

1935.

(SECOND SESSION.)

LEGISLATIVE ASSEMBLY.

NEW SOUTH WALES.

AUSTRALIAN MUSEUM.

(ANNUAL REPORT OF THE TRUSTEES FOR THE YEAR, 1934-1935.)

Ordered by the Legislative Assembly to be printed, 11 December, 1935.

TO HIS EXCELLENCY THE GOVERNOR,

The Trustees of the Australian Museum have the honour to submit to Your Excellency their eighty-first Annual Report, being that for the year ended 30th June, 1935.

The reports of the various sections demonstrate that during the year the Museum has made valuable contributions to scientific investigation, and also given assistance and advice to various Departments of State and to others concerned with primary and secondary industries.

1. TRUSTEES.

In December, Mr. F. S. Mance was re-elected to the office of President for the year 1935. The President represented the Trustees at the meeting of the Australian and New Zealand Association for the Advancement of Science, held at Melbourne in January, 1935.

In September, 1934, Dr. G. A. Waterhouse resumed attendance at meetings of the trustees, after a period of illness, and further leave of absence on the ground of ill-health was granted to him from 10th May, 1935.

Reference to the lamented death of Sir Edgeworth David, who at one time was an active and highly-esteemed member of the Board, was made at the meeting of September, 1934. During his association with the Museum the late Professor David was keenly interested in the affairs and the progress of the institution and his wide knowledge of scientific matters was of the highest value to his colleagues. The condolences of the Board were conveyed to Lady David.

Professor H. C. Richards, University of Queensland, was invited to represent the Trustees at the celebration of the Centenary of the Geological Survey of Great Britain, to be held in July, 1935.

A list of the trustees as at 30th June, 1935, appears in Appendix A.

2. STAFF.

Mr. A. Musgrave, entomologist, represented the Trustees at the annual conference of the Museums Association held at Bristol, England, in July, 1934.

The Director, Messrs. T. Hodge-Smith, G. P. Whitley, F. D. McCarthy and Miss J. Allan attended the Melbourne meeting of the Australian and New Zealand Association for the Advancement of Science.

The Trustees approved that Messrs. F. A. McNeill and T. Iredale should visit Brisbane in November to confer with officers of the Queensland Forest Branch, in connection with the completion and publication by that branch of a report on the destruction of timber structures by marine boring organisms in the Port of Brisbane.

At the request of the Minister for Education, Mr. F. D. McCarthy reported on a collection of ethnological specimens at Bulimba Station, near Armidale, and at the same time submitted to the Minister a report on the exhibits in the Armidale Museum.

Mr. F. D. McCarthy completed the University course in Anthropology and gained the Diploma in Anthropology, and Miss E. Bramell graduated M.A. in Anthropology at the University of Sydney. Mr. W. Boardman has entered on a course of study at the University with the view of proceeding to a degree in science.

A list of the staff as at 30th June, 1935, will be found in Appendix B.

3. HONORARY STAFF.

The Trustees record with regret the death of Mrs. M. J. Waterhouse, which took place on 13th June, 1935. During her lifetime Mrs. Waterhouse took a keen interest in natural history and was a liberal donor to the Museum.

It is with much regret that we record the death of W. S. Dun, Honorary Palaeontologist, which took place on 7th October, 1934. He had an extensive knowledge of Australian fossils, and during his many years of close association with the late Director, R. Etheridge, junior, and later as Honorary Palaeontologist, he rendered most valuable service to the Museum. His place in the scientific life of Australia will be hard to fill.

Mr. A. J. Marshall, who has at various times made valuable collections for the Museum, was appointed Honorary Ornithologist.

Lists of honorary staff and honorary correspondents appear in Appendices C and D and the opportunity is taken to express appreciation of the services rendered to the Museum by these honorary officers and correspondents.

4. FIELD WORK.

At the request of the Minister for Agriculture, Mr. J. R. Kinghorn, in conjunction with Mr. W. B. Gurney, Government Entomologist, carried out field observations into the grasshopper invasion and the question of the possible destruction of birds by poison baits used to control the grasshopper pest.

In July, 1934, Messrs. E. L. Troughton and H. O. Fletcher returned from a collecting trip to North-west Queensland, where they obtained a large collection of trilobites, mammals, birds, reptiles and other specimens.

Field work was carried out by Messrs. T. Iredale, G. P. Whitley and R. O. Chalmers at Austinmer and Five Islands, and by Dr. C. Anderson and Mr. R. O. Chalmers at the Cox River.

5. LIBRARY.

Accessions totalled 269 volumes, besides loose parts and reprints; pressure of other work and lack of regular assistance in the library prevented the collation of much unbound material, otherwise the total of volumes accessioned would have been well up to the record of previous years.

Among notable acquisitions of the year were the valuable collection of literature on Mallophaga made by the late Professor L. Harrison, which was purchased from Mrs. Harrison, and "The Pan-Pacific Entomologist," presented by Mr. A. Musgrave, Entomologist, who obtained the volumes of this valuable serial while abroad on long service leave. Mr. Musgrave also took the opportunity of procuring photostat copies of some important papers hitherto unavailable in local libraries.

Proposals for the transfer of certain historical MSS. to the Mitchell Library have been made, but arrangements have not yet been finalised.

Students and research workers and scientific institutions here and elsewhere continue to avail themselves of the resources of the library.

As in previous years, the Librarian, Mr. W. A. Rainbow, has given valuable assistance in editing and supervising the printing of publications.

6. PUBLICATIONS.

During the year Vol. XIX, No. 3, of the *Australian Museum Records* and the usual quarterly parts of the *Australian Museum Magazine*, each with a coloured cover, reproduced from the Museum series of Postcards, were issued.

A Guide to the exhibited collections has been projected, and certain sections have been prepared and are now under consideration.

A list of papers and articles prepared during the year is contained in Appendix E.

7. EMPIRE MUSEUMS SURVEY.

Following on the publication of the "Report on the Museums and Art Galleries of Australia and New Zealand," by S. F. Markham and Professor H. C. Richards, the Trustees approved that a letter be forwarded to the various Australian Museums regarding the formation of an Australian Museums Association to serve as a link between the Museums Association in England, the Carnegie Corporation of New York, and the Museums of Australia. In view of the approaching visit of Dr. F. P. Keppel, President of the Board of Trustees of the Carnegie Corporation, further consideration of this proposal was postponed. In March Dr. Keppel visited the Museum and was received by the Director, who drew his attention to the most urgent needs of the Museum. Dr. Keppel informed the Director that, while the Corporation would not grant funds for building purposes, favourable consideration might be given to a request for the provision of funds for the construction of storage cases, which are badly needed in connection with the work of the Museum. The requirements of the Museum were fully set out in a letter addressed to Dr. Keppel.

8. SERVICE TO COUNTRY MUSEUMS AND OTHERS.

In response to a request from the Minister for Education the Trustees furnished a report on the extent to which the institution assists country museums and schools, and on the services rendered by the Museum to the country population generally. The Trustees assured the Minister of their readiness to assist museums and residents outside the metropolitan area, but mentioned the difficulties arising from the lack of responsible and experienced curators in country museums.

