, 1984, of **Chris Coleman** who had worked at Kew as a Museum Steward for almost 18 years. During the Second World War he was a commando before becoming a Sergeant in the Irish Guards and received many medals and citations for bravery.

Congratulations to **Frank Constable** (1949) who received the M.B.E. in the Queen's Birthday Honours in 1984 for services to Horticultural Education, and was made an Associate of Honour of the Royal Horticultural Society in its 1984 awards. Now a Consultant in Arboriculture, Horticulture and Landscape, he retired from his post as City Parks and Recreation Officer for Derby City Council in 1983.

Dr. Tom Cope (Grass Section, Herbarium) is offered our congratulations on being promoted to Senior Scientific Officer with effect from 1st January 1984.

Congratulations to **Dr. Phillip Cribb** (Herbarium) who, in July 1984 was appointed as a Research Associate in orchidology in the Botanical Museum at Harvard, thus joining an elite group all associated with the Orchid Herbarium of Oakes Ames, and strengthening the ties between the two premier orchid herbarium departments. Earlier in the year, in January, he was lecturing in California and in March was in Miami attending the World Orchid Conference. In October he left for six weeks fieldwork in the Solomon Islands, breaking his return journey to lecture in Australia.

Rosemary Davies (Herbarium) is to be congratulated on her promotion, at the beginning of October, to Higher Scientific Officer to head the Index Kewensis Unit.

Douglas Dawson (1944) retired on 30th June, 1984, from his post as Estate Manager to the National Westminster Bank Staff College, firstly for five years in Hertfordshire and latterly, for 14 years at Heythrop Park, Chipping Norton. Douglas began his career with four

years private service at Waddesdon Manor Gardens after a year in local nurseries in and around Harrow. After a year in the R.H.S. Gardens at Wisley, he moved to Kew working mainly in the outdoor decorative department. On leaving Kew he spent seven years in Public Parks — Cardiff, Harrow and Wembley (now Brent) and then for 14 years became Assistant Curator of John Innes Institute at Bagfordbury, Hertford, before taking up his post working for the National Westminster Bank.

Barbara Dickinson, after leaving Kew in 1979, worked for a time at Glyndebourne before taking a degree course in Geography, from which she graduated with upper second class honours in 1984. During the course, Barbara took a one year sabbatical in which she and her husband went to work in the Seychelles.

Congratulations to **Suzu Dickerson** on her promotion to Scientific Officer and transfer, on 19th November, to the 'Kew Record' team from her post as an Assistant Scientific Officer in the Herbarium.

Dr. John Dransfield (Herbarium) and his wife, Dr. Soejatmi Dransfield, left on 22nd February for a month in China, where they visited herbaria and botanic gardens in Beijing, Guilin, Kunming and Guangzhou, under the auspices of the Royal Society/Academia Sinica exchange agreement. Later, on 1st May, John travelled to the Philippines to spend a month taking part in a botanical survey of the island of Palawan, a joint project involving the Philippine Government and Hilleshög Forestry Division of Sweden. The survey was led by Dr. Andrew Podzorski and the party included Dr. Colin Ridsdale (Leiden), Dr. Domingo Madulid (Pilippine National Herbarium) and Mr. E. S. Fernando (College of Forestry, Los Bãnos). From 4th July to 14th August he visited the Bailey Hortorium, Cornell University to continue collaboration on the Genera Palmarum and then on 30th September left for Malaysia to attend a rattan conference organised by I.D.R.C., Canada, before going on to review rattan projects in Sri Lanka and Thailand.

Congratulations to **Janet Dring** (Biochemistry Section of the Jodrell Laboratory) whose promotion to Scientific Officer dates from January 1984.

John Elsley (1964) was promoted in 1984 to Assistant Vice-President of the Park Seed Company. John left Missouri Botanic Gardens in February, 1981, to join the company and establish a new market for the sale of ornamental plants in the States, and this promotion recognises both his performance as well as the company's commitment to improving the quality of its horticultural products.

Congratulations to **Tom Everett** (1927), a former President of the Guild, who, on 30th May, was presented with the Arthur Hoyt Scott Garden and Horticultural Award of Swathmore College for 1984. Tom was born in England and began his training as an assistant gardener in Liverpool. After completing his Kew Diploma, he was employed for a time on private estates in the United States before joining the staff of

the New York Botanic Garden in 1932. During more than 30 years in charge of horticultural work there he assembled extensive collections of both hardy and greenhouse plants and designed and constructed the Thompson Memorial Rock Garden, considered one of the finest in North America. Recently his 10 volume New York Botanic Garden Encyclopaedia of Horticulture was released.

Dr. Keith Ferguson (Palynology Unit, Herbarium) lectured in Scotland and Ireland in the early part of 1984 and later attended and gave a paper at the Sixth International Palynological Conference in Calgary, Canada held from 26th August to 1st September. On 31st August he travelled on via Dallas and Oklahoma City, to the University of Oklahoma where he worked with Professor Skvarla for two weeks on the pollen morphology of **Swartzia**, before returning to Kew on 16th September. Shortly afterwards, on 26th September he left for the University of Cordoba, Spain, to attend the Fifth Palynological Symposium of the Association de Palinologos de Lengua Española as guest speaker, giving the plenary lecture on 'The role of pollen morphology in plant systematics'. Afterwards he visited the University of Sevilla and Cota Doñana.

Ian Fisher, currently a student at Kew, spent 10 days in Germany in 1984 visiting the Botanic Gardens of Berlin and Bonn and observing the standard of urban landscaping in three major cities.

In May 1984, **Hans Fliegner** (Assistant Curator, Temperate Section and currently a member of the Guild committee) represented Kew at the re-opening of the Tropical display complex in Frankfurt Botanic Garden. Later, in November, he left for a one month advisory visit to Trivandrum in the Kerala State of South India to assist with a project to develop a major botanical garden.

Hugh Flower (1976) was ordained a Deacon for the Diocese of Arundel and Brighton on 13th July, 1984, and his Bishop appointed him to the Parish of Our Lady of Ransom, Eastbourne, to serve his Diaconate leading to ordination as a Priest. At his Diaconate Ordination, the ceremony being performed by Bishop Howard Tripp of Southwark Diocese, Hugh made his three commitments to the Church which are binding for life; celibacy, prayer and obedience to his Bishop.

Barry Frankland (1967) returned to Kew on 11th April to speak on 'The workings of a University Botanic Garden' at a Seminar on 'Managing Open Spaces'.

