

Abstracts of Proceedings

15TH MARCH, 1949

Annual Meeting

The Annual Meeting was held in the Society's Room, Tasmanian Museum. His Excellency the Governor, President of the Society, presided.

The following Office-bearers were elected for 1949:—Mr. A. L. Meston was elected Vice-President for two years in the place of Mr. W. H. Hudspeth, who retired under Rule 12; Honorary Secretary, Dr. J. Pearson; Assistant Honorary Secretary, Mr. D. Martin; Honorary Treasurer, Mr. S. Angel; Honorary Auditor, Mr. H. J. Exley.

The following were elected members of the Council for 1949: Mr. W. H. Hudspeth and Mr. F. C. Wolfhagen were elected for three years in the place of Professor V. V. Hickman and Mr. J. Somerville, who retired under Rule 21. Mr. D. Martin was elected for a term of two years in the place of Mr. A. L. Meston who had been elected Vice-President.

The following were elected members of the Society:—Miss T. F. Masters, Mr. W. J. Sutherland, Ross, Mr. Walter Sutherland.

Dr. Joseph Pearson, Director of the Tasmanian Museum and Art Gallery, delivered a lecture entitled 'The Modern Museum', of which the following is an abstract:—

Dr. Pearson gave an account of his visit to Britain and U.S.A. in 1948-49.

Museums in Britain had suffered greatly from effects of the war, not so much by war damage as by the suspension of all building and developmental schemes, and the effects of the war will be felt for many years to come. He was able to arrange a further loan of pictures with the Trustees of the Tate Gallery. Seven pictures have been lent but they are not of such a high artistic standard as those included in the previous loan.

Dr. and Mrs. Pearson visited the U.S.A. as the guests of the Carnegie Corporation of New York. The visit lasted about ten weeks and it was found necessary to concentrate on the Museums of the Eastern States. The principal cities visited were New York, Washington, Boston, Chicago, Cleveland, Brooklyn, Providence, and the Universities of Harvard and Yale.

The following may be regarded as the salient features of modern museum development in America:—

1. Utilization of artificial light. This solves many architectural problems but also provides new ones. It is found that the use of artificial lighting is more effective and makes good display easier.
2. The popularity of large and expensive habitat groups.
3. The importance of linking the museums with school education.
4. The emphasis placed upon research by museum staffs and the generous provision of research laboratories and storage space for reserve collections.
5. Great civic interest taken in museums shown partly by the large private benefactions and by the provision of beautiful buildings.
6. The amenities of the public are considered. Hence comfortable heating arrangements and the provision of cafeterias.

Dr. Pearson thought that the many lessons which the modern museums of Britain and U.S.A. could teach would be lost if one's sense of proportion was not maintained. The special problems of museum development in Hobart might have their best solution if a close liaison were set up between the University and the Museum. The history of the

Tasmanian Museum showed clearly that the present system of administration by a Board of Trustees had not been very successful. The lecturer felt that the question of establishing a closer link with the University, even to the extent of building a new museum on the University site, should be given serious consideration.

Dr. Pearson also spoke of his activities while abroad in carrying out embryological investigations in the Embryological Department of University College, London. He also gave lectures on his marsupial researches at the Linnean Society of London, the University of Edinburgh, the Universities of Yale and Harvard, and the American Museum of Natural History, New York.

5TH APRIL, 1949

A meeting was held in the Society's Room. Mr. A. L. Meston, Vice-President, presided.

The following were elected members of the Society:—Mrs. F. M. Brownhill, Miss G. Madder, Dr. G. Sibthorpe, Mr. G. W. Colman, Mr. D. L. Hollis, Mr. D. M. Paton, Mr. C. G. Ryan, Mr. E. G. Terry.

Mr. D. Martin delivered an illustrated lecture entitled 'Eucalyptus Trees in the British Isles', of which the following is an abstract:—

The first record of cultivation of Eucalyptus in the British Isles was that of Aiton in 1789 who listed *E. obliqua* as growing at Kew. This seed was collected at Adventure Bay by Tobias Furneaux of the 'Adventure' of Cook's second voyage.