At the request of the Technological Museum exhibits were prepared for display in the Broken Hill Branch Museum and specimens were lent for exhibition by the Rangers' League, by the Outback Australia Exhibition, Melbourne, and the Men's Hobbies Exhibition, Sydney.

9. PUBLICITY.

A public notice board was erected in the Museum grounds at the College and William-street corner and is flood-lit for night display.

The Under Secretary, Department of Education, has permitted the insertion in the *Education Gazette* of a notice drawing the attention of teachers to the educational facilities offered by the Museum.

The display of showcards in trams has been continued throughout the year.

From the Superintendent of Technical Education the trustees received a large number of posters of Museum subjects prepared by Art Students of the East Sydney Technical College during visits to the Museum. These were accepted with appreciation, and it was decided to have them suitably framed for display purposes.

10. LECTURES AND BROADCASTS.

Popular Science and School Lectures have been continued and a large number of voluntary lectures were delivered by members of the staff to various educational institutions, societies, clubs, and other associations outside the Museum. The total number of lectures and attendances were as follows:—

	Attendance
11 Evening Lectures	2,159
8 School Lectures	1,310
7 Other Lectures in the Museum	405
69 Voluntary Lectures	6,393

Broadcast talks on various subjects were delivered during the year by Messrs. J. R. Kinghorn, F. A. McNeill, and H. O. Fletcher.

Details of lectures and attendances will be found in Appendix E.

11. BUILDINGS AND EQUIPMENT.

The question of the extension of the Museum building has continued to occupy the attention of the trustees.

On 3rd July the Government Architect, at the request of the Minister for Education, conferred with the Director, and discussed plans and proposals. The various plans were considered by the Minister and referred by him for consideration by Cabinet. In a letter to the President, dated 8th August, 1934, the Minister expressed the opinion that it would be in the public interest to incorporate into the Museum grounds the site now occupied by the William-street Girls' School, and that he had placed on record his approval that this site shall ultimately be added to the Museum grounds.

The Trustees received and considered sketch plans and report prepared by the Government Architect, but these were not deemed acceptable, chiefly owing to the variation in the alignment of the north wing facing William-street.

On 25th June the Trustees inspected the Museum premises with a view to determining the question of floor levels to be adopted in any proposed extension of the building. It was approved that the ground and first floor levels of the College-street galleries should be maintained throughout the building.

Various necessary repairs have been carried out by the Works Department, and the work of installing a system of automatic burglar alarms is nearing completion.

12. FINANCIAL.

In view of the needs of the Museum the Trustees directed that application be made to the Government for restoration of the statutory endowment to the original amount of £1,000; this request is now receiving the consideration of the Minister for Education.

The total nett expenditure from Consolidated Revenue for the year (excluding Statutory Endowment of £800) was £14,380 15s. 2d., compared with £14,410 12s. 9d. for the year 1933-34. Nett expenditure from Trustees' Account Funds (including Statutory Endowment) was £1,371 11s. 10d., compared with £1,308 0s. 10d. for the previous year. The cash balance in the Trustees' Account at 30th June was £167 2s. 4d. as against £390 1s. 7d. at 30th June, 1934.

Dr. C. Gordon MacLeod kindly made a donation of £5 towards the cost of purchasing a collection of coins and tokens.

Statements of Receipts and Expenditure and the Revenue Account for the year will be found in Appendices H and I.

13. PUBLIC ATTENDANCES.

The Trustees continued to give attention to suggestions for stimulating the interest of the public in the Museum, and members of the Scientific Staff were invited to submit reports on possible improvements in the gallery exhibits under their charge. The question of improved lighting, particularly in the ground floor of the north wing, the oldest part of the Museum building, is under consideration by officers of the Public Works Department, and experiments have been carried out to discover the best method of illumination.

It is gratifying to note that the number of visitors to the Museum is higher by 24,671 than last year.

Statistics of attendance for the years 1929-30 to 1934-35 are appended.

				Week-days.	Sundays.	Total.
1929-1930	..	..	..	209,685	68,746	278,431
1930-1931	..	..	..	204,609	64,827	269,436
1931-1932	..	..	..	191,380	59,837	251,217
1932-1933	..	..	..	166,749	53,901	220,650
1933-1934	..	..	..	136,066	48,478	184,544
1934-1935	..	..	..	150,481	58,734	209,215

14. GENERAL.

With the approval of the Department of Education the Trustees decided to promote an essay competition among school pupils, the essays to be based on exhibits on view in the Museum. The question of prizes and the general rules governing the competition are still under consideration.

15. THE COLLECTIONS.

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

The year's acquisitions were highly interesting scientifically and presented a wide geographical range. Individual donations were many and varied, but special mention may be made of a series of indigenous rats received from Sir Raphael Cilento and Professor Harvey Sutton, in connection with their investigations into Weil's disease; specimens of cuscus, bandicoots, and rats, contributed by Mr. J. A. Todd, who collected them while engaged in anthropological work in New Britain; a series of bats from Lindeman Island, Queensland, collected by Mr. Melbourne Ward. Other donations included cuscus and mice, Bulolo Valley, New Guinea, by Mr. F. B. S. Hislop; rats from the Mt. Hagen district, New Guinea, by Mr. J. L. Taylor; a species of mosaic-tailed rat, since described as a new species, *Melomys limicauda* Troughton, collected by Mr. F. A. McNeill, staff, while on recreation leave on Hayman Island, Queensland. Several small bats and marsupial mice were added to the excellent collections previously received from Mr. F. R. Bradshaw, Tambellup, Western Australia. Specimens from Taronga Zoological Park included a Great Ant-eater (*Myrmecophaga*), Canadian Porcupine, Hyaena, Cuscus and Spiny Ant-eater from New Guinea, and a Koala. Mr. Noel Burnet, Koala Park, presented a Koala, Red Kangaroo and two species of Wallaby.

Field work by Mr. Troughton and Mr. H. O. Fletcher, in which they traversed part of north-west Queensland and the Northern Territory resulted in a collection of ninety-two skins, skulls and spirit specimens of marsupials, rats and bats. Of these a water rat (*Hydromys lawnensis* Troughton) has been described as new, and the collection probably contains other new forms. During this trip observations were made in order to estimate the possibilities of future field work over the extensive route traversed. A second remarkably interesting collection was received from Father J. B. Poncet, Buin, Bougainville Island, the Museum supplying equipment and defraying expenses. The collection includes several new forms, including a new genus and species of Giant Rat (*Uromys poncetii* Troughton). By a similar arrangement with Mr. A. J. Marshall, series of bats were obtained from the island of Espiritu Santo, New Hebrides.

One thousand specimens were handled by the Taxidermists, including the reconditioning of old specimens and the preparation of new gallery exhibits. Four specimens of rats were, at the request of Professor Harvey Sutton, mounted for use at the meeting of health authorities in Brisbane and subsequent exhibition in the School of Public Health and Tropical Medicine, University of Sydney. Small collections were shown at the Teachers' Federation Preventorium Exhibition and at the Bushland Exhibition of the Rangers' League.

Considerable progress was made in the construction of the Platypus habitat group, subject to the demands of routine and care of the collections.

Advice was given to the Police Department regarding the identity, age and seasonal condition of possum skins. Assistance given on health and economic matters involved the examination of various consignments of over one hundred rats submitted in connection with researches on Weil's disease. The work of the Museum in this connection was the subject of warm appreciation expressed by Sir Raphael Cilento and Professor Harvey Sutton.

