

# ANNUAL REPORT 1991/92



australian  
**museum**



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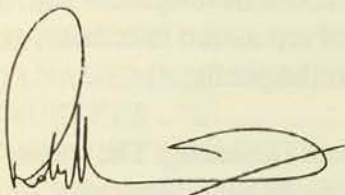
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*To the Hon. Peter Collins QC, MP  
Minister for the Arts in NSW*

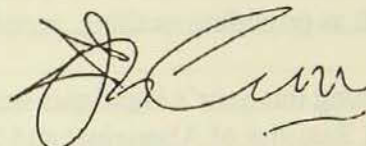
*Sir*

*In accordance with the provisions of the Annual Reports (Statutory Bodies) Act 1984, and the Public Finance and Audit Act 1983, we have pleasure in submitting this report on the activities of the Australian Museum Trust for the financial year ended June 30, 1992, for presentation to Parliament.*

*On behalf of the Australian Museum Trust,*



*Dr Robyn Williams AM*



*Dr Des Griffin AM*

# **ANNUAL REPORT 1991/92**

## **australian museum**

**6 College Street, Sydney NSW 2000**

**Telephone: (02) 339 8111**

**Open 7 Days, 10am - 5pm**

**General admission: \$8 families; \$4 adults; \$1.50 concessions**

**Free after 4pm daily; Half price every Saturday**

**Trust President Robyn Williams AM, (Hon) DSc**

**Director Des Griffin AM, MSc, PhD**

**Deputy Director Hal Cogger MSc, PhD**



## MINISTER'S MESSAGE



As ever, the Australian Museum has played an integral role in our State's social development and education, not to mention entertainment. It has maintained its international reputation in science, as well as providing exciting, accessible and culturally enriching programs to the public.

Among this year's highlights were the conference 'The Future of Australia's Dreaming: The Rights and Realities of Aboriginal and Torres Strait Islander People' and the hugely popular 'Sydney's Kids' holiday program, which involved more than 20 community groups. With programs such as these the Museum affirms its commitment to Australia's culturally diverse population.

The Museum's involvement in environmental issues continued with its provision of computer databases, news film and radio links to the 'Earth Summit' in Rio de Janeiro in June.

'Street Science', a travelling exhibition, proved to be a novel and popular way to make the important scientific work of the Museum more accessible.

The introduction of admission charges as a necessary financial measure in economically stringent times was well managed, and the Museum stressed its commitment to minimising the impact of these charges. The income generated will help the Museum to continue to provide the high standard of programs and services to which we have become accustomed.

A handwritten signature in dark ink, appearing to read 'Peter Collins'.

Peter Collins QC, MP  
Minister for the Arts



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*Cover: A carnival of cultures, a festival of fun!*

*"Sydney's Kids", January 1992.*

*Photo: C. Bento, Australian Museum*



# STATEMENT OF PHILOSOPHY

We intend to grow and develop in Sydney as one of the world's leading museums specialising in natural history and human studies. We want visitors and the wider community to have easy access to our accumulated knowledge and opportunities for enjoyable learning experiences.

We will use exhibitions, education programs, publications and other effective media to communicate with people throughout New South Wales, other parts of Australia and tourists. We want the Museum's public environment to be pleasant in all ways, our staff to be friendly and reliable and to show respect for the interests and needs of those who visit, those with whom we do business and our wider audience.

We want the information we gather and communicate to be accurate and our activities and services to be, and be seen to be, of high quality, supportive of our mission and relevant to the community.

Our research activities will concentrate on Australia and nearby regions. Collections and associated information will be managed for the purposes of research and communication to the public and will be preserved for the benefit of future generations.

The future of our natural environment and cultural heritage is of central concern: we intend to join in public debate and give advice to government, the community and business where we have special knowledge. We will respect the rights and wishes of the peoples whose knowledge and material culture form the basis of our human studies programs. We will consciously abide by legislation and conventions protecting the natural environment, wildlife and cultural heritage.

We believe support for the Museum to be the responsibility of the community, the private sector and government: the Trust and Staff will be active in gaining that support. We will seek increased financial support from the community, especially from those visiting the Museum, mainly by effective merchandising and donations.

We will provide opportunities for staff to contribute to the development of the Museum, realise their own potential and co-operate with others to achieve those ends. It is intended that staff contribute to a range of Museum programs beyond the discipline in which they work. We will seek new ways to advance the Museum's goals, rather than emphasise traditional roles and procedures. Equality of opportunity in employment, health and safety and staff development will be emphasised.

Resources are focused on specific programs and projects, especially those which we are in a unique position to undertake and in which we can achieve results of superior quality. Authority to manage resources is delegated to those in charge of programs. Evaluation of the success of programs, and of staff conducting them, will be a central feature of management.

We will account for the way in which we use the support gained from the community to achieve our objectives. We will be effective financial managers. We will introduce new technology where there is good evidence that it will help to achieve the Museum's goals.

We want the Museum to be an exciting and rewarding place to visit and work in.



# MISSION

Our mission is to  
increase understanding of our  
natural environment  
and cultural heritage  
and to be a catalyst in  
changing public  
attitudes and actions.

Research and the  
maintenance and improvement of  
collections  
are central to the  
achievement of  
the mission.

# PRESIDENT'S REPORT

A great museum is a centre of scholarship, of public interest, of debate about major issues, of display and of education. It is also a place of entertainment. The pressures of our age are pushing us relentlessly towards the latter, but the Australian Museum has spent the year ensuring that we balance all six. This has not been easy.

When we were forced to impose admission charges the Trust expressed both its reluctance to do so and its willingness to remove them once funds allow. The point is to maintain the Museum as a centre for all Australians and visitors from abroad, not only those who can afford it. I was impressed by advice from museums overseas that the imposition of charges causes the whole tone of the institution to perk up, to improve. When I asked for examples of customer service, public visibility, professionalism and flair that might result I was given lists of activities the Australian Museum has actually had underway for many years. When we began to charge on February 1st, 1992, we did not therefore witness a commercial-led transformation. We did, however see a diminution of the presence of families. I very much hope that the stimulus of 'Gargantuans', of cut rates for families and the access afforded by membership of the Museum Society will put this right. One gets the best from a museum such as ours not by annual visits, but by regular, frequent visits. This is our goal.

The Australian Museum is growing as a national, and indeed, international focus. Dr Griffin is rightly proud of our hosting the 'Future of Australia's Dreaming' conference and having Aboriginal people join others to discuss their views of where their communities are headed. Museums in Europe and North America have also recognised our leadership in the return (and care) of cultural property.

Our science prizes, The Eureka Prizes, have grown to include five categories and have been acknowledged by a number of institutions as among the premier such prizes in Australia. The Eureka Science Book Prize was awarded for the first time last year (to Penny Van Oosterzee from Alice Springs) and we now have an environmental journalism prize named after Dr Peter Hunt who died so tragically in March 1992. The Eureka's were reported widely and this year will be televised live by Quantum.

The Science Super Series continues to flourish with visiting speakers of the highest order. Sir David Attenborough came to us no less than three times last year. We have also had talks from Sir Phillip Tobias (South Africa), Dr Susan George (Paris) and Dr Jared Diamond (USA). Dr Diamond was the second COPUS (Royal Society of London) Science book prize winner in a row that we have had lecturing at the Museum. Both he and Stephen Jay Gould were awarded the prize after receiving our invitation!

Lecturers who are considering our invitations for next year include Dr Jane Goodall, Dr James Watson and Sir Crispin Cervantes Tickell. These speakers, who address scientific issues of world significance, receive considerable media coverage when in Australia and maintain our attention on major themes. We are also pleased to serve as a focus for other museums and universities which choose to take advantage of our bringing such people to Australia.

This is but one major activity of a Museum Society (TAMS) which must be among the best of its kind in the world. Susan Bridie, the executive officer, and the TAMS Council deserve our highest praise, not least for their financial support for many of the Museum's activities.

ANH (Australian Natural History magazine) has had an editorial lift and shine and is better than ever. Our efforts are now focused on increasing its profile. Museum scientists continue to increase their contribution to the magazine and I am delighted they are doing so.

In fact, our scientists are refreshingly willing to be seen and heard in public. This is a significant contrast to many overseas, who often prefer to be left alone with their slugs and spiders. Both as a source of straightforward



information ('what on earth is this crawling beast?') and of interpretation ('should we protect mangroves?') museum staff must make a contribution. I'm delighted to record that they are often at the centre of major debates. Tim Flannery, Alan Jones and Alex Ritchie know just what I mean.

They have also made significant strides in the scholarship we hold so dear. Dr Lin Sutherland revealed theories of volcanic activity in Australia (and was elected President of both the Royal Society and the Mineralogical Society of NSW). Winston Ponder was awarded a DSc. Congratulations to them and to those scientists in every department who have maintained the Museum's flow of original research.

The Trust itself is more active than ever - in the best sense. We are exploring ways to develop our eastern site to provide much needed lab space and an auditorium. We are set on improving our sponsorship and venue possibilities and welcome both Leah Falkingham and Warwick Matthews on staff to help in this regard.

My thanks for a splendidly professional performance throughout go to Geoff McKenzie, Hal Cogger and, of course, to that remarkable museum director, Dr Des Griffin.

Robyn Williams AM



## DIRECTOR'S MESSAGE

This year and next could be called the Years of the Gargantuans. The exhibition 'Gargantuans from the Garden' will be at the Museum from September 1992 to February 1993 and then tour at least five other major centres in Australia. With development costs of over \$1.5 million, this exhibition will be something never before seen in Australia: seven giant moving creatures including a praying mantis, a scorpion and a spider will engage and surprise the visitor. They will be accompanied by actual specimens, large models, stereoscopic scanning electron microscope (SEM) images, interactives, audio visuals, models, dioramas, theatrical sets, photo murals, photographs, artefacts, live displays, graphics and text. There will also be a range of entertainment and other activities including trapeze artists, storytelling, demonstaragerations, lectures, informal talks, dance performances, music workshops, special merchandise and subsidiary exhibits. And it will be lots of fun. The organisation of the exhibition development and of the tour to other venues has been carried forward, as always, by dedicated staff.

We affirmed our commitment to Aboriginal people and the culturally diverse Australian population through increases in staff and by provision of funds both directly from our resources and from granting agencies. A policies and procedures manual was completed by the Division of Anthropology for the Aboriginal collections which sets out the manner in which Australia's indigenous people will be encouraged to have access to collections and meaningful involvement in the Museum's entire range of programs.

Large numbers of human remains were returned to Aboriginal communities in New South Wales and Queensland. A position of Aboriginal Education Officer was created and filled.

The Museum's four day conference 'The Future of Australia's Dreaming: The Rights and Reality of Aboriginal and Torres Strait Island People' was held in March 1992. Over 500 people attended, the vast majority from Aboriginal communities, and became involved in the variety of presentations, discussion panels, workshops, tours and activities. The relevance of this conference to the Museum is to be found in our mission: "to increase understanding of our ... cultural heritage" and in the philosophy: "we intend to engage in public debate and give advice to governments... where we have special expertise..."

We created and filled a position of Cultural Diversity Liaison Officer to develop appropriate relationships with the increasingly diverse community, especially those of non-English speaking backgrounds. One of the features of the year was a month long program in January, 'Sydney's Kids', involving over 20 cultural community groups in Sydney. Graffiti artists and papyrus makers shared the Museum with Indonesian puppeteers, Latvian weavers, Latin American dancers and more. Demonstrations of traditional and contemporary arts and crafts, dances, music performances, storytelling, interactive computer language games and the ever popular face painting brought almost 70,000 people to the Museum in January, and built strong links with a large number of community groups. The coming year will see detailed planning for a new public program on 'Contemporary Australia': the development will involve people from the local communities together with Museum staff.

Our concern for the environment led us to decide to add another ecologist to the staff of the Division of Earth and Environmental Sciences. An electronic billboard was placed on the College Street facade displaying to visitors and passers-by the rapidly increasing size of the human population and the decreasing size of the world's rainforests.

During the week of the United Nations Conference on Environment and Development (the 'Earth Summit') in Rio de Janiero in June, the Museum provided direct computer data bases, news film and radio links updated daily from Rio for visitors.

The first year of the Museum's 'Person-In-Residence' program saw visual artist Lisa Anderson investigating the way in which memory is recorded within the Museum, through installations and performances such as 'Memories on a Grand Scale' - a major image and sound projection on to the night-time facade of the Museum.



We increased staff development programs to focus on new skills we need to have in place in five years' time. The desired position of the Museum, the strategies for achieving the relevant objectives and the enhanced and new skills necessary were identified by a seminar of all middle management people and a document was drawn up setting out appropriate staff development strategies. These will involve both 'in-house' trainers where we have the skills, in some areas of computer literacy, for example, and also outside courses.

A new industrial agreement covering all Exhibitions Division staff was drawn up emphasising a link between multi-skilling and opportunities for career advancement. Within the framework of this strong commitment to implementation of the structural efficiency principle, new arrangements covering 'front-of-house' staff (security officers, information officers, shop staff and interpretive staff) were explored, and consideration of new arrangements covering education and scientific staff has commenced.

Following the completion of a feasibility study of opportunities for commercialisation of the Museum's skills and services, the decision was made to appoint a business manager in 1991. The results of that have been very worthwhile, with an income of over \$245,000 being achieved this year, the bulk of it from scientific consulting in the environmental management field. Very few natural history museums have taken this kind of opportunity to involve themselves in participating in determining the future of the natural environmental.

'Open Day', a day when the entire Museum is thrown open to the public, has now become a feature of the celebration of International Museums Day 18 May. On the first Sunday after 18 May each year thousands of people pour into every gallery, laboratory, workshop and office, listen to talks and see demonstrations. This year was no different, with over 6,000 people visiting.

The first International Symposium on the Preservation and Conservation of Natural History Collections was held in Madrid in May. David Horton-James (Head of the Museum's Materials Conservation Division), Mark McGrouther (Collection Manager, Vertebrate Zoology) and I attended. The Symposium was attended by people from museums all over the world with responsibility for collection management and conservation. The importance of the issues of the conservation of natural history collections was addressed - large numbers of specimens of biological material in the world's museums are under considerable threat from inappropriate collection storage or attack by other creatures such as insects.

Many of the papers at the Symposium focused on the importance of using collections to increase public understanding of the natural environment and the importance of conserving biodiversity. Museums are not just storehouses of objects: they contain a wealth of information about the localities and habitats from which the collections of animals and plants originated. From such information a thorough understanding of the distribution of the world's animals and plants can be obtained.

This year was one of the most financially difficult in the last 20 years. In addition to reductions in Government funding under the 'productivity bonus' regime, a further amount of \$400,000 was deleted in the expectation that the Museum would reduce programs or introduce entry charges. In the area of discretionary maintenance funding - travel, stores, printing and the like - the reduction over the previous year's allocation from the Government was 40%. With the economic problems facing Australia, gaining support from the corporate business sector also proved even more difficult than in previous years. Over the last three years staffing levels have declined, fixed costs have increased and there has been considerable growth in earned and donated income (see 'commercialisation' and fundraising' in index).

After very substantial discussion and consideration of all options, the decision was made to introduce general admission charges from 1 February 1992. It was intended that charges would be framed in such a way as to have minimum impact on those least able to pay, especially families. Notwithstanding the relatively low charges, visitor numbers declined initially by almost 50% from the average attendance for the last four years. By the end of June, it seemed that this decline was reversing.



The introduction of charges had the inevitable effect of placing greater strain on our public programs, especially on advertising and promotion. The earnings through the Museum's shops declined substantially to some \$200,000 less than the budget forecast drawn up at the beginning of the year. The decline occurred mainly in the last five months of the year.

Part of the plans for the year included further quantitative and qualitative market research. This research was near completion by the end of the year. It shows substantial improvements in several perceptions of the Museum by visitors, particularly in the areas of educational value and friendliness.

Notwithstanding reduced funding, the year started with a new mood of confidence at the Museum. It is one characterised by a belief that we will continue to face the challenges posed by our mission. This confidence derives mainly from positive past experiences and expected successes we have had in raising funding beyond that provided by the State Government and by feelings that we can find new ways to survive, despite the difficulties.

In this positive atmosphere, several 'Research and Development Teams' were set up in early 1992 to address issues for the Museum's public programs. The Teams provide public program planners with relevant and up-to-date background information and appreciation of issues and process in a number of content areas. A staff initiated group, 'Square Pegs', was also set up to receive innovative ideas and creative solutions from Museum staff and recommend the best ones for adoption.

A fund to encourage collaborative and innovative research was introduced and funding schemes to assist general programs were reduced. The first grant was for 'Computer Imaging and Rendering of Internal Morphology' (Dr George Wilson and Mr Geoff Avern), a project regarded as having outstanding scientific merit, which seeks to develop a methodology for the three-dimensional reconstruction of internal structures in a wide variety of organisms.

As the year ended, senior management of the Museum commenced preparation of a new Corporate Strategic Plan for 1993-95. Through this plan we will take on new issues such as advances in technology, exploring links with other institutions, explorations of new audiences and new business, to name a few.

As always, I take this opportunity to thank the President of the Trust, Dr Robyn Williams AM and other Trustees and my colleagues in the Museum. The Australian Museum is fortunate in having intelligent and dedicated people throughout. It is they who make the Australian Museum unique.

Des Griffin AM



# REVIEW OF CORPORATE STRATEGIC PLAN

The Museum's Corporate Strategic Plan 1990/1992 encompasses four key result areas: Effective and Efficient Management; Public Programs; Research and Collections; Financial Viability. The following highlights some of the major achievements in these areas. In addition, each Division within the Museum has its own Corporate Plan linking with the Museum's strategic direction.

## **Effective and Efficient Management**

- \* Completion of Enterprise Agreement for Exhibition Project Officers, and review process underway for Front-of-House, Corporate Services and Education Divisions.
- \* 2 day training program for managers on marketing processes and opportunities.
- \* Restructuring of ANH magazine to achieve a broader position in the market, a larger potential audience and increased advertising revenue.
- \* Staff morale surveys completed; staff reward system in operation.
- \* Creation of a Cultural Diversity Officer position within existing resources.
- \* Appointment of Lisa Anderson, visual artist, as the inaugural Museum Person-In-Residence. The selection of the 1992 Person-In-Residence is underway.
- \* Special allocation of funds provided for innovative science projects.
- \* Emphasis on multicultural awareness in Front-of-House training.
- \* The 1992 intake of Education volunteers has focused on attracting people with community languages; a new volunteer training program commenced in early 1992.
- \* The 1993/1995 Corporate Strategic Plan is being developed.

## **Public Programs**

- \* The Museum has produced a series of challenging and exciting temporary public programs during the last year:
  - \* Sydney's Kids (over 50,000 visitors were involved in this Festival event focusing on the cultural diversity of Sydney's young people)
  - \* Luk Luk Gen (Look Again - PNG contemporary art)
  - \* Now You See Them (Australia's endangered and extinct species)
  - \* Boomali Artists (Contemporary Aboriginal artists)
  - \* Greek Australians in Their Own Image ( a photographic and historical exhibition)
  - \* Pol Art (artworks from the Polish community)

- \* Greek Australians in Their Own Image ( a photographic and historical exhibition)
- \* Pol Art (artworks from the Polish community)
- \* Face to Face (cultural diversity of Sydney's teenagers)
- \* Earth Summit Info (daily updates via computer from the Earth Summit)
- \* Open Day (during National Museums Week - over 5,000 visitors enjoyed behind-the-scenes tours of labs, talks, demonstrations and activities)
- \* 'Future of Australia's Dreaming' conference - over 500 participants, with guest speakers Chief Ted Moses (Quebec), Tamata Ravo (Vanuatu), Dalee Sambo (Inuit), Buddy Mikaere (New Zealand) and distinguished members of the Aboriginal community
- \* Development of a managing role with new international travelling exhibition opportunities
- \* 'Gargantuans From the Garden' - giant animatronic insects - an initiative by the Australian Museum under development for exhibition at the Australian Museum from September 1992 to January 1993 and to subsequently tour throughout Australia and New Zealand and possible longer term South East Asia tour
- \* Running, in conjunction with other organisations, a fully sponsored programs of awards that highlight community achievement in science - such as the Eureka Awards for achievement in the conduct of environmental research and the Earthworm Awards encouraging young people's involvement in environmental issues at a practical level
- \* Increase in the use of 'Museum in a Box' loans to country schools by 175% (from 336 to 923) and an increase of approximately 400% of people viewing the 'Museum on the Road' travelling exhibitions (100,000 to 500,000)
- \* Increase of 19% in Museum visitors involved in Visitor Services programs, events and activities (from 160,000 to 190,000)
- \* Museum Society's Super Science Series continued with speakers such as David Attenborough, David Suzuki, Stephen Jay Gould and Jarred Diamond
- \* Restructuring of the Museum as a Venue program and appointment of a Venue Manager to manage this self funding, income generating program
- \* Museum Society sponsorship of \$300,000 over 3 years to develop and establish the Investigation Centre
- \* Setting up Research and Development teams which give background information on issues and processes in major public program areas

#### **Research and Collections**

- \* Review and development of a long term plan for the Museum's scientific collections and future directions for Museum science
- \* Major research studies have addressed key issues such as endangered species, habitat degradation and urban ecology

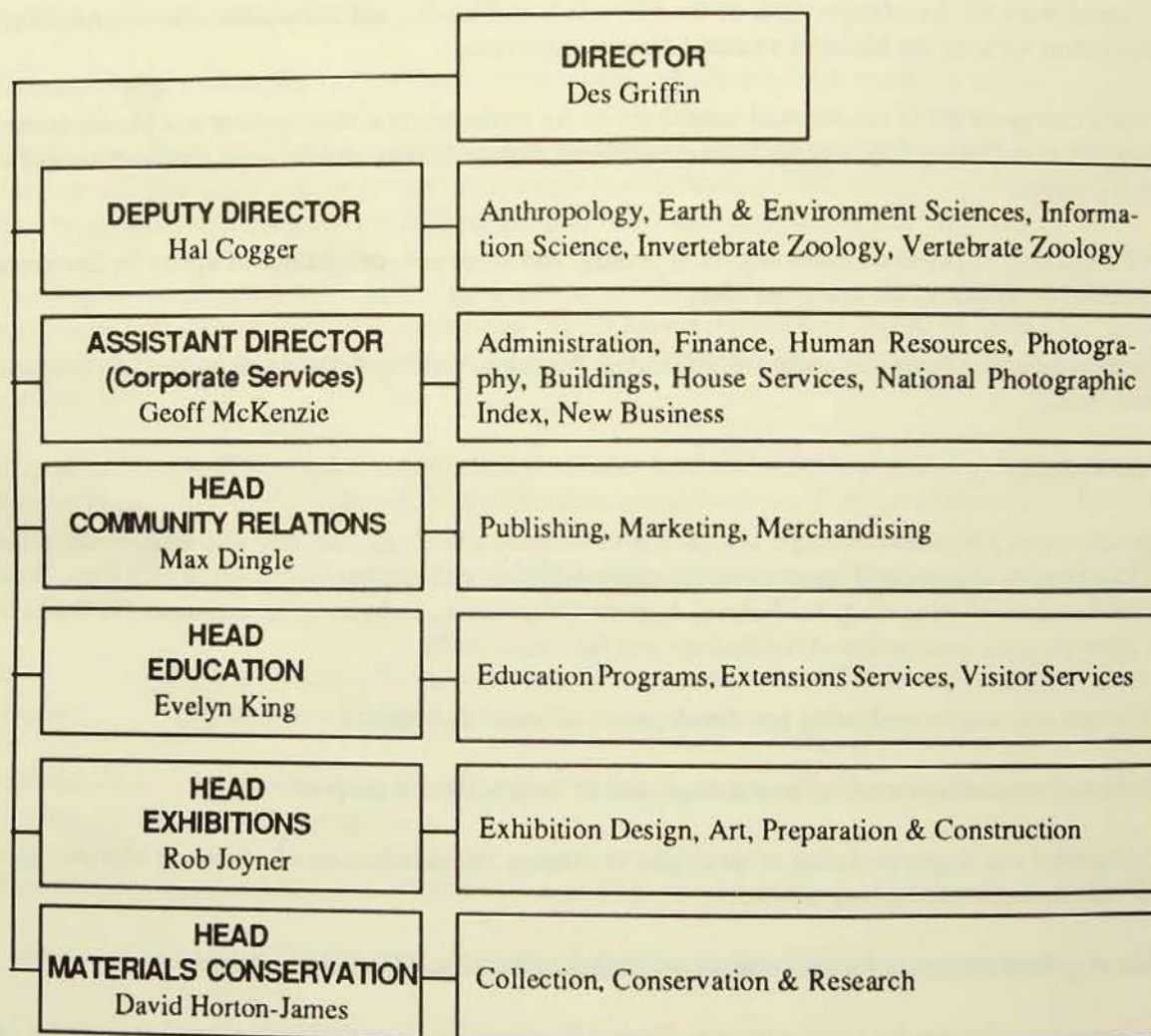


- \* Development of MIS (Management Information System) and Internet access for the Museum's computer network
- \* Increase of over 8% in research grants from \$827,000 to over \$900,000 received this financial year (including \$450,000 of Federally funded programs)
- \* Publication of over 100 scientific articles and monographs
- \* Return of over 50 sets of human remains to Aboriginal communities in NSW, QLD and NT in accordance with the Museum's Aboriginal Skeletal Remains Policy
- \* Completion of the third stage of the UNESCO training and technical assistance program in Vanuatu
- \* Continued work on the conservation of the Museum's anthropological collections, and commencement of conservation work on the Museum's natural history collections
- \* Increased involvement in commercial consultancies for environmental management and impact assessment, with projects in Botany Bay and the Parramatta River, and freshwater and fisheries management and stream faunal studies
- \* The Eureka science prizes continue to grow in prestige and scope with the addition of a prize for Environmental Journalism in honour of the late Peter Hunt
- \* Five International researchers awarded Australian Museum Visiting Fellowships to conduct projects with Museum staff

#### **Financial Viability**

- \* Appointment of a Business Manager and growth in Museum consultancy activity with an increased income of \$245,000 within 10 months. Projects with scientific staff have included benthic surveys for the Dept. Transport, marine fauna monitoring study for Federal Airports Corporation, archaeological assessment of Roma Gorge; and other projects have involved Exhibitions and Education staff.
- \* Consultant assisting in evaluating site development potential and options
- \* Review and rationalisation of off-site storage, and of vehicle fleet in progress
- \* Development and implementation of strategies to manage the introduction of admission charges, involving minimum disruption to visiting public
- \* Museum gained control of funding and programming of Building Maintenance works
- \* Treasury approval gained to borrow funds to finance 'Gargantuans From the Garden' pending receipt of income from the exhibition

# MANAGEMENT STRUCTURE





# TRUSTEES

Trustees are appointed under the Australian Museum Trust Act: No 95, 1975, as amended, which also sets out procedures for meetings of the Trust, quorum of Trustees etc. Appointments are for a term of three years and the Director of the Australian Museum is Secretary to the Trust. The Museum Trust is not aware of changes in Acts or legislation having taken place during the year effecting The Australian Museum Trust Act.

**Dr Robyn Williams AM** has been producer/presenter of the ABC Science Show since 1975. His television experience includes 'The Uncertainty Principle' and 'The Nature of Australia'. He has had several books published including 'Here Come the Philistines' and 'The Best of the Science Show' and is a regular contributor to Australian Natural History magazine. He is currently Chairman of the Commission for the Future and has been awarded honorary doctorates from the University of Sydney, Macquarie University and Deakin University. He joined the Museum Trust in 1984 and was elected President in 1986.

**Dr Telford Conlon** holds degrees in Chemistry from Sydney University and University College, London and a PhD in Biophysics from the University of NSW. A former lecturer at the NSW Institute of Technology, he was on the staff of the Minister for Science in 1973 and was a consultant on science policy to the Royal Commission on Australian Government Administration and the Department of Foreign Affairs. He was a director of the Australian Institute of Political Science for fifteen years and was Chairman in 1979-80. Until recently he was a Research Associate of the Neurobiology Unit at the NSW Institute of Technology and is now a company director. Dr Conlon joined the Museum Trust in 1988.

**Dr Malvin L Eutick** is Chairman of the Australian biotechnology company Bioquest Ltd and Marketing Director of the environmental services group G.M. Laboratories. Prior experience has included Senior Executive and Board positions in the biomedical field with the venture capital manager, Technology Investment Management and General Manager of the pharmaceutical company, Pharmacia-LKB. He holds degrees in biochemistry and museum studies. His interest in museums and their administration has resulted in his publishing several books including the 'NSW Museum Yellow Pages' and a guide to the legal problems surrounding the acquisition of museum objects. Dr Eutick joined the Museum Trust in 1986.

**Mr Trevor Kennedy AM** was Managing Director of Tourang Limited until his resignation in October 1991. He was previously Managing Director of Consolidated Press Holdings Limited, one of Australia's largest conglomerates, wholly owned by Mr Kerry Packer. Mr Kennedy has publishing experience across both of Australia's major publishing houses. In 1979 he was nominated Media Executive of the Year. In 1986 he was appointed the first Chief Executive of Consolidated Press Holdings. In the next five years the company experienced a period of dynamic and successful growth in turnover and profits. Mr Kennedy's major public addresses include the American Society of Newspaper Proprietors and American Magazine Publishers Association. He has a world-wide reputation in the magazine industry. He is also active in community affairs and has been involved with many fundraising and charitable organisations. Mr Kennedy joined the Museum Trust in 1992.

**Dr Jonathon King** graduated in Political Science at both the London School of Economics and University of Melbourne and has worked as a print and electronic journalist with mainstream newspapers and television stations in Britain and Australia. He lectured in Political Science in Britain, the USA and Australia before producing the \$14 million First Fleet Re-enactment Expedition for Australia's Bicentennial celebrations for which he won the Australian Achiever Award 1989. In 1992 he designed and produced the official film and book on the quincentennial re-enactment of the 1492 voyage of Christopher Columbus to commemorate his discovery of America. The author of fifteen books on Australian and American history and politics, he now teaches Media Studies at the Macleay College. He also gives talks to corporate and community groups on history, heritage and the environment.



He joined the Museum Trust in 1988.

**Mr Jim Layt AM** has been Managing Director of Blue Circle Southern Cement Limited for over ten years, and is also responsible for the domestic and overseas energy businesses of Boral Limited. He has a Bachelor of Science degree and a Master of Business Administration degree, and has undertaken Advanced Management Programs at Harvard University. He is currently a Member of the Business Council of Australia, Past President of the Cement & Concrete Association of Australia, a member of the Council of the University of New South Wales, Member of the Trade Development Council established by the Department of Foreign Affairs and Trade, Honorary Trustee of the Committee for Economic Development (CEDA), Director of the Australian Institute of Management Limited (AIM), Past President of the Employers' Federation of NSW, and Chairman of the Technical Aid to the Disabled Foundation. He joined the Museum Trust in 1990.

**Professor Brian Low** is Pro-Vice-Chancellor (Academic Support) at the University of Technology, Sydney. He was born and educated in Queensland and has worked as a secondary school teacher in Queensland, and as an academic staff member in universities in New South Wales. His research interests are in the areas of mathematical reasoning, the education of mathematics teachers and education policy. Professor Low joined the Museum Trust in 1990.

**Mr Nigel Milan** is one of Australia's leading executives in radio broadcasting. He was Chief Executive at Radio 2UE from 1987 to 1991, taking the Station from tenth to second position. Previously he was Sales Director of the Macquarie Network, and then Deputy General Manager of that network. He has served as a member of the Board of Management of Bond Media (National Nine Network, Bond Radio & Sky Channel), was Vice President, and later President, of the Federation of Australian Radio Broadcasters, and was appointed Acting Chief Executive of the 'Story of Sydney' tourist venue. He joined the Museum Trust in 1990.

**Mr Chris Puplick** graduated from Sydney University with a Master of Arts degree in Government having made a particular study of the operations of federal systems in Australia and overseas. He subsequently worked on the personal staff of the first federal minister for Aboriginal Affairs and for several members of the Federal Parliament. He entered Federal Parliament as a Liberal Senator for New South Wales in 1978 and served until 1981, and later from 1984 to 1990. He was at various times federal Shadow Minister for the Environment, Heritage, the Arts (including museums) and Sport, as well as being Manager of Opposition Business in the Senate. He has several published works and was an active broadcaster and book reviewer for the ABC Science Unit. He currently serves on the Board of the National Institute for Dramatic Art, the Griffin Theatre Company and the Zoological Parks Board of NSW; and on the Executive of the Australian Council for the Care of Animals in Research and Teaching (ACCART). He is an active member of Amnesty International and the International Commission of Jurists. He is the Chief Executive Officer of the Packaging Environment Foundation of Australia - a private sector organisation working to promote solutions to the management of municipal solid wastes with particular emphasis on environmental issues in the packaging industry. Mr Puplick joined the Museum Trust in 1991.

**Dr Richard Walsh** is a graduate in arts and medicine from the University of Sydney. He was founding editor of *Oz* and *Pol* magazines and the weekly *Nation Review*. He was Chief Executive at Angus & Robertson Publishers for fourteen years and is currently Chief Executive and Publisher at Australian Consolidated Press. He is Chairman of the Australian National Commission for UNESCO, a former Director of the Australasian Medical Publishing Company - producers of the *Medical Journal of Australia*, and is currently on the publishing committee of the Royal Flying Doctor Service. He joined the Museum Trust in 1988.

