

# Annual Report and Accounts

for the year ended 31 March 2005





# Annual Report and Accounts for the year ended 31 March 2005

Presented to Parliament pursuant to the National Heritage Act 1983, chapter 47, schedule 1, part IV, paragraphs 39(7) and 40(4).

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# The Royal Botanic Gardens, Kew is:

**a world-leading public organisation** governed by Trustees and sponsored by Defra. Funding comes mainly from Defra grants, visitor income and fundraising.

**devoted to increasing knowledge**, so that the diversity of plants and fungi can be used in sustainable ways for human benefit and conserved for future generations.

**an organisation of 1,200 people** including about 700 staff (200 in science and 200 in horticulture), 75 affiliated researchers and 100 students; the organisation is also supported by some 350 volunteers.

**two outstanding gardens** – Kew Gardens, a World Heritage Site six miles west of London, and Wakehurst Place (an estate leased from the National Trust) on the High Weald in West Sussex; these visitor attractions are home to Kew's collections, laboratories, library and the Millennium Seed Bank.

### Kew's mission is:

to enable better management of the Earth's environment by increasing knowledge and understanding of the plant and fungal kingdoms – the basis of life on Earth.

# Kew achieves results through:

surveys of plant diversity both overseas and in the UK, high quality scientific research and horticulture, publications – both scientific and popular, direct and digital access to the collections and information, education, capacity building and hands-on conservation activity; crucially the gardens also enable Kew to build public understanding and support for sustainability and plant conservation.

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#### Chairman's letter

The significance of plant biodiversity for a sustainable future is now increasingly recognised by governments, the public and the commercial sector. Kew aims to widen this recognition through its public profile and by contributing directly to national and international plant conservation and research activity.

In the UK, the Department for Environment, Food and Rural Affairs (Defra) has the lead role on sustainability and is taking an active, forward-looking position on both national and global stewardship of the environment. Defra sponsors Kew and we achieve the greatest impact by making the very best use of our resources to support outcomes that are aligned with Defra's objectives.

In last year's Annual Report I wrote that it would be difficult to match the year's achievements and I am pleased to tell you that we now have some even better results in our science, conservation and visitor programmes.

Indeed, with Peter Crane's leadership as Director over the last five years, the organisation has consistently improved its performance. I was therefore delighted that Peter's exceptional drive and commitment were recognised with a knighthood in the 2004 Queen's Birthday Honours List. Fittingly, the award was announced a week after a visit by Her Majesty to celebrate formally the inscription of Kew Gardens as a World Heritage Site.

Of perhaps even greater significance than the operational successes, Kew's carefully developed capital programme made important progress during the year. The Climbers and Creepers children's area was completed. Work commenced on a major extension of the Jodrell Laboratory (partly funded by the Wolfson Trust), a new Alpine House, irrigation plant and pipelines, improved entry facilities at Victoria Gate and, at Wakehurst, improved catering facilities.

This has all been made possible by significant and sustained capital support from Defra and I would like to take this opportunity to thank Defra's officials and Ministers, particularly Lord Whitty who has just retired from Defra, for responding generously to the cases we have made.

The year's exceptionally strong visitor figures produced an extra £1 million in revenue. Nonetheless, I remain concerned that our level of operating income is inadequate for the tasks that Kew, as a public body with unique capabilities, needs to accomplish in support of Government policy. I am acutely aware that Defra's resources are limited and greatly appreciate the extensive capital support provided but the matter of operational funding will require attention in the coming year.

On behalf of the Trustees, I would like to thank Sir Peter and everyone at Wakehurst Place and Kew Gardens, volunteers included, for the hard work and commitment that produced such a successful year. I am also grateful to my fellow Trustees for their dedication and their thoughtful contributions to Kew's direction and governance. In particular, I want to thank Chris Payne and Iain Oag, two long-serving and diligent Trustees who stood down this year, and to welcome Charles Godfray and Sandy Harrison to the Board.

Kew has a strong team and high ambitions but we recognise that we are only one part of the international effort to match the challenges of habitat destruction and species extinction. We are most useful when we work in effective partnerships and I would like to conclude by acknowledging and thanking all of the many other organisations and individuals with whom we have worked throughout the year.

Selsone

John Selborne

Chairman of Trustees

#### Director's Review

In 2004/05, for the second year running, Kew achieved all of its Key Performance Targets, a very satisfying result. However, the scale of the threat to the Earth's environment and the rapid extinction of plant species leave no scope for complacency. We need to keep raising our game and, as the Chairman noted, constantly striving to be useful and ever more effective partners.

Our drive to increase access to the collections is, therefore, one of our major priorities and we achieved a 39% increase in our web page traffic with over two million visitors. The BBC TV series A Year at Kew boosted public interest in our web site and access by conservationists and scientists is steadily expanding as we continually develop access to Kew's databases and collections.

In particular, Kew is playing a leading role in the development and implementation of the African Plants Initiative (API) working closely with the funders, the Andrew W Mellon Foundation, which is enabling the Aluka initiative, of which the API is part. The Mellon Foundation provided \$1,160,000 of support to Kew during the year and millions more to 25 API partners in Africa and elsewhere. Kew is contributing about 50,000 African 'type' specimens – more than any other herbarium worldwide – and this year we made strong progress by databasing and imaging more than 20,000 specimens and 2.000 illustrations. These resources are fundamental to the identification and understanding of the diversity of African plants and the digital access provided by the Initiative will enable a step change in Africa's capacity for plant diversity research, conservation and sustainable use. A further 17,000 Kew specimens were databased for other projects and added to Kew's herbarium catalogue HerbCat.

The momentum of the Millennium Seed Bank project, based at Wakehurst Place, grew apace in 2004/05. Seed collection rates increased 30% and five new Access and Benefit Sharing Agreements were signed – most notably with the Chinese Academy of Science. China has a great range of habitats and this new partnership is a breakthrough in the effort to conserve biodiversity and will contribute to Target 8 (ex situ conservation) of the Global Strategy for Plant Conservation.

During the year, Kew's 200 science staff and 75 honorary fellows and associates generated 385 publications. 51 of these, a record number, appeared in 'high impact' journals; many of these papers advanced our fundamental understanding of evolutionary relationships among plant species; others bear directly on issues of plant conservation and sustainable use for example, seed germination processes and deterring predation by insects.

Public attendance at both Kew Gardens (up 10%) and Wakehurst Place (up 15%) was above expectations even though the summer weather was much less favourable than in 2003. At 1,587,000 the total number of visits to the organisation was the greatest since 1949!

The strong results at Kew benefited from the BBC series and from a further improvement in family attendance. The innovative Climbers and Creepers educational play area opened in June 2004 and rapidly became an extremely popular family attraction. Attendance by children (excluding schools) increased 47% over last year to 167,000. School party numbers also increased. School parties are now better served – more educational support was provided to teachers and a covered lunch space for 200 schoolchildren was introduced as part of Climbers and Creepers. Total visits by children to Kew and Wakehurst have trebled since 2000/01 to reach 305,000 in 2004/05.

At Wakehurst Place, the introduction of the new Visitor Centre generated a marked increase in revenue. The Stables Restaurant has been refurbished and re-configured to improve capacity, reopening in May 2005. Together, these new facilities will provide a much improved level of service for the rapidly growing number of visitors. Additional land was purchased at Wakehurst contiguous with that already acquired for the Millennium Seed Bank and the main estate leased from the National Trust.

Looking ahead, the Jodrell Laboratory extension will be completed by the end of March 2006. Consultation is now beginning prior to seeking planning permission for the muchneeded extension to the Herbarium and Library. The programme to enhance digital access will also continue to expand. Our most ambitious summer festival, supported by GlaxoSmithKline, will feature Dale Chihuly's amazing glass structures. The new Alpine House will open in the spring of 2006. At Wakehurst Place the re-configured Stables restaurant will open at the end of May.

We have made a great deal of progress over the last five years and the last two have been especially successful so I would like to join the Chairman in congratulating everyone who has worked so hard at Kew and Wakehurst – they are all contributing to an organisation and a cause of global importance.

**Peter Crane** 

Kath Chane

Director

#### Business aims and outcomes

Kew has a wide range of responsibilities and activities spanning the world of plant science and including public engagement with its mission. Coherence and clarity of purpose are established through six primary business aims:

- 1 Build the quality of Kew's collections and encourage access by others, so as to maximise their use and increase their scientific, utilitarian and conservation value.
- 2 Maximise the value of Kew's work for the conservation and sustainable use of plant diversity by building the relevance, quality and utility of information that Kew provides, and improving its dissemination through a focus on service, synthesis, partnership with others and effective use of technology.
- 3 Demonstrate the excellence of Kew's scientific work and maximise its impact by disseminating the results to the broadest possible professional audience.
- 4 Support Kew's own activities, and those of policy makers and collaborators in the UK and overseas, in the conservation and sustainable use of biodiversity, through partnerships, capacity building, joint research, training and advice.
- 5 Maximise the value of Kew's work for increasing public enjoyment and understanding of plant diversity and the need to encourage conservation and sustainable use.
- 6 Generate revenue to support Kew's activities, while also ensuring that Kew meets its responsibilities as public servants, and shares benefits arising from its scientific work in a fair and equitable way with its partners.

The outcomes from these business aims are:

- 1 Use of Kew's collections.
- 2 High quality, useful information that is relevant for purposes of conserving and utilising plant diversity sustainably.
- 3 Research that is recognised as excellent by scientific peers.
- 4 Significant contributions in support of conservation and sustainable use activities by collaborators.
- 5 Contributions to public education about conservation and sustainable use that have a significant impact.
- 6 Revenue.

Performance on these six outcomes is monitored with ten key measures as shown opposite.

