



REPORTS
OF THE
COUNCIL AND AUDITORS
OF THE
ZOOLOGICAL SOCIETY
OF LONDON
FOR THE YEAR 1938

PREPARED FOR THE ANNUAL GENERAL MEETING

TO BE HELD ON

FRIDAY, APRIL 28th, 1939

AT 4 P.M.

PRINTED BY
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1939

1939.

MEETINGS FOR SCIENTIFIC BUSINESS.

At Half-past Five o'clock p.m. (5.30 p.m.)

TUESDAY, February	...	...	...	...	...	7 & 21
„ March	...	...	...	...	...	7 & 21
„ April	...	...	...	...	...	4 & 25
„ May	...	...	...	...	...	9 & 23
„ June	...	...	...	...	...	13
„ October	...	...	...	...	...	10
„ November	...	...	...	...	...	7 & 21

MEETINGS FOR GENERAL BUSINESS.

At Half-past Four o'clock p.m. (4.30 p.m.)

WEDNESDAY, January	...	...	...	...	...	18
„ February	...	...	...	...	...	15
„ March	...	...	...	...	...	15
„ April	...	...	...	...	...	19

FRIDAY, April 28th, at 4 p.m. (ANNIVERSARY MEETING).
(Annual Report and Election of Council and Officers.)

WEDNESDAY, May	...	...	...	...	...	17
„ June	...	...	...	...	...	21
„ July	...	...	...	...	...	19
„ August	...	...	...	...	...	16
„ November	...	...	...	...	...	15
„ December	...	...	...	...	...	20

Fellows of the Society are invited to attend the above Meetings held at the Offices in the Zoological Gardens.

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REPORT OF THE COUNCIL.

for the year ended 31st December, 1938.

A. ANNUAL GENERAL MEETING.

1. The Council has pleasure in presenting the one hundred and tenth Annual Report to the General Meeting of the Society, to be held on Friday, April 28th, 1939, at 4 p.m., at the Offices of the Society, in the Gardens, Regent's Park, N.W.8.

2. PROCEDURE AT THE ANNUAL GENERAL MEETING.

(By-law, Chapter VIII, Sections I and II.)

SECT. I. Notice of the time and place of the Annual General Meeting shall be advertised by the Council in four or more of the public Newspapers, at least fourteen days before the same shall take place.

SECT. II. The course of proceeding at the Annual General Meeting, after the Chair has been taken, shall be as follows:—

1. The reading of the Minutes of the previous Annual Meeting.
2. The appointment of Scrutineers and opening of the Ballot.
3. Presentation of the Auditors' Report, previously issued to Fellows.
4. Discussion of the Auditors' Report.
5. Presentation of the Council's Annual Report, previously issued to Fellows.
6. Discussion of the Council's Annual Report.
7. To receive the Report of the Scrutineers on the result of the Ballot.

No other business shall be transacted at such Meeting.

B. GENERAL REPORT FOR THE YEAR.

3. VISITORS.—The attendance of visitors during the year (1,816,012) was less than that for the previous year, the decrease being about 6%. It seems to have been largely due to the disturbed international situation in September. (For comparative tables, see p. 26.)

At Whipsnade there was an attendance of 523,345, a decrease of 23,073—just over 4%.

The combined totals for the last five years are as follows :—

1934	...	...	...	...	...	2,156,022
1935	...	...	...	...	...	2,433,681
1936	...	...	...	...	...	2,446,575
1937	...	...	...	...	...	2,493,315
1938	...	...	...	...	...	2,339,357

4. PROFESSIONAL FELLOWSHIP.—The rules for the admission of professional zoologists to the Fellowship were revised as follows :—

Professional Zoologists for this purpose shall be deemed to include *either* all receiving salary or fees in a professional zoological capacity, including those whose main work is the teaching of biology in schools and who have taken a University degree for which zoology has been a principal subject, *or* who have published a number of papers, embodying the results of research of zoological value, in a recognized scientific journal. They must be of British nationality or working in Great Britain or Ireland at the time of application.

5. A.R.P.—During the crisis in September, a detailed scheme was worked out for measures to be adopted in case of war or other emergency. This involved the conversion of basements into air-raid refuges, measures to be taken in the event of air-raids, provision for the removal of valuable books and documents to Whipsnade, and arrangements for the removal of the wives and families of the staff to Whipsnade.

6. AWARD OF MEDALS.—The Society's silver medal was awarded to Mr. G. C. Upstone, in recognition of his numerous donations during the past sixteen years, and he was made a Life Fellow of the Society. The bronze medal was awarded to Keeper L. M. Flewin in respect of his success in breeding and rearing Carnivores.