**Ms Patricia Watson** is the Editorial Business Manager for The Condé Nast Publications Pty Ltd. Over the past twenty years she has had a diverse career in accountancy and arts administration, including theatre management; front-of-house coordination for the South Pacific Arts Festival; band management; recording and publicity; and administration of the Sydney Film Festival and Travelling Film Festival. She has previously served as Secretary/Treasurer on the Board of the Crafts Council of New South Wales, a Board member of the Sydney Film Festival (Chairperson of the Sponsorship and Finance Committee) and as a member of the New South Wales Arts Advisory Council. Ms Watson joined the Museum Trust in 1992.



The trust met on 7 occasions during the year. Attendance at meetings was as follows:

*Dr Robyn Williams [President] 7 (of 7)*

*Dr Telford Conlon 6 (of 7); apology received for 1 meeting*

*Dr Malvin Eutick 7 (of 7)*

*Mr Trevor Kennedy (resignation accepted June 1992) 1 (of 3); apology received for 1 meeting*

*Dr Jonathon King 4 (of 7); apologies received for 3 meetings*

*Mr Jim Layt 5 (of 7); apologies received for 2 meetings*

*Prof Brian Low 7 (of 7)*

*Mr Nigel Milan (resignation accepted Nov 1991) 2 (of 4); apology received for 1 meeting*

*Mr Chris Puplick 6 (of 7); apology received for 1 meeting*

*Dr Richard Walsh (resignation accepted Nov 1991) 1 (of 3); apologies received for 2 meetings*

*Ms Patricia Watson 3 (of 3)*



# CODE OF CONDUCT

Staff of the Australian Museum shall use their position to advance the aims and objectives of the Museum and not their own personal interest.

## Values Underlying the Code

The Code of Conduct rests upon the assumption of a number of values which require that staff behave with:

- \* integrity
- \* honesty
- \* loyalty to the public interest
- \* fairness
- \* conscientiousness
- \* compassion

## 1. Principles

### *Public Confidence*

The public has a right to expect that public sector organisations act with the highest integrity and competence and treat all citizens fairly, reasonably and equitably.

### *Staff Rights*

Museum staff rights are the normal rights of employees, under the common law and within the provisions of legislation.

## 2. Conflicts of Interest

Museum staff should avoid any financial or other interest or undertaking that could directly or indirectly compromise the performance of their duties.

Conflicts of interest are assessed in terms of the likelihood that officers possessing a particular interest could be influenced, or might appear to be influenced, in the performance of their duties on a particular matter.

In many cases only the individual officer will be aware of the potential for conflict. Therefore, the onus is on the officer to notify his or her senior officer if a potential or actual conflict of interest arises.

## 3. Acceptance of Gifts or Benefits

Gifts or benefits may be accepted in circumstances approved by the Director, provided that there is no possibility that the recipient might be, or might appear to be, compromised in the process.

As a general rule a line may be drawn in situations where a gift could be seen by others as either an inducement or a reward which might place the staff member under an obligation.

## 4. Personal and Professional Behaviour

Members of staff should perform any duties associated with their positions diligently, impartially, conscientiously and to the best of their ability.

In the performance of their duties, staff should:

- \* keep up to date with advances and changes in their area of expertise
- \* comply with any relevant legislative, industrial or administrative requirements



- \* maintain adequate documentation to support any decisions made
- \* treat members of the public and other staff members with courtesy and sensitivity to their rights
- \* provide all necessary and appropriate assistance to members of the public
- \* strive to obtain value for public money spent and avoid waste and extravagance in the use of public resources
- \* not take or seek to take improper advantage of any official information gained in the course of employment

Members of staff should not harass or discriminate in work practices on the grounds of sex, marital status, pregnancy, age, race, colour, nationality, ethnic or national origin, physical or intellectual impairment, sexual preference, or religious or political conviction when dealing with their colleagues and members of the public. Supervisors should understand and apply EEO principles.

## **5. Fairness and Equity**

Issues or cases being considered by members of staff should be dealt with consistently, promptly and fairly. This involves dealing with matters in accordance with approved procedures, quickly, without discrimination on any grounds. There is an obligation to treat each issue reasonably and with a view to meeting the principles of natural justice.

## **6. Public Comment and the Use of Official Information**

While staff, as members of the community, have the right to make public comment and to enter into public debate on political and social issues, there are some circumstances in which public comment is inappropriate. These include:

- \* the implication that the public comment, although made in a private capacity, is in some way an official comment of the Government or of the Museum.
- \* where public comment, regardless of the connection or lack of connection with a staff member's normal duties, amounts to criticism sufficiently strong or persistent to give rise to the public perception that the officer is not prepared to implement or administer the policies of the Government of the day as they relate to his or her duties.

Staff can disclose official information which is normally given to members of the public seeking that information.

Staff should only disclose other official information or documents acquired in the course of his or her employment when required to do so by law, in the course of duty, when called to give evidence in court, or when proper authority has been given. In such cases, comments made by staff should be confined to factual information and should not express opinion on official policy or practice.

## **7. Use of Official Facilities and Equipment**

It is expected that staff will be:

- \* efficient and economical in the use and management of public resources
- \* scrupulous in their use of public property and services and not permit abuse by others

Official facilities and equipment should only be used for private purposes when official permission has been given.

## **8. Outside Employment**

The prior approval of the Director is required before staff may engage in any form of paid employment outside their official duties.

## **9. Political Participation**

Museum staff need to ensure that their participation in political matters does not bring them into a conflict of interest. If a staff member becomes aware that a potential conflict, whether real or apparent, has arisen or is likely to arise, they should immediately inform the Director.



# ANTHROPOLOGY DIVISION

Australia is situated in one of the most culturally diverse regions of the world. This is reflected in the nature of the anthropological collections held by the Australian Museum, and in the range of activities undertaken by the Division of Anthropology. Central to the Division's concerns is the increase of public understanding and knowledge about this cultural diversity through research, scholarship and sound collection management. The Division directs much attention to the problems of accessibility by indigenous peoples of Australia and the neighbouring region to its holdings of material items from their cultural heritages. While the Division's holdings are primarily from Australia, the western Pacific islands and South East Asia, its small collections from the Americas, Africa and mainland Asia are important for introducing Australians to cultures beyond their immediate region.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *participation in the planning and execution of 'The Future of Australia's Dreaming' conference held at the Museum in March, 1992*
- \* *completed Unesco sponsored Training and Technical Assistance program at the National Cultural Centre, Vanuatu*
- \* *completed two catalogues of parts of the Australian collections*
- \* *return of over 50 sets of human remains to Aboriginal communities in New South Wales, North Queensland, and the Northern Territory*

## GENERAL

From 2-8 March 1992, the Museum ran an important conference, entitled 'The Future of Australia's Dreaming', that addressed issues affecting the future rights of Aboriginal and Torres Strait Island people in Australia. Phillip Gordon and Judith Graham were members of the main planning, liaison and organising committee for this event. During the conference the Division ran tours of collections, workshops, displays and provided participants with access to a wide range of Museum services and information. The conference was an outstanding success; particularly pleasing was the participation of indigenous spokespersons from overseas, as well as the many expressions of goodwill from Aboriginal and Torres Strait Islands people. This was the first time that the Museum had attempted to hold such a complex and large conference, which addressed fundamental issues about the rights of Aboriginal and Torres Strait Islands people across a broad range of topics beyond cultural concerns.

Val Attenbrow and Paul Tacon each contributed a section to the new MOTR Exhibition 'Street Science', and participated in its public showing within the Museum. Beth Hise was engaged as the curator of the 'The Living Mask' temporary exhibition (opened July 1992); Judith Graham and Jim Specht were members of the Project Team for this exhibition. As part of the preparation for this exhibition, Graham visited the South Australian Museum in Adelaide to finalise the loan of Nygamada masks from the Port Hedland region which formed the central introductory display of the exhibition. She also participated in the 'Aboriginal Artists Speak- Boomali Aboriginal Artists' exhibition which was shown at the same time as the visiting 'Luk Luk Gen!' exhibition of contemporary Papua New Guinea art. Graham worked on the exhibition 'Issues in Print -Aboriginal Posters' and an exhibition of works from the collection and Aboriginal community trade fair held in conjunction with 'The Future of Australia's Dreaming' conference and gave a talk for the TAMS lecture program in conjunction with the conference.

The temporary travelling exhibition 'Raven's Survival: Eskimo Spirit and Subsistence in the Far North', and a small display of Douglas Mawson material organised by Beth Hise were opened at the Newcastle Regional Museum, where they will remain on display until 1993. Zoe Wakelin-King was a member of the project team that produced the highly successful 'Sydney's Kids' program in January 1992.



Gordon and Paul Tacon undertook a consultancy to advise the University of Sydney regarding the disposition of Aboriginal human remains held by the Macleay Museum, and the handling of its secret/sacred collection. Tacon also carried out a contract for the Conservation Council of the Northern Territory on rock art sites in Roma Gorge.

Zoe Wakelin-King was invited to present a paper on the Division's Sarawak material at a special centenary conference at the Sarawak Museum, Malaysia. Elizabeth Bonshek attended a workshop in Canberra on the Street-Ryan report on developing a national strategy for training museum professionals. Bonshek, Graham, Hise and Wakelin-King presented papers at the Conference of Museum Anthropologists, Adelaide. Graham also presented a paper on behalf of the Division on access to the collections at the Council of Australian Museum Associations conference. Goodsell attended a Workshop on Museum Information Exchange Standards at the Australian War Memorial, Canberra, and the Australian Registrars' Committee meeting in Adelaide. Attenbrow, Tacon and Gordon presented research posters at the annual conference of the Australian Archaeological Association. Attenbrow and Tacon presented papers to the first Archaeology and Linguistics conference, Darwin. Torrence and Fullagar presented papers at the Lapita Conference in Noumea, New Caledonia. Specht attended a special two-day briefing of the Australian Research Council in Canberra and, with Attenbrow, attended the conference 'Evolution, Form and Geography' held at the University of Sydney in honour of the late Professor N.W.G. Macintosh. Torrence attended the annual meetings of the Society for American Archaeology, Pittsburgh, USA, and gave a seminar on her ARC-funded research project in the Department of Anthropology, University of Auckland, New Zealand.

Attenbrow, Specht, Tacon, Gordon, Wakelin-King and Graham attended the Science Retreat in Katoomba.

Judith Graham, Kate Khan and Val Attenbrow spoke at training programs for the Museum guides about the Aboriginal Gallery and current issues relating to cultural heritage. Graham also provided talks and tours of Aboriginal gallery and collections to graduate students from China. Graham attended the Koori Community Arts InterAgency Meeting in regard to planning Cross-cultural Strategies for Future Action, and provided tours and talks for students at the Sydney College of the Arts, the University of Sydney and the University of Technology, Sydney on various aspects of Aboriginal heritage. She attended Aboriginal Hostels Open Day and worked with students in setting up a display about Aboriginal culture from the Museum's hands-on collections. Graham spoke to staff and students from the Wilcannia Aboriginal Boys' Home on careers in museums in areas such as design, anthropology, education and liaison, and attended NSW Aboriginal Land Council forums to discuss the return, management, funding and reburial of Aboriginal remains held in museums and the drafting of a national policy on skeletal remains.

Gordon, Graham and Specht provided advice to CAMA on its draft national policy on Aboriginal matters. Graham met with Torres Strait Islands' women to organise public programs, and future liaison and research projects. Attenbrow and Specht contributed to several Museum submissions on matters relating to the cultural heritage, particularly to National Parks and Wildlife Service of NSW relating to the Museum's responsibilities for curating archaeological and other materials under the NPW Act. Under this Act, the Australian Museum has responsibilities for the care of Aboriginal archaeological materials found on NSW lands outside the control of the Director of National Parks and Wildlife. Over the years during which the Museum has had this responsibility, the Division has received virtually no additional resources to manage this collection. Wakelin-King advised the Japanese cultural centre in Cowra regarding the management of its collections.

Bonshek gave a lecture to Museum Studies students at the University of Sydney, and Thomsett gave two TAMS Tours Behind the Scenes of the Pacific collections. Hise presented two WEA courses on African and Arctic cultures, and gave a course on ethnographic art in the College of Fine Arts, University of New South Wales. Specht gave a seminar at the University of Papua New Guinea. Torrence served as a discussant at the first Women in Archaeology seminar at the University of Albury. Tacon presented seminars at the Australian National University, Canberra, and the Northern Territory Museum of Arts and Sciences, both jointly with Chippindale, and a lecture in the Fine Arts Department, University of NSW. He also gave two talks to TAMS members, one jointly with Chippindale. Fullagar gave a joint paper with L. Head, T. O'Neill and J. Marthick (all University of Wollongong) at the Northern Australia Research Unit conference on Conservation and Development in Northern Australia. Belinda Pulvertaft presented a Museum Seminar on her work with the Sir Edward Strickland collection of artefacts from southern Africa.



The Division's contributions to Open Day included three tours of the Pacific collections (Bonshek and de Mestre), two tours of the Aboriginal collections (Graham), a public lecture (Specht), and poster presentations by Tacon (rock art research), Attenbrow (Port Jackson Archaeological Project), and Gordon and Donlon (repatriation of Aboriginal skeletal remains). The day also included a public viewing of the rolling-up of the massive Tongan bark cloth presented to the Opera House to mark its opening in 1973 by the King of Tonga. The Museum is holding this cloth, the largest in Australia, on behalf of the Opera House.

Attenbrow, Fullagar, Specht and Torrence continued as Research Associates of the Department of Prehistory and Historic Archaeology, University of Sydney. All four continued to act as co-supervisors for post-graduate students at various Sydney and other universities. Attenbrow continued as co-Editor of *Australian Archaeology*, for which Fullagar is also joint Review Editor.

Former Curator of Anthropology, Dr F.D. McCarthy, donated to the Division his extensive collections of reprints and some books and photographs.

## RESEARCH

Attenbrow continued her long-term project into the prehistory of Aboriginal settlement of the Port Jackson area. Aboriginal people from the Metropolitan and La Perouse Local Aboriginal Land Councils continued to be involved in both the fieldwork and laboratory analyses, as were university students and local residents. Radiocarbon dates for sites in Northmead and Vacluse showed initial occupation about 5,000 and 1,100 years ago respectively. Analysis of excavated finds suggests that hunting played a minor role in subsistence compared to fishing and shellfish collecting. She also excavated a site in Darling Mills State Forest, West Pennant Hills, which proved to be rich in stone artefacts made from a variety of raw materials. The presence of backed artefacts suggests an initial occupation between 2,000 and 5,000 years ago, but this has yet to be confirmed by radiocarbon dates. Analysis of the bones from the site show that the Eastern Grey Kangaroo (*Macropus giganteus*) and Brush-tailed Rock Wallaby (*Petrogale penicillata*) were hunted.

Paul Tacon initiated a joint archaeological and ethnographic research project with Dr Christopher Chippindale, University of Cambridge, England, into the rock art of the Northern Territory. On the first period of fieldwork, Tacon was joined by Susan McPherson of the Wiradjuri Regional Aboriginal Land Council, Wagga. Chippindale spent three months in the Division as a Visiting Fellow on this project between April-June 1992. Tacon's earlier work was reported in the New Scientist 'Science and Education Supplement' of 25 April 1992, on Radio National and on Melbourne and Darwin radio stations. Tacon also carried out liaison with communities in the Northern Territory concerning skeletal remains and secret-sacred items from their areas held by the Museum. In addition to his main research project, Tacon continued his work on contemporary Aboriginal material culture, identity and landscape. Some of the results of this work were incorporated into his section of the MOTR exhibition 'Street Science'.

In January-February 1992, Jim Specht completed the fieldwork component of his ARC-funded joint research project with Dr C. Gosden, La Trobe University, Melbourne. Specht and Gosden led a team of 11 people which concentrated on aspects of the history and formation of several archaeological sites on the south coast of West New Britain Province, Papua New Guinea. The team has evidence for sea level on this coastline once being about 2 metres higher than at present, possibly around 5,000-3,500 years ago. This would have had a major impact on the availability of land suitable for settlement. They also completed testing several Lapita pottery sites in the Kandrian area and the Arawe islands.

Richard Fullagar completed his three year Australian Research Council Fellowship in January 1992. This Fellowship formed an integral part of the ARC-funded archaeological research project led by Jim Specht and Chris Gosden (La Trobe University) in West New Britain, Papua New Guinea. Major findings by Fullagar included evidence for the use of stone tools in processing plant foods spanning the last 12,000 years. Over this period, the tool using activities at different sites became more similar through time. This has important implications for models of human settlement, re-settlement, mobility and gardening history. Fullagar also completed a study of small stone



spokeshaves collected by Paul Gorecki (James Cook University) from the Vanimo area of Papua New Guinea; they are possibly associated with the manufacture of arrow shafts.

Fullagar also continued research with Judy Furby (UNSW) on stone tools from the Cuddie Springs archaeological site in New South Wales, which has revealed a diverse range of activities at levels older than 30,000 years in clear association with megafauna. Tool functions include processing of starchy plants, woodworking and butchering. In a joint ARC project with Lesley Head, University of Wollongong, he made two further field trips to the East Kimberley. This project aims to integrate palaeoecological and archaeological evidence to trace a local history of human settlement. Two more rock shelter sites were excavated. Both sites have decorated rock walls, and deposits at one site extend below 1.2 metres, beyond the earliest stone point industries. Fullagar, with Cheryl Szpak, also examined artefacts from Attenbrow's Port Jackson project. This study revealed the presence of shell residues on ground stone files, providing the first clear evidence for the use of such tools in the manufacture of shell fish hooks. He also carried out a study of the first obsidian artefacts to be found in an Australian archaeological site by Bruno David (University of Queensland).

Robin Torrence, holding an Australian Research Council Fellowship, was successful in her application for a grant from ARC to pursue her project in the Talasea area of West New Britain Province, Papua New Guinea. She was also successful in obtaining a grant from the Australian and Pacific Science Foundation for rescue excavation of a Lapita pottery site on Garua Island in conjunction with the University of Papua New Guinea. Laboratory work during the year focused on technological analyses of artefacts from sites excavated in previous years, particularly at Bitokara Mission and on Garua Island. These sites contain important data on obsidian extraction and tool production over approximately the last 5,000 years, as well as representing the domestic use of the stone tools. Changing land-use patterns appear to have more influence on how obsidian was exploited than changes in the nature of trade and exchange.

## LIAISON

Phillip Gordon undertook fieldwork among communities in western Victoria and southern NSW, where he was able to collect several examples of Aboriginal fibre work. Gordon and Judith Graham were members of the task force that organised the conference 'The Future of Australia's Dreaming' held at the Museum in March 1992. Gordon also represented the Museum at the celebrations of the centenary of the founding of Wallaga Lake Aboriginal Reserve. He undertook a ten-week field trip to Aboriginal communities in North Queensland to return Aboriginal skeletal remains for reburial. He also gave several lectures at various universities. With other members of the Division, he completed the revision of the Policy and Procedures document relating to Aboriginal matters within the Museum.

Tacon and Attenbrow attended the return of the Mungo Woman skeletal remains to the Aboriginal people of western New South Wales in January 1992. These remains, dated to the late Pleistocene, will be held in a Keeping Place by the communities.

Graham and Tacon, with Materials Conservation, provided assistance for the relocation of an Aboriginal scarred tree endangered by the building of a new housing estate at Casula. The tree was eventually relocated to the grounds of the Tharawal Aboriginal Land Council following the successful co-operation between the Land Council, NPWS, the developers and the Museum.

In July and December 1991 Cultural Heritage students Peter White and Norman Graham from the Ngunwal Centre in Canberra completed catalogues of collections from the Tamworth (NSW) and Gippsland (Vic) regions. These reports were then distributed to Aboriginal communities by the students, thereby enabling people from a particular region to know what is housed from their area in the Museum collections.

Hise met with Leslie Tepper of the Canadian Ethnology Service to discuss further repatriations of Cape Mudge items to Canada.



Bonshek visited Vanuatu for five weeks to complete a training and technical assistance programme at the National Cultural Centre, Vila, sponsored by the Australian National Commission for Unesco.

The Division once again provided collection management technical training to persons from Australian and Pacific Islands organisations. Trainees included William Maria Mahuvu, Department of Anthropology, National Museum of Papua New Guinea; Melanie Rabarts, Division of Human Studies, Museum of Victoria; Sagale Buadromo, Fiji Museum; Peter White and Norman Graham, University of Canberra.

Work experience students again sought placement within the Division: Bronwyn McCutcheon, Shannon Reid, Andrew Stanton, Elizabeth Stone, Susan Whitby.

## COLLECTIONS

With the assistance of the Collection Managers, Prue May completed the brief for the computerisation of collection management within the Division. As part of this process, several members of the Division visited other museums to study how they have proceeded with this kind of project.

The main aim of the division during 1991/1992 was to ensure that the collections become increasingly accessible to their cultural stakeholders. Among the major achievements for the year were the completion of the first draft of a catalogue of part of the Aboriginal archaeological collections by Florek and others. The purpose of this catalogue is to encourage Aboriginal people, students and people interested in Australian prehistory to use the collection. The catalogue has been distributed for comment, prior to final revision and publication in 1992-93. Kate Khan submitted for publication the first volume of the catalogue describing the W.E. Roth collection of artefacts from North Queensland. This catalogue project aims to make information about this important collection more accessible to the Aboriginal people of the area, as well as to students and the general public. Copies of earlier Museum publications containing information on the Roth collection have already been distributed to the 43 communities represented in the collection.

As part of the improvement for the storage of the Australian archaeological materials, Florek relocated approximately 80,000 stone items into 48 new cabinets. Collection inventories for NSW, Victoria, S.A., were completed, and storage shelf lists and labels have been completed on the whole Aboriginal collection. Artefact documentation checking is still in progress and is essential before computerisation.

Denise Donlon was engaged to provide descriptions and assessments of Aboriginal human remains prior to their return to communities for reburial or safekeeping. The major part of this work was directed to those remains of known or named individuals from Queensland.

The Aboriginal collections were increased by the acquisition of several works by urban Aboriginal artists such as Bronwyn Bancroft, Euphemia Bostock, Ian Abdulla and Jeffrey Samuels. These acquisitions reflect the Museum's policy to record culture change and show the adoption of old stylistic traditions to new materials. It also enhances the representative nature and range of examples of Aboriginal material culture from South-East Australia and the Sydney region.

During the year, in conjunction with Materials Conservation, Graham conducted training programs for people involved with the setting up and maintenance of Aboriginal cultural centres, keeping places and museums. The program is known as 'Keeping Your Cultural Heritage Items for the Future'. Initially they have conducted a needs survey in regional centres such as Dubbo, Newcastle and Armidale. This was followed by two practical hands-on workshops at the Museum. In the future it is intended that these workshops be conducted externally at Aboriginal centres. It is hoped that by training people on the care and storage of artefacts that this will improve access to museum collections for community displays and education programs.

Nan Goodsell, with the assistance of Justine de Mestre and others, reduced the registration backlog of items received



from the University of Sydney by over 1,000 items, and registered 83 new acquisitions.

David Lipset (University of Minnesota) and Kathy Barlow submitted the final report of the Sepik Documentation Project. This is to be edited for publication in various formats.

While in Vanuatu, Bonshek visited the island of Ambae, where Lissant Bolton, a divisional staff member currently on study leave, is carrying out doctoral research on mat making. Bolton conducted a weaving workshop with women on Ambae on a grant to the Museum from the Australian National Commission for Unesco.

Zoe Wakelin-King commissioned a full Balinese *gamelan* for public performances. With the assistance of G. Watson, Department of Music at the University of Sydney, she organised a public appeal for funds and a sponsorship through Garuda Airlines. Tjokorda Raka Kerthyasa liaised with the Balinese community in Sydney for fundraising. With Derrick Blew he visited Bali on the Museum's behalf to supervise the production of the *gamelan*, and to record the process on videotape.

In 1992 Wakelin-King took long-service leave, and her position was partially filled by Belinda Pulvertaft and Beth Hise. Pulvertaft worked primarily on African materials, completing a catalogue of the Sir Edward Strickland collection from southern Africa, and supervised the photography of all of the previously unphotographed items from Africa and the Americas. The African work was in conjunction with an Australian Research Council research project at La Trobe University, Melbourne.

Beth Hise completed a major report on the Cape Mudge Kwakiutl collection for the Canadian Museum of Civilization, Ottawa. Hise also continued preparation of a catalogue of the Museum's Eskimo collection.

Loans were made to La Perouse Aboriginal Museum; National Maritime Museum, Sydney; Menmyny Aboriginal Museum, Yarrabah, North Qld; Jilla Bina Aboriginal Museum, Kuranda, North Qld; Artist Terry Yumbula, Northern Territory; Aboriginal Women's Exhibition, NSW Art Gallery; Northern Tablelands Aboriginal Land Council; Nundaroo Aboriginal Land Council; Wallaga Lake Aboriginal community centre; NSW National Parks and Wildlife Service; 'Eight Days That Changed the World'; AIDAB; Historic Houses Trust of NSW, 'Australian Icons'; 'Luk Luk Gen' PNG Contemporary Art Travelling Exhibition; Australia New Zealand Marae Trust; 'Court Arts of Indonesia', New York.

The Division received donations of artefacts from many sources, including Ascham School, T. Barlin, M. Blanc, E. Bonshek, late Mr. H. W. B. Bramell, B. Bria, F. Brown, Coca-Cola South Pacific, P. Carroll, Mrs. Edmonds, S.M. Eoe, M. Fitzgerald, Y. le Fort, Prof. T. Harding, Mr. C. Harris; M. Hawkins, M. Hilsden, I. Hossack, Jogiarto, M. Jolly, K. Kos, Prof. S. Lindner, A. McCausland, R. McLennan, L. Meehan, F.D. McCarthy, P. Matthews, P. Menses, G. Morris, A. Ridgeway, F. and B. Righetti, B. Ryan, R. Sheperd, late Mr. S. Slavik, J. M. Smythe, M. Stryker, S. Thomsett, M. Tuckson, R. Varnes, M. West, K. Wilson.

## FUTURE PLANS

- \* completion of the second volume of the Roth catalogue of Aboriginal artefacts from North Queensland
- \* publication of the first volume of the Guide to the Australian Archaeological Collections in the Australian Museum
- \* implementation of the first stage of computerisation of collection management
- \* implementation of a program of activities to mark the International Year for the World's Indigenous People in 1993
- \* publication of the final report on the Sepik Documentation Project
- \* completion of further fieldwork and analyses for each of the three major research projects in NSW, the Northern Territory and Papua New Guinea
- \* publication of the catalogues of the Eskimo and Strickland collections
- \* organise a workshop, summer school and training program for the newly-acquired gamelan orchestra



## VISITORS

The Division received almost 1,000 visitors during the year; only those from overseas are listed below:

M. Barbier-Muller, Geneva, Switzerland  
M. Berman, Tourism Corporation, West New Britain Province, Papua New Guinea  
Professor N. Besnier, Yale University, USA  
E. Bibimauri, Malaita, Solomon Islands  
L. Brown, Norfolk Island  
S. Buadromo, Fiji Museum, Suva, Fiji  
Dr M. Busse, National Museum and Art Gallery, Papua New Guinea  
Father G. Casals, Manila, Philippines  
R. Cassells, Otago Museum, Dunedin, New Zealand  
Dr Chen Yeh-i, National Museum of Prehistory, Taipei, ROC  
Dr J. Cherry, University of Cambridge, England  
Chiao Tsung-Min, National Museum of Prehistory, Taipei, ROC  
Dr C. Chippindale, University Museum of Archaeology and Anthropology, Cambridge, England  
Professor and Mrs P.J.C. Dark, Truro, England  
T. Dion, University of Alberta, Edmonton, Canada  
S.M. Eoe, National Museum and Art Gallery, Papua New Guinea  
L. Foanaota, National Museum, Honiara, Solomon Islands  
T. Hamilton-Irvine, Norfolk Island  
Professor T.G. Harding, University of California, USA  
Marilyn & Moses Havini, Buka Island, Papua New Guinea  
C. Isaac, J K McCarthy Museum, Goroka, Papua New Guinea  
D. Jachniak-Morrison, Pohnpei, Federated States of Micronesia  
P. van Kampen, Vancouver, Canada  
E. Kasarherou, Museum of New Caledonia, Noumea, New Caledonia  
Mr. Koyama, The National Museum of Modern Art, Kyoto, Japan  
R. Kelton, January 1992, Kelton Foundation, California, USA  
S. Kohmoto, Museum of Modern Art, Kyoto, Japan  
Lu Li-cheng, National Museum of Prehistory, Taipei, ROC  
B. Luthi, Kunstsammlung Nordrhein-Westfalen, Dusseldorf, Germany  
W.M. Mahuvu, National Museum and Art Gallery, Papua New Guinea  
Toi Te Rito Maihi, New Zealand  
K. McKinnon, University of Alberta, Edmonton, Canada  
E. Maxwell, Aotearoa Moananui Akiwa Weavers Group, New Zealand  
M. Morobubuna, University of Papua New Guinea, Papua New Guinea  
I. Nakase, Natural History Museum, Kobe, Japan  
J. Nalo, University of Papua New Guinea, Papua New Guinea  
Dr M. O'Hanlon, British Museum, London, England  
N. Prickett, Auckland Institute and Museum, Auckland, New Zealand  
Dr Ratoos, Gulf Province, Papua New Guinea  
T. Ravo, Vanuatu Political Party, Vila, Vanuatu  
Dr R. Rose, B.P. Bishop Museum, Honolulu, Hawaii, USA  
Dalee Sambo, Inuit Circumpolar Conference, Canada  
Shih Li-Ying, National Museum of Prehistory, Taipei, ROC  
Professor Wen-Hsun Sung, National Taiwan University, ROC  
Professor R. Shutler Jr, Simon Fraser University, Canada  
N. Smith, Vancouver, Canada  
A. Stucki, University of Geneva, Switzerland  
A. Tahiwai, Aotearoa Moananui Akiwa Weavers' Group, New Zealand



L. Tepper, Canadian Ethnology Service, Ottawa, Canada  
 Professor C. & J. Turner, Arizona State University, USA  
 F. Wadra, University of Papua New Guinea, Waigani, Papua New Guinea  
 D. Walford, Pacific Pathways, Hawaii, USA  
 C. Wiurane, Aotearoa Moananui Akiwa Weavers' Group, New Zealand  
 C. Yacoe, Pacific Pathways, Hawaii, USA  
 Professor Chien-Chung Yin, National Taiwan University, Taipei, ROC

## ABORIGINAL VISITORS - INDIVIDUALS AND COMMUNITIES

Barbara Pilot, Aboriginal Arts Board, Australia council  
 Aboriginal Studies students, Arts & Craft Skillshare, Kempsey  
 Lindsay Bostock & Colleen Stackie, Newcastle Land Council  
 Tom Whelan, Director, Office of Aboriginal Affairs, NSW  
 Ngunwal Culture and Heritage Centre students, Canberra University  
 Sue MacPherson, Wiradjuri Aboriginal Land Council  
 Avril Quaill & Hetti Perkins, NSW Art Gallery  
 Ray Elias, Loretta Brim & people from Kuranda, Nth Qld  
 Wayne Carr, Metropolitan Aboriginal Land Council  
 James Williams, Aboriginal Development Unit  
 Kaye Mundine, Indigenous Women's Unit, Canberra  
 Ken Morgan, Aboriginal Hostels  
 Carol Morgan, Department of Education, Employment and Training  
 Aboriginal Education students, Sydney University  
 Kempsey TAFE students  
 Cathy Craigie & Tranby Aboriginal College students  
 Eora Centre, Redfern  
 Christine Donnelly, Aboriginal Dance Theatre, Redfern  
 Peter Bertani, Doreen Kartinyeri, Neva Wilson, South Australian Museum  
 Lloyd Fourmile, Elverina Murgha, Menmuni Museum, Yarrabah  
 Clare Mason, Jean Carter & Ken Foster, La Perouse Aboriginal Museum  
 Joseph Wallam, Australian Heritage Commission  
 Barbara McCarthy, Aboriginal Reporter, ABC Television  
 Namaro Aboriginal Training Centre, Redfern, NSW  
 Nancy & Grant Burgoyne, Groote Island, Northern Territory  
 Mick, Didamain, Jocelyn & Selena Uibo, Batchelor, Darwin, Northern Territory  
 Judy Watson, Aboriginal Artist, Sydney  
 Aboriginal Unit, Wollongong University  
 Margaret Campbell & Dallas Dodd, Aboriginal Dreamtime Cruises  
 Gray Farrell, Sydney  
 Midiana  
 Cindy Johnson, NSW Aboriginal Land Council  
 Debbie Walford, Kianari Aboriginal Hostel  
 Aboriginal & Torres Strait Island Students, Cairns TAFE  
 Ramingining High School, Northern Territory  
 Louise Hamby, Sydney University, NSW  
 Students Dubbo High School, NSW  
 Awabakal Co-operative Trainee Site Offices, Newcastle, NSW  
 Traditional elders from the Kimberley Ranges, WA



# COMMUNITY RELATIONS DIVISION

The Community Relations Division encompasses a variety of fields of expertise and disciplines and is an important contributor to raising the profile of the Museum with the public as a whole. Strongly adhering to the Museum's Philosophy, we seek to further the Museum's Mission, using the skills and resources available to us.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *position of Cultural Diversity Co-ordinator established within Community Relations*
- \* *Australian Natural History won the Whitley Award for best periodical for the fifth successive year*

## AUSTRALIAN NATURAL HISTORY MAGAZINE

Australian Natural History magazine (ANH) carried off the Whitley Award for best periodical for the fifth successive year - a considerable achievement and also earned recognition and media coverage for the original and provocative article 'Is Australia Overpopulated?' published in the Spring '91 issue.

