



THE ZOOLOGICAL SOCIETY OF LONDON

# ANNUAL REPORT

## 1964

# THE ZOOLOGICAL SOCIETY OF LONDON

The Society was founded in 1826 by Sir Stamford Raffles, Sir Humphry Davy (President of the Royal Society) and other eminent naturalists,

'for the advancement of Zoology and Animal Physiology and the introduction of new and curious subjects of the Animal Kingdom',

and was incorporated by Royal Charter in 1829. A new Charter was granted to the Society in January 1963.

The Society's Gardens in Regent's Park, which were first opened to the public in 1828, now cover an area of 36 acres. Of the original features and buildings designed by Decimus Burton, the old Camel House with its clock tower, the Ravens' Aviary and the Giraffe House are still in existence. In 1927 the Society acquired 500 acres of farm and down land at Whipsnade and has developed them into a Zoological Park where there is a minimum of housing and a maximum of open spaces for the animals.

The existence of the Zoological Society as an Institution under a Royal Charter depends on the fulfilment of the object for which it was founded. Being primarily a scientific society it undertakes and encourages scientific research in zoology by members of its staff and by visiting scientists, and also spreads zoological knowledge through its educational activities. Scientific meetings, commencing at 5 p.m., are held in the Meeting Room on the second Tuesday in the months February to June and October to December. At these meetings the results of new research are communicated and discussed, and specimens and films of zoological interest are exhibited. Symposia on special subjects are arranged on other dates, which are notified as occasion arises. The Society owns one of the finest zoological libraries in the world, containing approximately 100,000 volumes, including many complete sets of scientific journals.

The Society publishes:

The *Proceedings* – the papers cover all fields of zoology and are fully illustrated with plates and text figures. In 1965 4 volumes (16 parts) will be published, and thereafter 3 volumes (12 parts) will be published annually.

The *Transactions* are published at irregular intervals.

The *Symposia* record the papers read at the Symposia.

The *Zoological Record*, a comprehensive bibliography of zoological literature with subject and systematic indices, is available either as a complete volume or separately in 20 parts dealing with the different animal groups.

The *Nomenclator Zoologicus* contains the names of all the genera and subgenera in zoology from the 10th Edition of Linnaeus 1758 to the end of 1945, with a bibliographical reference to the original description of each. The work contains approximately 250,000 entries, and is published in 5 volumes.

The *International Zoo Yearbook*, published annually, provides authoritative information on developments in the zoo world and a comprehensive reference section of zoos.

REPORT  
OF THE COUNCIL  
FOR 1964

*The Council has pleasure in presenting  
its one hundred and thirty-sixth Annual Report  
to the Annual General Meeting of the Society  
to be held on Thursday 29th April 1965  
at 4.0 p.m. in the Society's Meeting Room  
at Regent's Park*

THE ZOOLOGICAL SOCIETY OF LONDON

*Patron*

HER MAJESTY THE QUEEN

*Council 1964-1965*

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Professor J. Eric Smith, Sc.D., F.R.S.

The Most Hon. The Marquess of Willingdon

G. E. W. Wolstenholme, Esq. O.B.E., F.R.C.P., F.I.Biol., *Vice-President*

# CONTENTS

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## *Report of the Council*

Membership	7
Finance	9
Zoological Gardens, Regent's Park	11
Whipsnade Park	15
Scientific activities	17
Research	25
Educational activities	29
Staff	32
Acknowledgments	34

## *Appendices*

1. Regulations
  2. Committees
  3. Staff
  4. Publications by Society's Staff and Research Workers
  5. List of genera, species and subspecies new to the Collection
  6. Donors of animals
  7. List of animals born in the Society's Collection
  8. List of animals received
  9. Donations to the Zoological Record
  10. Donations and grants to the Nuffield Institute of Comparative Medicine
  11. Books presented to the Library
- Meetings during 1965

## *Financial Accounts, with Auditors' Report*

IN THE POCKET ON BACK COVER

## THE MEMBERSHIP

### *Council*

At the Annual General Meeting held on 4th May the following members of the Council retired:

Mr E. Michael Behrens  
Mr S. Wilson Kitchen  
Professor R. J. Pumphrey  
Dr W. H. Thorpe  
Sir Landsborough Thomson

The Fellows elected to fill these vacancies were:

The Earl of Mansfield  
Sir John Ritchie  
Sir Malcolm Sargent  
Mr Peter Scott  
Professor J. Eric Smith

The Earl of Cranbrook and Sir Alexander Samuels were appointed to fill the vacancies caused by the death of Professor G. Payling Wright, and the resignation of Sir Arthur Duncan, in May 1964.

### *Roll of Members*

At the end of the year there were 3,644 Fellows and 1,653 Associates.

### *Special General Meeting*

At a Special General Meeting of Fellows held on Wednesday, 16th December, the following resolution was considered and passed:

'That pursuant to Byelaw 5 and upon the recommendation of the Council the subscription payable by Scientific Fellows be increased to £6 per annum with effect from 1st January 1965.'

Before the meeting a letter was sent to all Fellows explaining that it was essential to publish a third volume of *Proceedings* annually if the increasing flow of papers submitted for publication was to be dealt with more speedily. This additional cost, together with the increase in the costs of printing and production in recent years, made an increase in the subscription paid by Scientific Fellows unavoidable.

## *Amendments to Regulations*

The implementation of this Resolution made certain amendments to the Regulations issued in January 1963 necessary, and the new Regulations which were passed by Council in December are given in Appendix 1.

In particular, Regulation 18 has been amended to allow Scientific Fellows to introduce two guests, at any one time, to the Gardens, Regent's Park and to Whip-snade Park.

## *Obituary*

The Council records, with deep regret, the deaths during the year of Mr Jack Cotton, Professor G. Payling Wright, Sir Garrard Tyrwhitt Drake and Mr Percy Carpenter.

As stated in Council's Report for last year, Mr Cotton, whose generous contributions had opened the way to the redevelopment of much of the Society's Gardens, had been awarded the Society's Gold Medal, and at the Annual General Meeting the Medal was received by his son, Mr Derek Cotton.

Professor G. Payling Wright was a member of Council at the time of his death, and as a member of the Committee of the Nuffield Institute of Comparative Medicine, and Chairman of the Planning Group had played a most valuable part in the development of this Institute.

Sir Garrard Tyrwhitt Drake was a member of Council for many years and a Vice-President from 1942-46.

Mr Percy Carpenter, the senior partner of Messrs W. B. Keen & Company, the Society's Auditors, had been concerned with the Society's financial affairs for nearly 30 years.



The Camel paddock of the Cotton Terraces, London Zoo  
*W. G. Vanderson. Fox Photos*





Arabian Oryx . . .  
'Michael', calf born to  
'Caroline' the Arabian Oryx  
sent in May, 1963 from the  
London Zoo to the herd  
collected together by the  
Fauna Preservation Society  
at Phoenix Zoo, Arizona  
*John McDowell*

## FINANCE

*General Review*

Ordinary expenditure in 1964 was about 7 per cent higher than in the previous year, due mainly to increased salaries and wages and a rise in the cost of maintenance. On the other hand, the exceptionally fine summer weather brought better attendances, both at London Zoo and Whipsnade. There were 1,816,000 visitors to Regent's Park, a figure only marginally below the seven-year average, and 38,000 more than in 1963. Whipsnade's total was 675,000, which, though an improvement on 1963 (616,000), was still well behind the 757,000 visitors in 1961. 39,000 cars were brought into the Park by visitors compared with some 33,600 in 1963. With these higher gate receipts and substantial improvements in takings from the Zoo shops and catering activities, the overall results for the year show a small surplus on revenue account. The full accounts are given at the end of this Report.

The increase in sales from the Zoo shops was particularly gratifying, and reflects the success of the measures taken on the advice of Mr A. M. Fleming, late of Marks and Spencer Limited, who was appointed as consultant at the end of 1963.

Early in the year the Council commissioned the consultant firm, Marketing Development Limited, to suggest ways in which the Society's revenue-earning activities could be increased. The firm's main recommendation was the appointment of a Public Relations Officer whose principal task would be to seek, through advertisement, planned public relations and other means of promotion, to increase attendances both at the London Zoo and Whipsnade. Mr J. A. Dale, from Imperial Chemical Industries Limited, was selected for this appointment from a large number of applicants.

*Capital Account*

The rebuilding programme at Regent's Park, described in a later section of this Report, continued at a good pace, and payments of about £322,000 on Capital Account were made during the year.

*Donations*

A number of important donations towards the rebuilding programme were announced. Of these, a grant of £100,000 from the London County Council and an anonymous donation of £10,000 have already been received. In addition a contribution of £500,000, partly grant and partly long-term loan, was promised by

H.M. Government, and further undertakings have been received from Mr Charles Clore (£50,000) and from the Wolfson Foundation (£100,000), the latter sum being earmarked for the modernization of the Society's headquarters and the provision of a building alongside it to house the principal conservation societies of this country.

The Council gratefully acknowledges a number of other donations received during the year, including £250 from the Jane Hodge Foundation towards the Hospital, and £107 from Mrs Audrey M. Mars towards the Rebuilding Fund.

The late Mrs H. G. Fantham (Dr Annie Porter), who was the Society's Honorary Parasitologist from 1938 until her death in 1963, bequeathed to the Society a valuable microscope, and £5,000 to endow a Fantham Memorial Research Fellowship for research in parasitology or aquatic animal ecology.

### *Nuffield Institute of Comparative Medicine*

The Appeal, under the Chairmanship of Mr A. H. T. Chisholm, to raise funds to equip the Nuffield Institute and to run it for the first few years, made further progress, donations given or promised totalling £192,000 by the end of the year.

The Council gratefully acknowledges the gifts received, including the donation of £25,000 for radiological equipment from the Wellcome Trust, £20,000 for an electron microscope from the Sembal Trust, and generous gifts on covenant from the Wellcome Foundation, the Pfizer Group, Imperial Chemical Industries, and May and Baker Ltd. A full list of the donations and grants is given in Appendix 10 on page 53.

## ZOOLOGICAL GARDENS REGENT'S PARK

### *The Collection*

**Mammal section** In order to give the important collection of wild dogs better facilities than could be provided in their existing cages in the North Mammal House, the animals have been moved to the eastern side of the Old Cattle Sheds building, which has been converted to provide spacious interior dens with large outside runs. The effect of better accommodation on the animals has been striking; they are much more active and alert, and there is every hope that some of the rarer species may now breed. The space thus released in the North Mammal House is being used to arrange a better display of small cats.

In the eastern corner of the Zoo the cages abutting the Education building have been converted and equipped to exhibit Coatis and Ring-tailed Lemurs, and a colony of each has been installed with great success.

A particularly important acquisition is the pair of European Bison, which were presented to the British Forestry Commission by the Polish Forestry Commission and deposited in the Collection. Since February 1963 there has been only a single male of this species in the London Zoo, but it is now hoped to be able to breed this extremely rare animal.

Among the more interesting additions to the mammal collection this year have been a Binturong, a Siberian Weasel, two Hog Badgers, two Giant Pangolins and two Spectacled Bears.

**Aquarium** A number of tanks in all three halls have been renovated during the course of the year, and a new breeding-room for tropical freshwater fishes has been established. The outstanding exhibit still continues to be the Arapaima (*Arapaima gigas*) from South America which is now almost 5 feet long, more than three times the length it was when it arrived in June 1962.

**Children's Zoo** A new nocturnal section housing Pottos, Douroucoulis, Lemurs, Flying Squirrels and Bushbabies was opened in the early summer. It has proved a very successful exhibit, and was described in some detail in the July Newsletter.

*Animals of all kinds (except fish and invertebrates) at Regent's Park*

On 1st January 1964	2,314
Received in 1964 by presentation, exchange, deposit and purchase, and transfer from Whipsnade	925
Born in the Menagerie during 1964	210
	<hr/>
	3,449
Died, sold, sent in exchange, returned to depositors, and transferred to Whipsnade	838
	<hr/>
In the Gardens on 31st December 1964	2,611
	<hr/>

*Flower gardens*

The greenhouse and additional frames built during the year have proved to be a great help in growing the vast amount of plants now needed in the gardens.

The spring and summer flower beds of pansies, violas and *Primula denticulata*, followed by geraniums, and the dahlia border where 200 varieties were planted, were particularly good.

Shrubberies and gardens have been planted around the newly completed buildings, and a lawn laid in the square in the main restaurant area.

The Society is grateful to Sir George Taylor, Director of the Royal Botanic Gardens, Kew, for his generous gifts of tropical plants and seeds.

*Catering*

In order to provide additional accommodation for visitors the forecourt of the Regent Cafeteria is being extensively altered. The existing canvas canopy is being replaced by a rigid roof and the front of the building extended laterally to provide a new entrance to the Regent Restaurant.

Zoo Restaurants Limited have completed another successful year during which the banqueting services have been in constant demand, and the number of functions undertaken has considerably increased.

In July a reception, undertaken by Zoo Restaurants Limited, was held in the Gardens for 2,500 delegates attending the 20th International Geographical Congress.

## REDEVELOPMENT PLAN

During 1964 considerable progress was made in the modernization of the London Zoo.

The new Elephant and Rhinoceros Pavilion, designed by Casson, Conder & Partners should be in full use by the time this Report appears. The completion of this building, which will house two African and two Indian elephants, and four rhinoceroses, is an important step in the redevelopment programme as the elephants have for many years lived in underground quarters where little daylight penetrates, and where it has not been possible for the public to visit them. In their new house the elephants will enjoy modern facilities, including a sandpit, outdoor and indoor bathing pools (the latter heated), special heating and ventilation of their dens, and a spare den for use as a sick bay. The rhinoceroses also have a sick bay and a 'wallow' in their paddock.

When the rhinoceroses have been moved to their new quarters their present enclosures on the west side of the Old Cattle Sheds will be developed to provide quarantine quarters for ungulates destined for Whipsnade, and which have, by the Ministry of Agriculture's regulations, to remain in London for twelve months.

By the end of the year the Northern Aviary was complete except for final adjustments to the wire mesh, and the planting and landscaping of the surrounding area which it was hoped to finish in the spring. To provide seats for visitors there is a long shelter, which is divided by open pergolas into four bays. Pictorial display panels giving general information about birds are being prepared for the walls of this shelter.

In October work began on the south bank of the Canal, east of the new bridge, where the high wire fence at the water's edge is being replaced by a low rail and gravel path with seats, the bank itself being landscaped as a picnic area. The opportunity is being taken to improve the Waterbus landing stage, and it is hoped eventually to add a tea garden in this area.

A further improvement in the Middle Garden has been the conversion of the old circular Gorilla House, recently used for Kodiak Bears, to a Chimpanzee House. The new house provides roomy indoor dens, as well as an outdoor enclosure offering plenty of scope for gymnastics. Outdoor cages in the Monkey House have been enlarged and adapted for the orang utans.

Towards the end of the year, the old Wolverine Cages near the Pavilion Restaurant were demolished. They will be replaced by a Flamingo Pool which will be seen from the Restaurant and Cafeterias and will greatly improve this area of the Gardens.

With the completion of these minor projects in the spring, and the 'face-lift' proposed for the outside of the Aquarium, the last stages in the 'tidying-up' operation begun in the Gardens some five years ago will have been reached. It will still remain to tackle the rebuilding of the major sections housing small mammals, primates, birds and insects, all of which are due for replacement in the redevelopment plan.

### *Research facilities*

One of the new research buildings, the Wellcome Institute of Comparative Physiology, was completed early in the year. An account of its opening, performed by Sir Henry Dale, late Chairman of the Wellcome Trust, in the presence of H.R.H. The Duke of Edinburgh, appears later in this Report. The building of these modern laboratories in the space between the Hospital and the Works Department completes the redevelopment of this part of the Main Gardens.

The Nuffield Institute of Comparative Medicine was nearly completed by the end of the year and this building, which also houses the Society's new Meeting Rooms, should be occupied in the spring.

## WHIPSNADE PARK

In May the President, H.R.H. The Duke of Edinburgh, accompanied by the Secretary, visited the Park.

*The Collection*

A complete list of animals new to the Collection, and a list of those born at Whipsnade is given in the Appendices. The important births include 1 Black-faced Kangaroo, 2 Polar Bears, 2 Pumas, 3 Moose, 1 Bennett's Wallaby (White Variety), 2 Pronghorn Antelopes, 2 Tigers, 5 Emus, 5 Black Swans, 4 Quail, 2 Sarus Cranes, 1 Hawaiian Goose, 6 Queen Alexandra's Parrakeets and 5 Black-necked Swans.

A very tame male Cheetah, which had been the mascot of the Regiment, was presented by the 11th Battalion of the King's African Rifles. At the same time, Mrs S. Ellis of the Nairobi National Park presented another equally tame male Cheetah and it is hoped that these animals will, after quarantine, live in the Children's Zoo, walking around the park on a collar and lead.

*General developments*

A road around Woodfield Paddock has been completed, and the following new works have also been started: an office block, to replace the offices destroyed by fire in 1962; a spacious moated Elephant Paddock immediately opposite the main entrance gate; a quarantine station for animals destined for export to the United States of America; and as part of this building, quarters where exotic birds can be housed during the winter months.

*The Gene Bank*

The Gene Bank, where small flocks and herds of disappearing breeds of British and foreign domestic animals are established and held, now comprises:

	<i>Number remaining from original purchase or presentation</i>	<i>Present status of herds and flocks</i>
Longhorn Cattle	1 male, 7 females	22
Chartley Cattle		27
Cotswold Sheep	1 male, 4 females	9
Norfolk-horned Sheep	2 males, 2 females	12



	<i>Number remaining from original purchase or presentation</i>	<i>Present status of herds and flocks</i>
Lincoln Longwool Sheep	1 male, 6 females	12
Manx Loghtan Sheep	1 male	2
Woodland White-faced Sheep	2 males, 6 females	8
Portland Sheep	1 male, 3 females	6
Soay Sheep (ex Hirta)	5 males, 7 females	19

There are also birds of the following breeds: Lakenvelders, Sumatra Game Fowl, Silver Spangled Hamburgs, Indian Game Fowl, Old English Game Fowl, Buff Cochins, Redcaps, Silver Dorkings. The last three breeds have been added during the year. The Woodlands White-faced Sheep bred poorly and a fresh ram was therefore added to the flock. The Norfolk-horned Sheep were also poor breeders: three infertile rams were removed from the flock and, in an attempt to stimulate sexual activity in the remaining rams, 10 Kent ewes, kindly loaned by Cooper, McDougall & Robertson Limited, were added to the flock for six weeks during the breeding season.

These animals are being preserved primarily for their value as subjects for biological study. Skeletons of individual sheep which have died have been forwarded to the British Museum (Natural History) for preservation, and this material will continue to be collected until representative carcasses of each breed have been accumulated. Dr Alan Jamieson, of the Animal Breeding Research Organization, collected blood samples from the Longhorn and Chartley Cattle to test sera transference, and Dr J. W. B. King (Animal Breeding Research Organization) obtained milk from sheep and cows to study variations in casein components. Dr R. M. Lee, of the Cooper Technical Bureau, withdrew blood samples from sheep to study breed variations in a serological component which hydrolyses an anthelmintic preparation. Dr L. M. Ryder (Animal Breeding Research Organization) has collected wool samples for his studies on fleece evolution in domestic sheep, and Dr Alan Robertson of the Institute of Animal Genetics, Edinburgh, has received eggs for the study of proteins.

*Animals of all kinds (except fish and invertebrates) at Whipsnade Park*

On 1st January 1964	2,188
Received in 1964 by presentation, exchange, deposit, purchase, and transfer from Regent's Park	135
Born in the Park during 1964	458
	<hr/> 2,781
Died, sold, sent in exchange or returned to depositors, and transferred to Regent's Park	698
	<hr/> 2,083
In the Park on 31st December 1964	



Giraffes in the London Zoo  
*W. G. Vanderson. Fox Photos*

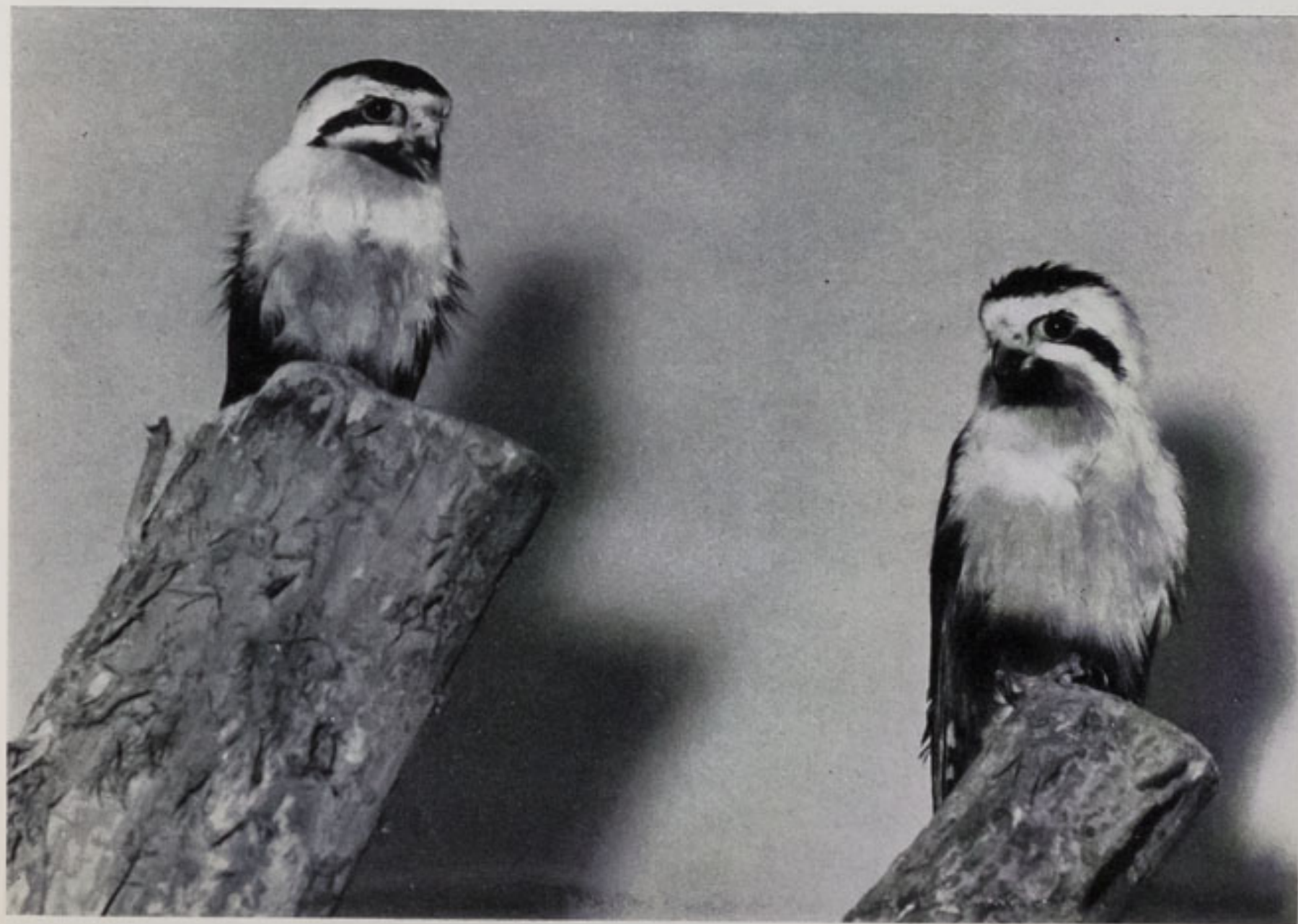


Polar Bear cubs at Whipsnade Park  
*Keystone Press Agency*



New Guinea 'Singing' Dogs, deposited by Sir Malcolm Sargent at the London Zoo  
*W. G. Vanderson. Fox Photos*

Red-thighed Falconets, *Microhierax caerulescens burmanicus*, a subspecies new to the Collection  
*The Zoological Society of London*





Axis Deer at Whipsnade Park  
*Daily Telegraph*



Yak in a paddock of the Cotton Terraces,  
London Zoo  
*W. G. Vanderson. Fox Photos*

## SCIENTIFIC ACTIVITIES

### *Scientific meetings*

Sixty-six papers accepted for publication were communicated or read in title at the eight scientific meetings held during the year. In addition, many other communications were made at the meetings: Mr O. Graham-Jones showed and commented on a film illustrating the sedation of captive wild animals; an illustrated account of the ecological studies in the Queen Elizabeth Park, Uganda, was given by Dr R. M. Laws; Dr Desmond Morris recounted the history of Giant Pandas in captivity and showed a film taken in the Peking Zoo of the young Giant Panda and its mother. He also commented on a film showing the birth of a Giraffe; Mr G. Porter discussed the effects of microenvironmental temperature on weight gain in mice; Dr F. C. Fraser introduced a film on the Spinner Porpoise of the Pacific and Mr P. E. Purves showed a film dealing with echo-navigation in Dolphins; a film on the Common Seal *Phoca vitulina* was exhibited by Professor H. R. Hewer; Mr Andrew Watson gave an account of the detection and identification of Bats in flight by their ultrasounds, illustrating his remarks by a practical demonstration; Captain C. R. S. Pitman played recordings of cries of some African Nightjars and Owls, and Dr W. H. Thorpe described the spectrograph analysis of Nightjar cries; a film of the Chimpanzees of the Budongo Forest was shown by Dr V. Reynolds.