7. CHANGES IN STAFF.—On account of the increasing complexity and scale of the Society's undertakings, and to enable a more efficient control of financial matters, both of detail and policy, to be exercised, Mr. F. W. Bond, the Chief Accountant, was appointed also as Assistant Treasurer, and Mr. S. A. Westwood, who had been the senior Audit Clerk of Messrs. W. B. Keen & Co. dealing with the Society's accounts, was appointed Assistant Accountant. Mr. A. T. Best left the Society's employ at the end of 1938.

8. CONSULTANT ARCHITECT.—The decision having been taken to appoint a Consultant Architect to advise on all matters concerning lay-out, architecture, and the aesthetic side of the Gardens in general, Professor W. G. Holford, A.R.I.B.A., Lever Professor of Civic Design in the University of Liverpool, was selected to fill the post. His advice has already proved valuable on several occasions, and he has prepared a general lay-out scheme to guide Council in future developments in the Gardens.

9. GIFT OF PORTRAITS OF SECRETARIES.—The Earl of Onslow, our President, has added to his gift of a series of portraits of all former Presidents an additional series of all former Secretaries.

10. NOTABLE SPECIMENS AND EXHIBITS.

Regent's Park.—The most noteworthy acquisitions were three Giant Pandas brought from Western China by Mr. Floyd Smith. Rarity, striking appearance, scientific interest, gentleness and amusing habits all combine to make the Giant Pandas an outstanding exhibit.

Another remarkable specimen obtained from the same source was an immature Snub-nosed Monkey, the first ever to be exhibited in any Zoo, and a Chinese Marmot, new to the collection.

Three Giant Forest Hogs from Kenya were on exhibition during the course of the year.

The unfortunate death of Mok, the male Gorilla, has in some degree been offset by the presentation by the Belgian Government of a baby Gorilla, also a male, but of the larger mountain subspecies. He is thriving in company with Jacqueline, a young female chimpanzee born in the Gardens, and the two provide a most interesting study of anthropoid development.

A fine young male Orang-Utan was obtained from the Munich Zoo in exchange for a Mongolian Wild Horse bred at Whipnade.

A specimen of the rare Maned Wolf from South America was purchased. This curious animal represents a long-legged specialization of the dog type.

A male hippopotamus, from the Hanover Zoo, was obtained in exchange to replace our animal, Billie, which died during the year.

A group of Jumping Hares from Kenya was put on exhibition in the Ostrich House. These strange relatives of the Jerboas are the largest jumping placental mammals.

Among mammals new to the Collection may be noted a specimen of the rare White-footed Marmoset from Colombia, presented by Mr. C. S. Webb; several kinds of rat from Kenya; and some specimens of the St. Kilda Field Mouse, presented by Mr. Robert Atkinson, which has evolved into a distinct species as a result of its isolation.

Among other interesting mammals we have to mention a Matschie's Tree Kangaroo; a pair of Cacomistles, tree-dwelling members of the Raccoon family from Central America, received in exchange from the Washington Zoo; a Spider Monkey and a Howler Monkey from South America, presented by Lord Moyne and Mrs. A. L. Rienzi respectively; a pair of Brazilian Tree Porcupines, presented by Lord Moyne; a Large Red Kashmir Flying-Squirrel; and a group of Norwegian Lemmings, presented by the Finmark Scientific Expedition.

Noteworthy birds include six Galapagos penguins and a King Penguin, presented by Mr. T. O. M. Sopwith and the Zoological Society of Scotland respectively; a Lesser, a Red, and two Meyer's Sicklebill Birds of Paradise, presented by Monsieur J. Delacour; a Great Condor; two Bald Eagles (from the Washington Zoo) and a Harpy Eagle; a Yellow-faced Macaw, presented by Monsieur Delacour; two Queen Alexandra's Parrakeets; and a Heavenly Sylph, a rare humming-bird from high altitudes in the Andes of Ecuador.

Three of the Quetzal Birds mentioned in last year's Report have survived, and have proved to be two females and one male. The male has begun to assume the gorgeous plumage characteristic of the adult.

In the Insect House, new methods for the rearing of Leaf Insects have been successfully applied, and a regular supply of these remarkable insects is now available.

Among notable births in the Gardens are to be mentioned a litter of tigers and one of leopards; an Arabian Camel, from one of the animals presented last year by H.M. King Ibn Saud of Saudi Arabia; a Northern Lynx; a Sea Lion; an American Bison; a Cape Buffalo; a Hartmann's Mountain Zebra; a Blesbok; and two Illiger's Macaws.

Whipsnade.—Two Mongolian Wild Horses were deposited by H.G. the Duke of Bedford, bringing our collection of these rare and interesting animals up to two pairs.

Two female Cheetahs were introduced to the two males already at Whipsnade, making a pair in each of the two paddocks. It is hoped that they will breed.

A calf was born to the White-tailed Gnus and is thriving.

The young Giraffe born on Dec. 26, 1938, is thriving, and now stands about 11 ft. in height.