It has also been a year of change with a new Marketing Department (Mike Field and Mary Pollinger) taken on to help improve circulation and advertising levels. The result has been a reshaping of both magazine design and contents, a relaunch into newsagents, and early indications of growth and a promising future.

## CULTURAL DIVERSITY

The Museum's current Corporate Strategic Plan includes 'multicultural representation' as an objective, both to attract a greater diversity of people from different backgrounds, and to give Museum visitors a greater appreciation of our multicultural Australia. The implementation of this objective involved the appointment of a Cultural Diversity Co-ordinator, and the future development of a gallery specifically to reflect Australia's cultural diversity. This very significant step highlights the Museum's commitment to the further development of on-going relationships with the wider community, begun several years ago with the Greek, Maori and Chinese communities.

The cultural diversity co-ordinator is responsible for the development of networks and closer relationships with community groups, particularly those of NESB, and encouraging them to visit the Museum. (The cultural diversity co-ordinator is also the Museum's EAPS co-ordinator). Exhibitions and other public programs are a particular focus. This year, many months of planning and community liaison resulted in the Museum's first big multicultural event 'Sydney's Kids', as part of the Festival of Sydney. It was an outstanding success and attracted a lot of attention. It also fulfilled, very successfully, the aim of introducing the Museum to many people who had not experienced it in the past.

'Sydney's Kids' was quickly followed by planning of a major exhibition 'The Living Mask: Performance and Ceremony Around the World'. This exhibition has, as the central theme, Aboriginal and Torres Strait Island masks, together with masks from every other continent. As well as the involvement of the Aboriginal and Torres Strait Island communities, members of the Chinese, Sri Lankan, Latin American, Indonesian, African, PNG, Japanese communities and a local theatre group are involved at many levels - from the loan of some of the masks to involvement in performance, and assistance with translations into other languages. The development of 'The Living Mask' is proving to be an exciting new way of combining a 'traditional' exhibition with the living culture and customs of contemporary Australia.

The Australian Museum also participated in the 1991 Carnivale program 'Greek Australians in Their Own Image', a photographic exhibition portraying the rich historical and cultural heritage of Australia's Greek Community; and during December 'Pol Art', an exhibition of art by Polish artists, was featured at the Museum.



## MERCHANDISING

The mail order services of the Museum continued to be expanded during 1991/92. Two mail order booklists were mailed to all national libraries and to all government and non-government schools in NSW. The second mail order catalogue was distributed, once again increasing awareness of the unique merchandise available from the Museum and creating a flow-on of product sales in the Museum shops.

A range of Australian Museum cards was developed in conjunction with the State Library of NSW. The series has proved popular in the shops and has also been sold to other institutions in Australia. Museum developed product has been distributed to the Museum of Western Australia, the Museum of South Australia, the Newcastle Regional Museum, the Queensland Museum, the Museum of Victoria, the National Science and Technology Centre and the Science Centre at the University of Wollongong.

## PUBLIC RELATIONS

Over the period media attention was focused on a number of significant programs, including 'Sydney's Kids', which was strongly covered by ethnic radio and press as well as metropolitan media. The four day conference 'The Future of Australia's Dreaming' saw extensive national coverage. Other activities achieving a high media profile included the Eureka Awards, the 'Now You See Them' exhibition, and the discovery by Mike Gray of blind trapdoor spiders in South Australia.

The announcement of the introduction of admission fees was sensitively co-ordinated by the section, with media reports focusing on the Museum's commitment to providing access, particularly for those who can least afford to pay.

Several programs were promoted by the section. The Annual Open Day continued to be popular, together with the Dinosaurs Picnic in Hyde Park North.

## RECORDS OF THE AUSTRALIAN MUSEUM

During the past year Scientific Publications produced 7 issues totalling 1459 pages: *Records* Volume 43 Numbers 2 & 3 and Volume 44 Number 1; *Supplements* 13 & 14; and *Technical Reports* 5 & 6. The issues contained eleven papers in zoology, two in palaeontology, one bibliography and one report on forest conservation. Australian Museum scientists authored or co-authored over half of the papers. The rest were by Australian and overseas scientists.

One new family, one new subfamily, 23 new genera and 59 new species were described in these issues, including 31 new species of Indo-Pacific jumping spiders by the prominent Polish taxonomist Dr Marek Zabka. Australian Museum scientists Dr Graham Pyke and Mr Paul O'Connor published a controversial report on wildlife conservation in the south-east forests of New South Wales; Dr Tim Flannery (Australian Museum) described a new species of bat from the Solomon Islands; and Dr Glenn Hunt (Australian Museum) co-authored a paper describing a new subfamily of harvestmen spiders.

'Crossopterygian Fishes from the Devonian of Antarctica' co-authored by Drs Gavin C. Young (Bureau of Mineral Resources, Canberra), John Long (Western Australian Museum, Perth) and Alex Ritchie (Australian Museum) is the first major monograph on this pivotal group of fishes, based on southern hemisphere material. In addition to the description of many new taxa the authors discuss new theories on the evolutionary relationships within the crossopterygian group.

In August we published our largest and one of our most significant books to date, 'The Families and Genera of Marine Gammaridean Amphipoda'. This book had been anticipated for several years and in addition to normal circulation it has sold over 200 copies in the first year. It was a great tribute to the senior author, Dr Jerry Barnard (Smithsonian Institution) who passed away two weeks before the issue was released.



## FUTURE PLANS

- \* *To continue with the cultural diversity program by closer liaison with the wider community and the development of a cultural diversity space.*
- \* *To implement an innovative marketing program to establish ANH as a financially viable and popular magazine*
- \* *To further increase relationships with media*
- \* *To initiate extensive media coverage for the "Gargantuans from the Garden" exhibition*
- \* *To seek opportunities to profile the Museum's public programs and scientific research activities*
- \* *A new Shop Manager is to be appointed in August. Judith Taylor has had considerable experience in the retail book industry*
- \* *To increase the mail order production to 50,000 in order to reach a broader range of prospective customers*
- \* *To develop a wide range of product for "Gargantuans from the Garden" exhibition shop*
- \* *To appoint a Venue Manager to organise functions and catering services within the Museum*
- \* *To advertise the Australian Museum as a suitable venue for the corporate sector*



# CORPORATE SERVICES DIVISION

The Corporate Services Division provides innovative and pro-active financial, property, people and information management through high quality co-operative services which respond to the needs of our customers.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *first year of the successful In-Residence program involving a visual artist and a researcher*
- \* *involvement of staff in Museum Public Programs, such as Open Day, on Project Teams, in 'The Future of Australia's Dreaming' conference and as members of "Research and Development" teams*
- \* *employment of a New Business manager and growth in Museum consultancy activity*
- \* *continued private sector funding support for major Museum programs*
- \* *development and implementation of successful strategies to manage the introduction of admission charges*
- \* *introduction of the new computer accounting system*
- \* *SEP review of Exhibitions Division completed, and reviews underway in respect of Front-of-House activities, Corporate Services, Education and Scientific Divisions*

## GENERAL

A two day divisional planning seminar was held at the commencement of the year and involved people from various roles across the Division. The outcome was a plan which emphasised a commitment to effective communication and utilisation of resources; the implementation of successful and innovative management practices; well maintained public, staff and storage areas; and the development of business opportunities particularly in the area of consultancies.

The review of Structural Efficiency (SEP) within the Museum has continued throughout the year with a draft Enterprise Agreement reached within the Museum on a restructuring for the Exhibitions Division which will reduce the classifications under which the staff in that area operate from four to one. This matter is currently before the Industrial Authority. Similar reviews are proceeding with Front-of-House staff, Corporate Services, Education and Scientific Divisions.

A series of discussions have proceeded with consultants concerning the possible redevelopment of the eastern end of the Museum site.

A decision was made by the Trust in late 1991 that it had no option but to introduce admission charges, following a substantial reduction in Government Funding allocations. A task group was formed to review the role of the College Street Information Desk and to recommend necessary changes in that area and other administrative and staffing issues. The charging of admission commenced on 1st February 1992.

A computer based cash register system has been installed at College Street Information Desk which will enable statistical visitor data to be collected as well as providing detailed admissions information. Major structural changes to the Information Desk have also been completed.

## FINANCES

The introduction of new accounting software has been completed and Intergy is now fully operational. This was achieved without the need for extra staff or consultants during the implementation period. Because of the introduction of new software, staff training has been a priority. This training has resulted in increased skills of all staff which has made this changeover period challenging without being threatening. The end result being a dedicated staff, a nil staff turnover and a high level of Customer Service maintained during a difficult period.



Active financial management has resulted in an increase in the level of Museum funds available for investment and the best possible returns for these funds. Both Museum management and the Museum's auditors set the writing of an accounting manual as a high priority task for this year and production is now at an advanced stage.

During the year the Museum undertook a survey and review of the motor vehicle fleet which assisted in improved organisation and management, and the Stores area also acquired a computer to assist with communication and management.

## **HOUSE SERVICES SECTION**

This section ensures that the assets of the Museum are kept safe from harm, that visitors and staff enjoy a safe and clean environment.

The introduction of admission charges and a desire to improve customer service standards led to the formation of the information support team within the section. The section is now responsible for the meeting and greeting of school groups visiting the Museum. The team has achieved a high level of motivation and service, and has actively participated in on-going customer service training, which has included reciprocal visits with other cultural institutions.

A paper recycling program has been introduced to the Museum as a whole, and a review has been undertaken to ensure that the materials used in the cleaning of the Museum are environmental acceptable.

## **HUMAN RESOURCE SERVICES**

This financial year has seen Human Resource Services concentrate on achieving high accuracy levels in processing salary and staff information. This resulted in a minimum number of over and under payments and a revised system in paying penalty rates. The Acting Human Resource Manager has been working on a number of different projects this year. They include the Museum's 'Sydney's Kids' program as a project team member; conducting and reporting results of morale surveys; and the implementation of the Structural Efficiency Principle (SEP) which includes developing a skills audit, and working on the Corporate Services SEP Sub Committee.

The Human Resource area has had a physical remodelling, with the building of a new office for the Human Resource Manager. This remodelling will achieve a confidential office for this position.

In staff development this year, marketing the Museum was strongly emphasised. 35 senior and middle management staff attended this training which was conducted by Dr Rhonda McIver, a well known Marketing Consultant. With the introduction of admission charges to the Museum, staff development also emphasised customer services training for Front-Of-House staff. 30 Front-Of-House staff which included Shop Staff, Security Officers, Guides and Information/Admissions staff attended this training. Sessions were also held for the Museum's Education Volunteers.

## **NATIONAL PHOTOGRAPHIC INDEX OF AUSTRALIAN WILDLIFE**

The National Photographic Index of Australian Wildlife is an expanding collection of colour photographs of the mammals, birds, reptiles and frogs of Australia. It is maintained as a reference supplement to the Museum's collections of preserved specimens and as a source of illustrations for publishers and authors. It is also the basis for a series of richly illustrated books produced in conjunction with Collins/Angus & Robertson.

The NPIAW published the seventh of its ten volume series on the birds of Australia (Parrots and Pigeons of Australia) and three volumes of its four volume Encyclopedia of Australian Animals (Frogs, Mammals and Birds) The fourth volume is in press and due for publication in September 1992. Commercial utilisation of the NPIAW archives has been actively pursued, including a presentation stall in the Australian Book Publishers Association Fair in June 1992.



## PHOTOGRAPHIC SERVICES

The Photographic Services section provides photographic services for the marketing, public programs and scientific needs of the Museum. This comprises the creation of original colour and black & white images for research, publications, publicity, the documentation of galleries and collections, black and white printing, X-radiography and slide duplication. We also manage and promote a modern and historic collection of images for scientific research, cultural understanding and commercial opportunities, drawing on a large collection of archival and recent photographs of fauna, the environment and indigenous peoples of Australia and the Pacific.

A high level of morale, professional practice and commitment to customer service by staff has contributed to the effective operation of the section, increased productivity and customer satisfaction, which are the measure of the section's achievements during the past year.

## PROPERTY SERVICES

A five year assessment management and maintenance plan was developed and funding was obtained to overcome the backlog of works required on the fabric and services. A Stonework Conservation and Repair Program was implemented in conjunction with the PWD Heritage Architectural Group which addresses the outstanding work required on the over 100 year old stonework.

## NEW BUSINESS

A New Business Manager was appointed in August 1991 to identify and put into action, for the purposes of financial gain, new business opportunities utilising the Museum's substantial intellectual and material resources. Earnings of \$245,000 have been achieved in this period, and the bulk of this revenue is from scientific consulting in the environment management field for major engineering consultancies and public sector groups. The most significant project to date has been for the Federal Airports Corporation undertaking a marine fauna survey of Botany Bay. In addition, a number of working relationships have been established with some major environmental consultants and tertiary education companies which have proved important in our success in winning contracts.

## FUTURE PLANS

- \* *to advertise and fill a staff development position which will improve the Museum's capacity to develop and implement training consistent with the Strategic Plan commitments to training and developing staff to meet the Museum's goals.*
- \* *the New Business Manager plans to make further inroads into the environmental consulting market and to consider new business opportunities for other sections of the Museum.*
- \* *the management of a 1992 In-Residence program with a Public Programs focus.*
- \* *to continue increased involvement in Museum-wide activities, such as Open Day, with opportunities for staff to work on Public Programs Project Teams*
- \* *to focus on further understanding the Division's varied customer wants/needs, set realistic target levels in this area and monitor performance*
- \* *to develop criteria to enable evaluation of training programs and implement these*
- \* *to substantially complete Structural Efficiency review throughout the Museum*
- \* *to resolve property title issues as a forerunner to redevelopment of the eastern end of the Museum site*
- \* *to improve financial reporting and provide on-line computer access by project officers to their project accounting data*



# EARTH AND ENVIRONMENTAL SCIENCES DIVISION

Earth & Environmental Sciences comprises two disciplinary areas, earth science and environmental science, with largely different aims and activities.

Earth Science manages collections of minerals, rocks, meteorites and fossils for display, research and community education. Present research focuses on 'hot spot' volcanic rocks and related earthquake activity in eastern Australia and associated minerals and gemstones and the research on the evolution of early Palaeozoic vertebrates.

Environmental Science carries out ecological research that will lead to better knowledge of ecological distributions and processes and to better environmental management. The section is active in promoting environmental management and awareness through the provision of statements, submissions, comments and advice to governments, the public, Museum programs, consultants and the media.

## ACHIEVEMENTS/HIGHLIGHTS

- \* initiation by Robert Jones of a field project to search for Early Cretaceous dinosaurs in northern Queensland
- \* participation in the excavation of the Cuddie Springs archaeological/fossil site
- \* completion of over 75% of the reorganisation of the Brachiopod section of the palaeontology collection
- \* completion of extensive field trip visiting significant northern hemisphere institutions and colleagues by Alex Ritchie
- \* collaboration in the development of a nation-wide network to combat the effects of creation "science"
- \* Dr Graham Pyke returned to the Museum after a serious car accident and is undergoing a program of rehabilitation
- \* Richard Major, Michelle Christy and Robyn Hill organised a highly-successful conference on honeyeaters
- \* successful completion of removal and predation experiments in the field
- \* Greg Gowing banded 1250 New Holland honeyeaters this year at North Head
- \* Anna Murray completed 75% of life history data extraction for beach amphipod research
- \* initiation by Dr Alan Jones of monthly discussions for scientists (over 50 people involved) studying various aspects (ecology, geology, contamination, etc) of sediments
- \* attendance at five environmental conferences (with papers given at MESA and CET)
- \* judgement of Earthworm Environmental Awards
- \* Dr Lin Sutherland was elected President of both the Mineralogical Society of N.S.W. and the Royal Society of N.S.W.
- \* the J.J. Johnston and G.H. Dreyer mineral collections acquired
- \* a commercial Gem Identification Service was established by Gayle Webb
- \* visiting Research Fellow, Professor K. A. Rodgers (University of Auckland) appointed a Research Associate
- \* a species list for the mineral collection was compiled, validated and computerised by Ross Pogson

## MARINE ECOLOGY

### Research

Alan Jones and Anna Murray's study of the biology and ecology of two beach amphipod species is in its final phase of data collection with 75% of life-history data being extracted. Newly-developed software has expedited this process.

Dr Jones' involvement in the EPA's Hawkesbury Ecotoxicology Project continues with the supervision of two M.Sc. students and membership of the Management Committee.



## **Environmental Activities**

Dr Jones continues his substantial involvement in various environmental activities. These include the coordination and preparation of comments on various issues e.g. biodiversity, coastal management and human population size. Robin Marsh is developing a computerised environmental data base.

## **Meetings and Committees**

Dr Jones attended conferences concerning: a) environmental solutions to environmental problems, b) toxic algal blooms, c) the role of the Environmental Protection Agency, d) marine environmental education and e) the effects of sediments on aquatic ecosystems. He delivered papers at the last two, initiated a monthly discussion group for scientists interested in sediments, and addressed various conservation groups. He is a member of the Editorial Board of the new journal 'Biodiversity and Conservation' and served as councillor to:

The National Trust Landscape Conservation Committee  
Coast and Wetlands Society  
Friends of Dee Why Lagoon  
Australians for an Ecologically Sustainable Population  
Hawkesbury Ecotoxicology Management Committee

## **Commercialisation**

Dr Jones and Ms Murray both contributed to the development of policy and the implementation of commercial projects.

## **Community and Museum Activities**

Dr Jones and Ms Murray both contributed to MOTR and the Museum Open Day. Dr Jones also contributed to the temporary exhibitions Endangered Species and the Earth Summit.

## **MINERALOGY AND PETROLOGY SECTION**

This Section studies the mineral environment of the Earth, particularly in the Australian sphere. Collections of minerals, rocks and meteorites are managed for display, research and community education. Research focuses on 'hot spot' volcanic rocks and related earthquake activity in eastern Australia and associated minerals and gemstones.

## **Research and Conferences**

Research on diamonds culminated in a review on East Australian Diamonds presented by Lin Sutherland at the 5th International Kimberlite Conference in Araxa, Brazil. Other research on high-pressure minerals by Dr Sutherland and co-workers was aired at two conferences; the 11th Geological Society of Australia Conference at the University College of Ballarat and the 15th Joint Seminar of the Mineralogical Societies of Australia at the Queensland Museum. A report on earthquakes was delivered by Dr Sutherland to the 26th Newcastle Symposium 'Advances in the Study of the Sydney Basin.'

Professor K. A. Rodgers (Geology Department, Auckland University) was a Visiting Research Fellow in the Mineralogy Section from November 1991 to January 1992. He conducted a Raman Laser Spectroscopy and Scanning Electron Microscope study of aluminium hydroxide minerals in the mineral collection. He instructed the Mineralogy staff on SEM techniques and gave seminars to the Australian Museum and the University of Technology, Sydney. His visit led to his appointment as a Research Associate of the Australian Museum.



## Exhibits

A display of cut gems, carved ornamental minerals and gem crystals marked the launch of Dr Sutherland's book, 'Gemstones of the Southern Continents'. Museum specimens were enhanced by a loan of spectacular cut sapphires and other gemstones from Gembank International. Many of the Museum specimens were later loaned to the West Australian Museum for their 'Rocks, Riches & Romance' exhibition.

Antarctic rocks collected by Sir Douglas Mawson were loaned to the Newcastle Regional Museum, and an iron meteorite was loaned to the Australian Nuclear Science and Technology Organisation for display.

Carved fluorite vases and other ornamental items were set up in the College Street Foyer and, as part of a commercial project, a case of large, well crystallised minerals lent by local mineral dealers was displayed in the Mineral Gallery.

## Fieldwork

Lin Sutherland collected samples from diamond-bearing areas and titanium mines in Brazil and, with Ross Pogson and Gayle Webb, he investigated basalt and sapphire-bearing areas near Oberon and Inverell in N.S.W. and collected zircons for age-dating in the Nanango-Kingaroy area in Queensland.

While attending the 11th Australian Geological Convention at Ballarat, Victoria in January, Lin and Ross collected zircons with Research Associate Dr Julian Hollis in the Myrniong and Werribee Gorge-Korobeit areas, Victoria.

## Collections

A collection of Broken Hill minerals, collected in the early 1900s by Mr G. H. Dreyer, was donated by his family. This collection is rich in fine azurite crystals and silver halide minerals. A large and varied collection of minerals from Australia and overseas was donated by the family of the late Mr J.J. Johnston. Other donations include gem sapphire crystals from Umba, Tanzania and a large native copper specimen from the Red Dome copper mine, Chillagoe, Queensland.

Suites of display-quality gem minerals from Afghanistan and Pakistan and rare minerals from Broken Hill were purchased while exchanges included fine, crystallised gold from California USA, rare aluminium hydroxide minerals and a suite of Philippinite tektites.

A project to register over 400 rare minerals donated under the Taxation Incentives for the Arts Scheme was completed, as was a complete computer listing of all 1150 mineral species in the collection. This latter project was the first such index to be prepared for 107 years. Computerised catalogues for the gemstones and meteorites were also completed.

Major research users of the collections included A.N.U. (studies of stable light isotopes in mineral products of weathering), James Cook University, Townsville (projects on sea drift of pumice and structure studies of the aragonite mineral group), C.S.I.R.O. Division of Coal Technology (pure mineral calibration standards for analytical equipment), School of Metallurgy, University of NSW (meteorite research) and the University of Adelaide (study of natural bitumen).

## Community and Museum Activities

A commercial gem identification service was initiated by Gayle Webb who promoted the service during the Museum Open Day.

Lin Sutherland gave talks to the Greenwich Gem Club, the Astronomical Society of NSW, and the Hunters Hill Probus Club. He also gave several media interviews connected with his gemstone book and with his volcanic and



earthquake research in the Sydney-Newcastle region. Lin was elected President of the Royal Society of NSW in April 1992 and President of the Mineralogical Society of N.S.W. in August 1991.

Ross Pogson spoke to the Mineralogical Society of NSW and also instructed the Australian Museum Guides on field collecting. Ross is a Council Member of the Mineralogical Society of N.S.W and attended the Mineralogical Societies of Australia Seminar in Brisbane. Whilst on a private trip to Austria, Ross examined the collections of the Natural History Museum of Vienna and was a guest of the Mineralogy-Petrology Department.

Gayle Webb addressed the Gemmological Association (NSW Branch), participated in the Director for a Day Programme, and became qualified as a First Aid Officer. Oliver Chalmers spoke to the Mineralogical Society of NSW and the Colonial Science Club. All staff participated in the Guides training programme and the Museum Open Day.

## **PALAEONTOLOGY**

### **Research**

Alex Ritchie continued research on the evolution of early vertebrates, especially Ordovician agnathans (Australia and South America), Siluro-Devonian agnathans (Europe, North America and Australia) and Devonian armoured fishes (Australia, Antarctica, Europe, Asia, N. America).

### **Exhibits**

The Tambar Springs Diprotodon skull was displayed in the Fossil Gallery following its return from the Story of Sydney Exhibition.

### **Fieldwork**

An expedition to North Queensland searching for dinosaur fossils was undertaken by Robert Jones and Paul Willis. Besides substantial amounts of Cretaceous marine reptile and fish material, fragments of an armoured dinosaur were found. This search should continue as the potential rewards for the Museum are enormous. Also the first of many trips to a site near Brewarrina, N.S.W was made by Robert Jones, at the invitation of the School of Geography (U.N.S.W.). This exciting site contains evidence for the co-existence of humans and the extinct Pleistocene megafauna.

Alex Ritchie made an extensive trip to significant northern hemisphere institutions, speaking at symposia, conferring with colleagues, collecting, and examining collections and public displays.

**Symposia:** the 39th Symposium of Vertebrate Palaeontology and Comparative Anatomy at Oxford University; the 7th Early Vertebrate Symposium in Quebec, Canada.

**Institutions:** Calgary (Geological Survey of Canada); Drumheller (Royal Tyrrell Museum of Palaeontology; Ex Terra Foundation); Edmonton (University of Alberta); Montreal (McGill University); Ottawa (Canadian Museum of Nature); Toronto (Royal Ontario Museum); Boston (Museum of Comparative Zoology); Cleveland (Museum of Natural History); Los Angeles (L.A. County Museum of Natural History and George Page Museum, Rancho La Brea); New York (American Museum of Natural History); Chicago (Field Museum); Washington (U.S. Museum of Natural History); Edinburgh (National Museum of Scotland), Glasgow (Hunterian Museum, University of Glasgow), Newcastle (Hancock Museum), Leicester (Museum and Art Gallery), Cambridge (Zoology Museum), Oxford (Zoology Museum) and London (Natural History Museum).

### **Collections**

Curation of the collection by temporary assistants and dedicated volunteers continued. Reptiles and amphibians were moved and reorganised, allowing consolidation of the fossil fish collection in the Fossil Gallery storage area.



Many (4210) specimens were registered, mainly brachiopods, molluscs, mammals and thin-sections. Seven visitors worked in the collection and thirty loans (more than twice as many as last year) were made.

Two magnificent Eocene fish specimens from The Green River Shales of Wyoming were donated by the Kanagawa Museum, Japan (co-ordinated by Dr Malcolm Walter). Notable specimens collected include an ichthyosaur skull (North Queensland) and bones of extinct megafauna and an aboriginal flake core (Cuddie Springs, Brewarrina).

### **Community and Museum Activities**

Alex Ritchie, Robert Jones (and volunteers Gabor Foldvary and Paul Willis) provided guided tours of the collection areas and manned an information and identification desk during the Museum Open Day. They also participated in the Director for a Day program.

Alex Ritchie served as the President of the Antarctic Society and on the council of the Linnean Society of N.S.W. Robert Jones was convenor of the Geological Sites and Monuments Sub-Committee of the Geological Society of Australia (N.S.W. Division), a council member of the Riversleigh Society and Chairman of the Australian Museum Occupational Health and Safety Committee.

Both members of staff gave lectures to various interested groups on palaeontology-related topics.

Alex Ritchie helped to set up an Australia-wide network of individuals in science (all disciplines), education (especially science teaching) and religion (mainstream denominations) who are concerned by the effects of 'creation science' on science teaching in Australia.

In March, the second meeting of a newly-formed New South Wales Palaeontology Group, attended by 35 local palaeontologists, was held in the Museum.

### **TERRESTRIAL ECOLOGY**

#### **Research**

Research at the new study site at North Head comprised the establishment of a colour-banded population of resident birds, monitoring nesting success and nest predation, regular estimation of the density of resident birds, and an experimental removal (temporary) of territorial birds.

The section, in collaboration with Dr Ralph Cartar, studied honeyeater foraging behaviour on the flowers of Christmas Bells. Dr Cartar had a Canadian Government Post-doctoral Fellowship during 1990 and 1991 to work with Dr Pyke.

#### **Meetings and Committees**

Dr Pyke gave a paper at the RAOU Scientific Day on Honeyeaters. This was an important step back into the workplace following his serious car accident. He is a member of the following committees:

- National Parks and Wildlife Advisory Council
- RAOU Research Committee
- Barren Grounds Nature Reserve Management Committee
- NSW Government Committee on Non-indigenous Animal Species

Dr Richard Major presented a paper on nest predators at the conference on Conservation Biology in Australia and Oceania. He is a committee member of the Australian Bird Study Association and is also Assistant Editor of *Corella* and Editor of the ornithological literature supplement to *Auk*, *Ibis*, *Emu*.



## FUTURE PLANS

The Marine Ecology section plans to:

- \* *continue to collect and analyse data from their current research projects on beach amphipods and Hawkesbury benthic communities*
- \* *continue collaborative work with the Environmental Protection Agency*
- \* *commit substantial time to various environmental activities and commercial projects*

The Mineralogy and Petrology section plans to:

- \* *continue computer databases of collections*
- \* *expand commercial activities for fund raising*
- \* *seek corporate sponsorship for X-ray equipment purchase*
- \* *develop research on the environmental and economic implications of Australia's geologic plate activity*

The Palaeontology section plans to:

- \* *install the type collection database on the network computer*
- \* *continue fieldwork in Queensland for dinosaur fossils*
- \* *continue fieldwork in NSW for evidence of megafauna/human co-existence at Cuddie Springs*
- \* *continue fieldwork for opalised fossils at Lightning Ridge*
- \* *continue research into the evolution of Palaeozoic fishes from Australia and overseas*

The Terrestrial Ecology section plans to:

- \* *pursue environmental science and environmental issues by establishing the following four parallel programs:*
  - (a) *strategic environmental research*
  - (b) *environmental information management*
  - (c) *sustainable resource use and wildlife conservation*
  - (d) *basic ecological research*
- \* *continue research on population biology of honeyeaters and pollination ecology of Christmas Bells*
- \* *consider new projects in areas such as effects of forestry practices on wildlife, population biology of the Eastern Bristlebird and other endangered species, and conservation of urban wildlife*
- \* *continue to host and collaborate with the Australian Bird Count*

## VISITORS

Dr Ralph Cartar, Dept. of Biological Science, Simon Fraser University, Burnaby B.C. CANADA

Mr. S. Currie, President of Gemmological Soc of NZ

Mr. P. Filmer-Sankey, Assistant Director, Newcastle Regional Museum, NSW

J. Furby, School of Geography, University of N.S.W.

Dr. F. V. Kaminsky, Central Research Institute of Geological Prospecting for Base and Precious metals, Moscow, Russia

Mr. B. P. Mishra, Dep Director, Geology, Dept of Steel and Mines, Government of Orissa, India

Mr. S.K. Mohaptra, Joint Director, Geology, Directorate of Mining & Geology, Government of Orissa, India

Mr. Nguyen Khac Tiep, Programme Officer, UNIDO, Hanoi, Vietnam

Asst.Prof K. Pigg, Department of Botany, Arizona State University.

Prof. K. A. Rodgers, University of Auckland, NZ

Dr. S.C. Shah, Geological Survey of India.

Dr. Tran Van Danh, Director, Dept for Sciences and Technology, People's Committee of Nghe An Province, Vietnam

Prof P. Williams, Chemistry Dept, University of Western Sydney



# EDUCATION DIVISION

The Education Division aims to deliver challenging, significant, experiential and enjoyable educational programs which are responsive to community needs and which raise awareness of relevant issues.

These aims are achieved through consultations with a range of cultural and education groups. Activities include outreach programs, school and WEA programs, interpretive programs and events, temporary exhibitions which focus on current environmental and culturally significant topics, conferences, publications, interactive programs, training programs.

The Education Division comprises three sections; Visitor Services, Education Programs and Resource Services. The managers and staff are also members of many cross divisional groups, professional organisations and contribute to the research, development, implementation and evaluation of public programs.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *once more both the Dinosaur Picnic and Open Day were popular events with over 8,500 people participating in the organised activities*
- \* *loans for the Museum in a Box program increased by 175%*
- \* *Street Science, a new travelling exhibition started at the Museum in April and was supported by a popular holiday program. It is now drawing wide audiences in shopping centres*
- \* *the number of people viewing travelling exhibitions has increased from just over 100,000 people in 1990/91 to over 500,000 in 1991/92*
- \* *the conference 'The Future of Australia's Dreaming' was evaluated very highly by participants and Aboriginal groups. Many of the issues and ideas which came from the conference will provide the basis for future plans and actions*
- \* *school visits have increased in popularity at a time when many institutions are recording decreased visitor numbers*
- \* *over 50,000 people participated in 'Sydney's Kids', the Museum's most successful January program*
- \* *hundreds of applicants applied to take part in the Museum's Work Experience Program*
- \* *the temporary exhibition Earth Summit promoted the Museum's image as being at the cutting edge of environmental issues, through its comprehensive daily reporting of the conference in Brazil*

## VISITOR SERVICES

The Visitor Services section of the Education Division has continued to expand its public programs to provide a range of activities which include school holiday programs, guided tours, gallery touch tables, craft activities, lectures, talks and films, entertainment and interpretive programs, children's activities and special events.

Nearly 190,000 people took part in Visitor Services programs compared to 160,000 in the previous year - an increase of 19%.

A highlight of the year was the 'Sydney's Kids' program which was developed and presented in January as part of the Festival of Sydney. This program celebrated the living cultures of Sydney's young people through dance, theatre, arts and museum and attracted over 50,000 visitors.

Other holiday programs highlighted Indonesian, Aboriginal, and Papuan New Guinea cultures through providing support for 'Luk Luk Gen' and 'Boomali' art exhibition. The work of the Museum's scientists was the focus of the April holiday program 'Street Science'.



The 'Dinosaur Picnic' (April 12th) attracted 3,000 visitors to special activities in both Hyde Park and the Museum, while on Open Day (May 24th) 5,500 visitors gained an insight into the museum through 'behind the scenes tours', entertainment and demonstrations and talks by museum staff.

The Visitor Services section continues to coordinate the very successful 'Director for a Day' program which provides all staff members with the opportunity to comment on and monitor the Museum's programs and services.

The 'Live at the Museum' Entertainment program increased in popularity with over 12,000 visitors participating in thematic weekend and holiday programs.

The Volunteer Program has again operated very successfully this year. More visitors than ever are taking advantage of the guided tours and the number of visitors using the touch tables run by the volunteers has doubled.

## EDUCATION PROGRAMS

There has been an increase in the number of school children visiting the museum this year, despite the introduction of admission fees.

