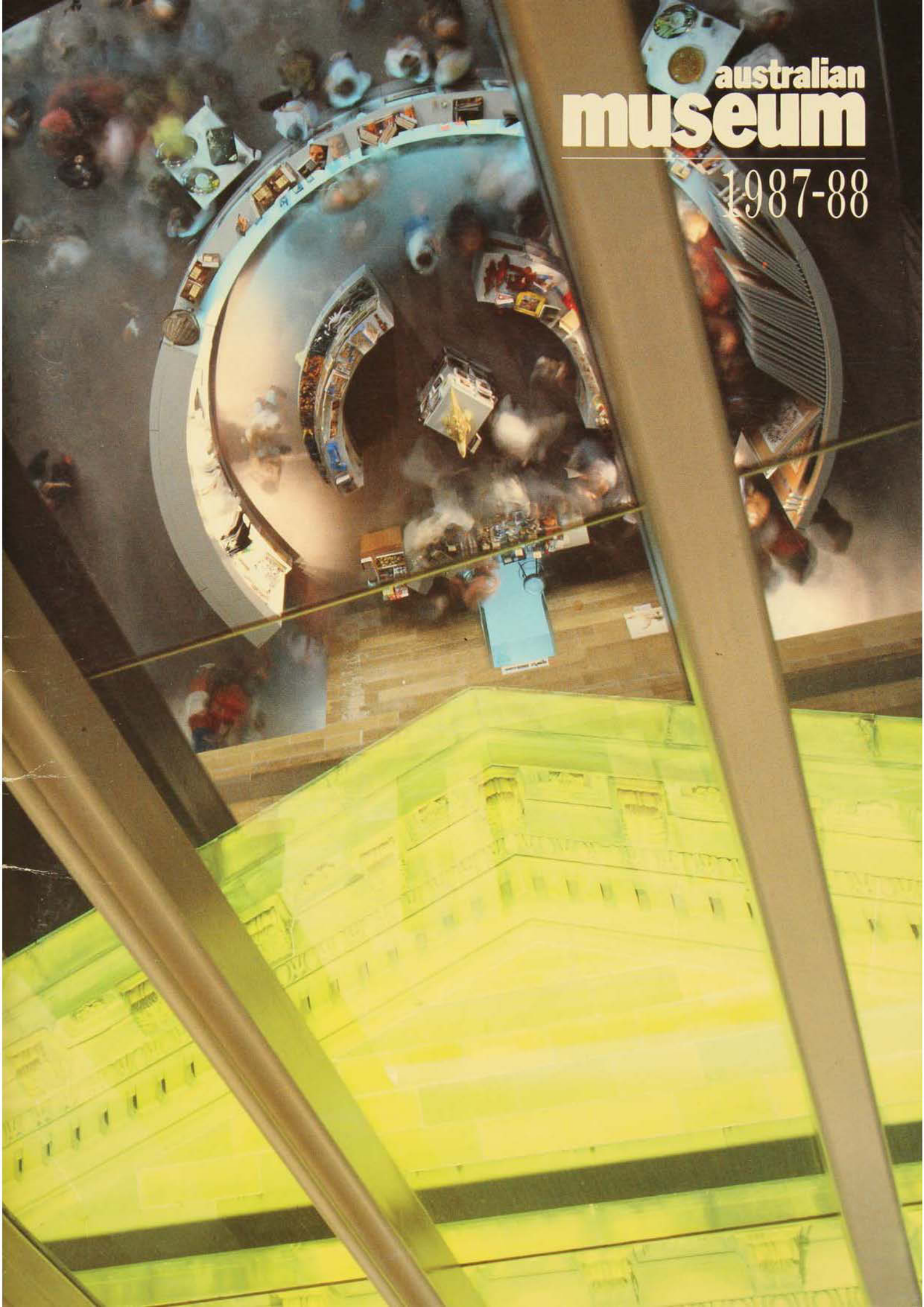

australian museum

1987-88

ANTHONY FARR

Singer Daryl Shaw introduces a young visitor to 'Bimbo' the cattle dog in 'Dreamtime to Dust'

The Trust and staff of the Australian Museum have pleasure in thanking the following organisations and individuals who provided financial assistance through research grants or donations. Benefactors are classed as companies who have donated more than $25,000 or individuals who have donated more than $15,000.

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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 increasing 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 focussed 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.

The Australian Museum's mission is to increase and communicate knowledge and encourage understanding of our natural environment and cultural heritage, especially in the Australian region: the conduct of original research and the maintenance and *improvement of collections are central to the achievement of the mission.*

INTRODUCTION

The quality of the Museum's scientific and technical staff is every bit as important as the quality of its collections in maintaining the organisation's place as one of the world's top natural history museums. They play a vital role in many spheres of science, making new discoveries, providing expert comment in the media and to government and legal authorities, publishing in popular and technical media, and assisting their colleagues in other institutions and industry.

Their visits overseas, and hosting of visiting experts, provide opportunities to generate goodwill and prestige for the nation. They are also ambassadors for science itself, sharing their knowledge and experience with Australians from all walks of life and of all ages.

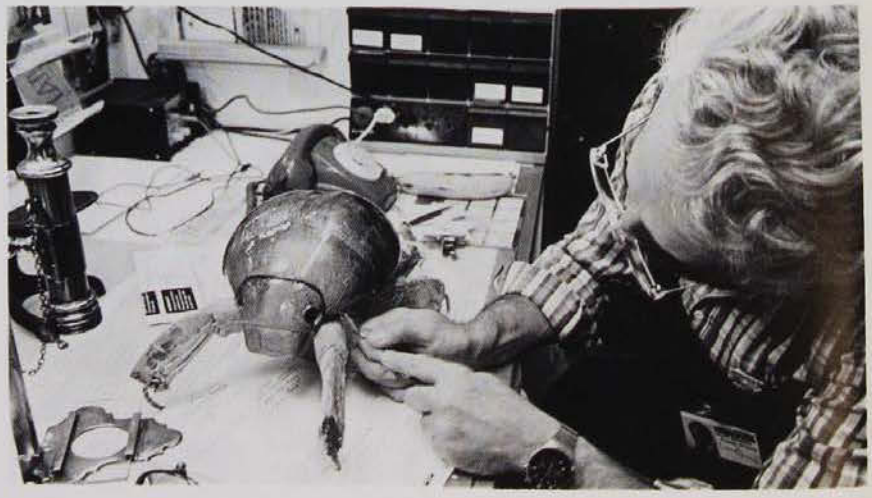
Scientific programs within the Museum take them into every corner of the continent, from studies of Aboriginal culture in the harsh deserts of the interior, to the highest mountain peaks in search of endangered wildlife. Through such scientific efforts, they help us all to better understand the natural world on which we depend, and the impact we have on it.

The Museum's vast specialist collections of fossils, animals, precious minerals and human artefacts not only conserve our great natural heritage, but provide a rich reference library into which anyone from the smallest child to the most eminent scientist can delve, and feel the spark of wonder in their minds.

(Top) ***Tim Flannery in the field.*** **(Bottom)** ***Steve Keeble in the Crustacean section.*** **(Bottom right)** ***Willie Feinburg works on insect models in the Preparations Department.***

JOHN FIELDS

ANTHONY FARR



ANTHONY FARR

PRESIDENT'S REPORT

It is difficult to conceive of a more challenging and yet a more rewarding year for the Australain Museum than the one just past. Around us we had the opening of countless new or refurbished instiutions of similar public role. Within the boundaries of the Museum there was the inevitable disruption of builders' trucks, scaffolding and dust as our own new wing neared completion. And while all this as going on we were steadfastly preparing four major exhibitions for the Bicentennial year!

That all was achieved without hiccups, I think, a tribute to the first-class teamwork of Dr Des Griffin and the Museum staff. I have rarely been in a major establishment in Australia where the spirit and enthusiasm is so manifest. At a time when tough questions are being asked about efficiency, relevance, cost-effectiveness and public esteem, I am delighted that the Australian Museum excels right across the board. At the same time we have maintained and even improved our very good relationships with other major museums, botanic gardens, libraries and galleries. Such co-operation is, today, absolutely essential.

Our public profile has soared. After the restraint imposed by the building going up right in the middle of everyone's space (including the public's), we took off this year: press, radio and television reports have been most gratifying. Most have featured scientific research done by the Museum, appearances by our scientists to respond to topical queries or stories concerning our exhibitions.

We also established an Australian Museum Foundaton, chaired by the eminent businessman and banker Reg Watson. We were fortunate indeed to obtain his services and results are already apparent with several major sponsorship contributions which are unlikely to have come our way without the Foundation's existence. At a time when public money is less forthcoming we are now able to face a positive future with less worry about diminishing our services to the community.

The new wing itself has proved to be a delightful environment and a superb setting for exhibitions. The first to open was *Pieces of Paradise*. The Hon Michael Somare, first Prime Minister of Papua New Guinea; Professor John Waiko (also from PNG) and Grace Molisa from Vanuatu, did the honours. Professor Waiko, much to everyone's surprise and enjoyment, made the most of the new atrium's accoustics by singing part of his speech.

Dreamtime to Dust was next, we spanned the millions with the exhibition and the generations with our guest speakers: Sir Mark Oliphant, Australia's great scientist; Jack Thompson, actor and conservationist, and schoolboy Evan Spalding who won the essay competition co-sponsored by the Sydney Morning Herald. Attendance since the opening has been spectacular.

Australian Natural History magazine was recognised by winning the Whitley Award. Major innovations and expansions have been planned for the magazine.

With such a range of activities: publishing, collecting, exhibiting, educating and being a public place for lectures, launches and meetings it sometimes escapes the innocent onlooker's attention that the Australian Museum is a great centre for scientific research and scholarship. This is perhaps inevitable with so many of our laboratories buried in the cramped catacombs. But excellence in research continued this year, throughout the scaffolding and bicentennial turmoil.

Alex Ritchie and Robert Jones discovered (in extraordinary circumstances) some very large opalised dinosaur bones. Lin Sutherland proposed new concepts in vulcanism which may allow prediction of eruptions. Tim Flannery found a giant rat in New Guinea (and my interview with him on that was broadcast in Australia and on the BBC).

New findings on both honeybees and honeyeaters are likely to have significant implications for wildlife management. Dr Pat Hutchings has continued her formidable production of papers and this year another two books, one for children. Others from the Museum's brigade of invertebrate zoologists took advantage of the First Fleet Re-enactment and Tall Ships to scrape the bottom of one of the vessels, discovering in the process some species in unlikely places.

The anthropologists, despite being submerged in efforts to prepare *Pieces of Paradise*, maintained research field work throughout Australia and in many parts of the South Pacific.

Our conservators hosted an International Congress at the Museum, attended by hundreds and praised by the overseas delegates for their combination of informality and professional excellence.

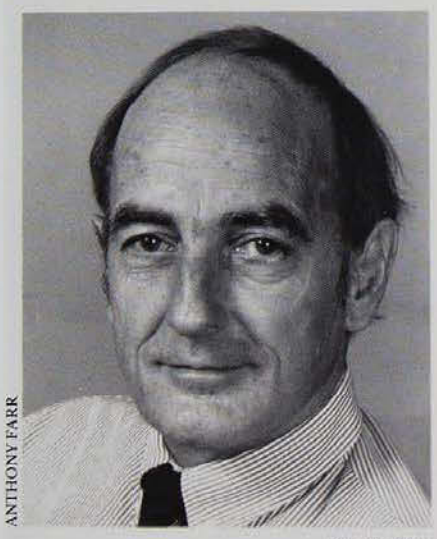
Above all, however, the Museum has spent this year in an extraordinary combination of activities: trying to combine the best of our 162 years of experience and tradition with, at the same time, tackling the many innovations and experiments we must have to face a challenging future.

DIRECTOR'S MESSAGE

As we had hoped, 1988 is proving to be the most important year for the Australian Museum since its foundation in 1827. The new building is one of the most exciting museum environments in the world. The first two exhibitions opened in the building in May 1988 are recognised as the best we have ever staged. The building and redevelopment will provide very good storage for all anthropology collections, laboratories for collection conservation, new library and proper staff accommodation and recreation space.

The openings of the exhibitions and the building have been events in themselves with speakers making major statements on our cultural heritage, our natural environment and the role of museums.

The new building was opened on June 22 by the Premier, the Honourable Nick Greiner, MP. Guests were toured through the new library, exhibitions and the partly completed Materials Conservation laboratories and Pacific artefact store. Beautifully set off from the existing older stone buildings, the new structure provides a new visitor orientation area in a dramatic, naturally lit atrium the height of the building itself. In the atrium is a second shop outlet and adjacent to it is a new restaurant. The building is expected to be completed by the end of August, and the renovation of older buildings towards the end of December 1988.



ANTHONY FARR

Des Griffin

At the opening of *Pieces of Paradise* on 6 May, distinguished Melanesians; the Rt Hon Michael Somare and Professor John Waiko from Papua New Guinea and Mrs Grace Molisa from Vanuatu; talked of the importance to them of their cultural heritage in strengthening their pride in themselves and their traditions. Colonisation has wiped out many traditions and resulted in loss of cultural material. Significant items from the Australian Museum's collections were returned to Papua New Guinea, Vanuatu and the Solomon Islands and gifts received in exchange. Now, that Pacific nations have achieved independence, museums in developed countries can help restore that pride through return of items for public display; this will be an ongoing program for the Australian Museum.

At the opening of *Dreamtime to Dust* on 29 May, distinguished scientist Sir Mark Oliphant and famous actor Jack Thompson spoke of the continuing destruction of Australia's natural environment, the importance of understanding the 'oneness' of humans and the environment and the need for us to come to terms with that.