Peter Gasson (Anatomy Section, Jodrell Laboratory) was promoted to the grade of Scientific Officer dating from January, 1984, and we extend our congratulations.

After many years working in Nairobi, **Jan Gillett**, who has collected extensively in Africa, came back to England to live in Kew. In May he returned to the Herbarium, where previously he had been a member of staff before his period of duty in Nairobi. He now intends to be a frequent visitor working on East African **Commiphora**. On 24th July, his son, Simon, visited the Herbarium and Library in connection with his agricultural and agroforestry responsibilities near Kano, Northern Nigeria.

Congratulations to **Peter Green**, former Deputy Director and Keeper of the Herbarium, now an Honorary Research Associate of Kew and a past President of the Guild, on his being awarded one of the 1984 Kew medals in recognition of his personal commitment to Kew, and his representation of Kew in many Societies and Associations. The medal was presented to Peter by Mr. Charles Notcutt on 14th September at the Students' prize-giving.

In 1984, **Dr. Chris Grey-Wilson** (Herbarium) was responsible as Editor for the launching in May at the Chelsea Flower Show of the new 'Kew Magazine' which incorporates Curtis's Botanical Magazine (in publication since 1787). It is hoped that the Kew Magazine, which is produced four times a year as a regular quarterly, will reflect all aspects of plants from botany to cultivation and conservation and will be international in its appeal.

It is pleasing to report that **Ian Grisenthwaite**, a third-year student in 1983, was one of five students, including Brita von Schoenaich (q.v.) to receive from Kew on 6th November a 'Citation of Merit' in recognition of their success in creating 'The Water Margin Garden', a winning entry taking no less than three major prizes at the Liverpool International Garden Festival. Our congratulations to them.

Dr. Ray Harley (Herbarium) left on 29th June for a three-week visit to São Paulo, Brazil, where he was invited to present a paper on the 'campos rupestres' of Bahia at the annual meeting of the Sociedade Botânica do Brasil. Later in the year, on 28th October he returned to Brazil, accompanied by Brian Stannard (q.v.) to participate in field work on the montane 'campo rupestre' flora of eastern Brazil, from Minas Gerais to Bahia, in conjunction with the Department of Botany, University of São Paulo. With Gail Bromley (q.v.), who had arrived before them, they were later joined by Gwilym Lewis (q.v.).

Our congratulations to **Martin Haward** (1983), on being awarded, along with four other students, a 'Citation of Merit' expressing Kew's recognition of their success in creating the winning entry for the Schools of Horticulture competition at the Liverpool International Garden Festival. The entry 'The Water Margin Garden' received three major prizes. The Citations were presented by Cyril Mitchelmore (q.v.), the President of the Guild, on November 6th.

On 10th January, **Nigel Hepper**, an Assistant Keeper in the Herbarium and a Vice-President of the Guild, left for Ivory Coast where he was joined by Dr. Jean Maley, palynologist of Montpellier, to collect in the forested hills in the North-West of the country. En route he visited Cairo Herbarium and returned to Kew on 27th February.

Stanley Hitt (1955) took the City of Bath into the 'Britain in Bloom' Competition again in 1984. Once again the city won convincingly as it has done many times before.

In December, **Professor R. E. Holttum**, an Honorary Research Fellow in the Herbarium, travelled to Penang, Malaysia, to give a keynote address to a Conference on the future of Tropical Botanic Gardens.

Sincere best wishes to **Sheila Hooper** for her retirement which began on 1st November, after 30 years of dedicated service in the Herbarium, where she specialised in **Dianthus** and later **Cyperaceae**.

We welcome **Roger Howson**, a Higher Executive Officer, on transfer from MAFF Headquarters, who took up an appointment on 19th March, 1984, to assist the Financial Controller in being responsible for all financial matters at the Royal Botanic Gardens, Kew.

Dr. Surrey Jacobs left Kew on 31st August, 1984, after completing his term of office as Australian Botanical Liaison Officer, and returned with his family to Sydney on 3rd September.

David Jewell (1983) who travelled to Tasmania in 1983 on a Thornton-Smith Scholarship with additional support from a Kew Guild Award, returned to Kew to speak about his experiences at the 1984 Autumn Trimester Open Seminar held on 6th November.

Welcome to **Robert Johnson** who took up his appointment on 2nd April, 1984, as Financial Controller under Trusteeship. He is directly responsible to the Director for all financial matters at Kew being assisted by Roger Howson (q.v.) and with two Finance Sections under him.

Congratulations to **Stephanie Joseph**, a Special Grade Gardener in the Alpine and Herbaceous Section, on being awarded one of the Kew Medals for 1984 for her skill and dedication in the propagating and cultivating of many rare and difficult plants. She was presented with the medal at the Students' Prize-giving on 14th September, by Mr. Charles Notcutt.

Dr. Andrew Kanis of the Herbarium Australiense, Canberra, who was Australian Botanical Liaison Officer at Kew from 1975-1976, returned on 3rd April to spend two weeks working in the Herbarium on Australian **Mimosoideae** and **Amaranthaceae**.

In a letter from Poona in June, 1984, Mrs. Motivala recorded that her father, **T. R. Kothavala** was, as a young unmarried man, sent to Kew Gardens at the end of the last century by the Maharaja Syajurow Gaekwar of Baroda State, India. A stone elephant was later presented to Kew by the Maharaja.

Atsushi Kuyama (1973) who has travelled to England, China, Korea and Australia to collect plants and lives in Hyogo, Japan, is now busy creating a big Botanic Garden on Awaji Island.

Welcome to **Nicholas Lander** of the Western Australian Herbarium, Perth, who took up his duties as Australian Botanical Liaison Officer in August replacing Dr. Surrey Jacobs (q.v.) who returned to Australia in early September. Nicholas Lander has a research interest in **Compositae** and **Malvaceae**.

Congratulations to **Dr. Edmund Launert** on his receiving a medal commemorating the Centenary of the Instituto de Investigação Cientifica Tropical in recognition of his efforts to further Anglo/Portuguese scientific co-operation. He is a member of the Kew Herbarium staff, based at the British Museum (Natural History) and also a member of the Guild.

Congratulations to **Timothy Lawrence** (Jodrell Laboratory) on his promotion to the grade of Scientific Officer dating from 22nd October, 1984.

Ian Leese (1982) wrote in April 1984, indicating that he had been offered and had accepted a Lecturer Grade IB post at Hadlow College of Agriculture and Horticulture, Tonbridge, Kent. Ian returned to Kew on 6th November to speak at the Autumn Trimester Open Seminar on his visit in 1983 to the Caribbean as an Ernest Thornton-Smith Scholarship holder.