The new Discovery Space Gallery has been very popular with the majority of schools who visit the Museum spending time in this gallery. A Teachers' Resource Pack giving information about the interactives in this gallery is now ready for use by schools.

The Education Section has worked to develop effective communication strategies so that the museum's programs are linked to those of schools, adult learning groups and a range of community and cultural groups. It distributes a newsletter *Links* to primary schools to provide teachers with classroom activities based on the primary science curriculum, which relate to forthcoming programs and exhibitions. The current edition features insects to promote the upcoming exhibition 'Gargantuans from the Garden'.

Ten In-service days were held for a variety of tertiary students from interstate and overseas as well as for local teachers and Museum Studies students.

The Museum's Aboriginal Education Officer helped organise the successful Boomalli Art exhibition and 'The Future of Australia's Dreaming' conference as well as teaching increasing numbers of Aboriginal Studies students from senior high school.

The museum again co-sponsored the 'Earthworm Environmental Award' program as part of the Federal government's 'Learning for Our Environment' strategy. There were over 400 entries reflecting a high level of support from school children for environmental issues.

Three publications were produced to support the NSW Department of School Education's 'Frogwatch' initiative which aims to find and identify frogs throughout New South Wales.

The Museum has cooperated with W.E.A. to provide services as diverse as a guided tour of Long Reef marine Reserve and classes on 'Arts, Craft and Culture in Indonesia', 'Care of Museum Collections' and 'Arts of Africa'.

Work experience at the museum has again proved to be outstandingly successful. From the hundreds of applications sixty students were selected to take part in the program.

Education Officer Carrie Arkinstall was awarded a Museum Education Association of Australia -BP scholarship to explore the relationship between museums and environmental issues and will visit a number of Australian museums later this year.



## **RESOURCE SERVICES**

Resource Services have had a busy year providing services to those people isolated geographically or financially from the museum. These services include Museum on the Road, Regional Galleries program, Museum in a Box, Field Days and Education resources.

### **Museum on the Road**

The two travelling exhibitions 'Aboriginal Australia' and 'Mammals in Australia' travelled to far western NSW, the north west, and are now travelling down the north coast. 'Papua New Guinea - the Abelam people' completed a successful tour of Queensland courtesy of the Regional Galleries Association of Queensland. The new Australian Museum Research exhibition, 'Street Science', was completed in April and is currently on tour in Sydney.

Our major change in strategy in 1992 is the placing of the exhibitions in shopping centres, which has considerably increased their exposure. During 1991/92 the number of people viewing travelling exhibitions in NSW has increased by 400%.

Westpac Banking Corporation is still sponsoring the Museum on the Road program.

### **Regional Galleries Program**

The 'What on Earth' exhibition, sponsored by National Mutual, has been on display in Orange, Liverpool, Bathurst and Penrith in the past twelve months with over 50,000 people visiting.

### **Museum in a Box**

During the year several new boxes have been added to the Box program including Frogs, Human Evolution and Platypus. The proportion of boxes on loan in the year has increased from 29% in 1990 to nearly 80% in 1991. This financial year saw 923 loans of boxes to schools, libraries and other institutions in NSW. Security Express has provided efficient delivery service.

### **Education Services and Field Day Presentations**

Resource Services provide Education Programs with continuous support in the development and maintenance of the Education activity rooms and collections. Preparators are also involved in holiday activities in the Discovery Space, on Open Day and with the travelling exhibitions in shopping centres.

Resource Services presented Natural History Displays at field days for Lane Cove National Park Environment day, Liverpool Colonial Day, Westfield Chatswood and Warriewood Environmental Awareness exhibition. These presentations attracted approximately 20,000 people.

Our expertise and animals, both live and mounted, were supplied to various agencies for promotion including 'Burke's Backyard' and 'Minder' television series.

## **CONFERENCE**

### **The Future of Australia's Dreaming**

This highly successful conference was organised and conducted by the Museum in collaboration with the Aboriginal community in March 1992. The four day forum drew over 500 participants daily, and included groups from all states of Australia as well as visitors and speakers from New Zealand, Canada and Vanuatu. Sessions included panel discussions, workshops and presentations from Aboriginal and Torres Strait Islander communities and indigenous people from overseas.

Proceedings of the conference are currently available through the Museum. Recommendations from the conference will be used in future program planning.



## FUTURE PLANS

- \* *to strengthen links with the Aboriginal community through programs and activities developed to support The International Year of the World's Indigenous People*
- \* *Investigation Centre - plans are underway for the joint development by Education and Science Divisions of an investigation centre which will provide facilities and support for public investigation and enquiries*
- \* *The Living Masks will provide an exciting performance program of dance, storytelling and music with masks from many cultures during the July school holidays*
- \* *Gargantuans from the Garden, a major program which features giant robotic models of insects and spiders, with a supporting public program which includes dance, storytelling and science demonstrations, will take place from September 1992 to February 1993*
- \* *Contemporary Australia Gallery - the Education Division through its visitor services program plans to develop activities and programs which highlight the cultural diversity of Australia to support the introduction of this new gallery*



# EXHIBITIONS DIVISION

Providing Museum visitors with an experience that is stimulating, enjoyable and thought-provoking is the challenge facing the Exhibition division.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *Exhibitions* - Luk Luk Gen, Now You See Them, Boomali Artists and Issues in Print, Greek Australians in Their Own Image, 'Pol Art, Face to Face
- \* *Street Science* - a new travelling exhibition

**Luk Luk Gen (Look Look Again)** - an exciting exhibition of developments in Papua New Guinean Art, exploring non-traditional themes and new media. This exhibition opened on September 17th 1991 and was on show until December 15th, 1991.

**Now You See Them** - a unique opportunity to view an amazing range of mammals and birds that have become extinct or endangered over the last 200 years: October 28th - December 8th, 1991.

**Boomali Artists And Issues In Print - Aboriginal Posters** - a celebration of diversity of Aboriginal arts with contemporary paintings and posters: October 5th - October 12th, 1991

**Greek Australians in Their Own Image** - a photographic and historical exhibition by Effie Alexekis and Leonard Janiszewski, exploring the Greek-Australian cultural experience. This exhibition was a contribution to Sydney's Carnivalé celebrations: October 1st - November 3rd, 1991.

**Pol Art** - an exhibition featuring paintings and sculptures by the Polish community, part of Sydney's Polish Festival: December 27th, 1991 - January 4th, 1992.

**Face to Face** - an exhibition about ten multicultural teenagers and their stories about being themselves created by Ms Mira Lemberg with the Ethnic Community Council: June 20th - July 19th, 1992.

**Street Science** - in early April a new travelling exhibition for the Museum On The Road (MOTR) program was launched at the Museum. "Street Science" highlighted the scientific research at the Museum covering 15 important projects in cultural and environmental research. The Project Manager was Mr Bodo Matzick and the Designer was Ms Jesse Mastrogianidis.

## PUBLIC EVENTS

During the year the Exhibition Division was also involved in six major public programs. These were:-

The Indonesian Experience	June/July 1991
Earthworm Awards	October 1991
Sydney's Kids	January 1992
Future of Australia's Dreaming	March 1992
Open Day	May 1992
Earth Summit Info	June 1992

The maintenance of exhibitions within the Museum continued to be given high priority with staff providing a seven day program and an intensive preventative maintenance regime.



## FUTURE PLANS

- \* *finalisation of the Division's restructuring through the Structural Efficiency Program, after prolonged negotiations*
- \* *Gargantuans from the Garden- an exciting new travelling exhibition, featuring seven giant robotic insects, will commence at the Museum on September 25th 1992, tour to major venues throughout Australia from mid-1993 to the end of 1995, and internationally after that time.*

## VISITORS

Mr U Sein Myint Aung, Assistant Director, Department of Cultural Institute, Ministry of Culture, Burma  
Mr Brad Baker, Manager Exhibition Development, Powerhouse Museum  
Dr Seddon Bennington, Chief Executive Officer, SCITECH Discovery Centre  
Ms Sagale Buadromo, Registrar, Fiji Museum  
Mr Gary Bullivant, Manager, Business Operations, National Science and Technology Centre  
Ms Kaye Dowling, Public Programmes Manager, Queen Victoria Museum & Art Gallery, Launceston  
Mr Jeff Freeman, Manager of Exhibitions & Graphics, Queensland Museum  
Ms Lesleigh Green, Head Public Programmes, Western Australian Museum  
Mr Pich Keo, Director, National Museum, Cambodia  
Ms Lorraine McLoughlin, Head of Division of Public Programs, South Australian Museum  
Mr Isao Nakase, Natural History Museum & Institute, Kobe, Japan  
Mr Kirk Peterson, Director Public Programs, Museum of Victoria  
Mr Adrian Spinks, Display Manager/Design, Tasmanian Museum and Art Gallery



# INFORMATION SCIENCE DIVISION

The Division of Information Science manages Information. Information may be defined as a representation, in any physical form, of knowledge used for communication. In relation to people who produce it, are affected by it, or who interface with it in any way, this Division must also consider the behavioural and cognitive implications.

The Division aims to develop systems to identify, store, retrieve, and transmit information in order to further what we know and can utilise from the flow of information. In addition, it develops products and services to meet identified user information needs.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *Science on the Network*
- \* *Internet Access*
- \* *current awareness services on Museum Network*
- \* *Management Information System (MIS)*
- \* *Remote Access to the Network*
- \* *establishment of Developmental Skills and Training Scheme for Research Library Staff*
- \* *microfiche of Trust minutes from 1836*
- \* *Director's Office files on CARMS*

The Division manages: information created and disseminated in a variety of media; the retrieval, sharing, exchange and dissemination of information, for example by utilising the Local Area Network, by hardcopy or by accessing external databases and disseminating the information either in electronic or hard copy format; the organisation and storage of information, whether electronically or other; methods of identifying and communicating with relevant external information holders; synthesis of disparate pieces of information into products and services tailored to meet user needs; preservation of information for current and future access, using appropriate technology or treatments; access to the information so as to meet current identified user needs; plans for methods to meet future information needs.

The Division aims to support and interact with all other Divisions through the activities listed above and to provide clients from the general community with access, both physical and intellectual, to relevant major information resources, products and services.

All of the achievements listed below are based on objectives and strategies outlined in the Division's Strategic Plan. Performance indicators identified within the plan have been assessed - only a very small percentage of indicators were unmet, this being due largely to changes in methodology for the effective achievement of the objectives.

The Information Science Division covers the following broad areas: The Local Area Network (LAN); the Research Library; Archives; Records Management; Database Development.

## LOCAL AREA NETWORK (LAN)

### Science on the Network

The LAN is a PC based computer network which supports the work of most of the museum. During the last year, the number of staff put onto the network increased from 60 users to 100. This increase in users was largely due to the Scientific Divisions coming on to the network. They now have shared network access to electronic mail (internal and via Internet), spreadsheet, data base, word processing, mapping and statistical programmes. In addition, they have access to an increased range of output devices - printers, plotters etc.



### **Internet Access**

Network users at the Australian Museum now have access to Internet. Internet is a global communications infrastructure. Hanging off the Internet are many other networks, the users of which we are now able to communicate with. The communication format includes the ability to attach electronic documents (e.g. manuscripts) to electronic messages. All of this is achieved through our own Local Area Network.

In Australia, we are now able to communicate with users of AARNET (Australian Academic and Research Network) - all universities in Australia and the CSIRO, as well as some commercial agencies. In the USA, most academic and research agencies, including the Smithsonian Institution, are users of CREN/BITNET. These agencies are now accessible to us via this system.

This system is cheaper than fax, and will allow scientific staff, public programmes staff and management to communicate quickly, throughout the world, directly from their PCs.

### **Remote Access Network**

It is now possible for the Director to access all applications and files on the Local Area Network from his home office. This will allow greater efficiency, in that files will now not have to be copied from one system to another when they are updated off site, multi-user databases can be updated on the one version only, electronic mail messages can be sent from offsite to all network users onsite.

Very shortly, this system will be expanded to allow the Lizard Island Research Station to access the Network, allowing much greater communication and access to information.

### **Museum Management Information Services (MIS)**

The first stage of the MIS was made accessible to a defined user group early in 1992. This system provides current information that supports the operations, management, analysis and decision making functions in the Museum. The information available is updated and added to regularly and covers a range of broad areas including financial, market research, policy and planning documents.

### **Other significant developments**

- \* Expansion of network training programme
- \* With the increase in size of the network and variety of users, the network has been bridged into 3 logical LANs, comprising ADMIN, SCIENCE and FINANCE. This has been achieved by the use of an intelligent tri-channel concentrator, which still has residual capacity to further divide the network, should traffic and growth require
- \* Museum Stores Section added to the Network

Many of the above developments have been facilitated by the relocation of the computer room in the 1990/91 financial year.

## **RESEARCH LIBRARY**

### **Research and Reference Services**

Demand for information services from both museum staff and external clients continued to be high throughout 1991/1992. The formation of Museum Public Policy R & D Groups, and the involvement of library staff in them has resulted in an increase in demand for specialised information services for internal users. The preparations for the Science Retreat stimulated a similar demand for literature research. Usage of the Research Library by external clients, particularly, tertiary students continued to be high and was matched by a corresponding demand from other institutions for the loan of materials and supply of documents.

The increasing demand for timely and accurate information has resulted in a 40% increase over the previous year in the number of computer searches performed on dial-up databases. The connection of the Research Library to the



museum's LAN has opened up another channel of communication between the library and its users, and has enabled search results to be disseminated electronically to museum staff. The purchase of an optical scanner has enabled the Research Library to produce its current awareness bulletin, *Serial Madness* electronically. Journal contents pages are scanned into the bulletin, which is then downloaded to the museum network to allow interactive access by users. In a similar way, the monthly listing of new book purchases, *Bibliomania*, is also transferred to the museum network. Hard copies of library bulletins are still produced for those staff without network access, as well as for external clients.

## **ARCHIVES**

Automation of the archival control systems, using the database program *DATAEASE* has proceeded with series, item and location modules as the first components. Further system enhancements are planned.

Reference use of the Archives by both internal and external users continued to be high. Some examples of reference queries include enquiries about the early history of the museum, its collections and staff; the 19th century acquisition of Aboriginal remains; and Thomas Bevan's 1885 expedition to New Guinea. The preservation program for the Archives continued in 1991/1992. The important series of museum correspondence from 1883-1926, which receives heavy use, has been foldered into acid-free wallets. The microfiche program continued with the copying of the Trust Minutes from 1836. A microfiche reader/printer has been purchased to allow better reference access and reduce handling of fragile records.

## **RECORDS MANAGEMENT**

The Central Records System (CRS), controlled and accessed through the computer records management program *CARMS*, has been further consolidated and extended with the full incorporation of the Director's Office files. The first stages have been completed in the development of a file classification scheme for controlled file titling, to allow better access to records.

Shelving has been installed at the Marrickville repository, to allow temporary off-site storage of semi-current records.

## **OTHER SIGNIFICANT DEVELOPMENTS**

### **Tours**

During 1991/1992, the Research Library hosted several tours of professional and student groups. In addition, the Archivist gave a talk on the museum's archives to students of the archives administration course at the University of NSW.

During the Museum's Open Day, tours of the Research Library, including Archives and Rare Books Sections, were once again particularly popular. The focus points were Computers, Archives and Rare Books, illustrating the wide range of information services provided within the Research Library.

### **Involvement in other Museum activities**

Research Library staff participated in a number of Public Policy Research and Development groups throughout 1992, and were also involved in the committees involved with the Sydney's Kids and the proposed Investigation Centre.

### **Professional development**

Research library staff attended the following conference and courses during 1991/1992:

*Opac and Beyond*, 6th Biennial Conference of the Victorian Association for Library Automation in Melbourne, 11-13 November, 1991.

*Wordperfect*, *Quattro Pro*, and *Hypercard* applications training.



Database searching on DIALOG.  
Records management classification systems course.

After negotiations with the State Library of NSW, The Australian Museum Research Library has succeeded in instituting a Developmental Skills and Training Scheme, whereby selected staff will spend a proportion of their time at the State Library updating their skills in particular areas. The first staff member will begin a three month part time placement in the Materials Processing Section of the State Library on the 24th June.

#### **Database Development**

Staff in the Division have been involved in various aspects of database developments including advice, support, evaluation, access. Particularly significant was the involvement with the development of the Malacology Data Base, which is available to defined users on the Network.

#### **FUTURE PLANS**

- \* *implementation of optical based computer archiving system, which will incorporate a word indexing system facilitating more effective retrieval of required files*
- \* *introduction of word retrieval system to the Network to facilitate high speed search and retrieval of information*
- \* *enhancement of Network operating system and application software*
- \* *automation of the Research Library's serials management system, as the first stage in the development of an integrated library management system*
- \* *further development of the Research Library's database of museum related information resources*
- \* *development of archival oral history program*



# INVERTEBRATE ZOOLOGY DIVISION

Invertebrates (animals without backbones, including shellfish, worms, insects, and many other kinds) are the most abundant of animals in both individuals and species. Their fundamental importance in the maintenance of our world environment and their countless effects on our lives is insufficiently appreciated by the public and policymakers. The Invertebrate Zoology division is promoting the importance of invertebrate biodiversity through active field and laboratory research and collections programs, diverse public programs, participation in government policy initiatives and by providing advice and services to government and private industry. Achievement of both Museum and divisional goals has been facilitated through the strategic planning process. This has allowed the effective utilisation of the range of financial, material and personnel resources available to the division.

## ACHIEVEMENTS/HIGHLIGHTS

- \* the Division's commercialisation projects form a substantial prop to income
- \* research achievements gain continuing recognition in many forms: Winston Ponder obtained his D.Sc from the University of Auckland, joining the distinguished group of double-doctorate holders (with Pat Hutchings and Bill Rudman) in the Invertebrate Division

## ENTOMOLOGY AND ARACHNOLOGY

This section is one of the busiest with public inquiries, problems with spiders, wasps, and many other kinds of insects being referred to the staff. The guided tours on Open Day were very popular.

### Research

Michael Gray's research on desine spider genera resulted in completion of work on *Phryganoporus* and substantial progress on *Forsterina*, both continental genera. Work on new genera and a generic review of several southern Australian agelenid spiders is substantially complete. Three of Dr Gray's manuscripts are in press, including a revision of the Australian Filistatidae.

Dan Bickel is in the final stages of preparing his manuscript on the Australian Sciapodinae (Family *Dolichopodidae* - the long-legged flies) for publication in the Australian Museum Records. This large paper will also include many new species gathered during his field trips to Western Australia and the Northern Territory in November 1991 and January 1992, respectively.

Dr Bickel is also continuing work on the Australian Sympycninae and a paper on this subfamily is in press with the journal *Invertebrate Taxonomy*.

Gerry Cassis has completed a revision of the earwig genus *Apachyus* which has provided novel insights on Indo-Pacific biogeography. He is continuing his monograph of Australian earwigs and has found other characters of taxonomic importance other than the traditionally used male genitalia. Dr Cassis has continued studies on Australian mirid bugs (*Heteroptera*), publishing a revision of the genus *Fingulus* with Dr G Stonedahl and is commencing a generic re-classification of the Australian Miridae. Dr Cassis has commenced a co-evolutionary study of the plant bug genus *Setocoris* and carnivorous plants with the Australian botanists Drs Marchant and Conran. Dr Cassis has provided a faunal report on the *Heteroptera* and *Dermaptera* of Christmas Island and Tasmania, and has recently returned from surveying these insect groups in the wet tropics of Queensland. Dr Cassis, with the Australian Museum anthropologist Dr Paul Tacon, has completed a study of the relevance of insects in indigenous cultures, with particular reference to the symbolism of insects depicted in rock art in the Northern Territory.



Glenn Hunt continued research into harvestmen and has completed two papers which describe new cave species and related surface species from NSW and Tasmania. One species is totally blind. Dr Hunt's paper on the Ballarinae, a new subfamily of harvestmen, has been published. These interesting animals, hitherto unknown in Australia, catch their prey in sticky droplets. Dr Hunt has commenced a study of soil mites supported by a grant from the Australian Biological Resources Study Program.

David McAlpine carried out a taxonomic review of the Afrotropical upside-down flies using material collected on recent trips by Amnon Freidberg (University of Tel Aviv) and himself. The now completed project included a phylogenetic study of world taxa combined with a study of the evolution of host plant associations. Dr McAlpine resolved some taxonomic problems in Australian helosciomyzid flies, partly as a result of his recent study of type specimens in the National Museum of Natural History, Paris. He has completed further descriptions of new species of platystomatid flies of Australia and New Guinea.

Application of GIS (geographic information system) to biogeographic research requires that museum records be computerised. Shane McEvey has set up a database for entomological records and a PAPYRUS listing of some 2,500 relevant taxonomic publications. The entire drosophilid collections at the museum has been entered allowing rapid listing of species by locality, by collector, by publication, etc.

Between November and May Dr McEvey surveyed numerous rainforest sites in the NE of the state as part of NPWS's Forest Fauna Survey and in the Sydney metropolitan area as part of his Sydney GIS work. Under contract to NPWS he will provide an inventory of drosophilid species (of which he found some 55 in NE NSW) with data that can be incorporated into Australia's most detailed and most sophisticated environmental GIS. More efficient management of natural resources will result.

Max Moulds has begun a revision of the complex cicada genus *Abrieta*. A history of Australian butterfly research and collecting has recently been completed for a multi-authored book. Papers on the cicada genera *Burbunga* and *Gudanga* are now ready for publication.

Günther Theischinger (Research Associate) is continuing his research on the systematics of the Australian crane flies and dragonflies.

Courtenay Smithers has carried out a taxonomic and seasonal study of the *Neuroptera* (lacewings) in the Mount Royal area. Dr Smithers' work on the *Psocoptera* has included completion of a revised Bibliography of papers on the Order which includes more than 2500 references, study of a collection from timber used in a survey of world boring beetles by the Forestry Commission, study of a large collection from the Mount Royal area and identification of material intercepted by Quarantine Officers.

Clarry Chadwick has been studying historical aspects of entomology in NSW, 1770-1990.

### **Fieldwork, Travel, Conferences**

In March 1992 Dr Cassis and Dr McEvey took part in the Cape York Peninsula Scientific Expedition organised by the Royal Geographic Society of Queensland. No intensive drosophilid surveys had been undertaken in the northern part of the peninsula before. The results are of particular relevance not only in understanding the distribution patterns of insects found in New Guinea and northern Australia but also for a Peninsula rocket-launch-zone environmental impact statement.

Field work undertaken by Dr Bickel and Mr Moulds in the Northern Territory and W.A. produced extensive collections of flies, beetles, lacewings and other insects. A number of new species were discovered including a new native fruit fly and several spectacular long-legged flies (*Dolichopodidae*).

Mr Moulds attended the Annual Meeting of the Council of Heads of Australian Entomological Collections, and the 22nd AGM and Scientific Conference of the Australian Entomological Society, both held in Hobart.



## Collections

Some 32,000 insects and 3,000 arachnids specimen lots were added to the collections and a total of 48 insect loans (approximately 2,000 specimens) and 61 arachnid loans (1,817 specimens) were made.

A major collection of Australian and Asian beetles and other insects, numbering over 10,000 in all, was donated by Mr G. Hangay. A collection of Chilean insects valued at \$5,000 was donated by R. de Keyzer and A. Sundholm. A valuable and extensive collection of pit-fall trap samples was received from the Department of Ecosystem Management, University of New England. The remainder of the leafhopper collection of the late J.W. Evans was donated by his wife, Museum Associate Mrs Faith Evans. Other insect material was received from Mr G. Williams, Mr R. de Keyzer, Mr M. Hanlon and Mr R. Lachlan.

There was substantial growth in the *Diptera* collection with over 3,000 specimens added. Some 3,500 *Diptera* accessions have been sorted to family.

New shelving has been added in the insect spirit collection providing much needed expansion. Space has also been provided for the transfer of the non-spider groups from the Spirit House arachnid collection where overcrowding has become a major concern.

Shelf labelling of the insect spirit collection was upgraded using movable magnetic labels that allow for collection expansion.

Courtenay Smithers continued identification and incorporation of lacewings (*Neuroptera*), especially the antlions (family *Myrmeleontidae*) of which there have been extensive recent acquisitions.

David McAlpine arranged exchanges of *Diptera* material with Zoology Department, Tel Aviv University, and American Museum of Natural History, New York.

## Services to Science and the Community

Dr Gray has served as Treasurer of the Linnean Society of New South Wales, also on the Jenolan Caves Scientific Advisory Committee, and the Scientific Committee of the 12th International Congress of Arachnology. He has prepared a submission on the heritage value of Carrai Bat Cave in northern NSW for a Heritage Commission invertebrate sites registration project, and has assisted in preparation of a Museum statement on biodiversity. Dr Gray continues to supervise a master's and a doctoral student. Public programs participation included the Museum's 'Gargantuans' and MOTR exhibits.

Dr Bickel spent much time overseeing work on the forthcoming 'Gargantuans from the Garden' exhibit.

Dr McEvey was responsible for the M.Ag.Sci. Insect Taxonomy and Evolution course at the Department of Plant Pathology and Agricultural Entomology, University of Sydney, in the first semester of 1992. All practical sessions and some lectures were based at the museum. Together with some of his students, he is publishing the results of field work in NSW rainforests.

Dr McEvey edited a volume on evolution and species concepts, currently in press with Johns Hopkins University Press; it will be one of a two volume set to be released in December this year. Details were finalised with the publisher and with his colleagues at the Hawaii Evolution Conference in 1991. The work was carried out during the last 12 months.

David McAlpine has been called on by ecologists several times to identify insect pollinators of Australian flora. To expedite this work, he and Barry Day made a study of the hover flies (*Syrphidae*) from material in this Museum and the Australian National Insect Collection, Canberra. The resulting key to Australian genera is available for those



interested in pollination ecology or the insects themselves. Dr McAlpine also made specialist identifications for several Australian and overseas institutions. He assessed a PhD thesis and several grant applications, and refereed research papers for Australian and overseas journals.

Dr McAlpine assisted with text and illustrations for the Museum's exhibit on extinct and endangered species.

Mr Moulds was a guest speaker at Friends of Ku-ring-Gai Chase, spoke to the Museum Guides and gave several radio interviews. He served as Treasurer for the Council of Heads of Australian Entomological Collections.

### **Commercialisation**

A contract was secured with the Sydney Metropolitan Water Board to survey stream invertebrate fauna in the South Creek Sewerage treatment plant outfall near St Marys. Eren Turak has carried out this work under Dr Bickel's supervision.

## **MALACOLOGY**

### **Research**

Winston Ponder is investigating a group of freshwater snails which are unusual in that they are often extremely restricted in distribution. Species of these small snails are sometimes found in only a single stream or spring and consequently are potentially in danger of extinction through human activity. This research has attracted the interest of the ANPWS Endangered Species Program which has provided some funding to investigate these animals in a cooperative program with the Evolutionary Biology Unit. A large monograph dealing with 60 species of Tasmanian freshwater snails, most of them new to science, was completed and submitted for publication. Programs being carried out in association with Dr Don Colgan include the investigation of the genetic structure of freshwater snail populations in streams at Wilsons Promontory, Victoria, in artesian springs near Lake Eyre and at Dalhousie Springs in northern South Australia.

Dr Ponder's work on the phylogeny of gastropods in collaboration with Dr D. Lindberg (University of California, Berkeley) is well advanced with Dr Lindberg and Dr Ponder both giving papers at international meetings on this subject. Significant funding is being sought from ARC to fund future developments in this program.

Bill Rudman continued his research into aspects of the ecology and evolution of opisthobranch molluscs (sea-slugs). One major project nearing completion, is a monograph on the New Caledonian fauna being funded by ORSTOM, the major overseas research agency of France. Because the biology of the whole of the Pacific Ocean is so closely inter-related, these studies are providing information essential for the better understanding of our Australian marine fauna.

Corals and soft-corals are essential elements of the tropical marine environment. Dr Rudman is continuing his studies of sea-slugs which exclusively feed on reef-forming corals, including collaborative studies with scientists in Hawaii, Enewetak and the U.S.A.

### **Fieldwork, Meetings, Workshops**

Field work in eastern Victoria, particularly Wilsons Promontory, and the Otway Ranges was carried out in July by Dr Ponder. The Australian Society of Limnology meeting in Lorne was attended in July at which Dr Ponder gave a paper on speciation in streams. Further work was carried out at Wilsons Promontory in January and Dr Ponder also did collecting on the Franklin River and other parts of Tasmania (self funded) in that month.

Dr Ponder attended the Malacological Workshop in Hong Kong in April 1991.

Ian Loch and Dr Ponder attended the First International Chiton Symposium in Adelaide in December 1991.



## Collections

The dry collections have been relocated on the Mezzanine floor. Accessions included 9,700 lots. There were 14 exchanges (64 lots, 125 specimens). Loans included 1,051 lots (3,616 specimens). Donations were received from H. Blackburn (Australian shells), M.D. Gordon (Hong Kong shells), O.L. Griffiths (Mauritius shells), A.K. Hipkins (New Zealand shells), V. Kessner (Indonesian snails), R. Pittaway (Australian shells), M. Shea (Australian landsnails).

## Services to Science and the Community

Bill Rudman gave illustrated talks to various amateur dive clubs. He continued as Associate Editor (Invertebrates) of the Records of the Australian Museum, and reviewed manuscripts submitted for publication in other scientific journals in Germany, England, U.S.A., Hong Kong, New Zealand and Australia. He also reviewed grant applications submitted to the National Science Foundation (U.S.A.) and the Foundation for Research, Science and Technology (N.Z.).

Dr Ponder assisted the ABC's 'A Question of Survival' in producing a segment dealing with the conservation of the South Australian mound springs, which went to air in June. He also reviewed many manuscripts and NSF, ARC, and ABRS research grant applications.

## Other activities

To increase awareness of behind-the-scene activities in the Museum, Phil Colman (Malacology) took several MPs in April through two scientific areas (Malacology and Ichthyology) to show the important collections and research activities. These MPs were Michael Photios, Jim Longley, and John Ryan, also Amanda Davey, Research Assistant to the Environment Committee. Judging from the very enthusiastic response, especially from Michael Photios (by letter) the exercise was well worthwhile, and Phil plans to repeat it with as many other Members as he can contact.

## MARINE INVERTEBRATES (other than Molluscs)

### Research

Pat Hutchings, working with Jane McRae, has completed a revision of the Australian Aphroditidae, a group of marine worms commonly known as seamice and which are common in deep water; they have described several new species of this family. This study was supported by a grant from The Australian Bureau of Fauna and Flora.

Dr Hutchings has completed a study of the terebellid polychaetes of Rottnest Island, WA, which were collected during an International Marine Biology Workshop which was held at the island in January 1991.

Jim Lowry and Helen Stoddart continue their monographic study of the world lysianassoid amphipod genera. Most type species have now been illustrated and entered in the taxonomic data base DELTA. They anticipate that the work will be finished during the next 12 months. They also continue their studies on Indo Pacific lysianassoid amphipods.

George Wilson's field work concerns taxonomy and phylogeny of isopod crustaceans. A new genus, belonging to a new undescribed family and suborder of isopods, has been described in a paper in the Australian Museum Records that will appear later in 1992. Dr Wilson has evaluated all literature on the isopod suborder *Phreatoicidea* and all specimens in the Museum's collection for an ongoing study of the group. Dr Wilson's proposal to study the phylogeny and classification of the isopod suborder *Asellota* has been funded by the Australian Research Council. Two collections of deep-sea asellote isopods from the bathyal and abyssal Pacific Ocean have been sorted to species level taxa. These collections will provide useful data for the ARC funded research.

Steven Keable completed his MSc thesis "The scavenging, small marine invertebrates of Lizard Island, Great Barrier Reef, Australia". The project documents for the first time the ecological importance of small scavenging crustaceans in tropical reef environments.



## Conferences

J.L. Barnard, the greatest student of amphipod crustaceans, died in August 1991. Dr Lowry was invited to participate in the J.L. Barnard Memorial Symposium at the Smithsonian Institution. He gave two papers - one on Barnard's immense contribution to Australian science and one on the use of DELTA in crustacean taxonomy.

Dr Berents also participated in the J.L. Barnard Memorial Meeting.

## Fieldwork

Dr Lowry was invited by the French organisation Service Mixte Controle Biologique (SMCB) to participate in a cruise to the Austral Isles aboard the French Army vessel *Marara*. The Austral Isles are among the most remote island groups in the South Pacific. The aims were to make a collection of small scavenging crustaceans (in particular cirrolanid isopods, lysianassoid amphipods and myodocopid ostracodes); to make a set of shallow water collections in the lagoons or on the shoreline of the islands visited; and to look for specific amphipods among the plankton samples made for other purposes. This work compliments the field studies already completed by Dr Lowry and Mr Keable at Lizard Island, Great Barrier Reef and at Madang, northern Papua New Guinea. The results of this study will yield the first information on small scavenging crustaceans from the central Pacific region.

Dr Hutchings undertook a field trip of 2 weeks to the Houtman Abrolhos in May and was able to make substantial polychaete collections. This was a joint field trip with the Marine Department of The Western Australian Museum. While in the West, she also helped in the field work associated with a joint Australian Research Grant she has with several other workers. The project which is now in its second year is to investigate the role of the density of seagrass beds on the productivity of the seagrasses and associated fauna. The beds are artificially manipulated at various densities and the productivity of the seagrasses determined at varying intervals. The fauna of each of the treatments will be collected at the end of the study next year. Throughout Australia seagrass beds are being impacted by pollution and dredging operations and yet we know little of the impact this has on the fish communities which are dependent upon these beds during their juvenile stages.