### *Symposia*

The following were held:

On 4th/5th March a symposium on 'The Mollusca' organized by Professor C. M. Yonge.

On 20th July a symposium on 'The endocrine control of metabolism and maturation in insects' arranged by Dr D. B. Carlisle of the Anti-Locust Research Centre.

On 24th-26th November, a symposium on 'Comparative biology of reproduction in mammals' organized jointly with The Society for the Study of Fertility, and supported financially by the World Health Organization. Communications on the physiology and biology of mammalian reproduction were given, and a section was devoted to marsupials.

The Symposia, all of which were open to any interested scientist as well as to Fellows of the Society, were very well attended and many scientists from abroad participated.

### *Ethology Seminars*

Eleven Seminars on various aspects of animal behaviour were arranged by the Curator of Mammals.

### *Publications*

During the year the Council reviewed its policy on scientific publications and decided it was essential to improve the speed of production. A significant improvement could only be achieved by the publication of three, instead of two, volumes of *Proceedings* annually and, in addition, it would be necessary to publish a fourth volume in 1965. Council also concluded an agreement whereby the *Proceedings*, *Transactions* and *Symposia* will, from January 1965, be published jointly with Academic Press.

**Proceedings** Two volumes, each consisting of four parts, were published: Volume 142 was completed on 26th June and Volume 143 on 15th December. The 78 papers and abstracts contained in these volumes are representative of a wide variety of subjects in the zoological sciences including:

*Volume 142.* E. H. ASHTON and C. E. OXNARD, 'Functional adaptations in the primate shoulder girdle'; J. MORTON BOYD, J. MACKAY DONEY, R. GRAHAM GUNN and PETER A. JEWELL, 'The Soay sheep of the island of Hirta, St Kilda. A study of a feral population'; A. J. E. CAVE, 'The thymus gland in three genera of rhinoceros'; J. A. L. COOKE, 'A revisionary study of some spiders of the rare family Prodidomidae'; JOHN HURRELL CROOK, 'Field experiments on the nest construction and repair behaviour of certain weaver birds'; H. MUNRO FOX, 'On the larval stages of cyprids and on *Siphlocandona* (Crustacea, Ostracoda)'; J. GREEN, 'Two new species of *Parabathynella* (Crustacea : Syncarida) from Lake Albert, Uganda'; H. R. HEWER, 'The determination of age, sexual maturity, longevity and a life-table in the Grey Seal (*Halichoerus grypus*)'; JAMES A. HOPSON, 'Tooth replacement in cynodont, dicynodont and therocephalian reptiles'; RICHARD NEWELL, 'Some factors controlling the upstream distribution of *Hydrobia ulvae* (Gastropoda, Prosobranchia)'; P. J. S. OLNEY, 'The food of mallard *Anas platyrhynchos platyrhynchos* collected from coastal and estuarine areas'; ROSALIND M. PONTIN, 'A comparative account of the protonephridia of *Asplanchna* (Rotifera) with special reference to the flame bulbs'; G. B. SHARMAN and PHYLLIS E. PILTON, 'The life history and reproduction of the Red Kangaroo (*Megaleia rufa*)'; J. D. THOMAS, 'Studies on the growth of trout, *Salmo trutta* from four contrasting habitats'; C. TYLER, 'A study of the egg shells of the Anatidae'; C. A. WRIGHT, 'Biochemical variation in *Lymnaea peregra* (Mollusca,

Basommatophora)'. *Volume 143*. V. P. AGRAWAL, 'Studies on the physiology of digestion in *Orchestia gammarella*'; J. GORDON BLOWER and PETER D. GABBUTT, 'Studies on the millipedes of a Devon oak wood'; S. H. CHUANG, 'The circulation of coelomic fluid in *Lingula unguis*'; G. B. CORBET, 'The Grey Long-eared Bat *Plecotus austriacus* in England and the Channel Islands'; J. M. EDINGTON, 'The taxonomy of British polycentropid larvae (Trichoptera)'; R. N. T.-W. -FIENNES, 'Report of the Society's Pathologist for the year 1962' and 'Cystic bone disease in South American Primates - II'; ALASTAIR GRAHAM, 'The functional anatomy of the buccal mass of the limpet (*Patella vulgata*)'; OLIVER GRAHAM-JONES, 'Cystic bone disease in South American Primates - I'; R. A. HINDE, T. E. ROWELL and Y. SPENCER-BOOTH, 'Behaviour of socially living Rhesus Monkeys in their first six months'; WILLIAM G. INGLIS, 'The structure of the nematode cuticle'; ELISABETH PALMER and G. WEDDELL, 'The relationship between structure, innervation and function of the skin of the Bottlenose Dolphin (*Tursiops truncatus*)'; JOCELYN D. REID, 'The reproduction of the sacoglossan opisthobranch *Elysia maoria*'; R. W. SIMS, 'Internal fertilization and the functional relationship of the female and spermathecal systems in new earthworms from Ghana (Eudrilidae : Oligochaeta)'; A. M. STUART, 'The structure and function of the sternal gland in *Zootermopsis nevadensis* (Isoptera)'.

**Transactions** Volume 30 by Jasmine Sidney entitled 'The past and present distribution of some African ungulates' is in the press and should be published shortly.

**Symposia** Numbers 11, 12 and 13 of the *Symposia* were published. Number 11, 'Cardiovascular anatomy and pathology', published in February, contained the papers given at the Symposium held in November 1962. Number 12, entitled 'The mammalian epidermis and its derivatives', containing the proceedings of the Symposium held in March 1963, was published in March. Symposium Number 13 on 'The Biology of Survival' held in May 1963 and organized jointly with the Physiological Society and the Society for the Study of Human Biology, was published in August 1964.

**Nomenclator Zoologicus** The publication of the volume containing the names and bibliographical references of new genera and subgenera from the literature of 1946 to 1955 has been unavoidably delayed, but it is expected that it will be published in the first half of 1965.

**Zoological Record** On the retirement of Mr G. B. Stratton, Dr H. G. Vevers was appointed Editor.

Volume 98, recording the zoological literature published in the year 1961, was completed in February 1965.

Ten sections of Volume 99, covering the literature for 1962, have been published and eight are in the press. Of Volume 100, recording the literature for 1963, one sec-



tion has been published and five are in the press. The cost of the production of this bibliography continues to rise, and as the income from sales and subscriptions remains insufficient to cover expenses publication depends to a large extent on the donations to the Zoological Record Fund, which are recorded in Appendix 9.

The volume of literature examined increases annually, and the Society is much indebted to the Recorders who undertake the preparation of this comprehensive bibliography.

**International Zoo Yearbook** With the continued development of the *Yearbook*, the Council has appointed a Committee, with international membership, to advise on the general policy of this publication. The members of the Committee are given in Appendix 2.

Volume 5 published in February 1965, is divided into three parts: Part I is a collection of 22 articles on ungulates in captivity. The papers include F. WALTHER, 'Ethological aspects of keeping different species of ungulates together in captivity'; D. BACKHAUS and H. FRADRICH, 'Experiences keeping various species of ungulates together at Frankfurt Zoo'; J. E. N. SLOAN, 'Helminthiasis in ungulates'; Z. VESELOVSKY and J. VOLF, 'Breeding and care of rare Asian equids at Prague Zoo'; H. WACKERNAGEL, 'Grant's Zebra, *Equus burchelli boehmi*, at Basle Zoo - a contribution to breeding biology'; J. A. DAVIS, 'Reproductive behaviour of the Small Malayan chevrotain, *Tragulus javanicus*, at New York Zoo'; and A. OEMING, 'A herd of musk-ox, *Ovibos moschatus*, in captivity'.

Part 2, new developments in the zoo world, is divided into subsections entitled Conservation, Breeding, Stock, Aquarium Management, Veterinary Work, Zoological Research, Educational Activities, and Architecture and Construction. There are 84 articles, including I. W. ROWLANDS, 'Artificial insemination of mammals in captivity'; K. FELLNER, 'Natural rearing of Clouded Leopards, *Neofelis nebulosa*, at Frankfurt Zoo'; H. MENDELSSOHN, 'Breeding the Syrian Hyrax, *Procavia capensis syriaca*'; W. N. VERHEYEN, 'Breeding the Congo Peacock, *Afropavo congensis*, at Antwerp Zoo'; G. BASILEWSKY, 'Keeping and breeding Madagascan lemurs in captivity'; C. A. HILL, 'Maintenance of facial coloration in the Red Uakari, *Cacajao rubicundus*'; V. and F. REYNOLDS, 'Natural environment and behaviour of Chimpanzees, *Pan troglodytes schweinfurthi*, and suggestions for their care in zoos'; F. J. R. JUNOR, 'Hand-rearing birds of the piscivorous type in the Kariba and Lake Kyle areas of Rhodesia'; W. G. CONWAY, 'Care of James's Flamingo, *Phoenicoparrus jamesi*, and the Andean Flamingo, *P. andinus*, in captivity'; I. POGLAYEN, 'Observations on Herrera's Mud Turtle, *Kinosternum herrerai*'; J. W. ATZ, 'Principles and practices of water management for marine aquaria'; C. W. GRAY, 'Paraplegia in a male Lowland Gorilla, *Gorilla g. gorilla*'; D. THIENPOINT and C. J. E. NIEMEGERES, 'R 7464, a new potent anaesthetic in fish'; J. SCHMITT, 'Blood groups in non-human primates'; and E. F. JACOBI, 'New nocturnal house at Amsterdam Zoo'.

Part 3, the reference section, contains detailed lists of zoos and aquaria of the world, changes in personnel, numbers and species of animals bred by zoos during 1963, a census of rare animals in zoos and aquaria, an index to the authors of articles in Volumes 1-4, and a subject index to Volumes 1-5. New features in this section include the list, published by the International Union for the Conservation of Nature, of mammals thought to be threatened with extinction, a list of recent important zoological research, veterinary work and publications of zoos and aquaria, and a list of recent and planned construction in zoos and aquaria. Once again the Society records its gratitude to the ever-increasing number of zoos, aquaria, research organizations and private individuals who contribute to the *Yearbook*.

### *Library*

During 1964, 4,160 volumes have been borrowed from the Library by Fellows, Associates and scientific institutions, and extensive use has been made of the Library's information and reference facilities. 5,834 parts of 971 periodicals were added to the Library during the year. The work of improving and increasing the photograph collection has continued and, since a better selection is now available, there has been a large increase in the number of prints sold.

The complete reconstruction of the Library will begin in 1965, and a great deal of preparatory work has been undertaken. By careful planning and organization it is hoped that the library service to Fellows and Associates can be maintained during the reconstruction period, although there will inevitably be some disruption.

### *Awards for contributions to zoology*

At the Annual General Meeting the President, H.R.H. The Duke of Edinburgh, presented the following awards:

**The Scientific Medal** (awarded to persons under 40 years of age for scientific merit and distinguished work in zoology) to *Dr Leslie Brent*, the National Institute for Medical Research; *Dr Peter Humphry Greenwood*, Department of Zoology, British Museum (Natural History); and to *Dr Janet Harker*, Department of Zoology, Cambridge University.

**The Stamford Raffles Award** to *Mr Cyril Winthrop Mackworth-Praed*, of Castle Top, Burley, Hampshire, in recognition of his distinguished contributions, as an amateur zoologist, to ornithology.

**The Thomas Henry Huxley Award** (for original work submitted as a doctor's thesis) to *Dr Charles Hugh O'Neill* of King's College, London. A Certificate of Commendation was also awarded to *Dr Leonard Hill*, Department of Zoology, Sheffield University.

**The Prince Philip Prize** (for an essay on animal ecology or behaviour submitted by a pupil of zoology, taking the G.C.E. 'A' Level or equivalent examination, in any school in the United Kingdom) to *Miss Janice Cornell*, The County Grammar School for Girls, Lewes, Sussex.

### *Clinical departments*

**Veterinary section** The total number of cases passing through the Hospital was 246, the average recovery rate reaching a new high figure of nearly 90%. Thirty-five animals passed through the quarantine station. The clinics of the Out Patients' Department were used by 81 people, who brought, as new patients, a total of 48 birds, 4 reptiles and 29 mammals.

Amongst the surgical and other activities undertaken were a fracture repair of the left foreleg of a Maned Wolf; an electroencephalographic examination of a Chimpanzee; and the exteriorization of an ingrowing tusk of the young African Elephant 'Toto'.

**Pathology laboratory** During the year 530 autopsies were made on animals from amongst the resident acclimatized populations which died in the Gardens, Regent's Park. A further 364 autopsies were made on newly arrived unacclimatized animals and on animals received from external sources. Diagnostic reports were made on 967 specimens from living animals.

The health of the animals during the exceptionally pleasant weather which persisted throughout the year has been unusually good. Deaths from infectious causes were at a low level. There were no respiratory deaths in the autumn amongst the ungulates, which may be the result of the improved conditions provided for the animals in the new quarters in the Cotton Terraces.

During the absence of the Pathologist from March to June on sick leave assistance with the work of the department was given by Dr E. C. Appleby, the Royal Veterinary College, and by Dr R. Finlayson, the Royal College of Surgeons, to both of whom the Society is grateful.

Mr Martin Senior, Consulting Veterinary Surgeon (Whipsnade Park), and Mr V. J. A. Manton, Deputy Director, carried out 266 autopsies – 134 on birds, 129 on mammals, and 3 on reptiles.

### *Conferences and visits, etc.*

The Annual Conference of the Directors of British Zoological Gardens was held at the Society's offices in May, and was attended by the Directors of the Zoological Gardens in Belfast, Bristol, Chester, Dublin, Edinburgh, and Paignton and members of the Society's staff.

The Society was host to the delegates attending an international Symposium in June on 'The role of zoos in conservation', which was held in the Society's Meeting Room, and sponsored by the International Union for the Conservation of Nature,

the International Union of Directors of Zoological Gardens, and the International Council for Bird Preservation.

The following resolution was passed at the Symposium, 'That an international organization of zoological gardens, experimental research institutions, animal collections and animal traders should be developed through the agency of the I.U.C.N. Zoo Liaison Committee; that this federation should be formed, among other purposes, for developing a method of distributing certain rare animals for exhibition in co-operation with the I.U.C.N. Survival Service Commission and for co-operating with the I.U.C.N. and various national governments in the administration of this method.' The Council at a later meeting expressed its support of this recommendation, and its desire to be associated with such a Federation when established.

The Scientific Director, Dr L. Harrison Matthews, has continued to serve as a member of the Board of Studies in Zoology and Comparative Anatomy of the University of London, the Consultative Committee on Grey Seals of the Nature Conservancy, the Scientific Advisory Committee to the Wildfowl Trust, the Biological Expeditions Committee, the North Borneo Expedition Committee of the Royal Society, the Trypanosomiasis Panel of the Department of Technical Co-operation, and as Chairman of the World List of Scientific Periodicals. He delivered the opening paper and took the Chair at the Symposium on the Biology of Seals, which was held at Cambridge in September, and he gave the Warwick James Lecture at the Royal Dental Hospital of London.

Dr L. G. Goodwin, the Director of the Nuffield Institute of Comparative Medicine, was elected President of the British Society for Parasitology and attended the International Congress of Parasitology in Rome during September. He was also a member of a World Health Organization Scientific Group on Drug Resistance of Malaria Parasites held in Geneva in October, and was appointed to the Tropical Medicine Research Board of the Medical Research Council and to the Subcommittee on Toxicity of the Dunlop Committee on Safety of Drugs.

The Pathologist and Head of the Pathology Department of the Nuffield Institute of Comparative Medicine, Mr R. N. Fiennes, contributed a paper entitled 'Atheroma in wild animals' at a Conference on Comparative Atherosclerosis, held in Los Angeles in February, which was published in an Atlas of Comparative Cardiovascular Disease in January 1965.

The Senior Veterinary Officer, Mr O. Graham-Jones, visited Stockholm during the year at the invitation of the Swedish Specialists' Association and presented two papers. A paper on 'Aspects of the Diagnosis, Treatment and Control of Tuberculosis in Zoo Animals', which he was invited to give to the International Symposium on 'Diseases in Zoo Animals' in Vienna, was read by Mr V. J. A. Manton.

Members of staff of the Wellcome Institute of Comparative Physiology took part in several scientific meetings, including a Symposium of the Mammal Society at Bangor in April (three papers read), the Annual Conference of the Society for the

Study of Fertility, at Oxford in July, the Seal Symposium at Cambridge in September, and the International Symposium on Comparative Biology of Reproduction in Mammals at Regent's Park in November (four papers read). In March, Dr I. W. Rowlands, the Senior Research Fellow, also took part in the Biological Council's Symposium on Agents affecting fertility, and he has continued to serve on the Committee of the Society for the Study of Fertility and the Society for Endocrinology.

Mr V. J. A. Manton, the Deputy Director, Whippsnade Park, attended the VIth International Symposium on Diseases of Zoo Animals held in Vienna, the Annual Congress of the British Veterinary Association at Bristol, and visited Schönbrunn Zoo.

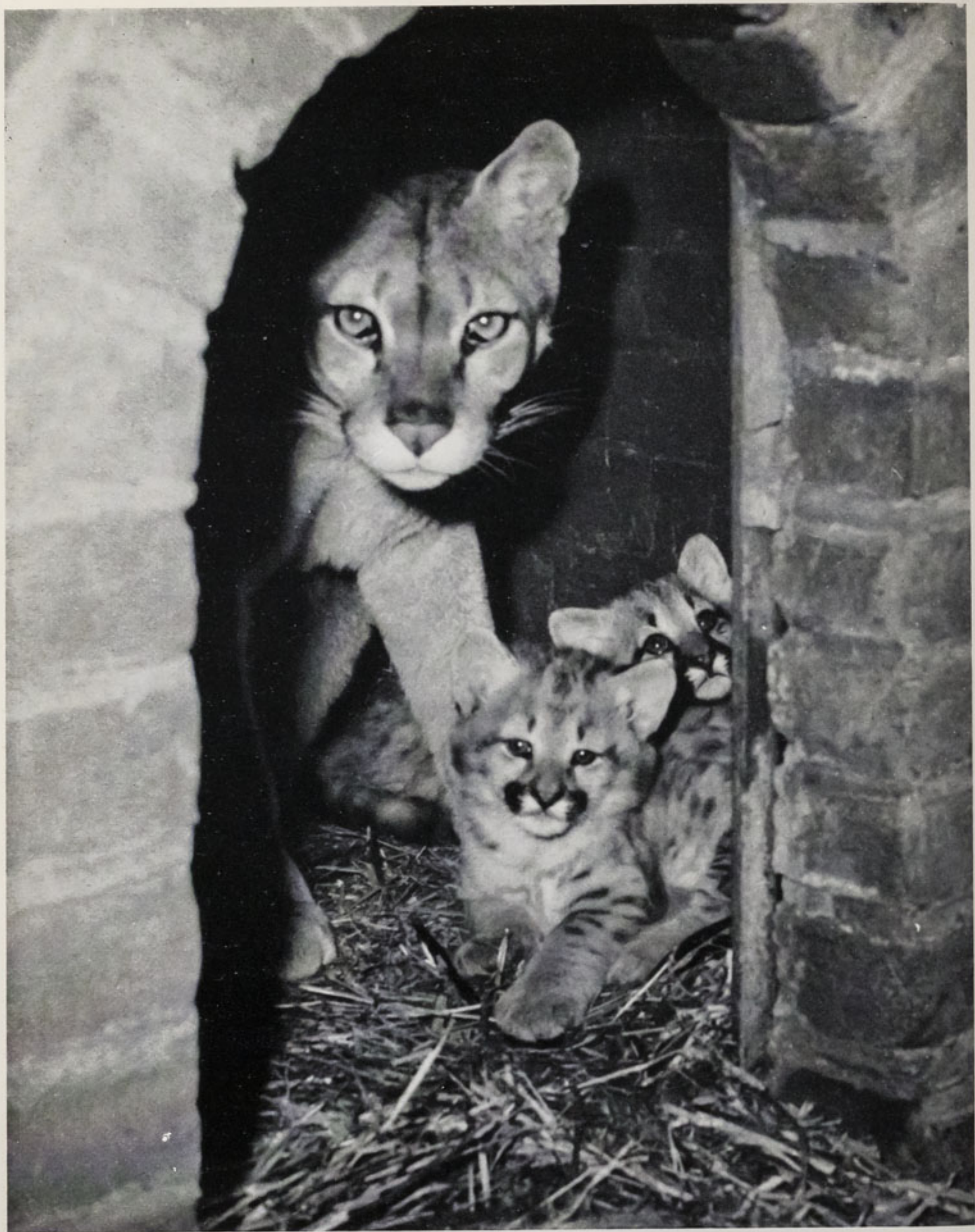
Miss Caroline Jarvis, editor of the *International Zoo Yearbook*, visited the New York Zoological Park, the New York Aquarium, the Catskill Game Farm, the National Zoological Park in Washington, the Philadelphia Zoological Garden, the Cleveland Zoological Park, and the Brookfield and Lincoln Park Zoos in Chicago. She also visited a number of continental zoos.