Two bear cubs were born in the Brown Bear Enclosure. A litter of tiger cubs was born in the Tiger Pit, and is thriving there. Another litter was born in Tiger Dell, and was reared in London. The Patagonian Cavies free in the Park bred for the first time.

The Quaker Parrakeets hatched some young birds in their communal nest near the Main Entrance.

11. NEW WORKS, 1938.

Regent's Park.—The final plans for the new Elephant House were worked out in detail, and its construction will now be proceeded with. In October, the Council of the Society entertained H.H. the Maharajah of Bhavnagar, the donor of £10,000 towards the cost of the house, and members of his family and staff, at a luncheon.

12. *Whipsnade.*—With the aid of a bequest from Miss Julia Lindley, a Reptiliary was constructed to the S.E. of the Cloisters. Mr. W. Arnold-Foster designed the rockwork and general layout. Snakes, Lizards, and Water-tortoises are here shown, providing the first exhibition of cold-blooded animals at Whipsnade.

The Arctic Foxes were transferred to a new enclosure on the edge of the Downs by Triangle Wood, and a second enclosure thus made available for Cheetahs, two pairs of which were exhibited during the latter part of the year.

The general planting scheme begun in 1937 has been continued and extended. One feature which should eventually be very striking is the border of double cherries along the Main Avenue.

13. WORKS PROPOSED.—Sanction has been given for the following works to be undertaken during 1939; (1) The construction of a Gibbon island, to include a group of trees, on the S.W. side of the Elephant Lawn; (2) the conversion of the Chimpanzee Caravan into an enclosure for Common Pandas; (3) the extension of the American Bar and kitchen accommodation at the Hall Farm Restaurant.

14. CHILDREN'S ZOO.

The new Children's Zoo, on its site in the Park Paddocks, was opened in the spring under the charge of Mr. A. T. Best, assisted by Mr. G. R. Doubleday. Photography of visitors with animals was abolished, and the only anthropoid apes permitted were the young chimpanzees' tea-party. The space available was much larger, and numerous exhibits of educational value and new attractions were available. Among these may be mentioned a baby elephant, hand-reared deer and antelope fawns, dingo puppies, a miniature reptiliary and terrarium, fresh-water fish, butterflies and moths and their caterpillars, a living Mendelian exhibit, and a display of nest-boxes and other devices to attract birds.

The entrance fee for children was reduced to 6*d.*, adults continuing to pay 1*s.* The Children's Zoo proved very attractive, and was visited by T.R.H. Princess Elizabeth and Princess Margaret Rose. During the period it was open (June to September inclusive) 88,760 persons visited it.

15. CARS AT WHIPSNADDE.—It has been decided to extend the facilities for bringing cars into the Park during the winter months. On payment of 5*s.*, cars are admitted on any day of the week, during the months of October to March inclusive. The facilities during the rest of the year remain as at present, cars being admitted only on Mondays.

16. OPEN EVENINGS.—The Open Evenings were continued on Wednesdays and Thursdays during the summer. Owing to bad weather, the attendance was not so great as in recent years, but 39,078 visitors entered the Gardens after 7 p.m. on these days.

No comparative figures are given, since the times of reading the turnstiles has been varied, in order to ascertain the most reasonable time for this purpose. It has now been decided that in all future years, the time should be 5.45 p.m.

The policy of having two open nights a week will be continued in 1939, from June 14th to August 31st inclusive, but the Gardens will close at 11 p.m. on these days.

17. CATERING.—The standard of catering established by the Manager has been worthily maintained, and the Society's catering, notably in respect of the main restaurants at Regent's Park and at Whipsnade, enjoys a high reputation.

The Open Evenings at Regent's Park provide unusual opportunities for dining in the open air in London; and the late hour to which Whipsnade is open in summer provides the opportunity of visiting the Park after business hours and enjoying dinner in beautiful and interesting surroundings—an opportunity of which advantage is being taken by an increasing number of Fellows and visitors.

It has been decided to continue the closure of the Lower Restaurant at Regent's Park on weekdays during the four winter months (November to February inclusive), and to accommodate the public in one section of the upper floor. A portion of the Upper Restaurant continues to be exclusively reserved for Fellows on these days.

Fellows will be able to use the gate giving direct access to the Restaurant from the Outer Circle on Sundays and on Open Evenings, but not at other times.

18. EDUCATION.—In the courses for L.C.C. teachers held in the past three years, more applications were received than could be dealt with. Accordingly, a further course was held in 1938. As before, it was conducted by Mr. H. R. Hewer of the Imperial College of Science and Technology, assisted by Mr. S. M. Watson and Miss Renton. The number registering for the course was 105.

19. SCIENTIFIC RESEARCH.—Under the direction of the Society's Pathologist, Colonel Hamerton, the work of the Prosectorium has been as full and varied as ever. Full details are to be found in his report (p. 23).