Gwilym Lewis (Herbarium) left for three weeks in Brazil on 20th January, 1984, when he attended the 35th Brazilian Botanical Congress in Manaus. Later, on December 5th, he travelled again to South America to join Dr. Ray Harley, Brian Stannard and Gail Bromley (q.v.) in fieldwork on the montane 'compo rupestre' flora of eastern Brazil, from Minas Gerais to Bahia, with the collaboration of the Department of Botany, University of São Paulo.

Peter Linder, South African Liaison Botanist in the Herbarium, travelled to Missouri in September to study collections of African **Restionaceae** in connection with his treatment of the family for the Flora of Southern Africa.

Tony Lord (1978) returned to Kew on 11th April to attend a seminar on 'Managing Open Spaces' at which he spoke on 'Gardens advisory work in The National Trust'.

Congratulations to **Gren Lucas**, until recently a member of the Guild Committee, on his appointment as Keeper of the Herbarium with effect from October 1984, after acting in this capacity since the beginning of 1983. At the end of February 1984, he travelled to Tucson, Arizona to attend a C.I.T.E.S. plant specialist meeting and then in September, he spent a week in Holland at the Fourth World Conference on 'Breeding Endangered Species in Captivity', where he spoke on the rôle of zoos in preserving rare species among their background vegetation. Later, in early November, he attended the I.U.C.N. General Assembly in Madrid, and in December spent 10 days with Prof. V. Heywood in India visiting various herbaria in order to prepare a report to the Secretary of the Department of the Environment, India, on the Flora of India. The report proposes how the production of a much needed revision of the flora might be organised within the Botanical Survey of India.

Welcome to **Anita MacDonald**, who transferred from the Overseas Development Administration on 17th September to take up the post of Assistant Librarian working on the 'Kew Record' and 'Current Awareness List'. She replaced Joan Walsh (q.v.) who left a few days later.

Bruce Maslin of the West Australian Herbarium, who was Australian Botanical Liaison Officer in the Kew Herbarium from 1977 to 1978, returned on 16th July to spend two weeks work on Australian **Acacia** species.

In April 1984, **Brian Mathew** (Herbarium) travelled to Uzbekistan in Soviet Middle Asia for two weeks during which he collected in two mountain ranges and visited Tashkent Botanic Garden.

During a year working with Brighton Parks and Recreation Department, **Michael Maunder** visited the Library in February to study literature on the genus **Syringa**. He has now returned to continue his horticultural course at Kew and is the student representative, joining his father, Peter Maunder (1954) on the Guild Committee.

In early November, **Anne Mayo** (Herbarium), together with Gren Lucas (q.v.) attended the I.U.C.N. General Assembly in Madrid.

Cyril Mitchelmore (1947), Director of the Welsh College of Horticulture, who became our new President in September, was at Kew on 6th November to present 'Citations of Honour' to five students, to express Kew's recognition of their success in designing, creating and maintaining the winning entry for the Schools of Horticulture competition at the Liverpool International Garden Festival. The students' entry, 'The Water Margin Garden' was awarded no less than three major prizes headed by the 'Prize of Honour' for the 'Best Garden Overall'.

Harriet Muir, working in the Micropropagation Unit, embarked in April 1984 on a study of the mycorrhizal micropropagation of British and European Orchids.

Welcome to **Richard Odell** who took up a post as an Assistant Scientific Officer on 9th April, 1984, working at Wakehurst Place.

At the end of February, **Sarah Oldfield** (Conservation Unit), travelled to Tucson, Arizona, to attend a plant specialist meeting of C.I.T.E.S. (Convention on International Trade in Endangered Species). Later, on 31st August she resigned from her post to live near Cambridge and carry on her interest in conservation on a freelance basis. Our best wishes go with her.

Welcome to **Sarah Oldridge**, who joined the staff on 3rd December as an Assistant Scientific Officer in the Mycology Section of the Herbarium.

Congratulations to **Dr. Simon Owens** on his promotion to the grade of Principal Scientific Officer as from 1st January, 1984. Simon is a member of the Jodrell Laboratory Staff and was, for a time, Secretary of the Guild.

Welcome to **Angela Parsons** who took up a post as an Assistant Scientific Officer at Wakehurst Place on 5th November, 1984.

Our congratulations to **Corporal Arthur Pater** (Wakehurst) on being awarded one of the 1984 Kew Medals, for exceptional devotion to duty and a fine relationship with the visiting public at Wakehurst Place. The medal was presented to him by the Chairman of the Board of Trustees at Wakehurst on 27th September. On the 30th, he retired and we extend our best wishes to him.

During 1984, **David Philcox** (Herbarium) travelled to Lapland in July and to Western Australia in October, on both occasions leading botanical holiday groups.

Barry Phillips (1972) is Horticultural Course Organiser in the Botanical Gardens, Paget, Bermuda, and reported in a letter dispatched

on 7th September, 1984, that his apprenticeship programme was progressing well with students going to the Universities of Georgia, Tennessee and New Hampshire, and one moving to Merrist Wood College, England. Barry paid a visit to Britain at Christmas time.

On February 6th, **Dr. Roger Polhill** began a journey by land-rover overland across North Africa and the Sahara to Nigeria and thence to the Cameroon for a period of collecting. Heavy rain and impassable roads prevented him from reaching Gabon. On December 18th and 19th he represented the Director at an Advisers' Meeting for an International Legume Database proposal at Missouri Botanical Garden.

In the last Journal (10, 88: 238) it was reported that **Colin Porter** (1983) had travelled to Equador in the Autumn of 1983. A film about the Combined Universities Expedition, of which he was a member on which he spoke the commentary, was shown in the spring of 1984 on the BBC 2 'World About Us' series. Later in the year he joined forces with four other students in creating 'The Water Margin Garden', the successful winning entry for the Schools of Horticulture competition at the Liverpool International Garden Festival. The entry was awarded no less than three major prizes. To express Kew's recognition of this success 'Citations of Merit' were awarded to the students by Cyril Mitchelmore, President of the Guild, on 6th November.