The cultivation of Eucalyptus in Europe boomed after 1850 as the result of von Mueller's enthusiasm and the belief that the oil was a specific for malaria. *E. globulus* in particular was widely planted but this was an unfortunate choice as this species is sensitive to frost and the timber, though fast growing, is difficult to season. Very few trees of this species now survive.

Following von Mueller's taxonomic work, collections of Eucalyptus were laid down in the 70's and 80's by wealthy amateurs but though they flourished for a time, most have declined owing to severe winters killing all but the hardiest species. The healthiest of the collections of this period are at Loch Hourne in Invernesshire where there are several hundred trees, embracing *E. coccifera*, *E. johnstoni*, and *E. urnigera*, and Rostrevor, co. Down with *E. coccifera*, *E. cordata*, *E. suborenlata*, *E. urnigera*, *E. ovata*, and *E. biangularis*.

About the turn of the century, further collections were laid down of which, Mt. Usher, co. Wicklow is now the most comprehensive and best maintained. It includes *E. amygdalina*, *E. stuartiana*, *E. delegatensis*, *E. gigantea*, *E. macarthuri*, *E. johnstoni*, *E. pulverulenta*, *E. urnigera*, *E. viminalis*, *E. virgata*, and *E. coccifera*.

Interesting introductions of single species were that of *E. gunnii* by Charles Balfour at Whittingehame, *E. lothian* in 1846, and J. Bateman at Brightlingsea, Essex, in 1887. A tree of the former is still healthy and is probably the oldest Eucalyptus outside its natural habitat. The seed for the latter did not come direct from Australia but from Argentina.

The survival of the different species in England gives useful information on their frost resistance. The hardiest are *E. nipophila*, *E. gunnii*, *E. vernicosa*, *E. parvifolia*, *E. coccifera*, *E. urnigera*, *E. suborenlata* which have survived temperatures below 5° F.

3RD MAY, 1949

A meeting was held in the Society's Room. Mr. A. L. Meston, Vice-President, presided.

The following were elected members of the Society:—Miss D. Alcock, Miss B. Scott, Mr. R. Shoobridge, Mr. H. M. Wilson.

Mr. L. W. Miller delivered an illustrated lecture entitled 'A Survey of the Aphids in Tasmania', of which the following is an abstract:—

Aphids, also known as blight or green flies are sap sucking plant bugs which are of considerable importance, not only for the damage they do, but also because they spread some of the most serious plant virus diseases. They are essentially insects of the Northern Hemisphere there being only about four native species in Australasia none of which have been recorded in Tasmania.

Most of the commercial crops, ornamental trees, and flowers, grown in Tasmania are of European or North American origin. Unfortunately at the time of the introduction of such plant species here no precautions were taken against the insects that they were carrying. Thus we find that a number of old world aphid species have been allowed to become established in Tasmania.

A detailed survey has revealed that there are approximately 50 species of aphids in Tasmania infesting many different types of imported plants the bulk of which are of importance to the State.

There are still a great many aphid species in either England or North America that have not yet reached Tasmania. Some of these are major pests of such important crops as apples, pears, raspberries, and peas. Every effort should therefore be made by the Commonwealth Plant quarantine authorities to prevent the accidental importation of any of these aphid pests into Tasmania.

7TH JUNE, 1949

A meeting was held in the Society's Room. His Excellency the Governor, President of the Society, presided.

The following were elected members of the Society:—Miss R. de Little, Mr. R. P. Mather.

Mr. N. R. Laird delivered an illustrated lecture entitled 'The Australian Antarctic Expedition' (see p. 285).

5TH JULY, 1949

A meeting was held in the Society's Room. Dr. W. L. Crowther, Vice-President, presided.

Mr. F. R. S. Hutchison was elected a member of the Society.

