### PARLIAMENT OF NEW SOUTH WALES.

## AUSTRALIAN MUSEUM.

(ANNUAL REPORT OF THE TRUSTEES FOR THE YEAR ENDED 30TH JUNE, 1940.)

Presented to Parliament in accordance with the provisions of Section 10 of the Australian Museum Act, 1902.

Ordered to be printed, 24 October, 1940.

To His Excellency the Governor.

The Trustees of the Australian Museum have the honour to submit to Your Excellency their eighty-sixth Annual Report for the year ended 30th June, 1940.

#### 1. TRUSTEES.

At the December Board Meeting Mr. F. S. Mance was re-elected President for the year 1940.

Leave of absence was granted to Mr. James McKern, Crown Trustee, on account of ill-health. He resigned on 9th February, 1940, and Mr. Mance, President, was appointed Crown Trustee from 3rd June, 1940.

Mr. Frank B. Spencer was elected a Trustee on 11th August, 1939, to fill the vacancy resulting from the death of the Hon. H. M. Hawkins, M.L.C.

On 27th June, 1939, the Minister for Education, the Hon. D. H. Drummond, inspected the Museum galleries and expressed his interest in the work of the Museum and the question of building extension. The Minister for Labour and Industry, the Hon. G. C. Gollan, also visited the Museum on 15th January, 1940, and inspected certain of the scientific offices.

A list of the Trustees as at 30th June, 1940, is given in Appendix A.

#### 2. STAFF.

Miss Elizabeth C. Pope, B.Sc., was appointed a Second-class Scientific Assistant to fill the vacancy caused by the resignation of Mr. W. Boardman; Miss Pope entered on duty on 15th September, 1939.

During the year Mr. J. R. Kinghorn was elected Member of the California Academy of Science, and he and Mr. T. Hodge-Smith have been made Fellows of the Australian and New Zealand Association for the Advancement of Science. Mr. E. Le G. Troughton was elected a Fellow of the Royal Zoological Society of New South Wales and a member of the Council of the Linnean Society of New South Wales. Mr. G. P. Whitley was elected to the Council of the Royal Australian Historical Society.

Mr. H. O. Fletcher was appointed a Trustee of the Hatton's Corner Reserve, Yass, and Mr. F. D. McCarthy a Trustee of a Reserve at Burragurra and Yango; both appointments were made by the Minister for Lands. Mr. J. R. Kinghorn was appointed a Trustee on a body controlling a reserve for the preservation of fauna and flora in the Hawkesbury River district.

The subject of the approaching retirement of the Director was considered by the Board.

By permission of the Trustees, Mr. G. P. Whitley acted as Organising Secretary for an exhibition of marine life held for two weeks at the Manly Art Gallery.

Mr. T. Hodge-Smith attended the Annual General Meeting of the Australian Division of the Art Galleries and Museums Association of Australia and New Zealand, held in Melbourne in September, 1939.

Mr. J. Kingsley, Assistant Articulator, received a grant from the Carnegie Corporation, New York, to enable him to attend a class for preparators conducted by Mr. Frank Tose, California Academy of Sciences, and to visit various American Museums. Mr. Kingsley sailed for America on 21st June, 1940.

### 3. Honorary Staff and Honorary Correspondents.

It is with regret that the Trustees report the death of Mr. H. J. Carter, Honorary Entomologist since July, 1920. He was a recognised authority on Australian Coleoptera, and his death is a distinct loss to the Museum and to Australian entomology. Mr. W. J. Plowden-Wardlaw was elected an Honorary Correspondent in terms of By-law 12.

4. FIELD WORK AND COLLECTING.

Mr. F. D. McCarthy, Assistant Anthropologist, accompanied by Mr. H. Jackson, Mechanic, made an archaeological reconnaissance of the north coast of New South Wales and some places of anthropological interest in New England. Several sites

were visited and collections of stone artefacts were made. The middens at Clybucca were visited and collections of stone artefacts were made. The middens at Clybucca were visited and concetions of street, and some detailed excavation and survey work were found to be of particular interest, and some detailed excavation and survey work at this locality is desirable. Mr. McCarthy accompanied Professor J. L. Shellshear and Dr. A. A. Abbie to

Wolgan Gap, where cave shelters and aboriginal drawings were examined, A number of shorter trips were made to places near Sydney for purposes of

marine collecting and film-making.