Continuing her stay in the Galapagos Islands, 600 miles off the coast of Equador, **Lizzie Potts** (1983) began work in 1983 on Santa Cruz Island in the '**Miconia** zone', where **Miconia robinsoniana** forms an almost pure stand on the upper slopes. It is a plant community unique to the Galapagos and is currently under threat from **Cinchona succirubra** which was introduced by man in the late 1940's. Lizzie's work involved vegetation analysis on plots where **Cinchona** had been treated with herbicide so that a record of regeneration after eardication could be made over the coming years. As a result of this preliminary study, a paper has been written by Lang Tan Tonc, G. E. Potts and Carlos Artwo. After leaving the Galapagos Islands in early January 1984, Lizzie joined the 'London Cocoa Trade Amazon Project' and worked on the evaluation of methods to improve the transportation of budwood and a study of growing conditions at E.E.N., San Carlos, Napo, Equador. She finished her work at the end of June and after travelling on holiday for a few months returned to England in October.

Hazel Preston resigned from her post on 28th September after two years working as an Assistant Scientific Officer in the Mycology Section of the Herbarium.

Jim Priest, currently a student at Kew, visited Mexico in 1984, where he met Graham Pattison (1981) and travelled to some interesting high altitude areas of Vera Cruz.

In March **Hugh Pritchard**, a Higher Scientific Officer at Wakehurst Place, travelled with several other members of the Kew staff to Miami to attend the World Orchid Conference.

Congratulations to **Adrian Pyatt**, a third-year student in 1983, on being awarded by Kew a 'Citation of Merit' along with Brita von

Schoenaich (q.v.) and three others for their winning entry, 'The Water Margin Garden' at the Liverpool International Garden Festival in 1984, an entry which was awarded no less than three major prizes.

Tim Rees (1981) returned to Kew for a day to speak about Papua New Guinea at the Autumn Trimester Open Seminar held on 6th November. His travels were undertaken when he was a winner of the Ernest Thornton-Smith Scholarship.

Jonathan Rickards (1975) wrote from Saudi Arabia in February 1984, where he was engaged in the importation of 30,000 trees for the Royal Commission of Jubail, a new industrial city on the Persian Gulf which had, at the time, one of the largest urban tree planting programmes in the Eastern Province.

Mrs. Marion Robertson retired from the Mounting Unit of the Herbarium on 4th May after six years in the post. During her time at Kew she mounted 49,620 specimens. We offer best wishes for her retirement.

On 15th February, **Martin Sands**, Co-ordinator in the Herbarium and Honorary Assistant Secretary of the Guild, left for three months in Malaysia in pursuit of his study of S.E. Asian **Begonias**. After a few days in Peninsula Malaya, he collected for a while in Division 1 of Sarawak and then spent a week in Brunei before beginning his main period of fieldwork in Sabah. Some of the time was spent on and around the famous Kinabalu massif, where he reached the summit (nearly 13,500 ft.) and collected as many as seven **Begonia** species in one valley. However, he also joined a party for two weeks on an expedition to the summit of Trus Madi, the second highest mountain in Sabah, as well as several remote limestone areas, before returning via Singapore, and arriving back in England on 15th May.

On 11th April, **Steven Scarr** (1968) returned to Kew to attend a seminar on 'Managing Open Spaces' and speak on 'Looking after a University Campus'.

Congratulations to **Tony Schilling** (Deputy Curator, Wakehurst Place) on being awarded a Gold Medal in 1984 for his work on the Liverpool International Garden Festival Technical Committee and as a member of the panel of judges. Earlier in March, he was invited by the Nurseryman's Association of Victoria to open 'Garden Week '84' in Melbourne, Australia, and later in the year he attended the 50th Annual Congress of the American Rock Garden Society in Ashville, North Carolina where he lectured on 'Asian counterparts of the North Carolina forests'.

Congratulations to **Brita von Schoenaich** (who was awarded her Kew Diploma in 1984) for her part, with four former students, in creating and maintaining the winning entry for the Schools of Horticulture competition at the Liverpool International Garden Festival. The entry, 'The Water Margin Garden', was awarded no less than three prizes and to express Kew's recognition of their success the students were awarded 'Citations of Merit', presented to them by the President of the Guild Cyril Mitchelmore (q.v.).

Congratulations to **Dawn Scott** (1983) on her being awarded a B.A. (Honours) degree from the North London School of Librarianship. Before transferring on promotion to the Veterinary Laboratories, Weybridge, she was Deputy Librarian at Kew for more than eight years, and as part of her degree course, she wrote two studies relating to Kew, copies of which have been presented to the Library. One dealt with the effect of the growth of public transport on the Gardens at Kew, and the other was a critical assessment of sources for the history of the major glasshouses in the Gardens.

With regret, we record the death at the end of 1982 of **Joe Short** (1940). In a letter received in September, 1984, Phyllis Short records some details of his career. He was at Kew from 1937 to 1938 and again from 1939 to 1940 after spending a year at the State Botanic Garden in Berlin. In his last year at Kew he specialised in tropical and subtropical plants and then spent 12 years in India where in Central India, Bengal and then Allahabad he was engaged in both extension work (horticulture) and fruit-growing (oranges, mandarines, paw-paws, mangos etc.) and various forms of intensive horticulture and erosion control. He worked under the auspices of the Friends Service Council (London). On returning to New Zealand in 1954, Joe worked in Parks in Auckland, where he became a prominent Rosearian and remained a judge and trainer of judges until his death. After leaving Auckland he was in charge of the Botanic Garden in Wellington and for his final 20 years was Curator and Grounds Supervisor of the Victoria University of Wellington. He was active throughout his career in the Royal New Zealand Institute of Horticulture in which he held various offices over the years.

During February and March, **John Simmons**, the Curator, visited Honduras at the invitation of the Honduras Ambassador to Britain, to collect plants from the mountainous interior for display in Kew's new conservatory. While in Honduras he met senior government ministers and gave lectures in Tegucigalpa and San Pedro Sula and both press and television expressed great interest in the work of Kew and the problems of plant conservation. During 1983 and 1984, the Curator worked with Central Television to produce a full programme on Kew Gardens in the 'Naturewatch' series scheduled to be broadcast in the Autumn of 1985. In May, 1984, he attended a meeting in Nice organised by the Technischer Leiter Organisation (Technical Managers of European Botanic Gardens), visiting famous botanical gardens in the area including the Jardin Exotique in Monaco and the rich collections of the late Marnier La Postolle at Cap Ferat now managed by Mde. Marnier. In 1984, the Curator was appointed to the Longwood Gardens Visiting Committee and attended a meeting in Pennsylvania last November. This committee, which meets every 18 months or so, is briefed to review the work of the Gardens and to make recommendations for future policy and improvements. He was also appointed to the Supreme Jury of the Liverpool International Gardens Festival, being awarded a Gold Medal for his work, and became the Botanic

Gardens representative to the Steering Committee guiding the formation of the Institute of Horticulture.