Members were given an opportunity to peruse further documents, &c., relating to Sir John and Lady Franklin, which had been presented by the Scott Polar Research Institute, Cambridge.

Mr. E. R. Guiler delivered an illustrated lecture entitled 'Marine Littoral Ecology', of which the following is an abstract:—

The physical and biological environments were discussed in a general sense. In Tasmania the tides play a very great part in the control of life on the shore. The tidal range is small the average rise and fall over a period of twelve months being only 1' 10½". The tides show diurnal inequality. During the period April to October the morning tide is larger than the afternoon but at the equinox the afternoon tide becomes the larger. Due to this inequality of the tides there occurs a very sharp increase in the amount of time the shore above the average level of the low high and high low tides is exposed to the air. This is a 'lethal' level. Above this on the shore there are very few species to be found while below it there is a rapidly increasing shore life. There are also critical levels on the shore above and below the lethal level. The critical levels are difficult to distinguish when they occur above the lethal level.

A typical zonation on a rocky shore in Southern Tasmania might read—

Lichens	
Bare Rock	
<i>Melagrapha uulifasciata</i>	H.H.W.
<i>Bembicium nanum</i>	
<i>Elminius plicatus</i> and <i>E. modestus</i>	Lethal Level.
<i>Patelloida alticostata</i>	
<i>Galeolaria</i> sp.	M.T.L.
<i>Brachydontes erosus</i> and <i>Catophragmus polymerus</i>	
<i>Mytilus planulatus</i>	L.L.W.

Below the lethal level only index species are given but above it the species on the above zonation are all that can be found in many places. A salient feature is the absence of algae. Algae are only found below *Galeolaria* or very poorly developed in pools.

Air and sea temperatures were discussed. The effect of extreme cold on the littoral fauna was illustrated from the results of the very cold winter of 1946-7 in Northern Ireland. Where the ice sheet covered the foreshore and was unbroken there was very little effect on littoral life. When the ice sheet was broken and the cold winds were allowed to penetrate to the forms dwelling below the ice very great slaughter ensued. The ice sheet ended about the zone of *Fucus serratus* and the Laminaria zone and the fauna thereof suffered very considerably. *Ostrca edulis*, *Paphia* sps., *Chlamys opercularis*, and annelids were found dead in thousands.

2ND AUGUST, 1949

A meeting was held in the Society's Room. Mr. A. L. Meston, Vice-President, presided.

The Chairman reported that Capt. D. C. Pearse had resigned from the position of Assistant Hon. Secretary and that, under Rule 10, this casual vacancy could be filled at a general meeting. Mr. D. Martin, M.Sc., was unanimously elected to this office.

The following were elected members of the Society:—Miss H. M. W. Shoobridge, Mr. P. S. Young, Mr. P. Anderson, Dr. G. M. W. Clemons, Mr. E. L. Garrett, Mr. F. J. Gunn, Mr. W. E. Tucker, Mr. C. L. Willes.

Dr. C. A. Duncan exhibited a photo micrograph of a new Trypanosome which was found in the blood of a platypus. This discovery was made accidentally in the course of preparing blood samples of the platypus in the Museum laboratory and the samples were taken to Dr. Duncan's laboratory for staining and the Trypanosomes were found in the stained preparations. Subsequently Dr. Duncan ascertained from authorities in Sydney that this Trypanosome is a new species and he proposes to call it *Trypanosoma binneyi*.

Mr. G. C. Wade delivered an illustrated lecture entitled 'Some Diseases of Ornamental Plants', of which the following is an abstract:—

Diseases in plants may result from a number of different causes. Some are caused by the invasion of the plant by another organism, which is parasitic on the host plant. However, disease may result from something wrong with the environment of the plant. Of these non-parasitic diseases those due to deficiencies of various essential elements, or to excesses of various substances in the soil are particularly important.