Mr Oliver Graham-Jones was awarded the Livesey Medal of the Royal College of Veterinary Surgeons. This medal may be awarded every third year to the person who, in the judgment of the Council of the Royal College of Veterinary Surgeons, has done the most serviceable work towards the prevention and/or alleviation of pain and/or fear in animals.

Dr H. G. Vevers, the Curator of the Aquarium, was awarded the first Fantham Memorial Research Fellowship to enable him to take part in the Royal Society's 1965 expedition to the Solomon Islands.



Iguana in the London Zoo  
*W. G. Vanderson. Fox Photos*



Puma cubs at Whipsnade Park  
*Associated Press*

## RESEARCH

Dr H. G. Vevers, the Curator of the Aquarium, has continued his work, in collaboration with Professor N. Millott, on the histochemistry and function of the axial organ of echinoids. A preliminary note of this work has been prepared and accepted for publication in *Nature*.

He has also made some progress in a survey of the pigments present in reptile and amphibian skins.

Dr Desmond Morris, the Curator of Mammals, has continued his animal behaviour research, and the building previously used as a Prosectorium has been converted for use as animal behaviour laboratories. Under his supervision the following projects are being carried out by research workers: Dr John Fentress is observing the various motor patterns of the nine animals in Wolf Wood. Mrs Christine King is working on imitation and observational learning in monkeys. Miss Devra Kleiman is observing the general behaviour of the Canidae available at the London Zoo. Dr Frances Reynolds is conducting a comparative study of hoarding behaviour in various species of rodents. Dr John Sparks is studying social grooming behaviour both in birds and mammals.

*The Nuffield Institute of Comparative Medicine*

Pending the completion of the building to house the Institute, the laboratory space and facilities provided at the Wellcome Institute of Comparative Physiology have enabled research work to begin in 1964.

The Heads of the Departments of the Institute have now been appointed. Dr G. R. Smith, at present Officer-in-Charge of the Central Laboratory of the United Nations Technical Assistance Board in Dar-es-Salaam, will take charge of the Infectious Diseases Department in March 1965. Dr M. A. Crawford, at present Lecturer in Biochemistry at Makerere College, Kampala, will take charge of the Biochemistry Department in July 1965. Mr P. R. E. Wallace joined the staff as Laboratory Superintendent in October.

**Pathology** Mr R. N. Fiennes, Head of the Pathology Department, has continued his work on cardiovascular disease and is now engaged on a study of the pathology of osteodystrophies in South American primates. When the Institute is in operation it will be possible to extend these investigations. A further grant of \$1,500 was given by the World Health Organization for these projects.

Dr R. Finlayson of St Bartholomew's Hospital (now at the Royal College of



Surgeons) continued his studies of cardiovascular diseases in animals which died in the London Zoo, and has prepared a monograph covering the results of his investigations during the past five years.

Miss S. K. Sikes completed a preliminary survey of arterial disease in wild animals in East Africa and, after making an assessment of the material collected, returned to Kenya in November to make further observations during the dry season of 1964-5.

Miss C. M. Hawkey joined the staff in October and is investigating factors which control the clotting of blood and fibrinolysis in a variety of species. This work is being carried out in collaboration with Dr C. Symons, Consultant Physician to the Royal Free and New End Hospitals.

The foregoing research projects have received financial support from the British Heart Foundation.

**Biochemistry and Infectious Diseases** With the co-operation of the Senior Veterinary Officer, Mr O. Graham-Jones, and of Professor I. D. P. Wootton of the Post-graduate Medical School at Hammersmith, basic information has been collected on the haematology and blood chemistry of a wide range of animal species. This has already been of great value in the diagnosis of disease of animals in the Society's Collection.

Mr P. F. L. Boreham joined the staff in September and is studying pharmacologically active substances in the tissues of animals with trypanosome infections. This work has been registered as the subject of a Ph.D. thesis of London University, and is supported by a grant from the Department of Technical Co-operation.

Dr P. A. J. Ball, Consultant Physician to the Middlesex Hospital, with the aid of a grant from the Medical Research Council, began work in October on the immunological aspects of helminthic infections.

Dr A. Voller, at present at the London School of Hygiene and Tropical Medicine, will join the staff in April 1965 to study protozoal and other infections by immunofluorescent techniques. This project will also be financed by the Medical Research Council.

**Radiology** Dr G. du Boulay of St Bartholomew's Hospital has given valuable advice on the design and equipment of the X-ray suite, and when the apparatus is installed he will begin a radiological study of cerebral blood vessels.

### *The Wellcome Institute of Comparative Physiology*

Although the Institute was occupied in January by Dr I. W. Rowlands (the Senior Research Fellow), Dr P. A. Jewell (Research Fellow) and members of the secretarial and technical staff who moved to the Institute from the Royal Veterinary College, London, it was decided, for various reasons, not to disrupt the work of other members of the scientific staff who were working in laboratories elsewhere.

Dr A. D. Woodhead (Research Fellow) remained at the Fisheries Laboratory in Lowestoft, and Dr G. H. Manley (Research Fellow) continued his work in another laboratory in the Gardens until the middle of November. Mr Gerald Clough (Research Student) was required to remain in Cambridge to complete his Ph.D. thesis. In April, one laboratory was set aside for the use of the Director of the Nuffield Institute of Comparative Medicine and other members of his staff until their new building was ready for occupation.

The Institute was officially opened on 5th May 1964, by Sir Henry Dale, O.M., F.R.S., in the presence of H.R.H. The Duke of Edinburgh, together with Trustees of the Wellcome Trust, officers and members of Council, members of several of the Society's committees and many distinguished scientists. Demonstrations of work were presented by the scientific staff of the Institute.

The founding of the Institute as a centre of research into the comparative biology of reproduction was celebrated later in the year (24th–26th November) by holding the International Symposium on this subject, which was attended by many distinguished biologists from overseas.

Dr Rowlands has continued his observations on the reproductive cycle of the Skomer Vole in natural and laboratory conditions. Further work, in collaboration with Dr J. S. Perry and Dr R. B. Heap of the Institute of Animal Physiology, Babraham, has been carried out on the endocrine control of gestation in the guinea pig and a parallel investigation has been initiated in the Coypu. The results of this latter investigation were reported at the International Symposium mentioned above.

Dr Jewell is examining the factors affecting the survival of young animals in the flock of Soay Sheep on Hirta (St Kilda) and the contribution of primiparous animals to the breeding performance of the population. A similar study on the Skomer Vole is being made to investigate fertility in young animals during the breeding season in which they are born and to assess the contribution made by animals of different age-classes to the growth of population.

Dr Manley's studies on social behaviour and reproductive patterns in loroid primates have been extended to include the Angwantibo, of which three specimens were obtained from Nigeria. Dr Manley's Fellowship has been extended for a further two years from the end of 1964, to enable him to study the behavioural aspects of infertility of animals in the Gardens, now being initiated by Dr R. Sadleir, and described below.

Dr A. D. Woodhead has continued to study reproduction and migration in the Arctic cod and North Sea plaice and has completed her work of thyroid activity in the Spur Dogfish. Similar studies are now being made on several other elasmobranch fish. Investigations of the effects of age on the gonads and endocrine glands of several teleosts are in progress. Dr Woodhead's Fellowship ended in September and a grant was obtained from the Development Commission to allow her to continue these studies.

Mr Gerald Clough has spent this, the last year of his Studentship, in Cambridge studying the hippopotamus material collected previously in Uganda, and is preparing a dissertation for the Ph.D. degree. He has been appointed Research Assistant as from 1st January 1965.

Dr Richard Sadleir took up his appointment as Research Fellow on 1st September to study the physiological aspect of infertility in captive animals. The fertility of mammals in the Society's collection has been classified as a general background to the breeding improvement programme, and equipment is being assembled for semen collection and preservation.

Mr J. J. R. Grimsdell, a Cambridge post-graduate research student, is spending the current academic year at the Institute to gain experience in techniques used in the study of comparative reproduction.

## EDUCATIONAL ACTIVITIES

### *Lecture-demonstrations for school pupils*

The facilities offered to school parties visiting the London Zoo and Whipsnade continue to be widely appreciated, and a growing number of schools from an area extending from the south coast to the Midlands attend each year as a normal part of the school curriculum.

During 1964 the attendances were:

Spring Term – Regent's Park. From Secondary Schools	9,620
Summer Term – Whipsnade Park. From Secondary Schools	3,261
Summer Term – Regent's Park. From Primary Schools	11,516
Autumn Term – Regent's Park. From Secondary Schools	10,778
	<hr/>
Total	35,175
	<hr/>

These totals represent the highest ever achieved for each particular period, the total attendance for the year being 17% higher than that for 1963.

The resources of the Education Department are now being utilized to the fullest possible extent for a large part of each term, and although it is normally possible to accommodate the schools who make bookings well in advance and are prepared to accept alternative dates, there are occasions, especially towards the end of the Spring Term and in June, when it is necessary to refuse bookings.

During the year short courses were organized for students of zoology from universities, whilst students from teachers' training colleges and technical colleges attended special lectures.

### *Young Zoologists' Club*

Membership of the Young Zoologists' Club increased to a total of approximately 4,200. Nevertheless unavoidable overhead expenses have also tended to rise; it was therefore decided to increase the subscription paid by individual members from 10s to 15s from 1st January 1965.

The meetings of members have included guided tours at both the London Zoo

and Whipsnade, film shows and an expedition to Box Hill. Some older members spent a week at Dale Fort, Pembrokeshire, studying the ecology of the sea-shore. A Brains Trust held in December, at which Mr Johnny Morris was chairman, with Mr Maxwell Knight, Dr L. Harrison Matthews and Mr O. Graham-Jones participating, proved very popular.

Three issues of *Zoo Magazine* appeared during the year, and the Club Information Bureau answered a wide variety of queries from members.

The Council is grateful to those Fellows and friends of the Society who have assisted and encouraged the Club during the year.

### *Christmas lectures*

Three meetings were organized during the Christmas holidays for the children and young friends of members of the Society. Mr Richard Fitter gave a lecture entitled 'Wild Life in Danger', Dr J. R. Napier spoke on 'Apes in the Attic', and at the third meeting the film 'The African Lion' was shown. These meetings were very popular and in each case all the available tickets were taken up.

### *Television and Film Unit*

The Television and Film Unit, as a new department, was established in January. The principal functions of this department are to deal with all requests for facilities for television, filming and still photography at the London Zoo and Whipsnade, and also to prepare original films for the Society's scientific records.

During the year 31 complete television programmes were produced in the London Zoo, of which 23 were recorded in April by Granada TV for transmission during the summer in the series 'Zootime', which celebrated its eighth anniversary on May 12th. A further series of one-hour programmes by Granada were transmitted direct from the Zoo on three afternoons in April. In July and August a series of five half-hour programmes were recorded at the Zoo and Whipsnade by the BBC Natural History Unit, and were transmitted in September under the titles 'London's Zoo' and 'London's Zoo in the Country'.

In addition, many shorter items were filmed in the Gardens for inclusion in a wide variety of programmes, among them the BBC News and Schools' Services, 'Blue Peter' (BBC 1), 'Vision On' (BBC 1), 'Animal Magic' (BBC 1), 'Playschool' (BBC 2), 'Tonight' (BBC 1), and 'Town and Around' (BBC 1); 'World in Action' (Granada TV), as well as the news and educational services of Rediffusion Television, Southern Television, the Canadian Broadcasting Corporation and German Television. Among programmes shown in 1964 but recorded earlier were the six films produced by the Zoological Society/Granada TV Film Unit in 1963, which were transmitted for the first time during the summer of 1964 under the title 'People Like Us'.

The London Zoo was also used on four occasions as a background location for

cinema feature films, and facilities were provided, both in London and at Whippsnade, for a wide range of professional still photography.

Concurrently with these activities, the Film Unit has been preparing its own colour films on subjects of scientific interest. Two 15-minute films entitled 'Teeth in action' and 'Sedation of wild animals in captivity' were completed, and two further films, 'The Comparative Ethology of the Canidae', and 'Social grooming in Vertebrates', are now in production. In addition, a number of shorter sequences illustrating new acquisitions and other items of topical interest were shown at Scientific Meetings, and the first of a series of sections of colour film was supplied to the Education Department for the illustration of the lectures to schools.

The Council is most grateful to Granada TV, who generously gave to the Society the building which had been built and equipped as a television studio.

## STAFF

At the end of the year the permanent staff of the Society totalled 527.

Of these, 421 were employed in the Headquarters of the Society and at the London Zoo, whilst 106 were employed at Whipsnade Park.

A list of senior members of the staff is given in Appendix 3.

### *Appointments*

Miss E. M. Owen was appointed Assistant Controller.

Mr J. A. Dale was appointed to the new post of Public Relations Officer, with Miss J. Crammond as his assistant.

Mr R. A. Fish was appointed to the post of Librarian in succession to Mr Stratton, and Mr J. Ward succeeded Mr L. M. Flewin as Gardens Executive of the London Zoo. Dr Fae Hall was appointed Television and Film Officer.

Messrs D. H. Williams and J. Stidworthy were appointed Assistant Education Officers during the year.

At Whipsnade Park, Mr M. Levine succeeded Mr Rhodes as Catering Manager.

Mr P. R. E. Wallace was appointed to the post of Laboratory Superintendent, the Nuffield Institute of Comparative Medicine.

### *Retirements*

On his retirement, after 50 years' service, Mr G. B. Stratton, Librarian was awarded the Silver Medal in recognition of his devoted service to the Society's publications and Library.

Several other members retired on pension, including Mr L. M. Flewin, Gardens Executive, after 43 years' service, Mr C. G. Harwood, Transport Executive, after 37 years' service, and Mr F. Stilwell, Signwriter, after 41 years' service.

At Whipsnade, Mr E. G. Rhodes, the Catering Manager, retired on pension owing to ill health, and Mr A. C. W. Corbett, the Clerk of Works, retired after 40 years' service.

### *Bronze Medals*

The Society's Bronze Medal was awarded to Mr G. J. Ashby in recognition of his distinguished work in the culture of insects, and to Mr F. J. Myers in recognition of his long and devoted service as Clerk of Works at Regent's Park. The Bronze

Medal was also awarded to Mr K. Alliborne for his courage in rescuing a fellow keeper from attack by the Giant Panda.

### *Other staff matters*

Following the retirement of Mr Harwood, the post of Transport Executive has been abolished and the work transferred to other Departments, the Catering Department having responsibility for the management of the Zoo Shop.

A new section responsible for the engraving of scientific labels and the preparation of signs and notices was formed under the direction of the Establishments Officer, and a concerted effort is being made to bring the labelling both in the London Zoo and at Whipsnade Park up to date.

The Joint Consultative Committee met regularly during the year, and many useful suggestions were made by the staff.

Thirteen members of the menagerie staff, the Architect's, Works and Gardens Departments, Regent's Park and Whipsnade, accompanied by Mr John Yealland, the Curator of Birds, visited the zoos at Amsterdam, Antwerp, Basle and Frankfurt, and Cologne.

This was the first organized tour for members of staff and was a great success. Its object was to enable the staff to study comparatively the various methods of animal management employed in other zoos. From the reports received it is clear that this type of study was of great benefit and it is hoped to arrange similar tours in the future.



## ACKNOWLEDGMENTS

The Council records its gratitude for the invaluable assistance given by the members of its committees, whose unfailing help and expert knowledge are of considerable assistance to the Council.

The Society is indebted to the many Fellows, Corresponding Members and others who have sent specimens for the collections. The gifts received are recorded in Appendix 6. Many other interesting animals have been received in exchange from Zoological Societies and Institutions and the Society is grateful for their valuable co-operation.

Senhora Hermione Blandy de Freitas Martins and Senhor João de Freitas Martins, C.M.Z.S., of Madeira, have continued to take a lively interest in the Society's Aquarium and sent valuable collections of marine animals.

The following have rendered valuable assistance to the Veterinary Officer: Dr J. T. Abrams, Department of Clinical Studies, University of Cambridge; Dr N. S. Barron, Vitamealo Advisory Service; Professor F. R. Bell, Professor of Experimental Veterinary Medicine, Physiology Department, Royal Veterinary College; Professor W. M. Davidson, Professor of Haematology, King's College Hospital Medical School; Mr S. L. Hignett, Chief Veterinary Adviser, Wellcome Research Laboratories; Professor G. Howe, Professor of Oral Surgery, University of Newcastle on Tyne; Mr J. M. King, Department of Veterinary Clinical Studies, University of Cambridge; Sir Benjamin Rycroft, Honorary Ophthalmologist to the Society; Dr R. V. Short, Department of Veterinary Clinical Studies, University of Cambridge; Mr R. J. C. Stewart, Human Nutritional Research Unit, Medical Research Council; Miss L. W. Thomas, Department of Experimental Medicine, University of Cambridge; Dr E. M. Widdowson, Department of Experimental Medicine, University of Cambridge; Professor I. D. P. Wootton, Post-graduate Medical School, Hammersmith Hospital.

The Society is grateful to the following for assistance at Whipsnade: Mr J. E. N. Sloan, Parasitologist of the Cooper, McDougall & Robertson Field Research Station at Berkhamsted, for the identification of parasites; Dr H. D. Holt, Director of the Public Health Laboratory Service, Luton, for bacteriological investigation; Dr J. Kelsall Thomas of Dunstable; the Ministry of Agriculture, Fisheries and Food at Weybridge; Messrs Parke Davis and Co. Ltd, for further supplies of Phencyclidine; the Cooper, McDougall & Robertson Field Research Station at Berkhamsted for providing sheep for animal feeding; Dr J. Derwent Clark of Dunstable and Mr J. Lloyd for their lectures on First Aid; the British Red Cross

Society for carrying out First Aid duties at Whipsnade; Mr Martin Senior, M.R.C.V.S., who presented a male Woodlands White-faced Sheep; Mr A. P. Shrimpton for his gift of two oil-paintings of a Tiger and Leopard; Mrs V. Bruce, who presented two clutches of Quail Eggs, and Air Vice-Marshal G. Silyn Roberts, who presented a Grey Squirrel.

The Wellcome Institute of Comparative Physiology gratefully acknowledges the help given by: the Development Commission for the grant enabling Dr Woodhead to continue her studies on reproduction and migration in fish; the Agricultural Research Council for the grant to employ a research student (Mr P. Grubb) to expedite the investigation of the Soay Sheep on Hirta; Mr J. Sale (Nairobi) for a collection of Hyrax; Mr G. E. Barnes (Nigeria) for three specimens of Angwantibo; and is particularly grateful to the Principal of the Royal Veterinary College, London, Professor E. C. Amoroso, Professor J. A. Laing and other members of the College staff, for the hospitality given to members of the Wellcome Institute during the period of its construction.

The Society's thanks are due to the following ministries and public institutions for their assistance in a variety of ways: the Royal Navy; the Ministry of Agriculture, Fisheries and Food; the Board of Trade; the Ministry of Public Building and Works; H.M. Customs and Excise; the British Museum (Natural History); the Royal Botanic Gardens, Kew; the Public Health Departments of the Corporation of the City of London, and of the Metropolitan Boroughs of Hampstead and St Marylebone; Chelsea Hospital for Women; Guy's Hospital; Queen Charlotte's Hospital and St Mary's Hospital, Paddington.

In the sphere of shipping and transport the following companies and corporations have given valuable co-operation: Air France; American Express Company Incorporated; Antwerp Steamship Company Limited; Ben Line Steamers Limited; Booker Line; British European Airways; British India Steam Navigation Company Limited; British Overseas Airways Corporation; British Railways; British United Airways Limited; Brown, Jenkinson & Company Limited; Cutting & Company Limited; Donaldson Line Limited; Elder Dempster Lines Limited; Hernu Peron & Stockwell Limited; Killick Martin & Company Limited; London Transport Executive; MacAndrews & Company Limited; Wm. H. Muller & Company Limited; Munro Transport; J. F. Obree & Son Limited; Pacific Steam Navigation Company; Pan American World Airways; the P. & O. Steam Navigation Company Limited; Port Line Limited; Qantas Airways; Royal Dutch Airlines; Royal Mail Lines Limited; Sabena Belgian World Airlines; Shaw Savill Line; Frank C. Strick & Company Limited; the Union-Castle Mail Steamship Company Limited; United Shipping Company Limited; J. B. Westray & Company Limited and Mark Whitwell & Son Limited.

As in the past, the Society is grateful to the Rt Hon. The Earl of Leicester for his kindness in providing evergreen oak for giraffes, and to Mr G. Palmer for making possible the shipment of sugar cane for the elephants; to Mr Ivan Seymour for the supply of earthworms, and to the following who have presented quantities of bamboo for the Giant Panda: Mrs G. Matthews, The Polkerris Boy Scout Troop, Mr T. P. Vandeleur, and Mrs S. E. Williams.

  
S. Zuckerman  
SECRETARY

## *Regulations*

The following new Regulations, in substitution for Regulations 12, 13, 18, 27, 29, issued in January, 1963, are made by the Council pursuant to the power granted to it by Article 8 of the Charter.

### **Regulation 12. Overseas List**

- i. 'An Ordinary Fellow who is resident outside the British Isles at the time of his election shall be registered on the Overseas List, in which case £7 out of the annual subscription of £8 shall be remitted.'
- ii. 'An Ordinary Fellow who takes up residence outside the British Isles after election or intends at any time to reside outside the British Isles for a period of more than twelve months shall be transferred to the Overseas List. During his residence abroad £7 out of the annual subscription of £8 shall be remitted, except in respect of the year in which he leaves the British Isles.'
- iii. 'A Scientific Fellow who is resident outside the British Isles at the time of his election shall be registered on the Overseas List. If he does not wish to receive the "Proceedings", £5 out of the annual subscription of £6 shall be remitted.'
- iv. 'A Scientific Fellow who takes up residence outside the British Isles after election or intends at any time to reside outside the British Isles for a period of more than twelve months shall be transferred to the Overseas List. If he does not wish to receive the "Proceedings" during his residence abroad, £5 out of the annual subscription of £6 shall be remitted, except in respect of the year in which he leaves the British Isles.'

### **Regulation 13. Life Fellows**

'The following life composition fees shall be payable by any Fellow who wishes to compound his future subscriptions:

	Age Group	21-30	31-40	41-50	51-60	61-70	71 and over
Ordinary Fellow		£170	£150	£130	£110	£80	£40
Scientific Fellow		£125	£110	£95	£80	£60	£30

provided that any Fellow who has reached the age of sixty-five and has at least thirty years' continuous membership may compound his future subscription by making a single payment of £25.'

### **Regulation 18**

'A Scientific Fellow may at any one time introduce two guests (two children under 14 counting as one guest) without charge, to the Zoological Gardens, Regent's Park, to Whipsnade Park and to any enclosure within either for which an entrance fee is charged to the public.'