Congratulations to **Roger Smith** (Principal Scientific Officer, Wakehurst Place) and his family, on the birth of a son in the autumn of 1984.

Lloyd Snellgrove, who completed his Diploma Course at Kew in 1984, and lives in Sheffield, undertook some part-time work as a lecturer in October teaching City and Guilds Horticulture Phases I and II and shortly afterwards taught for a while in a college in Doncaster until December.

On 26th February, **Brian Stannard** (Herbarium) set out for Venezuela to begin a period of fieldwork, eventually reaching the base-camp for the expedition at Neblina on 3rd March. From there he was ferried by helicopter to various habitats around the mountains including rain forest and montane bog, an area rich in Bromeliads, Sundews and Pitcher Plants. Later in the year he returned to South America with Dr. Ray Harley (q.v.) on 28th October to join in fieldwork on the montane 'camp rupestre' flora of eastern Brazil, from Minas Gerais to Bahia. They were accompanied by Gail Bromley (q.v.) and later, Gwilym Lewis (q.v.).

Our sincere best wishes to **Dr. Margaret Stant**, who retired on 24th February, 1984 after nearly 34 years working in the Jodrell Laboratory at Kew. We are grateful to her for the valued service she has given to the Guild for a number of years as Hon. Secretary, a task she has had to relinquish since September, as she is now living in Sidmouth, Devon. We wish her a long and happy retirement, although as President Elect, Margaret will continue to be closely involved in Guild activities. Just before leaving Kew, she was awarded the R. H. S. Lindley Medal for her exhibit of Electron microscope photographs at the Society's Centenary Apple and Pear Conference.

Joyce Stewart, who works in the Orchid Herbarium supported by the Bentham-Moxon Trust, attended the World Orchid Conference in Miami during March, 1984.

On 14th August, **Stan Stride**, who was awarded a Kew Medal in 1983, completed his career after 14 years at Wakehurst Place. We offer him our best wishes for a happy retirement.

Jane Stubbs, who left Kew on 31st December, 1984, after 11 years as a Guide-lecturer in the Museums Division, is now living in Peterborough, because the Nature Conservancy, for whom her husband works, has moved there from London. Our very best wishes go with her.

Sadly we record the death in August, 1984, at his home in Southsea, of **John Studley** (1930) at the age of 81, who was greatly respected for his work in charge of Parks in Portsmouth from 1945 to 1968. He was also resident expert for 14 years on the BBC Radio Solent programme, 'Topsoil'. He was a past President of the Portsmouth and Southsea Rotary Club and served a term as President of the National Institute of Parks Administration. As Parks Superintendent he was acknowledged

as the man who transformed Portsmouth with the development of colourful gardens after World War II. Born near Kew Gardens, he worked, after his time as a student, for local authorities at Merton and Mordon and Newport, Monmouthshire, before joining Portsmouth Corporation from which he retired in 1968 as Director of Parks and Recreation.

In 1984 **Don Sumithraarachchi** (1981), who is Superintendent of the Royal Botanic Gardens, Peradeniya, was elected a representative of Sri Lanka on the Council of the International Society for Horticultural Science.

Paul Summers, who was Gardens Supervisor in the Studies Section of the Living Collections Division and until 1983 Events Officer of the Guild, resigned from his post on 13th January, 1984 to begin his new job as Head Gardener at London Zoo.

Our congratulations to **Nigel Taylor** on his promotion to Higher Scientific Officer, from 1st January, 1984.

Roy Thomas (1958) is Director of Horticulture for 'Rock Resorts Inc.', a position that is probably unique among hotel management companies. He oversees horticultural master plans for individual properties and works with on-site grounds supervisors on planting, maintenance and pest control schedules. Roy, who is also chairman of the American Hotel and Motel Associations for a Quality Environment, was at one time Superintendent of Parks at Hamilton, Bermuda and began his association with 'Rock Resorts' in 1967 when he was horticulturist at Caneel Bay in the Virgin Islands National Park.

Les Thornton (1981) after working in Jeddah, began a new job at the beginning of December 1984 with B & Q (retail) as a Garden Centre Manager, in Keighley, West Yorkshire.

Dr. B. M. Wadhwa, who has been Indian Botanical Liaison Officer in the Herbarium since 1981, returned twice to India in 1984. In March he spent 15 days in Calcutta and Dehra Dun consulting herbarium material of **Saxifragaceae**, in which he specialises, and during four weeks in December, when he again visited herbaria, he took part in meetings convened by the Department of the Environment, India, to plan for a revision of the Flora of India. In July he spent two weeks visiting the herbaria of Uppsala and Berlin, also in connection with his study of **Saxifragaceae**.

W. F. Walker (1937), formerly Chief Horticulturist in the Department of Agriculture, Hobart, Tasmania, is the Australasian Vice Chairman of the Ornamental Plants Section of the International Society for Horticultural Science, and chaired a symposium session on the Propagation of Ornamental Plants held in Ringwood, Victoria, Australia in May, 1984.

Joan Walsh, who worked on the Kew Record as an Assistant Librarian at Kew since May 1982, gave up her post on 21st September to be replaced by Anita MacDonald (q.v.).

Sally Waltham resigned from her post as an Assistant Scientific Officer in the General Services Unit of the Herbarium on 12th October after three and a half years' service.

Richard Ward, our Editor, reports that the Rotary Club of Kew Gardens, which he initiated, was inaugurated on the same evening as the Annual Dinner. Immediately after the Dinner he, together with Guild President, Arthur Woodward, paid a late visit to the inaugural evening being held at the Richmond Hill Hotel. In October the Charter of the Club took place at the Camellia Restaurant, Syon Park and Professor Bell was invited as one of the main guests, together with his wife. Unfortunately no Kew Gardens staff have yet been persuaded to join the Club! The Club meets on Wednesday evenings at 8 p.m. at the Kew Gardens Hotel.

John Whitehead (1972), lecturer in Agriculture, Merrist Wood and currently a member of the Guild Committee, gave the Kew Mutual Improvement Society lecture on 16th January, entitled "Peru in August". Later in the year he began a series of periodic visits to the Library, pursuing his interests in dendrology.

OBITUARIES

MICHAEL ROBERT CUDD 1945-1984



There can be no more poignant example of saying 'Only the good die young' than the death of Michael Cudd at the tragically early age of 38. In every sense one of Nature's gentlemen, Michael was 'good all through', a man of compassion with a deep understanding of human frailties who was never heard to utter a harsh or unkind word about anyone, but who would willingly go to endless trouble and personal inconvenience to help those in need. Gifted with a keen sense of the ridiculous, sparkling humour and an infectious laugh, it was never possible to feel gloomy in his company for long. His love and great knowledge of plants, especially trees, went very deep and it is perhaps fitting that at the time of his fatal stroke he was working in his garden. Despite

intensive care and devoted medical attention his life ebbed peacefully to its close a few days later, on 2nd May 1984.