The most important parasitic diseases are those due to eelworms, bacteria, fungi, and viruses. Example of diseases of ornamental plants due to members of each of these groups was discussed. Those chosen illustrated different types of symptoms which may be produced by the attack of a parasite.

Eelworm disease of bulbs such as hyacinths, tulips, and narcissus causes a brown rot of some of the bulb scales, while others remain sound. Such bulbs may be entirely killed or produce stunted plants. The disease is controlled by holding the bulbs in hot water at such a temperature that the eelworms are killed without affecting the bulb.

In some diseases, the parts of the plant which are attacked grow excessively so that galls are produced. Crown gall is due to infection by bacteria, which stimulate the affected part to grow excessively so that large galls are produced. This infection usually occurs in the nursery, and it does not often spread to established plants. The fungus *Exobasidium* attacks the leaves of azaleas and rhododendrons causing them to become greatly enlarged. This trouble is easily controlled by spraying with a copper fungicide.

Several common leaf infecting fungus diseases were discussed, and the control measure described.

Collar and root rot diseases are due to fungal attack at the base of the plant, and such diseases result in the death or stunting of the plant. When young seedlings are affected in this way, the trouble is referred to as 'damping-off'. Crop rotation or soil sterilisation are the best methods of combating these diseases. In some cases resistant varieties of plants can be used, and treatment of the seed is effective in some cases.

Gladioli are subject to a number of important diseases. Botrytis corm rot gains entry to the corms after they have been dug and spread internally producing a soft rot. As the fungus is inside the corm it is useless to treat affected corms, but the trouble can be prevented by dipping the corms in a mercury fungicide as soon after digging as possible. In this way the fungus is unable to gain entry to the corms. Hard and dry rot are also due to fungi, and produce hard irregular scabs on the surface of the corms. The same fungi cause diseases of the growing plant. They are rather difficult to combat, but crop rotation and selection of disease free corms are very important measures. Dipping the corms in corrosive sublimate is of some value, but it is not completely effective as the scabs are so hard that the fungicide cannot penetrate very well. Bacterial scab may be recognised by circular concave scabs with a definite raised margin. This trouble can be controlled by dipping in corrosive sublimate, and by growing the plants in well-drained soil.

Virus diseases infect many ornamental plants. They are due to very small infective agents, many being carried by sucking insects, and bulbs from infected plants always carry the disease. The symptoms often consist of mottling of the foliage with pale coloured areas, and breaking of the flower colour. They are controlled by removing infected plants so that the disease does not spread, and by only saving bulbs from healthy plants.

6TH SEPTEMBER, 1949

A meeting was held in the Society's Room. Dr. W. L. Crowther presided. The following were elected members of the Society:—Mr. L. E. Luckman, Dr. A. G. Nicholls.

Mr. M. R. Banks delivered an illustrated lecture entitled 'Radioactivity and the Age of the Earth', of which the following is an abstract:—

Early estimates of the age of the earth are given which in general tend to be too small. Examples are 1,972,949,050 years by a Hindu philosopher, 5953 by Bishop Ussher, and several estimates ranging from 20,000,000 to 100,000,000 years by nineteenth century geologists and physicists.

Several astronomical estimates are mentioned and these indicate ages between 1,000,000,000 years and 10,000,000,000 years with the probable age closer to one thousand than to ten thousand million years and probably less than four thousand million years.

Radio-active estimations are now well established. These depend on the spontaneous disintegration of elements such as uranium, thorium, and rubidium to form lead and strontium respectively. The decomposition proceeds at a constant rate and by analysing radioactive minerals the uranium and the lead content are determined, the age is then found by dividing the lead by the uranium content and multiplying by the disintegration rate. The oldest mineral thus treated is 1985 million years old and this is considerably younger than the rocks in which it was found.

Rubidium also disintegrates to form strontium and by applying a similar procedure to that adopted for uranium, a mineral 2100 million years old has been found. This again was formed well after the earth had cooled down.