### 5. Donations.

The most important donation received during the year was the fine collection The most important doubter Mr. W. J. Plowden-Wardlaw; this contains repreor New Zealand series of practically all species known to occur in the Dominion.

Other donations are referred to later.

### 6. Gallery Improvements and Exhibits.

Three additional show cases have been installed in the Mineral Gallery, com-Three additional snow cases have been instance in the latineral Gallery, completing the series of new display cases in that gallery. New scenic backgrounds have been supplied to the Flying Fox, Boatswain Bird, and Admiralty Islets groups, which now harmonise with other habitat groups in the Rest Hall.

Two additional small groups: "The Life of the Dragonfly" and "Ants' Guests" have been placed in the gallery of invertebrates; in these the specimens and accessories have been modelled on a scale six times natural size by Mr. J. Kingsley, Assistant Articulator.

Important improvements in display have been effected in various sections, such as mammalogy, anthropology, entomology, and lower invertebrates, special attention being paid to the provision of pleasing backgrounds to the exhibits.

Special exhibits have from time to time been placed on view in the Main Hall; these included the recently discovered and described Bird of Paradise, Taeniaparadisea mayeri, the introduced Cabbage White Butterfly, man's insect enemies in peace and war, and insect pests of grain and other stored foodstuffs.

#### 7. LIBRARY.

During the year the Library acquired 407 volumes by exchange and purchase, besides numerous loose parts and reprints. Considerable progress has been made in the work of cataloguing authors' reprints. Limitation of funds for binding has been a serious hindrance to the efficiency of the library. Demands upon the resources of the library by research workers and various scientific institutions and departments have increased. Such assistance is not restricted to this State, but is extended to various parts of the Commonwealth. Indirectly, therefore, the Museum library helps to promote research outside the Museum.

As in previous years, the Librarian has devoted a considerable portion of his time to editorial work and the supervision of the printing of Museum publications.

### 8. Publications.

During the year Volume XX, Parts 5 and 6 of the "Records" of the Australian Museum, Volume VII, Parts 2-5 of the "Australian Museum Magazine," and Memoir VII, "Australian Meteorites," by Mr. T. Hodge-Smith, were issued. A further supply of "Aboriginal Place Names and their Meanings" was printed by the Government

The Trustees presented to the Department of Education copies of back numbers of the "Australian Museum Magazine" for distribution to schools, and a donation of Museum publications was made to the library of the Young Men's Christian Association. A supply of Magazines was also made available for the use of soldiers in camp and sailors on warships.

### 9. LECTURES AND BROADCASTS.

The usual programme of Popular Science Lectures and School Lectures was carried out during the year, and a number of voluntary lectures were delivered by members of the Museum Staff to various societies and educational bodies.

Mr. K. C. McKeown, Assistant Entomologist, delivered a short course of Nature Study Lectures in the Museum to the Summer School of Method for Teachers.

At the request of the Rural Bank, a series of "actuality" broadcasts on specimens exhibited in the galleries was arranged in connection with the Bank's "Agricultural Magazine of the Air"; other broadcasts were delivered by various members of the scientific staff.

The Trustees gave consideration to the possibility of installing special microphone and loud-speaker equipment for the purpose of giving gallery talks to visitors, but in view of the heavy cost involved the project was abandoned for the

Attendances at the various series of lectures were as follows:

13 Popular Science Lectur				Wanter OW	e anneance	1.60	
10 School Lectures	es	(# F)		06.6	06.8	515	2,090
62 Voluntary Lectures		16.63	1.4			110	1,599
. Staticary Lectures							4.492

## 10. CARNEGIE GRANT AND FILM WORK.

A series of nature films, comprising twelve subjects prepared and completed by Museum officers, was delivered to the Visual Education Committee of the Department of Education. Additional films are nearing completion.

### 11. BUILDINGS AND EQUIPMENT.

The Acting Government Architect submitted fresh plans for building extension. These plans, which were approved by the Trustees, provide for the erection of basement and sub-basement, affording additional storage space of two floors, each 102 by 59 feet. The Department of Works and Local Government was asked to make the necessary provision of funds to enable this work to proceed.

In view of the present limited storage space the Government Architect was requested to consider the feasibility of constructing additional floors in certain offices and workshops; this matter is still under consideration.