A successful field trip was conducted to northern NSW in March 1992 to collect polychaete worms and peracarid crustacea. The trip was a joint trip for collection management (with Dr Berents), terrestrial and marine isopod research (with Dr Wilson) and polychaete research (with Dr Hutchings). More than 150 samples were collected from near Ballina and Coffs Harbour.

Dr Berents led members of the Australian Museum Society on a trip to Lizard Island.

## Collections

The bryozoan collection (wet, dry and slides) was curated and reorganised to give better access and improve storage conditions. Sorting of priority collections continued using volunteers and staff. The 1988 Western Victorian Expedition has been sorted to family, and the sorting of the 1983-84 Western Australian Expedition is almost completed. All registered crustaceans, and about one third of registered polychaetes have been entered onto TITAN. All new registrations are now performed on TITAN. Sixty-four loans were sent to museums and other institutions around the world. More than 3,000 lots of marine invertebrates were registered and added to the collections. Many more were accessioned without registration.

Professor G. Rowe of Texas A & M University is donating a large and important collection of North Atlantic deep sea amphipod scavengers. Dr Poupin of SMCB, the monitoring organisation for radioactive pollution in French Polynesia, donated an important collection of marine decapods from French Polynesia. The marine invertebrate collections were used by four overseas visitors and 24 visitors from within Australia.



## Services to Science and the Community

Dr Hutchings has been one of the editors of a special issue of *Marine Pollution Bulletin* on conservation issues in Australia which will appear in October 1992. She solicited papers on offshore oil drilling, monitoring programs, and the current status of the Great Barrier Reef as well as writing an article herself on the problems of species introduced by ballast water into the Australian marine environment.

Dr Hutchings organised one of the symposia at the 7th International Coral Reef Congress, held in Guam in June 1992. Over 20 papers on the impact and consequences of bioerosion of both modern and fossil reefs were given during this symposium.

Dr Hutchings is currently President of The Australian Coral Reef Society. Until January this year she was also Treasurer of The International Coral Reef Society and is President elect of this Society. She is also on the Editorial Board of *Marine Pollution Bulletin*. She serves on the Scientific Working Group on Ballast Water Discharge, which is organised by The Bureau of Rural Resources within The Federal Department of Primary Industries and Energy. Dr Hutchings is a member of The Faunal Editorial Committee of The Bureau of Fauna and Flora.

## Commercialisation

Dr Hutchings has just completed a 3 year study of the temporal and spatial patterns of the benthos in Jervis Bay and also a study of the epifaunal molluscs in 4 creeks which flow into the Bay. This study was funded by a contract from the Department of Defence to CSIRO Division of Fisheries. The findings of these studies have been submitted to the Department of Defence and represent the first long term studies of such communities in Australia. Dr Hutchings is now beginning the task of preparing these reports for publication in the scientific literature. The findings of her studies and the other studies carried out in the contract will be invaluable in the preparation of the Management Plan for the Marine Nature Reserve covering the southern part of the Bay newly declared by Australian National Parks and Wildlife.

Dr Hutchings together with Drs Wilson and Berents is co-ordinating Phase 1 of a contract with The Federal Airports Corporation. The contract is to determine the benthic and epifaunal communities at the sites which will be dredged during the construction of Sydney Airports Third Runway and to compare these with control sites in other parts of the Bay. To date one set of samples has been collected and these are currently being sorted and identified. The next sampling period is in late July 1992.

Collection management staff were heavily involved with commercialisation projects. Staff identified marine invertebrates for Kinhill Engineers Pty. Ltd., carried out a study of the benthos of the Parramatta River for the Department of Transport, and carried out a study of mangrove epifauna of the Parramatta River for the Department of Transport.

## FUTURE PLANS

- \* *computerisation of insect type holdings, involving about 10,000 specimens*
- \* *rehousing and upgrading the extensive New Guinea and Pacific beetle collection, which includes many type specimens*
- \* *relocation of the millipedes, centipedes, and peripatus to the Yurong Street annexe*
- \* *the Malacology collections are soon to be entered on DataEase for information retrieval.*
- \* *attendance at the 12th International Congress of Arachnology in Brisbane*
- \* *preparation of a proposal for World Heritage listing of the Nullarbor Plain*
- \* *initiating a New South Wales leaf litter sampling program*
- \* *"Innovative Science" project to develop computer graphics methods of imaging internal morphology*
- \* *work on the phylogenetic classification of several fly families*
- \* *a study of Australian lauxaniid flies and production of a handbook of Australian acalyptrate flies.*



## VISITORS

### Entomology and Arachnology

Dr G. Bornemissza, Tasmania  
Dr P. Brock, England  
Dr A. Calder, CSIRO, Canberra  
Dr P. Cochereau, ORSTOM, New Caledonia  
Dr A.C. Courtice, Tasmania  
Dr R. Cox, University of Guelph, Canada  
Dr E. Dexter, University of New England, Armidale  
Dr N. Gough, DPI, Brisbane  
Mr R. Lachlan, Tabubil International School, PNG  
Dr D.M. Lanfranco, University Austral de Chile, Valdivia  
Dr P. Maddison, DSIR, Auckland  
Dr P. McQuillan, DPI, Hobart  
Dr S. Miller, Bishop Museum, Honolulu  
Dr G. Nessim, Plant Protection Research Institute, Egypt.  
Dr A. Savill, Canterbury Museum, Christchurch  
Dr S. Shattuck, CSIRO, Canberra  
Dr J. Truman, ANU, Canberra  
Dr J.A.L. Watson, CSIRO, Canberra

### Malacology

Dr A.G. Beu New Zealand Geological Survey, Lower Hutt, New Zealand.  
Prof. R. Carter, James Cook University, Townsville.  
Prof. C. Hickman, University of California, Berkely, USA.  
Dr M. Hollmann, Salk Institute, San Diego, USA.  
Dr D. O'Foighil, Simon Fraser University, Vancouver, Canada.  
Prof. E. Vokes, Tulane University, New Orleans, USA.  
Dr F. Wells, Western Australian Museum, Perth.  
Dr B. Wilson, Department of Conservation and Land Management, Perth.

### Marine Invertebrates

Mr Bob Berridge, University of New England  
Dr Anne Bothwell, University of Papua New Guinea  
Dr Niel Bruce, Queensland Museum  
Dr Bertrand Richer de Forges, ORSTOM  
Prof. Barry Jamison, University of Queensland  
Dr Pat Mather, Queensland Museum  
Mr Tim O'Hara, Museum of Victoria  
Dr Gary Poore, Museum of Victoria  
Mr Rick Webber, Museum of New Zealand  
Dr Robin Wilson, Museum of Victoria



# MATERIALS CONSERVATION DIVISION

The Materials Conservation Division aims to prevent damage to the collections, conserve items of special importance, undertake research to increase the immediate and long-term preservation of the collections, and disseminate information on conservation methods.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *conservators begin work on natural history collections*
- \* *improvements to storage of Anthropology collections, both the Aboriginal & Pacific, continues*
- \* *conservation of new acquisitions to the Anthropology collections continues*
- \* *visit and advice given to Kimberly and Central Desert region Aborigines in Outreach program*
- \* *exhibition maintenance program continues*
- \* *improved access to Australian Aboriginal string figures*

## MUSEUM PEST CONTROL PROGRAM

Objects returning from loan, new acquisitions and infested objects are treated to prevent the introduction of insect pests to the collections. Detection of insect populations with new monitoring techniques in Anthropology collection storage areas is continuing and parts of the Natural History collection areas are now included.

## MUSEUM DISASTER PLAN

The museum's disaster plan underwent a thorough update in the past year incorporating the changed locations and priorities of various departments. Groups of collection managers attended training courses on the recovery of photographic and paper-based archives.

## ANTHROPOLOGY STORAGE PROJECT

Storage conditions in both the Aboriginal and Pacific collections continued to be improved. Amongst the projects carried out in the Aboriginal collection were: mounting and supporting of canoes, baskets, flat textiles and repackaging of widow's caps and other funerary material. In the Pacific collections house models, mourning capes and beaded and feathered items were amongst those dealt with. The 12 x 20 metre Tongan Opera House barkcloth was rolled and supported on trolleys. A condition survey of mats and other textiles was completed on both collection groups.

## CONSERVATION OF COLLECTIONS

Conservators have started looking at the natural history collections (biology and geology) over this last year. They have been working with the collection managers in the following areas to look at the preservation problems: mammals, ornithology, entomology, ichthyology, marine invertebrates and malacology. Some storage mounts have been devised and appropriate storage systems have been recommended for the dry-stored collections. This project will continue for the following year.

A paper on the techniques developed for the safe storage of the Marind Anim collection (rare and significant objects from Irian Jaya) is awaiting publication. Analysis work is continuing on the identification and treatment system for the resinous material binding the body sections. Treatment is expected to commence in December, 1992 on this highly decorative seed/resin material.

Under the ongoing new acquisition program, inspection, documentation and manufacture of storage systems has been carried out on over 800 incoming objects for the anthropology collections. Information has been directly entered onto the conservation computer database. Storage systems have been made for all objects requiring immediate attention, with emphasis being placed on accessibility of the object. Modern materials used in the manufacture of new acquisitions have been noted and this list is updated continuously. This will allow us to determine any preservation problems with these new materials.



A survey of mats in the Pacific collection has been completed. A program has been developed for the creation of safe storage facilities for flat mats and textiles in the collections. Volunteer assistance has helped this program progress and will continue to do so for the next two years.

The exhibition maintenance program has continued as per schedule with the closure of the Indopacific gallery being carried out. The success of the program was noted by the improved condition of objects in the Abelam and Aboriginal galleries where maintenance was carried out for the second time. A list of objects in the public display areas has been finalised and updated with other information on the database. An emergency maintenance system within the program has been set up to attend to any immediate problems that arise outside of the schedule.

Around 60 artefacts from the Anthropology collections were prepared and packed for loan to 11 institutions and community groups in NSW, Queensland and the Northern Territory. Costs of time and materials were recovered where appropriate. Incoming loans of 95 objects were received for temporary exhibitions "Luk Luk Gen" and "The Living Mask". These were checked on arrival and their condition monitored whilst on display.

192 string figures from the Australian Aboriginal collections were documented for condition. A treatment method was devised to ensure their preservation and this treatment has been completed for over half of the figures. The majority of the figures now have an individual storage mounting system which has been designed to allow for their easy access and safe storage. A method for mounting the string figures for exhibition has also been developed.

#### RESEARCH ON PAINTED ARTEFACTS

Finalising the tests for the identification of traditional binding media used for the manufacture of Australian Aboriginal painted objects is now almost complete. Surveying the collections and relating this to consolidation techniques (techniques for preserving the painted decoration) will allow greater efficacy of future treatments.

#### ENVIRONMENTAL MONITORING

The Material Conservation Division maintains a computer monitor network of sensors for relative humidity and temperature throughout the Museum. This has been expanded to include the Temporary Exhibition area with an outside sensor point coming on line by the end of 1992.

#### INFORMATION MANAGEMENT

The Division's database was upgraded and reorganised to make its use easier and more efficient. The recording of basic information about objects and their treatment was reorganised to improve consistency, reduce repetition of tasks and to make previously recorded data more readily available.

#### OUTREACH CONSERVATION

Aboriginal arts centres in the Kimberley and Central Desert regions have been visited to assist in advising the communities on preservation and transport methods for their art products. Seminars on the preservation of this material have been held in Adelaide and Sydney for the conservation and curatorial community. A preservation seminar for Aboriginals in charge of keeping places was held in Materials Conservation Division prior to 'The Future of Australia's Dreaming' conference held at the Australian Museum in April.

#### FUTURE PLANS

- \* *conservation assessments to be carried out for two areas within the natural history collections*
- \* *appropriate packing guidelines to be devised for the safe transport of fragile museum specimens and objects*
- \* *to investigate the efficacy of freezing on museum pests and its effect on museum objects*
- \* *to continue the outreach program with visits to Aboriginal Keeping Places in NSW*
- \* *to continue to upgrade the storage of the Anthropology collections*
- \* *the new acquisition and exhibition maintenance programs are also to continue*



# VERTEBRATE ZOOLOGY AND SCIENTIFIC SERVICES DIVISION

The aim of the Division of Vertebrate Zoology and Scientific Services is to conduct research and provide information on the systematics, ecology and behaviour of Australian vertebrates (fishes, amphibians, reptiles, birds and mammals) and their relatives from other areas. The Division is also responsible for maintaining and enhancing the collections of these animal groups and information about them. The Division also includes the Evolutionary Biology unit which conducts research and provides services to all other scientific Divisions in the Museum.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *rediscovery of Bulmer's Fruit Bat (Aproteles bulmerae), previously thought to be extinct*
- \* *completion of study of the endangered Scott's Tree-kangaroo*
- \* *the success of the project studying the molecular evolution of fruit-bats*
- \* *the frozen collection has been placed in a racking system to increase specimen accessibility and security*
- \* *completion of Street Science, the first ever long-term exhibition on the kind of Science done in the Museum*
- \* *completion of consultancy for NSW National Parks and Wildlife Service to identify the threatened herpetofauna of Western New South Wales*
- \* *introduction of photomicrography facility, contributions to upcoming exhibition Gargantuans from the Garden*
- \* *introduction of computer imaging facilities*
- \* *Research Grants received totalling over \$200,000*
- \* *Fisheries Research and Development Committee funded research attempts to determine the number of gemfish breeding stocks and ocean perch species*
- \* *Collection manager in fishes attended the International Symposium on the Preservation and Conservation of Natural History Collections in Madrid*
- \* *an Australian Research Council grant to Jeff Leis on the taxonomy and systematics of lutjanid larvae renewed*
- \* *several scientists and technical staff participated in environmental surveys relating to commercial projects*
- \* *publication of 32 scientific and popular articles*
- \* *W. Boles presented paper on Australian Tertiary birds at international conference in Germany and participated in major conference on collection management in the United States*

## EVOLUTIONARY BIOLOGY UNIT

### Research and Scientific Services

The Evolutionary Biology Unit services the Museum's requirements for biochemistry, histology and electron microscopy. It also curates the Museum's extensive frozen tissue collection which represents a library of the genetic resources of a wide range of wildlife. The experimental services offered by the Unit are extensively utilised by other sections of the Museum and by outside individuals and organisations. Collaborative studies now underway include the identification of species and/or investigating the relationships between species in groups as diverse as bats, skinks, gemfish, cockroaches and freshwater snails.

### Histology

This year there has been a continued growth in the routine use of histology. A notable addition is a retracting microtome which can cut thinner sections than before from samples that have been embedded in plastic or wax supportive media. During 1991-92, the laboratory has provided facilities for research on snails and fish and will, in future, further aid in the investigation of the structures of these and other animals.



## **Protein Electrophoresis**

Electrophoretic studies completed during the year include investigations of Wilson's Promontory freshwater snails with W. F. Ponder (Malacology) and skinks (with R. Sadler, Herpetology). Studies continue on the freshwater snails of South Australian artesian springs (W. Ponder), gemfish and ocean perch (with J. Paxton, ichthyology), giant cockroaches with (H. Rose of Sydney University) and bats of New Guinea and the Pacific Islands (T. Flannery).

## **Molecular Biology**

Studies of the molecular phylogeny of the fruit bats utilising rDNA have made very good progress. This sub-order provides few morphological clues to its evolutionary history so that the collaborative investigation (with T. F. Flannery of Mammalogy) of DNA fingerprints will have a major impact on understanding of bat systematics. To date, in a nearly-completed, very-large scale study over 100 bats from 35 taxa have been fingerprinted. Analysis of this data set has now commenced.

## **Conferences**

Don Colgan attended the 38th Annual Meeting of the Genetics Society of Australia at Monash University, in July, 1991.

## **Collections**

The frozen tissue collection was again substantially increased this year, with over 2,000 new samples being added. These are comprised primarily of mammals from the Pacific Islands collected by T.F. Flannery and his colleagues, reptiles, particularly New Caledonian skinks, deposited by Herpetology and gemfish, ocean perch and other fish collected by Ichthyology. Other notable additions include bugs and cicadas from entomology.

Peter Egger was employed to continue the physical organisation of the collection in the ultra-cold freezers in which it was stored. The racking of the collection is now completed, thanks to his endeavours. Specimens can now be retrieved with a minimum of exposure to thawing of themselves or other tissues.

## **Community and Museum Activities**

Most work in the Unit is in collaboration with other sections in the Museum. In addition to the work with other Science Sections detailed above, there are a number of other contributions from the Unit. The Unit contributed significantly to the Endangered Species exhibition and spent many hours preparing images for the Street Science travelling exhibition. Both Geoff Avern and Don Colgan participated in the 'Director for a Day' program. Both the SEM and Biochemistry laboratories were opened for Open Day, with Geoff and Don giving 6 half-hourly talks each. The Unit hosted three work-experience students during the year.

## **HERPETOLOGY**

### **Research**

Allen Greer's limited amount of research this year (due to his participation in the Museum on the Road exhibition on Science in the Museum) was spent on projects dealing with: asymmetry (when the left and right sides of an animal don't match) of lizards and snakes; limb reduction in lizards and snakes, and a book on the biology and evolution of Australian snakes.

Ross Sadler's research time was largely given over to gathering distributional data for the consultancy on threatened herpetofauna of western New South Wales. The results of field collections and preliminary lab analysis of a widespread species of rainforest skink showed it to comprise several taxa, significantly changing previous concepts of the species' distribution and conservation requirements.



## Conferences

Ross Sadlier was an invited speaker at the 17th Pacific Science Congress in Honolulu, and attended the annual meeting of the Australian Society of Herpetologists in Armidale, NSW.

## Fieldwork

Ross Sadlier collected in northern New South Wales rainforests; Ross Sadlier with Glen Shea (Sydney University) and Arnold Kluge (University of Michigan, Michigan) in mid north coast rainforests; R. Sadlier and A. Bauer (Villanova University, Pennsylvania) in New Caledonia.

## Collections

The following progress was made in relation to the collection: Specimens registered - 1443, major acquisitions - approximately 300 specimens from National Parks and Wildlife Service rainforest survey in northern New South Wales, approximately 200 specimens from New Caledonia and 200 from Groote Eylandt, Northern Territory. Verification of identification of approximately 9000 specimens during 1991 -1992.

A total of 32 loans (25 to other institution and 8 for the section) comprising 2449 specimens were processed in 1991-92.

## Community and Museum Activities

Allen Greer's community activities included: lectures on reptiles to the ACT Herpetological Society, the Australian Herpetological Society, the TAFE "Applied Herpetology" course, and to the general public on Museum Open Day. He also gave ABC radio interviews on sea snakes and cane toads, and reviewed material for 'Australian Geographic', 'People', 'Readers' Digest', and 'Der Spiegel'. He was also appointed a Councillor for the 'Australian Journal of Zoology'. Ross Sadlier gave an Open Day presentation of the herpetology laboratory, and a tour of the lab and its facilities to the Australian Herpetological Society.

Allen Greer's Museum activities included: chairmanships of the Animal Care and Ethics Committee and the Peter Rankin Trust Fund for Herpetology; associate editorship (vertebrates) for the 'Records of the Australian Museum'; Scientific Officer on the project team for the Museum on the Road (MOTR) exhibition on Science in the Museum; manager of the Museum's toxic waste disposal program, and convenor of the Wednesday lunch for scientific research staff; writing for 'Muse'; scientific seminar on 'Asymmetry in Reptiles'; participation in 'Director for a Day' program.

Ross Sadlier contributed to the Australian National Parks and Wildlife Service/World Wildlife funded Reptile Action Plan headed by Dr Cogger, a project aimed at identifying the threatened Australian reptile species.

## Work Experience

The section oversaw two work experience students: Ms M. McGee and Mr J. Kovaks.

## ICHTHYOLOGY

### Research

Jeff Leis, Doug Hoese and Tom Trnski completed a paper describing for the first time the bizarre larvae of the toothpick goby family (*Xenisthmidae*). Jeff completed a major review paper on the ecology of the larvae of coral reef fishes published in a book titled 'The Ecology of Fishes on Coral Reefs' edited by P.F. Sale. Other major research efforts of Jeff were on identification of lutjanid larvae with Sally Reader and Krysia Lee (ARC grant); ecology of larvae of coral reef fishes in the vicinity of atolls in the Coral Sea with Howard Choat of James Cook University; ecology of larvae of surf zones of Sydney Beaches with Sally Reader; and ecology of larvae of coral reef fishes in



French Polynesia with Tom Trnski and several French investigators.

During the next year, Jeff plans to travel to South Africa at the invitation and expense of Foundation for Research and Development of South Africa to engage in collaborative research, present a series of lectures and workshops. He will continue with ARC-sponsored research on taxonomy and phylogeny of lutjanids as revealed by larval ontogeny. He plans to present a paper on larval fish populations in Coral Sea atoll lagoons at symposium on reef fish recruitment to be held at Annual Meetings of the Australian Marine Sciences Association in Perth. He also plans to complete a study on larval fishes in Sydney-area surf zones.

John Paxton, with Don Colgan of our Evolutionary Biology Unit, has initiated a study of the biochemical genetics of gemfish and ocean perch. The two year project, funded by the Fisheries Research and Development Corporation, is attempting to determine if separate breeding stocks of common gemfish are identifiable to aid fisheries management; the taxonomy of the commercially important ocean perch is also being studied. Research on deep sea whalefishes is continuing.

Doug Hoese and John Paxton began work on the second fish volume for the Zoological Catalogue of Australia, with funding from the Bureau of Flora and Fauna. Doug also began a study with a visiting scientist, Dr K Cole; a study of sex reversal in Australian gobioid fishes.

### Conferences

Mark McGrouther attended the international Symposium on the Preservation and Conservation of Natural History Collections in Madrid, May 10-15, 1992.

Jeff Leis, Mark McGrouther, Sally Reader and Tom Trnski attended the Australian Society for Fish Biology annual conference and larval fish workshops in Hobart, 23-26 August, 1991. Jeff Leis presented one paper, co-convened with Tom Trnski a workshop on larval illustration techniques, and gave the summing up for the larval fish biology workshop.

Doug Hoese and Mark McGrouther attended the Future of Australia's Biological Collections conference in Canberra, 11-13 November, 1991.

John Paxton attended the 7th European Ichthyological Congress in The Hague, Netherlands and presented a paper on the reproductive biology of whalefishes.

### Fieldwork

Sally Reader and Doug Hoese participated in an ongoing environmental survey of Botany Bay for the Sydney airport third runway project and Sally spent 12 days at Lizard Island assisting Dr Kassi Cole, a visiting research scientist. Tom Trnski participated in an environmental survey for the Waterboard at South Creek, western Sydney.

### Collections

The Fish collection was heavily utilised and we continue to improve the efficiency of collection maintenance. A total of 145 loans and exchanges were sent out (1401 lots and 9750 specimens). Registration of fishes totalled 5800 lots (11,363 specimens). The collection now contains 109,778 lots and approximately 470,490 specimens. All type specimens were rebottled due to problems with the old jars. All specimen storage drums in the spirit house have been relabelled with a more accessible and secure labelling system. These 'drum' fishes are now being entered into a new database to increase the ease of locating specimens. Considerable progress was made in processing of the backlog.

The section has continued to improve the computer record system. The Section arranged for the production of tractor fed, perforated laundry tag paper which is used in the printing of specimen labels for wet collections, saving considerable time and paper. A new database was made to automatically keep a record of entries into the main fish



database to facilitate easy annual report generation. In total, 114 station records were entered into PIP (DBase customised field registration system) offsite, and downloaded into Titan (database used for registration) at the museum. Many new macros were set up in Titan to speed the production of common printing jobs. A menu driven procedure was set up to streamline loan production. Technical staff now have the facility to print specimen labels in the Spirit House. A volunteer (M. Driver) has entered all the records for loan material on loan to Australian Museum Ichthyologists in an incoming loans database. Numerous procedures, software and programs were written to simplify and improve data input, output and communication.

## **Travel**

Mark McGrouther attended a Titan Developers course in Melbourne, 7-8 Oct 1991. John Paxton worked on deep sea fishes in the Zoological Museum, University of Copenhagen; Natural History Museum, London; Institute of Oceanographic Sciences, Wormley; Institute for Sea Fisheries, University of Hamburg; Moravian Museum, Brno; University of Lisbon; Fisheries Institute, La Rochelle; National Museum of Natural History, Paris; and the Smithsonian Institution, Washington, D.C. Jeff Leis visited Japan with Sally Reader on Australian Research Council funds to study larval fish collections in Tokyo, Miyazaki and Kagoshima. He presented a seminar in Tokyo to a select group of ichthyologists including His Majesty, Emperor Akihito.

## **Community and Museum activities**

John Paxton gave lectures on deep sea fish and fisheries to fishing and aquarium clubs and a group from the Royal Australian Navy. Information was also given to newspapers, radio and television. Papers were reviewed for scientific journals and applications for grant giving bodies. He began as Assistant Editor (Vertebrates) for Records of the Australian Museum and continues on the editorial boards of Indo-Pacific Fishes and Cybium (Journal of the Ichthyological Society of France).

Jeff Leis and Sally Reader had a panel in the new MOTR exhibit. Jeff was responsible for coordinating Lizard Island Fellowships and other Lizard Island matters. He also served on the following major Museum projects: Research and Development committee on Research; Report on Science (Chair); Commercialisation Procedures; Museum submissions on all Great Barrier Reef Issues.

The following staff participated in tours for approximately 100 visitors during museum open day: D. Hoese, J. Leis, J. Paxton, and T. Trnski. S. Reader and T. Trnski prepared the display materials.

Mark McGrouther participated in the Investigation Centre project team, Sydney's kids, Research and Development communication group, marketing course, talk to a TAMS group, and was elected as a staff representative on the TAMS council. Commercial Resolution of Administrative Procedures committee, the Corporate Identity Project Team, the design of interactives for the Discovery Space, talked to students from Canberra University, tours for students from Australian Science and Industry Association summer school groups and Museum Studies students. In addition, he continues to take a major role in museum-wide collection computing. One day per week used for system support and development for Titan/Xenix users.

Mark McGrouther, Sally Reader and Tom Trnski attended the Museum's Public Speaking Course.

Doug Hoese, Mark McGrouther and John Paxton attended the Science Workshop in Katoomba, 28-29 November, 1991.

The following staff participated in the Director for a Day program; D. Hoese, J. Leis, M. McGrouther, J. Paxton, S. Reader and T. Trnski.

Tom Trnski continues to edit the Australian Ichthyoplankton Newsletter.



The following six work experience students were supervised throughout the year, P. Boardman, P. Ettinger-Epstein, S. George M. Halliwell, B. Lake and D. Prior.

The Section raised \$1848 in commercial funds, by specimen identifications, insert sales and computer database searches.

## MAMMALOGY

### Research

Rediscovery of Bulmer's Fruit Bat (*Aproteles bulmerae*), previously thought to be extinct. During the registration of the 1,800 specimen backlog a skull of Bulmer's Fruit Bat was found by Alex Szalay. It had been collected in 1984, seven years after the species was thought to have been exterminated. This discovery prompted an expedition to Papua New Guinea in May (funded largely by Ok Tedi Mining) during which a small remnant colony of approximately 137 individuals was located. Tedi has expressed interest in support of the program.

Completion of study of Scott's Tree-kangaroo (*Dendrolagus scottae*). This endangered species was first described by Tim Flannery in 1990. A study of its ecology has been underway since 1989, and was completed in late 1991. Enough is now known of the species to implement a management plan. This is being prepared, and the Papua New Guinea Department of Environment will take over the project from here.

Ecological study of a new species of Monkey-faced bat (*Pteralopex sp.*) discovered in 1989 during the Section's Southwest Pacific Mammal Survey has now been completed. Previously known by a single specimen, it is now known to be restricted to two islands in Solomon Island's Western Province, and has probably become extinct on a third in recent times. Abundant data on roosting sites, diet and reproduction are currently being analysed for publication.

Completion of the first ever mammal survey of North Moluccas (Indonesia), which resulted in many new discoveries. Preliminary analysis indicates that one possible new genus of rat, and 6 new species or subspecies of other mammals have been found. Over 20 mammal species were recorded in the area for the first time.

Over the past year the Section has continued to focus on completion of the Mammal Survey of the southwest Pacific. This is a 5 year project, initiated in 1989. We are on target, with only parts of Papua New Guinea, Indonesia, Palau and New Caledonia to survey. We have also been carrying out ecological and conservation studies of endangered species in the region. Three species have been targeted this year: Scott's Tree-kangaroo (*Dendrolagus scottae*), Bulmer's Fruit Bat (*Aproteles bulmerae*) and the New Georgia Monkey-faced Bat (*Pteralopex sp.*). All of these studies have been successfully completed. Our Australian work has also progressed, with Dr Harry Parnaby, Research Associate, carrying out an important survey of mammals in the northeastern forests of NSW. This area is scheduled for logging of old growth forest, so Dr Parnaby's work is of more than academic interest.

### Field Work

Linda Gibson was invited by New South Wales National Parks and Wildlife Service to participate in a faunal survey carried out in the Western Division of New South Wales. The aim of the project was to assess the vertebrate fauna in an area where applications for clearing the vegetation were pending. The first trip, in October 1991 was a joint effort between National Parks and Wildlife Service, Western Lands Commission and the Museum. The second trip was carried out in April 1992.

There were 15 species of native mammal either trapped or seen. Three of these are listed in the National Parks and Wildlife Act Schedule 12 as Vulnerable and Rare species. The resulting report when presented to the Western Lands Commission will, for the first time present recent faunal survey results and their interpretation as a basis for habitat conservation in the Western Division of New South Wales.



## Collections

The entire historic backlog of 1,800 specimens has now been dealt with. It was found to include many important scientific specimens, including extinct species, Bulmer's Fruit Bat, and many specimens of great historical significance.

Our backlog of database entries has been cut from approximately 2,000 to 500, thanks to assistance from Tina Goh, Division Secretary, and volunteers.

The specimens from an important Australian-American Museum expedition were, according to a 1962 publication, supposed to have been split between the Australian and Smithsonian Museums. The Australian Museum never received its material. Arrangements have now been made for this small but valuable collection to be dispatched to us.

The move of the mammal skin, skull and skeleton collection from the spirit house to the new mammal collection area, has commenced. The dry specimens will be rehoused by early 1993. A new compactus has been constructed in the old Ornithology area. The move, along with a full inventory and database check, has already begun, and several thousand specimens have already been relocated. Eight new storage cabinets were purchased as part of the move process.

Approximately 1,800 specimens were acquired during the year, including an invaluable collection of approximately 500 mammals (mainly bats) from northeastern New South Wales co-ordinated by Dr Harry Parnaby. These have been obtained as a result of large scale faunal survey work being carried out in the north of the State. These specimens represent a significant increase in our knowledge of the distribution of a large number of important mammal species in New South Wales.

## Community and Museum Activities

Linda Gibson continued to attend monthly meetings of the Landscape Conservation Committee of the National Trust. She also gave talks to the National Parks Association of New South Wales, the Wildlife information and Rescue Service, and sat on a selection committee for the National Parks and Wildlife Service.

Linda gave interviews on the subject of whales to a number of radio stations including 2BL, 2GB and 2UE.

Tim Flannery gave a large number of media interviews and public lectures during the year. He also completed a documentary program on tree kangaroos, to be aired on the ABC later in 1992.

## ORNITHOLOGY

### Research

Walter Boles spent most of his research time on Tertiary fossil birds, particularly on the early Passeriformes (songbirds) from Riversleigh, northwest Queensland. This order comprises over 50% of living birds, yet its early evolutionary history remains unknown. The Riversleigh deposits contain some of the earliest and most diverse remains of this group. Walter presented a paper at the 3rd International Symposium of the Society for Avian Palaeontology and Evolution discussing his preliminary findings on the Riversleigh songbirds, including the description of the earliest known lyrebird *Menura*. This paper will appear in the proceedings of the meeting. Two papers resulting from his research on fossil birds were published during the year and three manuscripts are in press.

### Conferences

Walter Boles attended two major overseas conferences. The annual meeting of the Society for the Preservation of Natural History Collections was held 2-6 June 1992 in Lincoln, Nebraska, United States. Walter participated in a workshop updating health and safety standards, and a workshop on controlling insect pests in natural history collections.



The 3rd International Symposium of the Society for Avian Paleontology and Evolution was held 22-26 June 1992 at Frankfurt, Germany, where Walter presented a paper. In association with the meeting, he visited the Jura Museum, Eichstätt, and in the process examined an *Archaeopteryx* specimen.

Walter Boles attended the Future of Australia's Biological Collections conference in Canberra, 11-13 November 1991 and took part in a conservation course on photographic materials.

### Fieldwork

Due to extensive duties relating to Terrestrial Vertebrate Collection Management Walter Bole's fieldwork was limited to two one week trips within the state: Coolangubra State Forest and environs, southeast NSW, in conjunction with the Museum's Terrestrial Ecology section and the Forestry Commission's Wildlife Ecology section (4-13 Nov. 1991); and Pilliga State Forest, with Dr J. Shields of Wildlife Ecology, Forestry Commission (16-22 Feb. 1992).