As usual, the internal parasites from the animals were examined

by a panel of parasitologists under the direction of Professor R. T. Leiper, F.R.S. Blood parasites were, as usual, examined by Dr. C. M. Wenyon, C.M.G., C.B.E., F.R.S., and the bacterial flora by Mr. J. E. R. McDonagh, F.R.C.S. In addition, protozoan parasites were examined by Professor Doris Mackinnon of King's College.

Dr. S. Zuckerman of Oxford University, together with two of his pupils, continued his observations on the reproductive cycle and behaviour of Primates until March, 1938. This work was facilitated by a grant from the Society to cover travelling expenses for the two research students.

The Bureau of Animal Population continued the Ecological Survey of Whipsnade Park.

Dr. Annie Porter, lately of McGill University, was appointed as Honorary Parasitologist. She will undertake research on the protozoan and helminth parasites of fish, and routine examination of mammals in the Collections for the purpose of detecting helminth ova and so facilitating preventive measures.

Dr. T. F. Tierney generously presented the Society with a valuable X-ray apparatus, and is using it for research and diagnostic purposes with various animals. Dr. Tierney has recently been appointed Honorary Radiologist to the Society.

Mr. David Lack, to whom a grant of £50 was made, is now in the Galapagos islands as leader of an expedition to study the ecology and genetics of the family of birds known as *Geospizidae*, which present unique features in species-formation.

Dr. Burgess Barnett, in his new post as Superintendent of the Rangoon Zoo, is continuing his researches on the medical properties of snake venom, with the aid of a grant from the Society of £150 per annum for three years. He is also arranging to collect animals for the Society's Collections.

Records of the nesting of wild birds at Whipsnade were again taken by Keeper E. A. Billett and the results were of considerable interest. A paper on the subject by the Secretary has appeared in the *Proceedings*, and the British Trust for Ornithology, at the instance of the Secretary, is now arranging for records of similar type to be made over the whole of Britain for a number of years. Anyone interested in taking part in this scheme should write to Mr. James Fisher at the Society's Offices.

20. SCIENTIFIC MEDAL.—It has been decided to award a silver medal annually (subject to a high standard of merit being maintained) to a man or woman under 45 years of age, for distinguished work in Zoology. It is hoped to make the first award in 1939.

21. MARINE BIOLOGICAL ASSOCIATION.—The use of the Society's table at the Association's laboratory at Plymouth was granted to Miss F. L. Beanland for four weeks.

Professor E. W. MacBride, F.R.S., was reappointed by the Society as a Governor of the Association.

22. SCIENTIFIC PUBLICATIONS AND MEETINGS.—An unusually large volume of work was published by the Society during the year, making it more than ever difficult to single out particular papers. The following, however, may perhaps be mentioned:—

In the *Transactions*, an elaborate study by Dr. Tchernavin of the changes in proportions which occur in the Salmon skull throughout life, gradual at some periods, rapid at others; and a paper by Mr. T. Bagshawe on the habits of Penguins, showing what valuable results may be obtained by amateur observers.

In series A of the *Proceedings*, two important papers by Dr. J. R. Baker discussed the breeding seasons of birds in relation to latitude and to transportation from the southern to the northern hemisphere. Several other papers on the migration and habits of birds were published by Mr. Moreau, Professor Rowan, Mr. Keith, Mr. Chitty and Mr. Southern. Professor Rowan's was of special interest as corroborating by field observations (on London starlings) the effect of light in accelerating the onset of reproduction, while conversely Mr. Chitty's on pellet-formation in the Short-eared Owl demonstrated the value of laboratory experiment for the proper understanding of field natural history. Dr. Zuckerman and colleagues published a valuable study on the reproductive physiology of the Rhesus Monkey, and other studies on reproduction in mammals were published by Dr. Deanesly and Mr. Rowlands.

Results in regeneration and relative growth in invertebrates were reported by Miss Tazelaar, Miss Dixey, Dr. Paulian, and Messrs. Williams and Needham. Professor Fox continued his study of the adaptation of the basal metabolism of animals to their environment, and Mr. Ellenby broke new ground for the *Proceedings* with a study of physiological genetics in *Drosophila*.

An almost virgin field was explored by Dr. Wolff in her study of the hand-prints of various primates.

In series B we may mention Dr. Broom's paper on a new type of early fossil reptile; Miss Steen's on fossil amphibia; studies on the anatomy and development of the skull and muscles in various vertebrates by Mr. Claydon, Dr. Tchernavin, Dr. Malcolm Smith and Dr. Brock; on the classification of spiders by Dr. Bristowe; and two important papers on parasites, one by Miss Clay on the Mallophaga of Gallinaceous birds, the other on the intestinal protozoa from mammals in the Gardens by Professor Mackinnon.

