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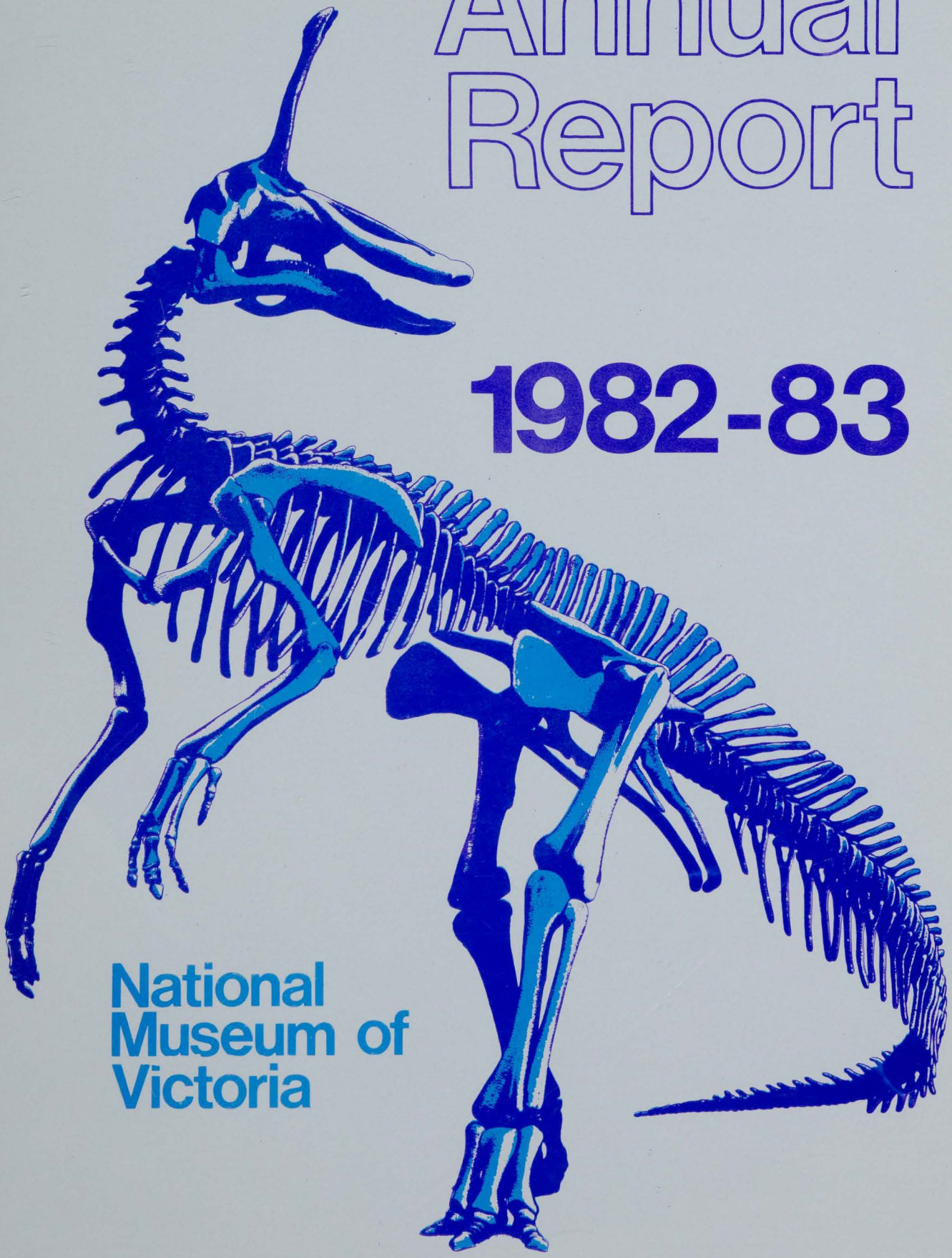
Annual Report

1982-83



National Museum of Victoria

Presented to both houses of Parliament pursuant to the provisions of section 17 of the National Museum of Victoria Council Act. No. 8072.

Annual Report

1982-83

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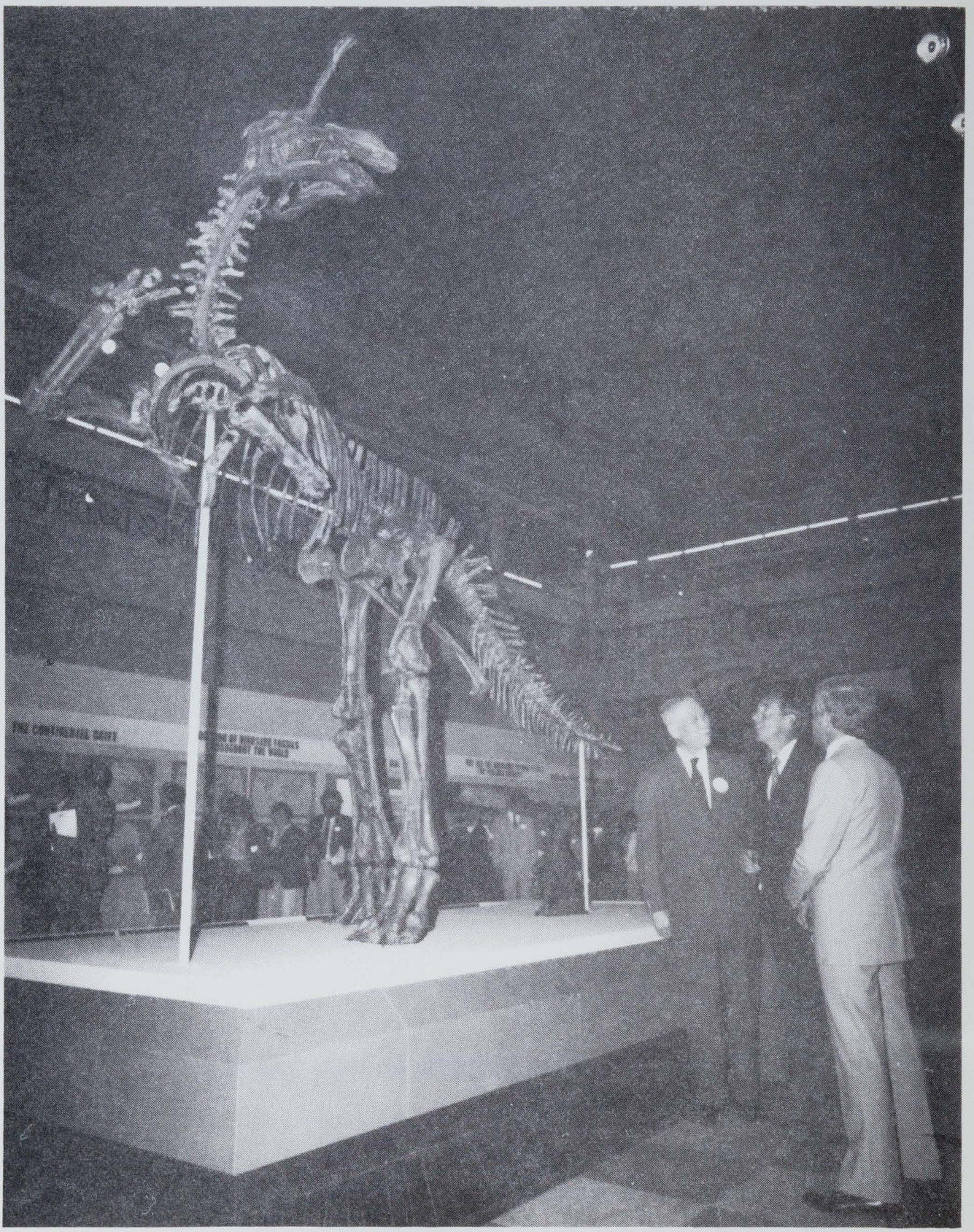
National Museum of Victoria



Opening of the 'Dinosaurs from China' exhibition, 20 October 1982. Mr Hao Ting, leader of the official delegation from Academia Sinica, Beijing, The Honourable Mr John Cain, Premier of Victoria, and Director Dr Barry Wilson standing beside *Tsintaosaurus*.

National Museum of Victoria Council

PRESIDENT
Professor J. W. Warren, MA PhD(Calif)

DEPUTY PRESIDENT
Dr H. N. B. Wettenhall, MD BS FRCP FRACP

TREASURER
Mr D. C. L. Gibbs, MA(Oxon)

MEMBERS
Sir William Dargie, CBE FRSA(Lond) FRAS
Brigadier P. P. Jackson, CMG CBE BE FIE(Aust) FI Mech E FAIM
Mrs S. Myer
Professor Sir Sydney Sunderland, CMG MD BS DSc HonMD(Tas,Qd) HonLLD(Melb,Mon) FRACP FRACS FAA (retired December 1982)
Mr J. C. F. Wharton, BSc
Dr H.K.Worner, CBE DSc(Melb) Hon DSc(Newcastle) ABSM FAA FTS FRACI FIE(Aust) FIM FIMM MAIMM MAIME

CHIEF EXECUTIVE OFFICER
Dr B. R. Wilson, BSc(Hons) PhD(WA) FTS

SECRETARY
Mr P. G. Ross, DPA

Report of the Council 1982-1983

To the Honourable the Minister for the Arts.

The National Museum of Victoria Council presents herewith its Annual Report for the year ending 30 June 1983, in accordance with Section 17 of the National Museum of Victoria Council Act 1970. The audited Financial Statements for 1982/83 will follow.

Office Bearers for 1982-1983 were:

President:	Professor J.W. Warren
Deputy President:	Dr H.N.B. Wettenhall
Treasurer:	Mr J.C.F. Wharton (August) Mr D.C.L. Gibbs (September-June)

Details of the activities of the Museum and its staff are given in the attached report by the Director, which the Council approves and incorporates in this Report.

During the year Council held eleven ordinary meetings. The contributions of immediate past office bearers were gratefully acknowledged, Dr Worner who served as Deputy President from June 1978 and Mr Wharton who was Treasurer from 1964 through August of 1982. In the course of the year Sir Sydney Sunderland retired from Council after serving as a member for 30 years. Sir Sydney's work for the Museum and his stature as a scholar were recognised in his election as the first Fellow of the National Museum under a newly adopted scheme for the appointment of Honorary Associates.

It was with deep regret that we noted the death of Sir Robert Blackwood who joined the Council in 1964 and served as President from 1968-1978. Sir Robert participated in a wide range of Museum activities, from assisting in administration to engaging in field research and the initiation of exhibitions. His personal contributions were many and varied, and are greatly missed.

This year three important events stood out as having more than the usual impact on the Museum's progress: (1) a controversial Management Review Report that recommended, *inter alia,* a merger with the Science Museum of Victoria, (2) the purchase by Government of a separate building for Museum use, and (3) an exhibition of Chinese dinosaurs.