Recently Professor Arthur Holmes evolved a method for comparing the composition of lead ores and as a result of this is able to fix the minimum age of the earth at 3350 million years and the maximum at 5400 million years. In this he used lead ore from Broken Hill with an age of 1200 million years among others.

New and untried methods involving the radioactivity of rubidium and potassium may eventually make it possible to find the age of sediments such as limestone and shale and even determine the absolute age of fossils to within a million years. This may well alter our ideas on rock structure and add greatly to our knowledge of evolutionary processes.

4TH OCTOBER, 1949

A meeting was held in the Society's Room. Dr. W. L. Crowther presided. The following were elected members of the Society:—Mr. T. H. O. Phillips, Mr. H. G. Cross.

The following illustrated lectures were given:—

- (1) 'A Slab of Ancient History', by W. H. Hudspeth. (See page 77.)
- (2) 'Camping Grounds of the Tasmanian Aborigines', by Dr. W. L. Crowther. (See page 83.)

1ST NOVEMBER, 1949

A meeting was held in the Society's Room. Professor S. W. Carey presided. The following were elected members of the Society:—Rev. A. A. Gray, Mr. W. D. Jackson, Dr. G. M. Parker.

The following papers which had been submitted for publication in the Society's Journal were tabled, and it was agreed to submit them to the Standing Committee:—

- (1) Geology of the Queenstown District, Tasmania. By John Bradley.
- (2) The Gordon River Limestone of Tasmania. By S. Warren Carey and M. R. Banks.

- (3) Structure and Stratigraphy of Hobart District. By S. Warren Carey.
- (4) Geology of the Junee-Adamsfield Area, Tasmania. By S. Warren Carey.
- (5) A Revision of Tasmanian Psocoptera with Descriptions of New Species.
By B. A. B. Edwards.
- (6) Distribution and occurrence of Sponges in Tasmania. By E. R. Guiler.
- (7) *Fabia hickmani* (Pinnotheridae) sp. nov. from the Mussel *Mytilus planulatus*. By E. R. Guiler.
- (8) A Revision of the Tasmanian Hydroida. By M. M. Hodgson.
- (9) Notes on the Life History of *Gonothyraea hyalina* Hincks. By M. M. Hodgson.
- (10) Further note on the female urogenital system of *Hypsiprymnodon*.
By Joseph Pearson.
- (11) The female urogenital system of the Dasyuridae. By Joseph Pearson.
- (12) The female urogenital system of Thylacinus. By Joseph Pearson.

Professor V. V. Hickman delivered an illustrated lecture entitled 'The Morphology and Habits of Spiders', of which the following is an abstract:—

The general anatomy and segmentation of the spider's body were described. Reference was made to the distinguishing features and geographic distribution of the Liphistiomorphae, Mygalomorphae, Hypochilomorphae, and Araneomorphae. The structure and arrangement of the eyes of the Argyropidae, Lycosidae, and Salticidae were considered in relation to the visual powers of these spiders. Illustrations of the different forms of spinning apparatus were shown and the employment of the silk in making webs, egg-sacs, &c., described. The various types of nests made by the Mygalomorphae were mentioned. Examples of mimicry and protective resemblance were shown on the screen and discussed. The habits of spiders belonging to the genera *Atrax* and *Latrodectus* were described and the poisonous effects of the bite of these spiders mentioned.

The Hon. Secretary reported that an invitation had been received from the Connecticut Academy of Arts and Sciences to appoint a delegate to attend the one hundred and fiftieth Anniversary Meeting, which also would be the one thousandth Meeting of the Society, to be held on the 4th November, and that in consequence a telegram had been sent to Professor Theodore Sizer, of Yale, asking him to represent the Royal Society of Tasmania on that occasion and to convey to the Academy the Society's greetings. The action of the Hon. Secretary was approved by the meeting.