### **Regulation 27**

'The subscription price for the "Proceedings" payable by an Ordinary Fellow shall be £5 per annum.'

### **Regulation 29**

'Fellows and Associates may purchase separate parts of the "Transactions" and "Symposia" at a discount of 20 per cent on the retail price.'

## Committees 1964-1965

### Gardens and Park Committee

*Terms of reference:* To consider matters relating to the layout, appearance, animal housing, and amenities other than catering, of the Society's Gardens, Regent's Park, and Whipsnade Park; to consult where necessary with other committees and to report to Council, so that the advice of the Committee can be taken into account in planning future maintenance and development.

*Members of Committee:*

A. H. T. Chisholm, C.B.E., M.A.  
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*Secretary:* Major-General C. J. G. Dalton, C.B.,  
C.B.E.

### Collections Policy Committee

*Terms of reference:* To make proposals to Council on the distribution of animals as between the Collections at Regent's Park and Whipsnade Park; to consult where necessary with other committees, and to advise on new purchases.

*Members of Committee:*

Professor Michael Abercrombie, F.R.S.  
K. M. Backhouse, M.B., B.S.  
G. C. L. Bertram, Ph.D.  
Professor A. J. E. Cave, M.D., D.Sc., F.R.C.S.  
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*Secretary:* H. Gwynne Vevers, M.B.E., D.Phil., Sec. L.S.

### Animal Welfare and Husbandry Committee

*Terms of reference:* To advise Council on matters relating to animal welfare and husbandry both in the Collections at Regent's Park and Whipsnade Park, particularly in relation to the work of the Society's Veterinary Officers and Pathologist.

*Members of Committee:*

Professor E. C. Amoroso, F.R.C.S., F.R.S.  
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### Breeding Policy Committee

*Terms of reference:* To report on the breeding records of animals in the Society's Collections and to make recommendations about any measures whereby the breeding of rare and other animals can be improved, and to advise Council on all matters relating to breeding research, including the appointment of Research Fellows.

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*Terms of reference:* To advise Council on all matters relating to the Society's educational activities.

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*Terms of reference:* To advise and assist Council in all matters of zoological research, relating to the Collections in the Menagerie or otherwise, which do not fall within the sphere of other committees of the Society.

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*Terms of reference:* To advise on all matters relating to research in comparative medicine; to receive and approve the Director's Annual Report to Council and the Statement of Accounts; and to advise on the appointment of research staff.

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### Zoological Record Committee

*Terms of reference:* To advise on the scope and production of the 'Zoological Record' and on methods of ensuring its widest distribution.

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### International Zoo Yearbook Committee

*Terms of reference:* To advise on the general policy, production, promotion and finance of the 'Yearbook'.

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Curator of Reptiles:* H. Gwynne Vevers, M.B.E.,  
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*Curator of Birds:* J. J. Yealland, F.L.S.

*Curator of Mammals:* D. J. Morris, D.Phil.

*Librarian:* R. A. Fish, F.L.A.

*Pathologist:* R. N. Fiennes, M.A., M.R.C.V.S. (see  
also under Nuffield Institute of Comparative  
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*Senior Veterinary Officer:* O. Graham-Jones,  
F.R.C.V.S.

#### Wellcome Institute of Comparative Physiology

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*Research Fellows:* P. A. Jewell, Ph.D.; G. H.  
Manley, D.Phil.; R. M. Sadleir, Ph.D.

*Research Assistant:* G. Clough, B.Sc.

*Visiting Student:* J. J. R. Grimsdell, B.A.

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*Head of Pathology Department:* R. N. Fiennes,  
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*Laboratory Superintendent:* P. R. E. Wallace, A.I.S.T.

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### REGENT'S PARK

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*Catering Manager:* W. N. Hill, F.H.C.I.

*Clerk of Works:* F. J. Myers

*Clerk of Works (New Zoo):* M. Carding

*Gardens Executive:* J. Ward

*Head Gardener:* H. Hemmings

*Herpetologist:* A. R. Lanworn

*Overseer of Birds:* D. G. Newson

*Overseers of Mammals:* B. W. Smith, H. Vinall

*Supplies Officer:* C. G. Nicholls, M.P.O.A.

*Hospital Superintendent:* A. T. Wilson

*Senior Technician, Pathology Laboratory:*  
H. Corbett, A.I.S.T.

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*Aquatic Birds and Birds of Prey:* A. E. Scrivener

*Bears:* S. Morton

*Bird House:* W. G. R. Daines

*Camels, Antelopes:* J. Lambden

*Children's Zoo:* W. E. Peckett

*Elephant:* W. G. Crompton

*Giraffes and Cattle:* H. N. G. Robinson

*Insects:* R. P. Humphreys

*Lion House:* T. W. Sangster

*Monkeys:* L. G. Smith (Senior Head Keeper)

*North Mammal House:* J. C. T. Alldis (Senior  
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*Parrot House and Eastern Aviary:* A. F. Shambrook

*Pheasantry and Ostrich House:* R. Barrow

*Reptiles:* D. J. Ball

*Sea Lions, Seals:* A. J. Cotterill

*Small Mammals:* H. W. Styles

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*Assistant to Director:* E. D. Day  
*Catering Manager:* M. Levine  
*Clerk of Works:* R. J. B. Phillips  
*Head Gardener:* R. Tully  
*Senior Overseer:* O. C. Chamberlain  
*Overseer:* F. L. Gladman

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*Bear Section:* A. Matthews  
*Camel Section:* G. Stanbridge  
*Carnivores Section:* F. Meakins  
*Children's Zoo:* L. Conway  
*Elephant Section:* C. H. Bailey  
*Giraffe Section:* L. Warner  
*Pheasant and Parrakeet Aviaries:* B. Simmons



## *Publications by Society's Staff and Research Workers*

(including those published in collaboration)

- BOYD, J. M., DONEY, J. M., GUNN, R. G., and JEWELL, P. A. (1964). The Soay sheep of the island of Hirta, St Kilda. A study of a feral population. *Proc. zool. Soc. Lond.* **142**, 129-163.
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- SPARKS, JOHN (1964). Flock structure of the Red Avadavat with particular reference to clumping and allopreening. *Anim. Behaviour.* **12**, 125-136.
- SPARKS, JOHN (1964). Contact behaviour in the Cuban Finch, *Tiaris canora* (Gmelin). *Bull. Br. Orn. Club*, **84**, 164-169.
- VEVERS, H. G. (1964). Cosmetic coloration in *Colour and life*. Symp. Inst. Biol. (In the press.)
- \*WOODHEAD, A. D., and WOODHEAD, P. M. J. (1964). Seasonal changes in the physiology of the cod in relation to its environment. I. Seasonal changes in the physiological reactions of the Barents Sea cod, *Gadus morhua* L., particularly affecting migration and maturation. ICNAF Environmental Symposium, January 1964. Contribution No. F-6A, Serial No. 1255A, pp. 1-25.
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- WOODHEAD, A. D. (1964). Variations de l'activité thyroïdienne et sa relation avec la reproduction et les migrations de *Squalus acanthias* Selacien ovovivipare. Published in special volume of *Annales d'endocrinologie* 1964.

\*Published and distributed as mimeographs. Now in press for publication in a special volume for the Symposium.

*List of genera, species and subspecies  
new to the Collection*

**Mammalia**

- Cynopterus horsfieldi* Anderson. Horsfield's Fruit Bat, Malay States, Sumatra.  
*Mustela sibirica* Pallas. Siberian Weasel, Asia.  
*Manis gigantea* Illiger. Giant Pangolin, West Africa.

**Aves**

- Egretta alba modesta* (J. E. Gray). Eastern Great White Heron. East and South-east Asia.  
*Aythya a. australis* (Eyton). Australian White-eye. Australasia.  
*Microhierax caerulescens burmanicus* Swann. Red-thighed Falconet. South-east Asia.  
*Francolinus s. shelleyi*. Grant. Shelley's Francolin. East Africa.  
*Uria l. lomvia* (Linné). Brunnich's Guillemot. North Atlantic and Arctic Ocean areas.  
*Pterocles gutturalis* A. Smith. Yellow-throated Sandgrouse. Africa.  
*Columba elphinstoni* (Sykes). Nilgiri Wood Pigeon. South-west India.  
*Hypsipetes indicus ictericus* (Strickland). Golden-browed Bulbul. South-west India.  
*Lanius excubitor pallidirostris* Cassin. Pale-billed Grey Shrike. South-west Asia and North-east Africa.  
*Prunella montanella* (Pallas). Siberian Accentor. North-east Asia.  
*Irena p. puella* (Latham). Fairy Bluebird. South-east Asia.  
\**Pogonospiza mystacalis* (Taczanowski). Chocolate-crowned Ground Sparrow. Peru.

- Carpodacus roseus* (Pallas). Pallas's Rose Finch. East and North-east Asia.  
\**Linurgus olivaceus* (Fraser). Oriole Finch. Tropical Africa.  
*Cryptospiza s. salvadorii* Reichenow. Abyssinian Crimson-wing. East Africa.

**Reptilia and Amphibia**

- Rana signata* (Günther.) Frog. South-east Asia.  
*Rana cancrivora* Gravenhorse. Frog. South-east Asia.  
*Rhacophorus leucomystax linki* Taylor. Malayan Tree Frog. South-east Asia.  
*Eublephis macularius* Blythe. Gecko. South-east Asia.  
*Phrynocephalus ornatus*. Lizard. Afghanistan.  
*Eremias velox persica* Blanford. Agama Lizard. Afghanistan.  
*Spalerosophis diadema atriceps* (Fischer). Clifford Snake. South-east Asia.  
*Anolis roquet extremus*. Anolis Lizard. West Indies.  
*Testudo carbonaria* Spix. Tortoise. West Indies.

**Pisces**

- Barbus javanicus* (Bleeker.) Tawes. South Asia.  
*Acanthopsis choiorhynchus* (Bleeker). Horse-faced Loach. South-east Asia.  
*Hemigrammus armstrongi* Schultz and Axelrod. Golden Tetra. Western Guiana.  
\**Hypophthalmichthys molitrix* (Valenciennes). Silver Carp. South Asia.

\*Genus new to the Collection.

*List of donors of animals to the Society*

REGENT'S PARK

- Aikman, Captain, 1 Brünnich's Guillemot  
 Albany Street Police Station, 1 Hermann's Tortoise  
 Allerton, V., 1 Pale-billed Grey Shrike  
 Ansell, W., 1 Dark Marsh Mongoose  
 Antwerp Aquarium, 1 Electric Eel  
 Bahawalpur, H. H. The Ameer of, 8 Indian  
     Changeable Lizards, 2 Geckos, 24 Fantail  
     Pigeons  
 Baltrock, R., 1 Yellow-throated Plated-lizard  
 Bartlett, E. Q., 1 Brown Acara, 1 Marbled Cichlid  
 Bayley, Dr, 2 Rooks  
 Beatson, Miss S. H., 1 Margouillat Lizard, 1 Long-  
     horn Beetle  
 Belcher, Mrs C., 1 Roe Deer  
 Bellairs, Dr A. d'A., 1 Top-tailed Gecko  
 Bennet, P. R., 1 Fat Dormouse  
 Bennett, C., 1 African Knife Fish  
 Bennett, Miss D., 1 Spectacled Cayman  
 Benwell, G., 1 Bream  
 Beraut, Dr E., 1 Yellow-fronted Woodpecker  
 Bingham, Mrs, 1 Green Glossy Starling  
 Bistoquet, Miss E., 1 Woodcock  
 Blakeney, J. E., 4 African Ring-necked Parrakeets  
 Bond, K. E., 4 Nilgiri Wood Pigeons, 4 Golden-  
     browed Bulbuls, 4 Blyth's Mynahs, 2 Banded  
     Kraits, 1 Common Krait, 2 Green Pit Vipers,  
     1 Banded Racer, 1 Indian Gamma, 1 Clifford  
     Snake, 1 Indian Cobra, 1 Russell's Viper, 1  
     Indian Wolf Snake  
 Boswell, N. H., 2 Oysters  
 Braithwaite, Lady V., 2 Budgerigars  
 Bramsley, Mrs, 1 Alexandrine Parrakeet  
 Brethurst, L., 1 Southern Flying Squirrel  
 Bristowe, Miss V., 1 Puff Adder, 1 Variable Tree  
     Snake, 1 Egg-eating Snake, 4 Flap-necked  
     Chameleons, 1 Grant's Skink, 1 Wolf Snake,  
     2 African Lined Snakes, 1 Sand Snake  
 Bristowe, Dr, 1 Mantis  
 Buckley, Miss K., 1 Greek Tortoise  
 Bull, P., 2 Masked Lovebirds  
 Burdett, T. A., 1 African Bull Frog  
 Burford, Mrs, 1 American Catfish  
 Burkill, H. N., 10 Mudskippers  
 Burton, J. D., 1 Blue and yellow Macaw  
 Butler, Miss N. P., 18 Spanish Terrapins  
 Buttler, R. L. J., 1 Spanish Terrapin  
 Camp, Mrs, 1 Grass Snake  
 Campbell, P., 1 Rosy-faced Lovebird  
 Campbell, S. E., 1 Red-eared Terrapin  
 Chalmers, T., 1 Sucker Fish  
 Chisholm, Mrs, 1 British Jay  
 Clarke, Miss D. M., 4 Greek Tortoises  
 Coleson, J., 1 European Tree Frog  
 Cook, K. D. J., 1 Plum-headed Parrakeet  
 Cotrell, E. V., 1 European Pond Tortoise  
 Cranbrook, The Earl of, 4 Malayan Fruit Bats, 1  
     Horsfield's Fruit Bat  
 Davis, J., 1 Hermit Crab  
 Dean, Miss S., 1 Sheep  
 D'eath, J. O., 2 Shelley's Francolins, 1 Barnacle  
     Goose, 3 Yellow-throated Sandgrouse  
 Denyon, Miss, 3 Japanese Quail  
 Dinwiddie, Mrs T., 1 Slow Loris  
 Dorey, C., 1 Red-eared Terrapin  
 Duval, Mr, 1 Blood Python  
 Eavis, Mrs R., 1 Blue-checked Barbet, 1 Pekin  
     Robin, 2 Indian White-eyes, 1 Orange-headed  
     Ground Thrush, 1 Violet Tanager, 1 Mrs  
     Wilson's Tanager, 1 Scarlet Tanager, 1 Blue  
     Honeycreeper, 1 Zebra Finch, 2 Paradise  
     Whydahs, 1 Superb Glossy Starling, 1 Nepal  
     Hill Mynah  
 Egerton, Mrs, 1 Hedgehog  
 Ellard, C., 1 Grant's Skink  
 Farner, Mr, 1 Long-horned Grasshopper  
 Farner, H., 1 Jamaican Tree Frog  
 Fasel, Klaus, 1 Small Indian Mongoose  
 Forbes, Miss E., 1 Red-eared Terrapin  
 Foss, Miss M., 1 Jackson's Chameleon  
 Fraser, P., 2 Ferrets  
 Fulham Police Station, 1 Green Lizard  
 Gore-Langton, Lady J., 1 Pony  
 Gorham, S. W., 3 Painted Terrapins, 1 Rain Hyla,  
     4 American Toads, 6 Double-striped Spelerpes,  
     6 Brown Spelerpes, 3 Red-bellied Snakes  
 Gosling, L. S., 1 Blackbird (albino)  
 Gray, J., 1 Southern Blue-tongued Skink  
 Graystone, A., 1 Indian White-eye  
 Green, Mrs, 1 White-nosed Monkey  
 Green, K., 1 Grass Snake  
 Griffiths, Mrs E., 1 European Pond Tortoise  
 Guy's Hospital Amazon Expedition, 4 Iguanas  
 Haines, D., 2 Cuban Finches  
 Harness, G., 2 Steppe Lemmings  
 Harris, B., 1 Fox  
 Harton, P., 1 Cockroach  
 Hawkesworth, H., 1 Guinea Pig  
 Herbert, Mrs, 1 Blue-fronted Parrot  
 Hilton, Miss T., 2 Red-eared Terrapins  
 Ionides, C. J. P., 6 Meller's Chameleons  
 Jadwell, D. J., Dragonfly larvae

- James, Captain J., 2 Pig-tailed Monkeys, 1 Moor Monkey  
 Johnson, Miss L., 1 Black-mantled Tamarin  
 Johnstone-Scott, R., 1 Spectacled Cayman  
 Jones, J., 1 Spectacled Cayman  
 Jones, P. C., 1 Grass Snake  
 Joyner, S. H., 1 Harlan's Horned Lizard  
 Kennedy, B., 2 Pike, 1 Roach  
 Kimber, Lady, 1 African Python  
 Kirby, M. A., 1 Julia's West Indian Snake  
 Knobel, Miss E. M., 1 Shama  
 Lanesborough, The Earl of, 2 Goats  
 Leftwich, Mrs S., 1 White-crested Hornbill  
 Litchfield, Mrs, 1 Green Singing Finch  
 Littledale, Dr. E. J., 1 Nile Monitor  
 Lyell, M., 1 African Python  
 Lythgoe, Dr, 1 Rainbow Wrasse  
 Maby, Miss V., 2 Red-headed Buntings, 2 Cut-throat Finches, 3 Bronze Mannikins  
 Maggs, Mrs, 1 Stump-tailed Skink  
 Makin, B., 1 Indian Gerbil  
 Marsden, G., 1 Praying Mantis  
 Marshal, Mrs C. M., 1 Greek Tortoise  
 Mason, A. J., 2 Red Platys, 1 Anostomus  
 McCarthy, D. J., 9 Huang's Rats  
 McDonald, K., 1 Eider Duck  
 McKinnon, N. A., 1 Javan Brahminy Kite  
 McKissack, Mr, 2 Abyssinian Lovebirds  
 Measures, R. E., 1 Mirror Carp  
 Miller-Ben Shaul, D., 1 Egyptian Dabb Lizard, 1 Grey Monitor  
 Miller, J., 1 Black-pointed Tegu  
 Milligan, S., 1 Red-eared Terrapin  
 Mills, N., 1 Pike  
 Mollison, S. and G., 1 Stick Insect  
 Morrison, R. W., 1 Aesculapian Snake  
 Mould, T., 1 Fer-de-Lance  
 Mrosovsky, Dr N., 1 Ornate Terrapin  
 Munslow, Mrs F., 1 Smoky Woolly Monkey  
 Naples, Zoological Gardens of, 1 Abyssinian Lovebird, 2 Quail Finches  
 Newmark, G. M. and J. R., 2 Abyssinian Crimsonwings, 2 Oriole Finches, 12 Eastern Garter Snakes, 3 De Kay's Snakes, 2 Milk Snakes, 1 Ribbon Snake, 1 American Black Snake  
 Nichols, J., 1 Mirror Carp  
 Nixon, Mr and Mrs G., 1 African Civet Cat  
 Noden, Mr, 1 White-faced Scops Owl  
 Oates, J., 1 Allen's Bushbaby  
 O'Hara, Miss C., 2 Three-coloured Mannikins  
 Ollivant, Captain, and Ship's Company of H.M.S. *Protector*, 1 King Penguin, 5 Gentoo Penguins, 3 Ringed Penguins  
 Oliver, Miss D., 1 Little Owl  
 Orange, Mrs E., 1 Greek Tortoise  
 Osborne, E., 1 Jerboa  
 Owen, C. W., 3 Chinchillas  
 Paignton Zoo, 2 Boatbills  
 Palmer, Mrs H., 1 Greek Tortoise  
 Parker, R., 2 Greek Tortoises, 1 Reticulated Python  
 Payne, S., 2 Catfish  
 P.C. 235, 1 Grass Snake  
 Pester, Dr R., 1 Springhaas  
 Pickley, Mrs P., 1 Green Lizard  
 Pike, C., 1 Black-headed Conure  
 Pritchard, P. C., 1 Rough Terrapin  
 Psychology Department, University College Hospital, 1 Red-eared Terrapin  
 Pullinger, Mrs, 1 Yellow-headed Conure  
 Pulvertaft, T. B., 1 Catfish  
 Pyne, J. W. H., 6 Axolotls  
 Rayesford, A. E., Nephila  
 Redd, J., 1 Pike  
 Rickman, G. J., 1 Rabbit, 1 Guinea Pig  
 Rimscha, Miss A., 1 Water Rail  
 Roberts, B., 2 Japanese Newts  
 Roy, R., 1 Flap-necked Chameleon  
 Royal Ballet School, 1 Royal Python  
 Rumer, Miss, 1 Diced Water Snake  
 Sacher, C., 1 Giant Land Snail  
 Searle, Dr K. C., 2 Malay Tupaia, 1 Siberian Weasel, 2 Foxes, 4 Red-footed Ground Squirrels, 4 Huang's Rats, 1 Phalanger, 1 Leopard Cat, 1 Civet, 1 One-wattled Cassowary, 8 Chinese Pond Herons, 5 E. Cattle Egrets, 1 E. Great White Heron, 5 Little Egrets, 1 Yellow-billed Egret, 2 Falcated Teal, 4 Red-thighed Falconets, 2 Chinese Bamboo Partridges, 1 E. White-breasted Waterhen, 3 Watercock, 2 E. Grey-headed Gallinules, 3 Chinese Necklace Doves, 2 Chinese Bulbuls, 2 Chinese Red-vented Bulbuls, 1 Brown-eared Bulbul, 1 White-headed Black Bulbul, 3 Siberian Accentors, 2 Japanese White-eyes, 4 Chinese White-eyes, 2 Red-flanked White-eyes, 1 Pallas's Rose Finch, 2 Long-tailed Rose Finches, 1 Black-naped Oriole, 1 Black-headed Oriole, 1 Chinese Starling  
 Secretan, Miss E. and Master O., 1 Reeve's Terrapin, 1 Three-banded Terrapin  
 Senior, Mrs D., 1 Indian Ring-necked Parrakeet, 1 Red-vented Bulbul, 1 Pekin Robin, 1 Chaffinch, 1 Goldfinch, 7 Canaries  
 Short, A., 1 Common Marmoset  
 Smith, G., 2 Moorish Geckos  
 Smith, Miss S., 1 Greek Tortoise  
 Southern, H. N., 2 Bank Voles  
 Sparrow, Mrs, 1 Spectacled Cayman  
 Spence, T., 3 Spotted Tinamous, 2 Capercaillie, 2 Picazuro Pigeons, 1 Naked-eyed Pigeon, 1 E. Turtle Dove, 2 Pink-headed Doves, 1 Lemon Dove, 1 Blue-backed Chlorophonia  
 Sruell, Mr, 1 Longhorn Beetle  
 Stevens, Mr, 1 Frog, *Rana signata*, 1 Malayan Tree Frog  
 Stiles, T. J., 1 Common Marmoset  
 Stirling, Miss J., 1 Bird-eating Spider  
 Sugden, Dr, 1 Bengal Monitor  
 Sundblad, B., 2 Adders  
 Swain, A. J., 1 Painted Spurfowl  
 Talbot, B., 10 Australian Long-nosed Crocodiles