The first, a Public Service Board Management Review Report, sprung from the long-standing need to reorganize and better equip Central Administration. However, the terms of reference went beyond this to consider, and finally recommend, the amalgamation of the Science and National Museums into a single organization that would subsume a third body, the Building Trustees, and Central Administration. Concomitantly, it was necessary to suggest a new managerial system. Council had reservations,

some serious, regarding the proposed amalgamation but resolved on balance it would benefit museum services in Victoria and supported that portion of the Report that recommended a merger. Accordingly, Council assisted in the drafting of legislation to create the 'Museum of Victoria' and concurrently, a Museum Advisory Board responsible for advising Government on a wide spectrum of museum affairs, especially regional centres.

The managerial structure suggested in the Management Review Report was not supported by Council and was criticised by Museum staff who pointed to several deficiencies in the proposal. Council accepted your assurance, as Minister, and that of the Director of the Ministry, that no organizational structures would be imposed on the proposed 'Museum of Victoria' without sufficient input from the future Council and/or Director, and resolved to leave this matter to the next Council in conjunction with Museum staff.

Parliament passed the enabling legislation as the 'Museum of Victoria Act - 1983', to come into effect on July 1, 1983, and we are satisfied this Act will provide the basis for a stronger museum service to Victoria.

The second event, obtaining the Dover Building in nearby Drewery Lane, will allow the large ethnographic collection to be moved from the La Trobe Gallery to free it for public purposes. Also, a much needed conservation laboratory to restore and preserve valuable items is planned for the building. This has been an urgent requirement for some time and its establishment is further assisted by the granting of a new senior position, a Conservation Officer to be appointed in 1983/84. All those with an interest in the preservation of heritage under the Museum's responsibility will be grateful for the efforts that you, as Minister for the Arts, put in to obtain the Dover Building.

The third item above, the temporary Chinese Dinosaur Exhibition, was a landmark in Museum activities. It represented a co-operative effort between us and Academia Sinica in Beijing and was opened by the Premier with representatives from Academia Sinica and the Australian Embassy of the People's Republic of China. It attracted corporate sponsorship much greater than the Museum has previously enjoyed, was the first exhibition to carry an entrance fee, and it attracted more than 300,000 visitors in the three-and-a-half months it was opened. The quality of the display and its educational value demonstrated the high skills and dedication of a staff whose talents are too often suppressed through lack of resources. The exhibition was conceived and negotiated by this Museum and by arrangement with us will be shown at the Australian Museum in Sydney later this year. However, while in Melbourne replicas of the Chinese dinosaurs were made from exact moulds of each bone. These will remain here to form the nucleus of a permanent dinosaur display in the immediate future.

In keeping with the dinosaur exhibition the annual Crosbie Morrison Memorial Lecture dealt with 'Dinosaurs' and was delivered by Dr Ralph Molnar, Curator of Mammals at the Queensland Museum. A large audience enjoyed Dr Molnar's discourse on these ancient reptiles and benefited from his first-hand knowledge of fossil material and dinosaur expeditions.

The Chinese Dinosaur Exhibition forced a delay in our exhibition schedule pushing some proposed displays into 1983/84. However, a fine display of life in Papua New Guinea lowland village, Kinomere, was established in Spencer Hall in co-operation with La Trobe University and opened by Professor John Scott, Vice-Chancellor of La Trobe. On closing in August the exhibition will be shown at La Trobe University with whom the Museum formally af-

filiated earlier this year. Spencer Hall is named after an earlier director of the Museum and scholar of high repute, Baldwin Spencer. A book of photographs taken by him in the Northern Territory at the turn of the century entitled 'The Aboriginal Photographs of Baldwin Spencer' was launched at a function in the Museum by Professor John Mulvaney. It was published by John Currey, O'Neil in co-operation with the Anthropology Department, Museum honoraries, and the skills of Mr Frank Coffa, Museum Photographer.

The Friends of the National Museum, founded in mid-1979, continues to strengthen Museum activities. Council is grateful for their support and assistance, and happily acknowledges the contributions of the their retiring President, Mr Ray Marginson, and welcomes Mr Peter Parkin in his place. Lady Murray accepted an invitation to become Patroness of the Friends and, with the Governor, enjoyed a tour of the Museum's collections in May. One important activity of the Friends is the Volunteer Guide programme, whereby members are trained as guides to assist the public in getting the most from exhibitions. Museum volunteers and members of the Friends were a necessary ingredient of the Chinese Dinosaur exhibition.

A new enterprise was the opening in July of the Museum Shop, a joint venture with the Council of the Science Museum. The Shop is situated at the Russell Street side of the complex, and there are plans for another, larger outlet to be established at the Swanston Street end in the immediate future. Trading to June 30 was satisfactory though admittedly boosted by attendances to the Dinosaur Exhibition.

The Museum's publications and research programmes continue to add to our understanding of the Victorian environment and the realms of scholarship encompassed by the Museum. The Science and Humanities Scholarhsip was awarded to two recipients, Dr Sally Kohlstedt from Syracuse University, New York, and Mr Zhou Siqing of the Natural History Museum, Beijing. Dr Kohlstedt was also partly supported by the Australian/American Educational Foundation. She was engaged in a comparative study of the development of natural history museums in Australia and the United States, and led seminars at the University of Melbourne on the development of field sciences in Australia. Mr Zhou is a recognized artist of natural history subjects and will hold the Scholarship while in Melbourne to compare and exchange techniques with artists here.

The Environmental Survey Unit has been active, undertaking contractural work for several Government agencies. Other staff have been involved in various research programmes and scientific conferences. Some examples are: Dr C.C. Lu visited Torres Strait to continue his extensive work on Australian squid populations, Miss J. Dixon attended the 3rd International Theriological Congress in Helsinki, and Dr P. Jell continued his five year collaboration with Professor W.T. Chang of the Institute of Geology and Palaeontology, Janjing, to produce a book on Chinese Cambrian trilobites; Dr Jell visited the Smithsonian Institution in connection with this project.

Research and scholarship programmes received some funding from external sources as follows:

GRANTS TO COUNCIL

	$
State Rivers & Water Supply Commission:	
Thomson River Survey	6000
Dartmouth Dam Survey	2500
Ministry for Conservation:	
Thomson River Survey	6000
Australian Biological Resources Study:	
Research Grants	38300
Department of Primary Industry	5695
Australia Council:	
Australia's First People Display	5000
State Electricity Commission:	
La Trobe River Survey	18900
Australian Museum:	
UNESCO Survey	1400
Department of Finance:	
Australian Marine Science Technological Advisory Committee (AMSTAC) Grants	77752
Australian Institute of Aboriginal Studies:	
Research Curator (Anthropology)	16921
F.A.O. of the U.S A.	2040
Foreign Affairs - Australia China Council:	
Science and Humanities Scholar	3600

The 43rd volume of the *Memoirs of the National Museum* was published in October containing the results of work done by Museum staff and other researchers on materials held by the Museum.

The research component of the Museum's responsibilities and the general care of the collections demands that items held by the Museum, and information pertaining to them, be readily accessible. Towards that end Council entered into an agreement with Computer Based Management Pty Ltd and the Department of Computer Science, University of Melbourne, to develop a computer system for this purpose. Because the software programme being developed may serve industrial purposes as well as the Museum's educational and cataloguing needs, partial funding has come from the following:

	$
H. & L. Hecht Trust	5000
Estate Daniel Scott	1000
Percy Baxter Charitable Trust	1000
David Syme & Co. Ltd	12500
The Myer Foundation	6000
The Ian Potter Foundation	10000
The George Alexander Foundation	5000
Esso Australia Ltd	12000

Entering collection records onto the computer is time-consuming. It will be greatly assisted, however, by the recent award of a grant

under the Employment Initiative Programme to allow the employment of 10 people for this purpose from 1 July 1983. Other monies awarded under the same programme will be used to employ temporary staff to prepare the ethnographic collection for its move to the Dover Building.

The level of staffing remains a concern of Council. During the year two new positions were made available, an Aboriginal Liaison Officer to assist in developing an understanding of the Museum's role in advancing Aboriginal heritage, and a Conservation Officer. Nevertheless, well qualified officers are still required to augment insufficient staffing in several important sections. Two long-serving members of staff retired, Mr L. Chapman who joined the Museum in 1937 and Ms E. Matheson who joined in 1950; their valued contributions to the Museum were recognized at a retirement function in August.

Regarding general funding, the Museum was asked to realise a 0.05% overall reduction in the Government allocation. Such reductions can only be accomplished by cutting that portion of the budget not committed to salaries, and on this occasion the acquisitions fund was severely curtailed. Outside financial contributions to the Museum Public Appeal attracted a dollar for dollar matching grant for which Council is most grateful, and consisted of the following in addition to previously acknowledged donors:

	$
Esso Australia Ltd	30000
Kellogg (Australia) Pty Ltd	10000
Kodak (A'sia) Pty Ltd	5500
B.H.P. Co. Ltd	2000
The Ian Potter Foundation	1000
Friends of the National Museum of Victoria	3000
Maxted Marketing	9350
Australia China Foundation	10000

Some of the above donations were in support of the Chinese Dinosaur Exhibition, as were grants of $30,050 from the Utah Foundation and $15,000 from the Baker Benefactions, reported in the 1981/82 Annual Report. We are also indebted to other groups who supported the Exhibition by contributing services, materials, or advertising as follows:

Trans Australia Airlines	travel and advertising
Cathay Pacific Airways Ltd	travel
Dow Corning (Australia) Pty Ltd	materials for replicating dinosaurs
McDonald's Family Restaurants	advertising
University of Utah	casts of fossil specimens

The building complex continues to have unacceptable safety and security features in spite of efforts by the Building Trustees to improve the situation. In addition, some galleries do not present attractive, suitable venues for modern exhibitions. The latter problem will be somewhat alleviated by a very welcome, separate allocation of $200,000 to be used for improvements by the Science and National Museums. A portion of this grant was designated to repaint McCoy Hall, a much needed project but delays have seen the end of the financial year with no visible sign of progress and no expenditure.

Attendances over the year were 1,222,894, compared with 721,000 in 1981/82, of which 99,000 were school groups under the auspices of the Education Service. Council wishes to call attention to the fine work of the teachers in the Education Service who work unselfishly in unsuitable, uncomfortable conditions, and recommends improvement of their situation be an urgent matter for the forthcoming 'Museum of Victoria'.

In summary, Council is pleased to record some improvement regarding the public side of Museum activities during this year as compared to the immediate past. We believe this has been achieved by efforts of the dedicated Museum staff and an increasing awareness of the desperate state of affairs by the Ministry and elsewhere. We extend our thanks to personnel of the Ministry for their assistance and to you, as Minister for the Arts, for your encouragement and material support.

This is the last Annual Report of the National Museum of Victoria as it merges with the Science Museum to form the 'Museum of Victoria'. In recent years the National Museum has been unable adequately to meet its obligation to properly conserve irreplaceable heritage items and provide stimulating and educational public programmes. We believe the value of the Museum and its collections have not been sufficiently appreciated by those who could benefit from them, including Government, to encourage them to support the Museum at a reasonable level. The improvements of this year, however, indicate that there may be an awakening to the Museum's plight. We trust there is now a momentum on which the 'Museum of Victoria' can move forward and build on the foundations of its predecessors, foundations with a 130 year history for the National Museum, and we wish the new Museum, its Council and staff a rewarding future.