# Performance targets and results

#### Performance vs last year and target

	Measure	Outcome 2003/04	Target 2004/05	Outcome 2004/05	±% vs Last year	±% vs Target
	Total access to the behind-the-scenes collections	28,448	22,000	25,889	-9	+18
 2a.	Total visits to the Kew website (page views)	8,833,827	10,000,000	12,297,147	+39	+23
2b.	Total research publications and compilations (calendar year)	446	350	385	-14	+10
2c.	Total species use, species conservation assessments and species conservation plans supported (calendar year)	3,701	3,200	6,996	+89	+119
2d.	Total habitat conservation assessments supported the contributions of information or advice (calendar year)		8	8	-11	0
3	Total publications in the highest impact scientific jou (calendar year)	urnals 45	19	51	+13	+168
4	Total staff contact days on projects with UK or overseas collaborators that contribute to the conservand sustainable use of plant diversity through capacibuilding, joint research, training and advice		2,400	5,135	+13	+114
5a.	Total visits to the gardens	1,424,549	1,355,000	1,586,578	+11	+17
5b.	Total Friends of Kew	62,380	64,000	64,292	+3	0
6	Total revenue generated £000	36,219	36,415	38,660	+7	+6

# Performance targets and results continued

#### Performance over five years

	Measure	2000/01	2001/02	2002/03	2003/04	2004/05
1	Total access to the behind-the-scenes collections	18,533	20,773	25,454	28,448	25,889
2a.	Total visits to the Kew website (page views)	3,200,000	5,020,000	6,910,000	8,833,827	12,297,147
2b.	Total research publications and compilations (calendar year)	439	392	404	446	385
2c.	Total species use, species conservation assessments and species conservation plans supported (calendar year)	1,087	2,456	4,888	3,701	6,996
2d.	Total habitat conservation assessments supported through contributions of information or advice (calendar year)	6	15	6	9	8
3	Total publications in the highest impact scientific jou (calendar year)	urnals 13	22	16	45	51
4	Total staff contact days on projects with UK or over- collaborators that contribute to the conservation an sustainable use of plant diversity through capacity be joint research, training and advice	d	3,082	4,875	4,561	5,135
5a.	Total visits to the gardens	1,137,436	1,361,286	1,355,407	1,424,549	1,586,578
5b.	Total Friends of Kew	45,930	58,966¹	60,800	62,380*	64,292
6	Total revenue generated £000	26,452*	30,484	27,025	36,219	38,660

<sup>\*</sup> Corrected figure.

<sup>1</sup> From this point onwards, Friends membership excludes children (now free admission) and includes Season Tickets.

#### Commentary on performance against targets

#### 1 Total access to behind-the-scenes collections

The 9% decrease on last year was caused by substantially lower figures for public attendance at both Kew and Wakehurst Nursery Open Days. At Kew the Climbers and Creepers construction work caused logistical difficulties and at Wakehurst heavy rain reduced visits; the combined impact accounted for a reduction of 2,500 visits. The Jodrell Laboratory and Herbarium open days were successful and access by professional visitors remained steady.

#### 2a. Total visits to Kew's web site

The outcome of 12.3 million page views was a 39% increase on last year and well ahead of target. The BBC2 series *A Year at Kew* encouraged greater public interest and access by conservationists and scientists is expanding with the continuing development of access to Kew's science and collections databases.

# 2b. Total research publications and compilations (calendar year)

Kew's overall level of publication compares very well with peer organisations and the important consideration for this target is that a steady level of around 350 is maintained.

# 2c. Total species use, species conservation assessments and species conservation plans supported

A substantial increase was generated in 2004/05. The key components of growth were species conservation assessments, boosted by the unprecedented publication of two major conservation checklists and an increase associated with the 30% growth in species banked by the Millennium Seed Bank.

# 2d. Total habitat conservation assessments supported through contributions of information and advice

These assessments are substantial products covering significant areas of plant diversity. The target of eight assessments was met, including one for Imbak in Borneo – the last remaining piece of now rare lowland rainforest outside protected areas in Sabah, home to many species including the orang utan and Borneo elephant.

# 3 Total publications in the highest impact scientific journals (calendar year)

51 such papers were published, a record number, in journals with a citation index factor above 2. Many of these high quality science papers advance fundamental understanding of relationships among plant species. Others have direct bearing on issues of plant conservation and sustainable use.

# 4 Total staff contact days on projects with UK or overseas collaborates that contribute to the conservation and sustainable use of plant diversity through capacity building, joint research, training and advice

Results on this measure also reached a new high. The increase results from a focus on projects with a substantial capacity building element, such as those supported by the Millennium Commission's Enhancement Grant to widen the impact of the Millennium Seed Bank project.

#### 5a. Total Visits to Gardens

The exceptional outcome of 1.587 million was the result of a further improvement in family attendance created by the opening of Climbers and Creepers and a very strong performance in the second half of the year supported by the BBC2 series A Year at Kew.

#### 5b. Friends of Kew

Membership grew in line with target to just over 64,000.

#### **6 Total Revenue Generated**

Strong support from Defra continued for capital funding. The excellent visitor numbers resulted in a £1 million increase in visitor-related income and this, combined with the strong performance on project income means the target has been exceeded by £2.2 million.

#### Foreword to the accounts\_year ended 31 March 2005

#### History of the body and statutory background

The Board of Trustees of the Royal Botanic Gardens, Kew was established under the National Heritage Act 1983 and came into existence on 8 August 1983. From 1 April 1984 responsibility for the Royal Botanic Gardens, Kew was transferred from the Minister of Agriculture, Fisheries and Food (now Secretary of State for Environment, Food and Rural Affairs) to the Board of Trustees. Under the above Act, RBG Kew is a non-departmental public body with exempt charitable status.

#### **Objectives**

Subject to the provisions of the National Heritage Act 1983 the Board's general functions are to:

- carry out investigation and research into the science of plants and related subjects, and disseminate the results of the investigation and research;
- provide advice, instruction and education in relation to those aspects of the science of plants with which the Board is for the time being, in fact concerned;
- provide other services (including quarantine) in relation to plants;
- care for its collections of plants, preserved plant material, other objects relating to plants, books and records;
- keep the collections as national reference collections, ensure that they are available to persons for the purposes of study, and add to and adapt them as scientific needs and the Board's resources allow;
- afford to members of the public opportunities to enter any land occupied or managed by the Board, for the purpose of gaining knowledge and enjoyment from the Board's collections.

#### **Results and appropriations**

The accounts have been prepared in a form directed by the Secretary of State for Environment, Food and Rural Affairs, with the approval of Treasury, under Schedule I Part IV subsection 39(4) of the National Heritage Act 1983 and on the basis of the accounting policies set out in Note 2.

Total incoming resources for the year were £42.2m (2003/04 £39.0m) of which £24.9m (£24.8m) was Grant-in-aid from the Department for Environment, Food and Rural Affairs. Total resources expended were £38.7m (£35.0m) leaving a surplus of £3.5m (£4.0m) prior to expenditure on fixed assets.

Total reserves increased to £96.8m (£88.1m). These include a substantial amount to reflect the value of certain land and buildings to which the Trustees do not have title (see below).

#### Land and buildings

The Board of Trustees do not hold title to the land and buildings used by the Royal Botanic Gardens, Kew, except for the Wellcome Trust Millennium Building and adjacent land. The remaining land and buildings are owned by the Crown. The Board are liable to maintain and replace all the buildings they use.

Information on land and buildings can be seen in Note 12.

#### Other fixed assets

Significant changes in other fixed assets are shown in Notes 12 and 13.

#### Investments

Investments held are in accordance with the Trustees' powers.

#### Research and development

The Royal Botanic Gardens, Kew is concerned with major research programmes in Plant Anatomy, Biochemistry, Cytology, Physiology, Molecular Systematics, Taxonomy and Conservation and many other aspects of plant and fungal diversity studies. It co-operates with universities and botanical institutes throughout the world and publishes the results in the appropriate scientific journals.

#### **Review of Activities**

Kew achieved all of its Key Performance Targets, with some exceptional results in science, conservation and visitor programmes; very good progress has been made over the five years since these targets were introduced.

At Kew Gardens, the novel Climbers and Creepers educational play area opened in June 2004 and quickly became a highly popular family attraction and also provided a new covered facility for school parties. Attendance by children (excluding schools) increased by 53,000 to 167,000. School party numbers also increased and more educational support was provided to teachers. Total visits by children to Kew and Wakehurst have trebled since 2000/01.

At both Kew and Wakehurst Place visitor numbers were above both our expectations and last year's results despite less favourable summer weather. At 1,587,000 the combined total number of visits was the greatest for over fifty years.

Visitor revenue increased at Wakehurst Place with the introduction of the new Visitor Centre. Admission and catering revenue increased significantly at Kew and, overall, revenue from visitors was up by £1 million. Additional land was purchased at Wakehurst contiguous with that already acquired for the Millennium Seed Bank and the main estate (the latter being leased from the National Trust).

The Millennium Seed Bank project continued to gather momentum. Seed collection rates increased 30% and five new Access and Benefit Sharing Agreements were signed – most notably with the Chinese Academy of Science. China's great range of habitats makes this new partnership a breakthrough in the efforts to conserve biodiversity and will contribute significantly to Target 8 of the Global Strategy for Plant Conservation (ex situ conservation).

Kew played a leading role in the development and implementation of the African Plants Initiative (API) working closely with the funders, the Andrew W Mellon Foundation, which is enabling the Aluka initiative, of which the API is part. The Mellon Foundation provided \$1,160,000 of support to Kew during the year and millions more to 25 API partners in Africa and elsewhere. Kew holds about 50,000 African 'type' specimens - more than any other herbarium worldwide and this year we made strong progress – databasing and imaging more than 20,000 specimens and 2,000 illustrations resources fundamental to the identification and understanding of the diversity of African plants. The digital access provided by the Initiative will greatly improve Africa's capacity for plant diversity research, conservation and sustainable use. A further 17,000 digitised items for other projects were integrated into the herbarium catalogue.

Some 385 publications were generated by Kew's staff and honorary fellows and associates. 51 papers, a record number, appeared in 'high impact' journals (those with a citation index factor above two). Many of these papers advance the fundamental understanding of relationships among plant species. Others have direct bearing on issues of conservation and sustainability.