### Collections

The curatorial program was dominated by reorganisation following the major moves of the main and off-site bird collections to new accommodations. Other curatorial activities were made possible with temporary assistance and could not have been achieved otherwise. The spirit collection was inventoried and almost completely rebottled and reordered. The final move of these specimens has been delayed awaiting the shift of fish collections from the Bird Lab. Ongoing registration of the Bettington-Hyem Egg Collection continued and these specimens were integrated with the main egg collection held at off-site storage. This collection has been largely reorganised after its randomisation during the two previous moves. Inventory of the foreign mounted specimens held off-site commenced. Further refinements of the collection database were made.

Important specimens were obtained from the Scott bequest fieldwork of Tim Flannery and his colleagues in the southwest Pacific, further expanding the Museum's important spirit collections from this area. Other major donations came from New South Wales National Parks and Wildlife Service, Taronga Zoological Park and Wildlife Information and Rescue Service. Over 200 South American specimens were received in exchange from the Fundação Museu de Ornithologia, including representatives of some of the few families lacking from the collection.

The number of specimens processed was less than desired, mainly because of reduced temporary assistance, demands for reorganisation of the main and off-site collections, expanded managerial duties of Walter Boles, including involvement in the preliminary stages of the Mammal collection move, and his time away from the Museum while overseas. Nevertheless, 1274 specimens were registered and more than 40 outgoing loans were processed.

### Community and Museum Activities

A panel in the new MOTR exhibit discussed Walter Boles' recent discovery of a Night Parrot specimen and the role of serendipity in science; he participated in the associated 'Meet a Scientist' program. He spoke to a meeting of the Wildlife Information and Rescue Service and conducted interviews for radio and newspapers; reviewed books for Australian Natural History and other publications and refereed manuscripts for several scientific journals; led a TAMS trip to the Northern Territory; and acted as Director for a Day on several days; and attended the Science Workshop in Katoomba, 28-29 November 1991.

Walter continues as a member of the Taxonomic Advisory Committee of the Royal Australasian Ornithologists Union, the committee of the Australian Bird Study Association, and the Museum's Animal Care and Ethics and Disaster Management Committees. He did a number of identifications of birds on behalf of Customs, National Parks and Wildlife Service and the police in relation to smuggling and other criminal cases.



## FUTURE PLANS

### Evolutionary Biology Unit

- \* *to continue expansion of the frozen tissue collection and computerise data relating to the its specimens*
- \* *to increase the use of DNA sequence data in studies of molecular systematics, concentrating on the relationships of insects and their allies*
- \* *to continue the provision of high quality research skills to biochemical, microscopical and histological problems*
- \* *to continue to seek grant funds to support research*
- \* *to complete the Mammal Move and add significant items to the collection*
- \* *to improve computer registration used within the Division*
- \* *to complete several scientific studies on vertebrate animals*

### Herpetology

- \* *to increase the skeletal and frozen tissue collections*
- \* *to proceed with the ongoing program of specimen verification and curation of the existing collection*

### Ichthyology

- \* *to continue to provide services to visitors and users of the collection*
- \* *to assess and process the backlog where appropriate*
- \* *to increase commercial projects*
- \* *to improve access to and reliability of electronically stored data*

### Mammalogy

- \* *to have completed surveys in most of Papua New Guinea, Palau and New Caledonia by mid 1993: the remaining parts of Eastern Indonesia and Papua New Guinea will be surveyed in the final year of the survey, and results will be published in a book Mammals of the Southwest Pacific Islands, which will be complete by 1994*
- \* *to continue to build the collection, concentrating on obtaining specimens of the few Australasian species we lack, either through fieldwork or exchange*
- \* *to improve the breadth of the collection, improving the skeleton, spirit and frozen tissue collection*

### Ornithology

- \* *to finish reorganisation of skin collection and labelling of cabinets*
- \* *to complete move of spirit collection*
- \* *to finish reorganisation and inventory of off-site storage*
- \* *to improve the standard of working areas by renovating offices, collection areas and laboratory area*
- \* *to establish dermestid colony for use by terrestrial vertebrate skeleton preparation*

## ACKNOWLEDGEMENTS OF COOPERATION/DONATIONS

Significant collections of reptile and amphibian specimens were received from: Harry Hines, David Milledge and Sandy Gilmore, New South Wales National Parks and Wildlife Service and Dr Michael Mahony, University of Newcastle. Madge Milston again performed the invaluable task of stringing Herpetology registration tags.

Individuals from New South Wales Fisheries, CSIRO Fisheries, Bureau of Rural Resources, Tasmanian Fisheries and New Zealand Fisheries, as well as individual fishermen, were most helpful in the supply of gemfish for our studies.

Four very important collections of fish larvae were received: from the wester north Atlantic donated by Dr M. Fahay, US National Marine Fisheries Service; from the western Indian Ocean donated by Dr W. Richards, US National Marine Fisheries Service; from the eastern Indian Ocean by Dr K. Janekarn, Phuket Marine Biological Station; from the western Pacific from Drs M. Okiyama, University of Tokyo and Dr T. Ozawa, Kagoshima University.

Mr M. Ellis spent time at the museum installing and demonstrating an environmental resource and mapping system. Mr K. Graham donated fishes collected by FRV Kapala.

Dr J. Cayley donated a collection of fishes from One Tree Island. Dr G. Allen donated a large collection of colour slides of fishes from Bali and Flores Island.



Again, this year the Evolutionary Biology Unit has benefited from the great generosity of the late Ken and Yasuko Myer which has enabled the Unit to purchase the retracting microtome, a spectrophotometer and an iso-electric focusing apparatus.

Valuable mammal specimens were received from the following organisations: New South Wales National Parks and Wildlife Service, Australian National Parks and Wildlife Service, Taronga Zoo, the University of Sydney, CSIRO Division of Wildlife and Ecology, ORRCA and WIRES.

## **VISITORS**

### **Herpetology**

Dr A. Allison, Bishop Museum, Hawaii  
Mr T. Annabel, Avondale College  
Ms J. Baker  
Dr A. Bauer, Villanova University  
Mr S. Blomberg, University of Sydney  
Mr J. Cann, La Perouse  
Prof. C. Gans, University of Michigan  
Dr A. Georges, University of Canberra  
Dr K. Henle, Universitat Frankfurt, Germany  
Mr G. Johnston, Flinders University  
Prof. A. Kluge, University of Michigan  
Mr M. McCoy, Honiara, Solomon Islands  
Mr K. Qualls, University of Sydney  
Prof. A. Thorn, Australian National University  
Mr T. Ward, James Cook University of Northern Queensland  
Mr J. Webb, University of Sydney  
Dr P. Willis, Macleay Museum, University of Sydney

### **Ichthyology**

J. Caira, University of Connecticut  
Dr K. Cole, Bishop's University, Quebec  
M. Ginter, Warsaw University  
Dr B. Goldman, Yapp Research Centre  
L. O'Ozouville, France  
S. Plane, University Perpignan, France  
Dr J. Randall, Bishop Museum, Hawaii  
Dr B. Salvat, University Perpignan, France  
Dr A. Vincent, Cambridge University

### **Mammals**

C. Groves, Australian National University  
A. Keast, Queen's University  
Dr J. Kingdon, Oxford University  
G. Morren, Rutgers University

### **Ornithology**

Yuri Starikov, St Petersburg  
Ted Cable, Kansas State University  
Jim Dick, Royal Ontario Museum



# LIZARD ISLAND RESEARCH STATION

Situated in the pristine waters of the Northern Great Barrier Reef, the Lizard Island Research Station provides housing and Research facilities for scientists and educational groups. The station's primary aims are to encourage high quality research leading to an understanding of tropical marine ecosystems and to foster education on that topic.

## ACHIEVEMENTS/HIGHLIGHTS

- \* *research and educational usage increased by 10%*
- \* *Raymond E Purves wet laboratory constructed*
- \* *renovations to old laboratory completed*
- \* *visitor display erected*
- \* *new vehicle and dive compressors purchased*
- \* *donation of diving gear from Apollo Sports Co received*

Usage of the station increased sharply this year, with 3,056 user days compared with 2,778 last year. The users comprised members of visiting educational groups as well as scientists and their assistants. The number of research projects carried out during the year also increased, from 36 to 49. The projects cover a wide range of scientific enquiry, including geological evidence of past sea levels, investigations of coral reef processes and many studies on the biology and ecology of reef fishes and invertebrates.

The RV SUNBIRD has had another successful year under management of Lois Wilson and Terry Ford, with much of its time being spent on research and monitoring in Torres Strait.

Construction of the Raymond E Purves Laboratory this year provides much needed space for messy work such as dissecting fishes and sorting samples. Renovation of the old laboratory building also increased the amount of effective lab space.

Information for casual visitors to the station was improved with the erection of a display about the Great Barrier Reef and the station's work. A new 4wd vehicle and two new scuba compressors were purchased this year to replace old ones. Funding for these expensive items was obtained from the Lizard Island Reef Research Foundation. A generous donation of scuba and snorkelling gear was made by Apollo Sports Co Ltd. The station now has high quality gear available for hire, which has proved particularly useful to researchers from overseas and to educational groups.

## FUTURE PLANS

A development plan for stage 111 of the Lizard Island Research Station was drawn up this year, covering developments to 2007. The estimated cost is \$2.8 million.



# THE AUSTRALIAN MUSEUM SOCIETY

The Australian Museum Society exists to maintain an association between the Museum and the community by encouraging a greater awareness of the purpose and function of the Museum, increasing understanding of our natural environment and cultural heritage, and assisting the Museum financially.

This year the Society reported record attendances at over 120 activities : these were as diverse as the well-publicised and lively debate **Out of Africa** with Alan Thorne and Colin Groves debating the origin of modern humans; David Attenborough's exploration of the natural world with charming anecdotes and breathtaking visual images; and **Raising Archie**, a luncheon talk by Richard Morecroft on his book of the same name.

The reputation of the **Science Super Series** continued to grow, with lectures by Dr. Peter Raven from the Missouri Botanic Gardens and Professor Phillip Tobias from the University of Witwatersrand, Johannesburg.

The Society contributed \$ 25,000 towards refurbishing the Hallstrom Theatre and \$ 5,000 to the Artist-in-Residence program, and has committed \$ 300,000 over the next three years in sponsorship of the Investigation Centre.

With the introduction of admission fees to the Museum, the Society has set in place an awareness campaign which will emphasise the additional benefit to members of free entry to the Museum.



## OFFICE OF THE DEPUTY DIRECTOR

As a member of the Federal Government's Biological Diversity Advisory Committee, the Deputy Director, Dr Hal Cogger, contributed to the preparation of a draft National Strategy for the Conservation of Biological Diversity to be submitted to the Minister for the Arts, Sport, the Environment and Territories in October 1992.

He presented a paper on the National Strategy at the "Conservation Biology in Australia and Oceania Conference" in Brisbane in October and also chaired a workshop on conservation problems in Pacific countries at the same conference.

In September 1991 he attended meetings of the International Commission on Zoological Nomenclature, of which he is Vice-President, in Amsterdam and Leiden. In Amsterdam he also represented the World Congress of Herpetology at the 24th General Assembly of the International Union of Biological Sciences.

In November 1991 he attended a symposium in Canberra jointly sponsored by the Australian Academy of Science and the Australian Institute of Biology on "Australia's Biota and the National Interest - the Role of Biological Collections". At this conference he chaired a workshop on the role of legal protection in ensuring the long-term survival of biological collections and subsequently published a paper on the workshop outcomes.

Dr Cogger convened a workshop in November 1991 for representatives of the Science Divisions of the Museum from which flowed a series of recommendations to examine and develop future directions in Science at the Museum.

As part of a project funded by the Endangered Species Unit of the Australian National Parks and Wildlife Service, Dr Cogger convened a workshop in December 1991 of leading herpetologists from around Australia to discuss the Reptile Action Plan - a plan which aims to identify Australia's endangered and vulnerable reptiles and to recommend and cost actions to arrest their decline and aid their recovery.

He was also appointed in January 1992 as the Australian Museum's representative on the NSW National Parks and Wildlife Service's Scientific Committee charged under the Endangered Fauna (Interim Protection) Act 1991 with responsibility for preparing a revised list of threatened species of wildlife in New South Wales.

In January 1992 he attended a Fenner Conference on biological diversity held at the Australian Academy of Science.

In March 1992 he was appointed Chairman of the Australian Biological Resources Study Advisory Committee.



# AUDITOR GENERAL'S OPINION

## Australian Museum Trust

To Members of the New South Wales Parliament and Members of the Australian Museum Trust

### Scope

I have audited the accounts of the Australian Museum Trust for the year ended 30 June 1992. The preparation and presentation of the financial statements, consisting of the accompanying statement of financial position, operating statement and statement of cash flows, together with the notes thereto, and the information contained therein are the responsibility of the Trust. My responsibility is to express an opinion on these statements to Members of the New South Wales Parliament and Members of the Trust based on my audit as required by Sections 34 and 41C(1) of the Public Finance and Audit Act 1983. My responsibility does not extend here to an assessment of the figures used in formulating budget figures disclosed in the financial statements.

My audit has been conducted in accordance with the provisions of the Act and Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatement. My procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with the requirements of the Public Finance and Audit Act 1983, and Australian accounting concepts and standards so as to present a view which is consistent with my understanding of the Trust's financial position and the results of its operations.

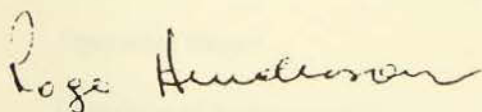
This audit opinion has been formed on the above basis.

### Audit Opinion

The Australian Museum Trust has departed from the provisions of AAS10 "Accounting for the Revaluation of Non-Current Assets" by not applying the recoverable amount test to its non-current assets. This is in line with an exemption granted by the Treasurer under section 41BA of the Public Finance and Audit Act 1983.

The exemption was granted because the Treasurer considers that, in respect for not-for-profit entities, the service potential of their assets is related to their ability to assist in the achievement of social service delivery objectives and is not dependent on their ability to generate net cash inflows. I am in agreement with the departure from the Standard. The quantification of the financial effect of the departure has not been assessed.

In my opinion, the financial statements of the Australian Museum Trust comply with Section 41B of the Act and present fairly the financial position of the Trust as at 30 June 1992 and the results of its operations for the year then ended in accordance with Statements of Accounting Concepts and applicable Accounting Standards.



R.C. Henderson, FC  
Director of Audit

(duly authorised by the Auditor-General of New South Wales under Section 45(2) of the Act)

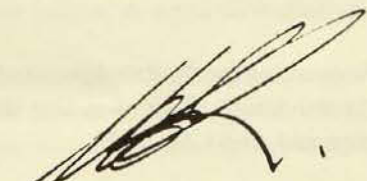
Sydney  
15 October 1992



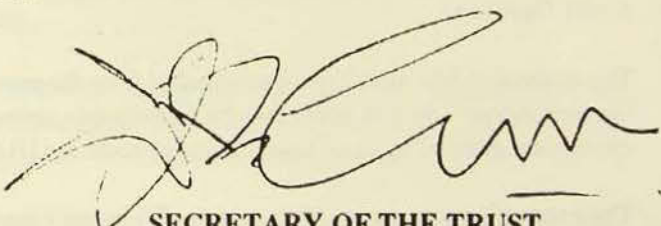
**AUSTRALIAN MUSEUM TRUST**  
**STATEMENT IN ACCORDANCE WITH SECTION 41C(1B) and (1C)**  
**OF PUBLIC FINANCE AND AUDIT ACT, 1983**

In accordance with a resolution of the Australian Museum Trust we state that :

- (a) The financial statements and notes thereon exhibit a true and fair view of the financial position and transactions for the year ended 30 June 1992.
- (b) The financial statements have been prepared in accordance with Statements of Accounting Concepts, applicable Australian Accounting Standards, the requirements of the Public Finance & Audit Act 1983, the Annual Reports Act and Regulations 1985, and the Financial Reporting Directives published in the Financial Reporting Code Under Accrual Accounting for Inner Budget Sector Entities. ("the Code")
- (c) We are not aware of any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.



**ACTING PRESIDENT OF THE TRUST**  
**10 AUGUST 1992**



**SECRETARY OF THE TRUST**  
**10 AUGUST 1992**



**AUSTRALIAN MUSEUM TRUST  
OPERATING STATEMENT  
FOR THE YEAR ENDED 30 JUNE 1992**

	Notes	Actual 1992 \$'000	Budget 1992 \$'000	Actual 1991 \$'000
<b>Operating Expenses</b>				
Employee related	4	9,344	9,690	8,375
Maintenance & working	4	5,337	5,490	6,326
Depreciation & Amortisation	4	643	460	462
Grants & Subsidies	4	1,885	1,700	2,284
Other		92	86	71
ABNORMAL ITEM: Annual Leave Entitlement		-	-	615
<b>Total Operating Expenses</b>		<u>17,301</u>	<u>17,426</u>	<u>18,113</u>
<b>Operating Revenues</b>				
Endowment		200	200	200
Subsidy		350	350	350
Grants - Government	5.3, 9.1	614	450	394
Grants - Other	5.3, 9.1	1,496	1,250	1,629
Gross Profit on Trading Operations				
- Shops	5.1	280	300	327
Trading Operations - Other	5.2	872	893	594
Other		149	133	120
Net income from:				
Australian Museum Foundation	6.1	266	312	465
Australian Museum Society	6.2	33	-	85
Peter Rankin Fund		0	0	1
<b>Total Operating Revenues</b>		<u>4,260</u>	<u>3,888</u>	<u>4,165</u>
<b>NET COST OF SERVICES</b>		<u>13,041</u>	<u>13,538</u>	<u>13,968</u>
Consolidated Fund recurrent allocation		11,405	11,477	13,092
Acceptance by Crown of Liability	2.3, 2.5	980	1,250	-
<b>Operating Result</b>		<u>-656</u>	<u>-811</u>	<u>-876</u>
Consolidated Fund capital allocation		833	833	705
<b>OPERATING RESULT after capital allocation</b>		<u>177</u>	<u>22</u>	<u>-171</u>

The accompanying notes form part of these statements.



**AUSTRALIAN MUSEUM TRUST  
STATEMENT OF FINANCIAL POSITION  
AS AT 30 JUNE 1992**

	Notes	Actual 1992 \$'000	Budget 1992 \$'000	Actual 1991 \$'000
<b>Current Assets</b>				
Cash	7.4	297	319	534
Investments	7.1	305	271	171
Receivable	7.2	239	138	159
Inventories	7.3	159	184	184
<b>Total Current Assets</b>		<u>1,000</u>	<u>912</u>	<u>1,048</u>
<b>Non-Current Assets</b>				
Property	8.1	322	124,143	124,225
Plant & Equipment	8.2	1,254	1,056	1,081
Exhibitions	8.3	2,069	1,882	1,647
Collections	8.4	-	-	1
<b>Total Non-Current Assets</b>		<u>3,645</u> <u>833</u>	<u>127,081</u> <u>833</u>	<u>126,981</u> <u>705</u>
<b>TOTAL ASSETS</b>		<u>4,645</u>	<u>127,993</u>	<u>128,029</u>
<b>Current Liabilities</b>				
Creditors & Accrued Charges	9.2	423	355	250
Grants Received in Advance - Government	9.1	-	187	187
Grants Received in Advance - Other	9.1	-	71	71
Provision for Leave Entitlements	10.1	789	780	700
<b>Total Current Liabilities</b>		<u>1,212</u>	<u>1,393</u>	<u>1,208</u>
<b>Non-Current Liabilities</b>				
Advance State Treasurer		-	17	17
Treasury Loan	2.10	640	40	-
<b>Total Non-Current Liabilities</b>		<u>640</u>	<u>57</u>	<u>17</u>
<b>TOTAL LIABILITIES</b>		<u>1,852</u>	<u>1,450</u>	<u>1,225</u>
<b>NET ASSETS</b>		<u>2,793</u> =====	<u>126,543</u> =====	<u>126,804</u> =====
<b>Equity</b>				
Accumulated surplus/(deficit)	11.1	2,397	198	220
Reserves	11.2	396	126,345	126,584
<b>TOTAL EQUITY</b>		<u>2,793</u> =====	<u>126,543</u> =====	<u>126,804</u> =====

The accompanying notes form part of these statements.



**AUSTRALIAN MUSEUM TRUST  
CASH FLOW STATEMENT  
FOR THE YEAR ENDED 30 JUNE 1992**

	Notes	Actual 1992 \$'000	Budget 1992 \$'000	Actual 1991 \$'000
<b>Cash Flow from Operating Activities</b>				
Payments		-8,253	-8,400	-8,290
Employee related		-5,186	-5,335	-6,606
Maintenance and Working		-1,885	-1,700	-2,284
Grants and subsidies		-92	-86	-71
Other		—	—	—
		-15,416	-15,521	-17,251
Receipts		2,957	2,909	2,995
User Charges		816	862	1,016
Donations and Industry Contribution		149	133	120
Other		—	—	—
		3,922	3,904	4,131
<b>Total Net Cash Used on Operating Activities</b>	17	-11,494	-11,617	-13,120
<b>Cash Flow from Investing Activities</b>				
Purchases of property, plant & equipment		-434	-149	-275
Purchase of investments	7.1	-134	-100	-52
Proceeds from Inventory	7.3	25	-	24
Purchase of Exhibitions	8.3	-1,061	-699	-705
		—	—	—
<b>Total Net Cash Outflow on Investing Activities</b>		-1,604	-948	-1,008
<b>Net Cash Outflow from Operating &amp; Investing Activities</b>		-13,098	-12,565	-14,128
<b>Government Funding Activities</b>				
Return to Crown on State Treasurer's Advance		-17	0	13
Consolidated Fund Recurrent Allocation		11,405	11,477	12,071
Consolidated Fund Capital Allocation		833	833	1,726
Loans from Treasury		640	40	-
Computer Finance Facility		-	-	258
		—	—	—
<b>Total Net Cash provided by Government</b>		12,861	12,350	14,068
<b>Net Increase/(Decrease) in Cash</b>		-237	-215	-60
Opening Balance		534	534	594
		—	—	—
<b>CLOSING CASH BALANCE</b>		297	319	534
		=====	=====	=====

The accompanying notes form part of these statements.



**AUSTRALIAN MUSEUM TRUST**  
**NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED 30 JUNE 1992**

**1.. THE MUSEUM TRUST REPORTING ENTITY**

The Australian Museum Trust comprises all the operating activities and entities under its control. It also encompasses funds which are restricted for specified purposes by the grantor or donor, but are nevertheless controlled by the Trust.

All transactions and balances between the funds and entities comprising the Australian Museum Trust have been eliminated in the process of preparing the financial statements.

**2.. SUMMARY OF SIGNIFICANT ACCOUNTING POLICY**

**2.1. Basis of Presentation**

Treasury has given approval under Section 9(2) of the Public Finance and Audit Act 1983 for the Museum to prepare its Financial Statements in accordance with the Financial Reporting Code under accrual accounting for Inner Budget Sector Entities. The statements are in accordance with full accrual accounting principles and comply with the Statements of accountancy Concepts, the Accounting Standards, industry practise, the requirements of the Public Finance and Audit Act, 1983 and the Public Finance (Statutory Bodies) Regulation, 1985. The statements have been prepared using the historical cost convention and do not take account of changing money values.

The Museum has followed the Financial Reporting Code in all matters. The treatment of Grants in Advance in the Financial Reporting Code under accrual accounting for Inner Budget Sector Entities recognises Grants in Advance as income when the cash is received. As a consequence, the previous year's balance of grants in advance has been transferred to grants operating revenue. However, the conditions of use of grant funding are such that the use of these funds is restricted to the purpose specified by the granting body. In 1990/91, the Museum applied the matching principle to grant receipts by bringing into account as revenue consistent with expenditure incurred on grant projects.

Advice received this year regarding the previous year valuation for the Museum building complex was that it was a valuation for a replacement building that had the same service capacity. This valuation method is inconsistent with the Australian Accounting Standards and therefore has been discontinued. In accordance with the policy guidelines for the valuation of Non-current Assets in the NSW Public Sector, historic properties can be classified as Category C and may be recognised in the Statement of Financial Position at a nominal value of \$1. The Museum has now adopted this approach, as a consequence the former valuation of these assets has been reduced to \$1 and the differences written off against the asset valuation reserve and accumulated surplus as appropriate.

During the year a number of other changes in government policy also caused changes in the Financial Statements. These are Acceptance by Crown of Liability for Employee Long Service Leave Entitlement and Superannuation. The Museum was able to determine the figure for Employee Long Service Leave Entitlement (see note 10.2). The State Superannuation Investment and Management Corporation (SMUTCH) and the NSW Treasury on 5 August 1992 advised that a new method be used to determine the level of Superannuation expense in 1991/92. This year's expense has now been included in the Operating Statement. The total amount of Liability (funded and unfunded) (see notes 2.3 and 2.5) is not included in the Statement of Financial Position.



### 2.1.1 Comparative Figures

The figures for Employee Related and Maintenance and Working expenses are not comparable this year, due to some expenses being reclassified as Employee related to ensure consistency with Government Financial Statistics definitions. In 1990/91 these expenses were classified as Maintenance and Working.

### 2.2. Fund Accounting

The Trust maintains proper accounts and records for all its operations in terms of Section 41(1) of the Public Finance and Audit Act, 1983. To ensure observance of the limitations and restrictions placed on the use of resources available to the Trust, accounts are maintained in accordance with the principles of fund accounting. This procedure classifies resources for budgetary control, accounting and reporting into distinct funds established according to their appropriation nature and operational purposes. Reporting by Funds is now excluded from these Statements.

### 2.3. Employee Superannuation Entitlements

As from the 1 July 1991 the Treasury has accepted liability for unfunded superannuation liability in respect of all Museum employees as an obligation of the Crown.

The Standard economic assumptions adopted by the SSIMC actuaries for the Triennial actuarial valuations carried out as at 31 March 1991 were:

Interest	9.0% pa
Rate of Salary Increase	7.5% pa
Rate of Increase in Consumer Price Index	6.0% pa

The cost of Superannuation benefits is calculated by using accrued benefit calculation method.

The gross liability is \$7,041,504 of which \$625,073 is presently unfunded. These figures are not included in the Museum's Statement of Financial Position. It has been agreed that where the Superannuation liability of budget sector agencies has been assumed by the Crown, any changes in the liability from past service should only affect the Crown's Statement of Financial Position. Therefore, in order to reflect the employer superannuation expense in the Net Cost of Services, a simpler arrangement has been adopted.

For the 1991/92 financial year and all subsequent years the amount of employer superannuation expense for State Superannuation fund (SSF), State Authorities Superannuation Scheme (SASS) and Basic Benefit is to be calculated as follows:

SSF - Actual employee contribution paid to SSIMC in  
respect of financial year involved

x 1.6

SASS - Actual employee contribution paid to SSIMC in  
respect of financial year

x 1.9

BASIC BENEFIT - Amount of Gross Salaries at 31 December

x 2.5%

Using this method the expense for the Museum in 1991/92 is \$739,370 and has been charged as an operating expense within the category Employee Related Costs and an offset corresponding amount included as a funding component - Crown Acceptance of Liability.



## **2.4. Insurance**

As at 1 July 1989, Government policy changed in respect of insurance practices for inner budget sector organisations when the Treasury managed Fund came into effect. This fund provides coverage for liability by the Museum in respect of personal accident, workers compensation, fire, theft and damage, etc., previously covered under specific policies with the Government Insurance Office.

## **2.5. Annual and Extended Leave**

A calculation has been made of the total liability for both accrued extended leave for all employees with an entitlement based on five (5) or more years service and accrued annual leave at their rate of pay at balance date. (See notes 2.1, 10.1 and 10.2)

The NSW Treasury, from 1 July 1991, has accepted the liability in respect of extended leave as an obligation of the Crown. The amount of this liability is \$1,327,200 and is not included in the Museum's Statement of Financial Position. The increase in extended leave liability for 1991/92 was \$241,084 and has been charged as an operating expense within the category Employee Related Costs and an offset corresponding amount included as a funding component - Crown Acceptance of Liability.

The accrued annual leave is a liability of the Museum funded from future recurrent allocations. The cost of this year's liability in respect of 1991/92 was \$89,348 and this amount has been charged as an operating expense within the category Employee Related Costs.

## **2.6. Depreciation and Amortisation**

The buildings on Lizard Island are depreciated on a straight-line basis over their remaining estimated life of up to 31 years on the assumption that the Museum's lease of land on the Island will be renewed in 1998.

Depreciation of Plant and Equipment is calculated on a diminishing value basis, the asset categories of Audio Visual, Photography, Science, Tools, General are at 12%, with Computers at 24% and Vehicles at 9%. Individual assets acquired for less than \$500 are expended in full in the year of acquisition and therefore not depreciated.

Exhibitions are amortised on a straight-line basis based on their expected useful life. (See note 8.3)

## **2.7. Monies held in excess of 2 years**

All amounts unclaimed from Consolidated Funds are forwarded to the Treasury for credit of Special Deposits Unclaimed Monies account and are available for refund from that account.

## **2.8. Capital Allocation and Building Maintenance**

The Museum received a capital allocation from the NSW Government for 1991/92. Works funded from this source were of a maintenance nature and the expenditure was therefore treated as operational expense for the year.

## **2.9. Exemption Granted under 45EA of the Public Finance and Audit Act**

No downward revaluation of non-current assets in accordance with AAS10 has been undertaken.

The Treasurer has determined that the "recoverable amount" test (R.A.T.) as set out in AAS10 is not to apply to budget sector agencies (i.e departments) in respect of the year ended 30 June 1992 and subsequent financial years. This exemption is granted under section 45EA of the Public Finance and Audit Act which came into effect on 1 July 1992.



## 2.10 Treasury Loan

During the year, construction of a new travelling exhibition "Gargantuans from the Garden" commenced. This exhibit is a commercial venture, which required short term venture working capital to proceed. The Premier and Treasury approved the provision of an advance (up to \$1.1million) from the Treasury Special Deposit Account, with interest payable from date of drawdown to date of repayment, at the State Bank reference rate determined at the commencement of each calendar month. As at 30 June 1992, \$600,000 had been drawn down against this approval.

A further \$40,000 loan was received to provide short term assistance for the employment of a business manager.

## 3.. BUDGET REVIEW

The net cost of services was lower than budget by \$462,000.

Operation revenues was higher than budget by \$372,000. This was mainly caused by the change in accounting policy in relation to grants and increased grant funding activity. Operational expenditure was less than budget by \$125,000 and also reflected the increased grant activity and a greater than expected increase in employee leave entitlements, but was offset by approval from Treasury to allow the carrying forward of a budget allocation of \$151,000 for Building Maintenance to the 1992/93 financial year.



#### 4.. OPERATING EXPENSES

	1991/92 \$'000	1990/91 \$'000
a) Employee related expenses comprise the following specific items:		
Salaries and wages	7,643	7,132
Superannuation	739	371
Payroll tax and fringe benefit tax	532	492
Long service leave	241	155
Annual leave	89	85
Workers Compensation insurance	81	132
Other	19	8
	<hr/>	<hr/>
	9,344	8,375
	<hr/>	<hr/>
b) Maintenance and working expenses comprise the following specific items:		
Rent	317	361
Building Maintenance	1,273	2,302
Travel	139	144
Freight	38	75
Motor Vehicles	89	114
Advertising & Promotional	313	335
Fees	416	437
Electricity	564	510
Insurance	365	316
Postal & Telephone	412	300
Stores & Equipment	684	746
Printing	487	419
Maintenance Contracts	120	154
Other	120	113
	<hr/>	<hr/>
	5,337	6,326
	<hr/>	<hr/>
c) Depreciation and Amortisation are charged as follows:		
Buildings	11	7
Exhibitions	427	255
Plant and Equipment	205	200
	<hr/>	<hr/>
	643	462
	<hr/>	<hr/>
d) Grants and subsidies comprise the following specific items:		
Scientific Research - Government Funds	489	394
Scientific Research - Other	851	751
Education Programs	12	5
Exhibitions Programs	117	721
Commercial Ventures	338	399
Other	78	14
	<hr/>	<hr/>
	1,885	2,284
	<hr/>	<hr/>



## 5. TRADING OPERATIONS

5.1 Shop Trading Operations	1991/92	1990/91
	\$	\$
Sales	657,414	926,108
Less: Cost of Sales		
Opening Stock	183,877	
Purchases	<u>352,811</u>	
	536,688	
Less: closing stock	<u>158,799</u>	<u>598,682</u>
Gross Profit	<u>279,525</u>	<u>327,426</u>

Closing Stock has been valued at the lower of average cost price or net realisable value.

Direct salaries and wages of \$185,982 (\$168,842 in 1990/91) and measurable overheads of \$27,271 (\$61,119 in 1990/91) were also identified against Shop Trading Operations. It is not the Museum's policy to consider and charge against the Shop Trading Account indirect costs. All expenditure mentioned above is included in Expenses in the Operating Statement.

5.2 Trading Operations - Other	1991/92	1990/91
	\$	\$

Revenue from other Trading operations comprised:

Australian Natural History	357,883	391,724
Gallery Revenue	218,331	113,758
Commercialisation Projects	136,022	-
Restaurant Activities	45,000	38,551
Mail Order Program	73,703	-
Sale of Brochures/Guides	40,551	40,347
Sale of Films	-	7,726
Miscellaneous	<u>878</u>	<u>1,413</u>
	<u>872,368</u>	<u>593,519</u>

5.3 Grants	1991/92	1990/91
	\$	\$

Revenue from Grants comprised:

Scientific Research - Government funds	614,470	394,011
Scientific Research - Other	939,722	782,981
Education Programs	23,931	11,564
Exhibition Programs	95,164	616,364
Commercial Ventures	412,473	217,625
Other	<u>24,321</u>	<u>0</u>
	<u>2,110,081</u>	<u>2,022,545</u>



## 6. OTHER INCOME

### 6.1 Australian Museum Foundation

The Foundation was established for the purpose of raising funds from the business sector to assist in the work carried out by the Trust.