On behalf of the Council of the National Museum of Victoria.

J. W. Warren,
President.

Staff as at 30 June 1983

DIRECTOR

B. R. Wilson, BSc(Hons) PhD FTS

DEPUTY DIRECTOR

T. A. Darragh, MSc DipEd

ADMINISTRATION

D. N. Anderson (Officer in Charge)
L. Anderson
J. Freeman
M. Hutchison
H. Martin
E. Rowley
K. Traynor
H. Vucinic

LIBRARY

Librarians: J. New, BA ALAA
J. Cotter, BSc DipLib
Clerical Assistant: L. Stefani

DIVISION OF ZOOLOGY

Senior Curator: B. J. Smith, BSc(Hons) PhD AMAA
Technical Assistant: R. Plant

Department of Mammalogy
Curator: J. M. Dixon, BSc(Hons)
Technical Officer: L. Huxley, BSc

Department of Ornithology
Curator: A. R. McEvey, BA
Technical Assistant: B. A. Gillies,BA DipEd

Department of Herpetology
Officer-in-Charge: A. J. Coventry

Department of Ichthyology
Curator: M. F. Gomon, BSc MSc PhD

Department of Invertebrate Zoology
Curator: C. C. Lu, BSc MSc PhD

Assistant Curator: S. Boyd, BSc
Technical Officer: J. U. Phillips

Department of Entomology
Curator: A. Neboiss, MSc PhD FRES
Assistant Curator: K. L. Walker, BAgrSc MSc
Technical Officer: Vacant

Department of Crustacea
Curator: G. C. B. Poore, BSc(Hons) PhD

Department of Biological Survey
Survey Officer: J. D. Blyth, BSc(Hons)
Assistant Survey Officer: A. L. Yen, BSc(Hons) PhD
Technical Assistant: P. Lillywhite

DIVISION OF GEOLOGY

Department of Mineralogy and Petrology
Curator: W. D. Birch, BSc(Hons) PhD
Technical Assistant: D. Henry

Department of Vertebrate Palaeontology
Curator: T. H. Rich, AB MA PhD
Technical Assistant: E. Thompson

Department of Invertebrate Palaeontology
Curator: P. A. Jell, BSc(Hons) PhD
Assistant Curator: D. J. Holloway, BSc(Hons) PhD
Technical Assistant: P. Clark

DIVISION OF ANTHROPOLOGY

Curator: R. Vanderwal, BA DipMus MA PhD
Assistant Curator: C. M. Hogarth, BA
Scientific Technical Officer: G. H.Sculthorpe, BA Dip Museum Studies
Aboriginal Liaison Officer: K. Koumalatsos

DIVISION OF PUBLIC PROGRAMMES

Head: E. McClellan, DipEd BSc(Hons) PhD

Conservation
Senior Conservation Officer: Vacant
Conservation Officer: M. R. Perkins, BAgr Dip Museum Studies

Exhibitions
Display Officer: A. G. Soliman, BA MA(Decor Art)

Deputy Display Officer: L. Mitchell, Cert Art Dip Ind Design TTSC

Display Assistants: S. Lucey, Dip Art
J. Challis, Dip Art

Preparators

Senior Preparator: M. G. Traynor

Preparators: B. Hall
K.Kelly
P. Swinkels

Photography

Photographer: F. Coffa, Dip Art(Photo Illus) BA

Education Services

Education Officers: R. N. Miller, Dip Art(Illust) TPTC (Officer-in-Charge)
K. Aulsebrook, Dip Teaching (Primary)
T. M. Buck, Dip Teaching (Primary)
H. Edmonds, BA Dip Teaching (Primary)
R. A. O'Shea, Dip Art Dip Ed
R. Taylor, BA BEd TPTC

Typist: V. McCormack

Staff Employed by the National Museum of Victoria Council

AMSTAC Projects:

Sponge Researcher:	F. Wiedenmayer, BSc PhD
Bass Strait:	R. S. Wilson, BSc(Hons)
Vic. Marine Fishes:	M. C. Blackburn, BSc

ABRS Projects:

Australian Isopods:	H. M. Lew Ton, BSc

AIAS Grant:

Research Curator, Anthropology:	G. E. Ramsay, MA(Hons)

Museum Shop

Manager:	J. Williams
Senior Assistant:	L. Vivian
Assistants:	D. Gofton J. Parsons
Dinosaur Project:	A. Love J. Pitts
Friends' Administrative Assistant:	C. Wendt
Director's Research Assistant:	H. Newton, BA

Honorary Scientific Staff

The following Research and Honorary Associates have given generous assistance with the work of the Institution during the past year. To them the thanks of the Council and Staff are extended.

FELLOW OF THE NATIONAL MUSEUM OF VICTORIA

Professor Sir Sydney Sunderland, CMG MD BS DSc HonMD(Tas,Qd) HonLLD(Melb,Mon) FRACP FRACS FAA

HONORARY ASSOCIATES

Ornithology

Mr C. N. Austin
Mr N. J. Favaloro
Mr G. Pizzey
Dr P. V. Rich
Sir Henry Somerset
Mr R. Weatherly

Herpetology

Dr M. J. Littlejohn
Mr K. C. Norris
Mr P. A. Rawlinson
Mr C. Tanner

Mammalogy

Dr A. K. Lee
Mr J. McNally
Mr R. M. Warneke

Ichthyology

Mr Rudi Kuiter

Entomology

Mr A. N. Burns
Mr D. F. Crosby
Mr C. McCubbin
Dr T. R. New

Invertebrate Zoology

Dr A. Ayling
Mr K. N. Bell
Mrs I. Black
Mr Philip Bock
Mr R. Burn
Ms M. Drummond
Mr R. C. Kershaw
Mr A. E. Monger
Brother M. O'Loughlin
Mr D. Staples
Mrs J. Watson
Mr L. Winsor

Anthropology

Mr J. E. Atkinson
Dr A. H. Campbell
Mr D. F. Ellicott
Mr G. Walker
Mr N. M. Wallace
Miss J. P. Wiseman

Palaeontology

Mr A. A.. Baker
Mr A. C. Collins
Mr R. J. Foster
Mr E. D. Gill
Professor E. S. Hills
Dr J. Richardson
Dr J. A. Talent
Mr D. J. Taylor
Mr H. E. Wilkinson

Mineralogy

Dr A. W. Beasley
Professor J. F. Lovering
Dr E. R. Segnit

HONORARY WORKERS

Una Allen
Betty Argo
Robert Baird
Ernest Bannister
Tom Burchell
June Bolton
Iris Brailey
Marijana Cirvydas
Jean Clarke
Peter Corcoran
Margaret Day
Muriel Elden
Tom Gunn
Eva Haebich
Lyn Haupt
Enid Holmes
Dianne Howe
Joan Lamond
Lorna Lawrence
Betty Lush
Colin Macrae
Ellen McCulloch
Reg Moss
Robin Nettleton
Rosalind Poole
Elisabeth Robertson
Merrill Rowley
Ian Schafer
Linley Selover
Pat Tuxen
June Van Zyl Viljoen

RESEARCH ASSOCIATES

Mr T. Flannery
Dr E. Fordyce
Mr R. Tait

Mamenchisaurus and visitors.

Director's Report on Activities for 1982-83

To the President,
National Museum of Victoria Council.

Sir,

I present herewith for consideration by the Council and subsequent transmission to the Honourable the Minister for the Arts, this report on the work of the National Museum of Victoria for the period 1 July 1982 to 30 June 1983.

PUBLIC PROGRAMMES

The public programmes of the Museum have continued to develop in the directions established in 1981/82. The productive capacity of the Division was measured by the unprecedented success of the 'Dinosaurs from China' exhibition which attracted 300,000 visitors including 60,000 school children over a three-month period. This exhibition provided the Museum with invaluable experience in the production and management of a 'blockbuster' exhibition.

As a result of limited staffing and resources and in response to the growth of the public programmes, the National Museum of Victoria has been increasing its use of contract staff; it is anticipated that this trend will continue. In order to adequately plan for efficient use of available resources the Division is producing forward plans for the development of both permanent and temporary exhibitions and gallery maintenance. The Museum will continue to seek outside funds from sponsors and granting bodies for its public programmes.

The general publications of the Museum have yet to be adequately developed but a number of publications will be produced in the forthcoming year.

Conservation continues to be a great concern. Progress has been made with the completion of a small conservation laboratory and the creation of the position of Senior Conservation Officer. These developments will need substantial support if the Museum is to maintain its ambitious exhibition programme and its programme of artefact acquisition and collection maintenance.

The role of Education Services within the Museum has expanded considerably with major input from teachers into exhibition planning and publication production. The role of Education Services in all phases of development of the Dinosaur Exhibition is acknowledged. Expansion of education facilities in support of major temporary and permanent exhibitions is planned in an attempt to overcome inadequate teaching and resource facilities.

Despite fiscal and economic difficulties the Division of Public Programmes is confident that it will be able to continue to expand and improve the Museum's public face and to continue to provide its other support services to the other divisions of the Museum.

EXHIBITIONS

Three temporary exhibitions were designed and produced this year.

Dinosaurs from China

This exhibition occupied three galleries of the Museum and included an introductory video presentation, an exhibition of the two dinosaurs from China together with various related casts, specimens and graphics and an open workshop where the public could view the casting of dinosaur replicas by museum preparators. The exhibition was improved by a book and record especially published for the exhibition. The 'Dinosaurs from China' attracted unprecedented publicity and crowds and provided an invaluable boost to the exhibitions programme.

W.Baldwin Spencer and the Aborigines of the Northern Territory 1894-1912

This exhibition presented Spencer's photographs of the Aboriginal people in almost every aspect of life such as food gathering, tool-making, and ceremonies. Also included were case displays of Aboriginal artefacts and Spencer memorabilia. The exhibition is now touring Victoria and will be displayed at the Australian Museum in Sydney.

Kinomere: Life in a Papuan Gulf Village

This exhibition was based on research of Dr Ron

Vanderwal, the Curator of Anthropology. It portrayed the history and development of the material culture of the people of Kinomere Village which is located on the Gulf of Papua in Papua New Guinea. The exhibition will also be displayed at the museum in the Division of Prehistory at La Trobe University.

EXHIBITION PROJECTS

The Museum is continuing its policy of developing an ongoing temporary exhibitions programme. The trend is to less frequent but higher quality temporary exhibitions.

Animals Inside Out

Design for this exhibition is complete but staging the exhibition is delayed pending the renovation of McCoy Hall. This innovative exhibition explores the relationship between skeletal structure and functional adaptation in animals. An education activities area is incorporated into the design of the exhibition.