This year we have also completely rewritten our statement of mission and corporate philosophy, gained major financial support from the corporate sector and from individuals, introduced the first stage of office automation to provide efficient and effective access to data bases of management information, established a new Evolutionary Biology Unit, formulated a new program to monitor all of our interactions with the public and our customers, revised the format of our bi-monthly news magazine under a new title, *Muse*, revised our plans for exhibitions through to 1992 and decided to more than double the size of *Australian Natural History* magazine to 100 pages per issue.

Almost every community organisation has experienced frustration in seeking corporate sponsorship in the last two years as companies were beseiged for help with events of all kinds as part of Australia's Bicentennial program. In this highly competitive environment we had no choice. Reviewing our strategies and discussing the processes used in museums in the USA, led us inevitably to form a new Foundation specially for the purpose, just as many other cultural organisations have. We are now on a new path. Mr Reginald Watson, AO, CMG, the Foundation's first Chairman is also Chairman of the State Bank.

The Bank is the first Governing Patron. Donating $250,000 to sponsor the *Dreamtime to Dust: Australia's' fragile environment* exhibition they join The Australian Museum Society and the NSW Bicentennial Secretariat who are also supporting the exhibition. Other sponsors are being actively sought for the Museum's varied activities.

The new Evolutionary Biology Unit has been supported by a generous grant from Mr Ken Myer. The Unit will use modern techniques to obtain biochemical and genetic information on the evolution of Australia's unique fauna.

Australian Natural History, the Museum's quarterly magazine, began publication in 1921. Since the early 1970's the appearance has been improved, especially in the last three years; circulation has grown to 20,000. In March 1989 it will expand from 48 pages to 100, better product with more information. It will then be one of the largest popular natural history magazines produced by any museum.

A major decision was made in the long-term Corporate Plan in mid 1987 to establish a local area computer network linking managers in all divisions. This will give them easier and more rapid access to management information and improve communication. The existing levels of computer literacy and keyboard skills in the Museum will enable us to avoid some of the problems besetting other businesses as they computerise their operations.

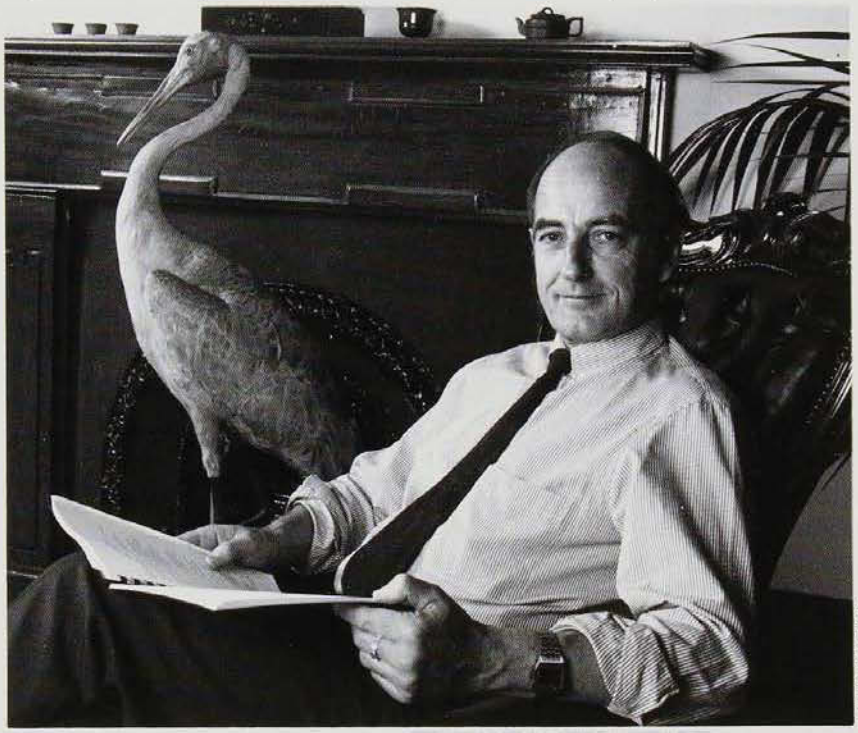
Museums, despite their successes, face difficult times in Australia as in England. Whilst people crowd into new museum buildings and exhibitions in the thousands, national governments continue to adopt a totally outmoded approach to their support, even their existence.

The assumption that the benefit of museums to the public is realised only by visits (not by publications, collections and research) and the application of the 'user pays' approach are leading to downgrading of the support for museums as with arts and cultural activities in general. A Ministerial inquiry in Canberra is even proposing that collections of some museums and galleries be sold off!

The Australian Museum will survive these times if it shows that it is unique and valuable. Our increasing attention to providing exciting educational experiences and quality service to customers will be vital. Of special importance will be our attention to scholarship. With the constant push for the glossy, the exciting, the instant gratification, some museums rush to drag in the visitors and then claim high attendance as if it were the instant barometer of success. They have lost sight of the fact that without scholarships museums will become a hucksters' market. Museums exist to excite and to educate as well as to conserve collections: people should come out wanting to learn more, *not as a mere statistic*.

The revision of the Museum's mission and philosophy and the introduction of a new program to monitor services to customers and visitors are thus vital. The new philosophy clearly spells out our commitment to providing exciting learning opportunities — our major purpose is education — and gives much greater emphasis to high quality services to visitors and all customers. A program is now in place which will involve managers in monitoring and helping to improve the quality of those services every week through observation, personal contact with customers and analysis of questionnaires completed by customers.

It is a great tribute to the staff of the Museum that we have opened the building and the new exhibitions and kept on working during construction. It is an acknowledgement too of the importance that the project teams for the new building and the exhibitions attached to a focus on achievement and on the resolution of conflict. As always, I have pleasure in thanking my colleagues, not least Deputy Director Hal Cogger, and the Trust, especially our distinguished President Robyn Williams, honoured this year by the award of membership of the Order of Australia (AM) and of two honorary Doctorates of Science from Macquarie University and the University of Sydney, for their support during the year.



ANTHONY FARR

We believe support of the Museum to be the responsibility of community *and* government: the Trust and staff will be active in gaining that support. The new building for the Australian Museum has taken us to the threshold of a new era: it will be up to the Trust and the staff to take us into the future.

CONTENTS

Statement of Philosophy	1
Introduction	2
President's Report	3
Director's Message	4
Bicentennial Achievements	6
Highlights, Future Plans	
Long-Term Corporate Planning	8
Trustees	
Scientific Achievements	10
Exhibitions	20
Community Relations	
Administration	24
Lizard Island Research Station	26

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BICENTENNIAL ACHIEVEMENTS

Whether you believe the Bicentennial is half over or only half started the Australian Museum's achievements to June 30 are certainly impressive. *Pieces of Paradise: Pacific Artefacts Through many Eyes* was the first exhibition to open in May. To celebrate the opening artefacts from the Museum's collections were returned to three Pacific nations.

The exhibition contains more than 300 artefacts from the Museum's anthropological collections many of which have never been viewed before. They range from Lapita pottery shards between 2,500 and 3,000 years old, to Captain Cook's feather cape presented to him in Hawaii in 1779 to paintings by contemporary Papua New Guinea artist Kuauge.

Dreamtime to Dust: Australia's Fragile Environment was opened three weeks later in a blaze of publicity. Dealing with our country's changing environment this exhibition takes visitors through three huge dioramas complete with re-created animals. The dioramas look at Australia 200,000 years ago, 20,000 years ago and at the present time. Speculations on the future and key environmental issues which threaten us are raised at the end of the exhibition.

On June 22 the Honourable Nick Greiner, Premier of NSW officially opened the Australian Museum's new wing. At an estimated cost of $14 million the building's total space is more than 9,500 sq. metres and covers six floors. As well as providing the two exhibition areas that house Pieces of Paradise and Dreamtime to Dust galleries the new wing houses the library, a second Museum shop, materials conservation laboratories, offices and storage for anthropological collections.

"I would like to present to the Director of the Australian Museum a little food for thought and to the President of the Australian Museum Trust a basket . . . an empty basket. An empty basket being a challenge and a commission. With the review and reorientation of Australia's thinking now increasingly evident we hope that in future with a little food for thought and this basket you will be appropriately and better equipped in your deliberation and decision making, relating to Pacific development and welfare and to cooperate with and assist us in our pursuit of those items necessary for the preparation and revival of our culture, the mutual and reciprocal interests of our museums and the collective common cultural heritage of our Pacific population."

Extract from speech by Grace Molisa at opening of 'Pieces of Paradise' 6th May 1988

ANTHONY FARR

(Top) ***NSW Premier Nick Greiner, Robyn Williams and Dr Des Griffin at the official opening of the new wing***
(Middle) ***Preparator Alison Titchen puts the finishing touches on a giant make for the Dreamtime to Dust gallery***
(Bottom) ***Papua New Guinea artist Kauage at the opening of Pieces of Paradise***

ANTHONY FARR

Designed by architect Colin Still of the NSW Public Works Dept, the building was constructed by I.W Giles & Co. From its first building in 1846 the Museum has grown to be a series of buildings forming a U-shape, the new wing fills in what was a courtyard and will provide the public with easy and asthetically pleasing access to collections and exhibitions areas.

The glass-roofed atrium is a particularly pleasing feature of the building enabling the beautiful sandstone walls and architraves of the original building to be viewed from many angles. It gives light and space to the main public entrance providing an atmosphere very different from that expected in the oldest and largest natural history museum in Australia.

To allow the public to join in the new building celebrations the Museum held a 'Celebration Weekend' on June 25 and 26. Musicians and performers entertained the public in all areas of the Museum, scientists gave talks in the Hallstrom Theatre, special guided tours of the library were conducted and a general fun, festive atmosphere pervaded. Attendance was very pleasing.

ANTHONY FARR

"We came and behaved as colonial conquerors . . . ruthless in our treatment of people, and even more ruthless in our exploitation of the land . . . The record of 'opening up' of this country, of almost total extinction of its inhabitants, of reduction of the average fertility of its soils to half its original value, of pollution of all its few rivers and streams, of the cutting down of most of its forests and bushes, of total disregard of the environment when mining, or building roads . . . This remarkable visual history of our land will surely help to make Australians want to change course . . . it is our job, the task of every Australian to do everything possible to put right the terrible human, and thoughtless technological wrongs of the past, and make this the home of a unique nation, which contributes fully to the development of the whole human race on Earth."

Extract from speech by Sir Mark Oliphant at opening of 'Dreamtime to Dust' 29th May 1988

LONG TERM CORPORATE PLANNING

The Museum's corporate planning system allows us to identify major goals in the short and long term. A central feature of the process is that it is done at several levels. The general plan addresses long term objectives while Divisional Plans address objectives most relevant to people in those divisions in the short and medium terms. The aim is to make these plans the plans of the staff who prepare them.

Some very important objectives in the latest long term plan include:

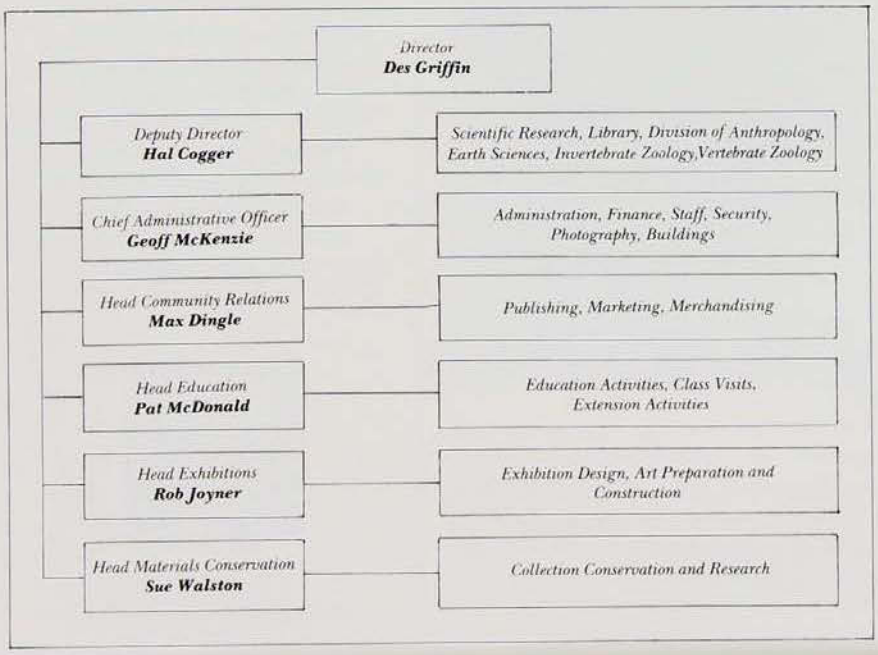
- identify and implement new proposals which would put the Museum in a uniquely successful situation
- significantly improve services to visitors and public access
- bring eminent scientists from overseas to give public lectures and lead workshops
- review the entire extension services offered by the Museum
- expand fund raising and revenue generation
- mixed commercial/government building development on Yurong Street frontage to be investigated
- new building to be completed and relocation of staff and facilities to proceed
- Department of Administrative Services Management Audit to be completed and reviewed
- fundraising from the business community to be advanced and commercialisation of Museum activities to be explored

HIGHLIGHTS

- Five major exhibitions for the Bicentennary
- Review of future exhibition themes
- Marine biologists in major expedition to Elizabeth & Middleton Reefs
- Library move accomplished
- Development of security staff training program
- Staff appraisal system developed
- National Photographic Index book 'Shorebirds of Australia' received Whitley Award
- Australian Natural History received Whitley Award
- Museum's extension service for the handicapped Wandervan started a joint venture with Taronga's Zoomobile
- Museum On The Road visited areas of high Aboriginal population
- Sydney University transferred a collection of over 3,000 objects to our Anthropology collection
- Materials Conservation developed and implemented a pest control program
- TAMS launch 'Circles of Natural History' to support Museum
- Synopsis of deep-sea whalefishes completed
- Discovery of fossils of large flightless birds
- Discovery that Bumble bees can remember their arrival directions at flowers, even after the flower has been rotated.