Owing to the high cost of the *Transactions*, it has been decided not to continue the publication of a whole volume each year, but to revert to the practice of spreading volumes over a number of years. Entire volumes of both main series of *Proceedings* will continue to be published annually. The issue of series C of the *Proceedings* (Abstracts) has also been discontinued; it has been replaced by brief Agenda and Abstracts of the Scientific Meetings, which are sent post free to any Fellow desiring them for a sum of 6s. per annum.

Among the scientific meetings, one was devoted to a valuable discussion on the Species Problem, an abstract of which is appearing in the *Proceedings*. A notable exhibit was that by Mr. Boulenger of lung-fish emerging from the mud in which they had been transported from Africa. A number of interesting and valuable films were shown, including two by Mr. Chisholm on the Duckbill Platypus and the display of the Bower-bird.

23. ANIMAL AND ZOO MAGAZINE.—This has continued to present popular articles and striking photographs of high standard to a wide circle of readers. It is being used by a number of schools.

24. AQUARIUM ADMISSION.—It has been decided to continue the experiment of charging the reduced admission fee of 6d. on Saturdays as well as Mondays, during 1939; see further notes on page 27. The restriction to three years of the validity of the Aquarium tickets purchasable by Fellows for Sundays has now been removed, and they are available in any year.

25. ZOOLOGICAL FILMS.—The series of films made by Zoological Film Productions, Ltd., in collaboration with the officials of the Society, as noted in last year's report, have proved very

successful. Twelve films for commercial showing have been completed, and six educational films for schools are being prepared. A three-reel film on Evolution is also being prepared for commercial showing.

The films already released have been very favourably commented on by critics, notably *Monkey into Man*, *Fingers and Thumbs*, *Mites and Monsters*, *Animal Legends*, and *Birth of the Year*. Several were shown in the exhibition of films of scientific interest at this year's meeting of the British Association in Cambridge.

26. STUDIO OF ANIMAL ART.—The attendance of London and Middlesex County Council students at the Zoo studio continues high (about 100 each week). Arrangements have been made for another exhibition of students' work in the near future.

27. ZOOLOGICAL SPORTS AND SOCIAL CLUB.—The membership of the Club has remained high (slightly over 100), and it has continued successfully in its functions of providing recreation and enjoyment and of acting as a social centre for the staff. Under its auspices a Christmas Party was organized for the children of the staff. This innovation was much appreciated.

28. BROADCASTING AND LECTURING.—Mr. Seth-Smith continued his very popular wireless talks under the title of "The Zoo Man." Dr. Ververs, Mr. Seth-Smith and Mr. Fisher have taken part in several television programmes. Zoo animals form a very suitable and popular feature for television.

C. FELLOWS AND MEMBERS.

29. ROLL OF FELLOWS.—The number of Fellows and Fellows-Elect on January 1st, 1938, was 8,518, and on January 1st, 1939, was 8,443. In 1938, 468 Fellows were elected or re-admitted as compared with 605 in 1937.

30. IMPERIAL FELLOWS.—There were no elections during the year.

31. FOREIGN MEMBERS.—No vacancies occurred during the year.

	1937.	1938.
Compounders at £30 (Elected before Dec., 1906)	243	229
Compounders at £45 (Elected after Nov., 1906)	430	440
Compositions remitted	21	21
Paying annually £3	7,440	7,345
Dormant (paying £1)	249	251
Do. subscriptions remitted	8	7
Admission Fees unpaid	63*	56*
Professional Fellows	58	88
Do. Admission Fees unpaid	6*	6*
	8,518	8,443

* These entries relate almost entirely to Fellows elected at the December Meetings, who did not pay their dues until the following January.

32. CORRESPONDING MEMBERS.—The following were elected to fill vacancies in the List :—

Prof. Dr. L. F. de Beaufort, Royal Zoological and Botanical Gardens, Amsterdam, Holland.

Prof. A. Dalcq, Department of Anatomy, University of Brussels, Brussels, Belgium.

Raymond Hook, Nanyuki, Kenya, British East Africa.

Heinrich Hagenbeck, Tierpark, Stellingen, near Hamburg, Germany.

Frederick William Shaw-Mayer, C/o Hong Kong and Shanghai Bank, Singapore, Straits Settlements.

33. LIST OF FELLOWS AND MEMBERS.—A revised edition will be published early in June, 1939. Any corrections should be sent to the Secretary before April 30th, 1939.

D. SCIENCE AND ANIMAL CONSERVATION.

34. SCIENTIFIC MEETINGS.—During the year the customary number (12) of Scientific Meetings were held, and were well attended.

35. SCIENTIFIC PUBLICATIONS.—During the year, under the new arrangements for publication, complete volumes of *Proceedings*, Series A (General and Experimental), Series B (Systematic and Morphological), and Series C (Abstracts of all Papers published in *Proceedings* and *Transactions*) were issued. Of the *Transactions*, three parts of Vol. 24. were published.