#### **Future developments**

At Wakehurst Place, the refurbished and re-configured Stables Restaurant re-opens in May 2005 with improved capacity. At Kew the construction of a major extension to the Jodrell Laboratory will be completed by the end of March 2006. Consultation has begun prior to seeking planning permission for the much-needed extension to the Herbarium and Library. The programme to enhance digital access will continue to expand.

Kew's most ambitious festival begins at the end of May 2005 and features Dale Chihuly's amazing glass structures, with support from GlaxoSmithKline. Improved public entry facilities will be installed at the Victoria Gate to reduce queues. The new Alpine House will open in the spring of 2006.

#### Foreword to the accounts\_year ended 31 March 2005 continued

#### Foundation and Friends of the Royal Botanic Gardens, Kew

The Foundation and Friends of the Royal Botanic Gardens, Kew is a registered charity (registration no. 803428) which is independently administered. Its purpose is to provide support for Kew by the raising of funds for Kew's activities. It does this by attracting sponsorship for projects and through an active and growing membership, committed volunteers and by enhancing awareness of Kew's work. Membership exceeds 64,000.

RBG Kew did not support the organisation financially in 2004/05.

#### The Kew Environmental Body

The Kew Environmental Body is constituted as a trust. It is enrolled as an environmental body with Entrust (enrolment no. 149098), the regulatory body for the purposes of the Landfill Tax Rebate Scheme, and is administered by the staff of Foundation and Friends of RBG Kew.

#### **RBG Kew Enterprises Limited**

RBG Kew owns 100% of the issued share capital of RBG Kew Enterprises Limited. This company carries out the following activities of RBG Kew: retailing, concerts, licensing, venue hire and commercial publications. Its results have been fully consolidated into the accounts of RBG Kew.

#### **Board of Trustees**

The membership of the Board of Trustees during the year is as follows. One Trustee is appointed by the Queen; the Chairman and other Trustees are appointed by the Secretary of State for Environment, Food and Rural Affairs.

#### Chairman

Lord Selborne KBE, FRS

#### Appointed by Her Majesty The Queen

Richard Lapthorne CBE (appointed 14 May 2004)

#### **Trustees**

Denise Bradley Tanya Burman Andrew Cahn CMG Richard Deverell Professor H Charles J Godfray FRS (appointed 31 October 2004) Dr Sandy Harrison (appointed 31 October 2004) Baroness Hayman David Norman Marion Regan

Sir Richard Sykes FRS

lain Oag (retired 16 November 2004)

Professor Christopher C Payne OBE (retired 16 November 2004)

The Board of Trustees is responsible for agreeing the strategy of the organisation through approval of the Corporate Plan and the budgets. The Director is responsible for developing and implementing the strategy and for the day to day operation of the organisation in conjunction with the Corporate Director, Operations and Finance. The Corporate Plan is updated annually and following approval by the Board is submitted to the Department for Environment, Food and Rural Affairs for approval by the Secretary of State.



Lord Selborne (Chairman



Denise Bradley



Tanva Burman



Andrew Cahn



Charles Godfray

Richard Deverell

#### Trustees details

**Denise Bradley** Director of Cultured Commerce Ltd. Currently working with online art retailer eyestorm. Formerly: AOL Time Warner, Viacom, Disney, Coca-Cola, Nike, Levi Strauss and Federated Department Stores. Educated at Stanford University and Harvard Business School, her interests include travel, gardens, art, music, sports, children's education and indigenous crafts.

**Tanya Burman** Currently a full time mother and a local resident. Formerly: Head of Development and Marketing at the Natural History Museum, Regional Director for the Royal Marsden Hospital Cancer Appeal, Fund Manager for bankers Lombard Odier. MA in Natural Sciences (Cantab), specialised in plant biochemistry.

Andrew Cahn cMG (Chairman of the Audit Committee) Director of Government and Industry Affairs at British Airways. Formerly: an official at the Ministry of Agriculture, Fisheries and Food, the Cabinet Office, the Foreign and Commonwealth Office and Chef de Cabinet at the European Commission.

**Richard Deverell** On the Board of BBC News and responsible for Internet and interactive TV news services. Formerly: BBC Policy and Planning, and management consultancy for the LEK partnership. He read Natural Science at Magdalene College, Cambridge. Interests include natural history, current affairs and triathlons.

Charles Godfray FRS Director of the NERC Centre for Population Biology and Professor of Evolutionary Biology at the Silwood Park Campus of Imperial College London. Fellow of the Royal Society and an honorary fellow of St Peters College, Oxford, the Natural History Museum, and Rothamsted Research.

Sandy Harrison Reader in Geographical Sciences at the University of Bristol. Member of the Terrestrial Observation Panel for Climate of the Global Climate Observing System and Global Terrestrial Observing System, Vice-President of the INQUA Commission on Palaeoclimatology, on the Scientific Steering Committee for the Palaeoclimate Modelling Intercomparison Project, and on the Scientific Steering Committee for the IGBP-GAIM initiative for an Earth System Atlas.

**Baroness Hayman Pc** Chair of Human Tissue Authority and a Privy Counsellor. Formerly: Chairman of Cancer Research UK. Minister of State at the Ministry of Agriculture, Fisheries and Food, also held positions including Parliamentary Under Secretary of State at the Department of Health and the Department of the Environment, Transport and the Regions.

Richard Lapthorne CBE Non-executive Chairman of Cable & Wireless plc and two other companies, non-executive Director of Oasis International, part-time Vice Chairman of JP Morgan Investment Bank. A Trustee of Calibre, a charity providing recorded books, and of Tommy's campaign.

**David Norman** (Chairman of the Finance Committee) Chairman of Norlan Resources Ltd, Senior Executive Search Consultancy and of The Royal Ballet School. Formerly: Chairman and Chief Executive of public plc, private manufacturing and service companies in the UK.

**Marion Regan** Managing Director of Hugh Lowe Farms Ltd – a family farming business, Director of KG Growers, a member of LEAF (Linking Environmental and Farming) and a grower member of the Soil Association. Educated at Oxford and at the University of Maryland in the USA, her interests are environmental issues, travel, riding and plants.

Lord Selborne KBE, FRS (Chairman of the Trustees)
Managing Director of Blackmoor Estate Limited,
Chancellor of Southampton University, Formerly:
President of the Royal Geographical Society, Chair of
the Joint Nature Conservation Committee, Chair of the
Agricultural and Food Research Council and Chair of
the UK Chemicals Stakeholder Forum. A Kew Trustee
from 1993 to 1998, he is a Trustee of the John Innes
Foundation and the Lawes Agricultural Trust.

**Sir Richard Sykes FRS** Rector of Imperial College London, he serves on a number of government and scientific committees. Formerly: Chairman of Glaxo SmithKline plc and President of the British Association for the Advancement of Science. He is also a Fellow of the Academy of Medical Sciences and of Kings College London, and is a Fleming Fellow at Lincoln College, Oxford.













Sandy Harrison

Baroness Hayman

Richard Lapthorne

David Norman

Marion Regan

Sir Richard Sykes

#### Foreword to the accounts\_year ended 31 March 2005 continued

#### Director

The Director of the Royal Botanic Gardens, Kew throughout the year was Professor Sir Peter Crane FRS.

#### Internal audit

The Board has appointed internal auditors who report to the Director as Accounting Officer and an Audit Committee constituted from members of the Board of Trustees. Their purpose is to review RBG Kew's systems of internal control and make recommendations for improvements through detailed reports on areas covered and an annual report summarising their work.

#### **Advisors**

#### **Bankers**

The Co-operative Bank plc 17 High Street Kingston-Upon-Thames Surrey, KT1 1LP

#### Auditor

Comptroller and Auditor General National Audit Office

#### **Solicitors**

DLA 3 Noble Street London, EC2V 7EE

The Treasury Solicitor Queen Anne's Chambers 28 Broadway London, SW1H 9JS

Burges Salmon Narrow Quay House Narrow Quay Bristol, BS1 4AH

Lord Selborne KBE, FRS

Chairman of the Board of Trustees

Jh Selone

24 June 2005

#### **Payment to creditors**

It is RBG Kew's policy to settle all invoices with its creditors within 30 days unless otherwise specified in the contract, and to observe the principles of CBI Code – Prompt Payments. During 2004/05 RBG Kew settled its debts on average in 32 days.

#### Reserves

The Reserves of the organisation are explained in Note 2 of the Accounts. The Board has agreed that the Unrestricted part of the Accumulated Reserves should not fall below a minimum of £2m to give the organisation the flexibility to cope with funding fluctuations. At present this fund stands at £10m in anticipation of a major capital programme.

#### **Disabled persons**

RBG Kew supports the employment of disabled people wherever possible, by recruitment, by retaining all those who become disabled during their employment, and generally through training, career development and promotion.

#### **Employee involvement**

Consultations take place with employees' representatives so that the views of employees may be taken into account in making decisions which are likely to affect their interests.

#### Volunteers and donated services

Over 300 volunteers donate their time and energy in various ways throughout our organisation and are an integral part of the Kew community. The newly established horticultural volunteer programme continues to be a success with 90 volunteers from a diversity of backgrounds helping out on a regular basis.

Five of our youngest volunteers have achieved Awards of Excellence this year through the Millennium Volunteers scheme.

We are fully supporting Year of The Volunteer 2005 and together with BTCV are holding volunteer events at Kew in May to celebrate and promote volunteering in the environment sector.

**Professor Sir Peter Crane FRS** 

Director

24 June 2005

#### Statement of Trustees' and Director's responsibilities

Under Schedule 1 Part IV subsection 39(2) National Heritage Act 1983 the Board of Trustees of the Royal Botanic Gardens, Kew are required to prepare a statement of accounts for each financial year in the form and on the basis determined by the Secretary of State for Environment, Food and Rural Affairs, with the consent of the Treasury. The accounts are prepared on an accruals basis and must show a true and fair view of the Royal Botanic Gardens, Kew's state of affairs at the year end and of its incoming resources, application of resources and cash flows for the financial year.

In preparing the accounts the Trustees are required to:

- observe the Accounts Direction issued by the Secretary of State for Environment, Food and Rural Affairs including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;
- make judgements and estimates on a reasonable basis;
- state whether applicable accounting standards have been followed, and disclose and explain any material departures in the financial statements;
- prepare the financial statements on the going concern basis, unless it is inappropriate to presume that the Royal Botanic Gardens, Kew will continue in operation.