The Department of Works and Local Government completed the installation of chandeliers in the North Wing and extended the lighting system to cases in the Mineral Gallery; this has resulted in a great improvement in the lighting of this wing.

### 12. FINANCE.

The total nett expenditure from Consolidated Revenue Fund for the year (excluding Statutory Endowment of £1,000) was £17,871 17s. 0d., compared with £18,567 1s. 2d. last year. Nett expenditure from Trustees' Account Funds (including Statutory Endowment) was £1,264 8s. 5d., compared with £1,192 6s. 8d. for 1938-39. The expenditure for the year from Trustees' Account (Carnegie Corporation Grant) was £156 4s. 7d.

The cash balance in Trustees' No. 1 Account at 30th June, 1940, was £190 15s. 4d., that in the Trustees' Carnegie Corporation Account, £154 5s. 10d.

Statement of Receipts and Payments for the year will be found in Appendix B.

### 13. Public Attendances.

Statistics of Attendance for the years 1932-33 to 1939-40 are appended.

				1	Week-days.	Sundays.	Total.
1932-33		34 85	(4):47		166,749	53,901	220,650
1933-34	7	1.74	4.47	9.9	136,066	48,478	184,544
1934-35	(4)(4)	24:30	(4.4)	1954	150,481	58,734	209,215
1935-36			4.5	10.00	145,916	56,501	202,417
1936-37	5444	100	130.45	19197	145,860	52,283	198,143
1937-38	+1.60	1400	118.060	(0.000.00)	157,161	54,809	211,970
1938-39	1974	0404	(%)(40)	24/24/2	155,751	52,154	207,905
1939-40			10.00		170,354	63,907	234,261

The increase in the years' attendances is very gratifying.

### 14. General.

A scheme was drawn up to provide for the safeguarding of the Museum and its contents in the event of a national emergency. A demonstration of fire and gas raid control was given to members of the Staff by an officer of the Board of Fire Commissioners.

On behalf of the Commonwealth Government an exhibit was prepared for the New Zealand Centenary Exhibition, Wellington. This consisted of mounted specimens of the platypus, the koala and two flying phalangers; also some striking insect types from North Australia and a series of Australian butterflies arranged by Dr. Waterhouse.

Collections for educational purposes were supplied to various colleges and schools.

### 15. The Collections and Scientific Work.

Mammals (E. Le G. Troughton in charge).

Mr. Troughton was abroad on extended leave until 27th December, 1939, during which period routine activities of the section were conducted by Mr. H. S. Grant, Chief Taxidermist, under the supervision of the Director. Mr. Troughton visited important Museums in the United States, Canada and England, and studied advances in methods of control, display and storage, made since his last overseas trip in 1930. He also made inquiries regarding faunal conservation by Government departments in Washington and in the Yosemite National Park. In New York he examined the Archbold New Guinea collections at the American Museum of Natural History, and at the British Museum, London, a number of type specimens of Australian marsupials, rats and bats.

Important acquisitions included several collections of marsupials and rodents submitted for examination in connection with medical and economic investigations in Queensland and New Guinea. Several marsupials were presented by Mr. Noel Burnet, Koala Park, and an interesting series of marsupials, rats and bats was obtained from the Rev. W. S. Chaseling, S.E. Arnhem Land, Additional specimens of rare rats and bats were contributed by the Rev. J. B. Poncelet, Bougainville, Solomon Islands.

Plans were prepared for modernising the Australian Section of the mammal gallery.

Advice on faunal matters was given to the Chief Secretary's Department and others.

On account of the time devoted to gallery rearrangement and display, research was confined mainly to the identification of collections submitted in connection with investigations on medical and economic matters, and specimens sent in by the general public.

At the request of the Editor, Mr. Troughton contributed an article, "The At the request of the Edition to Faunal and Economic Problems," to the Urgency of Biological Survey in relation to Faunal and Economic Problems," Australian Journal of Science.

Skeletons (E. Le G. Troughton in charge). Accessions of special interest included a dolphin skull from Shark's Bay, Western Australia, collected by Mr. G. P. Whitley (Staff); a human skull from Thursday Island, presented by Mrs. Harry Burrell; a series of macropod crania, rnursuay Island, presented by Mr. Noel Burnet; bandicoot crania, by Dr. W. G. Heaslip, Commonpresented by Mr. Roof Santon, wealth Health Laboratory; aboriginal skeleton remains from the Mortlake district, Victoria, received from the estate of Dr. John Macpherson.