36. PUBLICATION COMMITTEE.—The Council wishes to acknowledge the assistance received during the past year from the members of the Committee of Publication, upon whom devolved, in accordance with the By-laws, the arrangement and supervision of the Society's Scientific Publications.

37. ZOOLOGICAL RECORD.—Mr. Malcolm Smith, M.R.C.S., L.R.C.P., F.Z.S., was appointed as Editor to succeed Mr. W. L. Sclater, who retired on Dec. 31st, 1938, after completing the editorship of 17 volumes. The complete Volume, No. 74, dealing principally with the literature of 1937, was published on January 2nd, 1939.

38. ZOOLOGICAL RECORD : FINANCE.—Beginning with Volume 59 (literature of 1922), the Society undertook to continue responsibility for the *Record* if its loss on each volume did not exceed the sum of £500.

It has been arranged to keep accounts of the *Record* from Vol. 59 in the form of a "Zoological Record Fund" made up to the 31st of December each year. To this are credited all receipts (subscriptions and sales of the current Volume and of other Volumes from 59 onwards) received within the year, including the Society's own contribution of £500. From it is deducted the cost of production. Societies, Institutions and individuals who wish the *Record* to be maintained are requested to give their support in the form of annual donations to the Record Fund.

39. NOMENCLATOR ZOOLOGICUS.—Under the direction of Dr. S. A. Neave, O.B.E., work was continued on this important project of a complete list of the generic names of animals. Council having decided that they could not undertake the responsibility for printing the work; Dr. Neave and Mr. R. W. Lloyd have agreed to do so. Printing has now begun, and it is hoped to issue at least the first of the four large volumes during 1939. With the aid of grants including the Carnegie Institution and the Royal Society, it has been found possible to make a substantial reduction in the published price.

STATE OF "RECORD FUND" AT DECEMBER 31st, 1938.

	£	s.	d.	£	s.	d.
Balance from Vol. 73 (Annual Report, 1937, page 24)				1,831	0	5
Donations to Vol. 72 received in 1938 :—						
Challenger Society	5	5	0			
	<hr/>			5	5	0
Donations to Vol. 73 received in 1938 :—						
American Ornithologists' Union	4	19	9			
Barbour, Dr. Thomas	50	0	0			
British Association	50	0	0			
British Museum of Nat. Hist.	200	0	0			
British Ornithologists' Club	10	10	0			
Challenger Society	5	5	0			
Smithsonian Institution	10	1	5			
	<hr/>			330	16	2
Donations to Vol. 74 received in 1938 :—						
British Ornithologists' Club	10	10	0			
British Ornithologists' Union	10	10	0			
Challenger Society	5	5	0			
Hawaiian Entomological Society	5	4	2			
Linnean Society	15	0	0			
Liverpool School of Tropical Medicine... ..	10	10	0			
Rathbun, Dr. M. J.	1	0	0			
Royal Entomological Society	25	0	0			
Schmidt, W. L.	1	0	0			
Shoemaker, C. R.	1	0	0			
Wellcome Bureau	15	0	0			
Zoological Society of London	500	0	0			
	<hr/>			599	19	2
				<hr/>		
				2,767	0	9-
Cost of Vol. 74 (exclusive of Office Expenses) :—						
Letterpress	1,513	9	8			
Editor	200	0	0			
Recorders	353	6	10			
Searching and assistance to Recorders	188	2	6			
Distribution	31	12	7			
Slips for Recorders	16	4	6			
	<hr/>			2,302	16	1
Subscriptions to Vol. 74 to December 31st, 1938	743	10	0			
Sales of Vol. 74 to December 31st, 1938	94	16	11			
	<hr/>			838	6	11
Deficit on Vol. 74 to December 31st, 1938	<hr/>			1,464	9	2
				<hr/>		
				1,302	11	7
Add amount received on a/c of Vols. 59-73 since last adjustment				624	4	5
				<hr/>		
Balance of Fund to Vol. 75				£1,926	16	0
				<hr/> <hr/>		

40. LIBRARY.—As mentioned in last year's report, the Library is now insured for £60,000, its approximate replacement value. The figure of £35,000 given in the accounts (p. 63) represents a conservative estimate of its selling value, as Council considers this a more suitable figure for the purpose of estimating the Society's assets.

1,102 volumes were borrowed under the regulations.

Major S. S. Flower, F.Z.S., presented the Society with his valuable card catalogue dealing with the longevity of birds in the Gardens and elsewhere.

The following is a list of the chief additions to the Library during the past year :—

PRESENTED.