FUTURE PLANS

- Earth Sciences will consolidate the position of invertebrate palaeontologist
- Education Division will review extension services and class visits
- Anthropology will complete the transfer of collections and offices to new accommodation
- Materials Conservation will assess the practicality of low oxygen atmospheres in controlling insect infestation
- Telecom will install telephones at the Lizard Island Research Station
- An external review of the accounts section will be conducted
- Tim Flannery will continue his field work investigating the origins of Australasian mammal fauna and the effects of human impact.
- TAMS will expand its lecture program and attract line-up of international speakers
- Computer aided graphic design will be introduced
- Discovery Room will be relocated and expanded
- A new Skeleton Gallery will be installed



TRUSTEES

Mr Robyn Williams has been producer/presenter of the ABC *Science Show* since 1975. His television experience includes the *Uncertainty Principle* and documentaries on Australian wildlife.
He has served as a member of the Commission for the Future since its inception and is currently its Deputy Chairman. Until recently he was a member of the National Commission for UNESCO.
He has had a number of books published including *The Best of the Science Show* and his latest *Outpourings*, and is a regular contributor to the Museum's magazine *Australian Natural History*. He joined the Trust in 1984 and was elected President in 1986.

Mr Colin Bull A.M., B.Sc was Managing Director of Johnson and Johnson Pty Ltd 1969–81 and Chairman 1982–85. He is a Director of Manufacturers Mutual Insurance Company and of Clyde Industries. He was a member of the NSW Manufacturing Industry Advisory Council, Chairman of the NSW Innovation Centre, Executive Member of the Grocery Manufacturers of Australia Ltd and was Chairman in 1974 of that group. Council Member of the Chamber of Manufacturers of NSW since 1979 and was President in 1981 and 1982. He joined the Australian Museum Trust in 1985.

Dr Telford James Conlon holds degrees in Chemistry from Sydney University and University College London and a PhD in Biophysics from the University of New South Wales. As well as having been a 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 from 1979 to 1980.
Until recently he was a Research Associate of the Neurobiology Unit at the NSW Institute of Technology. He is now a company director.

Mr Richard Clark born and educated in Western Australia, is General Manager, Corporate and Public Affairs for Caltex Australia Ltd. He has had assignments in most states including that of State Manager, Queensland and more recently of NSW. He is a Trustee of Young Achievement Australia, NADOW, and the Committee for Economic Development of Australia.

Mr John G. Fink was born in Melbourne and educated in Sydney. He is currently on the Board of Management and Consultant to Universal Press Pty Ltd. Consultant to Singapore Press Holdings and a Director of their Australian company, Times Enterprises (Australia), and Consultant to the New Zealand Broadcasting Corporation. Previously was Proprietor and Managing Director of Gregory's Scientific Publications. He has had many senior positions including: Director of Australian Consolidated Press Ltd. (ACP), Managing Director of Golden Press Pty Ltd (book publishers), Managing Director Murray Leisure Group Ltd. (magazine publishers, Gregory's Publishing Company and Kosciusko Alpine Resorts), Managing Director Video Tape Corporation, Marketing Director ACP Ltd, Deputy Managing Director Victorian Broadcasting Network, Advertising Director ACP Ltd., National Sales Manager GTV Channel 9 Melbourne.

Dr Judy Messer has a sociology degree from Macquarie University and a PhD from the University of New South Wales. Dr Messer has been involved in research, tutoring and lecturing at both the University of NSW and Sydney University. Her PhD thesis dealt with the ecological and sociological implications of structural change in agriculture. Dr Messer is (voluntary) Chairperson of the Nature Conservation Council of New South Wales which is the umbrella body for 79 NSW environmental organisations. She is also a member of the Western Lands Advisory Council. Dr Messer is particularly interested in the maintenance of biological diversity, and the conservation of natural ecosystems and remnant native vegetation.

Mrs Joyce Clague completed her term of office during the year.

Professor David Throsby, completed his term of office during the year.

Mr Ernest G. McDonald completed his term of office during the year.

ANTHONY FARR

A meeting of the Australian Museum Trust

SCIENTIFIC ACHIEVEMENTS

A small boy sprawls across a bench, watching a cartoon video about the extinction of the dinosaurs. A mother and daughter scratch their heads as they try to figure out a computer-simulated forest management game. An elderly couple gasp as they turn a corner to be confronted by full-sized replica of a giant goanna, seven-metres of flesh-tearing aggression that once terrorised Australia's giant Ice Age marsupials. A balding man in his 40s arrives to donate his battered old Malibu surfboard and a faded poster advertising a Saturday night stomp with The Delltones.

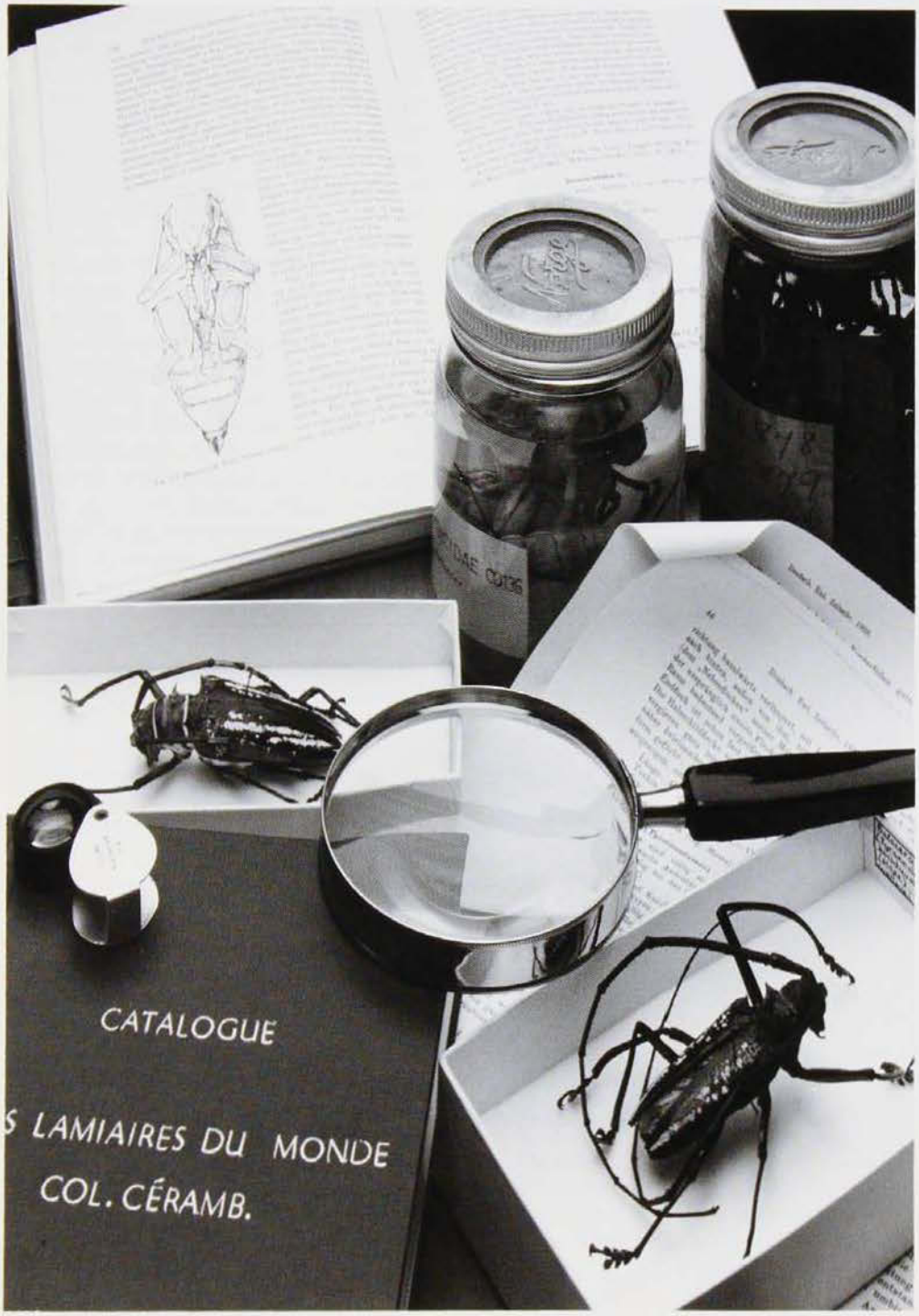
On any day at the Australian Museum you might witness scores of little scenes like that. Sure, the museum trappings have changed: computers and video screens now sit beside the traditional display cases. And the content has shifted as well: these days you're just as likely to see a stuffed Queensland cattle dog as *Tyrannosaurus rex* on show there.

Those changes have helped to keep the Museum in touch with its audience and with the times, but in 1988 its mission remains the same: to gather and spread information about the natural world, and about the relationships between that world and human society. As a boy, the man who donated the surfboard may have learned from the Museum how wave motions affected his surfing fun, or how floating bluebottles inflicted their painful stings on his legs. Today, his concerns may be to keep a record of the beach culture he enjoyed as a teenager, or to learn how the greenhouse effect might threaten tomorrow's young surfers.

If museums are repositories of knowledge, their backbones are the scientists and technical staff who assemble and interpret that knowledge. And it is the quality of the Museum's scientific efforts, just as much as the quality of its collections, that places it as one of the top natural history museums in the world.

A report like this can only hint at the breadth and depth of the Museum's research programs, and their relevance to Australia's culture and economy. Much of that research serves to increase human knowledge of the natural world, a vastly under-rated task in itself. At the other end of the spectrum, Museum researchers are making discoveries of immediate practical value. The work of the ***Invertebrate Zoology Division*** illustrates that point well.

Giant goanna in Dreamtime to Dust



MANY

of them may not be appealing in the way that, say a koala or platypus can be, but they are of enormous significance to our lives.

ANTHONY FARR

Australia is richly endowed with invertebrates — the vast group of animals without backbones, which includes shellfish, worms, insects and many others. Many of them may not be appealing in the way that, say, a koala or platypus can be, but they are of enormous significance to our lives. We depend heavily on bees and other insects, for example, to pollinate the flowers in our crops and gardens. Flies and mosquitoes may disturb our enjoyment of the outdoor life, or carry diseases that threaten public health and farm animals.

The Museum's scientists are involved in discovering and naming hundreds of new species of the smaller Australian invertebrates, which are so little known and studied. Dr Michael Gray, of the arachnology section, for example, has identified 35 species of funnel-web spiders and mapped their distribution. Having made the job of identifying these potentially fatal spiders much easier, this year he has been working their activity patterns (with Dr R. Bradley, of UCLA, in the United States). Knowing when and how people are likely to encounter funnel-webs may be life-saving information.

Another project with obvious practical value was the completion of a study of the invertebrate life in the seagrass beds of the Spencer Gulf, in South Australia. Dr Pat Hutchings has identified over 500 species there, and is analysing her results with Dr T. Ward, of the CSIRO Division of Fisheries. The seagrass beds lie adjacent to an iron-ore smelter; knowing the impact of heavy metal pollution on the animal life of the seagrass beds is critical for estuarine management, environmental protection and for the fishing industry. Likewise, Dr Alan Jones and Ms Anna Murray have begun a new project to study the sandy beaches of our many coastal bays and lagoons: both are intensively used and subjected to pollution and other human impacts, but virtually nothing is known about their ecology.

Dr Bill Rudman, assisted by Mr Geoff Avern, has attracted wide public interest for his work on nudibranchs (sea slugs). Electron microscopy has revealed that these often bright-coloured animals feed with rasping "teeth" that rival the Sydney Opera House for architectural curiosity. Apart from the sense

THAT

area had never been visited by zoologists before an Australian Museum team went there and . . . yielded a number of animals.

of wonder and aesthetic appreciation aroused in the public mind, the work has established new ways to identify nudibranch species. They have found, for example, that what was thought to be one species feeding on a variety of sponges was in fact, a group of many species of similar appearance, each one feeding on a different red sponge.

As a community resource, the Museum's physical presence is obvious. Less apparent is the fact that scientists such as those in the Invertebrate Zoology Division are part of the Museum's invaluable human resource. The community reaps the benefit of maintaining that resource in many ways. Scientists in the division, for example, are involved in supervising the work of many postgraduate university students from all over Australia and even from overseas.

Providing accurate information to the public is also a major part of the Division's work. During 1987–88, the number of inquiries about spiders averaged between 15 and 30 every week. After a commercial television program on the alleged effects of the white-tailed spider's bite, inquiries briefly soared to as high as 200 a week. Museum spider specialists subsequently took part in a number of radio and television interviews to try to correct misinformation in the original broadcast. As well, identifications requiring expert knowledge are often called for, either by other scientific organisations, Customs officials, or even the courts.

The Division's research collections are growing rapidly, reflecting its emphasis on discovery. More than 59,000 specimens were added to the insect and spider collections, along with another 15,000 in other invertebrate groups. Even so, many tens of thousands of species of Australian insects are thought to remain undescribed: global concern about the loss of biological diversity due to human activities is injecting a new sense of urgency into such work.

Work in the ***Vertebrate Zoology Division*** also underscores the importance of the Museum's scientific role in environmental and conservation issues. One of the Division's most outstanding discoveries for the year emerged from an earlier field expedition to the remote Star Mountains of far-western Papua New Guinea. That area had never been visited by zoologists before a Museum team went there, and the trip yielded a number of animals new to science.