Minerals Exposed

This exhibition will display for the first time many fine mineral specimens from the collection. 'Minerals Exposed' explores the growth of crystals in rock cavities and will be accompanied by many fine photographs of mineral crystals. A slide-kit will be produced for sale in the Museum Shop in conjunction with the exhibition.

The Great Barrier Reef

Negotiations are continuing with management of the Great Barrier Reef Marine Park Authority concerning the production of a joint exhibition on the Great Barrier Reef. This exhibition will be launched at this Museum and then travel throughout Australia and perhaps overseas. Sponsorship will be sought for this project.

Extinction is Forever III - The Mallee

This exhibition is the third in a series on the theme 'Extinction is Forever'. It will explore the ecology of the Mallee community which once covered one third of the continent. A feature of the exhibition will be a display of live arid-zone reptiles. An education and activities centre will be incorporated into this exhibition.

Theby - He Lives

The centre-piece of this exhibition is the mummy 'Theby'. This exhibition incorporates artefacts from the Museum's own collection and that of the National Gallery of Victoria. It will be accompanied by a multi-projector audio-visual programme which represents a significant development in display technology for this Museum. There will be a charge for entrance and money raised will go towards the cost of conserving the deteriorating mummy of 'Theby'. Sponsorship for the exhibition is being sought.

Australia's First People

Planning continues for this new and major anthropological exhibition. Mr David McCabe, a consultant designer, has prepared notional designs and a presentation portfolio to be used in raising funds for the project. Detailed designs have been completed for the Education Centre accompanying the exhibition. The Australian Aboriginal Arts Board granted the funds to enable the Museum to engage Aboriginal consultants to assist in all stages of planning. Other funds were granted by the Victorian Cultural Development Fund of the Ministry for the Arts, Victoria.

The Story of Victoria

This exhibition on social life and history in Victoria is planned to coincide with Victoria's 150th Anniversary celebrations. The State Committee coordinating these celebrations provided a grant to develop the notion of this exhibition. A brief was prepared by Science and National Museum staff in consultation with Mr Tom Griffiths, an historian, and museum designer Mr David McCabe. A notional design has been prepared together with a presentation portfolio to assist in fund raising.

SPECIAL PROJECTS

Museum Guides

A further intake of Museum Guides was trained. All guides are Friends of the National Museum of Victoria. There are now 22 guides and guiding services are offered to the visiting public on Saturday and Sunday afternoons and for limited booked groups during the week. Pending the employment of support staff, expansion of guiding services is anticipated.

Geelong Hospital Display

The display for the Pathology Department of the Geelong and District Hospital is well in hand. It will enable doctors and snake-bite victims to readily identify poisonous reptiles common in the district. The display will also be used as an aid for training medical practitioners.

National Conference of Preparators and Technicians

Planning is well in hand for the forthcoming conference which will be held in the Museum at the same time as the Museums' Association of Australia conference in October 1983. This conference has attracted considerable interest not only

from museums throughout Australia but also from industry and tertiary institutions and other government organizations.

Evaluation of Dinosaurs from China Exhibition

The Council of the National Museum employed Mr George Chomiak to evaluate the impact and effectiveness of the Dinosaurs from China exhibition in relation to the objectives of the exhibition. Mr Chomiak has submitted his report which will be used in planning further exhibitions.

DEPARTMENTAL REPORTS

Display

In addition to exhibition work the Display Department researched and produced new diorama labels. Experimentation with labels continues. A maintenance programme for the galleries was instigated in an attempt to improve the presentation of old, outdated displays.

Routine work for scientific, research and education purposes was performed and the Department was also responsible for the design and production of a number of posters and publications.

The Senior Display Officer supervised the design project of a final year Bachelor of Architecture student at R.M.I.T.

Conservation

The construction of the conservation laboratory was completed and the Conservation Officer, for the first time, will have a professionally equipped work area. The position of Senior Conservation Officer, at the level of SO-8 was also approved and advertisements to fill the position have been placed.

Although a number of individual items were treated, the main thrust of conservation work in the past year has been in the improvement of storage conditions for the anthropological collection.

Other work of significance included the treatment of a replica of a possum skin cloak for the Commonwealth Games exhibition; conservation treatment of items for the Kinomere exhibition and organization of packing materials for the movement of artefacts from the La Trobe Gallery.

The Conservation Officer also worked for three weeks under the supervision of the State Library Conservator on the conservation of two drawings.

Assistance was provided to a student group who were making a documentary on the storage conditions for the anthropology collection in the La Trobe Gallery.

Photography

The Photography Department continues to provide important assistance to the public programmes, especially the exhibitions programme. In addition substantial work was completed for scientific departments, in particular Vertebrate Palaeontology, Minerals and Petrology, Anthropology, and Invertebrate Palaeontology. Restoration work was performed on 500 nitrate negatives from the Chinnery Collection of anthropological photographs.

The Department also made important contributions to four commercial publications which the Museum has been involved in producing: 'Dinosaurs from China', 'Minerals from Broken Hill', 'The Aboriginal Photographs of Baldwin Spencer', and 'Donald Thomson in Arnhem Land'.

The photographer was appointed to the Working Committee of the Applied Art Assistant/Technician Photography course at Preston TAFE College.

Preparators

The preparators are continuing their work on the moulding and casting of the two dinosaurs from China. Over three hundred moulds have been prepared and casting is now well in hand. The interest in this work has been considerable and a trade day was organized on the project by one of the sponsors, Dow Corning Australia Pty Ltd; this attracted over 40 participants. Over 35 lecture tours were organized to cater for public and school interest in the project. Television documentary material was broadcast by Channels 0, 2, 7 and 9.

As part of a technical exchange programme six Chinese visitors from the Institute of Vertebrate Palaeontology and Palaeoanthropology, Academia Sinica, worked with the Preparators for various periods throughout the year on the moulding and casting project.

The preparators also provided planning input and technical assistance for a number of natural history exhibitions. In addition, work for scientific departments progressed, although there is still a substantial back-log to clear due to the demands of the moulding and casting project.

The department also cleaned and repaired 25 natural history specimens for the Beechworth Museum.

Education Services

Over 99,000 school visitors were recorded. Of these 14,000 received talks from Education Officers. A further 74,300 received information and activity material. The Education Services continued to provide invaluable assistance to the exhibition

programme. A highly successful Education Kit and Holiday Activities Kit for children was produced for the Dinosaurs from China exhibition.

Mr Ron Miller, the Senior Education Officer, provided invaluable assistance and advice during the training of the Museum Guides.

The department had a number of distinguished visitors including Ms Pat McDonald, Chief Education Officer of the Australian Museum, Sydney, and Mr Gin van Wengen, Education Officer of the National Museum of Anthropology, Leiden, Holland.

Education services continued to supply information and advice to education professionals in private enterprise, tertiary institutions and secondary and primary schools. During the Dinosaurs from China exhibition members of the service provided numerous interviews for the press and electronic media.

RESEARCH

Research in the Museum is based mainly on specimens and documents in the collections. With significant financial support from outside agencies a research programme has been successfully executed during the year resulting in 48 papers being published in technical journals (see Publications). The approved projects of research which are in accord with the policies and programmes reviewed last year fall within six principal research programmes.

GEOLOGY:
- Mineralogy
- Palaeontology

ANTHROPOLOGY:
- Australian Ethnology
- Pacific Ethnology

ZOOLOGY:
- Terrestrial
- Marine

GEOLOGY

Mineralogy

The major research project in the Department culminated in the publication of the book 'Minerals of Broken Hill' in December. The Curator's contribution was as co-author of the important descriptive mineralogy chapter, as co-ordinator of the colour plates, and as the compiler of a chapter of tabulated data. The book underwent a second printing in May, and included an addendum, prepared by Dr Birch, on new finds since the first edition. As a result of the work, research is under way on a number of aspects of Broken Hill mineralogy.

An extensive review of the occurrence and history of discovery and study of acid volcanic rocks in Victoria was undertaken during the year. A paper has been accepted for publication by the Royal Society of Victoria. In addition, field and laboratory research on occurrences of topaz-bearing rocks near Eldorado was completed and a manuscript forwarded to the Geological Society of Australia.

Fieldwork related to research was undertaken in the Eldorado area, in the Wangaratta-Whitfield region collection from old phosphate mines, and at quarries near Ballarat and Lake Boga.

Palaeontology

Research in the Palaeontology Departments is directed towards the understanding of faunas and floras of past ages, towards their evolution through space and time, and toward their bearing on the composition and origins of the modern flora and fauna. Moreover, the researches are often of considerable value to an understanding of the geological evolution of the globe or parts thereof, and in many cases to exploration programmes for mineral or fossil fuel resources.

During the year the research project entitled 'Revision of Chinese Cambrian Trilobites housed in the Smithsonian Institution, Washington, D.C.', was completed. This has taken more than five years of co-operation between Professor W. T. Chang of the Nanjing Institute of Geology and Palaeontology, Academia Sinica, and Dr Peter Jell, Curator of Invertebrate Fossils. During a three month stay in Melbourne by Professor Chang, the manuscript for this very large monograph was completed. It has since been accepted for publication as a book by Science Press, Beijing. This project is significant for two reasons:

1. It is the first major co-operative publication to result from the Australian Academy of Science/Academia Sinica Scientific Exchange Agreement.

2. It will be of enormous benefit to the very extensive exploration programme for phosphate rock currently being undertaken across North China.

Co-operative studies between Dr Tom Rich, Curator of Vertebrate Palaeontology, and colleagues from the Institute of Vertebrate Palaeontology and Palaeoanthropology, Academia Sinica, Beijing, on Jurassic and Oligocene mammal remains from China were completed.

These research links with China reflect a growing awareness of the closely parallel histories of the flora and fauna of the two continents of Asia and Australia for much of geological time. Older ideas of great distinction between the geological histories of the two countries are giving way to the new understanding.

The search for early mammals and the origin of our marsupial faunas continued with fieldwork by Dr Tom Rich in New South Wales and in north-eastern South Australia. Although some material was added to the collections, the real answers remain elusive.

Research on Palaeozoic echinodermata, principally from central Victoria but also from New South Wales, Queensland and Tasmania, continued with publication of two significant papers, one on rare groups of extinct echinoderms from Kinglake and Lilydale, and the other on the fossil remains collected during construction of the Winneke Reservoir at Christmas Hills. This work brought to light one entirely new Order of rhombiferan cystoids, two new families, and seven new genera containing ten new species. This work is part of a long term project that will continue for some 4-6 years.

Smaller projects during the year were: a description of the first Australian pre-Tertiary millipede from within the mouth of a labyrinthodont; continued study of Early Cretaceous insects, Tertiary crinoids, Cambrian trilobites, and Early Ordovician to Devonian trilobites.

Dr Jell co-edited a major palaeontological Memoir in honour of the 75th birthday of Professor Dorothy Hill, CBE, PhD, DSc, LLD, FRS, FAA, which is the first of a new palaeontological memoir series that will be published by the Association of Australasian Palaeontologists and edited by Dr Jell.