<i>Donor.</i>	<i>Donation.</i>
BEDFORD, H.G. THE DUKE OF, K.G., F.R.S.	Askania Nova. By W. Falz-Fein. 1930.
BOULENGER, E. G., F.Z.S.	The Psychology of Animals in Relation to Human Psychology. By F. Alverdes. 1932. Capture et Acclimatation des Poissons Exotiques. By W. Besnard. 1938.
BRITISH MUSEUM, TRUSTEES OF THE.	Great Barrier Reef Expedition, 1928-1929. Vol. V, No. 5; Vol. VI, No. 1. The John Murray Expedition. Vol. II, No. 2; Vol. IV, No. 9; Vol. V, Nos. 1-6. Economic Series. Nos. 3 and 7a. Instructions to Collectors. Nos. 2 and 13. Mosquitoes of the Ethiopian Region. By A. M. Evans. Part 2. 1938.
BRITISH TRUST FOR ORNITHOLOGY.	Report of the Little Owl Food Enquiry, 1936-37. By A. Hibbert-Ware. 1938.
CAMPBELL, MRS. A. C., F.Z.S.	Su-Lin, the real story of a baby Giant Panda. By R. A. Waring and H. Wells. 1937.
DEWAR, DOUGLAS, B.A., I.C.S., F.Z.S.	More Difficulties of the Evolution Theory. By Douglas Dewar. 1938.
DUNCAN, F. MARTIN, F.R.M.S., F.Z.S.	Wild Animals in Britain. By Frances Pitt. 1938.
FISHER, JAMES M. McC., B.A., F.Z.S.	Animals for show and pleasure in Ancient Rome. By G. Jennison. 1937.
GLADSTONE, HUGH S., M.A., D.L., F.R.S.E., F.Z.S.	Thomas Watling, Limner of Dumfries. By Hugh S. Gladstone. 1938.
JAGO, R. P., F.Z.S.	Reptiles and Amphibians, their habits and adaptations. By T. Barbour. 1934.

<i>Donor.</i>	<i>Donation.</i>
JONES, SURGEON-CAPT. K. H., M.B., R.N., F.Z.S.	Prints from many Trails. By H. Mortimer Batten. 1924. Jungle Paths and Indian Rivers. By W. M. McGover. 1928. The Magic Island. By W. B. Seabrook. 1931. Adventures in Arabia. By W. B. Seabrook. 1931. Dwellers of the Silences. By A. Sprunt. 1931.
LONDON NATURAL HISTORY SOCIETY.	The London Naturalist for the years 1921-1937.
NICHOLLS, C. T., F.Z.S.	Wonders of the Great Barrier Reef. By T. C. Roughley. 1937.
PINTO, CESAR.	Zoo-Parasitos de interesse Medico e Veterinario. By Cesar Pinto. 1938.
RENSHAW, DR. GRAHAM, F.Z.S.	Report of the first three years' Administration of the Eastern Portion of British Central Africa. By Sir Harry Johnston. 1894.
WRIGHT, REV. W. REES, F.Z.S.	A Collection of Zoological Reprints by various Authors.

PURCHASED.

- COLLENETTE (C. L.). A History of Richmond Park, with an Account of its Birds and Animals. 1937.
- COUTURIER (A. J.). Le Chamois. 1938.
- DARLING (F. FRASER). A Herd of Red Deer: A Study in Animal Behaviour. 1937.
- DAWYDOFF (C.). Traité d'Embryologie Comparée des Invertébrés. 1928.
- DITMARS (R. L.). Snakes of the World. 1937.
- GOLDSCHMIDT (R.). Physiological Genetics. 1938.
- JACKSON (SIR F. J.). The Birds of Kenya Colony and the Uganda Protectorate. 3 Vols. 1938.
- LAMBRECHT (KALMAN). Handbuch der Palaeornithologie. 1933.
- MAYNARD (L.). Animal Nutrition. 1938.
- SNODGRASS (R. E.). Principles of Insect Morphology. 1935.
- REINIG (W. F.). Die Holarktis. 1937.
- ROMER (A. S.). Vertebrate Palaeontology. 1933.
- WHEELER (W. M.). Mosaics and other Anomalies among Ants. 1937.
- WITHERBY (H. F.), JOURDAIN (F. C. R.), TICEHURST (N. F.), and TUCKER (B. W.). The Handbook of British Birds. Vols. I and II. 1938.

41. PROSECTORIUM.—This department continues its useful function of enquiring into the causes of death of animals in the Collection, of accommodating voluntary research workers in Anatomy, Bacteriology and Parasitology, and of providing

material for such research workers and for institutions. The attendances of such workers who have availed themselves of the opportunities provided, indicate that the facilities are appreciated.

Anatomical and Pathological specimens—namely, brains 49, skulls 37, bodies 121 to the value of £107 10s. (an increase of £27 16s. 9d. on last year's account)—have been distributed to private workers, Museums and other Institutions, some of which have in return given valuable advice.