Another collection of rats from the Ingham district, Queensland, was examined for the Colonial Sugar Refining Company. It was established that the small species which causes the most damage to sugar cane, and which has been hitherto known on the cane fields as the "tree rat," represents a rare species previously known only from the original specimen in a foreign museum.

Assistance was given to the Chief Secretary's Department regarding protected animals and information was supplied to the Technological Museum, the National Museum, Melbourne, and the Adelaide Museum. Advice on the collecting of mammals for research purposes was given to an officer of the Department of Anatomy, and to students of the Department of Zoology, University of Sydney.

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

Amongst the acquisitions were three skulls of the short-tailed Rottneest Island Wallaby, secured by Mr. G. P. Whitley, staff, while in Western Australia on vacation; fragments of an aboriginal skull found by Mr. H. V. Kirwan in a kitchen midden at Perkins Beach, near Port Kembla; two skulls of a giant rat, from Buin, Bougainville Island, which led to the recognition of the new genus and species; three skulls of New Hebrideans collected by Mr. A. J. Marshall on Espiritu Santo. Two fine skulls of Australian aborigines were received by exchange with Mr. W. H. P. Kinsela.

A series of crania illustrating the dentition of various kinds of mammals was provided for a Health Week display by the Australian Dental Association. Facilities for research were given to Mr. N. Benson, B.D.S., who made a detailed examination of the dentition in a large number of human crania in preparing a thesis for his doctorate in dentistry. Dr. C. J. Hackett, of Adelaide, examined the collection of aboriginal skeletons in the course of his investigation of the pathological condition which results in "boomerang" bones in Australian Aborigines.

Birds (J. R. Kinghorn in charge, W. Boardman, part-time Assistant).

During the year 452 birds, of which 207 were presented, were added to the collection. These included a collection from North-west Australia, presented by Mr. W. W. Frogatt, and from the New Hebrides, Mr. A. J. Marshall. Over forty-six interesting skins were obtained by Messrs. Troughton and Fletcher in Western Queensland and the Gulf country. A small exchange was made with the Field Museum of Natural History, Chicago.

Sixteen new groups and twelve single birds were mounted and added to the exhibited series, and 253 skins and a number of nests and eggs were cleaned and replaced in the reference collection.

Information was given to the Chief Secretary regarding alterations and additions to the schedules of the Birds and Animals Protection Act, and the habits of certain species of birds. Mr. Kinghorn and Mr. H. S. Grant, Chief Taxidermist, inspected many private aviaries to identify birds for the Police Department.

Mr. Kinghorn and Mr. Grant spent much time in advising inspectors and officials of the Customs Department on matters connected with the exportation and importation of birds. Over two hundred applications for permits to export were examined and dealt with, and many shipments were checked to make sure that no prohibited species were included, while a number of protected birds were handed to the Customs authorities or the police.

In company with Mr. W. B. Gurney, Government Entomologist, Mr. Kinghorn made two trips in the western part of New South Wales to investigate the alleged destruction of birds by poison baits and sprays used to control the grasshopper plague. Though several thousands of square miles of country were traversed no convincing evidence was found that birds were being destroyed.

Information was sought by the Department of Agriculture regarding the alleged destruction of green crops by Wood Ducks in the New England district, and also on the economic status of certain species of hawks.

The services of Mr. Kinghorn, as a member of the Nature Bulletin Committee, *Education Gazette*, and of the Primary Schools Broadcast Talks Committee were available when required. Many students of the East Sydney Technical College attended the Museum and made use of the mounted birds for art and design purposes. A number of commercial artists visited the bird department from time to time to examine specimens and consult literature in connection with their work.

Over three hundred study skins were lent to students, artists, and others, and about 200 mounted birds were made use of at the Museum during the year.

A number of working ornithologists, from Australia and abroad, visited the Museum to study certain species of birds in the reference collection. These included Dr. A. Rushton Parker, Royal Institution, London; Major Allan Brooks, American

Ornithologists' Union; Mrs. F. Dewesbury Pinfold, New Zealand aviculturist; Mr. Lysaght, British Ornithologists' Union; Mr. M. S. Curtler, late of the University of Virginia, United States, America.

A number of species of birds were examined for workers in the National Museum, Melbourne, and Members of the Royal Australasian Ornithologists' Union. Over 100 specimens of the genus *Acanthiza* and other birds were sent on loan to other Australian Museums for examination by research workers. A large number of petrels, penguins and other Antarctic birds were examined and measured for Mr. R. A. Falla, Auckland Museum, and measurements of over 700 eggs were made and forwarded to him in connection with his work on the birds of the Mawson Antarctic Expedition.

Several birds were mounted and forwarded to the Branch Museum, Broken Hill, and a waterhen was supplied to H.M.A.S. "Waterhen."

An exhibit was made at the Bushland Exhibition of the Rangers' League and a special display, showing the contents of bird stomachs, and features of the grasshopper invasion, was made at the Easter Show of the Royal Agricultural Society.

Reptiles and Batrachians (J. R. Kinghorn in charge; W. Boardman, part-time Assistant).

Over 700 specimens were acquired during the year, 53 of which were obtained by Messrs. Troughton and Fletcher in Western Queensland and the Gulf country. Donations included collections made on Bougainville Island by Father J. B. Poncelet, in Western Australia, Mr. F. R. Bradshaw; in the Moree district by Mr. R. F. Bailey and in the New Hebrides, by Mr. A. J. Marshall. A small exchange was made with the Museum of Comparative Zoology, Harvard College, United States, America, and with the Auckland University College, New Zealand.

Several casts of snakes were prepared by the Articulators and are awaiting colouring before being exhibited.

A special exhibit illustrating first-aid treatment of snake bite was made at the Easter Show, Royal Agricultural Society, and at the Rangers' League Exhibition.

A considerable amount of correspondence has taken place with herpetologists in the Museums of Europe, America and various British dominions, and types and other material stored in the Museum have been examined and described for workers elsewhere. Small collections and individual specimens have been examined and identified for the Technological Museum, University of Sydney, the Department of Health, the Department of Agriculture, the Colombo Museum and most of the Australian Museums.

Fishes (G. P. Whitley in charge).

Over one thousand specimens have been registered this year, the largest number since 1929-30. Several collections have been received from Mr. Melbourne Ward, Lindeman Island, Queensland, including some new genera of Gobiidae (one almost blind) and several species not yet recorded from Australia or new to our collections. The Embury Expedition to Hayman Island presented several Queensland fishes, and Mr. F. A. McNeill, who, while on recreation leave, accompanied the expedition on various occasions, brought back a number of specimens. Father Poncelet contributed some very interesting freshwater fishes from Bougainville Island, Solomons, and Mr. F. R. Morris sent specimens from Darwin, North Australia. Whilst associated with the Oxford University Expedition to the New Hebrides, Mr. A. J. Marshall made a collection of fishes for this Museum from Hog Harbour. Captain K. Moller has continued to forward unusual fishes obtained by the trawling vessels working in New South Wales and Victorian Waters, and the Queen Victoria Museum, Launceston, has generously presented paratypes of fishes recently described by Mr. E. O. G. Scott. A rare fish, of the genus *Pteraclis*, new to Australia, was received from near Sydney, and the Fisheries Department presented a garfish encircled by a rubber band, which formed the subject of an article by Mr. Whitley in *The Australian Museum Magazine*.