	1991/92	1990/91
	\$	\$
<b>Revenue</b>		
Donations	242,500	425,000
Interest	<u>23,224</u>	<u>39,887</u>
	265,724	464,887
<b>Expenditure</b>		
Government Charges	196	97
Other	<u>0</u>	<u>0</u>
<b>NET REVENUE</b>	<b><u>265,528</u></b>	<b><u>464,790</u></b>

### 6.2 The Australian Museum Society (TAMS)

The Society was established for the purpose of promoting a greater knowledge of and concern for the environment and to encourage community support for the work of the Museum.

	1991/92	1990/91
	\$	\$
<b>Revenue</b>		
Subscriptions	211,999	191,231
Merchandise	-	1,760
Functions (net)	27,914	84,111
Donations	3,426	3,930
Other	<u>33,661</u>	<u>20,577</u>
	277,000	301,609
<b>Expenditure</b>		
Merchandising	-	2,883
Salaries	115,108	102,484
Working Expenses	<u>129,019</u>	<u>111,721</u>
	244,127	217,088
<b>NET INCOME</b>	<b><u>32,873</u></b>	<b><u>84,521</u></b>



## 7. CURRENT ASSETS

### 7.1 Investments

Investments recorded at cost comprised:

	Cost \$	Face Value \$
Bank Term Deposit	304,531	305,532

Investments are brought to account at cost. (\$171,363 in 1990/91)

### 7.2 Receivable

At an aggregate value of \$239,221 recorded at balance date these comprised:

	1991/92 \$	1990/91 \$
Debtors	77,155	49,097
Less Provision for Doubtful Debts	<u>5,531</u>	<u>5,034</u>
	71,624	44,063
Accrued Income	<u>167,597</u>	<u>114,721</u>
	<u>239,221</u>	<u>158,784</u>

Within the figure of \$167,597 (114,721 in 1990/91) for accrued income is an amount of \$163,625 (\$51,174 in 1990/91) recoverable from the Consolidated Fund in 1992/93. The amount represents the net of accrued charges brought to account at 30 June 1992 for goods and services at a cost of \$194,695 (\$107,314 in 1990/91) and rent paid in advance of \$31,070 (\$56,140 in 1990/91).

The Debtors are aged:

	\$
Less than 30 days	37,731
30 to 59 days	9,991
60 to 89 days	7,523
90 to 120 days	14,626
120 days and over	<u>7,284</u>
	<u>77,155</u>

Bad Debts to the value of \$739 (\$615 in 1990/91) have been written off this year. These bad debts related to trading operations.

### 7.3 Inventories

The value recorded at 30 June 1992 of \$158,799 (\$183,877 in 1990/91) represented stock in trade held by the Museum's shop outlets. Stocks were brought to account at the lower of average cost price or net realisable value.

### 7.4 Cash

	1991/92 \$'000	1990/91 \$'000
Cash at Bank	291	529
Cash on Hand	<u>6</u>	<u>5</u>
	<u>297</u>	<u>534</u>



## 8. NON-CURRENT ASSETS

### 8.1 Property

The value recorded in the Statement of Financial Position covers the following Trust Property:

		Land \$	Buildings \$
Museum Property - College & William Streets, Sydney (at valuation)		1	
Museum Property - Yurong & Williams Streets, Sydney (at valuation)		1	
Museum Buildings - at above listed properties			1
Lizard Island Research Station Buildings			
Costs	283,291		
Capitalised Additions	107,909		
less Accumulated Depreciation	<u>69,099</u>		
Written Down Valuation		<u>2</u>	<u>322,101</u>
		<u>2</u>	<u>322,102</u>

The Lizard Island Research Station site is occupied by the Trust as lessee from the Queensland Government for a twenty five year period terminating in 1998 at an annual rental of \$25. A depreciation charge of \$10,736 against operations was brought to account in 1991/92.

In 1990/91 the Museum Valued its Museum Buildings in Sydney at replacement cost of \$124,000,000. Advice has since been received that this valuation is for a replacement modern building that has the same service capacity. It does not represent the replacement, historic and intrinsic value of the existing building.

In accordance with the Policy Guidelines for the Valuation of Non-current Assets in the NSW Public Sector historic building are classified as category C and may be recognised in the Statement of Financial Position at a value of \$1. The Museum has confirmed with the New South Wales Treasury that this approach be adopted.

### 8.2 Plant & Equipment

The book values are summarised as follows:

	1991/92 \$	1990/91 \$
Adjusted Capital Value Brought to Account at 1 July 1991	1,080,659	1,004,585
Movements for 1991/92	<u>378,039</u>	<u>275,616</u>
	1,458,698	1,280,201
Less Depreciation	<u>204,771</u>	<u>199,542</u>
Book Value at 30 June 1992	<u>1,253,927</u>	<u>1,080,659</u>

Items costing less than \$500, were fully expended in the year of acquisition as indicated in the accounting policy referred to in note 2.6.

The NSW Treasury has determined that all non-current assets within the public sector must be revalued in accordance with the "Policy Guidelines for Valuation of Physical Non-Current Assets in the NSW Public Sector" by the 1994/95 financial year. This will involve a change in the Museum's method of valuation of building and plant to net written down replacement cost.



### 8.3 Exhibitions

The value of Exhibitions represents capitalisation of the development and establishment costs of exhibitions that will continue to generate revenue or provide a community service beyond the financial year or years in which these costs were incurred.

Development and establishment costs as capitalised include material and construction expenditure but do not include an assessment of the intrinsic value of collection items incorporated in an exhibition unless specifically purchased (and thus costed) for the purpose. Labour costs for permanent staff inputs to the development of exhibitions have not been brought to account.

The accounting transactions for 1991/92 are summarised as follows:

	1991/92	1990/91
	\$	\$
Book Value of Exhibitions operational at 1 July 1991	1,673,652	1,463,187
Capitalisation of Exhibitions developed in 1991/92	<u>1,061,907</u>	<u>704,949</u>
	2,735,559	2,168,136
Less Amortisation to Operating Statement	427,005	255,418
Less Amortisation against reserves*	<u>239,066</u>	<u>239,066</u>
Book Value of Exhibitions at 30 June 1992	<u>2,069,488</u>	<u>1,673,652</u>

\* This relates to exhibition assets brought to account for the first time in 1988/89 but fully expended against operations in years prior to that date. Accordingly, this component of exhibition assets is written down annually by amortisation against reserves.

### 8.4 Collections, Works of Art, Specimens and Other Acquisitions

In accordance with the Policy Guidelines for Valuation of Physical Non-Current Assets in the NSW Public Sector the Museum's Collections are classified as category C assets and are recognised at the nominal value of \$1. For presentation purposes this item is shown in the Statement of Financial Position. Acquisitions are expended against operations in the relevant year of purchase. Acquisition costs do not feature as a major component of operating costs.

By way of example, the costs so expended over the past five years were:

	\$,000
1987/88	69
1988/89	65
1989/90	50
1990/91	40
1991/92	35

See also comment under note 8.3 concerning Exhibitions and note 2.4 regarding Insurance. The Trust's Collections were valued in 1981 by the Museum at \$76 million for insurance purposes.



## 8.5 Property, Plant & Equipment, Exhibitions and Collections

	Land & Buildings (note 8.1) \$'000	Plant & Equipment (note 8.2) \$'000	Exhibitions (note 8.3) \$'000	Collections (note 8.4) \$'000	Total \$'000
<b>At cost or valuation</b>					
Balance as at 1 July 1991	124,283	1,081	4,098	-	129,463
Movements	108	378	1,062	-	1,548
Written Down against reserves	<u>-124,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-124,000</u>
Balance as at 30 June 1992	<u>391</u>	<u>1,459</u>	<u>5,160</u>	<u>-</u>	<u>7,010</u>
<b>Accumulated Depreciation</b>					
Balance as at 1 July 1991	58	-	2,425	-	2,483
Depreciation for year	11	205	427	-	643
Amortisation against Reserves	<u>-</u>	<u>-</u>	<u>239</u>	<u>-</u>	<u>239</u>
Balance as at 30 June 1992	<u>69</u>	<u>205</u>	<u>3,091</u>	<u>-</u>	<u>3,365</u>
<b>Written Down Value</b>					
at 1 July 1991	124,225	1,081	1,674	-	126,980
	=====	=====	=====	=====	=====
at 30 June 1992	322	1,254	2,069	-	3,645
	=====	=====	=====	=====	=====

## 9. CURRENT LIABILITIES

### 9.1 Grants Received in Advance

Government and the private sector provide grants for scientific research, exhibitions, education, etc. At the 30 June 1991 the Museum recognised these grants as a liability of \$257,870 which represented grant funding provided for specific purposes, but unspent as at that time. As reported at note 2.1, the Museum has changed the manner of accounting for grants funds as from 1 July 1991 to accord with the New South Wales Treasury Reporting Code.

## 10. LIABILITIES

<b>10.1 Employee Annual Leave Entitlements</b>	<b>1991/92</b>	<b>1990/91</b>
	\$	\$
Accrued Annual Leave	<u>788,778</u>	<u>699,430</u>
<b>10.2 Employee Extended Leave Liability</b>	<b>1991/92</b>	<b>1990/91</b>
	\$	\$
Employee Extended Leave Liability	<u>1,327,200</u>	<u>1,086,116</u>

Assessment of Employee Annual Leave Entitlement as recorded above were calculated for all employees with an entitlement based on five or more years service. The liability as recorded above represents the accumulated value of untaken extended leave at 30 June 1992.

The NSW Treasury, from 1 July 1991, has accepted the liability in respect of extended leave as an obligation to the Crown. The increase in liability for this item of \$241,084 this year have been included in these Financial Statements as an Employee Related operating cost and an offset corresponding amount included as a funding component - Crown Acceptance of Liability.



## 11. EQUITY

### 11.1 Accumulated Funds

	1991/92	1990/91
	\$	\$
Balance at 30 June 1991	219,983	-66,939
Operating Result for Year	177,250	-170,665
Conversion of the Australian Museum Society to Accrual accounting	51,448	-
Assets Acquired free of Liability in prior periods	1,947,973	-
Assumption by Treasury of Computer Finance Facility liability	-	457,587
Balance at 30 June 1992	<u>2,396,654</u>	<u>219,983</u>

(See note 2.1) The use of some of these funds is restricted to the purpose specified by the granting body.

### 11.2 Reserves

	1991/92	1990/91
	\$	\$
Net reserves at 30 June 1991	126,583,316	35,322,381
Revaluation of Property	-123,999,998	91,500,000
Assets Acquired Free of Liability in prior periods	-1,947,973	-
Amortisation of Exhibitions	<u>-239,066</u>	<u>-239,065</u>
Balance as at 30 June 1992	<u>396,279</u>	<u>126,583,316</u>

## 12. COMMITMENTS FOR EXPENDITURE

### 12.1 Commitments for Goods and Services

Purchase orders for goods and services contracted for at 30 June 1992 not otherwise accounted for in the Statement of Financial Position totalled \$880,539 (\$662,359 at 30 June 1991). Given the nature of capital expenditure (see note 2.8) all amounts committed are included in the above figure.

### 12.2 Commitments for Leases

The Trust has forward commitments for lease rentals with respect to three properties it occupies as lessee. The aggregate lease expenditure contracted for at 30 June 1992 (subject to adjustments) comprises:

Not later than 1 year	\$
Later than 1 year & not later than 2 years	372,863
Later than 2 years & not later than 5 years	372,863
Later than 5 years	180,075
	25



### 13. MATERIAL ASSISTANCE PROVIDED AT NO COST TO THE TRUST

Material assistance provided to the Museum for which payment was not made, (figures are not available as to the cost of these services) included:

Volunteer Services, Legal Assistance and Industrial Relations

### 14. AUDIT FEE

The fee for the audit of the Museum's accounts and records, by the New South Wales Auditor-General's Office was \$25,500. The Auditor increased the Audit fee for the previous year by \$3,500. He received no other benefits.

### 15. MEMBERS FEES OR BENEFITS, ETC.

Trust members do not received emoluments or other benefits of office. There were no loans made to members or employees of the Trust.

### 16. CONTINGENT LIABILITIES

The Trust was not aware of any contingent liability relevant to its function at 30 June 1992.

### 17. RECONCILIATION OF NET CASH USED IN OPERATING ACTIVITY TO OPERATING RESULT

	1991/92	1990/91
	\$	\$
Operating Result	177	-171
Depreciation	643	462
Increase in Creditors	173	-253
Increase In Leave Entitlements	89	700
Increase in Sundry Debtors	-85	-39
Provision for Doubtful Debts	5	5
Decrease in Current Liabilities	-258	-27
Government Revenue	<u>-12,238</u>	<u>-13,797</u>
Net Cash used in operating activity	<u>-11,494</u>	<u>-13,120</u>



# 18. PROGRAM INFORMATION

Program 1	Administration and General
Program 2	Community Relations
Program 3	Education
Program 4	Exhibitions
Program 5	Scientific Research and Collections

	Program 1 \$,000	Program 2 \$,000	Program 3 \$,000	Program 4 \$,000	Program 5 \$,000	Total \$,000
Operating						
Employee related	-3,647	-513	-809	-941	-3,434	-9,344
Maintenance & working	-3,274	-841	-266	-95	-861	-5,337
Depreciation	-48	-6	-3	-448	-138	-643
Grants & subsidies	-258	-40	-14	-167	-1,406	-1,885
Other	<u>-37</u>	<u>-5</u>	<u>-</u>	<u>-</u>	<u>-(50)</u>	<u>-92</u>
<b>Total Operating Expense</b>	<b>-7,264</b>	<b>-1,405</b>	<b>-1,092</b>	<b>-1,651</b>	<b>-5,889</b>	<b>-17,301</b>
Operating Revenue						
Endowment	-	-	-	-	200	200
Subsidy	20	-	42	90	198	350
Grants - Government	-	-	-	-	614	614
Grants - Other	264	-80	48	151	1,113	1,496
Trading - Shop	-	280	-	-	-	280
Trading - Other	400	432	40	-	-	872
Other	105	44	-	-	-	149
Foundation	43	-	42	90	91	266
TAMS	-	33	-	-	-	33
Peter Rankin	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Total Operating Revenues</b>	<b><u>832</u></b>	<b><u>709</u></b>	<b><u>172</u></b>	<b><u>331</u></b>	<b><u>2,216</u></b>	<b><u>4,260</u></b>
<b>NET COST OF SERVICES</b>	<b>-6,432</b>	<b>-696</b>	<b>-920</b>	<b>-1,320</b>	<b>-3,673</b>	<b>-13,041</b>
Government Allocations	5,880	410	752	1,005	4,191	12,238
Acceptance by Crown	<u>980</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>980</u>
<b>Operating Result after Government Allocations</b>	<b><u>428</u></b>	<b><u>-286</u></b>	<b><u>-168</u></b>	<b><u>-315</u></b>	<b><u>518</u></b>	<b><u>177</u></b>

END OF AUDITED FINANCIAL STATEMENTS



# OUTLINE BUDGET 1992/93

## OPERATING REVENUE

\$'000

Entrance Charges	600
Retail/Publications, etc.	1,851
Grants/Other revenue	2,893
Consolidated Recurrent Allocation	11,912
Consolidated Capital Allocation	710
Acceptance by Crown of Superannuation & Long Service Leave liabilities	<u>1,016</u>
	<u>18,982</u>

## OPERATING EXPENSES

Employee Costs	11,066
Maintenance & Working expenses	7,073
Depreciation	<u>550</u>
	<u>18,689</u>



# STAFF

\* Denotes position no longer occupied by this person \*\* Denotes part-time employment  
(T) Denotes temporary position

## DIRECTORS OFFICE

D.J.G. Griffin AM MSc PhD	Director
F. Kelly	Assistant to Director
G. McCarthy	Asst to Director's Asst.

## DEPUTY DIRECTOR'S OFFICE

H.G. Cogger MSc PhD	Deputy Director
E.E. Cameron BSc(Hons) MSc	Scientific Officer
A. Egan	Asst to Heads of Scientific Div.
S. Zantiotis	Asst to Deputy Director

## ANTHROPOLOGY DIVISION

V.J. Attenbrow BA(Hons) PhD	Scientific Officer (Aboriginal prehistory)
E. Bonshek BA DipMusStud MA (Qual)	Technical Officer (Pacific projects) (T)
L. Brim	Museum Assistant* (Aboriginal projects)
T. Corkill BA(Hons)	Technical Officer*
D. Donlon MA, PhD	Scientific Officer (T)** (Aboriginal skeletal remains)
S. Florek MA	Technical Officer (Aboriginal projects)**
D. Fraser	Museum Assistant*
R. Fullagar	Aust. Research Council Post-Doctoral Research Fellow*
J. Graham	Technical Officer (Aboriginal Collection Manager)
C. Greenwood BA DipMusStud.	Technical Officer* (Pacific projects)
N. Goodsell BA	Technical Officer** (Pacific Documentation)
P. Gordon	Senior Technical Officer (Aboriginal Heritage Officer)
S. Hardaker	Divisional Secretary
B. Hise BA(Hons)	Technical Officer(T)** (Africa and Americas projects)
L-A. Kreller BA	Technical Officer* (Pacific archaeological research)
R. Kerthyasa	Technical Assistant* (Indonesian projects)
K. Khan BA(Hons) DipAnthrop	Senior Technical Officer** (Aboriginal projects)
P. May, BA(Hons) Dip InfSyst	Technical Officer(T)** (Computerisation project)
J. de Mestre	Technical Officer* (Pacific projects)
D. O'Reilly	Museum Assistant* (Aboriginal projects)
B. Pulvertaft BA(Hons)	Technical Officer* (African projects)
P. Rainbird BA(Hons)	Technical Officer* (Pacific archaeological research)
C. Sadlier BA	Technical Officer* (Aboriginal projects)

J.R. Specht MA PhD

D. Steele BA(Hons)

C. Szpak BA

P.S.C. Tacon MA PhD

S. Thomsett BA(Hons)  
DipMusStud

R. Torrence MA PhD

S. Tuckwell BA(Hons) DipEd

Z. Wakelin-King BA(Hons)

P. White

K. Wilkinson BA

Senior Research Scientist and Head of Division  
Technical Officer\* (Aboriginal archaeological research)  
Technical Officer\* (Aboriginal archaeological research)  
Scientific Officer (Aboriginal material culture)  
Senior Technical Officer (Acting Pacific Collection Manager)\*\*  
Australian Research Council Fellow(T)  
Technical Officer\* (SE Asia projects)  
Senior Technical Officer\*\* (Asia, Africa and Americas Collection Manager)  
Technical Officer\* (Aboriginal projects)  
Technical Officer\* (Aboriginal archaeological research)

## Volunteers in Anthropology

T. Allen, W. Alliston, J. Appleton, B. Asha, K. Atard, T. Barlin, S. Bard, D. Bell, R. Binney, E. Bond, L. Brass, D. Brown, S. Browning, M. Bryant, A. Cabezas, S.H. Chup, J. Clapin, M. Clark, D. Cole, E. Davidson, M. Dell'Oro, P. Douglas, M. Dove, J. Drew, J. Fenner, G. Flick, L. Gay, J. Gibson, T. Goodman, D. Gosden, C. Greenwood, J. Grey, M-N. Harris, J. & G. Haworth, F. Hook, G. Hughes, J. Ingram, S. Ingram, M. Keating, L. Jennings, R. Leurs, C. Kitto, D. Lamarche-Sarvia, R. Lee, R. Luhrs, N. McCarthy, W. McCowage, C-A McGrath, C. & P. McNiven, J. McPhail, P. May, J. de Mestre, N. Mortimer, K. Munro, K. Murray, X.L. Nevyen, J. Nicholas, A. Nightingale, M. O'Brien, J. Owen, A. Paynter, S. Pearce, P. Pemberton, L. Petrie, A. Powell, B. Pulvertaft, P. Rainbird, D. Regozo, F. Ryan, S. Raftery, D. Rossi, C. Schauller, L. Schauller, F. Scheuemann, M. Schouten, K. Schuller, C. Sefton, B. Shur, M. Smith, S. Smith, C. Szpak, D. Sun, O. Tavendale, P. Thomas, D. Towne, S. Tuckwell, A. Waghorn, M. Warre, P. Webb, G. Weise, S. Wellfare, M. Wilkins, K. Wilkinson, A. Wilson, M. Wilson, K. Wilton, S. Winlock, G. Wise

Australian Museum Aboriginal Advisory Committee  
Phillip Gordon acted as secretary to this committee which is chaired by Mr A. Ridgeway. Other members were J. Crew, P. Mackenzie, C. Gartside, C. Foley.

## COMMUNITY RELATIONS DIVISION

K. Annetts	Supervisor, Children's Shop
J. Barnett	Marketing Manager
M. Dingle	Head of Division
F. Doig BA(Comm)	Editor, ANH
M. Field BSc	ANH Marketing & Sales Manager
J. Gates	Editor, Records



T. Gibson  
G. Hickey BSc  
E. Knowles  
J. Lister\*  
W. Matthews  
S. Meadows  
B. Pegram  
M. Pollinger BA(Hons)  
P. Russell  
C. Sadlier  
J. Saunders BSc  
P. Stevens  
J. Taylor  
M. Tracanelli Millikan

Public Relations Manager  
Scientific Editor, ANH  
Shop Assistant  
Shop Manager  
Venue Manager  
Assistant Shop Manager  
Shop Assistant  
Marketing Assistant  
Clerical Assistant  
Shop Assistant  
Editorial Co-ordinator, ANH  
Shop Assistant  
Shop Manager  
Publicity Officer

#### Volunteers in Community Relations

C. Gallagher, H. Hazenfeld, N. Kosh, S. Vial, J. Yeomans

#### CORPORATE SERVICES DIVISION

L. Falkingham BSc(Hons)  
S. Fereday BAppScEnvirDes  
P. Klobe  
L. Kelly BA, GradDipEmpRel  
G. McKenzie CPA

C. MacLulich BEd(Hons),  
GradDipMusStud  
S. Winspear

Corporate Promotions Manager  
New Business Manager  
Assistant to Assistant Director  
Special Projects Officer \*  
Assistant Director, Corporate  
Services  
Special Projects Officer (T)  
Corporate Promotions Manager\*

#### Finance

M. Bahles  
D. Childs  
D. Cooper  
D. Cox  
T. Ireland  
K. May  
W. May  
J. Pritchard  
J. Rusten  
D. Schizas  
S. Wright BBus

Clerk (T)  
Stores Officer  
Accounts Payable Clerk  
Accounts Payable Clerk  
Stores Officer  
Clerk  
Assistant Finance Officer  
Cashier  
Stores Officer  
Senior Accounts Clerk  
Finance Manager

#### House Services

J. Beames  
S. Bender  
R. Berry  
K. Bilbie  
K. Bow  
H. Butler  
N. Calavrias  
E. Cosmo  
B. Dearing  
E. Drakoulaki  
J. Elias  
P. Fletcher  
N. Gregoire  
A. Griffiths  
G. Hastie  
K. Hawkey  
R. Hayllar-Davis  
H. Henne  
J. Le Hung  
T. Jones  
M. Kent  
N. Koulouris

Security Officer  
Security Officer  
Security Officer  
Cleaner  
Security Officer  
Security Officer  
Cleaner  
Cleaner  
Information Officer  
Cleaner  
Cleaner  
Cleaner  
Cleaner  
Security Officer  
Cleaner  
Receptionist/Typist\*\*  
Security Officer  
Cleaner  
Cleaner  
Cleaner  
Security Officer  
Cleaner

rJ. Lane  
U. Ledermann  
J. McElwee  
J. McGinlay  
I. McIntosh  
J. McKinnie  
S. Mellish  
R. Milroy  
B. Murphy  
T. Pananwala BA(Hons),  
PSC (USA)  
L. Pearson  
H. Pierson  
K. Randall  
D. Read  
R. Sampson  
B. Seears  
D. Shallis  
I. Shepherd  
A. Sommer  
B. Walsh

Security Officer  
Security Officer  
Cleaner  
Security Officer  
Security Officer  
Security Officer  
Cleaner  
Security Officer  
Security Officer  
Assistant House Services  
Manager  
Security Officer  
Security Officer  
Security Officer  
Security Officer  
Information Officer  
Assistant House Services Mng  
House Services Manager  
Receptionist  
Cleaner

#### Human Resource Services

J. Disher  
D. Grubb  
L. Hillsdon  
G. Korting  
B. McKellar BA  
J. Rae

Assistant Staff/Salaries Clerk  
A/Human Resource Manager  
Clerical Officer (T) \*  
A/Assistant Staff/Salaries Clerk  
Recruitment/Staff Clerk  
Clerical Officer (T) \*

#### National Photographic Index of Australian Wildlife

S. Bird  
N. Johnston  
R. Strahan MSc FlBiol

Collection Manager  
Clerk  
Editor-in-Chief\*\*

#### Photographic Services

C. Bento  
R. Bolzan BA  
S. Eddy  
D. Fraser  
M. Ortega  
A. Paynter  
H. Pinelli

Photographer  
Manager, Photographic Services  
Museum Assistant (T)\*\*  
Museum Assistant (T)  
Photographer  
Museum Assistant (T)  
Photographer

#### Property Services

R. Bow  
B. Earl  
R. Hewitt  
K. Joseph DipHort BA,  
DipT&CPlanning  
K. Mulvey  
J. Strand

Property Services Officer (T)  
Museum Officer (T)  
Technical Services Manager  
Property Services Officer  
Property Services Officer  
Property Services Manager

#### Volunteers in Corporate Services

C. Bowen, A. Brown, E. Carthew, D. Cousins, J. Disney, J. Faudon,  
L. Jackson, R. Leung, A. Paynter, J. Pulis, P. Swieca, V. Truichici,  
J. Waterhouse

#### EARTH AND ENVIRONMENTAL SCIENCES DIVISION

##### Marine Ecology

K. Attwood  
A.R. Jones MSc PhD  
R. Marsh BSc

Technical Officer (T)  
Research Scientist (Head of  
Division)  
Technical Officer (T)



A. Murray BSc Technical Officer, Project Leader(RMI)  
 V. Tzioumis BSc(Hons) Technical Officer (T)

**Volunteer in Marine Ecology**  
 R. Marsh

**Mineralogy and Petrology**  
 B. J. Barron PhD Scientific Officer (T)\*  
 S. M. Folwell BA Museum Assistant (T)\*\*  
 R.E. Pogson BAppSc(Hons) Acting Senior Technical Officer,  
 MA uslMM AuslMM Mineralogy Collection Manager  
 F. L. Sutherland MSc PhD FAIG Principal Research Scientist,  
 Head of Section  
 G. B. Webb BA FGAA DipDT Technical Officer, Gemmologist

**Volunteers in Mineralogy and Petrology**  
 W. Aliston, B. Armitage, J. Edwards, E. Hepburn, R. Laws, B. Saltpetre, D. Williams

**Palaeontology**  
 R.K. Jones MSc. Scientific Officer (Collection Manager)  
 J. Nancarrow Tech. Officer (Scientific) (T) \*\*  
 K.E. Page BA. Tech. Officer (Scientific) (T) \*\*  
 A. Ritchie BSc. PhD. Senior Research Scientist

**Volunteers in Palaeontology**  
 W. Boogaart, G. Foldvary, J. Hodgson, S. Salisbury

**Terrestrial Ecology**  
 M. Christy BSc Dip Nat Res Technical Officer (T)  
 G. Gowing BSc (Hons) Senior Technical Officer  
 R. Hill \*  
 T. Ivison \*  
 A. Lillierap \*  
 R.E. Major BSc (Hons) PhD Research Fellow (T)  
 G.H. Pyke BSc (Hons) PhD Senior Research Scientist

**Volunteers in Terrestrial Ecology**  
 G. Bartalesi, W. Boles, I. Booth, T. Boyce, R. Bruckert, P. Charbonneau, S. Cowan, B. Dabrowski, J. Dangers, C. Davidson, A. Fletcher, T. Goh, R. Harris, R. Hill, T. Ivison, S. Jose, C. Meehan, M. Mitchell, P. Rowland, D. Shaw, A. Silcocks, N. van Kolck, B. Wakefield

#### EDUCATION DIVISION

C. Arkinstall BAppSc DipEd Education Officer  
 CertScComm  
 R. Bow Clerical Officer \*  
 M. Chapman BA Dip Ed Guide  
 P. Chatenay BA Guide  
 S. Connors BEd(VA) Education Officer  
 J. Dawson BA, Cert Ed, MACE. Head of Division  
 G. Ebeling BSc DipEd Program Manager  
 L. Ferguson BA(Comm) Clerical Officer  
 F. Fletcher Clerical Officer  
 S. Gower BSc(Hons) Scientific Officer  
 A. Harris Senior Explainer\*\*  
 J. Hatherly BSc DipEd Education Officer  
 N. Hazenfeld BArt Ed Senior Explainer\*\*  
 E. King MA DipEd Head of Division\*  
 M. Khun BSc BEd MACE Senior Explainer\*\*  
 P. Macinnis BSc DipEd MEd Education Officer  
 MACE

C. MacLulich BEd(Hons) Program Manager  
 DipMusStud\*  
 S. Main BA DipEd Education Officer\*\*  
 T. Mansour Senior Explainer\*\*  
 M. Martin BA DipEd Program Manager  
 P. McDonald BSc(Hons)DipEd Senior Explainer\*\*  
 D. Millar Preparator  
 M. Robinson BAppSc Preparator  
 H. Samios Clerical Officer\*  
 L. Saunders Program Manager\*  
 A. Skates BA DipTeach Education Officer  
 H. Slarke BA Guide  
 K. Smith Guide\*\*  
 W. Steele Assistant Preparator  
 A. Watterson BSc(Hons)DipEd Education Officer

#### Explainers

L. Addle, R. Atkins, D. Ayers, S. Bernhardt, N. Borg, N. Brew, E. Coomber, N. Cox, P. Destefanis, R. Eggins, N. Ehlers, O. Evans, H. Floriani, E. Gatchalian, J. Goetz, A. Gonzalex, F. Greening, H. Handley, T. Harris, V. Hazenfeld, D. Houssarini, J. Joannou, S. Josey, J. Kabanoff, A. Kags, C. Lamond, S. Lorusso, D. Mezaaber, L. Michie, K. Mills, A. Mross, C. Nancarrow, P. O'Donovan, M. Peredi, M. Petrovska, M. Van-Schellebeck, M. Shaddock, J. Smith, M. Thomson, E. Yim, K. Young, S. Young, V. Young

#### Volunteers in Education

Jean Anderson, Jenny Atkins, Warren Bennetts, Ray Biddle, D. Blew, S. Boele, V. Bower, M. Copp, V. Davis, I. Erber, C. Fearnley, R. Freeman, B. Forman, L. Forman, E. Geering, G. Geering, I. Gorman, R. Grayson, E. Guinan, F. Hashizaki, J. Henwood, P. Heuer, J. Irani, C. Johnston, J. Kinsela, S. Lamport, J. Lane, M. Lawrie, D. Lucas, J. McDonald, J. McDonald, W. Macallister, B. McEwin, R. McGeorge, L. McHale, D. MacPherson, G. Oldfield, S. Pels, T. Perrin, J. Pollard, L. Pollard, G. Reid, J. Routh, P. Sanderson, N. Seiz, F. Sinn, J. Smith, K. Smith, J. Steenson, J. Stuart, J. Tendys, R. Waks, M. Webster, M. Watson, J. Wilson, C. Wood

#### EXHIBITION DIVISION STAFF LIST

##### Audio Visual Section

M. Cooper Technician  
 G. Hardiman Technician

##### Design Section

R. Clendinning B Ed Project Manager (T)  
 E. Cowell BA Dip Int Project Manager (T)  
 G. Ferguson Dip App Art Project Manager  
 A. Gregg BA (Vis Art) Designer  
 K. Gregg Designer  
 R. Joyner ADIA Head of Division  
 J. Mastrogiannis BA Designer  
 (Vis Art) Grad Dip Vis Art  
 B. Matzick Project Manager  
 A. Richards Dip Vis Art Project Manager  
 H. Rocak Designer  
 R. Ross-Wilson\* Project Manager  
 G. Sommer BA(Ind Des) Designer (T)  
 Y. Wakim Asst to Head of Div  
 R. Weakley Designer

##### Preparations Section

L. Bernard Preparator  
 M. Bray Preparator  
 M. Dingley Preparator



A. Gimenez  
G. Hangay Grad Dip Vis Art MCA  
J. Hood  
B. Hom  
C. Johnston  
O. Keywan  
E. MacLeod Dip Art  
H. Magor  
R. Moloney  
T. Ralph Grad Dip Gal Man MCA  
R. Scott-Child  
A. Wang  
C. Wang

Preparator (T)  
Chief Preparator  
Preparator  
Preparator  
Preparator  
Preparator  
Preparator  
Preparator  
Preparator  
Preparator (T)  
Preparator \*\*

#### Volunteers in Exhibitions

N. Barlow, M. Czehmester, I. Docking, J. Gibson, J. Giffen, J. Hughes, F. Ignacz, L. Joos, J. Liu, T. Matzick, B. Speechley