Mr T. A. Darragh, Deputy Director, finalized his major and longstanding research project, 'A Study of Tertiary Molluscan Faunas from South-Eastern Australia and their Biostratigraphic Significance'. The results of this work were submitted in March 1983 as a thesis for the degree of Doctor of Philosophy in the University of Melbourne. In this work a sequence of 18 informal assemblage zones based on mollusca and ranging in age from Middle Palaeocene to Late Pliocene was proposed. The composition of the molluscan fauna of south-eastern Australia was analysed in terms of its biogeographic elements, and it was concluded that the Indo-Pacific and Endemic elements have increased with time at the expense of the Australian-New Zealand and Cosmopolitan elements. The molluscan families Trigoniidae and Volutidae consisting of two genera and 18 genera respectively, were revised in detail to assist in the zonation.

ANTHROPOLOGY

Australian Ethnology

Gaye Sculthorpe's involvement in an oral history project has led to a joint piece of research with Tasmanian scholars on the life and times of the Tasmanian Aboriginal, Fanny Cochrane Smith, from whom Gaye is descended.

Gael Ramsay has again spent several weeks in Arnhem Land investigating changes in material culture from the time of Donald Thomson to the present day.

Pacific Ethnology

Ron Vanderwal undertook three months' research at Deception Bay, Gulf of Papua, as part of an ongoing programme investigating culture change and economics of swamp villages. Chris Hogarth was granted four months' leave to pursue a Graduate Diploma in Material Culture, James Cook University, involving in part an analysis of Irian Jaya material collected by Donald Thomson.

ZOOLOGY

Terrestrial Zoology

VERTEBRATES: Field studies by Mr J. Coventry were continued on the recovery of reptile and frog populations in the Big Desert following the severe wildfires in January 1981. Effects of the drought on this recovery have been monitored and valuable information on snake and lizard population dynamics obtained.

Historical research was continued by Miss J. Dixon with an account of the mammal and fish collections of the late Donald Thomson.

INVERTEBRATES: In this field the main research thrust is taxonomic and the development of check-lists together with some population studies.

Taxonomic work by Dr A. Neboiss on caddis-flies (Trichoptera) resulted in the revision of the genera *Triplectides* and *Setodes* and the publication of a check-list and bibliography of Australian Caddis-flies. A world-wide revision of the beetle genus *Cupes* was completed and studies on the native bee genera *Homalictus* and *Lasioglossum* continued by Mr K. Walker.

The compilation of a check-list of the Australian non-marine molluscs by Dr B. Smith was continued as part of the Zoological Catalogue of Australia. Work also continued on the populations of litter and aquatic invertebrates of the Errinundra Plateau and Reefton areas, with particular relation to timber extraction by the Survey Department. Publications are in preparation on the ground-dwelling beetles of the Big Desert by Dr A. Yen.

Three major surveys of aquatic invertebrate faunas carried out by the Department of Biological Survey over the last several years were completed, and final reports submitted to the funding authorities. For the Dartmouth and La Trobe studies three scientific papers each are in press, with one more nearing completion. Results from the Thomson study have been used by the Minis-

try of Water Resources in a major public report on allocation of water from the Thomson Dam, and several scientific publications are in preparation.

Marine Zoology

Research in the field of marine zoology has progressed on several fronts. Large scale field collecting in many regions has provided material on which taxonomic revisionary studies are based in many animal groups. Check-lists, bibliographies and field-guides have also been produced for several important marine groups.

The Bass Strait project, funded by a Marine Sciences and Technologies Grant, continues to be the largest single project in marine zoology. Though little field-work was carried out during the year, the vast collections were sorted into groups and dispatched to experts in Australia and overseas for identification. Outside funding from various sources enabled special collecting expeditions to be undertaken in many areas. Funds from A.B.R.S. enabled Gary Poore to collect crustacea in the Northern Territory (with the N.T. Museum), on the North Queensland shelf and Great Barrier Reef (with the Australian Institute of Marine Sciences) and the North-west shelf (with C.S.I.R.O. Division of Fisheries). C. C. Lu received a grant from the Fishing Industry Research Trust Account to enable him to collect squid in the Gulf of Carpentaria and Torres Strait (with Queensland Fisheries Department and K.F.V. Fisheries Ltd).

Taxonomic research during the year was carried out on isopod and amphipod crustacea; several groups of fishes including stingarees (Urolophidae), gurnards (Triglidae), roughies (Trachichthyidae), flatfishes (Bothidae, Pleuronectidae, Soleidae), and stargazers (Uranoscopidae); squid (Loliginidae and Sepioloidea); sponges; and mussels (Mytilidae). Honorary Associates carried out taxonomic work on bryozoa, pycnogonids, echinoderms, opisthobranch molluscs, bivalves and hydroids.

Check-lists are being compiled of the sponge fauna of Australia, of the marine bivalves of southern Australia and of the marine fishes of Victoria. These are intended to be a basic research tool for any taxonomic revisionary work on these groups. Martin Gomon is also involved in compiling a comprehensive field-guide to the fishes of Australia's southern coast.

THE COLLECTIONS

The curatorial and acquisitions policy review endorsed by Council last year established the principle that the collections are made for the following purposes:

1. To be an archival record of:
   a. the material cultures of the peoples who now and previously inhabited Australia and adjacent lands;
   b. the living and past faunas of Australia and adjacent lands and seas;
   c. the minerals and rocks which make up the continent of Australia.
2. To be a source of material for scientific research in the fields of zoology, geology and anthropology.
3. To be a source of material and ideas for educational programmes, especially exhibitions.

A policy was established that the emphasis should continue to be on material from the south-eastern Australian region, but recognition was given to the fact that some parts of the collections are already of national and international significance.

ACQUISITIONS

The curatorial programmes of most departments include the upgrading of existing collections and, in some cases, the registration of old as well as new accessions. Consequently the number of registrations during the year is not always the same as the number of new accessions.

The Museum has a purchasing programme to add to the collections where purchasing is appropriate, especially in the case of anthropology and mineralogy. Many specimens are also received as donations from the public. In most fields, however, the majority of new acquisitions are made by the staff in the pursuit of their research programmes.

Geology

MINERALOGY

The total number of acquisitions for the year was 918, made up of 552 minerals and 366 rocks and meteorites.

Major purchases for the year included a magnificent spray of mesolite crystals from India; a fine specimen of gold in quartz from Wehla, Victoria; a large azurite crystal from Morocco; a suite of Polish, Peruvian and Moroccan minerals; spectacular specimens of pyrite spheres in slate from Paraburdoo, Western Australia, and an azurite specimen from Queensland.

The major donation in the period was a fine collection of 90 mineral specimens from Miss Ruth Coulsell, the highlight of which was a number of colourful fluorite groups. A major exchange took place with Mr Peter Anderson, who provided over 100 specimens of rare European (mainly Italian)

species. The meteorite collection benefited from exchanges with several German collectors.

PALAEONTOLOGY

In the departments of Palaeontology, 7,600 vertebrate and plant fossils, and 17,000 invertebrate fossils were registered. Most of these were specimens in the collection but not previously curated; more than 70% of the fossil collection remains to be registered, and only through the able assistance of some 10 or 12 volunteers is any headway being achieved with the backlog.

New additions to the collections included fossil whale material from Beaumaris donated by Colin Macrae, Late Pleistocene marsupials from Lancefield, a tooth and phalange of a carnivorous dinosaur donated by Dr J. Jensen, and Early Devonian echinoderms and Early Ordovician trilobites, donated by Frank and Enid Holmes, Steve Echart, Peter Corcoran, Mark Burrows and Ron Nutt.

Research orientated collections by Peter Jell included Early Cambrian trilobites from the Flinders Ranges, Early Ordovician trilobites from Tasmania and Waratah Bay, Victoria, and Siluro-Devonian echinoderms from Victoria, Tasmania and New South Wales.

Anthropology

Acquisitions of special interest were:

a. Papuan Gulf artefacts (284) collected by Dr Ron Vanderwal during his field trip to the area. Many of these were included in the 'Kinomere' exhibition in the Spencer Gallery from March 1983.

b. Arnhem Land Aboriginal material collected by Gael Ramsay whilst undertaking field work relating to the Donald Thomson Collection. These recent artefacts will be of comparative interest to the items in the Thomson Collection.

c. The Kingsley Sutton Collection (donated by his widow) of Victorian Aboriginal Stone artefacts, numbering several thousand and collected during the 1950's and 1960's, mostly in Western Victoria.

The total acquisitions were 448 items, including Australian Aboriginal artefacts (126), Papua New Guinean (315), Asian (4), Pacific (2), North American (1).

Zoology

The Bass Strait Project and the many expeditions and field trips carried out by staff in connection with specific research projects continued to provide the bulk of the acquisitions in Zoology.

The various marine expeditions to Northern Australia, from the North-west shelf to the Great Barrier Reef by staff members, supplied a large number of specimens both in the special research areas of crustacea, fishes, and squid and in marine fauna in general. Similarly field work connected with research projects in terrestrial zoology supplied large collections of insects from several parts of Victoria and reptiles and amphibians from the Big Desert.

Various other scientific institutions donated or lodged collections of specimens either as exchange or identification material related to a specific research project or because the Museum is the statutory repository for biological material in Vcitoria. Such acquisitions included:

a. fishes donated by C.S.I.R.O., Macquarie University, Monash University, Smithsonian Institution, and Lakes Entrance Fish Co-op.;

b. type specimens of fishes sent on exchange from the Australian and Western Australian Museums;

c. birds from Brigham Young University and Monash University;

d. frogs from the University of Melbourne;

e. mammals from the Healesville Sanctuary, the Arthur Rylah Institute, and Forstamt der Rhein.Braunkohlenwerke, Germany;

f. marine invertebrates from C.S.I.R.O., Australian Institute of Marine Science, and the Antarctic Division;

g. type specimens of crustacea from the University of Queensland;

h. type specimens of insects from Colorado University, the Smithsonian Institution, and the University of Waterloo, Canada.

The nett result of these acquisitions is a very substantial growth in the zoological collections. This is evident in the following table showing the estimated number of specimens added to the collections in 1982/83.

Department	Estimated Number of New Accessions
Mammals	175
Birds	164
Reptiles and Amphibians	1513
Fishes	1300
Molluscs, etc.	10000
Crustaceans	5000
Insects and Arachnids	10000
Biological Survey	4000
	32152 specimens

LOANS

In addition to the research on the collections by staff and visiting scholars many loans (289) were made to workers in other institutions in all other Australian states and throughout the world. Most were for study purposes but some, especially those from the Anthropology Department, were for exhibitions. The extent of this use of the collections is evident from the following table which lists the number of loans, most of which consist of many specimens. Overseas countries which received loans included U.S.A., U.K., East Germany, West Germany, Netherlands, Hungary, France, Belgium, U.S.S.R., Sweden, South Africa, New Zealand.