Fishes collected by members of the staff included a series of Grunters (*Terapon percoides*) obtained by Messrs. Troughton and Fletcher about 100 miles south of Burketown, Queensland, and a number dredged by Mr. F. A. McNeill and Mr. A. A. Livingstone at Kurnell, New South Wales. Mr. Whitley made several short collecting trips in the neighbourhood of Sydney and visited the Five Islands, South Coast. When on recreation leave he collected marine specimens from several Pacific Islands, and at Lord Howe Island made arrangements for additional specimens to be sent to the Museum.

Specimens have been sent on loan to various Museums, namely, 450 Plectognathi and a series of Lizard fishes to the British Museum; Conger eels to the Auckland Museum, and eels to the Carlsberg Laboratory, Copenhagen.

Some skulls of the Port Jackson shark were prepared for Ward's Natural Science Establishment, New York, and a number of fishes were identified for the Queensland Museum, Brisbane.

A large number of inquiries were dealt with, an analysis showing a higher percentage of queries regarding sharks. Amongst overseas and other institutions to which information has been supplied may be enumerated the following:—The British Museum, the American Museum of Natural History, the Universities of Sydney,

Adelaide, and Western Australia, the Technological Museum, Sydney, the Taronga Park Aquarium, the Chief Secretary's, Health, and Customs Departments, Sydney. Information on commercial fishes has been supplied to various firms, a report on the destruction of fishing grounds by dredging and sand dumping was prepared for the National Park Trust, and a scheme for a submarine barrage against sharks was also inspected.

Mr. Whitley gave evidence before the Shark Menace Advisory Committee, supplied information bearing on the Fisheries and Oyster Farms Act, 1934, and was called as an expert witness by the Crown Law Department in cases brought by the Health Department against fishmongers. He also supplied information on sharks, their habits and powers of digestion to members of the medical and legal professions.

Insects, Arachnids, etc. (A. Musgrave in charge; K. C. McKeown and Miss N. B. Adams, Assistants; Dr. G. A. Waterhouse, Honorary Entomologist). During the greater part of the year Mr. Musgrave was absent on leave.

Accessions numbered 9,070, an approximate figure pending a decision regarding registration. A valuable collection of Hymenoptera, including many co-types, was acquired by exchange with Mr. Tarlton Rayment, Sandringham, Victoria, and important collections were presented by Mr. H. J. Carter (New Guinea Coleoptera, including co-types), Dr. K. K. Spence and Mr. J. Armstrong.

Work on the revision of the collection of Australian Coleoptera has been continued as opportunity offered, but progress has been slow owing to the delay in the issue of the Junk Catalogues. A beginning has also been made in revising the Coleoptera of New Guinea.

Investigations have been made from time to time into infestations of stores in the city by meal moths (*Ephesia* sp. *Plodia interpunctella*) and textile factories have been advised in connection with damage by carpet-beetles (*Anthrenus* spp.). Control measures suggested have been employed with considerable success.

Assistance has been rendered to various departments and institutions including the Department of Agriculture, the University of Sydney, the Council of Scientific and Industrial Research, and the Main Roads Board. Many individuals have been assisted with literature and the identification of specimens, including Messrs. H. J. Carter, W. W. Froggatt, N. B. Tindale (South Australian Museum), G. Archey (Auckland Museum), H. I. Pagden (formerly Entomologist, Solomon Islands), and Drs. K. K. Spence, E. H. Chisholm, J. Baum (Prague Museum), Rowland E. Turner (British Museum).

Mr. McKeown has continued his researches on the food of trout in Australia.

Dr. G. A. Waterhouse, Honorary Entomologist, has continued the registration of the butterflies but this work has been retarded owing to his ill-health for part of the year. He has collected many rare species on the Blue Mountains and also at Mackay, Queensland, these trips resulting in many specimens being added to the Museum collection. Rare species were also received from Messrs. V. Lindsay, Mackay, M. W. Mules, Woodside, South Australia, M. J. Manski, Cairns, Queensland, M. F. Day, Sydney, and T. H. Guthrie, Sydney.

The whole collection of Australian Butterflies is now properly arranged in drawers, but considerable time must yet be spent on some of the families, in sorting out those which are to be retained, as the series presented by Dr. Waterhouse is far too large even for a specialised collection such as is now in the Museum.

Two short papers have been contributed by Dr. Waterhouse to the Proceedings of the Linnean Society of New South Wales, the types of the new races described being in the Museum collection. The outstanding specimen of the year was a remarkable aberration of *Vanessa cardui kershawi*, caught by Dr. Waterhouse at Blackheath. This is the second aberration of this species in the collection, but they differ very much in their markings.

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

A large number of accessions were received during the year, the total registrations amounted to 5,477. Mr. Melbourne Ward continued to send valuable specimens from Lindeman Island, Queensland, and Mr. G. P. Whitley brought back a number of shells from the Solomon Islands and the New Hebrides, collected while he was on recreation leave. Specimens from Caloundra, Queensland, were brought in by Messrs. H. S. Mort and A. J. Thackway, and from Port Stephens and Manly by Mr. C. F. Laceron. Captain K. Moller as in previous years has contributed trawled Mollusca, including some rare and valuable species. A large collection of tropical shells was presented by Mrs. Murray. While on annual leave Mr. Iredale visited Seaforth and Lindeman Island, Queensland, where he had made extensive collections in connection with ecological studies of the fauna of these localities. A small exchange was made with Professor Peyrot, Bordeaux, France.

Short collecting trips were made to Austinmer and the Five Islands, South Coast, and Miss Allan paid several visits to the Bottle and Glass Rocks, Vaucluse, in search of Nudibranchs.

Mr. C. J. J. Watson, Queensland Forest Services, and Mr. Cummins, of the Council for Scientific and Industrial Research visited the Museum to confer with Messrs. Iredale and McNeill regarding investigations on marine borers, and subsequently Mr. Iredale journeyed to Brisbane to examine the localities and testing stations in the Brisbane River and Moreton Bay in connection with this important research.

Miss Allan attended the Melbourne meeting of the Australian and New Zealand Association for the Advancement of Science, to which she contributed a paper on "Economics of Australian and New Zealand Mollusca." While in Melbourne she spent some time working at the National Museum, paying special attention to the exhibits in the Children's section. During the year Miss Allan has made many drawings of shells, fishes, mammals, and other specimens.

Assistance has been given to the Department of Public Works, the Department of Agriculture (particularly in regard to liver-fluke in sheep), the Macleay Museum, and the Adelaide Museum.

A number of school collections were prepared and forwarded in response to requests for material. Specimens were lent for exhibition in Melbourne, and at the Men's Hobbies Exhibition in Sydney. In response to requests Miss Allan inspected and reported on several private collections of shells.

Lower Invertebrates (F. A. McNeill in charge; A. A. Livingstone and W. Boardman (part time) assistants).