Tellam, A. J., 1 Indigo Bunting  
Terminger, G., 1 Common Tench  
Thomas, Miss A., 2 Sun Fish  
Thompson, B., 1 Yellow-fronted Parrot  
Thorning, Miss P., 3 European Tree Frogs  
Thornton, E., 1 Pike  
Tilbey, M., 2 Golden Carp  
Tirminger, G., 1 Common Tench  
Underwood, Professor G., 2 Doumerc's Hylas,  
4 Tortoises (*Testudo carbonaria*) 1 Surinam  
Snake, 7 *Liguus* sp., 2 *Achatina*, 6 *Anableps*  
University College, Ghana, 7 Gaboon Vipers  
Van der Velde, 1 Spix's Hyla  
Vaudirs, A. S., 1 Wall Lizard  
Vevers, G., 3 Fat Dormice  
Walker, Miss H., 1 Moholi Bushbaby

Ward, C. H. G., 1 Red-eared Terrapin  
Warren, M., 2 Ornate Terrapins  
Watson, Mrs S., 1 Northern Guillemot  
Webb, Mrs, 1 Red-eared Terrapin  
Weston, F. G., Collection of stick insects  
Wheatley, Mrs G., R.W.S., 2 Red-eared Terrapins,  
2 Margined Tortoises, 1 Green Lizard  
Whitworth, Miss M., 1 Egyptian Plover  
Wildfowl Trust, The, 3 Coots  
Wilkins, Mr 4 Bearded Greaved-tortoises  
Wilkins, Lt.-Col. J. S., 1 African Python  
William, K., 1 Black Shark  
Wilson, B., 1 Lindheimer's Chicken Snake  
Witter, Mrs R. F. A., 3 Greek Tortoises  
Woodward, Miss D. J., 1 Red-eared Terrapin

#### WHIPSNADE PARK

British United Airways, 1 Red-billed Duck  
Bruce, Mrs V., 1 Common Zebra  
Daniell, H. S., 2 Lar Gibbons  
11th Battalion, The King's African Rifles, 1  
Cheetah  
Ellis, Mrs S., 1 Cheetah

Harben, Susan, Sandra and David, 3 Spur-winged  
Geese  
Rhys, The Hon. Mrs D., 1 New Forest Pony  
Spence, T., 1 Peacock Pheasant  
Vevers, G., 1 Fat Dormouse  
Willis, R., 2 Cockatiels

*List of animals (excluding common domestic varieties)  
born in the Society's Collection*

(The figures in brackets following an item indicates the number which have died)

REGENT'S PARK

**Mammals**

- 1 Olive Baboon (1)
- 1 Ring-tailed Lemur
- 2 Mouse Lemurs
- 1 Malaysian Fruit Bat
- 2 Lions (2)
- 3 Tigers (3)
- 3 Caracal Lynx (2)
- 5 Pumas
- 9 Dingoes (5)
- 13 Huang's Rats
- 3 Gambian Pouched Rats (3)
- 3 Orange-rumped Agoutis (1)
- 5 Green Acouchies
- 1 Banteng (1)
- 1 Yak
- 3 Mouflon (1)
- 1 Brindled Gnu (1)

- 1 White-bearded Gnu (1)
- 5 Blackbuck (1)
- 1 Giraffe
- 5 Timor Deer (4)
- 2 Red Deer (2)
- 1 Reindeer (1)
- 1 Llama
- 1 Great Grey Kangaroo
- 1 Swamp Wallaby
- 2 Agile Wallabies (1)

**Birds**

- 2 Black-footed Penguins (1)
- 2 Black Swans (2)
- 4 Upland Geese (2)
- 4 Red-legged Partridges
- 4 Erckel's Francolins (2)
- 2 Swinhoe's Pheasants (1)

- 13 Sonnerat's Jungle Fowl (1)
- 3 Reeves's Pheasants
- 3 Hume's Pheasants
- 4 Lady Amherst's Pheasants
- 1 Great Black-backed Gull
- 2 Herring Gulls
- 3 Chinese Necklace Doves
- 3 Cockatiels
- 1 Fischer's Lovebird
- 3 Mealy Rosella Parrakeets (2)
- 1 Barn Owl
- 3 Kenya Eagle Owls
- 6 Spotted Eagle Owls
- 1 Masked Jay Thrush

**Reptiles**

- 2 Boomslangs (2)
- 4 Rattlesnakes (3)

WHIPSNADE PARK

**Mammals**

- 5 Rhesus Monkeys
- 2 Tigers
- 2 Pumas
- 9 Canadian Timber Wolves (1)
- 2 Polar Bears
- 5 Brown Bears
- 3 Canadian Beavers
- 1 Crested Porcupine
- 1 Common Zebra
- 11 Chartley Oxen (1)
- 1 Cape Buffalo
- 7 Mouflon (2)
- 5 White-bearded Gnus (3)
- 9 Thomson's Gazelles
- 2 East African Eland
- 2 Pronghorn Antelopes (1)
- 8 Fallow Deer (2)
- 6 Fallow Deer (Dark Variety)
- 10 Spotted Deer (1)

- 4 Hog Deer (1)
- 3 Swamp Deer (1)
- 12 Formosan Deer (5)
- 20 Red Deer
- 2 Wapiti (1)
- 4 White-tailed Deer (3)
- 3 Moose (3)
- 25 Chinese Water Deer
- 2 Bactrian Camels
- 7 Llamas
- 6 Collared Peccaries (1)
- 1 Black-faced Kangaroo
- 81 Bennett's Wallabies (3)

**Birds**

- 1 Common Rhea
- 5 Emus (1)
- 5 Whooper Swans
- 5 Black-necked Swans (5)

- 5 Black Swans (1)
- 15 Grey Lag Geese
- 6 Greater Snow Geese (1)
- 1 Hawaiian Goose
- 3 Upland Geese (1)
- 1 Australian Grey Duck
- 3 Carolina Ducks (1)
- 4 Quail
- 13 Pallas's Eared Pheasants
- 6 Swinhoe's Pheasants
- 2 Chinese Silver Pheasants
- 13 Golden Pheasants (5)
- 28 Common Peafowl
- 4 Common Peafowl (black-winged var.)
- 2 Sarus Cranes (2)
- 2 Demoiselle Cranes
- 6 Queen Alexandra's Parrakeets
- 1 Barraband's Parrakeet

*List of animals received*

(Presented, purchased, received in exchange, deposited or born in the Menagerie)

REGENT'S PARK

**Mammals**

*Primates*

- 3 Chimpanzees
- 4 Talapoin Monkeys
- 3 Rhesus Monkeys
- 1 Lion-tailed Monkey
- 2 Pig-tailed Monkeys
- 3 Moor Monkeys
- 2 Black Apes
- 1 Olive Baboon
- 1 Drill
- 4 Feline Douroucoulis
- 1 Smoky Woolly Monkey
- 17 Common Marmosets
- 1 Black-mantled Tamarin
- 1 Cotton-headed Tamarin
- 1 Ring-tailed Lemur
- 2 Mouse Lemurs
- 2 Slender Lorises
- 1 Slow Loris
- 1 Moholi Bushbaby
- 1 Senegal Bushbaby
- 1 Allen's Bushbaby
- 1 Malay Tupaia

*Insectivora*

- 1 European Hedgehog

*Chiroptera*

- 5 Malaysian Fruit Bats
- 1 Horsfield's Fruit Bat

*Carnivora*

- 2 Lions
- 3 Tigers
- 3 Caracal Lynx
- 5 Pumas
- 1 Leopard Cat
- 1 African Civet Cat
- 2 Blotched Genets
- 1 Binturong
- 1 Small Indian Mongoose
- 1 Dark Marsh Mongoose
- 9 Dingoes
- 2 New Guinea Singing Dogs
- 3 Side-striped Jackals
- 3 Foxes
- 5 Bat-eared Foxes
- 5 Bush Dogs
- 1 Siberian Weasel

- 2 Ferrets

- 1 Indian Otter
- 2 Hog Badgers
- 1 Ring-tailed Coati
- 2 Spectacled Bears

*Pinnipedia*

- 1 Grey Seal

*Rodentia*

- 1 Southern Flying Squirrel
- 1 Red Squirrel
- 12 Red-footed Ground Squirrels
- 4 Fat Dormice
- 7 Golden Hamsters
- 26 Huang's Rats
- 3 Gambian Pouched Rats
- 1 Indian Gerbil
- 2 Steppe Lemmings
- 2 Bank Voles
- 1 Springhaas
- 1 Great Cane Rat
- 3 Orange-rumped Agoutis
- 7 Green Acouchies
- 3 Chinchillas
- 4 Wild Rabbits

*Perissodactyla*

- 2 Grevy's Zebras

*Artiodactyla*

- 3 Banteng
- 1 Yak
- 2 European Bison
- 3 Mouflon
- 3 Barbary Wild Sheep
- 7 Asiatic Ibex
- 1 Brindled Gnu
- 1 White-bearded Gnu
- 6 Saiga Antelope
- 5 Blackbuck
- 2 Pronghorn Antelope
- 1 Giraffe
- 5 Timor Deer
- 2 Red Deer
- 1 Roe Deer
- 3 Reindeer
- 5 Arabian Camels
- 3 Llamas

- 2 Wild Boar

*Pholidota*

- 2 Giant Pangolins

*Marsupialia*

- 1 Great Grey Kangaroo
- 2 Swamp Wallabies
- 2 Agile Wallabies

*Domestic*

- 2 Guinea Pigs
- 1 Rabbit
- 1 Shetland Pony
- 1 Donkey
- 1 Guernsey Calf
- 3 Sheep
- 21 Goats
- 3 Pigs

**Birds**

*Struthioniformes*

- 2 Ostriches

*Casuariiformes*

- 1 One-wattled Cassowary

*Tinamiformes*

- 3 Spotted Tinamous

*Sphenisciformes*

- 1 King Penguin
- 5 Gentoo Penguins
- 3 Ringed Penguins
- 1 Black-footed Penguin

*Pelecaniformes*

- 2 Cormorants

*Ciconiiformes*

- 8 Chinese Pond Herons
- 5 Eastern Cattle Egrets<sup>1</sup>
- 1 Eastern Great White Heron
- 5 Little Egrets
- 1 Yellow-billed Egret
- 2 Boatbills
- 6 Sacred Ibises
- 2 Spoonbills
- 11 Rosy Flamingos

*Anseriformes*

- 2 Black Swans
- 1 Barnacle Goose
- 4 Upland Geese
- 6 Ruddy Shelduck
- 1 Common Shelduck
- 1 South African Shelduck
- 2 Falcated Teal
- 1 Cape Teal
- 4 Pochard
- 2 Australian White-eyes
- 4 Tufted Ducks
- 1 Eider Duck

*Falconiformes*

- 2 Black-winged Kites
- 1 Javan Brahminy Kite
- 1 Osprey
- 4 Red-thighed Falconets

*Galliformes*

- 4 Capercaillie
- 2 Red-legged Partridges
- 2 Shelley's Francolins
- 4 Erckel's Francolins
- 2 Japanese Quail
- 2 Chinese Bamboo Partridges
- 1 Painted Spurfowl
- 1 Pallas's Eared Pheasant
- 2 Swinhoe's Pheasants
- 8 Sonnerat's Jungle Fowl
- 1 Cheer Pheasant
- 1 Common Pheasant
- 2 Reeves's Pheasants
- 4 Hume's Pheasants
- 2 Elliot's Pheasants
- 2 Lady Amherst's Pheasants
- 4 Tufted Guinea fowl

*Gruiformes*

- 1 Wattled Crane
- 2 Crowned Cranes (dark form)
- 1 Water Rail
- 1 Eastern White-breasted Waterhen
- 3 Watercock
- 4 Grey-headed Gallinules
- 2 Eastern Grey-headed Gallinules
- 3 Coots

*Charadriiformes*

- 2 Golden Plovers
- 1 Woodcock
- 1 Egyptian Plover
- 1 Great Black-backed Gull
- 2 Herring Gulls
- 13 Kittiwakes
- 1 Northern Guillemot
- 1 Brünnich's Guillemot

*Columbiformes*

- 2 Yellow-throated Sandgrouse
- 4 Nilgiri Wood Pigeons
- 2 Picazuro Pigeons
- 1 Naked-eyed Pigeon
- 1 Eastern Turtle Dove
- 1 Pink-headed Dove
- 6 Chinese Necklace Doves
- 1 Lemon Dove

*Psittaciformes*

- 4 Cockatiels
- 2 Blue and Yellow Macaws
- 1 Yellow-headed Conure
- 1 Black-headed Conure
- 1 Blue-fronted Parrot
- 2 Red-topped Parrots
- 4 African Ring-necked Parakeets
- 2 Indian Ring-necked Parakeets
- 1 Alexandrine Parakeet
- 1 Plum-headed Parakeet
- 1 Queen Alexandra's Parakeet
- 2 Madagascar Lovebirds
- 1 Rosy-faced Lovebird
- 3 Abyssinian Lovebirds
- 1 Fischer's Lovebird
- 3 Mealy Rosella Parakeets

*Strigiformes*

- 1 Barn Owl
- 1 White-faced Scops Owl
- 3 Kenya Eagle Owls
- 6 Spotted Eagle Owls
- 1 Snowy Owl
- 1 Little Owl

*Apodiformes*

- 1 Swallow-tailed Hummingbird
- 1 Ruby-and-Topaz Hummingbird
- 4 Blue-breasted Hummingbirds
- 1 White-bellied Hummingbird
- 1 Stripe-breasted Star-throat

*Coraciiformes*

- 1 Green Wood Hoopoe
- 1 White-crested Hornbill

*Piciformes*

- 1 Blue-cheeked Barbet
- 2 Spot-billed Toucanets
- 1 Yellow-fronted Woodpecker

*Passeriformes*

- 1 Blue-backed Manakin

- 1 Red-vented Bulbul
- 2 Chinese Bulbuls
- 2 Chinese Red-vented Bulbuls
- 1 Brown-eared Bulbul
- 4 Golden-browed Bulbuls
- 1 Pale-billed Grey Shrike
- 3 Siberian Accentors
- 2 Indian Shamas
- 1 Orange-headed Ground Thrush
- 1 Blackbird (albino)
- 1 Fairy Bluebird
- 1 Masked Jay Thrush
- 3 Pekin Robins
- 1 Rufous-bellied Niltava
- 2 Japanese White-eyes
- 3 Indian White-eyes
- 4 Chinese White-eyes
- 2 Red-flanked White-eyes
- 2 Dusky Miners
- 2 Red-headed Buntings
- 1 Indigo Bunting
- 1 Chocolate-crowned Ground Sparrow
- 1 White-capped Tanager
- 1 Spotted Emerald Tanager
- 1 Scarlet Tanager
- 4 Violet Tanagers
- 1 Mrs Wilson's Tanager
- 1 Blue-backed Chlorophonia
- 5 Purple Honey-creepers
- 1 Blue Honey-creeper
- 1 Chaffinch
- 1 Goldfinch
- 4 Mealy Redpolls
- 1 Lesser Redpoll
- 2 Long-tailed Rose Finches
- 1 Pallas's Rose Finch
- 1 Green Singing Finch
- 2 Oriole Finches
- 2 Cuban Finches
- 3 Bronze Mannikins
- 2 Three-coloured Mannikins
- 2 Cut-throat Finches
- 1 Zebra Finch
- 4 Abyssinian Crimson-wings
- 2 Quail Finches
- 1 Combassou
- 2 Paradise Whydahs
- 1 Superb Glossy Starling
- 1 Green Glossy Starling
- 1 Chinese Starling
- 4 Blyth's Mynahs or Starlings
- 1 Nepal Hill Mynah
- 1 Black-naped Oriole
- 1 Black-headed Oriole
- 2 Azure Jays

*Domestic*

- 6 Bantams



- 24 Fan-tailed Pigeons
- 2 Budgerigars
- 7 Canaries

**Reptiles**

*Order Testudines*

- 1 Spotted Terrapin
- 9 Spanish Terrapins
- 12 Red-eared Terrapins
- 3 Ornate Terrapins
- 1 Rough Terrapin
- 1 Reeves's Terrapin
- 1 Three-banded Terrapin
- 2 European Pond Tortoises
- 2 Margined Tortoises
- 4 Bearded Greaved-tortoises
- 3 Painted Terrapins
- 1 Hermann's Tortoise
- 2 Horsfield's Tortoises
- 15 Greek Tortoises
- 4 Tortoises, *Testudo carbonaria*

*Order Crocodilia*

- 4 Spectacled Cayman
- 2 Smooth-fronted Cayman
- 10 Australian Long-nosed Crocodiles

*Order Sauria*

- 1 Yellow-throated Plated-lizard
- 3 Green Lizards
- 1 Egyptian Dabb Lizard
- 1 Wall Lizard
- 1 Harlan's Horned Lizard
- 2 General Hardwicke's Dabb Lizards
- 1 Margouillat Lizard
- 8 Indian Changeable Lizards
- 2 Starred Agamas
- 20 Lizards, *Phrynocephalus ornatus*
- 3 Agamas, *Eremias velox persica*
- 6 Geckos, *Gymnodactylus*
- 2 Geckos, *Eublephis*

**Mammals**

*Primates*

- 3 Lar Gibbons
- 5 Rhesus Monkeys

*Carnivora*

- 2 Tigers
- 2 Northern Lynx
- 2 Pumas
- 2 Cheetahs
- 9 Canadian Timber Wolves
- 2 Lesser Pandas
- 2 Polar Bears
- 5 Brown Bears

- 1 Top-tailed Gecko
- 2 Moorish Geckos
- 3 Flying Geckos
- 6 Hungarian Skinks
- 1 Eyed Skink
- 1 Grant's Skink
- 1 Stump-tailed Skink
- 1 Southern Blue-tongued Skink
- 7 Jackson's Chameleons
- 1 Mediterranean Chameleon
- 3 Indian Chameleons
- 6 Meller's Chameleons
- 2 Chameleons sp. inc.
- 2 Bosc's Monitors
- 1 Nile Monitor
- 1 Grey Monitor
- 1 Bengal Monitor
- 4 Iguanas
- 1 Cayman Island Ground Iguana
- 2 Gila Monsters
- 4 Pallas Glass Snakes
- 1 Great Tegu
- 1 Black-pointed Tegu
- 2 Anolis, *Anolis roquet-extremus*

*Order Serpentina*

- 3 Green Pit Vipers
- 1 Russell's Viper
- 17 Long-nosed Vipers
- 7 Baboon Vipers
- 5 Adders
- 1 Indian Wolf Snake
- 1 Variable Tree Snake
- 5 Egg-eating Snakes
- 1 Wolf Snake
- 2 African Lined Snakes
- 1 Sand Snake
- 52 Grass Snakes
- 7 Four-lined Snakes
- 1 Cat-snake
- 2 Montpellier Snakes
- 3 Red-bellied Snakes
- 1 Julia's West Indian Snake
- 12 Eastern Garter Snakes

- 3 De Kay's Snakes
- 2 Milk Snakes
- 1 Ribbon Snake
- 1 American Black Snake
- 1 Diced Water-snake
- 1 Surinam Snake
- 1 Lindheimer's Chicken Snake
- 1 Aesculapian Snake
- 3 Spotted Leaf Snakes
- 2 King Snakes
- 2 Eastern Diamondback Rattlesnakes
- 6 Puff Adders
- 1 Indian Cobra
- 2 Banded Kraits
- 1 Common Krait
- 2 Copperheads
- 2 Cottonmouth Moccasins
- 3 Boomslangs
- 1 East African Jameson's Mamba
- 1 Banded Racer
- 1 Indian Gamma
- 1 Fer-de-lance
- 1 African Python
- 1 Reticulated Python
- 1 Royal Python
- 1 Blood Python

*Amphibians*

- 1 African Bull Frog
- 4 European Tree Frogs
- 1 Jamaican Tree Frog, sp. inc.
- 1 Frog, *Rana signata*
- 1 Frog, *Rana cancrivora*
- 9 Malayan Tree Frogs, *Rhacophorus leucomystax linki*
- 4 American Toads
- 6 Giant Toads
- 1 Rain Hyla
- 2 Doumerc's Hylas
- 1 Spix's Hyla
- 6 Natterjacks
- 2 Japanese Newts
- 6 Brown Spelerpes
- 6 Double-striped Spelerpes

**WHIPNADE PARK**

*Rodentia*

- 3 Canadian Beavers
- 1 Fat Dormouse
- 1 Crested Porcupine
- 3 Spotted Pacas
- 3 Central American Agoutis
- 9 Capybaras

*Perissodactyla*

- 2 Przewalski Wild Horses
- 1 Hartmann's Mountain Zebra
- 4 Common Zebras
- 1 Brazilian Tapir

*Artiodactyla*

- 2 Yaks
- 1 Cape Buffalo
- 7 Mouflon
- 5 White-bearded Gnus
- 5 Impalas
- 7 Nilgai
- 9 Thomson's Gazelles
- 2 East African Eland
- 2 Pronghorn Antelope
- 8 Fallow Deer
- 6 Fallow Deer (Dark var.)

- 10 Spotted Deer
- 4 Hog Deer
- 3 Swamp Deer
- 12 Formosan Deer
- 20 Red Deer
- 2 Wapiti
- 20 Pere David's Deer
- 4 White-tailed Deer
- 3 Moose
- 25 Chinese Water Deer
- 2 Bactrian Camels
- 7 Llamas
- 6 Collared Peccaries

*Marsupialia*

- 1 Black-faced Kangaroo
- 81 Bennett's Wallabies

**Birds**

*Rheiformes*

- 1 Common Rhea

*Casuariiformes*

- 5 Emus

*Ciconiiformes*

- 10 Chilean Flamingos

*Anseriformes*

- 4 Eyton's Whistling Ducks
- 5 Whooper Swans
- 5 Black-necked Swans
- 7 Black Swans
- 15 Grey Lag Geese
- 6 Greater Snow Geese
- 1 Hawaiian Goose
- 3 Upland Geese
- 1 Australian Grey Duck
- 1 Red-billed Duck
- 5 Carolina Ducks
- 2 Mandarin Ducks
- 3 Spur-winged Geese

*Galliformes*

- 4 Quail
- 13 Pallas's Eared Pheasants

- 6 Swinhoe's Pheasants
- 2 Chinese Silver Pheasants
- 1 Elliot's Pheasant
- 1 Reeves's Pheasant
- 13 Golden Pheasants
- 2 Peacock Pheasants
- 29 Common Peafowl
- 4 Common Peafowl (black-winged var.)