Number of Loans to other Organizations during 1982/83

Department	Number of Loans	
	Australia	Overseas
GEOLOGY:		
Mineralogy	30	5
Palaeontology	32	6
ANTHROPOLOGY:	20	
ZOOLOGY:		
Invertebrates	27	14
Fishes	19	6
Mammals	27	
Reptiles & Amphibians	9	2
Birds	22	1
Insects & Arachnids	44	18
Crustaceans	5	2
Totals	235	54

CURATION PROGRAMMES

Geology

MINERALOGY

Most of the long-term curation programmes undertaken in 1982/83 were carried out by volunteer staff. The major project is a revision of the card index system to base it on localities, combined with a species by species stock-take. As well, volunteers have been stocktaking, and relabelling where necessary, specimens from a number of collections donated, or purchased in the past. The rock collection was rearranged and a new set of cabinet labels is in preparation. Routine identification by X-ray diffraction techniques continued on the collection when necessary and when time permitted. Details on all mineral and rock specimens registered in 1983 were entered on standard data sheets in preparation for the introduction of the computers.

PALAEONTOLOGY

Curation of the Cretaceous fossil plant collection by museum volunteer Dr Merrill Rowley was nearly completed. The long-term project of curation of the fossil vertebrate collection was carried out with assistance from a number of volunteers, prominent among these being Messrs Craig Cleeland and Richard Kay, and Ms Wendy Moore.

Arrangements were made to begin the transfer of the information now in the specimen registers into a machine readable format. This is in order that electronic data processing techniques can be used to manipulate these records. The actual execution of this project will begin on July 1, 1983.

Preparation of specimens was carried out by a number of volunteers, including Messrs Linley Selover and Ernest Bannister and Lady Elizabeth Lush. Mr Colin McCrae, a museum volunteer, partially compiled a catalogue giving detailed locality descriptions of where the fossils in the collection came from.

In the Department of Invertebrate Fossils space is being cleared for reorganizing the graptolite collections as part of the major programme over the next few years. Using volunteers, 16,000 specimens were registered, mainly brachiopods, bivalves, graptolites, and trilobites.

Anthropology

The Dover Building will in due course accommodate storage and office space for the Department of Anthropology, providing a much-needed controlled environment for the collections. The large Victorian Aboriginal photographic collection is becoming usable as sorting and mounting continues. The Victorian Aboriginal material culture collection is being catalogued, thus providing much easier use. Finally, the old foam in and on top of the storage cabinets is being replaced with plastic and acid-free tissue.

Zoology

Limited storage space and deficiencies in the curatorial assistance available continue to be serious problems in the organization and maintenance of the research/reference collections. An increased demand from institutions, government authorities and the general public for identification services has made the reorganization and modernization of the collections more and more urgent. An increased research effort by the scientific staff and major lodgements of material in accordance with the Museum's statutory obligation as the official repository for biological material has put further pressure on the limited space available for collection storage. The purchase of some shelving and insect cabinets during the year has temporarily alleviated some particularly severe bottle-necks but no longer term solutions

are in sight.

Curatorial work continued in all departments with major reorganizations being undertaken in the hymenopteran insect collections, in the marine mammal holdings following a major donation of material from the Arthur Rylah Institute and in the bryozoan collections with the help of an Honorary Associate and a volunteer worker. Catalogues of type holdings have also been prepared for Bryozoa and Mollusca.

Several zoology departments are operating with no technical assistance at all or with a much reduced level of assistance. This results in the scientist in that department spending much of his time performing technical tasks with a resultant drop in both research output and in identification and enquiry services performed. Some of these deficiencies in technical services are being bridged with the help of volunteer workers. The staff is very appreciative of the invaluable services provided by these volunteers. However, because they are only there on a part-time, temporary basis they cannot cover the lack of permanent technical staff.

COMPUTER PROCESSING

The Museum Council took the decision last year to investigate the possibility of computer processing as a tool in collection management and data retrieval to address the problems of increased demand on the collections and associated information. As a result an agreement was reached between the Council and Professor Poole of the Computer Science Department at the University of Melbourne who, in association with Mr Peter Reynolds, a computer consultant of Knowledge Engineering Pty Ltd, has set up a development group to develop a new large data-base retrieval system. With funds raised from outside sources and a special government grant these ideas have been developed to the point where a computer based data entry and retrieval system will start to be installed in the Museum early next year.

The system developed for the Museum is based on the principle that all curators should have full interactive access to their whole collection database at all times. Each curator will have a VDU on the desk and any enquiries of the data-base can be put, with an instant response. Further developmental work is envisaged for public access to the system in the future. The considerable collection back-log will be picked up over the next few years by a variety of means. A grant from Australian Biological Resources Study will enable a start to be made with some of the zoological data, while employment initiatives grants will fund other back-log data entry. The system which is being developed and installed is such an innovation in the field of Museum computing that several enquiries for details have already been received from other state museums and from several state and federal agencies.

LIBRARY

The Library of the National Museum, established in 1854, holds one of the finest collections of natural history publications in Australia, and is a major research tool for the staff. The collection reflects the range of scientific research carried out within the Museum. As well as its collection of classical natural history works (both monographs and periodicals) the Library collects contemporary material and has profiles running on the data base BIOSIS.

The Library received 547 books in 1982/83, of which 212 were donated and 335 purchased, and 1,156 periodical titles. Of these, 669 were received in exchange for the Museum publications, *Memoirs of the National Museum of Victoria* and *Reports of the National Museum of Victoria.* A further 248 are subscribed to and the rest were donated. Exchange agreements with other institutions, scientific organizations, universities, learned societies etc., are an important and valuable source of material for the Library and in accordance with the policy of acquisition of relevant periodicals, 41 new exchange agreements were finalized during the year.

Victorian Field Naturalist Clubs are, in response to a letter, depositing their publications in the Library. It is hoped to preserve these for posterity and record the natural history of Victoria.

Miscellaneous uncatalogued material was sorted by a vacation student over the December-January break. Many missing issues of journals were located and added to incomplete sets and much other valuable material was discovered.

The Library has been able to add to the rare antiquarian material and has continued to complete sets of periodicals.Some notable acquisitions during 1982/83 were:

Linnaeus, Carl (1707-1778)
Systema naturae, per regna tria naturae,... Editio duodecima reformata. Holmiae, 1766, Vols. 1-3.

Linnaeus, Carl (1707-1778)
Museum S. R. M. Ludovicae Ulricae Reginae Svecorum,... Holmiae, Stockholm, 1764.

Martyn, Thomas (1760?-1816?)
The Universal Conchologist, exhibiting the figure of every known shell... London, 1789.

Rumph, George Eberhard (1627-1702)
D'amboinsche rariteit Kamer, behelzende eene beschryvinge... Amsterdam, 1705.

Invaluable help has been given to the Library by our volunteer staff. Typing of catalogue stencils has hastened their appearance in the catalogue. A regular conservation programme has been instigated with the systematic dressing of the leatherbound volumes and dusting of the stock.

The binding programme has progressed. Current titles are bound to date and the backlog has been substantially reduced. Fine binding is also included.

LOANS

Internal	Items Lent	969
	Photocopies supplied in lieu	671
		1640
Inter-library	Items lent	117
	Photocopies supplied in lieu	596
		713

VOLUNTEERS

The following people have assisted the staff in the day to day tasks of the Museum Departments.They have contributed much to the efficient working of the institution and we gratefully acknowledge their assistance.

Senior Curator (Zoology)

Betty Argo
Vivienne Smith

Invertebrate Zoology

Richard Evans
Dianne Howe
Lorna Lawrence

Fishes

Rosalind Poole
Geraldine Richards
Elisabeth Robertson

Sponges

Peter Myroniuk
Geraldine Richards
Elisabeth Robertson
Natalie Schroeder

Mammals

Philip Eagles
Ian Schafer
Simon Townsend

Herpetology

Helen Bartoszewicz
Ellie Hamilton

Survey

George Chomiak
Marijana Cirvydas
Sandi Kogtevs
Christine Shankly

Bass Strait Survey

Jack Greaves
Sandra Hendrickx

Birds

Robert Baird
Ellen McCulloch
Robin Nettleton

Crustacea

Tom Gunn

Minerals

June Bolton
Margaret Day
Lyn Haupt
Joan Lamond
Reginald Moss
Puloma Mukerjee

Vertebrate Fossils

Robert Baird
Ernest Bannister
Iris Brailey
Craig Cleeland
Richard Kay
Jennifer Laby
Lorna Lawrence
Betty Lush
Colin Macrae
Wendy Moore
Merrill Rowley
John Saul
Linley Selover

Invertebrate Fossils

Marijana Cirvydas
Peter Corcoran
Enid Holmes
Puloma Mukerjee
June Van Zyl Viljoen

Anthropology

Una Allen
Jean Clarke
Mark Chandler
Muriel Elden
Sally Fletcher
Linda Gibson
Eva Haebich
James Knight
Helen Laffin
Joan Nanson
Fiona Scales
Pat Skoufis
Lesla Sutton

Pat Tuxen
Sheila Waters
Kaye Wilson

Library

June Bolton
Amanda Britton
Diana Britton
Robert Parrett

Public Programmes

Betty Argo
Tom Burchell
George Chomiak
John Coyne
Mary Firminger
Shane Lepage
Robert McBain
Geraldine Richards
Pat Tuxen

Volunteer Guides

Peter Baitz
Helen Bartoszewicz
Sofia Bartoszewicz
George Chomiak
Jennesse Corry
Fiona Dawson
Graeme Dawson
Sue Dawson
Max Dean
Margaret Gonshor
Noelene Gruar
Heather Hadley
Peter Heazlewood
Ruth Irving
Darryl Leech
Nigel McGillivray
Penny Morison
Jo Price
Bob Tranter
Elaine Tranter
Nancy Tsernjavski
Anne Wilson

EXTENSION ACTIVITIES

Staff appointed/elected to organizations relevant to the Museum's activities

Museum staff, experts in their respective fields, are active in professional societies and working parties outside the Museum itself. The following list illustrates the range and extent of this service.

DR W.D. BIRCH
Committee Member, Mineralogical Society of Victoria.
Member, Editorial Board, 'Australian Mineralogist'.
Member, Editorial Board, 'Minerals of Broken Hill'.

MR J. BLYTH
Convenor, Victorian Chapter, Australian Society for Limnology.
Convenor, Invertebrate Voucher System Committee (Aust. Soc. for Limnology).
Convenor and Chairman, Interdepartmental groups for the investigation of environmental research in East Gippsland.
Programme Co-ordinator, Friends of the National Museum of Victoria (from April 1983).
Advisor, River Murray Biological Monitoring Working Group (River Murray Commission).
Inaugural Member, Victorian Stream Survey Group.

MS S. BOYD
Member, Working Group for South Gippsland Marine and Wildlife Reserves established by the National Parks Service and Fisheries and Wildlife Division, Ministry for Conservation.

MR F. COFFA
Member, Working Committee, Applied Art Assistant/Technician Photography Course, TAFE College, Preston.