Michael started his career in 1962 as an apprentice gardener with the Parks Department of the former London County Council where his quite exceptional diligence and ability were quickly noted. In those early days it was my privilege to be able to give some guidance and to steer his footsteps towards Kew, though I could not foresee the deep and loyal friendship which was to ensue in later years. He entered Kew in 1965 and three years later received his Diploma, plus the Matilda Smith Memorial Prize, the Proudlock Prize and the Ernest Thornton-Smith Travelling Scholarship. He had the distinction of being the first recipient of this prestigious award and devoted it to five intensive months of study in Jamaica. For good measure he added the National Diploma in Arboriculture to his armoury and, shortly afterwards, took up his first professional appointment as Arboricultural Officer to the London Borough of Hounslow, where he did much to raise standards of tree care and training and to encourage tree planting throughout the Borough.

In 1974 he joined the horticultural advisory staff of the Greater London Council, a post which he held with distinction until his death. Many and diverse are the aspects of the London scene which have been enriched for posterity by his initiative and effort.

His early and great love of trees led him into the Arboricultural Association in which he held successively the posts of Secretary to the Education Committee, Secretary, and later Chairman, of the South East Branch and, finally, member of Council. The Association's beautifully crafted and uniquely designed funeral tribute, composed of leaves, flowers and fruits of trees and shrubs was wonderfully appropriate to the man and the occasion and was one of the most moving in a huge display of floral offerings.

Kew also recognised his devotion to trees and for many years he was visiting lecturer in Arboriculture to the Diploma course, handing over the reins only weeks before his death.

His beloved wife, Penny, whom he married in 1975, was unstinting in her support throughout the all too few years of their happiness together. They were blessed by three fine sons, Stephen, Andrew and Robert. Those who benefited from friendship with Michael have suffered a great and irreparable loss, but it is as nothing compared with that of Penny, the children and his parents, to all of whom heartfelt sympathy is expressed.

The final honour to Michael's name, at South West London Crematorium, was attended by friends and colleagues so numerous that the spacious chapel was packed to overflowing. This spontaneous and silent homage bore testimony more eloquent than any words to the affection and respect which Michael inspired in all who were privileged to know him.

A memorial seat bearing his name has been placed near the Lucombe Oak in the Syon Vista at Kew and trees dedicated to him planted in the Gardens and in Battersea Park, where he first started work.

He had so much more to give; the world is the poorer for his passing.

W. E. Storey

E. W. STUDLEY

E. W. Studley, affectionately known as John, died during mid-August at the age of 81 years. He retired from public service in 1969, as Director of Parks and Recreation to the city of Portsmouth, and continued without interruption to actively pursue his hobby and his profession of horticulture.

He began his career with Messrs. Wood & Long of Isleworth in 1920, and progressed to Raynes Park with Carters Tested Seeds Ltd. A period at John Innes as improver and student gardener, ideally provided him with the experience to benefit fully from the move to Kew. As student gardener and later as deputy foreman, John exhibited all the attributes of a true Plantsman.

In 1930 he moved to Ilford Parks Department, progressing from propagator to Head Gardener, and with the move to Merton and



Morden U.D.C. in 1934 he became Parks Superintendent. A move which gave him much pleasure was to the County Borough of Newport as Park and Allotments Superintendent. Here war-time food production confirmed his ability as a grower, exhibitor and judge. His keen interest in vegetable growing and allotment management was to remain a great source of pleasure to him.

John Studley joined Portsmouth City Council in 1945 as Chief Officer and was responsible for the major changes and improvements in post-war development of public open space in a city and resort much devastated by war. His ability and dedication will be reflected in the public open space of that city for very many years to come.

John was a public servant and gentleman — a long standing church man, President of Portsmouth Rotary Club, local President of N.A.L.G.O., and Chairman of Portsmouth Horticultural Society.

His friendship, his professional ability, his delightful eccentricities will be missed by the very many in every sphere of activity in which he was known, respected and loved.

RULES OF THE KEW GUILD — Published every second year. Alternating with Staff List, and incorporating any changes.

Name of the Society.

- (1) The name of the Society shall be "The Kew Guild".

Objects.

- (2) The objects of the Guild shall be—
- (a) the advancement of knowledge of horticulture generally and in particular in connection with the work of the Royal Botanic Gardens, Kew, and among members of the Guild.
 - (b) the encouragement of horticultural education at the Royal Botanic Gardens, Kew, by the provision of prizes and grants for Student Gardeners and the administration of the educational funds of the Guild.
 - (c) the provision of facilities for leisure time education and recreation in the interests of the social welfare of Student Gardeners and others having need of such facilities who are within the provisions of Section 1 of the Recreational Charities Act, 1958.
 - (d) the administration of the charitable funds of the Guild and the assistance from such funds of members of the Guild who are in need.
 - (e) the publication of a Journal in furtherance of the objects of the Guild or any of them.
 - (f) generally to do all such acts as shall further the active and corporate life of the Guild and may be lawfully done by a body established only for the purposes recognised by the law of England as charitable.

Membership.

- (3) (a) Membership of the Guild shall be open to past and present Curators, Assistant Curators, Garden Supervisors, Student Gardeners, scientific, horticultural, professional and executive members of the staff of the Royal Botanic Gardens, Kew and Wakehurst Place; also International Trainees and Research and Liaison Scientists, provided they have worked continuously **at Kew or Wakehurst Place for at least twelve months**. The term "Kewites" where used herein or by the Guild in other publications shall mean a paid-up member of the Guild.
- (b) In addition, the Committee may admit to membership of the Guild any member of the Kew staff outside the categories set out in (3) (a) who is deemed worthy of membership of the Guild.
- (c) Honorary Membership may be awarded at the discretion of the Committee to a former officer (Hon. Editor, Secretary or Treasurer) who has rendered outstanding service.
- (4) Members of the Guild shall have the right to vote at meetings and to compete in competitions, and shall be eligible for election as officers of the Guild or to serve on the Committee.
- (5) Any member wishing to resign shall give notice to the Honorary Secretary or the Honorary Treasurer before the first day of December in the year of his or her intention to resign.
- (6) (a) The Committee may by resolution communicated to the member in writing and stating concisely the grounds for which it proposes to act call upon any individual to resign from the Guild and if the member does not so resign within forty-eight days after being so called upon the Committee may by resolution terminate his membership.
- (b) before coming to any decision the Committee shall give the member affected proper facilities for stating his case to them either orally or in writing as the Committee may determine.