The Accounting Officer for the Department for Environment, Food and Rural Affairs has designated the Director of the Royal Botanic Gardens, Kew as the Accounting Officer for the Royal Botanic Gardens. His relevant responsibilities as Accounting Officer, including his responsibility for the propriety and regularity of the public finances for which he is answerable and for the keeping of proper records, are set out in the Non-Departmental Public Bodies' Accounting Officer Memorandum, issued by the Treasury and published in *Government Accounting*.

#### Statement on internal control

#### 1\_Scope of responsibility

As Accounting Officer, the Director has responsibility for maintaining a sound system of internal control that supports the achievement of RBG Kew's policies, aims and objectives, whilst safeguarding the public funds and assets for which he is personally responsible in accordance with the responsibilities assigned to him in Government Accounting. In addition, he is accountable to the principal Accounting Officer of the Department for Environment, Food and Rural Affairs (Defra) to enable him to discharge his overall responsibility for ensuring that RBG Kew, as a Defra Non-Departmental Public Body, has adequate financial systems and procedures in place.

# 2\_The purpose of the system of internal control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of RBG Kew's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in RBG Kew for the year ended 31 March 2005 and up to the date of the approval of the Annual Report and Accounts, and accords with Treasury guidance.

#### 3\_Capacity to handle risk

Strategic leadership on risk management issues comes from the Audit Committee which is able to draw on the expertise of Trustees with experience of the private sector and other government bodies. During 2003/04 the management of risk within RBG Kew was formalised into a Risk Management Strategy and this was approved by the Audit Committee. The Strategy is available to all staff on the intranet along with a copy of the Risk Register and other guidance on risk. Kew has a Risk Co-ordinator who is responsible for

collating and passing upwards information on current risk activity from Departments and maintaining and disseminating up-to-date risk management guidance for managers and staff.

#### 4 The risk and control framework

RBG Kew embraces the principles and requirements of good corporate governance. In further support of the Risk Management Strategy a concise Risk Policy has been developed setting out the risk appetite of the organisation. This is set out in the Corporate Plan at the start of the Risk Register.

As part of the Heads of Department Corporate Planning workshops held in October, the Risk Register for the organisation, which identifies the main risks attached to each of our Key Measures of Business Outcomes, was reviewed and updated. This Risk Register identifies for each risk the actions needed to address it and the "Risk Owner". To further strengthen the Risk Register the Internal Auditors carried out a full review of it in January 2005 and various recommendations were made. The Risk Register has been further updated and revised based on this and it is included in the Corporate Plan 2005/06 – 2009/10 which has been submitted to Defra.

The Audit Committee met three times during the year and has Risk as a standing item on its Agenda. The Board of Trustees receives Minutes of all Audit Committee meetings and the Chairman of the Audit Committee reports to the Board on any items of concern.

Risk is also a standing item on the monthly Heads of Department meetings when there is the opportunity to discuss any new or emerging risks.

The performance management process ensures that the organisation's goals are reflected by individual staff members' objectives and training plans. Training on risk management is being developed to help ensure it is embedded throughout the organisation.

Regular reviews are made of health and safety and security risks and necessary policies and procedures are implemented.

Risk assessments are carried out on all major projects.

#### 5 Review of effectiveness

As Accounting Officer, the Director has responsibility for reviewing the effectiveness of the system of internal control. His review of the effectiveness of the system of internal control is informed by the work of the internal auditors and the senior managers within RBG Kew who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports.

RBG Kew has an Internal Audit function which operates to the standards defined in the Government Internal Audit Standards. They submit regular reports which include the Head of Internal Audit's independent opinion on the adequacy and effectiveness of RBG Kew's system on internal control together with recommendations for improvement. The Audit Committee reviews all the reports and approves the management responses and

action plans to deal with the issues raised. The internal auditors update the Audit Committee at every meeting on progress on all action plan points not yet completed. During 2004/05 the internal auditors carried out a specific review of RBG Kew's Risk Register and they made several recommendations for improvements which have been incorporated. The Minutes of all Audit Committee meetings are reviewed at the Board Meetings and any issues arising discussed. There have been no significant internal control issues identified during the year.

The Director and the Chairman of the Board of Trustees have been advised on the implications of the result of the Director's review of the effectiveness of the system of internal control by the Board and the Audit Committee. A plan to address weaknesses and ensure continuous improvement of the system is in place.

Lord Selborne KBE, FRS

Chairman of the Board of Trustees

24 June 2005

**Professor Sir Peter Crane FRS** 

Cath Chane

Director

24 June 2005

# Royal Botanic Gardens, Kew\_statement 1

#### Consolidated Statement of Financial Activities for the year ended 31 March 2005

	Notes	Unrestricted	Restricted	Endowment	2004/05 Total	2003/04 Total
		£′000	£'000	£′000	£′000	£'000
Incoming resources						
Grant-in-aid	3	24,899		_	24,899	24,783
Grants, gifts & donations	4	517	5,404	_	5,921	4,443
Investment income	5	644	25	-	669	526
Income from activities in furtherance						
of objectives	6	6,140	_	_	6,140	5,605
Income from trading	7	4,567	_	_	4,567	3,643
Total incoming resources		36,767	5,429	-	42,196	39,000
Resources expended						
Charitable expenditure						
Primary programmes	9	19,046	5,581	_	24,627	21,115
Property costs	9	5,063	_	_	5,063	5,349
Support costs	9	3,381	_	-	3,381	3,562
Management & administration	9	2,001	_	_	2,001	2,097
Costs of generating funds						
Trading	9	3,610	_	_	3,610	2,863
Total resources expended		33,101	5,581	-	38,682	34,986
Notional cost of capital	2	(3,145)	(86)	(5)	(3,236)	(2,961)
Net incoming/(outgoing) resource after notional cost of capital	es	521	(238)	(5)	278	1,053
Reversal of notional cost of capital		3,145	86	5	3,236	2,961
Net incoming/(outgoing) resource	es	3,666	(152)	-	3,514	4,014
Gains on investment assets: Unrealise	ed	_	6	14	20	23
Revaluation of tangible assets		5,138	1	_	5,139	3,049
Net movement in reserves		8,804	(145)	14	8,673	7,086
Reserves at 1 April	17	85,469	2,517	143	88,129	81,043
Reserves at 31 March	17	£94,273	£2,372	£157	£96,802	£88,129

All activities arise from continuing operations.

The Notes on pages 21 to 27 form part of these accounts.

# Royal Botanic Gardens, Kew\_statement 2

#### **Balance Sheet 31 March 2005**

		Royal Botanic Gardens, Kew		Cons	Consolidated	
1	Notes	2005 £′000	2004 £′000	2005 £′000	2004 £'000	
Fixed assets						
Tangible assets	12	86,251	76,914	86,251	76,914	
Investments	13	562	542	237	217	
		86,813	77,456	86,488	77,131	
Current assets						
Stocks of goods for sale		_	_	601	571	
Debtors	15	4,298	2,890	3,940	2,646	
Cash at bank and in hand		11,741	12,785	12,198	13,055	
		16,039	15,675	16,739	16,272	
Creditors: amounts falling due within one year	16	(6,050)	(5,002)	(6,425)	(5,274)	
Net current assets		9,989	10,673	10,314	10,998	
Total assets less current liabilities		£96,802	£88,129	£96,802	£88,129	
Reserves						
Unrestricted	17	94,273	85,469	94,273	85,469	
Restricted	17	2,372	2,517	2,372	2,517	
Endowment	17	157	143	157	143	
		£96,802	£88,129	£96,802	£88,129	

Lord Selborne KBE, FRS

Chairman of the Board of Trustees

24 June 2005

**Professor Sir Peter Crane FRS** 

Director

24 June 2005

# Royal Botanic Gardens, Kew\_statement 3

#### Consolidated Cash Flow Statement for the year ended 31 March 2005

	2004/05 £'000	2003/04 £'000
Net cash inflow from operating activities	4,610	7,141
Returns on investments	669	526
Capital expenditure and financial investment	(6,136)	(5,187)
(Decrease) / increase in cash at bank	£(857)	£2,480

## from operating activities

	2004/05	2003/04
	£′000	£'000
Net incoming resources	3,514	4,014
Depreciation	1,892	1,704
Loss on sale of tangible fixed assets	38	70
Loss of revaluation of fixed assets	8	4
Increase in stock	(30)	(76)
Increase in debtors	(1,294)	(601)
Increase in creditors	1,151	2,552
Less investment income	(669)	(526)
	£4.610	£7.141

#### b\_Analysis of cash flows

Capital expenditure and financial investment					
Payments to acquire tangible fixed assets	(6,155)	(5,229)			
Receipts from sales of tangible fixed assets	19	42			
	£(6,136)	£(5,187)			
Management of liquid resources					
Decrease in short term cash deposits	£-	£-			

#### a\_Reconciliation of net incoming resources to net cash inflow c\_Reconciliation of net cash flow to movement in net funds

	2004/05 £'000	2003/04 £'000
Increase / (decrease) in cash in period	(857)	2,480
Cash inflow from decrease in liquid resource	ces –	_
Movement in net funds in the period	(857)	2,480
Net funds at 1 April	13,055	10,575
Net funds at 31 March	£12,198	£13,055

#### d\_Analysis of net funds

	1 April 2004	Cash Flow	31 March 2005
	£'000	£′000	£'000
Cash at bank and in hand	13,055	(857)	12,198
Liquid resources	_	_	_
Net Funds	£13,055	£(857)	£12,198

#### Notes to the accounts\_year ended 31 March 2005

#### 1 Form of accounts

As stated in the Foreword, these accounts have been prepared in the form directed by the Department for Environment, Food and Rural Affairs. Without limiting the information given, the accounts meet the accounting and disclosure requirements of applicable accounting standards so far as those requirements are appropriate, and comply with the Statement of Recommended Practice, Accounting and Reporting by Charities 2000.