Registrations during the year numbered 1,895. Among the acquisitions were several batches of material from Father J. C. Poncelet, Bougainville Island, and specimens received from Capt. K. Moller, of the trawling fleet. Mr. Melbourne Ward presented the holotypes of Crustacea described by himself and other invertebrates obtained on the Queensland coast, and Messrs. J. C. Wiburd and M. E. Gray contributed Oligochaetes and freshwater sponges. Messrs. F. A. McNeill and G. P. Whitley presented extensive series of specimens obtained by them while on vacation in the Whitsunday Group, Queensland, and the Solomon Islands, respectively.

Exchanges of specimens were made with Dr. Tane Sakai, Simoda Marine Biological Station, Japan (Decapoda), and with Mr. Leo Stach, University of Melbourne (Bryozoa).

Several requests for specimens were attended to. The entire collection of Isopoda terrestria was forwarded for examination to Professor G. E. Nicholls, University of Western Australia, and a series of the estuarine Long-armed Prawn (*Palaemon novae-hollandiae*) was sent to Dr. Isabel Gordon, British Museum of Natural History.

Information and assistance were rendered to the Technological Museum, Sydney, State Fisheries Branch, Department of Education. Professor W. R. McGregor, University College, Auckland, and the Rev. J. Marshall, who was supplied with information on various subjects for use on a lecture tour of Canada and the United States.

A critical examination was made of the preface to Dr. H. Lyman Clark's projected report on the Australian echinoderm fauna, and alterations and additions were made thereto. An MS. report on the marine boring organisms of the Port of Brisbane by Mr. C. J. J. Watson, Queensland Forest Service, was reviewed and amplified by Mr. McNeill.

Marine boring organisms, submitted from time to time by Mr. Cummins, Council for Scientific and Industrial Research, and Mr. R. A. Johnson, Sydney Harbour Trust, have been examined and identified and Mr. McNeill has, in conjunction with Mr. Johnson, been engaged in a supplementary report on the destruction of wharf piles by marine borers and its prevention. Progress has been made in the sorting, labelling and description of the Decapoda collected by the British Great Barrier Reef Expedition, and a proportion of the collection is ready for despatch to the British Museum.

Anthropology (C. Anderson in charge; F. D. McCarthy and Miss E. Bramell, assistants).

Accessions much exceeded those of previous years, totalling 3,761 specimens. These include donations of specimens from Arnhem Land by Mrs. Sweeney; stone adze blades from Aitape, Mandated Territory, New Guinea, by Oil Search Limited; stone adze blades and stone-headed clubs from Central Division, Papua, by Mr. R. V. Oldham. The Rev. A. J. Barrett presented stone implements from Anna Bay, Port Stephens, and Mrs. E. Harber a fine collection of old Indian brasses. A tree trunk from which a number of aboriginal shields have been cut was presented by Messrs. E. and L. D. Hawdon.

Exchanges were received from the Pittsburg Numismatic Museum (currency and flint implements); the Prehistoric Department of the Kon. Bataviaasch Genootschap v. Kunsten en Wetenschappen (stone implements); Mr. F. D. Maning (Tasmanian flaked implements), and Mr. W. H. P. Kinsela (New South Wales coastal implements).

Purchases included 100 specimens from Arnhem Land (Rev. H. B. Shelton), a splendid collection of New South Wales coastal implements (Mr. J. S. Rolfe), 91 specimens from the collection of Mr. A. S. Kenyon, and 34 specimens from the New Hebrides (Mr. A. J. Marshall).

No official collecting trips were made, but stone implements collected by Miss Bramell and Mr. McCarthy on week-ends were added to the collection.

An exhibit illustrating the story of money was placed on view, and has attracted the interest of students and coin collectors. The photographs depicting the daily life of the Australian and New Guinea natives have proved of great exhibition value, attracting much attention from visitors. The exhibition of Polynesian and Micronesian material in the lower gallery necessitated re-arrangement of the entire series of exhibits from the Bismarck Archipelago, Admiralty Islands and Solomon Islands. Some of the table cases in the Australian gallery have been re-arranged, and, where possible, photographs have been added to illustrate the uses of the objects displayed. Almost one thousand new specimens have been placed on view during the year.

The Australian National Research Council has lent several outstanding specimens for exhibition; these include a Tikopian outrigger canoe, a Melville Island grave-post and a grave-post and bark paintings from Arnhem Land.

Portion of the Australian collection in the store has been catalogued; spears and small articles such as dress and ornament and ceremonial objects remain to be done.

Information on aboriginal art, implements, and utensils, and on current events of anthropological interest, has been given to visitors, commercial artists, school pupils, members of the Arts and Crafts Society and to the press. Distribution maps of the occurrence of aboriginal weapons were prepared for Professor A. P. Elkin, University of Sydney. Dr. Randall Colyer was supplied with data and specimens for use at the Pan-Pacific Womens' Conference, Honolulu, and special exhibits were placed on view at the Teachers' Federation Preventorium Exhibition and the Bushland Exhibition.

Numismatics (C. Anderson in charge; F. D. McCarthy and Miss E. Bramell, assistants).

Accessions for the year numbered 1,354. The most noteworthy donation was a collection of ancient Indian coins presented by Mrs. Adams. Other gifts included British coins, by Mr. K. B. Gilchrist, miscellaneous coins, by Mr. J. A. Bragg, a collection of badges issued during the Great War, by Mr. P. J. Marks. The Melbourne Centenary Council presented a silver and a school children's Centenary Medal; the bronze Centenary Medal and two florins were purchased. A large collection of coins, which filled many gaps in the Museum series, was purchased from Mr. K. P. Bath.

Prior to the installation of the new numismatic cabinets in October, 1934, the coin display in the Main Hall was changed monthly. The medals are now exhibited in the new cabinets, but exhibition of the coins awaits provision of suitable mounts, which are now being prepared by the Government Printer.

Fossils (C. Anderson in charge; H. O. Fletcher, assistant).

A large number of accessions were registered during the year, the total being 3,098. These included a fine series of trilobites collected by Mr. Fletcher and Mr. E. Troughton at Mount Isa and the Thornton River in Queensland. A number of Miocene fossils from the Bordeaux district, France, were received by exchange with Professor Peyrot. A large collection, including types, was transferred from the Geological and Mining Museum, Department of Mines, registered, and added to the collection.

The Cambrian trilobites from Mount Isa were developed and many additional specimens were revealed when the matrix was further reduced by splitting. A complete list of the type specimens of trilobites contained in the Museum has been compiled and a Check-list of Australian trilobites is also under preparation.

A series of fossils from the north-west basin of Western Australia was received from Oil Search Limited, and a description of the species has been prepared for publication by Mr. Fletcher.

A number of the bones of the plesiosaur *Cimoliosaurus*, from Baradine Siding, near Richmond, Queensland, were presented by Mr. N. Chandler, and fossil fishes were received from Captain M. J. Lowe and Mr. T. H. Pincombe. A large series of Triassic fishes from the Brookvale Quarry, near Sydney, were collected by Dr. Anderson and Mr. Fletcher, or purchased from Mr. W. Bass. Reptilian bones, possibly dinosaurian, from White Cliffs, were presented by Mr. J. Austin. The collection of Post-Tertiary vertebrates transferred from the Geological and Mining Museum is being gradually determined, registered and catalogued, over 200 specimens from this source having been critically examined during the year.