MR T.A. DARRAGH
Hon. Secretary, Royal Society of Victoria.
Member, Editorial Board, Journal of the Malacological Society of Australia.
Member, Sub-committee on geological conservation, Geological Society of Australia, Victorian Division.

MISS J. DIXON
Associate, History and Philosophy of Science Department, University of Melbourne.
Member, Australasian Marsupial Specialist Group of the International Union for the Conservation of Nature and Natural Resources (IUCN) Species Survival Commission.

DR M. GOMON
Programme Co-ordinator, Friends of the National Museum of Victoria (to April 1983).

DR D.J. HOLLOWAY
Hon. Treasurer, Geological Society of Australia, Victorian Division.
Hon. Editor, 'nomen nudum'.

DR P.A. JELL
President, Association of Australasian Palaeontologists.
Hon. Editor, Memoirs of the Association of Australasian Palaeontologists.
Hon. Editor, Royal Society of Victoria.
Member, Editorial Board, Geological Society of Australia.

MR P. LILLYWHITE
Membership Co-ordinator, Victorian Stream Survey Group.

DR C.C.LU
Member, Research Advisory Committee, Victo-

rian Institute of Marine Science.
Member, BIOMASS *ad hoc* Group on Squid Ecology, SCAR.
Member, Cephalopod International Advisory Committee.

MR A.R.MCEVEY
Scientific Associate, Royal Melbourne Zoological Gardens.
Member, Taxonomic Advisory Committee, Royal Australasian Ornithologists' Union.
Member, Chisholm Collection Board.

MR R.N. MILLER
President, Museum Education Association of Victoria.
Member, Law Institute Heritage Committee.

MS M. PERKINS
President, Victorian Division, Institute for the Conservation of Cultural Materials.

DR B.J.SMITH
Vice-President, Field Naturalists' Club of Victoria.
Convenor, Editorial Committee for the 'Victorian Naturalist'.
Member, South Gippsland Marine Reserves Steering Committee.

MS R. TAYLOR
Secretary, Museum Education Association of Victoria.
Council Member, Museum Education Association of Australia.

MR M. TRAYNOR
Member, TAFE Advisory Committee, Certificate of Applied Science Biology.

DR R. VANDERWAL
Council Member, Archaeological and Anthropological Society of Victoria.
Honorary Research Fellow, Division of Prehistory, La Trobe University.
Editorial Board, 'Archaeology in Oceania'.
Member, Heritage Committee, Law Institute of Victoria.

MR K.L. WALKER
Editor and Councillor, Entomological Society of Victoria.

DR B.R. WILSON, FTS
Fellow, Australian Academy of Technological Sciences.
Council Member, Victorian Institute of Marine Sciences.
Member, Zoological Board of Victoria.
Member, Committee on Data for Science and Technology (CODATA), Australian Academy of Science.
Member, Victorian Archaeological Advisory Committee (Ministry for Conservation).
Member, Great Barrier Reef Committee.
Member, Editorial Board, 'Journal of the Malacological Society of Australia'.
Member, Editorial Board, 'Malacologia' (University of Michigan).
Member, Editorial Board, 'Monographs of Marine Mollusca' (Delaware).
Member, Fauna Sub-committee, Australian Biological Resources Study.
President, Museums' Association of Australia, Victorian Branch.

DR A.L. YEN
Committee Member, Victorian Entomological Society.
Field Leader, Wyperfeld National Park Management Workshop.

Lectures and Talks - Universities and other institutions.

DR W.D. BIRCH:
'Mineralogy of Broken Hill - an Overview' - La Trobe University Geology Department.
'Acid Volcanism in Victoria' - R.M.I.T. Geology Department.
'Gold' - Brandon Park Primary School.

MR J. BLYTH:
'Monitoring Aquatic Resources' - Chisholm College of Advanced Education.

MR F. COFFA:
'Museum and natural science photography' - R.M.I.T. Photography Department.
'Scientific Photography' - series of six lectures - TAFE College Preston.

MR J. COVENTRY:
'Herpetology and N.M.V. Displays' National Museum of Victoria Guides.
'Identification of reptile goods in relation to endangered species' - Myers (Adelaide) and South Australian Museum.

MISS J. DIXON:
'Locomotion in the platypus, *Ornithorhynchus anatinus*' - Zoology Department, University of Zurich, Switzerland.
'Review of mammal research in the National Museum of Victoria 1965/83' - Seminar, Department of Zoology, La Trobe University.
'Mammal displays in the Museum' - National Museum of Victoria Guides.
'Functions and use of the Mammal Department in the National Museum of Victoria' - TAFE College, Box Hill.

MISS B. GILLIES:
'The function of the Ornithology Department' - National Museum of Victoria Guides.

DR M. GOMON:
'Biogeography of Australian Freshwater Fishes' - Zoology Department, Monash University.
'Taxonomy and Biogeography of Australasian Fishes' - Ecology Discussion Group, Zoology De-

partment, University of Melbourne.

MRS C. HOGARTH:
'Aboriginal and Oceanic Design' - R.M.I.T. Design Department.
'The Anthropology Collections' - Ethnic Education, Migrant Group.
'What do anthropologists do and why?' - St Albans Technical School.

DR P.A. JELL:
'Trilobites' - Monash University, Geology Department.
'Cambrian biogeography and an expanding earth', 'Palaeozoic Echinoderms', and 'Feeding habits of trilobites' - Department of Geology, University of Tasmania.

MS K. KOUMALATSOS:
'The Anthropology Collections' - Aboriginal Health Trainees, Koorie College.

MR A.R.McEVEY:
'Opening of Robert Ulmann Exhibition' - Chisholm College, La Trobe University.

MR R.N. MILLER
'Aborigines of the Western District of Victoria' - Institute of Catholic Education, Oakleigh Campus.
'Aborigines in Victoria' - State College of Victoria, Melbourne.
'History of the National Museum of Victoria', 'National Museum of Victoria, a case study in long-term educational planning', and 'Planning an individual educational programme' - Museum studies students, Victoria College, Rusden Campus.
'Workshop on Human Evolution' - School of Occupational Therapy, Lincoln Institute of Health Services, and Secondary School Biology Teachers.
'The National Museum of Victoria as a language resource' - Child Migrant Education Service, Victoria College, Toorak Campus.

MS GAEL RAMSAY:
'Preliminary results from recent work on the material culture of Eastern Arnhem Land' - Prehistory Department, La Trobe University.

DR T. RICH:
'Origin and Evolution of Australian Mammals' - Monash University.
'Dinosaurs' - Monash University.

MS G. SCULTHORPE:
'The Anthropology Collections' - Council of Adult Education Classes.

MR M. TRAYNOR:
'Taxidermy' - Gisborne Primary School.

DR R. VANDERWAL:
'The Anthropology Collections' - Ethnic Education, Migrant Group.
'Kinomere, past and present' - National Museum of Victoria Guides.
'Museology', 'Tasmanian Prehistory', and 'Papua New Guinea Prehistory' - Victorian Archaeological Survey/National Museum of Victoria lecture series.
'Human Evolution' - Lincoln Institute.

DR B. R. WILSON
'Australian Marine Biology - Now and Future' - Australian Academy of Technological Sciences, Victorian Division.

Lectures and Talks - Societies and Clubs

DR W.D. BIRCH:
'Phosphate Deposits of Victoria' - Mineralogical Societies Seminar, Adelaide.
'Minerals of Broken Hill' - Gemmological Association of Australia (Victorian Branch).
'Minerals of Victoria' - Cheong Park Lapidary Club.

MR J. BLYTH:
'Invertebrate Survey in Victoria' and 'Far East Gippsland, Victoria's South-west Tasmania' - Friends of the National Museum of Victoria.
'The effect of reservoirs on streams' - Greensborough and District Angling Club.
'A proposed stream survey in East Gippsland' - Mammal Survey Group of Victoria.
'Stream Survey in East Gippsland' - Bairnsdale Field Naturalists' Club and Australian Society for Limnology.
'Streams of the Errinundra Plateau' - Minister for Conservation and the Labour Party Planning Committee for Environment and Conservation.
'The beauty of the Errinundra Plateau' - Residents of East Gippsland.

MR F. COFFA:
'Various aspects of mineral photography' - Mineralogical Society of Victoria.

MR J. COVENTRY:
'Reptiles of the Melbourne area' and 'Use of keys in identifying reptiles' - Ringwood Naturalists' Club.
'Snakes and Spiders' (with K. Walker) - Friends of the National Museum of Victoria.
'Reptiles' - Mitcham Adult Migrant Community English Class and Box Hill Adult Migrant Evening English Classes.

MISS J. DIXON:
'Mammals of the Donald Thomson collection from Northern Australia' - joint symposium of the Australian Mammal Society and the Ecological Society of Australia.

EDUCATION STAFF:
Workshop on National Museum of Victoria Education Programmes - Biology Curriculum Standing Committee.
'Dinosaur Discovery Day' - Primary and Secondary school teachers of south-central region.

DR M. GOMON:
'What is that fish?' - Friends of the National Museum of Victoria.
'They're all mullet to me' - Oceans '83, Underwater Congress and Film Festival.

DR P.A.JELL:
'Fossil Echinoderms' - Victorian Field Naturalists' Club.
'Cambrian geology of China' - Geological Society of Australia, Tasmanian Division.

DR E. McCLELLAN:
'The National Museum of Victoria'- Council of Adult Education Classes.

MR A. McEVEY:
'Fundamental points in bird painting' - Wildlife Art Society of Australasia.

DR B.J. SMITH:
'Snails of the Dry Forest' and 'Checklist of Non-marine molluscs of Australia' - Malacological Society of Australia.
'Snails Teeth, Giant Worms and Watering-pots' - Friends of the National Museum of Victoria.

MR M. TRAYNOR:
'Hands-on' experience and talk - Victorian Association for the Blind.

DR R. VANDERWAL:
'Gulf of Papua Research' and 'Kinomere Village, past and present' - Friends of the National Museum of Victoria.

MR K. WALKER:
'The differences between moths and butterflies of the Australian region' - Horsham Field Naturalists' Club.
'Australian Ants and their Societies' - Wildlife Art Society of Australasia.
'Australian Spiders' - Friends of the National Museum of Victoria.
'The World of Ants and Ants of the World' - Entomological Society of Victoria.

DR F. WIEDENMAYER:
'Siliceous sponges and their evolution' - Malacological Society of Australia, Victorian Branch.

Conferences Attended (Papers presented appear in brackets)

MR J. BLYTH:
Annual Congress, Australian Society for Limnology, Brisbane, May, 1983.
('The impact of erosion sediment of stream-bed structure and aquatic invertebrates in the Thomson River, Victoria.')

MR T.A. DARRAGH:
Dorothy Hill Jubilee Meeting of Association of Australasian Palaeontologists, Brisbane, September, 1982.
Pacific Science Congress, Dunedin, New Zealand, February, 1983.

MISS J. DIXON:
Third International Theriological Congress, Helsinki, Finland, August, 1982.
('Geographic areas of Australia poorly represented in mammal research collections'.)
Annual Meeting Australian Mammal Society, Darwin, May, 1983.