#### 2\_Accounting policies

#### **Accounting Convention**

The accounts are prepared under the modified historical cost convention and fixed assets and investments are shown at their value to the business by reference to current costs.

#### **Basis of Consolidation**

The consolidated financial statements consolidate the financial statements of the Royal Botanic Gardens, Kew and its subsidiary RBG Kew Enterprises Limited for the year ended 31 March 2005.

#### **Expense Allocation**

Indirect costs have been allocated to the headings in the Statement of Financial Activities on the basis of headcount except for computer costs which have been allocated on the basis of computer numbers.

#### **Government Grants**

Grant-in-aid including capital grant is credited to income in the year in which it is received. Grant for the purchase of capital items is transferred to a capital grants reserve from which it is released as the assets are depreciated.

#### **Income from Activities**

Income is accounted for on a receivable basis, net of VAT.

#### **Land and Buildings**

The Board of Trustees does not hold title to the land and buildings used by the Royal Botanic Gardens, Kew except for the Wellcome Trust Millennium Building and the land it is situated on. The remaining land and buildings are owned by the Crown. As required by the

Statement of Recommended Practice,
Accounting and Reporting by Charities (SORP) issued in October 2000, existing buildings and their associated land used for fundraising or administration purposes plus the Wellcome Trust Millennium Building, have been valued and capitalised on the Balance Sheet (see Note 12). Land and buildings are revalued every 5 years by professionally qualified valuers, on the basis of either open market value for existing use or depreciated replacement cost. The first professional revaluation was carried out during 2001/02. In between professional revaluations, values are updated using indices provided by the professional valuers.

The Board of Trustees consider that the cost of obtaining valuations for all the other existing buildings at 31 March 2005, which are all historic and inalienable, would be onerous compared to the benefit to the readers of the Accounts and therefore no value has been placed on these as allowed by the SORP. Expenditure on new buildings over £150,000 is capitalised.

#### Collections

The Board of Trustees consider that the cost of obtaining valuations for all existing collections would be onerous compared to the benefit to the readers of the Accounts and therefore no values have been placed on these as allowed by the SORP. New items to the collections costing more than £2,000 are capitalised, except for additions to the living collections which are written off in the year of acquisition. Collections are unlikely to depreciate and are expected to have a life in excess of 50 years so no depreciation is provided against them. Impairment reviews of these collections will be undertaken.

#### Other Fixed Assets

Other fixed assets are stated at their value to the business by reference to current costs. Historic costs are not disclosed as required by the SORP as, in accordance with Treasury Non-Departmental Public Bodies Guidance, this adds no information of value to the Accounts. Capital items costing less than £2,000 are written off to other direct costs (Note 11) in the year of purchase. All other capital expenditure is capitalised as fixed assets.

#### 2\_Accounting policies continued

#### Depreciation

Depreciation is provided on all fixed assets, except land and collections, at rates calculated to write off the cost or valuation, less estimated residual value, of each asset evenly over its expected useful life, as follows:

**Buildings** between 20 and 80 years **Gardens equipment** between 5 and 20 years

#### Scientific equipment:

Laboratory equipment over 10 years Computer and photographic equipment between 4 and 10 years

Office equipment over 5 years

Motor vehicles over 5 years

Copyrights year of purchase

#### Notional cost of capital

Notional cost of capital is calculated at 3.5% of the average capital employed by RBG Kew in the year.

#### **Pensions**

Pension arrangements are described in Note 21 to the accounts. Pension contributions payable by RBG Kew are expensed as incurred.

#### Investments

Investments are stated at current market value at the balance sheet date. Valuations are kept up-to-date such that when investments are sold there is no gain or loss arising. As a result the Statement of Financial Activities only includes unrealised gains and losses arising from the revaluation of the investment portfolio throughout the year. As explained in the fixed asset accounting policy note, historical cost disclosures have not been provided.

#### Stocks

Stocks are valued at the lower of cost and net realisable value which is considered to be equivalent to their value to the business.

#### **Net Liquid Resources**

Liquid resources comprise short term cash deposits.

#### Reserves

Reserves are analysed under the headings Unrestricted, Restricted and Endowment Funds.

#### **Restricted Funds**

These are funds which have been given to RBG Kew for specific uses.

#### **Endowment Funds**

These are capital funds where Trustees have no power to convert the capital to income. However, the income generated by these funds can be used for the purposes for which the endowment was given.

#### **Accumulated Reserves**

The Board of Trustees, with the approval of the Secretary of State for Environment, Food and Rural Affairs, may undertake certain activities the proceeds from which, together with donations and funds from other sources, including those profits of RBG Kew Enterprises Limited which have been covenanted to RBG Kew, but excluding Grant-in-aid, are taken to the Accumulated Reserves. These funds may be used at the Board's discretion within the terms of section 24 of the National Heritage Act 1983.

#### **Revaluation Reserve**

This represents the cumulative difference between historic and current costs of fixed assets.

#### **Taxation**

The Royal Botanic Gardens, Kew is an exempt charity as a consequence of Schedule 5 subsection 4 of the National Heritage Act 1983. RBG Kew Enterprises Limited covenants most of its profits to the Royal Botanic Gardens, Kew and consequently only a small amount of taxation may be payable, mainly due to timing differences. The Royal Botanic Gardens, Kew and RBG Kew Enterprises Limited are group registered for VAT purposes and are able to recover part of their input VAT.

#### 3\_Grant-in-aid

	2004/05	2003/04
	£′000	£′000
Total Grant-in-aid received		
from Defra during the year	£24,899	£24,783

#### 4\_Grants, gifts and donations

	2004/05	2003/04
	£'000	£'000
Income received from RBG Kew Foundation	1,520	1,308
Millennium Seed Bank project income	2,640	2,450
Other project income	1,635	621
Grant for maintaining Wakehurst Place	101	32
Donations	25	32
	£5,921	£4,443

#### 5\_Investment income

	2004/05	2003/04
	£′000	£'000
Interest receivable	661	518
Charities Official Investment Fund	8	8
	£669	£526

All interest receivable is from cash at bank and short term cash deposits.

# 6\_Income from activities in furtherance of objectives

004/05	2003/04
£'000	£′000
4,259	3,485
634	490
91	99
95	105
19	42
1,042	1,384
£6,140	£5,605
	<b>£'000</b> 4,259 634 91 95 19

(i) Other income from third parties consists of supplies made of goods and services from, amongst other things, consultancies, provision of photographs, reproduction fees and identification services.

#### 7\_Income from trading

	2004/05	2003/04
	£′000	£′000
Retailing	2,881	2,469
Commercial Development (i)	1,686	1,174
	£4,567	£3,643

(i) Commercial Development consists of concerts, licensing, venue hire and commercial publishing.

# 8\_Key performance target – total revenue generated

RBG Kew had a Key Performance Target for Total Revenue Generated in 2004/05 of £36.4m. Actual Revenue Generated, as defined for this target, was £38.7m. The increase is due to the excellent performance on visitor generated income and increased project income.

#### 9\_Resources expended

	Staff Costs £'000	Depreciation	Other Direct Costs £'000	Allocated Costs £'000	2004/05 Total £'000	2003/04 Total £'000
Primary						
programmes	14,696	791	9,140	_	24,627	21,115
Property costs	_	970	4,093	_	5,063	5,349
Support costs	247	88	429	2,617	3,381	3,562
Management 8	k					
administration	3,113	24	1,481	(2,617)	2,001	2,097
Trading	1,171	19	2,420	_	3,610	2,863
	£19,227	£1,892	£17,563	£-	£38,682	£34,986
Note	10	12	11			

#### 10\_Trustees' remuneration and staff costs

#### a\_Trustees' remuneration

Trustees do not receive any remuneration for their services.

Travelling and subsistence expenses of 4 Trustees (2003/04 3) have been charged at cost as part of other direct costs – Note 11.

#### **b\_Director's remuneration**

	2004/05	2003/04
	£'000	£'000
Remuneration of the Director,		
excluding pension contributions	130	125
Pension contributions	18	17

2004/05

The Director is an ordinary member of the Principal Civil Service Pension Scheme and details of this can be seen in Note 21. The amount of his accrued pension at 31 March 2005 is £7,168 per annum (31 March 2004 £5,722) and the transfer value was £111,843 (£86,415). At 31 March 2005 the Director was 50 years of age.

#### c\_Employees with earnings above £50,000

Number of employees at:	2004/05	2003/04
£50,000 – 59,999	10	9
£60,000 – 69,999	2	1
£70,000 – 79,999	2	3
£80,000 – 89,999	1	-
£120,000 – 129,999	1	1

#### d\_Staff salaries and social security, including the Director

<del>-</del>	•	•	
		2004/05	2003/04
		£'000	£'000
Salaries		16,142	14,412
Social security costs		1,208	1,064
		17,350	15,476
Staff pensions – Note 21		1,877	1,696
		£19,227	£17,172

# e\_The average weekly number of employees during the year analysed by function

	2004/05	2003/04
Botanical science	225	199
Horticulture and public education	231	228
Visitor services and marketing	48	48
Information services	66	62
Support services and estates management	60	56
Directorate	7	6
RBG Kew Enterprises Ltd	51	52
	688	651

The comparative 2003/04 figures have been restated to correct a small miscalculation.

#### 11\_Other direct costs

	2004/05 £'000	2003/04 £'000
Cost of sales	1,667	1,389
Materials	3,043	3,352
Direct project costs	1,097	918
Repairs and maintenance	3,181	3,618
Minor new building works	2,304	828
Hire charges	296	254
Rates and utilities	746	621
Trustees' travel and subsistence	2	1
Staff travel and subsistence	409	434
General services	3,574	3,435
Bad debt provisions	1	16
Professional fees – audit	29	26
– other	1,214	1,218
	£17,563	£16,110

Unrecovered VAT for the year of £311,000 has been charged against these accounts (2003/04 £238,000). No other fees were paid to the external auditors.