RE-DISCOVERING THE BOOMERANG

Australia's economic woes have put enormous pressure on scientists to justify their work, especially in areas of basic or fundamental research, if they are to hold on to their share of the public purse. But science is a creative and unpredictable thing, and its relevance and value are not always obvious. What seems like an academic exercise one day can have a surprising and unexpected pay-off the next. Take the work of Dr Lin Sutherland, for example. Many Australians might assume that their nation had little need for a scientist who specialises in volcanoes. After all, it is an ancient, stable continent not noted now, or even in recorded history, for volcanic activity. Even allowing for the fact that volcanoes were active here in ancient times, as is obvious from the many old volcanic cones and debris, what possible help could Dr Sutherland give by way of research that pays financial or social dividends? Although it may not seem so, many years of study have shown that eastern Australia is one of the great volcanic belts of the world. Some fields are not extinct, but simply dormant, and could erupt at any time. Some of our volcanoes "are so fresh they look like they erupted just yesterday", Dr Sutherland notes. Aborigines certainly witnessed the awesome explosion of whole mountains and the destructive rain of fire and lava, and recorded them in their lore. We now know that a pattern is evident in Australia's volcanoes, with the oldest and biggest in the north, and becoming gradually more recent towards the south. Scientists think Australia has drifted north over a stationary hot spot beneath the Earth's crust, which has erupted regularly. A slight zigzag motion in the continent's drift has left the volcanoes in apt boomerang-shaped chains, Dr Sutherland believes. Those findings, along with other evidence, suggest that the next volcano is most likely to erupt beneath Tasmania. That alone will save public money if a prediction system is to be set up, but Dr Sutherland's studies also suggest that knowledge of that boomerang pattern, and how it formed, will greatly narrow the search for mineral riches associated with volcanic processes, including diamond, sapphire, zircon, garnet, and moonstone. A fascinating story, public safety and exciting commercial potential — all of that springing from patient basic research in the best scientific tradition, and in the best national interests.

The undisputed "star" was the discovery of a previously unrecognised giant rat, of the genus *Mallomys*, which turned out to be the largest living member of the rat and mouse family known. The cat-sized animal created intense public interest in Sydney, so much so that it went on special display for a short time before scientific work on the specimen continued.

Its discovery, by Dr Tim Flannery, was of international significance, as were all of the specimens collected in the area. Apart from their uniqueness, the finds shed new light on the distribution of animals in New Guinea. Difficult access to that high country means that further information about the area is unlikely to emerge for some time.

In another expedition to the Solomon Islands, Dr Flannery surveyed giant rats there as well, the first time that data has been collected in the area for a century. One species, *Uromys imperator*, is the largest mammal native to the Solomons: Dr Flannery found that it was critically endangered and will concentrate in future on the status of that species.

The bountiful and exquisitely preserved fossils of the Riversleigh deposits, in Queensland's Gulf Country, continue to reveal new information about Australia's prehistoric animals from the Tertiary period.

A team led by Associate Professor Michael Archer, of the University of New South Wales, who is a Research Associated of the Museum, has unearthed one of the world's finest fossil sites there. Mr Walter Boles continued his work on Riversleigh's fossil birds, and new finds included fossil ibis, rails and more evidence of the impressive mihirungs, another group of giant vertebrates. Those extinct flightless birds, resembling but overshadowing the emu, include the largest known birds from anywhere in the world. They survived into the Ice Age, and may well have still been alive when the first people arrived on the continent.

Like many other Museum scientists, Mr Boles has also made significant contributions to science through publication of his work.

ANTHONY FARR

Walter Boles

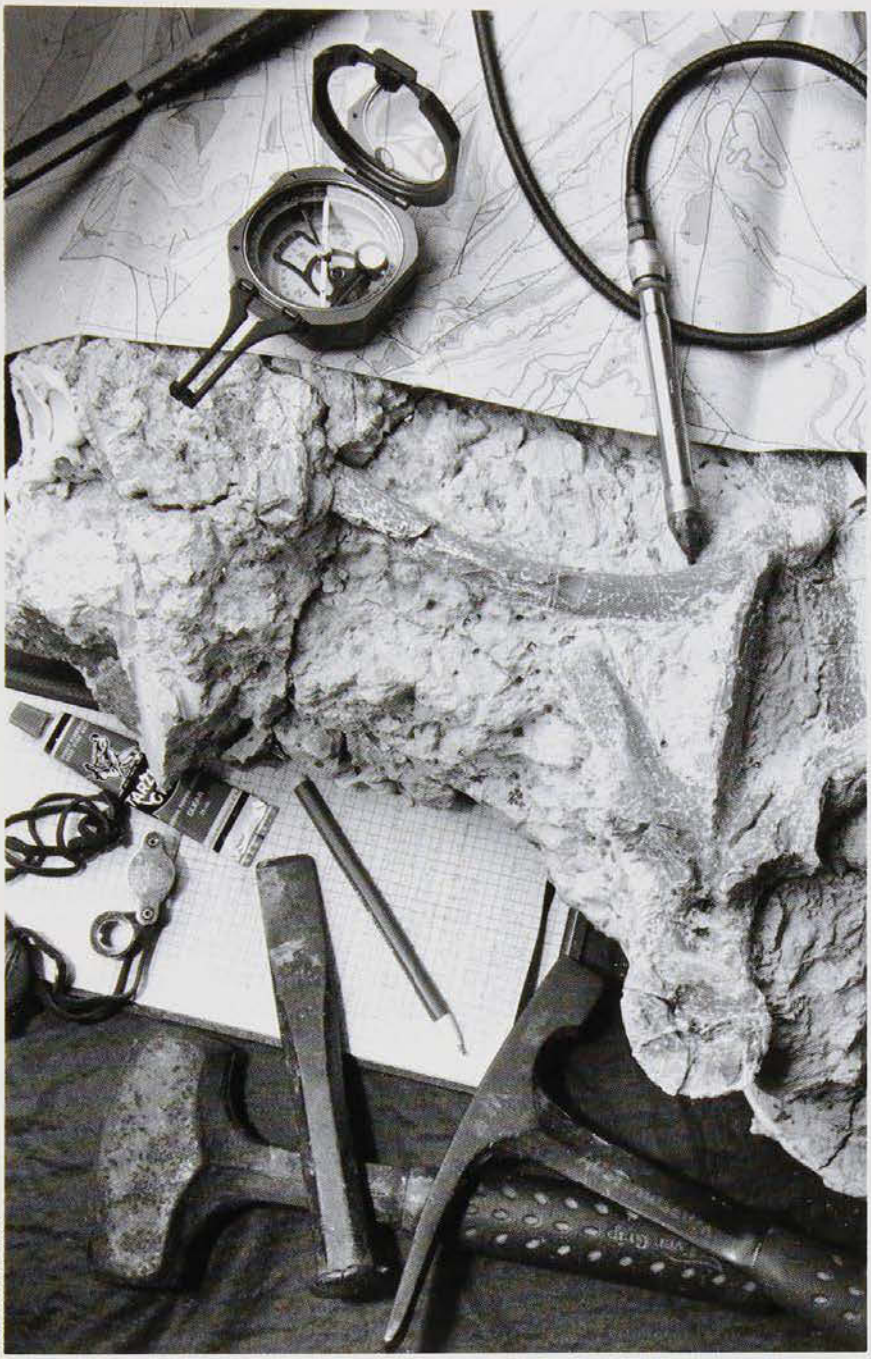
This year he finished *The Robins and Flycatchers of Australia*, the fifth volume of the National Photographic Index of Australian Wildlife series of bird books. The book was published at the end of 1987, and launched by the then Minister for Environment, Planning and Heritage, Mr Bob Carr.

Other significant publishing events involved Dr Jeff Leis and Mr Tom Trnski, who completed the manuscript for a major book on the larvae of Indo-Pacific shorefishes (covering the larvae of 54 families of tropical marine fishes, and following an earlier volume on the larvae of coral reef fishes). Dr Allen Greer, of the Herpetology Section, completed his book "Biology and Evolution of Australian Lizards", an attempt to summarise contemporary knowledge on the subject.

Dr Greer was also in demand for media interviews on crocodiles and cane toads. The discovery of a single cane toad in the western suburbs of Sydney by a member of the public, and identified by Museum staff, was reported as far afield as Denmark!

BOTTOM SCRAPING

When the First Fleet sailed into Botany Bay back in 1788, they brought with them more than the beginnings of a new human colony. The hull of each ship in the fleet was encrusted with all manner of tiny marine animals that had attached themselves along the way. So when a re-enactment of the voyage arrived back at that same bay in January, 1988, it was a rare opportunity to check whether the sailing ships had inadvertently helped those little "fouling" organisms to colonise Australian coastal waters all those years ago. Dr Winston Ponder, the Museum's head of invertebrate zoology, points out that virtually no detailed information is available about the animals and plants carried around the world by sailing vessels. Many are now common to ports scattered far across the globe, but scientists believe that before international travel by ship began, they were far more restricted in their ranges. Australian coastal waters appear to have many introduced fouling organisms — although there are still doubts about which ones are native and which are not — and it has been estimated that as many as 70 per cent of them came in sailing ships days. Modern ships, with their faster speeds, metal hulls and special anti-fouling paints, present fewer opportunities for these micro-hitchhikers. A team of Navy divers form HMAS *Penguin* worked with the Museum team, using tenders and the research vessel *Flamingo Bay* to scrape the hulls of the First Fleet Re-enactment and the Tall Ships vessels, and the event attracted considerable media coverage. That alone raised public awareness about the potential for this unwitting method of introducing exotic animals into Australia. The recent discovery of a colony of Japanese seaweed growing on the Tasmanian coast has reinforced that awareness of the process. It will be many years before the results of the First Fleet Re-enactment scrapings are fully known, since the identification of species will rely on overseas expertise in a number of cases. Sadly, the study was limited by the fact that many of the ships were cleaned in Rio de Janerio. Nevertheless, it drew attention to marine invertebrates in a unique way, and was a timely reminder that no baseline study of the bottom-dwelling animals of Sydney Harbour has even been done. "It really is amazing how little we know about it," says Dr Ponder.



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The toad appears to have strayed south by chance, perhaps on a vehicle, but the incident served to highlight public concern about the introduced pest, and the need for scientific expertise about it.

Increasing numbers of sightings of humpback whales during their migratory trips up the east coast of Australia also drew attention to Dr Bill Dawbin's continuing research on the whales' famous song. That research has clearly established that the whales vocalise and sing during their migrations, plus the intriguing finding that the eastern and western populations sing in different "dialects". Dr Dawbin and Ms Linda Gibson also continued to provide expert advice on much-publicised whale strandings.

Scientists within the Division are also involved in collaborating with overseas researchers, or in supporting foreign scientists visiting Australia — reflecting the international nature of science itself and the opportunities it presents for expressing goodwill other than through normal diplomatic channels. Dr Grahame Pyke, for example, travelled to Canada for collaborative research at Simon Fraser University. There he studied bumblebees as they moved from flower to flower, and confirmed that they can remember their arrival directions at a flower, and tend to leave in the same direction even if the flower is rotated while they are feeding from it. That discovery involved some ingenious experiments with artificial

REFLECTING

the international nature of science itself, and the opportunities it presents for expressing goodwill other than through normal diplomatic channels.

flowers, and settled a long-standing scientific debate about the bumblebee's sense of direction. In Australia, Dr Pyke has continued to make new findings on the pollination ecology of Christmas bells, with help from field research assistants at the Barren Grounds Bird Observatory, 150 kilometres south of Sydney.

A visiting scientist, Dr Eleanor Brown, of the US National Museum of Natural History, Smithsonian Institution, triggered a surprising level of public debate in the Sydney media about the behaviour of the pied currawong. Dr Brown's public comments to the effect that the bird had acquired an unwarranted reputation for aggression towards other birds brought a strong response from members of the public, apparently reflecting keen community interest in urban birdlife.

ANTHONY FARR

BUT

we are neither ashamed nor frightened to present images of these artefacts.

Public interest in dinosaurs, a long-standing fascination the world over, also drew attention to the work of the ***Earth Sciences Division***. Dr Alex Ritchie and Mr Robert Jones have continued work on their excavations of opalised dinosaur bones at Lightning Ridge, one of the richest dinosaur finds known in NSW. While a wide range of dinosaurs are known to have existed in Australia in prehistoric times, the number of fossils found so far has been surprisingly small all over the continent. This reflects both the difficulty of the search, and the handful of professional scientists actually doing such work. The Museum team also investigated a new site on the Sheepyard opal field, near Glengarry, which produced a number of new dinosaur bones. Negotiations are under way with the owners to acquire sites.

The University of New England's "type" fossil collection was transferred to the Museum during the year. That transfer was part of a long-term centralisation program, which encourages institutions to deposit these important collections with the Museum for their security and preservation. The Division manages a comprehensive collection of minerals, rocks, meteorites and fossils, which are accessible to researchers, educators and the community. Australia's geological heritage is one of the most ancient and varied in the world, and the Division's staff experts have a watching brief to monitor that heritage, giving advice on preservation and acquiring important material for the collections.

Two spectacular display ammonites from the USSR were purchased, and specimens of fish excavated during last year's highly successful Somersby fossil dig near Gosford were exchanged for Tertiary fossil fish from Wyoming, USA. A superb display slice of the gem-studded Imilac meteorite was also obtained through a specimen exchange. Scientists throughout Australia, and indeed the world, use the collection for research purposes: loans were made to 28 Australian researchers, and to 12 overseas institutions during the year. One loan was for Australian fossils for the *Kadimakara* display, an exhibition travelling through North American museums. Australia's unique prehistoric fauna is of particular interest there, and such exhibitions must help to spark tourist interest.

The University of New England collection involved several thousand items, including fossil corals from the Armidale area, which once formed part of the bed of a shallow sea. "Type" fossils are important because they are the benchmark representatives of a particular species or genus. The Museum's whole collection, therefore, can be viewed as a sort of reference library for scientists throughout the world.

In a similar way, the ***Anthropology Division*** holds a vast collection of material from all over the world, including about 80,000 ethnographic and 100,000 archaeological artefacts. An important event this year was the transfer of the University of Sydney's collection of about 3,000 objects, collected mainly in Melanesia in the 1920s and '30s. They substantially enhance the Museum's Pacific anthropology collection, already recognised as one of the finest in the world.