Birds (J. R. Kinghorn in charge).

Acquisitions during the year totalled 483, of which the very valuable donation of 400 New Zealand birds, presented by Mr. W. J. Plowden-Wardlaw, constituted the or 400 New Zealand or as, presented most important item. Three specimens of a new bird of paradise were presented by Brigadier-General Sir Walter McNicoll, Administrator of the Mandated Territory of New Guinea.

Measures were taken to combat the growth of mould on the specimens stored in the basement. The specimens have been cleaned and improvements have been

effected in ventilation.

The reference collections and catalogues have been checked from time to time and kept up to date and the bird room has been partially reorganised; all the type specimens have been brought together and separately listed and catalogued. About 100 specimens of previously unnamed Pacific birds have been identified in acordance

with the reports of the Whitney Expedition.

Mr. Kinghorn made measurements of, and notes on, seabirds, and studied variations in hawks from Pacific Islands. He also critically examined several species of the genus Platycercus and made notes on erythrochroism and xanthochroism in these birds. He prepared an annotated list of birds of the irrigation areas for the conference of the Royal Australasian Ornithologists' Union and collated the latest information relating to the economic status of ducks in relation to rice crops.

Additional information regarding the effect on birds of poisoned bran bait was gathered from various sources, more particularly from reports issued in the

United States of America.

Information was given to the Chief Secretary's Department regarding open seasons, and the list of protected birds was revised. The Department of Agriculture was assisted with advice on the economics of certain species, and information was given to the Department of Trade and Customs regarding the entry of foreign birds likely to be injurious to crops and orchards.

As Honorary Secretary of the State Advisory Committee on the Exportation and Importation of Fauna, Mr. Kinghorn has given special attention to the question of prohibiting the importation of destructive birds.

Reptiles and Batrachia (J. R. Kinghorn in charge).

Accessions numbered 153, the most important being collections received from the Rev. W. S. Chaseling, Arnhem Land, and from Mr. F. H. Taylor, New Guinea. The collection made by the Simpson Desert Expedition was received for report and Mr. Kinghorn has identified the various species. The reference collection and catalogues have been kept in order and a complete list of type specimens was prepared.

Mr. Kinghorn has made exhaustive notes on crosses between Tiliqua nigrolutea and T. scincoides, bred by Mr. G. Longley, and has supplied information to Dr. A. Loveridge, Museum of Comparative Zoology, Harvard College, Mr. H. W. Parker, British Museum, and Mr. J. R. Slevin, California Academy of Sciences.

Fishes (G. P. Whitley in charge).

Accessions included Bali fishes received from Mr. R. Neuhaus, Buin and Northern Territory fishes from the Rev. J. B. Poncelet and the Rev. W. S. Chaseling, respectively. Mr. Whitley made collections in Western Australia and some interesting specimens were obtained by Mr. H. O. Fletcher when a member of the Simpson Desert Expedition, Central Australia.

Information was supplied to many inquirers in Australia and abroad. A report on poisonous fishes was prepared for the Health Department, Rabaul, and an inquiry regarding "flathead" fillets was dealt with for the Defence Department. Mr. Whitley supplied additional references for Neave's Nomenclator Zoologicus and for Australian

During the year a Handbook on the Sharks, Rays and other Primitive Fishes of Australia, by Mr. Whitley, was prepared for publication by the Royal Zoological Society of New South Wales; this forms Part 1 of a Handbook on the Fishes of

Insects and Arachnida (A. Musgrave in charge; K. C. McKeown and Nancy B. Adams, Assistants; Dr. G. A. Waterhouse, Honorary Entomologist).

The most outstanding accessions were the collections obtained by Mr. N. Geary in Queensland; these contained many novelties and fine series of species not previously well represented in the Museum collections.

Mr. Musgrave and Miss Adams were largely employed in revising and modernising the exhibited collection: new labels and illustrative drawings have been prepared and greatly enhance the appearance and educational value of the exhibits.

Information was supplied and specimens identified for various Departments and Institutions and the public.