#### 12\_Tangible assets

	Land	Dwellings	Buildings	Collections		Scientific Equipment	Office Equipment	Motor Vehicles	Grant Aided Total	RBG Kew Enterprises Total	Consolidated Total
	£'000	£'000	£′000	£′000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Valuation											
At 1 April 2004	20,482	12,713	47,782	12	1,992	7,862	143	536	91,522	17	91,539
Additions	250	_	4,319	8	687	624	25	242	6,155	_	6,155
Disposals	_	-	_	-	(137)	(556	5) (18)	(72)	(783)	(17)	(800)
Revaluation	1,114	595	3,963	-	25	(25)	(3)	34	5,703	-	5,703
At 31 March 2005	21,846	13,308	56,064	20	2,567	7,905	147	740	102,597	_	102,597
Depreciation											
At 1 April 2004	_	2,052	6,415	_	889	4,792	95	365	14,608	17	14,625
Charge for the year	-	212	758	_	190	626	12	94	1,892	_	1,892
Disposals	_	_	_	_	(123)	) (532	2) (15)	(56)	(726)	(17)	(743)
Revaluation	_	96	500	-	13	(27	") (3)	(7)	572	-	572
At 31 March 2005	_	2,360	7,673	_	969	4,859	89	396	16,346	_	16,346
Net book value											
At 31 March 2005	£21,846	£10,948	£48,391	£20	£1,598	£3,046	£58	£344	£86,251	£-	£86,251
At 31 March 2004 f	£20,482	£10,661	£41,367	£12	£1,103	£3,070	£48	£171	£76,914	£-	£76,914

<sup>(</sup>a) Fixed assets with a net book value of £57,000 were disposed of during the year for £19,000.

<sup>(</sup>b) As explained in Note 2 existing buildings at 31 March 2001 that were not used for fundraising or administration purposes have not been capitalised. There are over 250 buildings on the Kew site including the magnificent public glasshouses — The Palm House, The Temperate House and the Princess of Wales Conservatory. The age range of the buildings is also extensive, stretching from the 19th Century and throughout the 20th Century.

<sup>(</sup>c) The valuations of the land and buildings were carried out by Powis Hughes & Associates, Chartered Surveyors, and Fanshawe, Chartered Quantity Surveyors. The valuations were made on an existing use basis at 31 March 2002 and were prepared in accordance with the Royal Institution of Chartered Surveyors Appraisal and Valuation Manual. The land was valued at £16,200,000 and the buildings at £40,677,000.

#### 13\_Investments

	Royal Botar	Consc	olidated		
	2005	2005 2004		2005	2004
	£'000	£'000		£'000	£'000
Valuation					
At 1 April	542	519		217	194
Revaluation	20	23		20	23
At 31 March	£562	£542		£237	£217

#### Investments at 31 March are analysed as follows:

Roy	/al Botanio	Gardens, Kew	Conso	lidated
	2005	2004	2005	2004
	£'000	£'000	£'000	£'000
RBG Kew Enterprise	S			
Limited	325	325	-	_
Charities Official				
Investment Fund	237	217	237	217
	£562	£542	£237	£217

#### 14\_Trading subsidiary

The subsidiary undertaking is as follows:

Name\_RBG Kew Enterprises Limited

Registered in\_England & Wales

Activity\_Retailing and commercial development

Proportion of shares held\_Ordinary shares 100%

\_Redeemable shares 100%

A summary of the results of the subsidiary is shown below. All values are at historic costs.

	Note	2004/05 £'000	2003/04 £'000
Turnover		4,496	3,542
Cost of sales		(1,700)	(1,423)
Gross profit		2,796	2,119
Net other expenses	1	(1,867)	(1,394)
Interest receivable		35	21
Net profit		964	746
Gift Aid paid to RBG Kew		(964)	(746)
Profit for year		£–	£-

	2005 £′000	2004 £'000
Balance sheet		
Fixed assets	-	_
Current assets	1,340	961
Current liabilities	(1,015)	(636)
	£325	£325
Share capital and reserves	£325	£325

Note 1\_Other expenses are stated after £150,000 income (2003/04 £150,000) from Orange plc for sponsorship of the Millennium Seed Bank project.

#### 15\_Debtors

Roya	Royal Botanic Gardens, Kew			olidated
	2005	2004	2005	2004
	£'000	£'000	£'000	£′000
Trade debtors	618	208	842	316
Prepayments and accrued income	1,720	1,065	1,750	1,075
Owed by subsidiary	641	365	-	_
Owed by RBG Kew Foundation	510	588	510	588
Owed by Central Government Department	ents 319	114	327	116
Travel advances to sta	ff 37	31	37	31
Staff loans	6	5	6	5
Value added tax	447	514	468	515
Total debtors	£4,298	£2,890	£3,940	£2,646

#### 16\_Creditors: Amounts falling due within one year

	Royal Botan	ic Gardens,	Kew Cons	olidated
	200	5 2004	2005	2004
	£'00	0 £'000	£′000	£'000
Trade creditors	1.	3 58	70	67
Accruals	5,05	3 4,646	5,178	4,759
Provision for cla	nims 39	9 24	. 39	24
Other	94	5 274	1,138	424
Total creditors	£6,050	0 £5,002	£6,425	£5,274

#### Movement on provision for claims

	£'000	
At 1 April 2004	24	
New provisions	15	
Utilised during year	_	
Released during year	_	
At 31 March 2005	£39	

#### 17\_Statement of reserves

	At 1 April	Income	Expenditure	Revaluation	At 31 March
	2004				2005
	£′000	£'000	£′000	£'000	£′000
Unrestricted					
Government Capital Grants	13,594	6,141	(1,022)	-	18,713
Capital Revaluation Reserve	63,167	_	(890)	5,138	67,415
General	8,708	30,626	(31,189)	_	8,145
Total Unrestricted	85,469	36,767	(33,101)	5,138	94,273
Restricted					
Capital Grants	153	14	(44)	-	123
Capital Revaluation Reserve	1	_	(1)	_	_
Donations	419	48	(117)	7	357
Projects	1,944	5,367	(5,419)	_	1,892
Total Restricted	2,517	5,429	(5,581)	7	2,372
Endowment					
Scott-Marshall	141	_	-	14	155
Robin Spare Book Fund	2	_	_	_	2
Total Endowment	143	_	_	14	157
Total Reserves	£88,129	£42,196	f(38,682)	£5,159	£96,802

The Capital Grants fund represents monies given by third parties for specific projects which are used to purchase capital equipment. It is released as the assets are depreciated or are disposed of

Projects are where RBG Kew receives money from third parties to fund various activities such as specific areas of research, developments in the gardens, restoration of buildings etc, much of this money coming via the Foundation. There were over 70 such projects this year.

#### 18\_Analysis of net assets between reserves

_ ,				
	Unrestricted £'000	Restricted £'000	Endowment £'000	Total £'000
Reserves balances at 31 March are represented by:				
Tangible assets	86,128	123	-	86,251
Investments	_	80	157	237
Current assets	13,995	2,744	_	16,739
Creditors	(5,850)	(575	) –	(6,425)
	£94.273	£2.372	£157	£96.802

#### 19\_Analysis of reserves

Un	restricted	Restricted	<b>Endowment</b>	Total
	£′000	£'000	£′000	£'000
Capital Grants				
<ul><li>Government</li></ul>	18,713	_	_	18,713
– Other capital grants	_	123	_	123
Accumulated Reserves	8,145	2,234	110	10,489
Revaluation Reserve	67,415	15	47	67,477
	£94,273	£2,372	£157	£96,802

#### 20\_Capital grants

	Other Grants	Government Grants	Total
	£′000	£′000	£'000
Historic net book value of fixed assets at 1 April 2004	153	13,594	13,747
Acquired during the year with Grant-in-aid	_	6,141	6,141
Acquired during the year with capital grants	14	_	14
	167	19,735	19,902
Less historic depreciation  – Tangible assets	(44)	(979)	(1,023)
Release on assets disposed of during the year	-	(43)	(43)
Historic net book value of fixed assets at 31 March 2005	£123	£18,713	£18,836

The Donations fund represents money given mainly by members of the public for specific purposes ranging from the purchase of books for the Library to money to support different parts of the gardens. There are over 30 different accounts within Donations.

The income from the Scott-Marshall endowment is to be used to provide travel scholarships for horticultural staff at RBG Kew.

The income from the Robin Spare Book Fund is to be used to purchase books for the School of Horticulture library at RBG Kew.

#### 21\_Pension commitment

The staff of the Royal Botanic Gardens, Kew are employed by the Trustees and they are eligible to be members of the Principal Civil Service Pension Scheme, PCSPS. This is an unfunded defined benefits scheme to which the conditions of the Superannuation Acts 1965 and 1972 and subsequent amendments apply. The Director is a member of the Classic Scheme of the PCSPS. In this scheme benefits accrue at the rate of 1/80th of pensionable salary for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. Members pay contributions of 1.5 per cent of pensionable earnings. On death, pensions are payable to the surviving spouse at a rate of half the member's pension.

On death in service, the scheme pays a lump sum benefit of twice pensionable pay and also provides a service enhancement on computing the spouse's pension. The enhancement depends on length of service and cannot exceed 10 years. Medical retirement is possible in the event of serious ill health. In this case, pensions are brought into payment immediately without actuarial reduction and with service enhanced as for widow(er) pensions. RBG Kew's contributions to the PCSPS are affected by a surplus or deficit in the scheme but as it is a multi-employer scheme RBG Kew is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. A full actuarial valuation was carried out in March 2003 and details can be found in the resource accounts of the Cabinet Office: Civil Superannuation (www.civilservicepensions.gov.uk). For 2004/05 contributions of £1,834,000 were paid to the Paymaster General at rates determined from time to time by the Government Actuary and advised by the Treasury. For 2004/05 these rates ranged from 12% to 18.5% depending on salary. RBG Kew Enterprises operates a Group Personal Pension Plan for its employees, which is a defined contribution scheme. It made pension contributions of £43,000 to this scheme during the year. 29 staff were members of the defined contribution scheme at 31 March 2005 and the remaining staff were members of the PCSPS.

#### 22 Commitments

Construction contracts on five capital projects totalling £7.5m were partially complete at 31 March 2005.