*Gruiformes*

- 2 Sarus Cranes
- 2 Demoiselle Cranes
- 6 Crowned Cranes

*Psittaciformes*

- 2 Cockatiels
- 1 Yellow-headed Conure
- 2 Grey Parrots
- 6 Queen Alexandra's Parakeets
- 1 Barraband's Parakeet

*Donations to the Zoological Record*

	£	s	d
Acadian Entomological Society	8	5	10
American Museum of Natural History	177	19	1
American Ornithologists' Union, Vol. 99	17	14	0
American Ornithologists' Union, Vol. 100	17	15	7
American Society of Ichthyologists and Herpetologists	75	12	3
American Society of Mammalogists	107	4	0
Anonymous	100	0	0
Auckland Institute and Museum	5	5	0
Bombay Natural History Society	5	0	0
British Herpetological Society	2	2	0
British Museum (Natural History)	450	0	0
British Ornithologists' Club	5	5	0
British Ornithologists' Union	15	15	0
British Trust for Ornithology	2	0	0
Brooklyn Entomological Society	3	10	8
California Academy of Sciences	9	19	4
Canadian Society of Zoologists, Vol. 99	8	0	0
Canadian Society of Zoologists, Vol. 100	16	0	0
Challenger Society	5	5	0
Chicago Natural History Museum	17	14	9
Conchological Society of Great Britain and Ireland	2	0	0
Duke University, Department of Zoology	17	15	7
Entomological Society of Alberta	3	5	8
Entomological Society of America	71	9	11
Entomological Society of Canada	33	0	0
Entomological Society of Ontario	33	2	1
Geological Society of London	5	5	0
Harvard University, Museum of Comparative Zoology	89	8	0
International Council of Scientific Unions	534	11	4
Kennicott Club	8	17	1
Linnean Society of London	20	0	0
Linnean Society of New South Wales	11	19	0
Liverpool School of Tropical Medicine	3	3	0
London School of Hygiene and Tropical Medicine	2	2	0
Malacological Society of London	2	2	0
Mammal Society of the British Isles	2	2	0
Mayr, Dr. Ernst	2	9	4
Michigan, University of	35	13	8
Naples Zoological Station	10	0	0
New York Zoological Society	35	11	9
Paleontological Society	17	14	2
Royal Entomological Society	25	0	0
Royal Society of Tropical Medicine and Hygiene	5	5	0
Smithsonian Institution	53	11	10
Society of Systematic Zoology	71	4	2
Tichen, Joseph		3	4
Transvaal Museum	5	5	0
Wellcome Laboratories of Tropical Medicine	17	10	0
Witwatersrand, University of the	2	0	0
	<hr/>		
Total	£2,171	18	5

APPENDIX 10

*The Nuffield Institute of Comparative Medicine  
List of donations and grants received or promised*

	£	s	d		£	s	d
H. J. Heinz Co. Ltd	30,000	0	0	National Commercial Bank of Scotland Ltd	100	0	0
Wellcome Trust	25,000	0	0	Arthur H. Cox & Co. Ltd	100	0	0
British Heart Foundation	22,000	0	0	Cow & Gate Ltd	100	0	0
Medical Research Council	21,850	0	0	Metal Box Co. Ltd	100	0	0
Sembal Trust	20,000	0	0	Refuge Assurance Co. Ltd	100	0	0
Wellcome Foundation Ltd	10,000	0	0	G. A. L. Freeman Esq.	100	0	0
Ministry of Overseas Development	9,686	0	0	J. Paul Getty Esq.	100	0	0
Pearl Assurance Co. Ltd	7,000	0	0	Chilean Iodine Educational Bureau	100	0	0
The Pfizer Group	5,719	0	0	The Edgar E. Lawley Foundation	100	0	0
Shell Petroleum Co. Ltd	3,500	0	0	G. M. Stitcher Esq.	52	10	0
British Petroleum Co. Ltd	3,500	0	0	George Allen & Unwin Ltd	52	10	0
May & Baker Ltd	3,500	0	0	Strauss, Turnbull & Co.	52	10	0
Imperial Chemical Industries Ltd	3,500	0	0	Martins Bank Ltd	50	0	0
Glaxo Laboratories Ltd	2,250	0	0	J. & A. Churchill Ltd	50	0	0
Unilever Ltd	2,000	0	0	Anonymous	50	0	0
Petfoods Ltd	2,000	0	0	R. Nivison & Co.	50	0	0
Prudential Assurance Co. Ltd	1,750	0	0	Express Dairy Co. Ltd.	50	0	0
Esso Petroleum Co. Ltd	1,714	0	0	District Bank Ltd	50	0	0
Gestetner Trusts	1,500	0	0	Council of the Stock Exchange	50	0	0
Sir Billy Butlin	1,000	0	0	R. C. B. Lane Esq.	28	10	0
G. D. Searle & Co. Ltd	1,000	0	0	Viyella International Ltd	26	5	0
The Goldsmiths' Company	1,000	0	0	Pinchin Ferguson Clark	26	5	0
Smith Kline & French Research Institute	1,000	0	0	Friary Meux Ltd	26	5	0
Smith Kline & French Foundation	1,000	0	0	Nelson Preserving Co. Ltd	26	5	0
Bovril Ltd	700	0	0	Coutts & Co.	25	0	0
Gestetner Ltd	700	0	0	B. Finch & Co. Ltd	25	0	0
Rolls-Royce Ltd	700	0	0	Wedd Jefferson & Co.	25	0	0
Daniel Thwaites & Co. Ltd	571	0	0	Dix (Builders) Ltd	25	0	0
Sir David Evans Bevan	500	0	0	Horlicks Ltd	25	0	0
Willows Francis Ltd	500	0	0	Textile Machinery Makers Ltd	25	0	0
Abdullah Al-Ghanim	500	0	0	The late R. A. Loader Esq.	21	0	0
The Dowager Countess Eleanor Peel Trust	500	0	0	Kinloch (Provision Merchants) Ltd	10	10	0
National Cash Register Co. Ltd	300	0	0	Park Bottling Co. Ltd	10	10	0
Spillers Ltd	250	0	0	Vaughan Associates Ltd	10	10	0
Westminster Bank Ltd	250	0	0	Wm. Houghton & Sons Ltd	10	10	0
Lloyds Bank Ltd	250	0	0	Friends' Provident and Century Life Office	10	10	0
National Provincial Bank Ltd	250	0	0	Singer Sewing Machine Co. Ltd	10	10	0
Barclays Bank Ltd	250	0	0	Bovis Group Trust Fund	10	10	0
Midland Bank Ltd	250	0	0	Durlacher, Oldham, Mordaunt, Godson & Co.	10	0	0
Cazenove & Co.	250	0	0	Govett, Sons & Co.	10	0	0
J. Sainsbury Ltd	250	0	0	Raimes, Clark & Co. Ltd	10	0	0
The Lord Austin Will Trust	250	0	0	Sir Harold Howitt	10	0	0
Ash Spinning Co. Ltd	229	0	0	S. R. Hogg Esq.	10	0	0
John Mowlem & Co. Ltd	200	0	0	Samuel Montagu & Co. Ltd	10	0	0
J. Lyons & Co. Ltd	200	0	0	Geo. D. Atkin & Co.	5	5	0
Albert and Mary Lasker Foundation	178	0	0	Zettlers International Pools Ltd	5	5	0
Troughton & Young Ltd	120	0	0	G. C. H. Matthey Esq.	5	5	0
C. Shippam Ltd	114	0	0	C. G. Rickett Esq.	5	5	0
Bank of England	105	0	0	Paul E. Shaw & Co.	5	5	0
Associated Television Ltd	105	0	0	L. H. Chamen Esq.	5	0	0
Roche Products Ltd	105	0	0	H.D.E.C.-G.G.C., C.M.	5	0	0
Wrigley Co. Ltd	105	0	0	L. H. Cooper Esq.	3	3	0
Royal Bank of Scotland	100	0	0	Studio Briggs Ltd	3	3	0
Equity and Law Life Assurance Society Ltd	100	0	0				
George Mason & Co. Ltd	100	0	0		£192,338	18	0

Equipment or materials have also been given by Ethicon Ltd, Miles Laboratories Ltd, Cambridge Instrument Co. Ltd and Kodak Ltd,  
When donations have been given under covenant the amounts shown include the tax which it is expected to recover.

*Books presented to the Library*

- AGRICULTURAL RESEARCH SERVICES  
ZOMBA, NYASALAND Report on the survey of Northern Lake Nyasa, 1954-55  
By P. B. N. Jackson *and others*. 1963
- AMBASSADE DE FRANCE À LONDRES,  
BUREAU SCIENTIFIQUE Le mimétisme animal. By Roger Caillois. 1963
- BERTRAM, GEORGE C. L., Ph.D. In search of mermaids. By Colin Bertram. 1963
- BLACKWELL SCIENTIFIC PUBLICATIONS The handbook of British mammals. Edited for the Mam-  
mal Society of the British Isles by H. N. Southern. 1964
- BRITISH MUSEUM (NATURAL HISTORY),  
TRUSTEES OF Bulletin of the British Museum (Natural History) Ento-  
mology, Vol. 14, nos. 5-7; Vol. 15, nos. 1-9; Geology,  
Vol. 9, nos. 3-7; Vol. 10, nos. 1-2; Zoology, Vol. 11,  
nos. 2-8; Vol. 12, no. 1  
Dinosaurs. By W. E. Swinton. 2nd edition. 1964  
Seals of the world. By Judith E. King. 1964  
Yorkshire Jurassic flora II. By Thomas Maxwell Harris.  
1964
- COLEMAN-COOKE, JOHN Discovery II in the Antarctic: the story of British research  
in the Southern Seas. By John Coleman-Cooke. 1963
- COUNTRY LIFE L'ours brun. By Marcel A. J. Couturier. 1954
- FIENNES, R.N., M.A., M.R.C.V.S. Man, nature and disease. By R. Fiennes. 1964
- FRANKENSCHWERTH, MRS K. Collection of volumes from the Library of the late Pro-  
fessor H. F. Rosenberg.
- GOVERNMENT ENTOMOLOGIST,  
NYASALAND Insect pests of cotton. By R. C. H. Sweeney. 1964
- GREULICH, PROFESSOR WILLIAM W. Fishes of the Marshall and Marianas Islands. Vols. 1 and  
2. By Leonard P. Schultz and others. 1953, 1960
- HAMLIN, PAUL A book of mammoths. By Josef Augusta. Translated by  
Margaret Schierl. 1963
- HARRISON, DAVID L., M.A., M.B., B.Ch. The mammals of Arabia. By David L. Harrison. 1964
- HAVERSCHMIDT, F. The black-tailed godwit. By F. Haverschmidt. 1963
- HER MAJESTY'S CONSUL, FORMOSA Snakes of Taiwan. By Robert E. Kuntz. 1963
- HUDD, A. G. Presmŷkayushchiesya Turkmenii. By O. P. Bogdanov.  
1962  
Ptitsŷ zapadnŷkh oblasteŷ USSR. By F. I. Strautman. 1963
- HUTCHINSON & CO. (PUBLISHERS) LTD Portrait of a river: the wildlife of the Danube from the  
Black Sea to Budapest. By Guy Mountfort. 1962
- ISRAEL PROGRAM FOR SCIENTIFIC  
TRANSLATIONS Fundamentals of paleontology (Osnovy paleontologii).  
A manual for paleontologists and geologists of the  
USSR. General part: Protozoa. Edited by Yu. A.  
Orlov. Translated from the Russian. 1962
- KNIGHT, MAXWELL, O.B.E., F.L.S., My pet friends. By Maxwell Knight. 1964
- POLIAKOWA, MISS SOPHIA Belukha: opŷt monograficheskogo issledovaniya vida. By  
S. E. Kleinenberg and others. 1964  
Morfologicheskie osobennosti vodnŷkh mlekopitayu-  
shchikh. 1964

- RICHDALE, DR L. E. Post-egg period in albatrosses. By L. E. Richdale. 1952
- THOMSON, SIR A. LANDSBOROUGH, C.B., O.B.E., M.A., D.Sc., LL.D. A new dictionary of birds. Edited by Sir A. Landsborough Thomson. 1964
- UNIVERSITETSFORLAGET, OSLO The biology of myxine. By Alf Brodal and Ragnar Fänge. 1963
- UNIVERSITY OF CHICAGO PRESS Social behavior and organization among vertebrates. Edited by William Etkin. 1964
- VAN NOSTRAND, D., COMPANY LTD General biology. Edited by A. Stauffer. 1963
- VAN STRAELEN, MADAME Victor Van Straelen, tel qu'il demeure. 1964
- WALKER, ERNEST P. Mammals of the world. By Ernest P. Walker and others. 3 vols. 1964
- WORLD LIST OF SCIENTIFIC PERIODICALS, COUNCIL OF THE World list of scientific periodicals, published in the years 1900-1960. 4th edition. Edited by Peter Brown and George Burder Stratton. Vol. 1. A-E. Vol. 2. F-P. 1964

## MEETINGS DURING 1965

### *Scientific Meetings at 5 p.m.*

Tuesday, 9th February  
Tuesday, 9th March  
Tuesday, 13th April  
Tuesday, 11th May  
Tuesday, 8th June  
Tuesday, 12th October  
Tuesday, 9th November  
Tuesday, 14th December

### *Symposia*

Wednesday and Thursday, 3rd–4th March  
Tuesday–Wednesday, 15th–16th June  
A Symposium will be held in November, but the date has still  
to be arranged.

REPORT OF THE  
AUDITORS ON THE ACCOUNTS OF  
THE ZOOLOGICAL SOCIETY  
OF LONDON  
FOR THE YEAR ENDED  
*31st December 1959*

In accordance with the provisions of Chapter 8 of the Bye-Laws of the Society we report that we have examined the Books and Accounts of the Society for the year ended 31st December, 1959, and have found them to be in order. Having received all the information and explanations we have required, we are of the opinion that the attached Balance Sheet and accompanying Income and Expenditure Account and Schedule show a true and fair view of the position as shown by the books of the Society. We have verified the Investments and the Cash Balances.

W. B. KEEN & CO  
*Chartered Accountants*

FINSBURY CIRCUS HOUSE · BLOMFIELD STREET · LONDON EC2  
3 MARCH 1960



THE ZOOLOGICAL SOCIETY OF LONDON

*Schedule of Bequest, Trust and Special Funds 1959*

FUNDS	BALANCES at 1st Jan. 1959	ADDITIONS DURING YEAR					DEDUCTIONS DURING YEAR <i>Expenditure, etc.</i>	BALANCES at 31st Dec. 1959
		<i>Investment Income</i>	<i>Donations, Fees Sales, etc.</i>	<i>Transfers</i>	<i>Other</i>	<i>Total Additions</i>		
	£	£	£	£	£	£	£	
<i>Bequest and Trust Funds</i>								
Heer Bequest	91							
Allen Bequest – Regent's Park	16,842						91	
Hance Bequest – Whipsnade Park	14,035					Transferred to Rebuilding Fund – Regent's Park	16,842	
Salisbury Bequest	3,183	131			131	Transferred to Building Fund – Whipsnade Park	14,035	
Kime Bequest – Regent's Park	668					Transferred to Rebuilding Fund – Regent's Park	668	
Kime Bequest – Whipsnade Park	400					Transferred to Building Fund – Whipsnade Park	400	
Barrington Bequest – Regent's Park (Library)	1,087	45			45		1,132	
*De Arroyave Trust Fund	—	3,099		Dr. 3,033	66	Upkeep of Grave and Mausoleum	66	
*Davis Trust Fund	—	57		Dr. 57	—		—	
	36,306	3,332		Dr. 3,090	242		32,011	
							4,537	
<i>Special Funds</i>								
Zoological Record Fund	18,402	780	6,629		7,409	Preparation and Printing etc.	5,753	
Neave Lloyd Nomenclator Zoologicus Fund	7,503	315	498		813	Distribution	115	
Composition Fund	20,710		217	Dr. 615	Dr. 398		20,312	
Rebuilding Fund – Regent's Park	192,893	8,076	1,637	30,253	30,858	† New Works	81,712	
Staff Compensation and Sick Benefit Fund	1,511	63			(War Damage)	Grant	50	
Regent's Park Catering Department – Capital Improvements Fund	11,873	252		3,400	3,652	Garden Cafe and Buffet Bar Improvements	7,300	
Whipsnade Park Catering Department – Capital Improvements Fund	7,148	294		1,100	1,394		8,542	
Building Fund – Whipsnade Park	23,588	1,610	1,847	14,435	17,892	New Lavatory	243	
General Reserve Fund – Regent's Park	108,538	4,924	100	615	25,079		41,237	
General Purposes Account	250,012				(Profit on Sale of Investments)		139,256	
	£678,484	£19,646	£10,928	£46,098	£55,937		250,012	
							£127,184	
							£683,909	

\* Capital of the De Arroyave Trust Fund is held by the Official Trustee of Charitable Funds.  
Capital of the Davis Trust Fund is held in trust by the Society.

† *Expenditure on New Works*

New Hospital & Sanatorium – Balance	1,435
New Works Buildings – Instalment	30,546
New Supplies Department – Instalment	28,259
New Education Centre – Instalment	4,627
Children's Zoo Improvements – Instalment	7,031
Regent Building & Bakery Alterations – Instalment	8,096
Other Items	1,718
	£81,712

Estimated Contractual Liability Outstanding £70,000

THE ZOOLOGICAL SOCIETY OF LONDON

Balance Sheet at 31st December 1959

1958		£	£	£
27,951	Sundry Creditors and Receipts in Advance			30,446
75,000	Trustees of Pension Fund			—
100,000	Pensions Contributions Reserve Fund			100,000
	<i>Excess of Assets over Liabilities (per Schedule)</i>			
	Sundry Bequest and Trust Funds		4,537	
	Zoological Record Fund		20,058	
	Neave Lloyd Nomenclator Zoologicus Fund		8,201	
	Composition Fund		20,312	
	Rebuilding Fund - Regent's Park		182,005	
	Staff Compensation and Sick Benefit Fund		1,524	
	Catering Departments, Capital Improvements Funds			
	Regent's Park	8,225		
	Whipsnade Park	8,542		
			16,767	
	Building Fund - Whipsnade Park		41,237	
	General Reserve Fund - Regent's Park		139,256	
	General Purposes Account		250,012	
678,484				683,909
£881,435				£814,355

NOTE: No values are included in the above Balance Sheet in respect of:  
a. Animals.  
b. Literary Books and Pictures.  
c. Plant, Vehicles, Fittings and Furniture

1958		£	£
14,474	<i>Freehold Property at cost</i>		
	31, Prince Albert Road, N.W.1	14,474	
106,624	Whipsnade Park	106,624	
			121,098
	<i>Stocks</i>		
1,000	Scientific Publications	1,000	
15,760	Books, Souvenirs, etc.	19,638	
8,764	Catering Depts. Provisions etc.	8,876	
5,940	Farm and Garden (Whipsnade)	6,430	
			35,944
20,537	Sundry Debtors and Payments in Advance		18,843
551,666	Investments (at cost) and Loan on Mortgage (per Schedule)		496,891
156,670	Short Term Loans, Deposits and Cash		141,579
£881,435			£814,355

	£
<i>Investments (at cost)</i>	
British Government Securities	161,121
Canadian	68,558
American	110,116
Industrials etc.	156,496
Loan on Mortgage	600
Zoo Restaurants Ltd, 2 Ordinary £1 Shares (fully paid)	—
	£496,891

The Market Value of the Investments at 31st December, 1959 was £584,321.

TERENCE C. S. MORRISON-SCOTT  
Treasurer

Income and Expenditure Account for the year ended 31st December 1959

1958		£	£	£
18,966	Members Subscriptions and Entrance Fees			25,857
21,292	Interest and Dividends (after allocation to Funds)			12,422
	<i>Scientific (Special Income)</i>			
5,909	Sale of Scientific Publications		4,689	
5,247	Educational Scheme - Visits		1,085	
—	Young Zoologists Club		1,181	
				6,955
	<i>Regent's Park - Gardens</i>			
213,369	Admission of Visitors to Gardens	223,309		
14,549	Admission of Visitors to Aquarium	15,068		
6,854	Admission of Visitors to Children's Zoo	7,774		
968	Chimpanzees' Tea Party	1,010		
5,432	Riding Receipts	4,040		
2,338	Push Chairs, Hire of	2,764		
			253,965	
9,936	Books, Souvenirs, Guides, etc., Net Receipts		11,436	
13,392	Catering Department, Net Receipts		17,338	
6,000	Zoo Restaurants Ltd, Fee		6,000	
3,721	Television and Film Permits		3,705	
195	Sale of Animals etc.		441	
2,970	Miscellaneous Receipts		3,195	
				296,080
	<i>Whipsnade Park - Gardens</i>			
73,008	Admission of Visitors to Park	81,294		
5,848	Admission of Visitors to Children's Zoo	6,524		
15,418	Admission of Cars to Park	17,117		
2,975	Train Receipts	3,212		
3,243	Riding Receipts	3,756		
588	Push Chairs, Hire of	659		
6,228	Car Parks - Parking Fees	6,826		
			119,388	
5,614	Books, Souvenirs, Guides, etc., Net Receipts		6,393	
10,453	Farm, Garden and Forestry Sales		8,414	
4,503	Sale of Animals etc.		8,211	
6,437	Catering Department, Net Receipts		11,564	
200	Miscellaneous Receipts		262	
				154,232
£465,653				£495,546
£28,385	Balance brought down			£17,243
£28,385				£17,243

1958		£	£	£
35,080	General Administration			31,845
	<i>Pensions</i>			
22,711	Payments to Pensioners		22,965	
—	Contribution to Trustees of Pension Fund		30,000	
				52,965
	<i>Scientific (Special Expenditure)</i>			
7,714	Library		7,373	
2,244	Prosectorium Expenses		3,549	
3,379	Educational Scheme		3,367	
328	Young Zoologists Club		1,504	
6,807	Scientific Publications, Cost of		7,717	
10,586	Salaries and Sundry Expenses		9,795	
				33,305
	<i>Regent's Park - Gardens</i>			
	Menagerie Expenses			
7,360	Rates, Rents and Insurance	5,591		
102,265	Salaries	104,831		
25,774	Provisions	27,773		
33,343	Fuel, Light, Water, Utensils, Transport and Other Expenses	35,785		
48,795	Works Department	51,232		
15,717	Gardeners' and Sweeping Dept. Expenses	13,907		
			239,119	
4,166	Advertising		3,153	
8,299	Purchase of Animals and Exhibits		6,728	
	<i>Special Works</i>			
	Rhinoceros Den - alterations	4,058		
	Old Sanatorium - alterations	121		
	Giant Panda Enclosure	3,775		
			7,954	
7,147				256,954
	<i>Whipsnade Park - Gardens</i>			
	Menagerie Expenses			
2,669	Rates and Insurance	2,782		
35,303	Salaries	37,329		
15,621	Provisions	15,658		
11,793	Fuel, Light, Water, Utensils, Transport and Other Expenses	12,912		
16,411	Works Department	17,868		
			86,549	
10,105	Farm, Garden and Forestry Expenses		8,812	
1,561	Advertising		1,105	
2,090	Purchase of Animals		6,768	
				103,234
£437,268				£478,303
28,385	Balance carried down			17,243
£465,653				£495,546
	<i>Transfers</i>			
	Appropriations to:			
100	Staff Compensation and Sick Benefit Fund		—	
16,000	Rebuilding Fund		12,743	
	Catering Departments, Capital Improvements Funds—			
5,000	Regent's Park	3,400		
800	Whipsnade Park	1,100		
			4,500	
6,485	Balance - Surplus for year			17,243
£28,385				£17,243



REPORT OF THE  
AUDITORS ON THE ACCOUNTS OF  
THE ZOOLOGICAL SOCIETY  
OF LONDON  
FOR THE YEAR ENDED

*31st December 1960*

In accordance with the provisions of Chapter 8 of the Bye-Laws of the Society we report that we have examined the Books and Accounts of the Society for the year ended 31st December, 1960, and have found them to be in order. Having received all the information and explanations we have required, we are of the opinion that the attached Balance Sheet and accompanying Income and Expenditure Account and Schedule show a true and fair view of the position as shown by the books of the Society. We have verified the Investments and the Cash Balances.