Mr. Fletcher has been engaged mainly in re-organizing and cataloguing the very large collection of invertebrate fossils. These are now finally housed in one room and a systematic arrangement will be made as soon as the necessary rack-work and storage boxes are available.

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

Specimens registered during the year numbered 434. These included a fine series of Japanese minerals, presented by Mr. A. Combe, and a number of specimens illustrating the occurrence of mica and gold in Central Australia, presented by Messrs. Shearsby, Isidoro, Lewis, and Hodge-Smith. Mr. Herman presented a collection of calcite and aragonite from a basalt quarry at Bexhill, near Lismore, New South Wales.

While attending the Melbourne meeting of the Australian and New Zealand Association for the Advancement of Science, Mr. Hodge-Smith collected specimens of jarosite and gypsum at Mornington, and Mr. Fletcher collected galena, anglesite and pyromorphite at Mt. Isa, Queensland.

More than half of the year's acquisitions were obtained by exchange with Mr. J. J. Johnston and the Mining and Geological Museum, Department of Mines. A collection of Broken Hill minerals, a fine example of rutilated quartz, and a large slug of chloride of silver were purchased.

A considerable amount of time has been devoted to the improvement of the gallery exhibits. Considerable progress has been made with the limestone cave group, which besides the ordinary stalactites and stalagmites will show an underground river, a chimney, and a second chamber above the level of the main chamber, as well as shawls, "mysteries," and crystal groups. The work of modelling has been carried out by Mr. J. Kingsley, Assistant Articulator, and the design of individual exhibits is due to his artistic skill and ability.

A relief map of New South Wales modelled in the Lands Department was, by courtesy of the Under Secretary, obtained on loan, and a cast was prepared by Messrs. Clutton and Kingsley, Articulators. The scale is eight miles to one inch and the geological boundaries have been drawn on information afforded by the State geological map and the new geological map of Australia by the late Sir Edgeworth David, supplemented by the results of recent work in geological mapping. Colouring of the geological outcrops is now proceeding and the map will shortly be on view. The principal localities of mineralogical interest will be shown on the model. Arrangements have been made for the display of an exhibit of fluorescent minerals, for which the necessary materials have been ordered from America.

Teaching collections have been sent to the Newcastle and Sydney Technical Colleges, to metropolitan High Schools, and to primary schools in the country. Inquiries by the general public, mining companies, and retail jewellers have been attended to.

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

During the year 291 specimens have been registered, the most important acquisition being a number of Australian and foreign meteorites obtained by exchanges. Mr. A. Combe presented two specimens of billitonites from Billiton, and the Geological Survey of Victoria presented a fine piece of the Cranbourne meteorite. Another complete stone of the "Gilgoin" Aerolite ("Gilgoin No. 8") was collected by Mr. H. O. Fletcher. The Australian meteorite falls now represented in the collection is forty-one, of which nineteen are main masses. Mr. Hodge-Smith collected a series of Victorian igneous rocks while attending the Melbourne Science Congress.

A number of foreign rocks have been registered and incorporated in the main collection, many having been first sectioned and determined.

The Common Seal of the Museum was hereunto affixed by Order of the Board this twentieth day of November, 1935.

(L.S.)

F. S. MANCE, President.

W. T. WELLS, Secretary.

APPENDIX A.

TRUSTEES OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1935.

Crown Trustee—

Mr. James McKern.

Statutory—

His Honor the Chief Justice.
The Hon. the Colonial Secretary.
The Hon. the Attorney-General.
The Hon. the Colonial Treasurer.
The Auditor-General (Mr. J. Spence).
The President of the Medical Board.

Appointed—

The Hon. the President of the Legislative Council.
The Crown Solicitor.
The Surveyor-General and Chief Surveyor (Mr. H. B. Mathews, B.A.).
The Hon. the Secretary for Public Works.
The Hon. the Minister for Education.

Elective Trustees—

Dr. G. H. Abbott, M.B., Mast. Surg.
Mr. E. C. Andrews, B.A., F.G.S.
Mr. G. M. Blair.
Dr. C. Gordon MacLeod, M.B., Ch.M.
Dr. G. A. Waterhouse, B.E., F.R.E.S.
Mr. F. S. Mance.
The Hon. F. E. Wall, M.D., M.L.C.
Professor A. N. Burkitt, M.B., B.Sc.
Hon. H. M. Hawkins, M.L.C.
Professor W. J. Dakin, D.Sc.
Mr. F. W. Marks, F.C.A. (Aust.).
Sir Charles Rosenthal, K.C.B., C.M.G., D.S.O., V.D.

APPENDIX B.

STAFF OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1935.

Director C. Anderson, M.A., D.Sc., C.M.Z.S.

Administrative Staff—

Secretary	W. T. Wells, A. I. A. V.
Clerk.....	Miss G. E. Johnstone.
Clerk	R. D. Gill.

Scientific Staff—

Anthropology	Miss E. Bramell, M.A., Dip. Ed., Assistant. F. D. McCarthy, Dip. Anth., Assistant.
Zoology	J. R. Kinghorn, C.M.Z.S., Ornithologist, Herpetologist. E. Le G. Troughton, Mammalogist. A. Musgrave, F.R.E.S., Entomologist. K. C. McKeown, Assistant. Miss N. B. Adams, Assistant. F. A. McNeill, Lower Invertebrates. A. A. Livingstone, Assistant. W. Boardman, Assistant. T. Iredale, F.R.Z.S., Conchologist. Miss C. M. J. Allan, Assistant. G. P. Whitley, F.R.Z.S., Ichthyologist.
Mineralogy	T. Hodge-Smith, Mineralogist, Petrologist. R. O. Chalmers, A.S.T.C., Cadet.
Palaeontology.....	H. O. Fletcher, Assistant Palaeontologist.

Library Staff—

Librarian W. A. Rainbow.

1 reparatorial Staff—

Articulator	G. C. Clutton.
Assistant Articulator	J. Kingsley.
Taxidermist.....	H. S. Grant.
Assistant Taxidermist	J. H. Wright.
	W. Barnes.

Mechanical Staff—

Chief Mechanic	T. A. Henson.
Assistant Mechanic	H. Jackson.

Attendant and General Staff—

Chief Attendant	T. A. Murphy.
Attendants	W. A. Medway.
	H. W. Stein.
	J. McIver.
	J. Lewis.
	R. K. Morris.

Night Attendants F. L. Haylings.
T. Glazebrook.

APPENDIX C.

HONORARY STAFF OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1935.

Professor T. Harvey Johnston, M.A., D.Sc., Hon. Zoologist.
 Edw. F. Hallmann, B.Sc., Hon. Zoologist.
 A. F. Basset Hull, Hon. Ornithologist.
 G. A. Waterhouse, D.Sc., B.E., Hon. Entomologist.
 H. J. Carter, B.A., Hon. Entomologist.
 E. A. Briggs, D.Sc., Hon. Zoologist.
 H. Leighton Kesteven, D.Sc., M.D., Hon. Zoologist.
 Melbourne Ward, Hon. Zoologist.
 Geo. A. Thomas, Hon. Archæologist.
 K. A. Hindwood, Hon. Ornithologist.
 T. H. Guthrie, Hon. Lepidopterist.
 W. W. Froggatt, Hon. Entomologist.
 A. J. Marshall, Hon. Ornithologist.