DR P.A. JELL:
Dorothy Hill Jubilee Meeting of Association of Australasian Palaeontologists, Brisbane, September, 1982.
Sixth Australian Geological Convention, Canberra, February, 1983.
('The Early to Middle Cambrian boundary in Australia'.)

DR E. McCLELLAN:
Conference of Exhibition Planners, Canberra, October, 1982.
('The role of the designer in Interpretative Services'.)

DR A. NEBOISS:
Trichoptera Conference, Mt Buffalo, Victoria, November, 1982.

DR T.H. RICH:
Annual Meeting Australian Mammal Society, Darwin, May, 1983.

DR B.J. SMITH:
ICOM International Seminar on Museum Documentation, Sydney, August, 1982.

MS E.M. THOMPSON:
International Ornithological Congress, Moscow, U.S.S.R., August, 1982.
('Systematic significance of ratite quadrate'.)

DR R. VANDERWAL:
Fifteenth Scientific Congress, Dunedin, New Zealand, February, 1983.
('Material culture research at Deception Bay, Gulf of Papua'.)

DR B. R. WILSON:
Coastal Ecology Workshop, C.S.I.R.O. Marine Laboratories, Marmion, W.A., May, 1983.
Research on Rottnest Island, Satellite Conference associated with 1983 ANZAAS Congress, Rottnest Island, W.A., May, 1983.
Annual Scientific Meeting of Australian Marine Science Association, Mandurah, W.A., May, 1983.

PUBLICATIONS

BARNARD, J.L. and DRUMMOND, M.M., 1983. *Warreyus,* a new genus Exoedicerotidae (Crustacea, Amphipoda) based on *Exoediceros maculosus* Sheard. *Proc. R. Soc. Vict.* 95:65-75.

BIRCH, W.D. and PEARSON, J.E., 1982. Copper-chloride minerals in basalt from Flinders, Victoria. *Aust. Mineral.* 39:211-213.

BIRCH, W.D., CHAPMAN, A. and PECOVER, S.R., 1982. The Minerals, *in* Worner, H.K. and Mitchell, R. (eds.), *Minerals of Broken Hill,* pp. 68-195. Aust. Mining and Smelting Ltd, Melb.

BIRCH, W.D., 1982. A note on arsenopyrite crystals from Broken Hill, New South Wales. *Aust. Mineral.* 40:224-5.

BIRCH, W.D., 1982. Summary of Mineral Data *in* Worner, H.K. and Mitchell, R. (eds.), *Minerals of Broken Hill,* pp. 196-223. Aust. Mining and Smelting Ltd, Melb.

BIRCH, W.D., BOTTRILL, R. and PLIMER, I.R., 1983. Addendum *in* Worner, H.K. and Mitchell, R. (eds.), *Minerals of Broken Hill* (2nd edn.), pp. 260. Aust. Mining and Smelting Ltd, Melb.

BURKE, A.C., GAFFNEY, E.S. and RICH, T.H., 1983. Miocene turtles from Lake Tarkarooloo, South Australia. *Alcheringa,* 7:151-154.

CHANG, W.T. and JELL, P.A., 1983. Chinese Ordovician trilobites housed in the Smithsonian Institution. *Mem. Ass. Australas. Palaeontols,* 1:186-194.

DARRAGH, T.A., 1983. Volutidae (Mollusca Gastropoda) from the Capricorn Channel, Central Queensland. *J. malac. Soc. Aust.,* 6(12):83-87, Fig. 1-6.

DIXON, J., 1982. Geographic areas of Australia poorly represented in mammal research collections. Abstract of paper:55. *Int. Ther. 111.*

HOGARTH, C., 1982. The people and art of the Philippines. *Mankind,* 13:465.

HOGARTH, C., SCULTHORPE, G. and VANDERWAL, R., 1982. Research on the Anthropological collections, National Museum of Victoria. *Artefact,* 7:47-55.

HOLLOWAY, D.J., 1982. Trilobites from the Mount Ida Formation (Late Silurian-Early Devonian), Victoria. *Proc. R. Soc. Vict.,* 94:133-154.

JELL, P.A., 1982. *Crotalocrinites pulcher* (Hisinger 1840) from the Early Devonian of Central Victoria. *Alcheringa,* 6:174.

JELL, P.A., 1983. Some Early Devonian echinoderms from Victoria (Rhombifera, Blastoidea and Ophiocistioidea). *Mem. Ass. Australas. Palaeontols,* 1:195-223.

JELL, P.A. and HOLLOWAY, D.J., 1983. Devonian and ?Late Silurian Palaeontology of the Winneke Reservoir Site, Christmas Hills, Victoria. *Proc. R. Soc. Vict.,* 95:1-21.

JELL, P.A., 1983. A larger bivalved arthropod from SADME Edeowie-1 Well of probable Cambrian age. *Proc. R. Soc. S. Aust.,* 107:123-125.

KENSLEY, B. and POORE, G.C.B., 1982. Anthurids from the Houtman Abrolhos Islands, Western Australia. (Crustacea, Isopoda, Anthuridae). *Proc. biol. Soc. Wash.,* 95:625-36.

LU, C.C. and DUNNING, M., 1982. Identification guide to Australian arrow squid (Family Ommastrephidae). *Victorian Institute of Marine Sciences, Tech. Rep. No. 2.* 30pp.

MORSE, J.C. and NEBOISS, A., 1982. *Triplectides* of Australia (Insecta, Trichoptera, Leptoceridae). *Mem. natn. Mus. Vict.,* 43(2):61-98.

NEBOISS, A., 1982. Genus *Setodes* (Rambur) new to Australian Fauna (Trichoptera, Leptoceridae). *Mem. natn. Mus. Vict.,* 43(2):105-107.

NEBOISS, A., 1983. Checklist and Bibliography of the Australian Caddis-Flies (Trichoptera). *Aust. Soc. Limnol. Spec. Publ. No. 5,* 132pp.

PICKETT, J.W. and JELL, P.A., 1983. Middle Cambrian Sphinctozoa (Porifera) from New South Wales. *Mem. Ass. Australas. Palaeontols,* 1:85-92.

POORE, G.C.B., 1982. Benthic Communities of the Gippsland Lakes, Victoria. *Aust. J. mar. Freshwat. Res.,* 33:901-15.

POORE, G.C.B., 1982. *Upogebia niugii* (Crustacea) a new shrimp from Papua New Guinea. *Proc. R. Soc. Vict.,* 94:169-172.

POWELL, C. Mc.A., NEEF, G., CRANE, D., JELL, P.A. and PERCIVAL, I.G., 1982. Significance of Late Cambrian (Idamean) fossils in the Cupala Creek Formation, north-western New South Wales. *Proc. Linn. Soc. N.S.W.,* 106:127-150.

RICH, P.V., van TETS, G.F. and McEVEY, A.R., 1982. Pleistocene records of *Falco berigora* from Australia and the identity of *Asturaetus furcillatus* De Vis (Aves, Falconidae). *Mem. Qd Mus.,* 20(3):687-693.

RICH, P.V. and THOMPSON, E.M. (eds.), 1982. *The Fossil Vertebrate Record of Australasia.* Monash University Offset Printing Unit, Clayton. Pp. i-xiii, 1-759.

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RICH, T.H., ARCHER, M., PLANE, M., FLANNERY, T.F., PLEDGE, N.S., HAND, S. and RICH, P.V., 1982. Australian Tertiary mammal localities, *in* Rich, P.V. and Thompson, E.M. (eds.), *The Fossil Vertebrate Record of Australasia,* pp. 525-572. Monash University Offset Printing Unit, Clayton.

RICH, T.H., HOPE, J., MARTIN, H., NEW, J., OVENDEN, F. and THOMPSON, E.M., 1982. Literature references to the fossil terrestrial mammals of Australia and New Guinea, *in* Rich, P.V. and Thompson, E.M. (eds.), *The Fossil Vertebrate Record of Australasia,* pp. 573-594. Monash University Offset Printing Unit, Clayton.

RICH, T.H. and RICH, P.V., 1982. Search for fossils in New Zealand and Australia. *Res. Rep. Natn. geogr. Soc.,* 14:557-568.

RICH, T.H., ZHANG, Y.J. and HAND, S.J., 1983. Insectivores and a bat from the early Oligocene Caijiachong Formation of Yunnan, China. *Aust. Mammal.,* 6:61-75.

ROBERTS, J. and JELL, P.A. (eds.), 1983. Dorothy Hill Jubilee Memoir. *Mem. Ass. Australas. Palaeontols,* 1:374pp.

SMITH, B.J. and PETERSON, J.A., 1982. Studies on the Giant Gippsland Earthworm, *Megascolides australis* McCoy, 1878. *Victorian Nat.,* 99(4):164-172.

STAPLES, D.A., 1982. Pycnogonida of the Calliope River and Auckland Creek, Queensland. *Mem. Qd Mus.,* 20:455-471.

VANDERWAL, R. and FRANKEL, D., 1982. Archaeological investigations near Kerema, Gulf Province, Papua New Guinea 1980-81: Preliminary field report. *Research in Melanesia,* 6:20-32.

VANDERWAL, R. and FRANKEL, D., 1982. Prehistoric research at Kinomere Village, Papua New Guinea, 1981: Preliminary field report. *Aust. Archaeol.,* 14:86-95.

VANDERWAL, R. (ed.), 1982. *The Aboriginal Photographs of Baldwin Spencer.* Introduced by J. Mulvaney, selected and annotated by G. Walker. John Currey, O'Neil, Melbourne.

WALKER, K.L., 1982. Some aspects of the Native Australian Bee Fauna. *Victorian Ent.,* 12(3):26-30.

WALKER, K.L., 1983. Observations in my back yard. *Victorian Ent.,* 13(1):5-7.

WALKER, K.L., 1983. The World of Ants and Ants of the World. *Victorian Ent.,* 13(3):23-30.

Reports and Catalogues

DAVEY, G.W., BROOKS, P.J. and BLYTH, J.D., 1982. *Substrata, sediment and current as determinants of aquatic invertebrate distribution in relation to construction of the Thomson Dam.* 212pp. Submitted to the Ministry for Water Resources.

EDUCATION STAFF, 1982. Dinosaur Package. Two folders of information and activities for use at school and during a visit to the exhibition.

EDUCATION STAFF, 1983. Kinomere. A 4-page information leaflet, and three activity sheets produced to supplement the exhibit.

MARCHANT, R., MITCHELL, P. and NORRIS, R., 1982. *The distribution of macroinvertebrates along the lower reaches of the La Trobe River and its response to disturbance.* 44pp. Final report to the State Electricity Commission of Victoria.

METZELING, L., GRAESSER, A., SUTER, P. and MARCHANT, R., 1982. *The distribution of macroinvertebrates in the upper catchment of the La Trobe River.* 93pp. Final report to the State Electricity Commission of Victoria.

SMITH, B.J. (ed.), 1982. *Dinosaurs from China.* National Museum of Victoria. 51pp.