W. B. KEEN & CO  
*Chartered Accountants*

FINSBURY CIRCUS HOUSE · BLOMFIELD STREET · LONDON EC2

7th MARCH 1961

THE ZOOLOGICAL SOCIETY OF LONDON

Schedule of Bequest, Trust and Special Funds 1960

FUNDS	BALANCES at 1st Jan., 1960	ADDITIONS DURING YEAR				DEDUCTIONS DURING YEAR		BALANCES at 31st Dec., 1960	
		Investment Income	Donations, Fees, Sales, etc.	Transfers	Other	Transfers	Expendi- ture	£	£
<i>Bequest and Trust Funds</i>	£	£	£	£	£			£	£
Heer Bequest	91							91	
Salisbury Bequest	3,314	142						3,456	
Barrington Bequest	1,132	48						1,180	
*De Arroyave Trust Fund	—	3,099				{ Income and Expenditure Account	3,086		
						{ Upkeep of Grave and Mausoleum		13	
						{ Income and Expenditure Account	57		
*Davis Trust Fund	—	57							
<i>Scientific Research Funds</i>									4,727
Ford Foundation Fund	—	3,223	195,941			Salary, Advertising, etc.		423	198,741
<i>Publications Funds</i>									
Zoological Record Fund	20,058	848	11,876			Preparation and Printing, etc.		14,113	18,669
Neave Lloyd Fund	8,201	360	520			Distribution		135	8,946
<i>General Funds</i>									27,615
Composition Fund	20,312		110			General Reserve Fund	475		19,947
Rebuilding Fund - Regent's Park	182,005	6,607	483	†22,874		New Works		58,903	153,066
Building Fund - Whipsnade Park	41,237	1,540				New Works		16,874	25,903
Regent's Park Catering Improvements Fund	8,225	170		4,000		New Works		-7,028	5,367
Whipsnade Catering Improvements Fund	8,542	365		1,850					10,757
Staff Compensation Fund	1,524					Grants		8	1,516
Jack Cotton Fund	—	252	30,000			New Works		658	29,594
General Reserve Fund	139,256	5,839		475	10,651 (Profit on Sale of Investments)	{ Rebuilding Fund	15,512		140,509
					5,419 (Freehold Property)	{ Income and Expenditure Account	200		248,946
General Purposes Account	250,012					Rebuilding Fund	6,485		
	£683,909	£22,550	£238,930	£29,199	£16,070		£25,815	£98,155	£866,688

\* Capital of the De Arroyave Trust Fund is held by the Official Trustee of Charitable Funds. Capital of the Davis Trust Fund is held in trust by the Society.

† Includes £126 balance from Legal Expenses Appeal Fund.

THE ZOOLOGICAL SOCIETY OF LONDON

Balance Sheet at 31st December 1960

1959		£	£
30,446	Sundry Creditors and Receipts in Advance		28,231
100,000	Pensions Contributions Reserve Fund		100,000
	<i>Excess of Assets over Liabilities (per Schedule)</i>		
4,537	Bequest and Trust Funds		4,727
	Scientific Research Funds—		
	Ford Foundation Fund		198,741
	Publications Funds—		
	Zoological Record Fund	18,669	
	Neave Lloyd Fund	8,946	
28,259			27,615
	General Funds—		
	Composition Fund	19,947	
	Rebuilding Fund—Regent's Park	153,066	
	Building Fund—Whipsnade Park	25,903	
	Regent's Park Catering Improvements Fund	5,367	
	Whipsnade Catering Improvements Fund	10,757	
	Staff Compensation Fund	1,516	
	Jack Cotton Fund	29,594	
	General Reserve Fund	140,509	
	General Purposes Account	248,946	
651,113			635,605
£814,355			£994,919

1959		£	£	£
	<i>Freehold Property at cost</i>			
14,474	31, Prince Albert Road, N.W.1			14,474
106,624	Whipsnade Park as at 1st January 1960	106,624		
	Add Expenditure on Staff Housing during year	5,419		
			112,043	126,517
	<i>Stocks</i>			
1,000	Scientific Publications			1,000
19,638	Books, Souvenirs, etc.			12,770
8,876	Catering Depts. Provisions etc.			9,603
6,430	Farm and Garden (Whipsnade)			5,743
				29,116
18,843	Sundry Debtors and Payments in Advance			25,678
496,891	Investments at cost (see below)			635,787
	(Including Funds for special purposes and scientific research)			
141,579	Short Term Loans, Deposits and Cash			177,821
£814,355				£994,919

NOTE: No values are included in the above Balance Sheet in respect of:  
a. Animals.  
b. Library Books and Pictures.  
c. Plant, Vehicles, Fittings and Furniture.

<i>Investments (at cost)</i>		£
	British Government Securities	221,718
	Canadian	75,156
	American	109,720
	Industrials etc.	228,593
	Loan on Mortgage	600
	Zoo Restaurants Ltd, 2 Ordinary £1 Shares (fully paid)	—
		£635,787

The Market Value of the Investments at 31st December, 1960 was £672,771.

TERENCE C. S. MORRISON-SCOTT  
Treasurer

Income and Expenditure Account for the year ended 31st December 1960

1959		£	£	£
25,857	Members Subscriptions and Entrance Fees			24,167
12,422	Interest and Dividends (after allocation to Funds)			13,290
	<i>Scientific</i>			
4,689	Sale of Scientific Publications		6,458	
1,085	Educational Scheme - Visits		1,657	
1,181	Young Zoologists Club		879	
	International Zoo Yearbook		131	9,125
	<i>Regent's Park - Gardens</i>			
223,309	Admission of Visitors to Gardens	242,645		
15,068	Admission of Visitors to Aquarium	14,231		
7,774	Admission of Visitors to Children's Zoo	12,850		
1,010	Chimpanzees' Tea Party	769		
4,040	Riding Receipts	4,676		
2,764	Push Chairs, Hire of	2,498		
			277,669	
11,436	Books, Souvenirs, Guides, etc., Net Receipts		10,333	
17,338	Catering Department, Net Receipts		14,234	
6,000	Zoo Restaurants Ltd, Fee		7,297	
3,705	Television and Film Permits		3,668	
441	Animals		1,636	
3,195	Miscellaneous Receipts		3,501	
				318,338
	<i>Whipsnade Park - Gardens</i>			
81,294	Admission of Visitors to Park	92,126		
6,524	Admission of Visitors to Children's Zoo	6,663		
17,117	Admission of Cars to Park	17,849		
3,212	Train Receipts	2,636		
3,756	Riding Receipts	4,583		
659	Push Chairs, Hire of	584		
6,826	Car Parks - Parking Fees	6,738		
			131,179	
6,393	Books, Souvenirs, Guides, etc., Net Receipts		6,437	
8,414	Farm, Garden and Forestry Sales		7,114	
8,211	Animals		5,314	
11,564	Catering Department, Net Receipts		10,703	
262	Miscellaneous Receipts		226	
				160,973
£495,546				£525,893
17,243	Surplus for year brought down			6,601
£17,243				£6,601

1959		£	£	£
31,845	General Administration			40,952
	<i>Pensions</i>			
22,965	Payments to Pensioners		22,566	
30,000	Contribution to Trustees of Pension Fund		30,000	
				52,566
	<i>Scientific</i>			
13,344	General Scientific Expenses		14,480	
7,373	Library		7,156	
7,717	Scientific Publications, Cost of		11,625	
3,367	Educational Scheme		4,162	
1,504	Young Zoologists Club		1,510	
	International Zoo Yearbook		867	39,800
	<i>Regent's Park - Gardens</i>			
	Menagerie Expenses			
5,591	Rates, Rents and Insurance		6,585	
104,831	Salaries		113,264	
27,773	Provisions		30,588	
35,785	Fuel, Light, Water, Transport, etc.		46,006	196,443
	<i>Works Department</i>			
51,232	General Maintenance		45,261	
7,954	Alterations and Improvements		6,845	
				52,106
13,907	Gardeners' and Sweeping Dept. Expenses		15,193	
3,153	Advertising		398	
6,728	Purchase of Animals and Exhibits		7,096	271,236
	<i>Whipsnade Park - Gardens</i>			
	Menagerie Expenses			
2,782	Rates and Insurance		2,774	
37,329	Salaries		40,876	
15,658	Provisions		18,936	
12,912	Fuel, Light, Water, Transport, etc.		14,319	76,905
	<i>Works Department</i>			
17,181	General Maintenance		19,697	
687	Alterations and Improvements		2,392	
				22,089
8,812	Farm, Gardens and Forestry Expenses		11,584	
1,105	Advertising		1,187	
6,768	Purchase of Animals		2,973	114,738
478,303				519,292
17,243	Surplus for year carried down			6,601
£495,546				£525,893
	<i>Transfers</i>			
	Appropriations to:			
12,743	Rebuilding Fund		751	
3,400	Catering Departments, Improvements Funds—			
	Regent's Park	4,000		
1,100	Whipsnade Park	1,850		
			5,850	6,601
£17,243				£6,601



REPORT OF THE  
AUDITORS ON THE ACCOUNTS OF  
THE ZOOLOGICAL SOCIETY  
OF LONDON  
FOR THE YEAR ENDED

*31st December 1962*

In accordance with the provisions of Byelaw 33 we report that we have examined the Books and Accounts of the Society for the year ended 31st December 1962, including those relating to the Ford Research Fund, and have found them to be in order. Having received all the information and explanations we have required, we are of the opinion that the attached Balance Sheets, the accompanying Income and Expenditure Accounts and Schedule show a true and fair view of the position as shown by the books of the Society. We have verified the Investments and the Cash Balances.

W. B. KEEN & CO

*Chartered Accountants*

20th February 1963

FINSBURY CIRCUS HOUSE · BLOMFIELD STREET · LONDON EC2



THE ZOOLOGICAL SOCIETY OF LONDON

Schedule of Bequest, Trust and Special Funds 1962

FUNDS	BALANCES at 1st Jan. 1962	ADDITIONS DURING YEAR			DEDUCTIONS DURING YEAR	BALANCES at 31st Dec. 1962		
		Investment Income	Donations, Fees, Sales, etc.	Other		£	£	
<i>Bequest and Trust Funds</i>	£	£	£	£		£	£	
Heer Bequest	91					91		
Salisbury Bequest	3,612	78			Part cost of Cockatoo Aviary	3,690	—	
Barrington Bequest	1,233	65			Development of Library	1,298	—	
*De Arroyave Trust Fund	—	3,099			{ To Income and Expenditure Account	2,977 }	—	
*Davis Trust Fund	—	57			Upkeep of Grave and Mausoleum	122 }	—	
					To Income and Expenditure Account	57	—	
							91	
<i>Scientific Research Funds</i> † Nuffield Institute Fund	1,810	131	1,000		Apparatus and Preliminary Expenses	511	2,430	
<i>Publications Funds</i>								
Zoological Record Fund	17,702	787	15,070		Preparation and Printing, etc.	16,611	16,948	
Neave Lloyd Fund	9,842	523	410		Nomenclator Zoologicus Expenses	137	10,638	
							27,586	
<i>General Funds</i>								
Rebuilding Fund - Regent's Park	93,599	9,169	8,388	45,288	From General Purposes Account	New Works	156,444	—
Jack Cotton Fund	—		40,000			New Works	40,000	—
Building Fund - Whipsnade Park	13,417	97	53	{ 59,007 From General Purposes Account		New Works	91,435	12,584
				{ 18,861 From General Reserve Fund		Improvements	18,981	—
				{ 12,584 Balance of Fire Insurance Claim		Improvements	4,074	11,331
Regent's Park Catering Improvements Fund	5,667	58		{ 10,156 From General Purposes Account		To General Reserve Fund	1,055	18,527
Whipsnade Catering Improvements Fund	12,827	578		{ 3,100 From Income and Expenditure Account		Grants	386	1,130
Composition Fund	19,452		130	2,000 From Income and Expenditure Account				18,500
Staff Compensation Fund	1,516					To Whipsnade Building Fund	18,861	140,000
Buildings Replacement Fund	—			18,500 From Income and Expenditure Account		{ Transfers to Other Funds	114,451 }	210,715
General Reserve Fund	148,618			{ 1,055 Fees of deceased Compounders		{ Deficit from Income and Expenditure	5,563 }	412,787
				{ 9,188 Profit on Sale of Investments		Account		
General Purposes Account	245,683			85,046 Profit on Sale of 31 Prince Albert Road				
	£575,069	£14,642	£65,051	£264,785		£476,653	£442,894	

\* The capital of the De Arroyave Trust Fund is held by the Official Trustee of Charitable Funds.

The capital of the Davis Trust Fund is held in trust by the Society, but is not included in the Balance Sheet.

† See separate account overleaf for Ford Research Fund.

THE ZOOLOGICAL SOCIETY OF LONDON

Balance Sheet at 31st December 1962

1961		£	£
£			
30,071	Sundry Creditors and Receipts in Advance		40,095
100,000	Pensions Contributions Reserve Fund		100,000
	<i>Excess of Assets over Liabilities (per Schedule)</i>		
4,936	Bequest and Trust Funds		91
	Scientific Research Funds—		
1,810	Nuffield Institute Fund		2,430
	Publications Funds—		
	Zoological Record Fund	16,948	
	Neave Lloyd Fund	10,638	
27,544			27,586
	General Funds—		
	Rebuilding Fund—Regent's Park		
	Jack Cotton Fund		
	Building Fund—Whipsnade Park	12,584	
	Regent's Park Catering Improvements Fund		
	Whipsnade Catering Improvements Fund	11,331	
	Composition Fund	18,527	
	Staff Compensation Fund	1,130	
	Buildings Replacement Fund	18,500	
	General Reserve Fund	140,000	
	General Purposes Account	210,715	
540,779			412,787
£705,140			£582,989

1961		£	£
£			
	<i>Freehold Property at Cost</i>		
14,474	31 Prince Albert Road, NW1 (sold during year)		
114,523	Whipsnade Park as at 1st January 1962	114,523	
	Add Expenditure on Staff Housing during year	540	
			115,063
	<i>Stocks</i>		
1,000	Scientific Publications	1,000	
22,903	Books, Souvenirs, etc.	15,739	
10,929	Catering Depts Provisions etc.	10,696	
			27,435
40,207	Sundry Debtors and Payments in Advance		29,769
382,955	Investments at cost (see below)		
	(Including Funds for special purposes and scientific research)		349,960
118,149	Deposits and Cash		60,762
£705,140			£582,989

NOTE: No values are included in the above Balance Sheet in respect of:  
a Animals  
b Library Books and Pictures  
c Plant, Vehicles, Fittings and Furniture  
d Farm and Gardens Stocks (Whipsnade)

<i>Investments (at cost)</i>			
	British Government Securities	97,247	
	Canadian	40,731	
	American	62,284	
	Industrial etc.	149,098	
	Loan on Mortgage	600	
	Zoo Restaurants Ltd 2 Ordinary £1 Shares (fully paid)		
		£349,960	

The Market Value of the Investments at 31st December 1962 was £412,972

TERENCE C. S. MORRISON-SCOTT  
Treasurer

Income and Expenditure Account for the year ended 31st December 1962

1961		£	£	£
£				
23,054	Members' Subscriptions and Entrance Fees			22,967
13,990	Interest and Dividends (after allocation to Funds)			11,085
	<i>Scientific</i>			
6,652	Sale of Scientific Publications	8,889		
1,831	Educational Scheme—Visits	3,018		
1,037	Young Zoologists Club	1,129		
1,206	International Zoo Yearbook	2,512		
	Miscellaneous	250		
				15,798
	<i>Regent's Park</i>			
255,709	Admission of Visitors to Gardens	297,801		
15,308	Admission of Visitors to Aquarium	13,518		
17,024	Admission of Visitors to Children's Zoo	16,006		
833	Chimpanzees' Tea Party	818		
5,394	Riding Receipts	4,502		
2,917	Push Chairs, Hire of	2,662		
13,884	Books, Souvenirs, Guides, etc., Net Receipts	10,775		
	Catering Department, Net Receipts	19,343		
	Less Contribution to Catering Improvements Fund	3,100		
18,467		16,243		
10,193	Zoo Restaurants Ltd	14,214		
3,849	Television and Film Permits	3,658		
313	Animals	475		
3,973	Miscellaneous Receipts	3,346		
				384,018
	<i>Whipsnade Park</i>			
109,517	Admission of Visitors to Park	122,634		
8,725	Admission of Visitors to Children's Zoo	7,394		
23,279	Admission of Cars to Park	26,035		
2,567	Train Receipts	1,959		
5,647	Riding Receipts	3,589		
577	Push Chairs, Hire of	748		
8,060	Car Parks—Parking Fees	8,740		
7,364	Books, Souvenirs, Guides, etc., Net Receipts	9,884		
7,392	Farm, Gardens and Forestry Sales	2,158		
5,985	Animals	3,440		
	Catering Department, Net Receipts	5,911		
	Less Contribution to Catering Improvements Fund	2,000		
11,879		3,911		
410	Miscellaneous Receipts	154		
				190,646
£587,036				£624,514
	Deficit for year carried to General Purposes Account			5,563
£587,036				£630,077

1961		£	£	£
£				
42,167	General Administration			43,000
	Contribution to Buildings Replacement Fund			18,500
	<i>Pensions</i>			
22,663	Payments to Pensioners		20,217	
30,000	Contribution to Trustees of Pension Fund		30,000	
				50,217
	<i>Scientific</i>			
17,050	General Scientific Expenses		19,306	
7,340	Library	8,191		
	Less Transfer from Barrington Bequest	1,298		
			6,893	
11,514	Scientific Publications, Cost of		14,279	
3,212	Educational Scheme		4,182	
2,656	Young Zoologists Club		2,056	
2,190	International Zoo Yearbook		3,675	
				50,391
	<i>Regent's Park</i>			
	Menagerie Expenses			
6,928	Rates, Rents and Insurance	7,152		
124,810	Salaries	134,529		
32,531	Provisions	35,161		
44,525	Fuel, Light, Water, Transport, etc.	50,562		
			227,404	
	<i>Works</i>			
48,350	General Maintenance	46,263		
29,514	Alterations and Improvements	18,233		
			64,496	
18,273	Gardening and Sweeping Expenses		19,668	
760	Advertising		3,240	
5,526	Purchase of Animals and Exhibits		18,838	
			333,646	
	<i>Whipsnade Park</i>			
	Menagerie Expenses			
3,023	Rates and Insurance	£3,138		
46,966	Salaries	49,041		
18,683	Provisions	18,131		
15,478	Fuel, Light, Water, Transport, etc.	18,296		
			88,606	
	<i>Works</i>			
20,118	General Maintenance	18,962		
1,483	Alterations and Improvements	648		
			19,610	
12,725	Farm, Gardens and Forestry Expenses		14,522	
2,316	Advertising		2,749	
5,323	Purchase of Animals		8,836	
			134,323	
£576,124				£630,077
10,912	Surplus for year carried to Rebuilding Fund			
£587,036				£630,077

# F O R D R E S E A R C H F U N D

## Balance Sheet at 31st December 1962

	£	£	£		£
Sundry Creditors and Receipts in Advance			8,743	Sundry Debtors and Payments in Advance	3,133
Capital Account			229,879	Investments at Cost	240,417
<i>Equipment Fund</i>				Deposits and Cash	1,810
Balance 1st Jan. 1962	2,413				
Add Profit on sale of Investments	<u>7,117</u>				
		9,530			
Less Purchase of equipment		<u>3,644</u>			
			5,886		
<i>Revenue Account Surplus</i>					
Balance 1st January 1962		6,570			
Less: Excess of Expenditure over Income for year		<u>5,718</u>			
			852		
			<u>£245,360</u>		<u>£245,360</u>

The market valuation of the Investments at 31st December 1962 was £244,170

## Income and Expenditure Account for the year ended 31st December 1962

	£		£
Interest and Dividends	12,361	Salaries and Wages	13,667
Excess of Expenditure over Income carried to Balance Sheet	5,718	Apparatus and Laboratory Expenses	980
		Miscellaneous	3,432
	<u>£18,079</u>		<u>£18,079</u>

REPORT OF THE AUDITORS  
ON THE ACCOUNTS OF  
THE ZOOLOGICAL SOCIETY  
OF LONDON  
FOR THE YEAR ENDED

*31st December 1963*

In accordance with the provisions of Byelaw 33 we report that we have examined the Books and Accounts of the Society for the year ended 31st December 1963, including those relating to the Ford Research Fund and the Nuffield Institute Fund, and have found them to be in order. Having received all the information and explanations we have required, we are of the opinion that the attached Balance Sheets, the accompanying Income and Expenditure Accounts and Notes show a true and fair view of the position as shown by the books of the Society. We have verified the Investments and the Cash Balances.