Information on matters of economic interest was given to the Irrigation Commission, Leeton (stomach contents of ducks); the Department of Public Works (insect fauna of sewage); a parachute factory (destruction of silk by Attagenus

piceus).

Mr. Musgrave has continued research on Pentatomidae and has commenced revisionary work on the cabinet collections of Australian Rhyncota, Lygaeidae, Miridae and Tingidae. His "Index to the Literature on Australian Arachnida, Myriapoda and Onycophora, 1775-1938" is now ready for publication and he has also prepared a Catalogue of the Australian Arachnida.

All insect Arachnid and Myriapoda types in the Museum collection have been

Mr. McKeown has continued his investigations on the food of trout in Australia and also his researches on Australian Cerambycidae, including a revision of the genus Platyomopsis. He paid a visit to the Lecton Irrigation Area in May, 1940, in connection with the damage to irrigation channels by crayfishes, and submitted a report on the results.

Registrations of butterflies by Dr. Waterhouse included 350 of the hybrids bred by himself from crosses between Tisiphone abeona and T. morrisi. The note-

books dealing with these experiments accompany them.

The most interesting accessions during the year were a remarkable aberration of Vanessa cardui kershawi and another pair of Ogyris ianthis from Milmerran, South Queensland.

Accompanied by Mr. G. M. Goldfinch, Dr. Waterhouse visited Ebor, near Armidale, and collected many interesting specimens which were added to the

Conchology (T. Iredale in charge; Joyce Allan, Assistant).

Large collections were received from Mr. Melbourne Ward and Mr. G. P. Whitley, obtained in the Northern Territory and Shark's Bay, Western Australia, respectively; Mr. A. A. Cameron, Clarence River, and Messrs. C. F. Lascron, H. S. Mort, H. Bernhard, Sydney, have made many valuable contributions; Messrs, S. J. Copland and J. Shaffery presented series of Queensland land shells, and Dr. Dorothy Hill and Mr. F. Rick forwarded most interesting material obtained during the course of reclamation and dredging work in Moreton Bay.

The reference collection has been attended to and rearranged in accordance with the progress of research, and certain sections, namely, the Loricata, Cephalopoda, Scaphopoda, Brachiopoda and Pteropoda, have been sorted. Alterations and rearrange-

ment in the basement store have relieved congestion to some degree.

Miss Allan continued work in the gallery and submitted a sketch of a new type of table case designed to provide more space for display and an improved appearance.

Information and assistance were given to the Zoology and Geology Departments of the University, the Fisheries Branch of the Council for Scientific and Industrial Research, Cronulla, and many others.

Research was conducted on land shells, cowries, opisthobranchs and other groups and a number of papers were published.

Lower Invertebrates (F. A. McNeill in charge; A. A. Livingstone and Elizabeth C.

Valuable donations of Decapoda have been received from Mr. A. A. Cameron, Clarence River; both Queensland and New South Wales forms were represented. A large collection of Echinodermata, including many paratypes, was presented to the Museum by the Australian Antarctic Expedition Publication Committee. A collection of Mysidacea, described by Prof. W. M. Tattersall, was presented by Prof. W. J. Dakin, Trustee, and Miss Pope presented a collection of Polychaeta.

Nematoda and Trematoda lent to Prof. T. Harvey Johnston, University of Adelaide, have been returned and another selection of the same material has been forwarded to him for examination. Pelagic Tunicata on loan to Dr. Harold Thompson, Marine Biological Laboratory, Cronulla, have been determined and returned to the Museum. Exchanges of Amphipoda and Echinodermata were made with the South Australian Museum and the Argentine Museum of Natural Sciences, respectively.

Transference of the dry invertebrate collection to metal storage cabinets has

now been completed, with a great saving of floor space in the store rooms.

Information was given to the Research Branch of the Metropolitan Water, Sewerage and Drainage Board concerning the fauna of the water supply; the State Fisheries Branch (identity of commercial prawns); Mr. A. Simpson, University of Sydney (Crustacea from Port Hacking). Mr. McNeill has continued to collaborate with Mr. R. A. Johnson, Maritime Services Board, in the study of marine boring organisms, and a second supplementary report has been completed.

Anthropology (F. D. McCarthy and Elsie Bramell, Assistants).