This year marked the opening of the exhibition conceived by Dr Jim Specht, *Pieces of Paradise: Pacific Artefacts Through Many Eyes*, and a special supplement to *Australian Natural History* explored some of the many issues raised in the exhibition. One such issue is the effect of collectors on the cultural heritage of the region, and how institutions like the Australian Museum came to acquire its artefacts. As the Museum Director, Dr Des Griffin, noted in the supplement: "These artefacts reflect to a large degree Australia's previous colonial relationship with the region; they are a small proportion of our total holdings. But we are neither ashamed nor frightened to present images of these artefacts, for the circumstances under which many of them came to our Museum belong to a past that cannot be changed." As a significant step towards a different relationship in the future, the opening of the exhibition was marked by the Australian Museum Trust with the return of three culturally significant artefacts to museums in Papua New Guinea, Vanuatu and the Solomon Islands.

Work also continued on preparations for the new gallery *Rituals of the Human Life Cycle*, which will open in late 1988. It will explore human cultural diversity through ideas and objects from around the world. Collection management consumed much time during the year, with efforts being concentrated on the mammoth task of preparing the

ANTHONY FARR

Conservator Thurid Clark works on a Malagan mask.

PRESERVING PARADISE

Before the stunning *Pieces of Paradise* exhibition could go ahead, more than 350 of the objects to be displayed required careful conservation work. Many had never been shown publicly before and were quite old. It was important that they be seen at their best, and that they remained as free as possible from the normal decay they would suffer outside the controlled Museum environment. Pacific Island artefacts present many preservation problems: many are made from fragile natural materials, and can be easily damaged by insects, mould, excessive light, dirt and poor handling. Some were meant to be used once for a special occasion, while others are so old, or subject to taboos, that very little is known about how they were made. The Museum's skilled conservators have to bear in mind at all times the need to record everything they do, and try to use reversible laboratory treatments. Sometimes nothing much can be done without risking the artefact's integrity — removing a coat of dust, for example, might leave a pigment underneath liable to flake or crumble — so devising safe storage and handling systems is the only option until new treatments can be devised. Conserving these remarkable Pacific artefacts demanded the utmost patience and delicacy. One mask alone took six weeks of full-time work to prepare it for display. The mask was collected in 1938, from the area between the Yuat and Keram rivers, in Papua New Guinea's East Sepik Province, where the people have a distinctive art style. As well as striking feather-covered ritual shields, their main productions include these fragile masks assembled intricately from shells, feathers, animal teeth, hair and woven fibre. This one mask had to be cleaned all over with tiny cotton swabs, have its clay base consolidated and be structurally strengthened in places. Art from the region is changing, especially in response to commercial demand for more saleable woodcarvings that provide cash for the region's artists. Taking such care of these traditional works from 50 years ago may be demanding, but the effort is well worth it if a record of these priceless pieces of paradise is retained for future generations, and if it promotes the kind of respect each culture deserves from others.

ANTHONY FARR

collections for removal to new storage. Many items are rare or fragile, and others — such as the Aboriginal collection — will be made more accessible to visitors after the move. The Melanesian collection, mentioned earlier, contains some extremely interesting material, much enhanced by accompanying information about the objects available in the publications and papers of the people who collected it — and some are associated with famous names in anthropology, such as Gregory Bateson, Margaret Mead and Raymond Firth.

Among the Division's many research activities, Dr Specht prepared to return to West New Britain to carry out further research into the area's prehistory, along with Dr Richard Fullager (a research associate with the Museum) and Dr Robin Torrence, of the University of Sheffield, in the United Kingdom. Dr Ronald Lampert returned to central Australia, to extend his research on the Western Desert Research Project, and Kate Khan also returned to the Western Desert to visit Yuendumu and Papunya, where she is well known. She extended her documentation of the Aboriginal art of the region, and of the material culture made and used by women. Dr Betty Meehan again visited communities in central and northeastern Arnhem Land, and in the central Daly River area, where she pursued her research into the material culture associated with subsistence activities. Dr Lampert has begun a new project aimed at discovering the history of people of the Lake Eyre region. That exceptional project draws together experts in social anthropology, demography, geomorphology and contact history, to study what appears to be an area with continuous human presence extending back to the earliest phases of human occupation of Australia.

Underpinning the work of all the Museum's collection efforts is the ***Materials Conservation Division***. Its all-important task is to prevent damage to the collections, conserve items of special importance, and to undertake research to increase the immediate and long-term preservation of the collections. As well, it is a community resource in the sense that it disseminates information on conservation methods to a wide variety of groups and individuals, meeting over 50 public inquiries throughout the year.

Work on the *Pieces of Paradise*

SUCH

work is vital if the Museum is to continue to maintain its rare, precious and often unique examples of nature's bounty and human ingenuity.

exhibition involved the conservation of more than 350 exhibits (see page 17), many of which were particularly demanding. Many of these items had never been displayed before. Likewise, the *Rituals of the Human Life Cycle* exhibition has presented a special challenge because of the sheer diversity of materials from which the display objects are prepared. New treatment methods to prevent the corrosion of many of the metal artefacts, including a number of Japanese swords, were developed. Many of the things on display will require supports, so an innovative mounting system employing a polyethylene coating on metal supports has been used to cushion them. *Pieces of Paradise* artefacts included two five-metre Sepik house posts, comprising wood, feathers, plant fibre, shells, plastic, fur and various pigments.

Painted artefacts present special conservation problems, so the Division is involved in continuing research into the development of methods and materials to reduce flaking: testing procedures have been developed and experimental trials, have begun to determine the most suitable adhesive for securing paint to the surface of wood without damaging or altering its physical appearance.

Sue Walston and Karen Coote organised the 8th Triennial Meeting of the ICOM Conservation Committee in Sydney in September, 1987. This was the first international conservation conference to be held in the Southern Hemisphere. Apart from being a great success, it drew many international visitors to Sydney, and to the Museum. Organised tours of the Materials Conservation laboratory were well attended.

Insect pests are a continuing threat, with so many organic materials in many of the Museum collections. A major research project is under way to assess whether prolonged exposures to low-oxygen atmospheres can be used as a feasible fumigation technique. Cultures of several major Museum pests — drug store beetle, powder-post beetle, cigarette beetle, carpet beetle and clothes moth — have been prepared, and experimental trials with the low-oxygen technique have begun. Such work is vital if the Museum is to continue to maintain its many rare, precious and often unique examples of nature's bounty and human ingenuity.

Bob Beale

LIBRARY

The Australian Museum's library forms one of Australia's major natural history literature resources. It's collections are made available for the scientific and educational activities of organisations and individuals.

This year the library moved to its new premises on the top floor of the new wing. Careful planning enabled the entire move and setting up in the new area to be completed in only six weeks.

The new library is vastly superior to the old in terms of access, space, facilities and aesthetics. Some important features are:

- an environmentally controlled secure area for rare books and archives. Attached to this is a Rare Books/Archives Reading Room with bench space to allow items to be spread out safely.
- a reference/reception/catalogue area with staff on hand to assist at all times.
- periodicals display area for staff to peruse new journals in an area separate from other work areas.
- Library staff working area incorporating computer facilities.

Throughout the new library original pieces of Museum furniture over 100 years old have been included as an integral part of the working environment as well as cases of displays that, as well as being decorative, show the development of display techniques over the years. These pieces were all especially restored for their use in the library and form a wonderful working collection of Museum Material Archives.

MUSEUM SERVICES

EXHIBITIONS The range of natural history topics is so vast it would be impossible to address every subject area and collection at once, therefore exhibitions attempt to achieve a balance of subject areas over time.

Through its exhibitions the Museum seeks to make particular statements and address themes. While objects form the fundamental support for these statements they are not generally the starting point. Objects are displayed in context with their meaning explained so that the audience may understand its significance.

The Exhibitions Division is responsible for designing and producing innovative and stimulating exhibitions as well as creating and maintaining pleasant, functional facilities in all public areas of the Museum.

An unprecedented program of four new semi-permanent exhibitions and one major travelling exhibition has been the over-riding thrust of the Division's work this year. Completion of the new wing and other extensions has provided a new restaurant, orientation atrium, specialist shop, new passenger lift, toilets and rest areas which all combine to give the Museum an exciting new ambience.

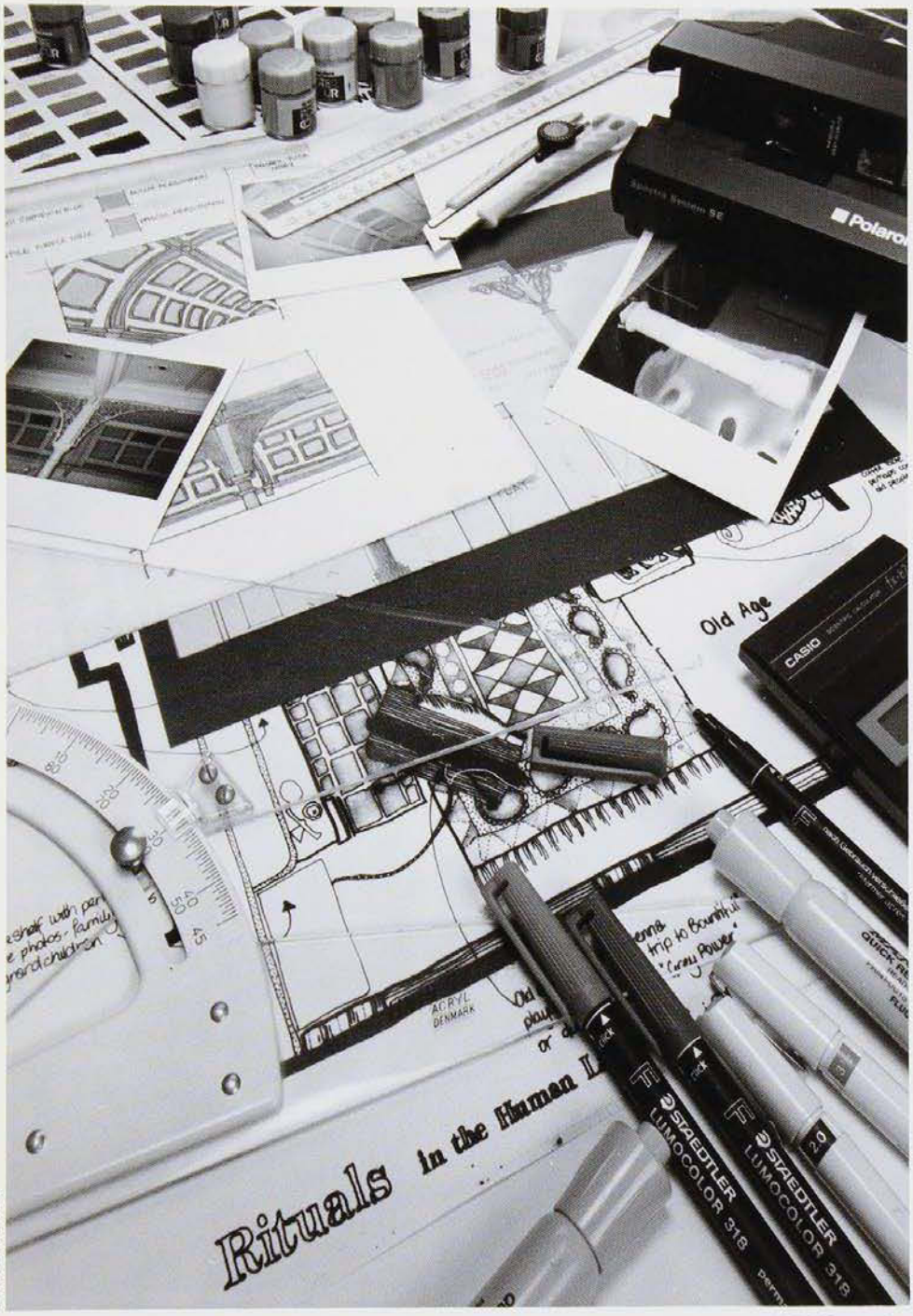
A new process camera was purchased enabling faster, more accurate reproduction. The old camera has been made available to scientific illustrators.

The Exhibition Guideline, a guide for the production and management of exhibitions was revised and re-published after five years of successful use. The Exhibition Advisory Committee reviewed current and future themes for semi-permanent exhibits and confirmed the important themes to be addressed in the Museum's exhibits over the next four years. These plans reflect the acquisition of new gallery areas and reaffirm the philosophy of the Museum.

COMMUNITY RELATIONS

Community Relations promotes the Museum's image as a centre for scientific research, a source of enjoyable experiences and an educator. Through publications such as Records of the Australian Museum, Australian Natural History magazine, promotional brochures, material on new exhibitions and the Annual Report we spread knowledge about Australia's natural environment and cultural heritage.

This year *Australian Natural History* took out the 'Best Periodical' category in the highly esteemed Whitley Awards. These awards are presented annually by the Royal Zoological Society of NSW for ex-



ANTHONY FARR

OBJECTS

are displayed in context with their meaning explained so that the audience may understand its significance.

cellence in natural history publication. The magazine also broke the 20,000 circulation mark for the first time.

Three volumes of *Records of the Australian Museum* and two Supplements were published during the last year. These included 10 papers in zoology, one in palaeontology and two zoological monographs. Museum scientists published one third of the papers.

A series of four television advertisements, one for each of the Bicentennial exhibitions has been prepared for the Museum by advertising agency Sleeman, Whitaker, Heckendorf and Potter. They are being screened progressively throughout the year. A new four-colour Museum Guide book has been produced and has been well received by staff and the public. It will be updated each year to feature new galleries. The bi-monthly news and events brochure produced in conjunction with The Australian Museum Society was re-launched in an A4 colour magazine format and titled *Muse*.

A second Museum Shop opened this year. Situated in the Atrium space of the new wing it will complement temporary exhibitions and ease the pressure on the main shop during peak trading periods.

MARKETING

of the Museum's services is important to ensure the community is aware of the resources available.