Northern Branch

Annual Report for 1949

The Council submitted the following record of activities in 1949:—

In presenting this Annual Report of the Branch's activities during 1949, your Council wishes to draw particular attention to a matter of interest to all members of the Branch. Our membership now comprises nine Life Members and seventy-three Ordinary Members, an increase of sixteen over last year. This is an indication of the part that the Branch is beginning to play in our cultural life. Your Council now feels that the Branch is in the position to carry on an active existence of its own while still linked closely with the parent Society in its general aims. The Society will therefore be asked to grant the Branch a considerable measure of control of its own affairs.

Action taken by the Branch led to the formation of the Launceston Field Naturalists' Club in October 1949 and this Club is now doing active work. There is a definite need for a Club of this sort in Launceston and its future progress should be marked.

The Tasmanian Historical Society went into recess recently and has transferred its assets and property to the Branch. The Branch has agreed to incorporate the Society and to use the funds transferred for historical research.

Six meetings were held during the year, of which the two meetings in May were held in conjunction with the Northern Tasmanian Fisheries Association:—

April 28th 1949	Prof. S. W. Carey: 'The Ascent of Life'.
May 16th 1949	Prof. E. Percival: 'Freshwater Fisheries Problems'.
May 25th 1949	Mr. D. Butcher: 'Freshwater Fisheries Problems'.
July 6th 1949	Mr. N. R. Laird: 'Macquarie Island'.
August 4th 1949	Dr. Loftus Hills: 'Science and Civilisation'.
November 18th 1949	Mr. Crosbie Morrison: 'Our Natural Inheritance'.

MEETINGS

APRIL 28, 1949

Annual General Meeting

The Annual General Meeting was held at the Museum, Mr. J. E. Heritage presiding.

The Annual Report and Balance Sheet for 1948 were adopted.

The Office-bearers for 1949 were elected.

A lecture was then given by Professor S. W. Carey, entitled 'The Ascent of Life'.

In his lecture, which was illustrated with lantern slides, Professor Carey dealt with the progress of evolution of life on the earth from the evidence of the geological record. He traced the gradually increasing complexity of life as one geologic period succeeded another, finally culminating in the Primates. Professor Carey showed something of the great changes that have occurred in the faunas from age to age, and how various groups have dominated, later to decline in importance, with many of them now no longer existing.

MAY 16, 1949

A meeting was held at the Museum, Mr. J. E. Heritage presiding.

Professor E. Percival, Professor of Biology at Canterbury University College, Christchurch, New Zealand, spoke on Freshwater Fisheries Problems.

In introducing the speaker, Mr. Heritage stressed the need for biological survey in Tasmania, such studies being particularly urgent in view of disappearing life forms and changing environments. He asked members and others to co-operate with the Society in this work.

In his address, Professor Percival first reviewed freshwater fisheries work overseas and in New Zealand, emphasising the need for research to provide the basic data for the study of fisheries problems.

Professor Percival then went on to deal with Tasmanian problems and here he found that the absence of information made it difficult to assess the state of the fishery. Much could be done, however, if those interested undertook certain investigations, he said.

Among matters referred to were the collecting of catch records, the maintenance of stocks of fish by hatchery stocking and natural reproduction, the fertilising of waters to increase food supplies and the introduction of food organisms from other areas.

In conclusion, Professor Percival made a special plea for the preservation of remaining virgin waters in Tasmania in their original state. He pointed out that others besides anglers were interested in fresh waters and that some should remain free from introduced organisms.

MAY 25, 1949

A meeting was held at the Museum, Mr. J. E. Heritage presiding. Mr. Dunbavin Butcher, Director of the Fisheries and Game Department of Victoria, spoke on Freshwater Fishing Problems.

Mr. Butcher described the work of his Department in studying and developing freshwater fisheries in Victoria. He said that the basis of this work was a thorough study of the biology of fresh waters and that activities would be concerned with meeting the need for increased intensity of fishing. This can be done only by management of existing waters.

Mr. Butcher stressed the importance of the chemical constitution of the water, in particular pH and amounts of phosphate and nitrate.