Registrations for the year totalled 1,522. Outstanding donations included a large Maori greenstone tiki of fine workmanship by Mr. W. A. Little; five human hair wigs and other articles of dress and ornament from Central New Guinea, by Mr. J. L. Taylor; two collections (438 specimens) from the Bena Bena district, New Guinea, by Messrs, R. I. Skinner and N. D. McWilliam. Mr. L. Staehelin presented four Balinese carvings, and Major C. M. Southey four whale-tooth pendants from Fiji.

A representative series of the stone implements of Kangaroo Island, South Australia, was purchased from Mr. H. M. Cooper and by exchange with Dr. G. H. R. Koenigswald a collection of stone artefacts was obtained from Central and Western

Java.

During an archaeological reconnaissance of the North Coast district of New During an archaeological recontained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from middens at Moor South Wales, Mr. McCarthy obtained about 400 implements from Mr. McCarthy obtained South Wates, Mr. McCarthy South Read, Anna Bay and Tacking Point. Creek, Clybucca Creek, Yamba, Crescent Head, Anna Bay and Tacking Point.

The stone implements, other than exhibited specimens, have now been assembled The stone implements, other case of the reference collection readily in one place; this facilitates cataloguing and makes the reference collection readily in one place; this facilitates catalogue and Micronesian material is now satisfactorily accommo-accessible. The Polynesian and Micronesian material is now satisfactorily accommoaccessible. The Polynesian and a cabinet suitable for the storage of spears has been dated in a metal cabinet, and a cabinet suitable for the storage of spears has been

About 130 photographic enlargements and a number of distribution charts have improvised. About 130 photographic been interspersed with the exhibits to which they lend interest and variety. In the been interspersed with the characteristic been interspersed with the characteristic lower ethnological gallery, the plan of assembling the objects to illustrate Pacific lower ethnological galler, adopted in preference to geographical arrangement. Sub-culture as a whole has been adopted in preference to geographical arrangement. Subculture as a whole has been according to the prehistoric objects, canoe types, the jects already treated in this manner are the prehistoric objects, canoe types, the making of bark cloth, and stone implements.

Data in connection with the proposed legislation for the preservation of aboriginal relies were assembled and supplied to the Government. In association with the ginal relies were assembled and the Anthropological Society of New South Wales and Trustees of Ku-ring-gai Chase, the Anthropological Society of New South Wales and the Federation of Bushwalkers, steps have been taken for the organised recording of rock carvings and other aboriginal relics in the Sydney district.

Mr. James Hornell, author of standard works on native navigation, spent two weeks at the Museum making notes on our material, and assistance was also given to Weeks at the little and the little and the little and l Mr. Kingsacy Roth, who had a forwarded to Dr. Carl Schuster for his monograph on primitive art.

Numismatics (F. D. McCarthy and Elsie Bramell, Assistants).

Nearly 1,000 tokens and medals transferred from the Mitchell Library were registered. The medals include a wide range of Australian issues, particularly of exhibition awards. The Mitchell Library type token collection has yet to be checked and registered.

Labels were prepared for the European coins which were mounted and placed on exhibition. The sections placed in the cabinets last year were the coins of Ancient Greece and Rome, France, Germany, Italy, Spain, Portugal and the British Colonies.

Fossils (H. O. Fletcher, Assistant).

Specimens registered during the year numbered 514, and these included several collections of special interest and importance. A collection of beautifully preserved and named Archaeocyathinae from the Lower Cambrian rocks of the Ajax Mine, Beltana, South Australia, was presented by the Kyancutta Museum. Dr. Dorothy Hill, University of Queensland, presented a series of slides of palaeozoic corals, including type and figured specimens. From Mr. A. O. Baker we received a collection of Miocene fossils from a new locality near Watson, on the Trans-Australian Railway Line. A large series of named palaeozoic brachiopods from North America was received in exchange with the Geology Department, University of Sydney. Mrs. R. J. Tillyard presented a collection of Triassic insects from Brookvale, N.S.W., including several complete and well-preserved specimens. The Geology Department, University of Sydney, presented two specimens of the recently described Tricoelocrinus belfordi.

During the year Mr. Fletcher has continued the work of sorting the collection of invertebrates, which is now in fair order. The essential task of cataloguing the collection is still awaiting completion, but the type and figured specimens are largely listed.