EDUCATION

The Education Division is changing its outlook to provide broader educational opportunities for a wider range of Museum visitors.

Adult education will be given a priority as will teacher training. Marketing of the Division's services is important to ensure the community is aware of the resources available. This is achieved through magazine articles, *Noticeboard* a mailer distributed to all schools, teachers' previews of new galleries and lectures to trainee teachers.

Desktop publishing will enable the written material produced by the Division to be regularly upgraded.

ANTHONY FARR

The Honourable Franca Arena MLC Congratulates Apple Computer for their sponsorship of the popular Wandervan.* (Right) *Martyn Robinson prepares Museum in a Box.* (Above Right) *The award winning Australian Natural History magazine.

ANTHONY FARR

Inside the Museum both booked and un-booked school groups use the galleries and education rooms for hands on activities. 'Action Rooms' are set up with different themes each term and comprise a variety of activities. Both Action Rooms were heavily booked.

The Museum in a Train visited the Central West, Illawarra, Far North Coast regions and Broken Hill via Yass and Young. The Train was visited by almost 60,000 people, school children and the general public. As well as conducting school lessons the Train opened in the evenings in some towns for Scouts and Guides groups and natural history meetings.

The State Rail Authority hauls the Train which has been sponsored by the Commonwealth Bank. This ser-

vice will cease to run after November 1988 and replacement extension services are being considered for the NSW country areas.

Museum On The Road continues to present a range of exhibitions in suburban libraries and shopping centres. MOTR exhibitions cover the topics Life in The Sea, Aboriginal Australia, Mammals, Papua New Guinea — The Abelam People and were visited by more than 160,000 people this year.

Museum in a Box is a program of loan cases containing specimens artefacts, tapes, graphics and notes which are transported to inner city, suburban, distant and isolated schools. During the year 596 boxes were booked.

The Wandervan is designed to extend the museum's educational resources to the disadvantaged and disabled sectors of the community in schools, hospitals, migrant centres, nursing homes, corrective, psychiatric and other institutions. This year the Wandervan visited 3,909 individuals in 157 visits to 141 centres. Wandervan was generously sponsored by Apple Computers this year. A joint service was initiated between the Wandervan and Taronga Park's Zoomobile to visit disadvantaged schools.

The Discovery Room has continued to be extremely popular with 110,000 visitors this year. New exhibits on human skeletons, insect life cycles, spider and mosquito feeding and archaeology have been well received. A weekday class visits program in the Discovery Room is continuing to be successful, the Room is open three mornings a week for year 2-10 students.

ANTHONY FARR

(Below Left) ***The Discovery Room proves very popular.***

ANTHONY FARR

ADMINISTRATION

Any business needs competent administration to achieve its aims and the Australian Museum is no exception. The Administration Division provides accounting, building, guiding, staffing, photography, security and cleaning services. Staff are committed to issues of accountability, provision of career and personal development and ensuring the Museum is a stimulating, progressive and entrepreneurial organisation in which to work.

ACCOUNTS SECTION

During the year the Unisys computer hardware system was upgraded greatly improving response times for general processing, report generation and inquiries. Additional software was also purchased. Improvements have been made in the payment of accounts with 95% or more of invoices now processed within 30 days.

ANTHONY FARR

GUIDES SECTION

The Guides undertook extensive training this year to familiarise themselves with the Bicentennial exhibitions. Daily highlights tours continue along with the very successful school holiday tour programs. The new cloakroom and information desk in the College St foyer was handed over in May.

STAFF SECTION

Attention was given to improving office systems and level of service provided. The computerised personnel system was reviewed and a consultant engaged to update and improve the system. The Induction material was revised and presented in a more attractive, easily understandable form. A one day induction seminar was held for new staff with speakers from the Museum and internal agencies. The William St foyer has been renovated and a new PABX has been installed. A 'Front of House' training program has also been developed.

PHOTOGRAPHY SECTION

The sections tasks range from providing up-to-date illustrations for Museum displays to photographing details of the latest archaeological and scientific discoveries for our archives.

Some of the major work performed during the year included:

- Coverage of land use in the snowy region by John Fields
- Pieces of Paradise and Rituals galleries artefacts photographed
- Ric Bolzan photographed the 'Pieces of Paradise' supplement to Australian Natural History

- Published work included three posters and covers for Australian Natural History and the 'Tracks Through Time' supplement
- All staff contributed photography for scientific papers
- The George Brown collection circa 1860's to 1890's comprising 900 glass plate negatives is being conserved and copied.

John Fields resigned as Officer in Charge of the section to take up a position with Armidale University.

In October 1987 the section was reviewed by a panel comprising inservice and commercial photographers, business people and Museum management.

STAFF

are committed to issues of accountability, ensuring the Museum is a stimulating, progressive and entrepreneurial organisation in which to work.

ANTHONY FARR

SPECIAL PROGRAMS

LIZARD ISLAND RESEARCH STATION was established in 1973 and is a facility of the Australian Museum located on the Great Barrier Reef. It supports research into all aspects of the biology, geology, hydrology, history and conservation of the Reef by scientists.

Accommodation is provided for 16 scientists at a time with diving equipment, running sea water system and air conditioned laboratories available to support their research. A total of 240 scientists visited the Station this year.

Facilities were improved this year through IBM's computer and Personal Decision series software.

The Station's research vessel R.V. Sunbird is available for charter. This year it assisted research throughout the Great Barrier Reef region from One Tree Island to Papua New Guinea.

This year saw the 6th Lizard Island Research Station Doctoral Fellowship awarded to Sydney University student Julian Caley. He will study the role "disturbance" plays in the structure of biological reef communities together with the effect predators and competitors have on the abundance and distribution of species. A further 21 scientific papers have been published on research conducted at the Station bringing total publications to 234 since the Station's establishment.

Diving off Lizard Island.

NATIONAL PHOTOGRAPHIC INDEX OF AUSTRALIAN WILDLIFE

The Index is a special project of the Australian Musuem which maintains an expanding, documented collection of photographs of the mammals, birds, reptiles and frogs of Australia. It provides information on the appearance of living animals and complements the collections of preserved specimens in the Museum. It is available on a commercial basis to publishers and provides a resource for richly illustrated reference books, produced by the Index staff.

Direction and financial supervision of the Index is through a Committee of Management appointed by the Australian Museum Trust.

Book production is the major activity of the Index. This year it has

published:

"The Robins and Flycatchers of Australia" by W.E. Boles. This 508 page book is the fifth in a series of ten volumes which will cover all the birds of Australia.

"The Shorebirds of Australia" by T.D. Pringle received the Whitley Award of the Royal Zoological Society of NSW for the best zoological reference book published in Australia in 1987. The author received a High Commendation for the literary quality of the book in the 1987 C.J. Dennis Awards of the Victorian Fellowship of Australian Writers.

"What Bird Call is That?" by T.R. Lindsey (with an introductory section and recorded commentary by R. Strahan) is an illustrated book and two audio cassettes.

Texts of volumes 6 and 7 of the bird series "The Honeyeaters of Australia" and "Parrots and Pigeons of Australia" are with publishers along with the mammal and frog sections of the "Encyclopaedia of Australian Terrestrial Vertebrates".

The Index also continues its important work of curating historical collections. This year the Bird Observer's Club of Australia donated its entire black and white collection of over 7,000 glass lantern slides and negatives to the Index.

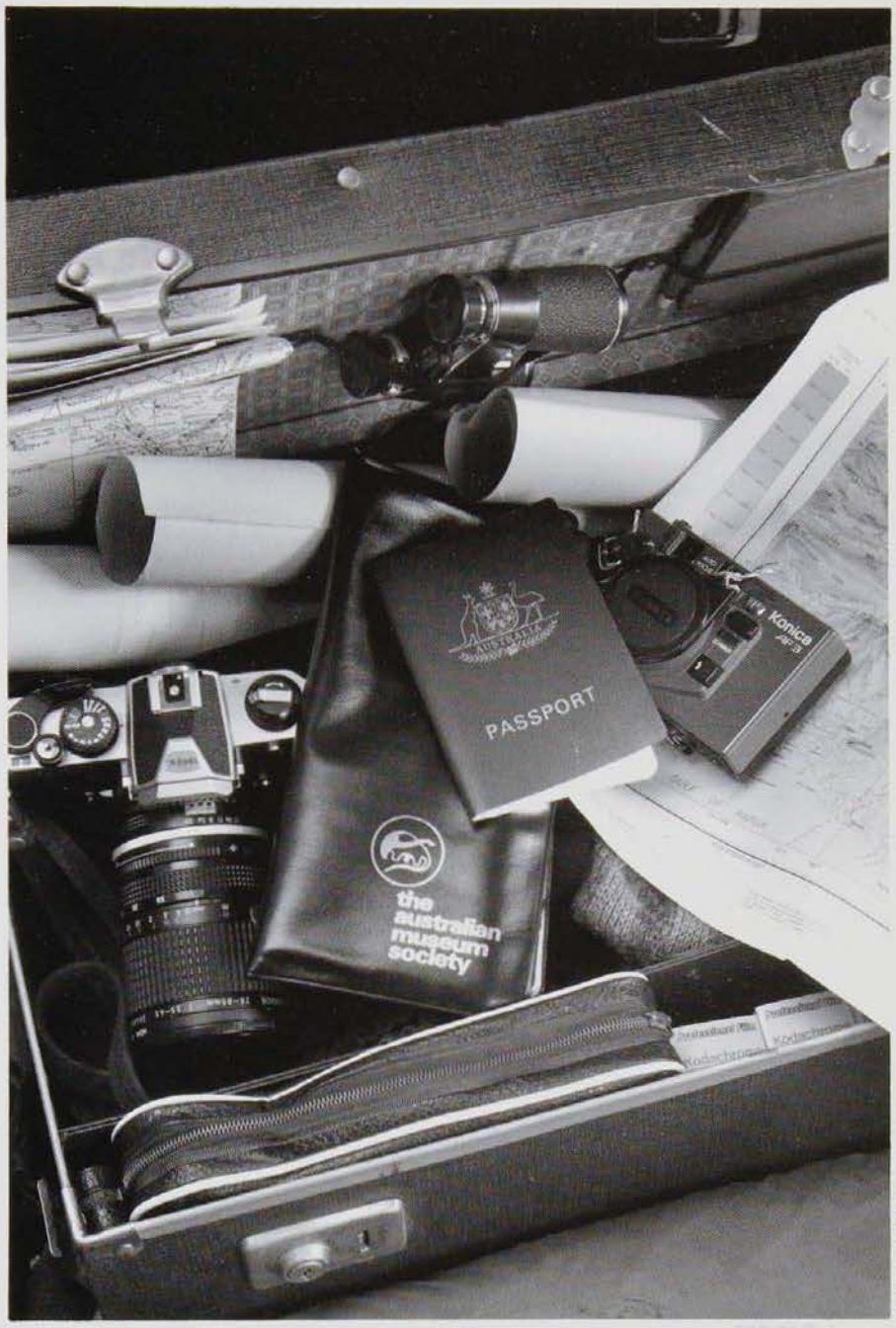
THE AUSTRALIAN MUSEUM SOCIETY

The Australian Museum Society (TAMS) is the Museum's Friends group, an important link that bridges the gap between the Museum and the community.

During the past year TAMS launched a new membership program "Circles of Natural History"; presented the Museum with it's final contribution to the "Dreamtime to Dust" exhibition of $25,000 (TAMS sponsored the exhibition for $100,000) and presented members with an exciting 1988 Discovery Tours program of five overseas trips.

The bi-monthly news and events brochure jointly produced by TAMS and the Community Relations Division was re-launched in a colour magazine format and titled "Muse".

Over 200 volunteers were selected and placed by the Society in all divisions of the Museum.



ANTHONY FARR

IT

supports research into all aspects of the biology, geology, hydrology, history and conservation of the Reef by scientists from all over the world.

FINANCES

CONTENTS

Page 28
Statistical Summary of trends over preceeding 5 years

Page 29
Budget for 1988/89

Page 29
Supplementary information

Page 32
Statement of Financial operation for the year ended 30 June 1988

Page 33
Statement of financial position as at 30 June 1988

Page 34
Statement of Source and Application of Funds for the year ended 30 June 1988

Page 35
Notes to and forming part of the Financial Statements

STATISTICAL SUMMARY — YEAR ENDING 30 JUNE 1988

	1984 ($'000)	1985 ($'000)	1986 ($'000)	1987 ($'000)	1988 ($'000)
Reserves	483	306	218	(2)	(8)
General Fund Receipts	1,310	1,319	1,457	1,758	2,033
Grant Fund Receipts	1,057	700	937	898	886
General Fund Payments	1,044	1,479	1,608	1,968	2,086
Grant Fund Payments	982	727	864	976	848
Consolidated Fund Payments	5,007	5,520	5,729	10,800	16,301
Statutory Endowment Receipts	140	148	160	160	300
Corporate Sponsorship raised during the year:	200	350	350	350	350
% of State Government funds to Total recurrent Funds Spent During the Year	65%	69%	66%	69%	75%
Permanent Staff	163	163	163	177	200

BUDGET 1988/89

Budget for year ending 30th June, 1989 for Consolidated and Trust Grants and General Funds

Anticipated Revenue

		1988 ($'000)
Consolidated Fund		8,468
Grants Account		953
General Fund		2,473
Deficit		—
		11,894

Budgeted Expenses

Consolidated Fund		8,468
— Salaries/Employee Payments	5,802	
— Maintenance and Working Expenses	2,016	
— Major Plant and Equipment	650	
GrantFund		953
General Fund		2,322
— Acquisitions	60	
— Trading Activities	738	
— Education Programs	128	
— Exhibition Programs	1,085	
— Scientific Programs	158	
— Other	153	
Budgeted surplus		151
		11,894

FINANCES

Highlights

Revenue from Trading Operations up by $165,448

Exhibition development expenditure increased by $388,288 to $950,247 — this expenditure included development of five major exhibitions.