Annual Subscriptions.

- (7) The Annual Subscription which shall be payable on January 1st of each year shall be such a sum as the Annual General Meeting shall from time to time determine and

shall entitle members to all publications of the Guild. A member whose subscription is one year in arrears shall not receive further publications until his arrears be fully paid. The annual subscription is £7.00 (**Student Gardeners £3.00 — as at September 1982**).

- (8) Any member whose subscriptions are fully paid may on the payment of a lump sum predetermined by the Annual General Meeting become a Life Member and be entitled to all the privileges of the Guild without further payment. A sum representing not less than one-half of each life subscription shall be invested in the name of the Trustees and the liabilities to Life Subscribers shall be clearly shown in the annual Statement of Accounts. The provisions of this Rule may be suspended by resolution of an Annual General Meeting for such period as the Annual General Meeting shall think fit. (This rule is at present suspended.)

Management of the Guild.

- (9) (a) The business of the Guild shall be conducted by a Committee composed of the officers and ordinary Committee members. The officers shall consist of the President, two Vice-Presidents, the immediate Past-President, the President-Elect, Honorary Secretary, Honorary Assistant Secretary, Honorary Treasurer, and Honorary Editor. The ordinary Committee members shall consist of four present Kewites, twelve Old Kewites and two Student Gardeners.
- (b) Nine members of the Committee shall form a quorum. The Committee shall meet from time to time as may be necessary. Nine members of the Committee may by signed written notice to the Honorary Secretary request him to call a meeting of the Committee and if such meeting be not called within thirty days of the despatch of such notice the said nine members may themselves call a meeting of the Committee by twenty-one days' notice in writing sent to all members thereof.
- (c) The Committee may regulate its own proceedings by standing order or otherwise as it may think fit. No act or proceedings of the Committee shall be invalidated by any vacancy on the Committee or any sub-committee thereof on the grounds that a member of the Committee or of a sub-committee thereof was not qualified at or had become disqualified after the date of his appointment. The Chairman of the Committee shall at Committee meetings have no second or casting vote in the case of an equality of votes.
- (d) At least seven days' written notice of a meeting of the Committee shall so far as practicable be given to every officer and other members of the Committee.
- (e) A Chairman of the Committee shall be elected by the Committee to take the Chair in the absence of the President, the immediate Past-President, the President-Elect and Vice-Presidents.
- (f) There shall be two Honorary Auditors chosen from among members of the Guild who are not members of the Committee.

Election of Officers, Committee, and Auditors.

- (10) (a) The President, the President-Elect, Honorary Secretary, Honorary Assistant Secretary, Honorary Treasurer, and Honorary Editor shall be elected annually at the Annual General Meeting. One Vice-President shall be elected annually at the Annual General Meeting and shall hold office for two years. Any vacancy among the officers shall be filled as soon as possible by co-option by the Committee, and any person so co-opted shall hold office until the conclusion of the following Annual General Meeting.
- (b) Four ordinary Committee Members (three of whom shall be Old Kewites) shall be elected each year and shall hold office for four years. They shall not be eligible for re-election for at least twelve months after the end of their term of office. Any casual vacancy on the Committee shall be filled at the next Annual General Meeting, the member elected completing the term of office of the member whom he has replaced. The Student Gardener representatives shall be elected annually by the Student Gardeners.
- (c) One Honorary Auditor shall be elected each year and shall hold office for two years.

- (d) Candidates for election as officers or ordinary Committee members or Auditors may be proposed by any member of the Guild provided that the names of candidates be sent in writing to the Honorary Secretary at least twenty-eight clear days' before the Annual General Meeting.

Meetings

- (11) The Annual General Meeting shall be held at Kew on either the second or third Saturday in September. At the Annual General Meeting the Report of the Committee and a Statement of the Accounts shall be submitted and election of officers and Committee members and Auditors shall take place. **Fourteen clear days before the Annual General Meeting the Honorary Secretary shall circulate to all members with an address in the United Kingdom a financial statement** together with the agenda of the meeting which shall include a list of candidates for election as officers or ordinary Committee members or Auditors together with their proposers.
- (12) A Special General Meeting of the Guild may be called at any time by the Committee and shall be so called within fifty-six days of receipt by the Honorary Secretary of a requisition in writing signed by not less than thirty-five members stating the purpose for which such a meeting is desired and setting out any resolution which it is desired to propose thereat. Notice of the meeting with an agenda thereof shall be sent to all members with an address in the United Kingdom at least forty-two days before the date appointed for the meeting. Amendments to any resolutions set out in the agenda shall be sent to the Honorary Secretary at least twenty-eight clear days before the date of the meeting and shall be sent by him to all members with an address in the United Kingdom at least seven clear days before the date of the meeting. No business shall be transacted at such meeting other than that specified in the notice and no amendment of any substance to any resolution proposed at the meeting shall be allowed. The Chairman of the meeting shall be nominated by the Committee.
- (13) The accidental omission to give notice of a meeting to or the non-receipt of notice of a meeting by any member shall not invalidate any proceedings or resolutions at any meeting of the Guild or any Committee thereof.
- (14) At a General Meeting each individual member whose subscription is fully paid up to the date of the meeting shall have one vote and no more except the Chairman who shall have a second or casting vote in the case of an equality of votes.

Alterations to the Rules.

- (15) These rules may be altered by a two-thirds majority of those present and voting at an Annual or Special General Meeting. Any proposals for the alteration of Rules shall be sent to the Honorary Secretary in writing at least twenty-eight clear days before the date of the Annual or Special General Meeting and shall be sent by him to all members with an address in the United Kingdom at least seven clear days before the date of the Annual or Special General Meeting.

Dissolution of the Guild.

- (16) A motion to dissolve the Guild may only be made at a Special General Meeting and to effect a dissolution at least three-quarters of the members actually present and voting at the meeting shall vote in favour of the dissolution. If a motion to dissolve the Guild is carried by the said majority the Guild's surplus funds, property and assets (if any) shall be disposed of for charitable purposes in connection with education and research in connection with botany and horticulture as the members may at the said Special General Meeting decide, or failing any such decision to a charity connected with botany and horticulture to be nominated by the Director of the Royal Botanic Gardens, Kew, for the time being, to the intent that no member of the Guild shall receive any of the said funds, property and assets by virtue of his membership.