APPENDIX D.

HONORARY CORRESPONDENTS OF THE AUSTRALIAN MUSEUM AT 30TH JUNE, 1935.

Mr. R. E. Baxter.	Mr. Anthony Hordern.	Mr. Melbourne Ward.
Mr. H. Burrell.	Sir Samuel Hordern.	Dr. G. A. Waterhouse.
Captain D. L. Comtesse.	Mr. O. Phillips.	Miss Edith Walker.
Sir Hugh Denison.	Dr. R. H. Palleine.	Mr. R. R. Dangar.
Mr. Robert Dixon.	Sir Arthur Rickard.	Mr. R. H. Dangar.
Mr. William Dixon.	Mr. E. H. Rainford.	Mr. James Burns.
Mr. C. E. Hart.	Mr. T. E. Rofe.	

APPENDIX E.

PAPERS AND ARTICLES PREPARED DURING THE YEAR.

- "Five New Rats of the Genera *Hydromys* and *Melomys* from Northern Australia." E. Le G. Troughton, *Records Australian Museum*, XIX, 4, 1935.
- "A New Genus and Species of Giant Rat from the Solomons." E. Le G. Troughton, *Records Australian Museum*, XIX, 4, 1935.
- "Marsupial Gliders or Flying Possums." E. Le G. Troughton, *Australian Museum Magazine*, v. 8, 1934.
- "The Largest Gliders or Flying Possums." E. Le G. Troughton, *Australian Museum Magazine*, v. 9, 1935.
- "The Beaks of Birds." J. R. Kinghorn, *Australian Museum Magazine*, v. 8, 1934.
- "The Early History of the Koala." T. Iredale and G. P. Whitley, *Victorian Naturalist*, LI, 1934.
- "Supplement to the Check-List of the Fishes of New South Wales." G. P. Whitley, *Royal Zoological Society of New South Wales*, 1934.
- "Studies in Ichthyology, No. 9." G. P. Whitley, *Records Australian Museum*, XIX, 4, 1935.
- "Fishes and Flowers." G. P. Whitley, *Australian Museum Magazine*, v. 1934.
- "Australian Shark Tragedies." G. P. Whitley, *Victorian Naturalist*, LI, 1935.
- "Some Fishes of the Sydney District." G. P. Whitley, *Australian Museum Magazine*, v. 1935. (To be translated into German for Das Aquarium.)
- "The Fish and the Ring in Fable and Fact." G. P. Whitley, *Australian Museum Magazine*, v. 1935.
- "Whitebait." G. P. Whitley, *Victorian Naturalist* (in press).
- "Fishes from North Queensland." G. P. Whitley, *Records S. Australian Museum* (in press).
- "The Food of Trout." K. C. McKeown, *Australian Museum Magazine*, v. 7, 1934.
- "Insect Wonders of Australia." K. C. McKeown, Angus & Robertson Ltd., Sydney, 1935, 8vo, pp. 252, VIII.
- "Wonders of the Ant World, Part I." K. C. McKeown, *Australian Museum Magazine*, v. 10, 1935.
- "Wonders of the Ant World, Part II." K. C. McKeown, *Australian Museum Magazine*, v. 11, 1935.
- "Locusts and Grasshoppers." Nancy B. Adams, *Australian Museum Magazine*, v. 8, 1935.
- "Hawk Moths." Nancy B. Adams, *Australian Museum Magazine*, v. 10, 1935.
- "Australian Hesperidiidae V. Notes and Description of a New Form." G. A. Waterhouse, *Proceedings Linnean Society of New South Wales*, LIX, 5-6, 1934.
- "Notes on Australian Lycaenidae VII. Descriptions of New Races." G. A. Waterhouse, *Proceedings Linnean Society of New South Wales*, LIX, 5-6, 1934.
- "Australian Molluscan Notes." T. Iredale, for *Records Australian Museum* (in press).
- "Australian Cowries." T. Iredale, *Australian Zoologist*, VIII, 2, 1935.
- "The Economics of Australian and New Zealand Mollusca." Joyce Allan (for *Australian Zoologist*).
- "Silk from Shells: An Ancient Industry." Joyce Allan, *Australian Museum Magazine*, v. 7, 1934.
- "Australian Shells: Ear-shells and Wide-mouthed Shells." Joyce Allan, *Australian Museum Magazine*, v. 9, 1935.
- "Australian Shells: Top, Turban, Pheasant, and Dolphin Shells." Joyce Allan, *Australian Museum Magazine*, v. 10, 1935.
- "Australian Shells: Liotias, Wheel Shells, Nerites, Cap, Sugar, and True Limpets." Joyce Allan, *Australian Museum Magazine*, v. 11, 1935.
- "Pearl from a Freshwater Mussel." Joyce Allan, *Victorian Naturalist*, LI, 1934.
- "Seaweed Crabs and their Camouflage." F. A. McNeill (for *Australian Museum Magazine*).
- "Life's Simplest Children." F. A. McNeill, *Education Gazette*, May 1, 1935.
- "The Life and Uses of Bêche-de-Mer." A. A. Livingstone, *Australian Museum Magazine*, v. 11, 1935.
- "A Tasmanian Flaked Axe of Unusual Size." Elsie Bramell, *Australian Museum Magazine*, v. 7, 1934.
- "A Mirror from the Temple of a Thousand Ages, Peiping, China." F. D. McCarthy, *Australian Museum Magazine*, v. 8, 1935.
- "A Shield Tree." F. D. McCarthy, *Australian Museum Magazine*, v. 11, 1935.
- "The Story of Money." F. D. McCarthy, *Australian Museum Magazine*, v. 11, 1935.
- "Trilobite Hunting in the North." H. O. Fletcher, *Australian Museum Magazine*, v. 9, 1935.
- "Ichthyosaurs." C. Anderson, *Australian Museum Magazine*, v. 8, 1934.
- "Sir Tannatt William Edgeworth David." C. Anderson, *Australian Museum Magazine*, v. 8, 1934.
- "Obituary—W. S. Dun." C. Anderson, *Australian Museum Magazine*, v. 9, 1935.
- "Darwin in Australia." C. Anderson, *Australian Museum Magazine*, v. 11, 1935.
- "Tekkites." T. Hodge-Smith, *Australian Museum Magazine*, v. 7, 1934.
- "The Adventures of a Tobacco Tin." T. Hodge-Smith, *Australian Museum Magazine*, v. 10, 1935.
- "Stilbite Collecting at Garravilla." R. O. Chalmers, *Australian Museum Magazine*, v. 7, 1934.

APPENDIX F.

LECTURES DELIVERED DURING THE YEAR 1934-1935.