Statutory endowment amounted to $300,000 an increase of 88% over the allocation for previous year.

SUPPLEMENTARY INFORMATION

State Government Funds State government funds were provided to meet salaries of the Museum's permanent and some temporary staff; general operating maintenance expenses; endowment, special subsidy contributions and capital works and services.

The State Government allocation to the Museum's salaries, working expenses and major plant and equipment increased by $2,165,523 or 34% over the previous year. Of this amount 42% or $905,302 related to increases in salary and allowance payments; 28% or $610,221 to increases in the maintenance and working expenses; and 30% or $650,000 to increases in major plant and equipment. Salaries and salary related expenses represented 63% of the total Government recurrent allocation of $9.1 million and 48% of the Museum's total recurrent expenditure of $12 million.

Consolidated Fund Capital Works and services expenditure of $7,802,065 was incurred on the new building in 1987/88, an increase of $3,336,148 or 75% compared to previous year.

As in the previous year, the Consolidated Fund allocation proved inadequate for all the Museum's maintenance and working expenses. As a result, expenditure on travelling and printing totalling $71,962 was paid from Trust funds. This was a decrease of $176,359 or 71% on expenditure for similar items including advertising and computer fees funded from Trust funds in the previous year.

Major variations in the Consolidated Fund working expenses compared with the previous year include Rent and Rates (+ 21%), Advertising (+ 82%), Fees (+ 43%), Gas and Electricity (+ 25%), Stores (+ 41%), Books (+ 32%), and Freight (+ 42%).

Trust Accounts

The Museum Trust operates two main accounts, the General and Grant Accounts.

Funds for the General Account are generated through merchandising operations such as sale of books, magazines, minerals, souvenirs, replicas, etc; hire of parts of the Museum buildings for functions and television commercials; donations and interest on investments.

Scientific research grants and corporate sponsorship are accounted for within the Grant Account. Corporate sponsorship funds are transferred to the Trust Account as expenditure is incurred on projects for which the sponsorship has been raised. In the preparation of these Financial Statements corporate sponsorship is only recorded as revenue in the Trust General account.

Combined income for the General and Grant Accounts for the year totalled $2,918,824 (budgeted income was $3,334,667) while expenditure totalled $2,933,289 (budgeted expenditure was $3,296,211). As a result of these variations the accumulated deficit for these Accounts increased from $1,705 to $8,023 as at 30th June, 1988.

Trust General Account

Receipts to the General Account were $2,032,525 an increase of 14% over the previous year. Major items contributing to this result were Museum Shop (29% of total funds); Special Subsidy (17%); Statutory Endowment (15%); Australian Natural History Magazine (13%); Gallery Sponsorship (8%).

Payments from the General Account were $2,085,709 an increase of $117,690 over the previous year. Major items contributing to this result were Exhibitions (46%); Museum Shop (18%); Australian Natural History Magazine (13%); Science (5%) and Education (4%).

Trust Grant Account

Receipts to the Grant Account were $886,299. The Main sources of this income were: Lizard Island Research Station (30% of total income); National Photograophic Index (19%); Education and Exhibition programs (14%); Australian Biological Resources Studies (11%); Australian Research Grants Scheme (9%) and Marine Science and Technology Grant Scheme (5%).

Payments from the Grant Account amounted to $847,580. Major contributors were Lizard Island Research Station (34%); National Photographic Index (26%); Australian Research Grant Scheme (11%); Australian Biological Resources Studies (9%) and Marine Science and Technology Grant Scheme (6%).

Summary of Accumulated Funds

Trust General Account — operations within this account resulted in an accumulated deficit of $63,230 at 30th June, 1988, an increase of $45,037 in the balance of the accumulated deficit 12 months earlier.

Trust Grant Account — showed an accumulated surplus of $55,207 at the 30th June, 1988, an increase of $38,719 in the balance of accumulated funds on previous year.

The decline in accumulated funds resulted from increased outlays in exhibitions and education projects and receipt of money from sponsorship late in the year casuing an early decline of reserves and thus reduced earnings from interest on investment.

With regard to the General fund, recoupment of income from the Bicentennial Council for the building opening was less than buget because of the building not being opened until late June. In additon, while the level of sponsorship funds reached the target level of $350,000, this was acheived only with a contribution of $82,000 for scientific purposes from the Lizard Island Reef Research Foundation. Lower levels of corporate sponsorship for exhibtion and education programs resulted in a significantly lower transfer of funds from the Grant to General Fund to offset the costs incurred on those programs.

A Museum Foundation was established during the year with the objective of raising corporate sponsorship for exhibition, education and other projects. Sponsorship of $50,000 per year over a five year period (commencing 1987/88) was obtained late in the year by the Foundation from the State Bank of New South Wales in respect of the Dreamtime to Dust exhibition — the major costs of which are contained within the financial year under review. A further donation of $50,000 from Mr K. Myer was obtained fo scientific purposes.

The Grant Account comprises a number of individual specific purpose accounts. The increase in accumulated funds within the Grant Account reflects the marked improvement within one Account — the Lizard Island Research Station. This account's accumulated deficit reduced from $102,565 to $83,739 during the year, which resulted from increased revenue from fees compared to previous year.

AUDITOR GENERAL'S CERTIFICATE

AUSTRALIAN MUSEUM TRUST

The accounts of the Australian Museum Trust for the year ended 30 June 1988, have been audited in accordance with Section 34 of the Public Finance and Audit Act 1983.

In my opinion, the accompanying financial position, financial operations and funds statements, read in conjunction with the notes thereto, comply with Section 41B of the Act and exhibit a true and fair view of the financial position at 30 June 1988 and transactions for the year then ended.

K J ROBSON, FASA CPA

SYDNEY,
29 September 1988

AUDITOR-GENERAL OF NEW SOUTH WALES

AUSTRALIAN MUSEUM TRUST
STATEMENT IN ACCORDANCE WITH SECTION 41B(1) (F) 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, 1988.

(b) The financial statements have been prepared in accordance with the provision of the Public Finance and Audit Act, 1983 and the Public Finance and Audit (Statutory Bodies) Regulation 1985 and the Treasurer's Directions; and

(c) We are not aware of any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.

R.Williams,
PRESIDENT OF THE TRUST

5/8/88

D. J. G. Griffin,
SECRETARY OF THE TRUST

5/8/88

AUSTRALIAN MUSEUM TRUST
STATEMENT OF FINANCIAL OPERATIONS
FOR THE YEAR ENDED 30 JUNE 1988

	Note	1988 $	1987 $
Revenue:			
Consolidated Fund —			
Recurrent Services	—	8,499,245	6,333,722
Statutory Endowment	—	300,000	160,000
Projects Subsidy	—	350,000	350,000
Capital Works and Services	4	7,802,065	4,465,917
Grants —			
Australian Government	7	251,573	287,575
Other Scientific	7	509,946	481,971
Education/Exhibitions	7	124,780	128,590
Trustees and Special Accounts —			
Trading Operations	8	968,897	803,449
Other Revenue	9	413,628	444,995
Peter Rankin Trust Fund	10	2,602	3,102
Australian Museum Society	11	408,463	344,339
Coffee Shop	24	224,428	297,995
Australian Government —			
Special Employment Programs	1	65,214	
		19,920,841	14,101,655
Expenses for Year Exceeded Revenue by		30,478	223,583
		19,951,319	14,325,238

	Note	1988 $	1987 $
Expenses:			
Consolidated Fund —			
Personnel Costs	—	5,805,738	4,900,436
Working Expenses	12	2,693,507	1,433,286
Capital Works and Service	4	7,802,065	4,465,917
Grants —			
Australian Government	7	230,813	277,054
Other Scientific	7	583,917	530,599
Education/Exhibition	7	32,850	168,401
Trustees and Special Accounts —			
Trading Operations	8	666,933	591,953
Exhibitions	13	950,247	561,959
Science Programs	14	96,114	117,694
Collection Acquisitions	—	69,035	80,059
Program Distribution	—	25,000	89,508
Education Programs	15	78,824	189,470
Other Operating Costs	16	199,556	337,376
Peter Rankin Trust Fund	10	1,900	1,833
Australian Museum Society	11	442,900	346,544
Coffee Shop	24	206,706	233,149
Australian Government —			
Special Employment Programs	1	65,214	—
		19,951,319	14,325,238

AUSTRALIAN MUSEUM TRUST
STATEMENT OF FINANCIAL POSITION
AS AT 30 JUNE 1988

Funds Held	Note	1988 $	1987 $
Trust General Account	22	(63,230)	(18,193)
Trust Grant Account	22	55,207	16,488
Australian Museum Society	22	81,259	107,549
Peter Rankin Trust Fund	22	20,012	19,310
Coffee Shop	22	—	(1,428)
		93,248	123,726
Represented By —			
Investments	18	90,438	117,954
Debtors and Accrued Income (less Provision for Doubtful Debts 1988 $3,000)	19	55,833	63,667
Cash on Hand	20	21,900	25,901
		168,171	207,522
Less			
Creditors and Accrued Expenses	21	61,362	19,051
Bank Overdraft	20	13,561	64,745
		74,923	83,796
		93,248	123,726

AUSTRALIAN MUSEUM TRUST
STATEMENT OF SOURCE AND APPLICATION OF FUNDS
FOR THE YEAR ENDED 30 JUNE 1988

		1988 $		1987 $
SOURCE OF FUNDS				
Funds from Operations				
Inflows of funds from operations				
Revenue	2,904,317		2,792,016	
Outflow of funds from operations expended in the provision of goods and services	19,951,319	(17,047,002)	14,325,238	(11,533,222)
Funds from Government				
Parliamentary approprations				
Recurrent	9,149,245		6,843,722	
Capital Works	7,802,065		4,465,917	
Other	65,214	17,016,524	—	11,309,639
Reduction in Assets				
Current assets				
Cash at Bank		—		74,896
Debtors		7,834		—
Investments		27,516		165,046
Cash on hand		4,001		—
Increase in liabilities				
Current liabilities				
Creditors		42,311		—
Bank overdraft		—		64,745
		51,184		81,104
APPLICATIONS OF FUNDS				
Increase in Assets				
Current assets				
Debtors	—		54,775	
Cash on hand	51,184	51,184	10,001	64,776
Reduction in Liabilities				
Current liabilities				
Creditors		—		16,328
		51,184		81,104

AUSTRALIAN MUSEUM TRUST
NOTES FORMING PART OF THE FINANCIAL STATEMENTS

1. Accounting Policies

1.1 The financial statements incorporate the Australian Museum Trust and New South Wales State Government Consolidated Fund allocations to the Australian Museum.

The financial statements have been prepared on a modified accural basis ie. income earned but not received, and expenses incurred but not paid at 30 June 1988 for Trust and Grant operations are included in the Statement of Financial Operations and are shown as 'debtors' and 'creditors' in the Statement of Financial Position. Operations on the Consolidated Fund are prepared on a cash basis with the exception of salaries which are fully brought to account to the year in which they relate.

The Treasurer has granted exemption under Section 41B(2) of the Public Finance and Audit Act 1983, from full accural accounting and under Section 41B (3) (a) from the necessity of preparing a Balance Sheet or Statement of Balances, subject to the presentation of a Statement of Financial Position.

1.2 Financial Statements are based on conventional historic cost principles. Current Australian Accounting Standards where applicable, have been adhered to in preparing the financial statements. Accounting policies adopted are consistent with those applied in previous years.

1.3 General operating expenses of the Museum including salaries of all permanent staff, rent, rates, travel, and other similar costs, are met from the Consolidated Fund.

1.4 Under the accounting policy adopted, the cost of plant and equipment is expended in the year of purchase. Accordingly, depreciation as required by the Australian Accounting Standards, is not provided.

1.5 Long service leave and annual leave are met from the Consolidated Fund allocation as leave is taken or as leave on retirement or resignation is paid. Provision for long service leave and annual leave is not therefore made in financial statements.

1.6 The Australian Museum occupies a site bounded by College, William, and Yurong Streets, Sydney. The site is Crown Land and is dedicated for the purpose of the Australian Museum. It is considered to be inappropriate to value this land given the restricted purpose of the holding.

The cost and current values of land and buildings are not reflected in the accounts. Insurance coverage for buildings and contents has been effected through the Government Insurance Office and Treasury Fire Risks Account and the costs are shown at Note 12.

1.7 The financial statements do not include expenditure on Australian Government special employment programs for 1986–87 as these figures are unavailable.

1.8 The Australian Museum subsidy of $41,000 was transferred from Trust General (Program distribution) to Grant (Lizard Island Research Station). This transfer is excluded from the financial statements, except in the preparation of Lizard Island Revenue and Expenditure Statement (note 25).

1.9 Sponsorship revenue of $165,646 was transferred from Grant Education/Exhibition Programs (note 7) to Trust General Other Revenue (note 9). This transfer has been excluded in the preparation of the financial statements.

1.10 The cost of payroll tax is met directly by the Treasurer and therefore not included in the financial statements.

1.11 Prior to 1 July, 1987 Employer's Superannuation Liability to the State Superannuation Fund and State Public Service Superannuation Fund were met directly by the Treasurer. Since this date, the Treasurer has continued to meet the Employer's Superannuation Liability to the State Superannuation Fund, but the Museum is responsible for meeting their liability to the State Public Service Superannuation Fund and State Authority Superannuation Scheme. The Treasurer has made provision for this cost to be met from Consolidated Fund as shown at note 12.

2. Insurances

2.1 For insurance purposes, plant and equipment is valued at $1,119,096.

2.2 The Trust's collections were valued in 1981 by the Museum at $76 million. The current value of these items may, however, be substantially in excess of this amount. The State Government acts as self insurer for any fire loss or damages to collections amounting to more than $5 million, arising from any one claim.

Insurance cover has been arranged to cover exhibits up to the amount of $5 million.