Property of the Guild and Trustees.

- (17) (a) The Guild may purchase or otherwise acquire and hold property of any nature and may sell lease mortgage or otherwise deal with the same. Any property belonging

to the Guild may be invested in the names of not more than four and not less than two Trustees who may be appointed from time to time by the Committee and any vacancy amongst such Trustees shall be filled by the Committee. Such property may also be invested in the name of a limited company established by and under the control of the Guild for trust purposes.

- (b) Such investments may be in or upon such shares, stocks, funds, securities, investments, and property, real or personal, freehold or leasehold in any part of the world upon such terms and conditions (if any) as the Committee shall in their absolute discretion think fit and in all respects as if the Committee were the sole beneficial owners thereof. The Committee may from time to time direct the Trustees to sell vary and transfer such investments and property.
- (c) The Committee may deal with the said investments as if they were the sole beneficial owners thereof.
- (d) If legal proceedings of any kind are resorted to or defended by the Guild the Trustees shall on the instructions of the Committee but not otherwise prosecute or defend such proceedings either in the name of the Guild or in the name of the Trustees or otherwise on behalf of the Guild as may be necessary.
- (e) The Trustees shall in all respects act as required by the Committee and a copy of a minute of the Committee signed by the Honorary Secretary shall be conclusive evidence of its decision.
- (f) Any Trustee may be removed from office by a resolution passed at a meeting of the Committee by a vote of not less than three-quarters majority of the members of the Committee present and voting at the meeting. At least seven clear days' notice of a special meeting to remove a Trustee shall be given to all members of the Committee and the agenda for the meeting shall state concisely the reasons why the removal is considered necessary and the accused Trustee shall be permitted to make his defence orally or in writing.
- (g) The Trustees shall be effectively indemnified by the Committee from and against any liability costs expenses and payments whatsoever which may be properly incurred or made by them in relation to the trusts of the property and investments of the Guild or in relation to any legal proceedings or which otherwise relate directly or indirectly to the performance of the functions of a Trustee of the Guild.
- (h) Except where otherwise provided the Trustees may act by a simple majority of those present and voting at a meeting of the Trustees.
- (i) The Trustees shall from among their number appoint an Honorary Secretary.

INCOME AND EXPENDITURE ACCOUNT FOR

1983		1984
£	DEBIT	£ £
	To:	
	Kew Guild Journal:	
1,600.00	Printing 1983 Journal inc. blocks	1,780.00
	Wakehurst Booklet:	
378.84	Reprinting	—
84.00	Prizes awarded by the Guild	95.00
113.25	Hon. Officers' expenses	92.91
415.88	General Printing, Postage, Stationery etc.	524.90
	Guild Emblems	292.85
—	Less value of stock	292.85
360.00	Award Scheme: Prizes	257.00
11.45	Insurance	9.38
—	Annual Dinner Deficit	105.95
—	Award Scheme Raffle prizes (paintings)	390.00
2,963.42		3,255.14

BALANCE SHEET FOR THE YEAR

1983		1984
£	LIABILITIES	£ £
	Capital Fund:	
12,808.86	As per attached statement of assets	15,418.88
	Current Liabilities:	
	Life Subscriptions:	
	48 @ £1.00 Half Rate	24.00
	41 @ £2.00 Half Rate	41.00
	73 @ £3.15 Half Rate	114.97
	4 @ £5.25	21.00
	7 NO RECORD	
200.97		200.97
13,009.83		15,619.85

THE YEAR ENDED 31st DECEMBER, 1984

1983		1984	
£	CREDIT	£	£
	By:		
	Annual subscription and arrears	1,688.05	
	Donations — General	159.00	
	Award Scheme Donations	2,270.00	
3,870.48			4,117.05
	Dividends:		
	From Charities Investment Fund		
537.40	General Account	580.22	
201.20	Award Scheme	217.23	
			797.45
	Interest from Bank:		
82.64	General Account	139.19	
129.14	Award Scheme Deposit Account	190.81	
			330.00
	Wakehurst Booklet:		
687.46	Receipts from Sale	567.30	
	Less value of stock	198.28	
103.03	Sale of Emblems	43.32	
	Less value of stock	34.39	
			8.93
182.08	Award Scheme Soirée and Raffle		181.40
12.40	Sale of Journals		48.81
20.40	A.G.M. Tea		12.50
45.01	Annual Dinner		—
<u>5,871.24</u>			<u>5,865.16</u>
	Balance at 1.1.1984	12,808.86	
	Plus Excess Income over Expenditure	2,610.02	
		<u>15,418.88</u>	

ENDED 31st DECEMBER, 1984

1983		1984	
£	INVESTED ASSETS	£	£
	Charities Official Investment Fund		
	General Fund	4,000.00	
	Award Scheme Fund	2,000.00	
6,000.00			6,000.00
	CURRENT ASSETS		
399.11	Emblems — Purchase Value	658.07	
	Wakehurst Booklet — New Stock:		
1,936.16	(Purchase Value)	1,737.88	
			2,395.95
	Cash at Barclays Bank:		
1,759.68	General Deposit Account	2,073.87	
2,529.39	Award Scheme Deposit Account	4,998.83	
385.49	Current Account	151.20	
			7,223.90
<u>13,009.83</u>			<u>15,619.85</u>

Audited and found correct:

Signed by: T. Reynolds
Jill Cowley
29th February 1985

LIST OF R.B.G. STAFF, HONORARY RESEARCH ASSOCIATES AND STUDENT MEMBERS OF THE KEW GUILD

(as at 31st December, 1984)

Staff:

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

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

Honorary Research Associates

Brenan, Professor J. P. M.
 Green, P. S.
 Metcalfe, Dr. C. R.

Students:

Jackson, A.
 Maunder, M.
 Reich, Miss D.
 Walker, J.



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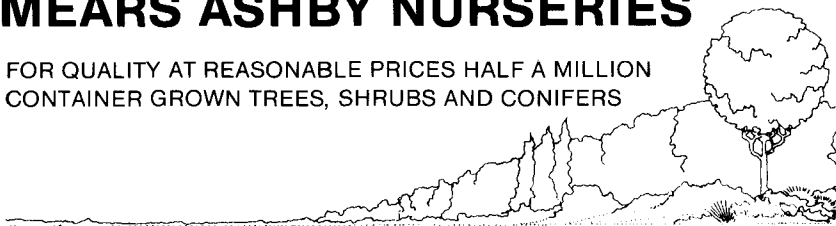
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