<i>Popular Science Lectures.</i>			
Date.	Subject.	Lecturer.	Attendance.
1934.			
12 July	" Magic Among Primitive Peoples "	Miss E. Bramell	292
26 July	" Natural History and Economic Importance of Worms "...	W. Boardman	134
9 Aug.	" Shells in Art and Industry "	Miss J. Allan	167
23 Aug.	" The Story of Money "	F. D. McCarthy	162
13 Sept.	" The Struggle for Existence in the Crustacean World ".....	F. A. McNeill	146
27 Sept.	" Meteorites and Shooting Stars "	T. H. Smith	175
1935.			
9 May	" Wonder Birds of New Zealand "	T. Iredale	203
16 May	" Sharks "	G. P. Whitley	192
30 May	" Natural History of Coal "	T. H. Smith	212
13 June	" Curiosities of Insect Life "	K. C. McKeown	219
27 June	" The Gulf Country "	H. O. Fletcher	257
11 Lectures		Total	2,159

<i>Other Lectures in the Museum.</i>			
1934.			
25 Oct.	" The Great Barrier Reef "	W. Boardman	65
	(Members of the English Speaking Union.)		
7 Nov.	" Our Feathered Friends "	J. R. Kinghorn	220
	(Students of Sydney Church of England Grammar School (Girls.)		
1935.			
26 Feb.	" Evolution of Man "	C. Anderson	24
	(Students of Sydney Kindergarten College.)		
12 Mar.	" The Australian Aborigine "	F. D. McCarthy	26
	(Students of Sydney Kindergarten College.)		
19 Mar.	" The Achievements of Prehistoric Man "	Miss E. Bramell	25
	(Students of Sydney Kindergarten College.)		
26 Mar.	" The Maori of New Zealand "	F. D. McCarthy	25
	(Students of Sydney Kindergarten College.)		
26 April	" Birds "	J. R. Kinghorn	20
	(Students of Girls' Grammar School, Darlinghurst.)		
7 Lectures		Total	405

<i>School Lectures.</i>			
1934.			
3 July	" Fishes "	G. P. Whitley	179
17 July	" Geology "	T. H. Smith	142
31 July	" Reptiles "	J. R. Kinghorn	197
14 Aug.	" Mammals "	E. L. Troughton	78
28 Aug.	" Insects and Spiders "	K. C. McKeown	168
1935.			
28 May	" Birds "	J. R. Kinghorn	156
11 June	" Fishes "	G. P. Whitley	107
25 June	" Shells "	Miss J. Allan	283
8 Lectures		Total	1,310

APPENDIX G.

Schedule of Specimens acquired during the year ended 30th June, 1935 :—

Department.	Donation.	Exchange.	Purchase.	Prepared.	Collection.	Total.
Vertebrata—						
Mammalia	222	...	92	...	86	400
Aves	348	11	...	...	93	452
Reptilia	591	24	3	...	107	725
Pisces	908	...	...	...	166	1,074
Skeletons	17	2	...	...	...	19
	2,086	37	95	...	452	2,670
Invertebrata—						
Mollusca	5,477	...	...	...	...	5,477
Insecta and Arachnida	9,000	70	...	...	...	9,070
Crustacea	221	28	...	...	39	288
Echinodermata	153	11	...	...	...	164
Polyzoa	844	...	...	...	...	844
Vermes	98	...	...	...	...	98
Hydroida .....	...	...	...	...	...	...
Sponges and Foraminifera ...	15	...	...	...	...	15
Other Invertebrata	486	...	...	...	...	486
	16,294	109	...	...	39	16,442
Fossils	104	1,418	259	...	1,317	3,098
Minerals	55	302	63	...	14	434
Rocks	53	31	...	...	207	291
	212	1,751	322	...	1,538	3,823
Ethnological, etc.—						
Ethnological	1,023	729	2,009	...	...	3,761
Historical .....	...	...	...	...	...	...
Numismatical	623	...	731	...	...	1,354
	1,646	729	2,740	...	...	5,115
Miscellaneous—						
Micro. Sections .....	...	...	...	...	...	...
Casts .....	...	...	...	4	...	4
Moulds .....	...	...	...	8	...	8
Photo. Negatives .....	...	...	...	59	...	59
Lantern Slides .....	...	...	...	259	...	259
Photographs .....	...	...	...	...	...	...
	...	...	...	330	...	330
Vertebrata	2,086	37	95	...	452	2,670
Invertebrata	16,294	109	...	...	39	16,442
Fossils, Minerals, and Rocks ...	212	1,751	322	...	1,538	3,823
Ethnological	1,646	729	2,740	...	...	5,115
Miscellaneous .....	...	...	...	330	...	330
	20,238	2,626	2,857	330	2,029	28,380

APPENDIX H.

THE AUSTRALIAN MUSEUM.

Summarised Statement of Net Receipts and Payments for the Year ended 30th June, 1935.

RECEIPTS.						PAYMENTS.					
						</					

I certify that the books, accounts, and vouchers of the Australian Museum have been examined for the year ended 30th June, 1935, under the provisions of Section 11 of the Australian Museum Act, 1902, and that this summarised Statement of Receipts and Payments is correct and in accordance therewith.

(Signed) A. W. KELLY,
Auditor.

APPENDIX I.

THE AUSTRALIAN MUSEUM.

REVENUE ACCOUNT.

Dr.

Period 1st July, 1934, to 30th June, 1935.

Cr.

			£	s.	d.	£	s.	d.				£	s.	d.	£	s.	d.
To Scientific Administration—									By Interest—								
Scientific Staff Salaries, Stores, and Services			7,182	14	4				Funds Invested—								
Articulators do do			613	7	2				Sydney City Council Deposit ...			3	16	10			
Taxidermists do do			1,065	6	8				Australian Consolidated Inscribed Stock ...			16	0	0			
Collecting Specimens ...			42	14	6				Commercial Banking Co., Ltd., Fixed Deposit			6	5	0			
Preservation of Specimens ...			24	1	6												
Freights and Charges—Specimens, etc.			48	18	10				Sales of Publications—								
Photography and Slides ...			136	12	2				Museum Magazine ...			193	6	2			
						9,113	15	2	Museum Postcards ...			16	0	6			
Office Administration—Office Staff, Salaries, etc.			1,157	7	8				"Records" and other Publications ...			13	4	5			
						1,157	7	8							222	11	1
Publicity ...			38	0	8				Donations ...						14	2	5
General Expenses ...			64	15	7										262	15	4
Stationery ...			39	12	4				Balance ...						14,601	12	8
Postages and Telegrams ...			53	11	7												
Insurances ...			143	3	3			339 3 5									
Library Administration—Salaries, etc., Book binding and Sundries ...			714	17	6			714 17 6									
General Administration—																	
Artificers—Salaries, Stores, etc.			448	2	5												
Attendants—Salaries, Overtime, Assistance, etc.			2,131	19	7												
Working Expenses—Stores, etc.			141	0	5												
Motor Lorry Expenses			46	16	3												
Building, Repairs and Maintenance			110	4	6												
Electric Fittings, Repairs and Maintenance			21	11	4			2,899 14 6									
Pensions ...			52	0	0			52 0 0									
Lectures—Fees and Expenses...			88	18	0			88 18 0									
Depreciation — Furniture, Equipment, and Plant ...			255	5	7			255 5 7									
Publications—																	
Magazine—Cost and Publishing and Distributing ...			698	7	6												
Less Stocks on Hand ...			516	2	0			182 5 6									
Postcards—Cost and Publishing			201	13	10												
Less Stocks on Hand ...			193	7	2			8 6 8									
"Records"—Cost and Publishing			96	4	1												
Less Stocks on Hand ...			43	10	1			52 14 0									
								£14,864 8 0							£14,864 8 0		