JULY 6, 1949

A meeting was held at the Public Library Hall, Mr. J. E. Heritage presiding.

Mr. Norman R. Laird, Official Photographer and Tasmanian Government representative on the Australian Antarctic Expedition, 1948, spoke on Macquarie Island and the work of this expedition there. Mr. Laird first dealt with the history of the island from its discovery by Frederick Hasselburg of the sealer 'Perseverance' in 1810; the orgies of sealing, first a few years of hunting the fur-seal, which by 1815 had been practically exterminated, and then the elephant-seal for its blubber, its extermination being nearly complete by 1829; later sporadic visits for sealing, culminating in the establishment by Joseph Hatch of his infamous industry to obtain penguin and seal oil; and the visits of such notable exploring and scientific expeditions as those led by Bellinghausen (1820), Wilkes (1840), Scott (1901), Shackleton (1909), and Mawson (1911).

Mr. Laird then showed photographs taken during his visit to Macquarie Island, these including a very fine series dealing with topography and natural history.

In closing the meeting, the Chairman referred to the need for biological survey in Tasmania and said that the Branch was taking the matter up actively.

AUGUST 4, 1949

A meeting was held at the Museum, Mr. J. E. Heritage presiding.

Dr. Loftus Hills spoke on 'Science and Civilisation'. In introducing Dr. Hills, the Chairman recalled that he had given the inaugural lecture at the Branch in 1921.

'Science and Civilisation' is a complex statement, with science and civilisation intimately associated. Civilisation grew up and decayed before modern science existed with its exact observation, exact measurement, exact thinking and precise language. Modern science began with Galileo who set science on the path of steady progress, and for the last 400 years science has been able to contribute more and more to facilitate the process of civilisation.

The pure science of to-day is the technology of to-morrow. Nowhere is this more true than in the use of atomic energy. The use of nuclear fission processes has the greatest possibility for good in civilisation, although up to the present almost its only use has been the destruction of human life, which is another example of the way in which science has developed far ahead of political organisation.

Science has developed a terminology and nomenclature free from nationality whereas in everyday use the meaning of words has become corrupted. Capitalism, democracy, socialism, nationalism, communism, there are hundreds of definitions of each of them rather than scientific definition. Plato long ago pointed out that one of the symbols of evolution is that words lose their meaning.

Dr. Loftus Hills concluded by saying, 'free interchange of ideas is necessary for progress'.

NOVEMBER 18, 1949

A meeting was held at the Museum, Dr. C. Craig presiding.

Mr. Crosbie Morrison, President of the Royal Society of Victoria, gave a lecture entitled 'Our Natural Inheritance', illustrating it with colour films.

He discussed first the radiation of reptiles and mammals from their centre of evolution, which he placed in Asia Minor, pointing out that the less successful forms were elbowed out as new types evolved and finally reached the periphery. The Marsupials thus came to Australasia and the Americas and in Australia were the dominant land mammals because of the changes in land connection associated with Wallace's Line.

Mr. Morrison went on to show how Australia's unique mammal fauna was but one point of interest, most groups of animals and plants in Australia providing special opportunities for study. The need to conserve this unique fauna and flora was urgent. He instanced the Cape Barren Goose and commented on the conditions which could permit the present destruction of these birds.

Mr. Morrison illustrated his talk with five colour films comprising (1) plant life, (2) the giant earthworm, (3) and (4) birds, and (5) mammals.

Office-bearers, 1949

Chairman: J. E. Heritage, C.M.G., LL.B., 1949.

Vice-Chairman: Gilbert McKinlay, 1949.

Council: Hon. R. K. Green, M.L.C., LL.B., 1949; W. K. McIntyre, M.C., B.E., M.D., F.R.C.O.G., 1949, 1950; C. G. Ryan, 1949, 1950; K. R. von Stieglitz, 1949.

Hon. Secretary-Treasurer: N. J. B. Plomley, M.Sc. (1949).