There were no other major capital commitments at 31 March 2005.

#### 23\_Related party transactions

RBG Kew has dealings with the Department for Environment, Food and Rural Affairs and its sponsored bodies, and other Government Departments and their sponsored bodies.

As stated in the Foreword to the Accounts the purpose of the Foundation and Friends of the Royal Botanic Gardens, Kew is to provide support for Kew and, as shown in Note 4, £1.5m was received in 2004/05 (2003/04 £1.3m) plus £2.0m for the Millennium Seed Bank project.

Mr Richard Lapthorne was formerly a Director of Orange plc. This company has a contract with RBG Kew Enterprises Ltd to sponsor the Millennium Seed Bank project and this year £150,000 (2003/04 £150,000) was received.

Enquiries about the Trustees' Register of Interests should be sent to the Head of Corporate Services, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB.

#### 24\_Financial instruments

FRS 13 – Derivatives and other Financial Instruments, requires disclosure of the role financial instruments have had during the period in creating and changing the risks an entity faces in undertaking its activities. Because RBG Kew's activities are financed mainly by Government Grants and visitor income, it is not exposed to the degree of financial risk faced by business entities. In addition, RBG Kew has no powers to borrow funds and only a limited number of transactions are in foreign currency. Financial assets and liabilities are generated by day to day operational activities and are not held to change the risks facing RBG Kew in undertaking its activities.

#### Certificate and Report

# The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament

I certify that I have audited the financial statements on pages 18 to 27 under the National Heritage Act 1983. These financial statements have been prepared under the historical cost convention as modified by the revaluation of certain fixed assets and the accounting policies set out on pages 21 to 22.

#### Respective responsibilities of the Board of Trustees, the Director of the Royal Botanic Gardens, Kew and the Auditor

As described on page 15 the Board of Trustees and the Director of the Royal Botanic Gardens, Kew are responsible for the preparation of the financial statements in accordance with the National Heritage Act 1983 and the Department for Environment, Food and Rural Affairs directions made thereunder, and for ensuring the regularity of financial transactions. The Board of Trustees and the Director of the Royal Botanic Gardens, Kew are also responsible for the preparation of the Foreword/other contents of the Annual Report. My responsibilities, as independent auditor, are established by statute and guided by the Auditing Practices Board and the auditing profession's ethical guidance.

I report my opinion as to whether the financial statements give a true and fair view and are properly prepared in accordance with the National Heritage Act 1983 and Department for Environment, Food and Rural Affairs directions made thereunder, and whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. I also report if, in my opinion, the Foreword is not consistent with the financial statements, if the Royal Botanic Gardens, Kew has not kept proper accounting records, or if I have not received all the information and explanations I require for my audit.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. I consider the implications for my certificate if I become aware of any apparent misstatements or material inconsistencies with the financial statements.

I review whether the statement on pages 16 and 17 reflects the Royal Botanic Gardens, Kew's compliance with Treasury's guidance on the Statement on Internal Control. I report if it does not meet the requirements specified by Treasury, or if the statement is misleading or inconsistent with other information I am aware of from my audit of the financial statements. I am not required to consider, nor have I considered, whether the Accounting Officer's Statement on Internal Control covers all risks and controls. I am also not required to form an opinion on the effectiveness on the Royal Botanic Gardens, Kew's corporate governance procedures or its risk and control procedures.

#### Basis of audit opinion

I conducted my audit in accordance with United Kingdom Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements. It also includes an assessment of the significant estimates and judgements made by the Board of Trustees and the Director in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Royal Botanic Gardens, Kew's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by error, or by fraud or other irregularity and that, in all material respects, the expenditure, income and resources have been applied for the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements.

#### Opinion

In my opinion:

- the financial statements give a true and fair view of the state
  of affairs of the Royal Botanic Gardens, Kew at 31 March
  2005 and of its incoming resources, application of resources
  and cash flows in the year then ended and have been
  properly prepared in accordance with the National Heritage
  Act 1983 and the directions made thereunder by the
  Secretary of State for Environment, Food and Rural Affairs;
- in all material respects the expenditure, income and resources have been applied for the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

I have no observations to make on these financial statements.

#### John Bourn

Comptroller and Auditor General National Audit Office, 157–197 Buckingham Palace Road, Victoria, London SW1W 9SP

30 June 2005

# Royal Botanic Gardens, Kew\_Five year financial summary

#### **Summary Statement of Financial Activities**

_	2000/01	2001/02	2002/03	2003/04	2004/05
a	s restated £'000	£′000	£′000	£′000	£′000
Incoming resources					
Grant-in-aid	16,935	19,729	16,629	24,783	24,899
Grants, gifts and donations	4,211	4,309	4,208	4,443	5,921
Income from activities	6,814	8,237	8,202	9,248	10,707
Investment income	678	581	526	526	669
Total incoming resources	28,638	32,856	29,565	39,000	42,196
Resources expended					
Charitable expenditure (i)	24,152	26,958	26,813	32,123	35,072
Cost of generating funds	2,213	2,377	2,570	2,863	3,610
Total resources expended	26,365	29,335	29,383	34,986	38,682
Net incoming resources	2,273	3,521	182	4,014	3,514
Unrealised movements on investments	(31)	(15)	(57)	23	20
Revaluation of tangible assets (i)	3,994	6,193	7,830	3,049	5,139
Net movement in reserves	6,236	9,699	7,955	7,086	8,673
Reserves at 1 April	57,153	63,389	73,088	81,043	88,129
Reserves at 31 March	£63,389	£73,088	£81,043	£88,129	£96,802

#### **Summary Balance Sheet**

	2001	2002	2003	2004	2005
	as restated				
	£′000	£′000	£′000	£′000	£′000
Fixed assets (i)	53,866	60,969	70,650	77,131	86,488
Current assets	12,165	14,613	13,115	16,272	16,739
Creditors	(2,642)	(2,494)	(2,722)	(5,274)	(6,425)
Total assets less current liabilities	£63,389	£73,088	£81,043	£88,129	£96,802
Unrestricted	62,481	71,339	78,277	85,469	94,273
Restricted	732	1,583	2,638	2,517	2,372
Endowment	176	166	128	143	157
Total reserves	£63,389	£73,088	£81,043	£88,129	£96,802

<sup>(</sup>i) Land and Buildings used for administrative and fundraising purposes were valued at 31 March 2002 and included in the 2001/02 accounts. The results for 2000/01 have been restated to reflect this change.

#### Corporate information

#### Health and safety statement

The following statement has been prepared in line with the guidance on Health and Safety in Annual Reports issued by the Health and Safety Commission.

The Royal Botanic Gardens, Kew recognises the importance of managing health and safety risks, and does this by an effective Health and Safety Management System. Its commitment is made known to all new staff upon arrival who receive copies of the General Statement. This and all other Health and Safety policies are available to staff on the Intranet and on paper via line managers. The Statement makes clear the commitment of the Trustees, as the employers, to ensuring a safe workplace for their employees and visitors. The Trustees receive Health and Safety reports at every meeting. They also approve the Corporate Health and Safety Action Plan for the year, which sets the targets for the year. This is published on Kew website. Responsibility for day-to-day activity rests with the Director and senior management team. Health and Safety is a standing item at all Head of Department meetings.

The most significant risks to staff in terms of numbers exposed are manual handling, exposure to chemicals and other substances hazardous to health, minor cuts from instruments such as scalpels and secateurs, and injuries associated with using computers. A few staff are involved in working at height, using horticultural equipment, and collecting expeditions abroad. Risk reduction strategies are in place for all these activities. Past experience is that the most significant risk to members of the public is slipping, tripping or falling.

Staff receive training when appointed, through the Induction Programme, and as their work changes. Refresher training is also provided within Departments as appropriate. Specialist training for First Aiders, Fire Wardens and other key competencies are arranged by the Corporate Health and Safety Co-ordinator. In the spring of 2005, training was given to all existing Risk Assessors and many new Assessors to maintain standards.

The Local Health and Safety Committee meets twice a year, and is the forum where the Safety Representatives of the three recognised Trade Unions and Director can discuss issues or concerns. The Trade Union representatives may see the Director more frequently if they desire. Trade Union Safety Representatives are consulted when Departmental Health and Safety Action Plans are drawn up, and on all new policies and procedures. The Trade Union Safety Representatives receive information about accidents, so they can carry out their own investigations, and about any remedial action planned.

In the reporting year April 2004 to March 2005 nine accidents were reported under RIDDOR. Five involved members of staff, and four involved members of the visiting public. None of the accidents were fatalities. During this period, there were a total

of 1.5 million visitors to Kew and Wakehurst Place, and an average staff number of 728 (permanent and short-term appointments in RBG Kew, RBG Kew Enterprises and Foundation and Friends of RBG Kew). This compares with thirteen accidents reported under RIDDOR last year, when there were 1.4 million visitors. Work is planned on a new HR system which will enable Kew to track employee days lost through physical and mental illness. No enforcement notices were served, nor were there any convictions for health and safety offences.

#### **Citizens Charter statement**

As public servants we have a duty to serve the public well and, as a leading visitor attraction with two important sites, we must also meet the needs of an increasingly competitive and demanding market. Our Customer Charter sets out a comprehensive set of standards that govern the quality of our visitor attractions (at Kew and Wakehurst Place) and the access and information available to visitors. It also covers visitor care and complaints procedures.

At the same time, Kew is possibly the world's leading centre for information on plant diversity and we respond to an astonishingly wide variety of enquiries from a host of different and very diverse users. Accordingly, the Charter defines our role in handling public enquiries.

We use visitor surveys to monitor performance. Free information leaflets, including a map, are given to visitors on entry. These leaflets include a survey form and we analyse the results on an ongoing basis. Our stated and very demanding aim is to achieve 80% of visitors stating that their visit was 'very enjoyable' and 60% rating value for money as 'excellent'. This year we achieved 85% on enjoyment – a 2% increase on last year. Value for money fell to 38% (with 41% rating it as 'good' giving an overall reduction of 1%).

During the year we continued our feedback and training programme to involve front-line staff in setting improved standards for visitor care.