W. B. KEEN & CO  
*Chartered Accountants*

19 February 1964

FINSBURY CIRCUS HOUSE · BLOMFIELD STREET · LONDON EC2

THE ZOOLOGICAL SOCIETY OF LONDON

*Balance Sheet at 31st December 1963*

1962		£	£
40,095	Sundry Creditors and Receipts in Advance		52,525
100,000	Pensions Contributions Reserve Fund		100,000
—	Short term loans and Bank overdraft		250,474
<i>Excess of Assets over Liabilities</i>			
91	Heer Bequest		91
	Publications Funds (note 1)		
16,948	Zoological Record Fund	15,884	
10,638	Neave Lloyd Fund	11,908	
		—	27,792
12,584	Building Fund—Whipsnade Park (note 2)		8,753
	Catering Improvements Funds (note 3)		
—	Regent's Park	—	
11,331	Whipsnade Park	11,975	
		—	11,975
18,527	Composition Fund		18,172
1,130	Staff Compensation Fund		1,131
	Reserves (note 4)		
140,000	General Reserve	140,000	
18,500	Buildings Replacement Fund	37,942	
		—	177,942
210,715	General Purposes Account (note 5)		119,424
			—
			£768,279
			£580,559

For the notes which form part of these accounts see pages 7 and 8

1962		£	£
115,063	<i>Freehold Property at Cost</i>		
	Whipsnade Park as at 1st January 1963		115,063
	Add Expenditure on Staff Housing during year		4,361
			—
			119,424
	<i>Stocks (note 6)</i>		
1,000	Scientific Publications		1,000
15,739	Books, Souvenirs, etc.		21,947
10,696	Catering Departments – Provisions, etc.		8,957
			—
			31,904
29,769	Sundry Debtors and Payments in Advance		33,036
349,360	Investments at cost (market value £421,571)		332,854
600	Loan on Mortgage		600
	Regent's Park Rebuilding Fund – expenditure financed by short term loans (note 7)		246,461
			—
58,332	Cash in hand		4,000
			—
			£768,279
			£580,559

TERENCE C. S. MORRISON-SCOTT  
*Treasurer*

## Income and Expenditure Account for the year ended 31st December 1963

1962		£	£	£
22,967	Members' Subscriptions and Entrance Fees			22,555
	Interest and Dividends			
8,051	General (after allocation to Funds)		9,194	
2,977	Net Income from De Arroyave Trust Fund (note 8)		1,882	
57	Income from Davis Fund (note 9)		57	
				11,133
	<i>Scientific</i>			
8,889	Sale of Scientific Publications		10,571	
3,018	Educational Scheme—Visits		3,433	
1,129	Young Zoologists' Club		1,676	
2,512	International Zoo Yearbook		3,077	
250	Miscellaneous		180	
				18,937
	<i>Regent's Park</i>			
297,801	Admission of Visitors to Gardens		323,133	
13,518	Admission of Visitors to Aquarium		13,726	
16,006	Admission of Visitors to Children's Zoo		16,759	
818	Chimpanzees' Tea Party		760	
4,502	Riding Receipts		3,432	
2,662	Push Chairs, Hire of		2,649	
10,775	Books, Souvenirs, Guides, etc., Net Receipts		16,372	
	Catering Department, Net Receipts	29,104		
	<i>Less</i> Contribution to Catering Improvements Fund	2,900		
16,243			26,204	
14,214	Zoo Restaurants Ltd		15,230	
3,658	Television and Film Permits		3,982	
475	Animals		2,141	
3,346	Miscellaneous Receipts		3,224	
				427,612
	<i>Whipsnade Park</i>			
122,634	Admission of Visitors to Park		116,912	
7,394	Admission of Visitors to Children's Zoo		7,108	
26,035	Admission of Cars to Park		27,048	
1,959	Train Receipts		2,403	
3,589	Riding Receipts		2,852	
748	Push Chairs, Hire of		697	
8,740	Car Parks—Parking Fees		8,654	
9,884	Books, Souvenirs, Guides, etc., Net Receipts		11,630	
2,158	Farm, Gardens and Forestry Sales		1,734	
3,440	Animals		3,777	
	Catering Department, Net Receipts	7,337		
	<i>Less</i> Contribution to Catering Improvements Fund	900		
3,911			6,437	
154	Miscellaneous Receipts		194	
				189,446
£624,514			£669,683	
5,563	Deficit for year carried to General Purposes Account		1,287	
£630,077			£670,970	

For the notes which form part of these accounts see pages 7 and 8

1962		£	£	£
43,000	General Administration			47,863
18,500	Contribution to Buildings Replacement Fund			18,500
	<i>Pensions</i>			
20,217	Payments to Pensioners		19,694	
30,000	Contribution to Trustees of Pension Fund		30,000	
				49,694
	<i>Scientific</i>			
19,306	General Scientific Expenses	18,247		
	Contribution to Ford Research Fund	7,780		
				26,027
6,893	Library		8,557	
14,279	Scientific Publications, Cost of		17,624	
4,182	Educational Scheme		4,403	
2,056	Young Zoologists' Club		2,725	
3,675	International Zoo Yearbook		4,405	
				63,741
	<i>Regent's Park</i>			
	<i>Menagerie Expenses</i>			
7,152	Rates, Rents and Insurance	4,946		
134,529	Salaries	145,617		
35,161	Provisions	37,569		
50,562	Fuel, Light, Water, Transport, etc.	51,989		
				240,121
	<i>Works</i>			
46,263	General Maintenance	53,253		
18,233	Alterations and Improvements	17,715		
				70,968
19,668	Gardening and Sweeping Expenses		21,223	
3,240	Advertising		3,674	
18,838	Purchase of Animals and Exhibits		5,261	
				341,247
	<i>Whipsnade Park</i>			
	<i>Menagerie Expenses</i>			
3,138	Rates and Insurance	3,424		
49,041	Salaries	56,749		
18,131	Provisions	22,699		
18,296	Fuel, Light, Water, Transport, etc.	19,408		
				102,280
	<i>Works</i>			
18,962	General Maintenance	21,958		
648	Alterations and Improvements	1,942		
				23,900
14,522	Farm, Gardens and Forestry Expenses		13,118	
2,749	Advertising		2,809	
8,836	Purchase of Animals		7,818	
				149,925
£630,077			£670,970	

# Ford Research Fund

## BALANCE SHEET AT 31ST DECEMBER 1963

	£	£	£		£
Sundry Creditors and Receipts in Advance			6,289	Sundry Debtors and Payments in Advance	4,244
Capital Account			229,879	Investments at Cost (market value £258,725)	242,189
<i>Equipment Fund</i>				Cash in hand	6,171
Balance 1st Jan. 1963	5,886				
Add Profit on sale of Investments	10,346				
	—	16,232			
Less Purchase of equipment		5,214			
		—	11,018		
<i>Revenue Account Surplus</i>					
Balance 1st Jan. 1963		852			
Add: Excess of Income over Expenditure for year		4,566			
		—	5,418		
			—		
			<u>£252,604</u>		<u>£252,604</u>

## INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER 1963

	£		£
Interest and Dividends	14,220	Salaries and Wages	14,671
Society's Contribution	7,780	Laboratory and other scientific expenses	1,296
		Administration charge	1,467
		Excess of Income over Expenditure	4,566
	—		
	<u>£22,000</u>		<u>£22,000</u>

# Nuffield Institute Fund

## YEAR ENDED 31ST DECEMBER 1963

	£		£	£
Balance 1st January 1963	2,430	Appeal Expenses		5,283
Donations	38,074	Salaries		674
Interest Received	374	Equipment		576
		Miscellaneous		135
		Balance: Deposit	30,000	
		Cash	4,210	
			—	34,210
	—			<u>£40,878</u>
	<u>£40,878</u>			<u>£40,878</u>

THE ZOOLOGICAL SOCIETY OF LONDON

*Notes on the Accounts 31st December 1963*

1. Publications Funds

	<i>Zoological Record Fund</i>	<i>Neave Lloyd Fund (Nomenclator Zoologicus)</i>
	£	£
Balance at 1st January 1963	16,948	10,638
Investment Income	990	561
Sales and Donations	13,725	852
	<hr/>	<hr/>
	31,663	12,051
<i>Less: Publication and Distribution Costs</i>	15,779	143
	<hr/>	<hr/>
Balance at 31st December 1963	<u>£15,884</u>	<u>£11,908</u>

2. Whipsnade Building Fund

	£	£
Balance at 1st January 1963		12,584*
Investment Income		213
Donations		20
Fire claims		652
Transfer from General Purposes Account		12,462
		<hr/>
		25,931
<i>Less New Works</i>	12,462	
Fire Damage Repairs	4,71	
	<hr/>	<hr/>
		17,178
		<hr/>
Balance at 31st December 1963		<u>£8,753*</u>

\* Unspent balance of fire insurance claim

3. Catering Improvements Funds

	<i>Regent's Park</i>		<i>Whipsnade Park</i>
	£	£	£
Balance at 1st January 1963		—	11,331
Investment Income		—	554
Transfer from Income and Expenditure Account		2,900	900
Transfer from General Purposes Account		10,243	—
		<hr/>	<hr/>
		13,143	12,785
<i>Less: Catering Improvements</i>	12,694		810
Loan interest charges	449		
	<hr/>	<hr/>	<hr/>
		13,143	—
		<hr/>	<hr/>
Balance at 31st December 1963		—	<u>£11,975</u>



#### 4. Reserves

	<i>General Reserve Fund</i>	<i>Buildings Replacement Fund</i>
	£	£
Balance at 1st January 1963	140,000	18,500
Investment Income	—	942
Realised profits on investments	16,043	—
Fees of Deceased Compounders (from Composition Fund)	355	—
Contribution from Income and Expenditure Account	—	18,500
	<hr/>	<hr/>
	156,398	37,942
<i>Less: Transfer to Regent's Park Rebuilding Fund</i>	16,398	—
	<hr/>	<hr/>
Balances at 31st December 1963	<u>£140,000</u>	<u>£37,942</u>

#### 5. General Purposes Account

	£	£	£
Balance at 1st January 1963			210,715
<i>Less: Transfers to other Funds:</i>			
Whipsnade Building Fund	12,462		
Regent's Park Catering Improvements Fund	10,243		
Regent's Park Rebuilding Fund	67,299		
	<hr/>		
		90,004	
Deficit from Income and Expenditure Account		1,287	
		<hr/>	91,291
			<hr/>
Balance at 31st December 1963			<u>£119,424</u>

#### 6. Stocks

No values are included in the Balance Sheet for:

- |                               |  |
|-------------------------------|--|
| a. Animals                    | c. Plant, vehicles, fittings and furniture |
| b. Library books and pictures | d. Farm and Garden stocks (Whipsnade)      |

#### 7. Regent's Park Rebuilding Fund

	£	£
Balance at 1st January 1963		—
Donations		2,128
Instalment of Jack Cotton Donation		40,000
Transfers: General Reserve		16,398
General Purposes Account		67,299
		<hr/>
		125,825
<i>Less: New Works</i>	371,800	
Loan interest charges	486	
	<hr/>	372,286
		<hr/>
Balance at 31st December 1963		<u>£246,461 Dr</u>

#### 8. De Arroyave Fund

The capital of the De Arroyave Fund is held by the Official Trustee of Charitable Funds. The income from the Fund was £1,894 and from this £12 was spent on the upkeep of the Lopes grave and mausoleum, in accordance with the terms of the Trust.

#### 9. Davis Fund

The capital of the Davis Fund is held in trust by the Society, but is not included in the Balance Sheet.

REPORT OF THE AUDITORS  
ON THE ACCOUNTS OF  
THE ZOOLOGICAL SOCIETY  
OF LONDON  
FOR THE YEAR ENDED

*31st December 1964*

In accordance with the provisions of Byelaw 33 we report that we have examined the Books and Accounts of the Society for the year ended 31st December 1964, including those relating to the Ford Research Fund, and have found them to be in order. Having received all the information and explanations we have required, we are of the opinion that the attached Balance Sheets, the accompanying Income and Expenditure Accounts and Notes show a true and fair view of the position as shown by the books of the Society. We have verified the Investments and the Cash Balances.

W. B. KEEN & CO  
*Chartered Accountants*

16th February, 1965

FINSBURY CIRCUS HOUSE • BLOMFIELD STREET • LONDON EC2

THE ZOOLOGICAL SOCIETY OF LONDON

Balance Sheet at 1st December 1964

1963			1963	
£	£		£	£
	48,315	Sundry Creditors and Receipts in Advance		45,091
	100,000	Pensions Contributions Reserve Fund		100,000
	250,474	Short term loans and Bank overdraft		327,604
		<i>Excess of Assets over Liabilities</i>		
	91	Heer Bequest		91
	—	Fantham Bequest		5,113
	34,210	Nuffield Institute Fund (note 1)		52,878
		Publications Funds (note 2)		
15,884		Zoological Record Fund	14,712	
11,908		Neave Lloyd Fund	11,628	
<u>      </u>	27,792		<u>      </u>	26,340
	8,753	Whipsnade Building Fund		—
		Catering Improvements Funds (note 3)		
	—	Regent's Park	3,882	
11,975		Whipsnade	13,686	
<u>      </u>	11,975		<u>      </u>	17,568
	18,172	Composition Fund		18,082
	1,131	Staff Compensation Fund		1,131
		Reserves (note 4)		
140,000		General Reserve	140,000	
37,942		Buildings Replacement Fund	60,882	
<u>      </u>	177,942		<u>      </u>	200,882
	119,424	General Purposes Account (note 5)		119,468
<u>      </u>	<u>£798,279</u>		<u>      </u>	<u>£914,248</u>

For the notes which form part of these accounts see pages 7 and 8

1963			1963	
£	£		£	£
		<i>Freehold Property at Cost</i>		
115,063		Whipsnade Park as at 1st January 1964	119,424	
4,361		Add Expenditure on Staff Housing during year	44	
<u>      </u>	119,424		<u>      </u>	119,468
		<i>Stocks (note 6)</i>		
1,000		Scientific Publications	1,000	
21,947		Books, Souvenirs, etc.	23,771	
8,957		Catering Departments - Provisions, etc.	12,953	
<u>      </u>	31,904		<u>      </u>	37,724
33,036		Sundry Debtors and Payments in Advance	44,601	
332,854		Investments at cost (market value £410,205)	343,503	
600		Loan on Mortgage	—	
		Expenditure financed by short term loans:		
246,461		Regent's Park Rebuilding Fund (note 7)	347,048	
—		Whipsnade Building Fund (note 8)	11,745	
			<u>      </u>	358,793
34,000		Deposits and Cash		10,159
<u>      </u>	<u>£798,279</u>		<u>      </u>	<u>£914,248</u>

TERENCE C. S. MORRISON-SCOTT  
Treasurer

*Income and Expenditure Account for the year ended 31st December 1964*

1963			1963	
£	£		£	£
	22,555	Members' Subscriptions and Entrance Fees		23,003
		Interest and Dividends		
9,194		General (after allocation to Funds)	9,336	
1,882		Net Income from De Arroyave Trust Fund (note 9)	4,961	
57		Income from Davis Fund (note 10)	57	
<u>        </u>	11,133		<u>        </u>	14,354
		<i>Scientific</i>		
10,571		Sale of Scientific Publications	10,569	
3,433		Educational Scheme - Visits	4,199	
1,676		Young Zoologists' Club	1,934	
3,077		International Zoo Yearbook	4,110	
180		Miscellaneous	155	
<u>        </u>	18,937		<u>        </u>	20,967
		<i>Regent's Park</i>		
323,133		Admission of Visitors to Gardens	334,160	
13,726		Admission of Visitors to Aquarium	14,726	
16,759		Admission of Visitors to Children's Zoo	17,589	
760		Chimpanzees' Tea Party	1,157	
3,432		Riding Receipts	2,901	
2,649		Push Chairs, Hire of	2,891	
11,516		Books, Souvenirs, Guides, etc., Net Receipts	16,464	
		Catering Department, Net Receipts	34,118	
		Less Contribution to Catering Improvements Fund	4,350	
26,204			29,768	
15,230		Zoo Restaurants Ltd	16,898	
3,982		Television and Film Permits	3,134	
2,141		Animals	400	
3,224		Miscellaneous Receipts	3,802	
<u>        </u>	422,756		<u>        </u>	443,890
		<i>Whipsnade</i>		
116,912		Admission of Visitors to Park	128,152	
7,108		Admission of Visitors to Children's Zoo	7,878	
27,048		Admission of Cars to Park	31,846	
2,403		Train Receipts	2,264	
2,852		Riding Receipts	3,407	
697		Push Chairs, Hire of	820	
8,654		Car Parks - Parking Fees	9,514	
9,645		Books, Souvenirs, Guides, etc., Net Receipts	11,312	
1,734		Farm, Gardens and Forestry Sales	1,539	
3,777		Animals	5,608	
		Catering Department, Net Receipts	8,841	
		Less Contribution to Catering Improvements Fund	1,100	
6,437			7,741	
194		Miscellaneous Receipts	607	
<u>        </u>	187,461		<u>        </u>	210,688
	1,287	Deficit for year carried to General Purposes Account		
<u>        </u>	<u>£664,129</u>		<u>        </u>	<u>£712,902</u>

For the notes which form part of these accounts see pages 7 and 8

1963			1963	
£	£		£	£
	47,863	General Administration		49,356
	18,500	Contribution to Buildings Replacement Fund		21,000
		<i>Pensions</i>		
19,694		Payments to Pensioners	18,714	
30,000		Contribution to Trustees of Pension Fund	30,961	
<u>        </u>	49,694		<u>        </u>	49,675
		<i>Scientific</i>		
18,247		General Scientific Expenses	20,858	
7,780		Contribution to Ford Research Fund	8,741	
			<u>        </u>	29,599
8,557		Library	10,951	
17,624		Scientific Publications	16,935	
4,403		Educational Scheme	4,865	
2,725		Young Zoologists' Club	2,954	
4,405		International Zoo Yearbook	5,378	
<u>        </u>	63,741		<u>        </u>	70,682
		<i>Regent's Park</i>		
		Menagerie Expenses		
		Rates, Rents and Insurance	4,131	
4,946		Salaries	161,414	
141,121		Provisions	40,021	
37,569		Fuel, Light, Water, Transport, etc.	53,706	
51,629			<u>        </u>	259,272
		Works		
		General Maintenance	65,287	
53,253		Alterations and Improvements	21,442	
17,715			<u>        </u>	86,729
		Gardening and Sweeping Expenses	23,702	
21,223		Advertising	3,958	
3,674		Purchase of Animals and Exhibits	7,588	
5,261			<u>        </u>	381,249
<u>        </u>	336,391		<u>        </u>	
		<i>Whipsnade</i>		
		Menagerie Expenses		
		Rates and Insurance	4,306	
3,424		Salaries	56,307	
54,903		Provisions	21,136	
22,699		Fuel, Light, Water, Transport, etc.	15,446	
19,269			<u>        </u>	97,195
		Works		
		General Maintenance	16,927	
21,958		Alterations and Improvements	2,322	
1,942			<u>        </u>	19,249
		Farm, Gardens and Forestry Expenses	13,197	
13,118		Advertising	2,012	
2,809		Purchase of Animals	5,977	
7,818			<u>        </u>	137,630
<u>        </u>	147,940		<u>        </u>	3,310
		Surplus for year carried to General Purposes Account		
<u>        </u>	<u>£664,129</u>		<u>        </u>	<u>£712,902</u>

# Ford Research Fund

## BALANCE SHEET AT 31st DECEMBER 1964

	£	£	£		£
Sundry Creditors and Receipts in Advance			3,929	Sundry Debtors and Payments in Advance	3,047
Capital Account			229,879	Investments at Cost (market value £222,922)	227,383
<i>Equipment Fund</i>				Deposits and cash	10,919
Balance 1st Jan. 1964	11,018				
Add Profit on sale of Investments	70				
	11,088				
Less Purchase of equipment		8,847			
		2,241			
<i>Revenue Account Surplus</i>					
Balance 1st Jan. 1964		5,418			
Less: Excess of Expenditure over Income for year		118			
		5,300			
		£241,349			£241,349

## INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st DECEMBER 1964

	£		£
Interest and Dividends	13,259	Salaries (including Pension Contributions)	17,630
Society's Contribution	8,741	Laboratory and other scientific expenses	1,503
Excess of Expenditure over Income	118	Administration charge	1,286
		Travelling and Miscellaneous	1,699
	£22,118		£22,118
	£22,118		£22,118

THE ZOOLOGICAL SOCIETY OF LONDON

*Notes on the Accounts 31st December 1964*

**1. Nuffield Institute Fund**

	£	£
Balance at 1st January 1964		34,210
Donations received during the year		44,008
Investment Income		2,432
		<hr/>
<i>Less:</i> Salaries (including Pension contributions)	11,378	80,650
Scientific Expenses	14,150	
Miscellaneous	2,244	
	<hr/>	<hr/>
		27,772
Balance at 31st December 1964		<hr/> <u>£52,878</u>

**2. Publications Funds**

	<i>Zoological Record Fund</i>	<i>Neave Lloyd Fund (Nomenclator Zoologicus)</i>
	£	£
Balance at 1st January 1964	15,884	11,908
Investment Income	774	577
Sales and Donations	14,549	284
	<hr/>	<hr/>
<i>Less:</i> Publication and Distribution Costs	31,207	12,769
	16,495	1,141
	<hr/>	<hr/>
Balance at 31st December 1964	<hr/> <u>£14,712</u>	<hr/> <u>£11,628</u>

**3. Catering Improvements Funds**

	<i>Regent's Park</i>	<i>Whipsnade Park</i>
	£	£
Balance at 1st January 1964	—	11,975
Investment Income	—	611
Transfer from Income and Expenditure Account	4,350	1,100
	<hr/>	<hr/>
<i>Less:</i> Catering Improvements	4,350	13,686
	468	—
	<hr/>	<hr/>
Balance at 31st December 1964	<hr/> <u>£3,882</u>	<hr/> <u>£13,686</u>

**4. Reserves**

	<i>General</i>	<i>Buildings Replacement Fund</i>
	£	£
Balance at 1st January 1964	140,000	37,942
Investment Income	—	1,940
Realised profits on investments	15,895	—
Fees of Deceased Compounders (from Composition Fund)	145	—
Contribution from Income and Expenditure Account	—	21,000
	<hr/>	<hr/>
<i>Less:</i> Transfer to Regent's Park Rebuilding Fund	156,040	60,882
	16,040	—
	<hr/>	<hr/>
Balance at 31st December 1964	<hr/> <u>£140,000</u>	<hr/> <u>£60,882</u>

## 5. General Purposes Account

Balance at 1st January 1964	£	119,424
Surplus from Income and Expenditure Account		3,310
		<hr/>
<i>Less:</i> Transferred to Regent's Park Rebuilding Fund		122,734
		3,266
		<hr/>
Balance at 31st December 1964		£119,468

## 6. Stocks

No values are included in the Balance Sheet for:

a. Animals

b. Library books and pictures

c. Plant, vehicles, fittings and furniture

d. Farm and Garden stocks (Whipsnade)

## 7. Regent's Park Rebuilding Fund

Balance at 1st January 1964	£	£	
New Works		246,461	Dr.
Loan Interest Charges (Net)		301,304	
		15,251	
		<hr/>	
		563,016	Dr.
<i>Less:</i> Donations:			
London County Council	100,000		
Instalment of Jack Cotton Donation	85,000		
Miscellaneous	11,662		
Transfers from:			
General Reserve	16,040		
General Purposes	3,266		
		<hr/>	
		215,968	
		<hr/>	
Balance at 31st December 1964		£347,048	Dr.

## 8. Whipsnade Building Fund

Balance at 1st January 1964	£	8,753
Donations		10
		<hr/>
		8,763
<i>Less:</i> New Works		20,508
		<hr/>
Balance at 31st December 1964		£11,745 Dr.

## 9. De Arroyave Fund

The capital of the De Arroyave Fund is held by the Official Trustee of Charitable Funds. The income from the Fund was £5,039 and from this £78 was spent on the upkeep of the Lopes grave and mausoleum, in accordance with the terms of the Trust.

## 10. Davis Fund

The capital of the Davis Fund is held in trust by the Society, but is not included in the Balance Sheet.



THE ZOOLOGICAL SOCIETY OF LONDON

*Annual Report*

1959





THE ZOOLOGICAL SOCIETY OF LONDON

*Annual Report*

1960



THE ZOOLOGICAL SOCIETY OF LONDON

*Annual Report*

1961



THE ZOOLOGICAL SOCIETY OF LONDON

ANNUAL REPORT

1962



THE ZOOLOGICAL SOCIETY OF LONDON

ANNUAL REPORT

1963



THE ZOOLOGICAL SOCIETY OF LONDON

ANNUAL REPORT

1964

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