The complete rearrangement of the exhibited collection is nearing completion. A new feature is the introduction of a series of enlargements showing reconstructions of extinct forms. An original skeleton of Mystriosaurus and a fine cast of an ichthyosaur have been put on view in an annex of the palaeontological gallery and illuminated by a spot light. Many new labels have been added.

Until 14th August, 1939, Mr. Fletcher was on special leave as a member of the Simpson Desert Expedition, of which he was second in command.

During the year he has carried on palaeontological work for the Geological Survey and has reported on several small collections. He has also conducted research on various groups, including Merismopteria and Nuculana, and is preparing a check list of Australian trilobites.

Mineralogy (T. Hodge-Smith in charge; R. O. Chalmers, Assistant).

Additions to the collection totalled 260 specimens. These included minerals collected by the Australasian Antarctic Expedition, 1911-1914, and a collection from the Northern Territory presented by Mr. A. E. Williams. Mr. Graham Hall presented two fine slabs of the folded and faulted ore from Mt. Isa, North Queensland, and Mr. A. R. Campbell presented specimens of minerals from the Broken Hill Mines. number of specimens of opal from Coober Pedy, South Australia, was received from Messrs. A. Musgrave and G. Burford,

A section of the wall cases in the Mineral Gallery was converted into a lightproof case to house materials which are affected by sunlight.

Petrology (T. Hodge-Smith in charge; R. O. Chalmers, Assistant). Accessions numbered 1,189 specimens and 89 micro-slides, the majority consist-

ing of rocks collected by the Australasian Antarctic Expedition, 1911-1914. A number of polished slabs of build: of polished slabs of building stones was presented by the Mascot Granite and Trachyte

Works Ltd. Mr. Chalmers while on vacation collected a number of rocks from the Five Islands, Kiandra, and Tilba Tilba, and Mr. A. H. Voisey again presented various rock specimens from the northern part of New South Wales.

An iron meteorite from Tawallah Valley, Northern Territory, was obtained by arrangement with the Director of Mines, Darwin; portion of this new meteorite has been forwarded to the Geological Museum, Department of the Interior, Cauberra. A portion of the Eli Elwah meteorite was obtained by exchange with the British Museum. These additions bring the number of Australian falls represented in the Museum to fifty, out of a total of eighty-six.

Analysis of the Tawallah Valley meteorite has been completed; Dr. A. B. Edwards, University of Melbourne, is making a mineragraphic examination of this interesting new iron.

### Preparations.

1. Taxidermists' Branch (H. S. Grant in charge; J. H. Wright and W. Barnes, Assistants).

New specimens preserved or skinned totalled 173 mammals, 153 birds, 152 reptiles, and 75 fishes. New study specimens treated numbered 130 mammals, 265 birds. Twenty-four mounted mammals and 112 mounted birds were renovated.

One bird of paradise and two wallabies were mounted at the request of the Trustees of Taronga Park. In association with the Taronga Park Trust, a succession of exhibits was placed on view in the display window of Sydney Ferries Limited.

Assistance and specimens were provided for students in the art classes of the East Sydney Technical College.

2. Articulators' Branch (G. C. Clutton in charge; J. Kingsley, Assistant).

During the year 27 skulls, 3 moulds and 15 casts were prepared. Photographic negatives made numbered 374 and 864 photographs were printed. Lantern slides added to the collection numbered 143. A number of skeletons was repaired and reconditioned and the necessary attention was given to the exhibited osteological collection.

The making of nature films for use in the Museum and in schools was continued. In the selection and arrangement of subjects and the preparation of titles Mr. Clutton was assisted by Miss Joyce Allan and Messrs. McNeill, Musgrave and Whitley. Two films were completed, entitled "Life of the Rocky Seashore" and "Exploring the Ocean Surf Beach," and two others, "Life among the Mangroves" and "Marine Oddities" are well in hand. Titles were supplied for three films, "Life of the Stickleback," "The Platypus," and "Birds of the Barrier Reef."