Kew is a member of the Association of Leading Visitor Attractions (ALVA), a body that represents those organisations receiving over a million visits each year. ALVA has developed robust bench-marking surveys to monitor, and thus improve, quality and Kew has played an active role in this process. During the year Kew continued to actively participate in the ALVA 'mystery guest' scheme.

Kew's Customer Charter is available from the Ticket Offices at Kew and Wakehurst Place and on the Internet at www.kew.org/aboutus/charter.pdf

#### **Diversity statement**

The statistical information presented here is largely based on an analysis of 2003/04 data carried out in May 2004. This will be repeated in 2006.

#### **Policy**

Kew is committed to ensuring that those employed within the organisation are assisted in using and developing their skills, potential and sense of self-worth, regardless of their gender, race, colour, national origin, religious beliefs, sexuality, marital status, age or disability. Kew's policy also outlines that no job applicant receives less favourable treatment on the grounds laid out above. Kew actively monitors diversity to help identify opportunities for progress. This includes revising policies and adapting recruitment procedures, as well as increasing staff awareness through publication of educational equality and diversity materials.

#### **Ethnicity**

The percentage of Non-White employees for Kew is currently 7.3% (with a 25% non-response rate) which represents an increase of 0.4% on last years figures. This compares with the overall UK Civil Service figures of 8.1% and the local Richmond-upon-Thames Local Authority district of 9%. Across England the population is 7.9% non-white but in London, the non-white population is approximately 29%. So, Kew staff are only slightly less ethnically diverse than our immediate surrounding community, the civil service as a whole and the UK in general.

When looking at distribution across the different grades at Kew, 88% of non-white employees are currently in Bands A, B or C although only 72% of all employees at Kew are at Band C or below. 100% are Band E or below currently with no representation among Senior Management.

#### Gender

The total number of males and females at Kew are almost equal with slightly more females than males (350 females and 317 males). This is consistent with UK Civil Service figures where 52.4% of employees are female, and with the gender split across England's population where 51% are females. The gender split aged 16-74 currently in employment in England is 46% female and 54% male, although almost the reverse is true at Kew where 53% are female and 47% male.

Looking at gender distribution by band, 80% of all the female employees at Kew are currently in Bands C or lower compared with 64% of male employees. At Band F or Director level, female employees make up only 20% of this grade, or 10 employees. More females than males are employed in the science, commercial and support departments but the reverse is true in the Horticulture and Public Education department.

#### **Working patterns**

Kew recognises that diversity also encompasses different working strategies. 15% of all employees work part time, and are represented at each band level. Part-time working is practised by both genders – 22% by male employees. A variety of flexible working arrangements are in place throughout the organisation.

#### Disability

3.6% (21 staff members) of those that responded to the original 2001 survey and completed the disability section of the questionnaire, defined themselves as disabled under the DDA definition. Of these, 38% were female and all were in Bands E or lower; 24% belonged to science departments, 33% to support and commercial departments and 43% to the Horticulture and Public Education department.

#### **Publications**

We achieved an excellent level of publication in high impact journals during the year.

By convention, publications are always reported for the calendar year and, during 2004, our staff and honorary research colleagues produced or co-authored the 385 publications that are listed on the following pages.

Among these papers, those 52 marked with an asterisk were published in journals with a citation impact factor (CIF) greater than 2. One of these was included in last year's statistics, therefore this year's total in 'high impact journals' has been adjusted to 51.

- Aitkenhead, M.J., **Mustard, M.J.** & McDonald, A.J.S. (2004). Using neural networks to predict spatial structure in ecological systems. *Ecological Modelling* 179(3): 393–403.
- \*Albach, D.C., & **Chase, M.W.** (2004). Incongruence in Veroniceae (Plantaginaceae): evidence from two plastid and a nuclear ribosomal DNA region. *Molecular Phylogenetics* and Evolution 32: 183–197.
- ——, Martinez-Ortega, M.M. & **Chase, M.W.** (2004). *Veronica*: parallel morphological evolution and phylogeography in the Mediterranean. *Plant Systematics and Evolution* 246: 177–194.
- —, Martínez-Ortega, M.M., Fischer, M.A. & **Chase, M.W.** (2004). Evolution of Veroniceae: a phylogenetic perspective. *Annals of the Missouri Botanical Garden* 91: 275–302.
- —, Martínez-Ortega, M.M., Fischer, M.A. & **Chase, M.W.** (2004). A new classification of the tribe Veroniceae problems and a possible solution. *Taxon* 53(2): 429–452.
- Ali, H., **Lysák, M.** & Schubert, I. (2004). Genomic *in situ* hybridization in plants with small genomes is feasible and elucidates the chromosomal parentage in interspecific *Arabidopsis* hybrids. *Genome Biology* 47: 954–960.
- **Alton, S.** (2004). The Millennium Seed Bank Project international programme. *Journal of Botanic Gardens Conservation International* 1(1): 15–16.
- \*Amaral da Silva, E.A., **Toorop, P.E.,** van Aelst, A. & Hilhorst, H.W.M. (2004). Abscisic acid controls embryo growth potential and endosperm cap weakening during coffee (*Coffea arabica* cv. Rubi) seed germination. *Planta* 220(2): 251–261.
- **Andrews, S.** (2004). A taxonomic update on the South African lavender scene. *Lavender Bag* 22: 4–13.
- —— (2004). Recent botanical and dendrological publications. *International Dendrology Society Yearbook* 2003: 153–162.
- —— & **Schrire, B.D.** (2004). Expert speakers recommend *Indigofera* for late summer colour. *Plantsman n.s.* 3(4): 186.
- —— see also under Upson, T.M.
- Arora, D.K., **Bridge, P.D.** & Bhatnagar, D. (eds) (2003). Handbook of fungal biotechnology. New York: Marcel Dekker.
- **Atkins, S.** (2004). Verbenaceae. *In* Kadereit, J.W. (*ed.*) The families and genera of vascular plants. Vol VII. Lamiales. Berlin: Springer. 449–468.
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- —— see also under Harley, R.M., Townsend, R.
- Avery, P.A., Faull, J. & **Simmonds, M.S.J.** (2004). Effect of different photoperiods on the growth, infectivity and colonization of Trinidadian strains of *Paecilomyces fumosoroseus* on the greenhouse whitefly, *Trialeurodes vaporariorum*, using a glass slide bioassay. *Journal of Insect Science* 4(38): 1–10.

- Averyanov, L., **Cribb, P.J.**, Hiep, N.T. & Loc, P.K. (2003). Slipper orchids of Vietnam. Hanoi: Birdlife International. (In Vietnamese)
- Bachman, S., Baker, W.J., Brummitt, N., Dransfield, J. & Moat, J. (2004). Elevational gradients, area and tropical island diversity: an example from the palms of New Guinea. *Ecography* 27(3): 299–310.
- **Baker, W.J.** (2004). Palm research in 2003. *Palms* 48: 148–151.
- —— & **Dransfield, J.** (2004). *Calamus* suaveolens — a new rattan from Sulawesi. *Kew* Bulletin 59(1): 69–71.
- ——, Henderson, S., Birks, J. & Birks, H. (2004). On the Jhomolhari Trail. *Quarterly Bulletin of the Alpine Garden Society* 72: 269–297.
- —— & Loo, A.H.B. (2004). A synopsis of the genus *Hydriastele* (Arecaceae). *Kew Bulletin* 59(1): 61–68.
- —— see also under **Bachman, S.,** Banka, R., **Cheek, M.**, Stauffer, F.W.
- Banka, R. & **Baker, W.** (2004). A monograph of the genus *Rhopaloblaste* (Arecaceae). *Kew Bulletin* 59(1): 47–60.
- **Banks, H.** (2004). Pollen structure in caesalpinioid legumes. PhD Thesis. Oxford: Oxford University. 246 pp.
- Barraclough, T.G. see under Davies, T.J., Pons, J.
- Bateman, R.M. see under Rudall, P.J.
- **Beaman, J.H.** & Anderson, C. (2004). The plants of Mount Kinabalu. 5. Dicotyledon families Magnoliaceae to Winteraceae. Kota Kinabalu: Natural History Publications. 609 pp.
- **Beentje, H.J.** & Mesfin Tadesse (2004). A new species of *Emilia. Kew Bulletin* 59(2): 325–326.
- see also under **Harvey, Y.,** Küper, W., Mesfin Tadesse
- \*Beier, B.-A., Nylander, J.A.A., **Chase, M.W.** & Thulin, M. (2004). Phylogenetic relationships and biogeography of the desert plant genus *Fagonia* (Zygophyllaceae), inferred by parsimony and Bayesian model averaging. *Molecular Phylogenetics and Evolution* 33: 91–108.
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- —— (2004). Perspectives on polyploidy in plants — ancient and neo. *Biological Journal of the Linnean Society* 82: 411–423.
- —— see also under Leitch, I.J., Pires, J.C.
- Bhandol, P. see under Cheek, M., Harvey, Y.
- \*Bickford, S.A., Laffan, S.W., **de Kok, R.P.J.** & Orthia, L.A. (2004). Spatial analysis of taxonomic and genetic patterns and their potential for understanding evolutionary histories. *Journal of Biogeography* 31(11): 1715–1733.

- \*Bidartondo, M.I., Burghardt, B., Gebauer, G., Bruns, T.D. & Read, D.J. (2004). Changing partners in the dark: isotopic and molecular evidence of ectomycorrhizal liaisons between forest orchids and trees. *Proceedings of the Royal Society of London Series B Biological Sciences* 271(1550): 1799–1806.
- ----- see also under Leake, J.R.
- Bidgood, S. see under Cheek, M.
- **Biggs, N.** (2004). Plant portraits: 502. *Sinningia pusilla* Gesneriaceae. *Curtis's Botanical Magazine* 21(3): 193–196.
- Bornman, C.H., **Grace, O.M.** & Van Staden, J. (2004). Sustainable biotechnology for sub-Saharan Africa: can it be implemented and maintained? *South African Journal of Botany* 70: 1–11.
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- Boyd, A. see under Pires, J.C.
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