3. Assistance provided by other Government bodies.

Motor vehicles are provided by the Government Supply Department for the use of the Australian

Museum. The estimated cost of these vehicles as at 30th June, 1988 is $188,870 (1987 $167,285). The cost of acquisition of these vehicles is met by the Government Supply Department while their running costs are met by the Australian Museum.

4. Capital Works and Services

A major extention to the Museum building costing $14 million is being constructed by the Public Works Department and will be completed in August, 1988.

Consolidated Fund Capital works and Services expenditure totalled $7,802,065 in 1987/88 (1986/87 $4,465,917). This expenditure covered:—

	1988 $	1987 $
— Emergency communication system	—	5,582
— Fire sprinklers	—	26,445
— William Street lifts	—	873
— Strong Store	—	1,273
— College Street entrance	—	50,140
— Major Building Extensions	7,335,467	3,863,455
— Demolition of Point Building	—	217,757
— Public toilets	—	5,584
— Yurong Street sprinklers	—	59,657
— Fumigation Chamber	—	109,151
— Major plant and equipment	—	126,000
— Old Building Minor Works	91,611	—
— Security and Safety	90,011	—
— Refit old Wing	20,168	—
— New Wing Minor Works	264,808	—

5. Inventories

The Coffee Shop ceased trading on 28th May, 1988 and all remaining stock was sold. Trading stock on hand at 30 June, 1988 related to the Museum shop and was valued (at cost) at $145,422. Trading Stock on hand is not included in the Statement of Financial Position.

6. Expenditure by activity

The following is provided as a guide to the manner in which funds are applied within the organisation. Salaries are categorised within activities, as is the case with other expenditure that falls directly within an Activity. Expenditure not falling directly into a specific activity, such as rent and electricity, has been allocated to Administration Activities which, therefore, reflects actual Administrative costs as well as overheads associated with maintaining the specific Activities undertaken by the Museum.

	1988 $	1987 $
Administration Activities	3,004,797	2,454,748
Community Relations	703,710	522,836
Educational Activities	590,019	784,437
Exhibition Activities	1,829,164	1,425,600
Scientific Research/ Collections	4,639,811	3,500,054
Trading Operation Activities	873,639	825,102
The Australian Museum Society	442,900	346,544
Capital Works and Services	7,802,065	4,465,917
Special Employment Programs	65,214	
	19,951,319	14,325,238

7. Grants — Revenue and Expenses Comprised:

	1988		1987	
	$ Revenue	$ Expenses	$ Revenue	$ Expenses

Australian Government				
Australian Biological Resources Study	99,225	75,826	61,527	63,674
Marine Science and Technologies Grants Scheme	44,695	46,368	117,856	99,803
Australian Research Grants Scheme	83,829	93,977	93,628	73,695
Queen Elizabeth II Fellowship Scheme	—	—	2,013	21,466
Other	23,824	14,642	12,551	18,416
	251,573	230,813	287,575	277,054
Other Scientific				
Lizard Island Research Station	267,687	289,915	230,439	244,813
National Photographic Index of Australian Wildlife	170,511	221,649	168,710	201,926
Lizard Island Research Station Fellowships	38,229	11,787	—	26,442
Other	33,519	60,566	82,822	57,418
	509,946	583,917	481,971	530,599
Education/Exhibition Programs	124,780	32,850	128,590	168,401
Grants in total	886,299	847,580	898,136	976,054

8. Trading Operations

	1988		1987	
	$	$	$	$
	Revenue	Expenses	Revenue	Expenses
Museum Shop (Note 23)	581,449	379,379	539,158	356,754
Australian Natural History	262,472	282,288	222,323	233,361
Gallery Guides	19,504	—	31,996	—
Museum Restaurant	10,400	—	—	—
Gallery Fees	84,513	3,616	—	—
Other Trading	10,559	1,650	9,972	1,838
	968,897	666,933	803,449	591,953

Other Trading excludes Coffee Shop distribution of $8,147 to the Museum General Account. This amount is included in Coffee Shop Revenue.

9. Other Revenue:

	1988	1987
	$	$
NSW Bicentennial Council — Dreamtime to Dust	56,261	127,374
NSW Bicentennial Council — Building Opening	21,900	—
Sponsorship Education/Exhibitions	165,646	164,000
Interest on Investments	11,612	28,051
Donations	47,291	73,494
Miscellaneous	55,191	43,093
Records of the Museum	6,607	2,857
Museum as a Venue	1,610	6,126
Reimbursement from Department of Public Works	47,510	—
	413,628	444,995

10. Peter Rankin Trust Fund

The Peter Rankin Trust Fund for Herpetology is a fund which seeks to provide small grants-in-aid to young Australians studying lizards, frogs and their relatives. The Fund makes awards annually up to $1,000.

Contributions to the invested capital of the Fund are continually being sought by the Committee overseeing the Fund.

	1988 $	1987 $
Revenue		
Donations	685	470
Interest	1,917	2,632
	2,602	3,102
Expenses		
Scholarships	1,900	1,818
Bank Charges	—	15
	1,900	1,833

11. The Australian Museum Society

The Society was established for the purpose of fostering interest amongst the general public in natural history and the work carried out by the Museum.

	1988 $	1987 $
Revenue		
Functions	257,011	214,813
Membership Subscriptions	130,284	96,947
Merchandising	5,720	10,076
Other	15,448	22,503
	408,463	344,339

	1988 $	1987 $
Expenses		
Functions	244,874	140,848
Subscriptions	209	683
Exhibition Sponsorship	25,000	60,000
Merchandise	5,570	6,372
Salaries and Honararia	70,626	63,574
Office Supplies	62,468	38,353
Other	34,153	36,714
	442,900	346,544

Revenue excludes Coffee Shop distribution of $8,147 to the Museum Society. This amount is included in Coffee Shop Revenue.

12. Consolidated Fund — working expenses comprised:

	1988 $	1987 $
Workers Compensation Insurance	33,500	31,960
Meals	5,022	5,369
Fringe Benefits Tax	621	513
Employer's Superannuation Contribution	27,336	—
Rent and Rates	377,322	297,909
Maintenance	14,362	16,068
Travel	83,793	94,263
Motor Vehicle Running Costs	62,459	40,822
Freight and Cartage	49,575	28,761
Advertising	156,896	27,505
Books	98,579	66,679
Fees for Services Rendered	168,980	96,406
Gas and Electricity	194,849	146,937
Laundry	1,258	843
Other Insurance	116,147	73,034
Postal and Telephone	106,198	104,846
Printing	189,048	186,610
Stores	353,315	210,153
Minor Expenses	4,273	4,608
Plant and Equipment	474,528	—
Computer Equipment	175,446	—
	2,693,507	1,433,286

Consolidated Fund maintenance and working expenses had amounts due and unpaid of $198,504 for goods and services received as at 30 June, 1988.

13. Exhibition expenses comprised:

	1988 $	1987 $
Mineral Gallery	3,365	131,602
Temporary Exhibitions	—	15,360
Maintenance of Galleries	3,110	10,111
Fossil Gallery	—	327
Dreamtime to Dust	309,420	150,375
Pieces of Paradise	229,430	109,339
Rituals of the Human Life Cycle	129,195	42,228
Tracks Through Time	189,238	100,108
20th Century Dinsours	85,948	—
Other Galleries/Exhibitions	541	2,509
	950,247	561,959

14. Science Program expenses comprised:

	1988 $	1987 $
Research Grants	9,815	12,480
Visiting Fellows	34,035	38,902
Contributions to Lizard Island Research Station	25,000	25,000
Conferences	—	5,000
Scientific Assistance	23,968	30,229
Honoraria	1,796	4,583
Sutherland Award	1,500	1,500
	96,114	117,694

15. Education Program expenses comprised:

	1988 $	1987 $
Museum Train	2,474	24,733
Wandervan	29,533	28,856
Discovery Room	46,817	135,881
	78,824	189,470

16. Other Operating Costs comprised:

	1988	1987
	$	$
Advertising	—	175,667
Computer Fees	—	14,683
Entertainment	33,317	28,974
Printing	51,921	19,932
Travelling Expenses	20,041	38,039
Miscellaneous	51,607	26,366
Buildings — Improvements and Repairs	—	25,715
Audit Fee (see note 17)	8,600	8,000
Building Opening	22,050	—
Fund Raising Consultancy	12,020	—
	199,556	337,376

17. Audit Fee

	1988	1987
	$	$
Australian Museum Trust	8,600 (accrued 87/88)	8,000
Consolidated Fund	7,850 (to be paid 88/89)	7,400
	16,450	15 400

18. Investments of the Australian Museum as at 30 June 1988 comprised:

	1988		1987	
	Cost	**Market Value**	**Cost**	**Market Value**
	$	$	$	$
Commonwealth Bank of Australia —				
Term Deposit	19,236	19,336	18,205	18,328
Commercial Bill	71,202	71,541	99,749	100,450
	90,438	90,877	117,954	118,778

	1988	1987
	$	$
These Investments are held on behalf of:		
The Australian Museum Society	71,202	99,749
Peter Rankin Trust Fund	19,236	18,205
	90,438	117,954

The dissection of the market value of investments as at 30 June, 1988 is:

Peter Rankin Trust Fund	19,336
The Australian Museum Society	71,541
	90,877

19. Debtors and Accrued Income comprised:

	1988	1987
	$	$
Interest Accrued	439	824
Debtors ($58,394 less provision for doubtful debts $3,000)	55,394	62,843
	55,833	63,667

20. Cash at Bank, including cash advances, comprised:

	Bank	On Hand	1988	1987
	$	$	$	$
Australian Museum Trust	(17,956)	21,800	3,844	(55,497)
The Australian Museum Society	12,783	100	12,883	17,099
Coffee Shop	(9,064)	—	(9,064)	(1,428)
Peter Rankin Trust Fund	676	—	676	982
	(13,561)	21,900	8,339	(38,844)

21. Creditors and Accrued Expenses:

	1988	1987
	$	$
Creditors	61,362	19,051
	61,362	19,051

22. Funds Held

	Opening $	Receipts $	Payment $	Closing $
Trust General Account	(18,193)	2,040,672	2,085,709	(63,230)
Trust Grant Account	16,488	886,299	847,580	55,207
Australian Museum Society	107,549	416,610	442,900	81,259
Peter Rankin Trust Fund	19,310	2,602	1,900	20,012
Coffee Shop	(1,428)	224,428	223,000	—
	123,726	3,570,611	3,601,089	93,248

Funds held includes Coffee Shop distribution of $16,294 to Trust General ($8,147) and the Australian Museum Society ($8,147). This amount is shown as Coffee Shop revenue in the statement of Financial Operations.

23. Museum Shop Trading Account For The Year Ended 30 June 1988

		1988 $		1987 $
Sales (Note 8)		581,449		539,158
Opening Stock (i)	102,384		109,850	
Purchases (Note 8)	379,379		356,754	
	481,763		466,604	
Closing Stock (i)	145,422		102,384	
Cost of Sales		336,341		364,220
Gross Profit		245,108		174,938
Operating Costs				
Part time wages (ii)		—		—
Surplus (iii)		245,108		174,938

Notes

(i) Stock is valued at cost.

(ii) Salaries totalling $76,288 (1987 $59,285) for a Shop Manager, Assistant Shop Manager and three Salespersons, who are within the permanent staff establishment, were met from Consolidated Fund.

Part time employee salaries totalling $29,130 (1987 $29,808) were paid from Consolidated Fund temporary assistance.

(iii) The difference of $43,038 between the surplus ($202,070) of revenue over expenses on account of the Museum Shop as outlined at Note 8 and the surplus ($245,108) as shown in the above trading accounts represents the difference between the opening and closing stocks:

	$
Closing Stock	145,422
Opening Stock	102,384
	43,038

24. Coffee Shop Trading Account for the eleven months ended 28 May, 1988

		1988 $		1987 $
Sales		224,377		297,723
Opening Stock (i)	5,798		5,291	
Purchases	106,057		125,289	
	111,855		130,580	
Closing Stock (i)	—		5,798	
Cost of Sales		111,855		124,782
Gross Profit		112,522		172,941
Operating Costs				
Salaries	87,854		94,546	
Durables	2,372		2,530	
Sundry	10,423		10,784	
		100,649	107,860	
		11,873		65,081
Add: Other income — Interest on Investments		51		272
Surplus (ii) and (iii)		11,924		65,353

Notes

(i) Stock is valued at cost.

(ii) Surplus funds are distributed equally between the Museum and the Australian Museum Society.

(iii) The difference of $5,798 between the surplus ($17,722) of revenue over expenses on account of the Coffee Shop as per the Statement of Financial Operations and the surplus ($11,924) as shown in the above Coffee Shop Trading Account represents the difference between the closing and opening stock:

	$
Opening Stock	5,798
Closing Stock	—
	5,798

(iv) Reconciliation of trading account to the statement of financial operations.

	1988	1987
	$	$
Sales	224,377	297,723
Interest on Investment	51	272
Revenue	224,428	297,995
Purchases	106,057	125,289
Salaries	87,854	94,546
Durables	2,372	2,530
Sundry	10,423	10,784
Expenses	206,706	233,149

25. Lizard Island statement of Revenue and Expenditure Summary as at 30 June 1988.

	1988	1987
Revenue	$	$
Supporting Institutions	18,496	25,000
Fees	176,498	130,598
Sales	28,416	29,944
Donations		
— Lizard Island Reef Research Foundation	44,277	129,015
— Australian Museum, including NSW Government Subsidy	41,000	64,508
	308,687	379,065
Expenses		
Salaries and Fees	149,558	141,426
Running Expenses	30,578	35,370
Maintenance	64,141	100,297
Other	25,792	44,370
Capital Works	19,846	71,976
	289,915	393,439
surplus/deficit	18,772	(14,374)

26. Contingent Liabilities

The Trust has no contingent liabilities.

— End of Audited Financial Statements —

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General

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B. Ross-Wilson	Project Manager
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