Specimens	accessio	ned for	the	year 19	39-1940	total	led:
Vertebra		10.00	0.00		10.0		06.6

Vertebrates	(*) *	**		10.0	* *	06.8	(4)(4)	1,444
Invertebrates		9.0	4.6	+ +		19.90	* *	6,302
Fossils, Minerals	and	Rocks	F#1#3	1819		A(0)		1,918
Ethnological				4.4		4.4	* *	2,490
Miscellaneous	14141		14/4/		553	4.14	14.14	531
								12,685
Dr. Waterhouse	Colle	ection		**	10.5	*:2	2.5	3,605
			Tot	al	(8/8)		* *	16,290
Papers and Article	e nro	nared di	ring :	the vea	r 1939	-1940	totalle	d:
Australian Muse	um .	Records	& M	emoirs	(A)			. 19
Australian Muse						w: 59	69.	2
Other publicatio								19
								5
								1/25

The Common Seal of the Museum was hereunto affixed by the Order of the Board this 26th day of September, 1940.

F. S. MANCE, President. W. T. WELLS, Secretary.

### APPENDIX A.

TRUSTEES OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1940. C Manon ATCA

Crown Trustee	F. S. Mance, A.L.C.A.
Okakakana	His Honour the Chief Justice.
Boardoory	
	The Hon. the Attorney General.
	The Hon. the Colonial Treasurer.
	The Hon. the Conoral
	The Auditor General.
	The President of the Medical Board.
Appointed	The Hon, the President of the Legislative Council.
Appointed	Ort - Crown Solicitor
	Conoral and Chief Surveyor.
	The Hon, the Minister for Works and Local Government.
	The Hon, the Minister for Education.
	The Hon, the Minister for Linear
Elective	G. H. Abbott, M.D., Ch.M.
	C. Candon MacLend, M.B., Ch.M.
	G A Waterhouse, D.Sc., D.E., F.W.E.G.
	mt o Hon F E Wall, M.D., M.D.C.
	Professor A. N. Burkitt, M.B., B.Sc.
	Professor W. J. Dakin, D.So.
	Professor W. J. Dakin, D. J. (Aust.)
	F. W. Marks, C.B.E., F.C.A. (Aust.).
	H. B. Mathews, B.A.
	A. B. Walkom, D.Sc.
	Frank B. Spencer.
	Trum art of

## APPENDIX B.

# THE AUSTRALIAN MUSEUM.

Summarised Statement of Net Receipts and Payments for the Year ended 30th June, 1940.

	PAYMENTS.
RECEIPTS.	
£ s. d	Scientific Administration o.148 2 9
	Office 1,423 4 2
Balance 1st July, 1965 Revenue Fund)	Library 590 11 11 Preparators 2,053 0 2
reasury (Consolidated Revealed in meet cost of Increases in 36, 5	
Appropriation (Vice Suspense Account to meet cost of the Suspension of the Suspension Suspension of the Suspension Suspension of the Suspension Suspension of the Suspension Sus	Attendants 2,647 1 5
Freasurer's Advance 29 5 Statutory Endowment	Less: Refunds to Vote for Work Performed 36 4 9
cales of Phonestrum	Total Salaries
Donations	Overtime 422 19 0 Temporary Assistance 224 9 7
Miscellancon	Temporary Assistance
	Medical Expenses to Officer for Injury sustained in course of
	Employment
	Subsidiary Staff Charges— Workers' Compensation Insurance 48
	Employers' Superannuation Contribution 721
	Expenses in Connection with Buildings— Maintenance of Lawns and Grounds 411
	Transport Expenditure— Travelling Expenses 141
	Canaral Expenditure—
	Postal and Telegraphic Services
	Books, Periodicals, and Papers 448 Freight and Cartage 40
	Packbinding 116
	Photography and Slides 20
	Laundry Expenses 22
	Fees to Lecturers 40 Minor Replacements and Additions to Plant, etc 150
	Grand Stationery and Sundry Services 912
the property of the second second second	Paroposations, magazine,
	Balance at 30th June, 1940 19,136
	£19,327
£19,327 0	9
	By Purchase of Films, Printing, etc 124
	Cinema Equipment
	Field Expenses of Officers 12
o Carnegie Corporation of New York, Grant for Educa-	156
tonal Services. Balance brought forward 2005 15	8 Balance at 30th June, 1940 154
Interest 4 11	£310
	4200

Aud'ted under the provisions of Section 11 of the Australian Museum Act, 1902, and found correct.

J. R. MOORE, Assistant Auditor-General,

Sydney, 2nd October, 1940.