#### INFORMATION SCIENCE DIVISION

N. Bain  
G. Baker BA(LibSc) ALAA  
J. Brazier BA(Hons) Dip IM  
C. Cantrell  
J. Dudman  
K. Fox  
M. Kumvaj BA Dip Lib  
A. McConochie  
G. Ortega Montiel  
B. Pearson BA Dip Inf Man Lib  
C. Pyne  
R. Ratajczak  
P. Young BA Dip Ed BPhil(Ed)  
Grad Dip App Sci (Info)

Senior Library Technician \*\*  
Head of Division  
Archivist/Records Manager (Archives)  
Library Technician  
Museum Assistant  
Assistant Library Technician \*\*  
Manager, Research Library  
Senior Library Technician \*\*  
Assistant Library Technician \*\* (T)  
Librarian (T)  
Clerical Assistant  
Assistant Library Technician (T)  
Assist. to Head of Division

Volunteer in Information Science  
M. Wilson BSc

#### INVERTEBRATE ZOOLOGY DIVISION

##### Entomology and Arachnology

D. Bickel PhD  
G. Cassis PhD  
S. Cowan  
B.J. Day  
M.R. Gray MSc PhD  
G.S. Hunt BSc Dip Ed PhD  
C. Horseman  
A. Leask B Agric. Sc  
S.M. Lindsay BSc  
F. MacKillop BSc  
J. Manning BSc (Hons)  
S.F. McEvey PhD MAIBiol  
D.K. McAlpine MSc PhD  
M.S. Moulds TchC

Scientific Officer  
Visiting Scientific Officer  
Clerical Officer  
Technical Officer  
Scientific Officer  
Visiting Research Scientist  
Technical Officer  
Tech. Officer (T) \*\*  
Tech. Officer (T) \*\*  
Tech. Officer (T) \*  
Tech. Officer (T) \*\*  
Visiting Scientific Officer  
Principal Research Scientist  
Scientific Officer (Collection Manager)

J. Thompson Assoc Dip Envir Stud.

Tech. Officer (T) \*\*

##### Volunteers in Entomology & Arachnology

M. Anderson, B. Balmer, P. Bradney, H. Bridgett, C. Chadwick, G. Copp, D. Cropp, S. Fellenburg, A. Jones, G. Knowles, S. Lindsay, R. Lormer, J. Virtue

##### Malacology

C. Allen BSc  
G. Clark B App Sc  
P. Colman  
I. Loch  
P. Longdon  
A. Miller BSc (Hons)  
W. Ponder MSc PhD DSc

Tech. Officer (T) \*\*  
Technical Officer (T)  
Technical Officer  
Snr Technical Officer  
Tech. Assistant (T) \*\*\*  
Tech. Officer (T) \*\*  
Principal Research Scientist  
Principal Research Scientist  
Tech. Officer (T) \*\*\*

W. Rudman MSc PhD DSc

A. Toluzzi MSc

##### Volunteers in Malacology

F. Ashdown, J. Beck, F. Brown, P. Burton, D. Drake, J. Fisher, T. Ireland, A. Leroy, L. Lovett, M. McKellar, C. Neild, D. Pearson, H. Ronay, R. Simmons, J. Wise

##### Marine Invertebrates

L. Albertson BSc Grad Dip Art  
K. Atwood RN  
P. Berents MSc PhD  
K. Dempsey BSc BA Grad Dip Art  
P. Hutchings PhD DSc

Technical Officer  
Technical Officer (T)  
Scientific Officer  
Technical Officer (T)  
Principal Research Scientist  
Data Entry Op. (T) \*

T. Hutton BA

S. Keable BSc  
J. Lowry MA PhD

Technical Officer (T)  
Principal Research Scientist

F. MacKillop BSc  
J. McRae BSc  
A. Meza BSc (Hons)  
A. Murray BSc  
A. Parker BSc (Hons)  
C. Rose BSc  
R. Springthorpe BSc  
H. Stoddart BSc (Hons)  
G. Torr BSc (Hons)  
G. Wilson PhD

Tech. Officer (T) \*  
Tech. Officer (T) \*  
Tech. Officer (T) \*  
Technical Officer  
Tech. Officer (T) \*  
Technical Officer \*\*  
Technical Officer  
Scientific Officer  
Tech. Officer (T) \*  
Scientific Officer

##### Volunteers in Marine Invertebrates

K. Atwood, V. Atwood, C. Brown, E. Cameron, M. Dell'oro, B. Oldmeadow, B. Saltpeter, A. Sinclair, E. Silk, H. Ward, L. Wild

##### LIZARD ISLAND RESEARCH STATION

T. Ford  
A.K. Hoggett BSc(Hons) PhD  
L. Pearce  
M. Pearce  
L. Vail PhD  
L. Wilson

Master, RV "Sunbird"  
Co-Director  
Maintenance Engineer  
Accommodation Officer  
Co-Director  
Crew/relief Master of RV "Sunbird"

##### Volunteers at Lizard Island Research Station

M. & P. Airey, L. Axe, B. Baschek, J. Brubich, J. Davies, L. Davies, M. Eggerup, M. Ericksson, K. & T. Goh, A. Gorlich, J. & P. Hatherly, C. Kolb, T. Leya, K. Michalek, P. Nelson, B. Plouffe, U. Salzmann, E. Seymour, B. Speechley, S. Winspear, G. Wittick



## MATERIALS CONSERVATION DIVISION

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S. Gatenby BSc	Conservator
M. Gilbert MSc PhD	Scientific Officer*
D. Horton-James BSc	Head of Division
M. Kelly Dip Fine Arts	Assistant Conservator
C. Macgregor BSc	Conservator
DipArchCons	
M. McCord NND DipEd	Conservator*
ConsCert FIIIC	
M. Pacheco	Clerical Officer
A. Roach	Assistant Conservator
G. Scott BSc SocScConsCert	Conservator
S. Valis BA BAppSc	Conservator

### Volunteers in Materials Conservation

G. Denes, H. Joynes, P. Ovenden\*, J. Powers, N. Turner

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Michelle Brittain BSc	Admin. Officer
Christine Corrie BSc	Admin. Officer
Sherry Gregory BA(Hons)	Manager Corporate Membership
Wendy Wilkins MA	Project Officer

### Volunteers for the Museum Society

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T. Goh	Divisional Secretary
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### Evolutionary Biology Unit

G. Averm BSc MSc Dip Ed	Senior Tech Officer
D. Colgan BSc BEd PhD	Research Scientist
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M. Humphrey BSc	Research Asst**(T)
J. Macaranas BSc MSc PhD	Research Asst*(T)

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T. Terzis BSc
A. Toluzzi BSc

Technical Officer  
Technical Officer\*(T)  
Technical Officer(T)

### Herpetology Section

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A.E. Greer PhD

Principal Research Scientist  
Technical Officer

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### Volunteers in Herpetology

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Technical Officer (T)\*\*  
Technical Officer \*\*  
Technical Officer (T)\*\*  
Technical Officer (T)\*\*  
Senior Research Scientist (Head of Div)  
Technical Officer (T)\*\*  
Technical Officer (T)  
Senior Research Scientist  
Scientific Officer (Collection Manager)  
Snr Research Scientist  
Technical Officer  
Technical Officer

M. Howell BSc  
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J. Leis BSc PhD

M. McGrouther BSc(Hons)

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T. Trmski BSc

### Volunteers in Ichthyology

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### Mammalogy Section

T. Ennis  
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Tech. Assistant (T)\*\*  
Technical Officer (T)  
Snr Research Scientist  
Technical Officer  
Tech. Assistant (T)\*\*  
Scientific Officer (T)\*\*  
Tech. Assistant (T)\*\*  
Research Asst. (T)\*\*  
Technical Officer (T)\*\*

### Volunteers in Mammalogy

D. Brown, J. Collins, M. Ebach, M. Francis, V. Lea, T. Loise, G. Malolakis, K. Swarbrick, Liz Tasker, Jan Tendys, Sophia Tzannes

### Ornithology Section

W.E. Boles, BSE

Scientific Officer (Terrestrial Vertebrate Collections)  
Curatorial Assistant (Birds) (T)  
Curatorial Assistant (Birds) (T)  
Curatorial Assistant (Birds) (T)  
Curatorial Assistant (Birds) (T)

T.J. Ivison

T.R. Lindsey

P. Rowland

### Volunteers in Ornithology

T. Kelsey, M. Tink



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# APPENDICES

## appendix a: Committees

### Aboriginal Advisory Committee

The Australian Museum's Aboriginal Advisory Committee, formed in early 1991, was established to provide advice concerning Aboriginal culture and heritage matters, particularly Aboriginal collections and skeletal remains. Committee members were J. Crew, C. Foley, G. Gartside and P. Mackenzie, Chairperson was Mr Aden Ridgeway, and Secretary was Mr Phillip Gordon. During 1990/91 the Committee was involved in reviewing the Museum's document on Policy and Procedures relating to the Australian Museum's Aboriginal collections, and the Chairperson served on the Steering Committee for the "Future of Australia's Dreaming" conference.

### Animal Care and Ethics Committee

Members of the Committee are: Walter Boles, David Butcher, Dr Tim Flannery, Dr Allen Greer, Dr Doug Hoese, Surrey Jacob and Glen Shea.

The Committee met four times (15 July, 16 December, 30 March and 11 June) and among other business considered and passed two research proposals (Education Section and Terrestrial Ecology).

The Committee submitted and had accepted its annual return of animal use for the year.

The Museum was inspected on 11 June by representatives of the Animal Research Review Panel. A formal report has not yet been received but only minor and quite useful recommendations were made during the course of the inspection.

The Museum has reapplied for accreditation as an Animal Research Establishment for 1992/93 (fee \$500).

Having managed the Committee for four and a half years, Allen Greer is retiring as Chairperson. The new Chairperson effect 1 July is Walter Boles.

### Occupational Health and Safety Committee

The Australian Museum's Occupational Health and Safety Committee has membership across all divisions and is comprised of the following staff:

Robert Jones (Chair), Ian Shepherd, Carrie Arkinstall, Dennis Shallis, Tilak Pananwala, Sue Valis, Joyce Sudman, Liz Bonshek.

The Committee regularly carries out risk inspections of the Museum's various work areas and generally acts as a review of measures taken to protect the health and safety of Museum staff.



## **Risk Committee**

The Risk Committee of the Australian Museum is comprised of:

Ian Shepherd (Chair), Gwen Baker, Donna Grubb, John Strand, Stephen Wright

## **Trust Committees**

Membership of the various Australian Museum Trust committees is as follows:

### **Finance**

Mal Eutick, Patricia Watson (Geoff McKenzie and Des Griffin)

### **Influence (outside the Museum)**

Chris Puplick, Robyn Williams (Des Griffin)

### **Commercialisation**

Mal Eutick (Geoff McKenzie)

### **Science and the Environment: Advocacy**

Jonathon King, (Hal Cogger and Alan Jones)

### **Education and Public Programs**

Brian Low, Telford Conlon, Jonathon King (Rob Joyner and Evelyn King)

### **The New Building**

Mal Eutick (Geoff McKenzie)

### **Indigenous People and Expansion of Involvement with other Cultures**

Chris Puplick (Des Griffin and Evelyn King)

### **Fundraising from the Private Sector**

Patricia Watson, Jim Layt, Chris Puplick (Max Dingle and Leah Falkingham)

### **Assisting in Enhancing the Role of the Trust**

Brian Low, Patricia Watson (Des Griffin)

### **Lizard Island Research Foundation**

Patricia Watson and Mal Eutick as Trust representatives



## appendix b: Complaints Procedure

Comments and complaints are recorded in the Visitors Comment Book at the Information Desk in the main foyer. The average number of comments per day is eight (less than 1% of daily visitors), and virtually all of these are positive comments. The total number of complaints during the year was seven. Six related to the introduction of entry fees and were resolved by explaining the necessity of that measure. The other was from a customer who was caught in the lift when it broke down: apologies were made at the time and subsequently a letter was sent with a free pass to return to the Museum.

Where customers leave details, replies are given to all comments. All suggestions with regard to public programs are given to the appropriate Division for consideration. There were no unresolved complaints at the time of reporting.

A number of complaints were received during the year about the Museum Restaurant. A survey has been undertaken and improvements are being implemented by the outside caterers.

## appendix c: Consultants

### Consultants over \$30,000

Public Works Department, Ventilation Survey of Main Building	\$64,300
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### Consultants under \$30,000

Dr B.J. Barron	\$ 1,625
Collier Jardine	\$ 1,968
T.W. Crow & Associates	\$ 3,000
A. D'Ambrosio	\$ 900
Desmond Freeman & Associates	\$ 902
Gamkerlidze & Partners	\$ 6,575
Gavin Hughes Design	\$ 1,450
Dr Mark Gilberg	\$ 1,200
Mr Brendan Junge	\$ 500
Knowledge Engineering	\$ 625
McIver & Associates	\$14,000
Miller Milsten & Ferris	\$ 660
Ms June Owen	\$ 4,600
Power Training Corporation Pty Ltd	\$ 7,650
Strategic Impact	\$ 3,725.50

Total Cost of Consultancies  
under \$30,000

\$49,380.50

## appendix d: Equal Employment Opportunity

The Australian Museum is fully committed to Equal Employment Opportunity and has in place a Management Plan which outlines the Museum's objectives and strategies for achievement in this regard. This plan is produced annually. The key redistributive factors are listed in tabular form:.



**Table 1. Representation and Recruitment of Aboriginal Employees and Employees with a Physical Disability**

	1991/92			1990/91		
	Total Staff	Aboriginal people	PWPD *	Total Staff	Aboriginal people	PWPD
<b>Total Employees</b>	279	3 1.1%	2 0.7%	282	3 1.1%	2 0.7%
<b>Recruited in the year</b>	32	2 6.2%	0 0.0%	42	1 2.4%	0 0.0%

**Table 2. Representation of Target EEO Groups within Levels**

Level	1991/92			1990/1991		
	Total Staff	Women	NESB(1)	Total Staff	Women	NESB(1)
<b>Below CO1 (2)</b>	11	8 72.7%	3 27.3%	14	6 42.9%	1 7.1%
<b>CO 1 - Gd 1 (3)</b>	74	32 43.2%	12 16.2%	97	51 52.6%	13 13.4%
<b>A&amp;C Gd1-2</b>	47	34 72.3%	7 14.9%	43	18 41.9%	4 9.3%
<b>A&amp;C Gd3-5</b>	77	37 48.1%	12 15.6%	67	32 47.8%	9 13.4%
<b>A&amp;C Gd6-9</b>	44	22 50.0%	2 4.5%	41	17 41.5%	2 4.9%
<b>A&amp;C Gd10-12</b>	18	3 16.7%	0 0.0%	14	2 14.3%	0 0.0%
<b>Above A&amp;C Gd12</b>	8	1 12.5%	0 0.0%	6	1 16.7%	0 0.0%
<b>TOTAL</b>	<b>279</b>	<b>137 49.1%</b>	<b>36 12.9%</b>	<b>282</b>	<b>127 45.0%</b>	<b>29 10.3%</b>

\* people with a physical disability

(1)Non-English speaking background

(2)Employees on salaries below Clerical Officer Scale Grade 1, 21 year old rate

(3)Employees on salaries from Clerical Officer Scale Grade 1, 21 year old rate to below minimum Administrative and Clerical Scale Grade 1



In the last year there was a significant increase in the number of women employed by the Museum. Women now make up 49% of the total employed, an increase of 4% from the previous year and an increase of approximately 10% on the 1989/90 figures. There has been a significant increase in the number of women occupying A&C grades 1-2 and also 6-9.

There has been an increase in the number of NESB people employed by the Museum. Currently almost 13% of our staff come from a NESB background, and there has been a significant increase in the number of NESB people employed in the middle grades, i.e. A&C grades 1-5.

The objectives of the Museum with regard to Equal Employment Opportunity are to increase Aboriginal and NESB representation and opportunity within the Museum workforce.

## appendix e: Freedom of Information

The Australian Museum is committed to the concepts embodied in the *Freedom of Information Act 1989*.

For the reporting period, 1 July 1991 - 30 June 1992, the Australian Museum received nil requests for information under the FOI Act, nor did it carry over any requests from the previous year.

The Australian Museum publishes, as required, both a Freedom of Information *Statement of Affairs* and also a *Summary of Affairs*, the latter as follows:

FREEDOM OF INFORMATION  
Section 14(1)(b) and (3)  
SUMMARY OF AFFAIRS  
of the  
AUSTRALIAN MUSEUM  
(F.O.I. Agency N°. 377)

### SECTION 1 - Policy Documents

The Planning and Policy documents of the Australian Museum are as follows:

- Corporate Strategic Plan
- Strategic Plans for Divisions
- Exhibition Philosophy
- Policy Regarding Acquisition of Cultural Property
- Equal Employment Opportunity Management Plan
- Ethnic Affairs Policy

### SECTION 2 - Statement of Affairs

This document summarises the Museum's structure and functions, the kinds of documents the Museum holds, and how they may be accessed. The latest edition of this document was published in June 1992. It is available free of charge from the Australian Museum Library.

### SECTION 3 - Contact Arrangements

Documents published by the Australian Museum: All of the Museum's published books, serials, reports and documents may be accessed through the Australian Museum Library, Monday to Friday, 9 am - 12.30 pm, 1.30 pm - 5 pm.



**Personnel Files:** Staff do not need to use FOI to access their personnel files. Requests for access should be directed to the Human Resources Section.

**Planning and Policy Documents:** These documents are all available through the Australian Museum Library, at the times previously listed.

**Archives:** These may be accessed through the Australian Museum Library at the times previously listed.

**All other documents:** To access all other records, applications in writing must be made to the FOI Coordinator, Australian Museum Library, 6 College St., Sydney, 2000. Applications may be made in person at the Australian Museum Library.

## **appendix f: Fundraising Activities**

The Museum has continued to seek funding from the private sector in the areas of donations, sponsorship, bequests and commercialisation.

### **Sponsorship**

Sponsorship activities have raised almost \$350,000 for exhibitions, research and programs.

### **Donations**

Donations totalling \$24,600 were also received this year.

### **Bequests**

The Bequests program continued this year and was successful in gaining support with a number of people providing donations of money (totalling \$90,500) and/or collections or artefacts in their wills.

## **appendix g: Human Resource Issues**

The Australian Museum has played an active role in implementing industrial relations policy this financial year. The implementation of the structural efficiency principle is seen as a major priority. The structures of the Exhibitions, Education and Corporate Services Divisions are currently being reviewed by a management and employee divisional committee to identify better ways of working, better structures and improved career paths.

The Exhibitions Division review has been completed. An Enterprise Agreement has now been negotiated and has been lodged with the Industrial Register.

The Divisions of Science and Community Relations will be reviewed in the next financial year.

Industrial action within the Museum has been low with minor matters negotiated with employees and the unions involved.

Two morale surveys have been conducted - one in August 1991 and one in May 1992. The aim of these surveys is to assist management in identifying areas which are considered by staff as affecting their morale. Staff are encouraged to relate problems that they are experiencing and suggest solutions to those problems. A report is given to Senior Management who then analyse the survey results and discuss possible solutions.



The survey results received so far indicate that staff now have a greater understanding of, and commitment to, the Museum's mission. Problems with utilisation of space within the Museum have been highlighted and are now being addressed as a result of the survey.

The Museum implemented a formal staff appraisal system in 1989. This appraisal system is compulsory and combines an appraisal of the employee and the employer. The system is used as a tool for staff to comment on their work and the work of their Section and Supervisor. The Supervisor is given the opportunity to appraise the work of their staff. An action plan is devised by the supervisor and the appraisee for goals to be achieved in the next 12 months.

## appendix h: Overseas Travel

Details of overseas travel undertaken by members of the Anthropology, Invertebrates and Vertebrates Divisions for educational and research purposes are to be found in the divisional reports.

## appendix i: Performance Management

### Measures of Performance

Performance measures are an integral part of the Museum's Corporate Plan and daily functioning. Throughout the four key areas of the Corporate Plan - 'Effective and Efficient Management', 'Public Programs', 'Research and Collections' and 'Financial Viability' - performance indicators are matched to objectives and actions. Further details of performance indicators can be found in the Corporate Plans for 1990-92 and 1993-95.

Results of a performance review of collection management, originally undertaken in 1990, have been incorporated into future planning for collection management including new staffing structures, responsibilities and collection management processes.

In response to the Premier's Customer Service Report, the Australian Museum is developing a number of customer council groups which will assist in assessing the Museum's measures of performance in a number of key areas.

### Payment Performance Indicators

#### 1. Schedule of accounts payable at 30th June 1992.

Current	136,551
Less than 30 days overdue	18,088
30 to 60 days overdue	nil
60 to 90 days overdue	nil
over 90 days overdue	859
TOTAL	<u>155,498</u>



## 2. Accounts Paid on time for the quarter ended 30th June 1992.

Percentage of accounts paid on time	94%
Total amount of accounts paid on time	\$4,853,960.80
Total amount of accounts paid	\$5,163,788.08

## 3. Commentary on Action taken

Payments are, in almost all instances, not only made on time but are ready for payment within five days of invoice and approval to pay being received by the Finance office. The problems affecting the prompt processing of payments are:-

- Invoices not received on time; have incorrect charges/calculations or exceed purchase order by a significant amount.
- Approval to pay not received, or approving officers exceeding their delegation.

Payment performance has been improved by the introduction of new accounting software that is able to age accounts payable more accurately, check for double payments and generally process payments more efficiently. Other measures include the appointment of one officer to be responsible for forwarding invoices to the appropriate approving officer, keeping track of that paperwork and regularly checking statements for overdue payments. A fax machine has been installed to maintain a closer contact with creditors.

A purchasing policy has been implemented and training provided to project officers in purchasing and payment procedures.

## appendix j: Recycling at the Museum

The Musuem has introduced an active recycling policy focussing on paper, aluminium and glass. There are now waste paper collection points in each major work area. Staff are encouraged to reduce usage and reuse paper before recycling. Most photocopiers within the Museum are compatible with 100% recycled paper. However, recycled paper is not suitable for long-term archival storage and so the suitability of recycled paper for documentation is currently being assessed. Guidelines for recycled paper usage within the Museum will be formulated in the near future.

## appendix k: Research & Development

Total Income from grants	\$1,209,347		
Total Museum expenditure	\$3,829,026	=	Salaries \$3,119,122
			B Items (travel, stores, etc.) \$589,041
			F Items (major equipment) \$120,863

Total Museum expenditure on research and development minus salaries was \$709,904.

Research projects undertaken during the year were:

Ceraphrodine amphipod research	P. Berents	Taxonomy and biology of birds	W. Boles
Diptera Brachycera and survey	D. Bickel	Insect systematics & co-evolution studies	G. Cassis



Biochemical research	D. Colgan	Amphipod systematics/scavengers	J. Lowry/
Herpetological studies	H. Cogger		H. Stoddart
S.W. Pacific mammals survey	T. Flannery	Acalypterate fly research	D. McAlpine
Spider systematics & survey	M. Gray	Drosophilid research	S. McEvey
Systematics of lizards & snakes	A. Greer	Cicada systematics	M. Moulds
Systematics of gobioid fishes	D. Hoese	Deep sea fish studies	J. Paxton
Taxonomy of mites	G. Hunt	Evolution of gastropod molluscs	W. Ponder
Taxonomy & ecology of polychaete worms	P. Hutchings	Terrestrial ecological research	G. Pyke
Marine ecological research	A. Jones	Systematics of opisthobranch molluscs	W. Rudman
Larval fish systematics & ecology	J. Leis	Lizard and amphibian research	R. Sadler
		Australia's lithosphere	L. Sutherland
		Phylogenetic systematics of isopods	G. Wilson

## appendix I: Research Associates and Associates

### Research Associates

His Imperial Highness Emperor Akihito  
M. Archer BA PhD  
I. Bennett AO MSc  
J.B. Burch PhD  
C.E. Chadwick BSc  
R.O. Chalmers ASTC  
W. Dawbin DSc  
H.J. de S Disney MA  
B. Egloff MA PhD  
B.M. England BSc DipGemmology  
F. Evans MSc  
H.O. Fletcher MSc  
J.M. Forshaw  
R.L.K. Fullagar BA PhD  
B. Goldman BSc PhD  
J.D. Hollis PhD  
K.W. Huffman BA DipEthnol  
W. Ivantsoff PhD  
P. Kailola BSc (Hons)  
K.C. Khoo BSc (Hons)  
R.J. Lampert PhD FAHA  
J.E. Marlow BSc (Hons)  
F.D. McCarthy Dip Anthropol Hon DSc FAHA  
P.M. McDonald BSc MEd  
S.F. McEvey BSc PhD FRES  
G.A. Mengden PhD  
M. Moulds TchC  
T.R. New ARC DIC BSc PhD  
R.A.L. Osborne DipEd MSc PhD  
H. Parnaby PhD  
H. Paxton PhD  
J. Pickett MSc DPhilNat

E.C. Pope MSc CMZS  
S.F. Rainer BSc MSc PhD  
K.R. Rodgers PhD  
G.M. Shea BVSc (Hons)  
R. Shine BSc PhD DSc  
C.N. Smithers MSc PhD  
W. Starck PhD  
N.N. Tait PhD  
F.H. Talbot MSc PhD FLS FRZS FRSA  
G. Theischinger  
A.G. Thorne BA MA (Hons) PhD  
I.W.B. Thornton BSc PhD DSc  
R. Torrence AB MA PhD  
M.R. Walter PhD  
J.P. White MA PhD  
M.E. White MSc  
M.J. Whitten BSc (Hons) BA PhD FTS  
G. Williams BSc  
R.V.S. Wright MA  
J.C. Yaldwyn MSc PhD FMANZ

### Associates

K. Atkinson  
B. Bertram  
K. Carnaby  
E.L. Carthew  
D. Clyne FRPS FRES  
T.S. Coldham BA FGAA  
N. Coleman  
L. Courtney-Haines  
G. Daniels  
J.A. Frazier FRPS ACS  
H. Goodall



O. Griffiths BSc  
A. Healy  
J. Henley BAppSc FGAA  
V. Kessner  
R. Kuiter  
R.B. Lachlan BEd DipTeach FRES  
J.A. Lindsay MA PhD  
T.R. Lindsey  
N.W. Longmore  
D.F. McMichael CBE MA PhD  
W. McReaddie  
K. Meguro

D.R. Moore MA DipAnthrop  
R. Morrison  
N.W. Rodd BSc  
A.B. Rose  
D.J. Scambler BSc  
R. Steene  
W.E. Summerville  
G.A.J. Swan  
M. Tuckson  
S. Walston DipCons (Lond)  
L. Wilson  
G.F.C. Wishart

## **appendix m: Risk Management**

Through membership of the NSW Treasury Managed Fund and the Public Sector Risk Management Association, the Museum has enthusiastically utilised risk management techniques in order to minimise both incidence of risk and, as a consequence, the cost of safeguarding the Museum's extensive asset base. The NSW Treasury acknowledged this effort with a Certificate of Appreciation earlier in the year. The House Services Manager acts as the nominated Risk Manager and is an Associate Member of the Australian Institute of Risk Management.

## **appendix n: Senior Executive Service Staff Performance Planning & Review System**

A Performance Planning and Review System has been developed by the Ministry for the Arts. It is intended that this review system be used with involvement of the Trust in the performance measurement of the Museum's Senior Executive Staff.

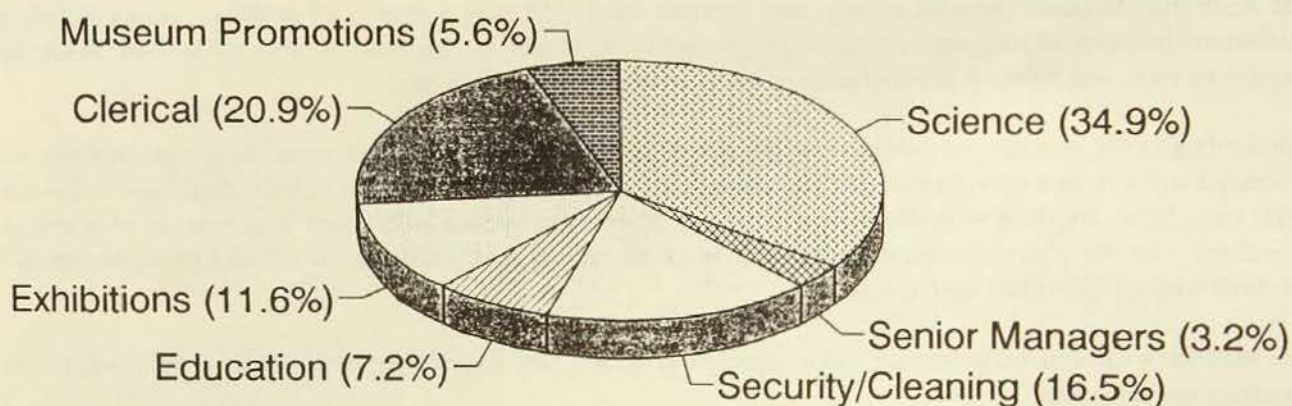
Three positions are involved - those of the Director, Deputy Director and Assistant Director. The Secretary for the Ministry, Evan Williams, is responsible for the performance review of the Director - this position is a First Tier SES position. The Director is responsible for the performance review of the Deputy Director and Assistant Director - these two positions are classified as Second Tier SES positions. No women occupy any of these positions at this time.

The Performance Management System will incorporate a review of the Museum's Corporate Plan. This will occur after the Trust has approved the Corporate Plan and the Director's performance is reviewed by the Secretary of the Ministry. The Museum's Corporate Plan will be analysed to ensure that there are appropriate linkages with the Ministry's Corporate Plan. The Director's performance agreement should be integrated with the Corporate Plan. Performance Agreements will be reviewed annually with progress reviews occurring throughout the year, to remain consistent with organisational aims and objectives.

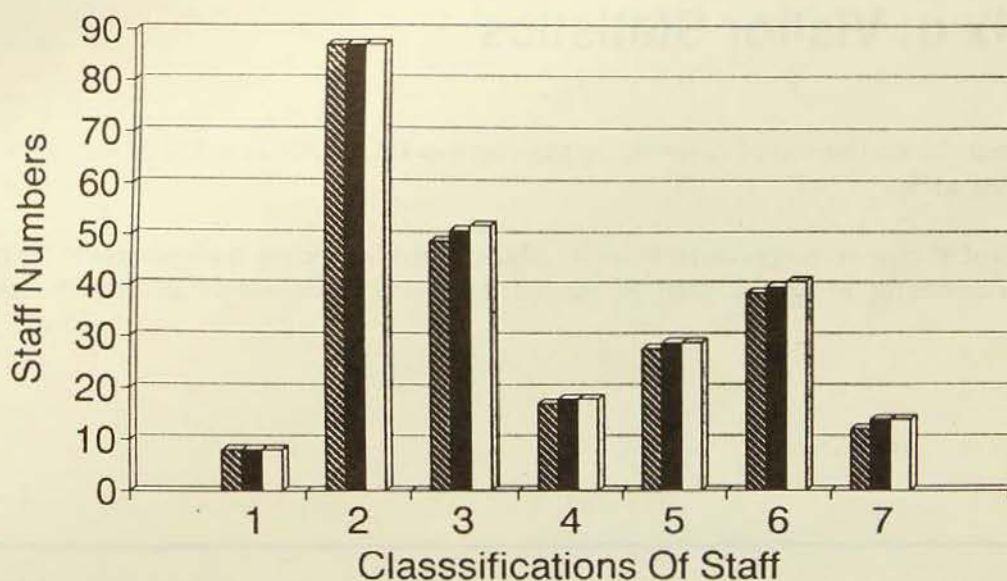


## appendix o: Staffing Profiles

### Staffing Percentage 1992



### Staffing Levels 1990-1992



30th June 1990
  30th June 1991
  30th June 1992

1 = Senior Management  
 2 = Science  
 3 = Clerical  
 4 = Education

5 = Exhibitions  
 6 = Security/Cleaning  
 7 = Museum promotions



## appendix p: Time for Provision of Service

The Australian Museum philosophy states: "We want the information we gather and communicate to be accurate and our activities and services to be of high quality, supportive of our mission and relevant to the community."

The Australian Museum provides open access 7 days a week, 364 days a year to all public programs including exhibitions, interpretive programs, education programs, extension services, general customer services, etc. Scientific enquiry services and research library facilities are available Monday to Friday.

Standard times for provision of service do apply in a number of areas: for example, employment applications are processed within four weeks; handling of correspondence is generally dealt with on an individual basis within ten days; complaints are dealt with either face-to-face or by correspondence within two weeks; areas of scientific consultancy, advice or environmental management work and reports on submissions have a quick response time and are dealt with on individual time scales.

The Museum's exhibitions, education and interpretive programs take a varied development time, but always meet specified opening dates.

In response to the Premier's Customer Service Project, the Australian Museum is developing a 'Guarantee of Service' statement which will clearly outline its customer service policy.

## appendix q: Visitor Statistics

In the 1991/92 year, the total number of visitors to the Museum was 411,332. Of these, 62,021 were school students and accompanying adults.

The introduction of admission charges on 1st February 1992 resulted in a decline in attendances by almost 50% of the average attendances for the last four years. By the end of June 1992 it seemed that this trend was reversing.

Approximate cost per copy (500 printed) for the Australian Museum Annual Report 1991-92 was \$5.60



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