Among the Institutions, the following may be mentioned :—

- Royal College of Surgeons.
- Royal College of Veterinary Surgeons.
- British Museum (Natural History).
- Royal Scottish Museum, Edinburgh.
- London School of Hygiene and Tropical Medicine.
- Bland Sutton Institute of Pathology, Middlesex Hospital.
- Wellcome Bureau of Scientific Research.
- Wellcome Research Laboratories, Beckenham.
- Bedford College for Women.
- National Hospital for Nervous Diseases, Queen Square, W.C.1.
- Nature of Disease Institute.
- Epsom College.
- Anatomical Departments of Universities of Oxford, Manchester, Leeds, Sheffield, St. Thomas's Hospital, Middlesex Hospital and University College Hospital, London.

Since the Anatomical Research Fellowship has been in abeyance, the collection and distribution of Anatomical material has been undertaken by the Pathologist and his staff.

42. FIRST AID AND MEDICAL ATTENDANCE.—The Prosectorium staff are trained in First Aid work and have attended, under the supervision of the Pathologist, a large number of cases of minor accidents and ailments amongst visitors and staff during the year.

43. PATHOLOGY.—Col. A. E. Hamerton, the Society's Pathologist, reports :—

The average strength for the year of the Society's Collection, excluding Aquarium, Reptile and Insect Houses, is estimated at 1,035 for Mammals (inclusive of many small short-lived species) and 1,846 Birds.

The number of deaths in the Menagerie investigated by post-mortem examination was 1,070, of which 308 were mammalian; of these 96 died within 6 months of arrival. Of 531 avian deaths 138 occurred during the period of acclimatization.

The severe frost and snowstorm that occurred during Christmas week caused high mortality amongst the smaller species of birds in the outdoor aviaries.

Further details and cases of pathological interest will be noted in my annual Report to be published as usual in *The Scientific Proceedings*.

44. ANATOMICAL RESEARCH FELLOWSHIP.—In abeyance.

45. OTHER SCIENTIFIC RESEARCH IN THE GARDENS.—Details of this will be found in the General Report for the year on p. 13.

46. HELMINTHOLOGY.—During the past year the Society's Pathologist has collected the parasites from all animals dying in the Gardens, except from those reserved, owing to their rarity, for detailed anatomical study. The specimens have been sent daily in a fresh condition to Professor Leiper, F.R.S., at the Department of Parasitology, London School of Hygiene and Tropical Medicine, and have been used either for study of life-cycles or for systematic work. Quarterly reports have been submitted by him to the Prosectorial Committee dealing briefly with those forms of scientific interest or pathogenic significance and the rest of the material has been preserved for later detailed study by a panel of parasitologists working in collaboration with Professor Leiper.

47. OPHTHALMOLOGY.—The work of this department has been continued by Miss Ida C. Mann, D.Sc., M.B., B.S., F.R.C.S., the Society's Honorary Consulting Ophthalmologist.

48. SCIENTIFIC AND OTHER GRANTS.—The following grants have been made :—

£25	Bison Society for 1938.
10	National Trust, towards preservation of Wicken Fen.
25	Dr. S. Zuckerman, for travelling expenses of his students in connection with his researches into the behaviour and reproduction of Primates.
2 2s.	International Committee for Bird Preservation.

49. LOAN OF THE SOCIETY'S ROOMS.—The Society's Rooms have been lent to the Association of British Zoologists, the

Avicultural Society, the British Trust for Ornithology, the Society for the Preservation of the Fauna of the Empire, the South-Eastern Union of Scientific Societies, Ornamental Pheasant Society, Genetical Society, International Committee for Bird Preservation, Royal Counties Veterinary Association, Institute for the Study of Animal Behaviour, British Psychological Society and the Association of Bird Watchers and Wardens.

50. ANIMAL PROTECTION.—(1) *Society for the Preservation of the Fauna of the Empire*.—As mentioned in previous reports, this organization is provided with accommodation in the Office building of the Zoological Society. The Council is appreciative of the valuable work being carried out by the Fauna Society and proposes to continue its support.

Close touch is maintained with its work through our President, Lord Onslow, who is also President of the Fauna Society, and through the Secretary, who is a Member of its Executive Committee.

The minimum subscription to the Fauna Society is only 10s. per annum and it is hoped that more Fellows of the Zoological Society will support it. It publishes three times a year a Journal which contains much interesting matter relative to its activities.

(2) *International Bird Preservation*.—The British Section of the International Committee for Bird Preservation has the Society's Offices as its registered address, and the Society gives its assistance in many ways. Among the Committee's activities are: (1) the securing of an improved International Convention for the Protection of European Birds; (2) an international scheme for the preservation of wild fowl; (3) the betterment of conditions of transport of live birds; (4) the securing of an international agreement to mitigate the destruction of sea-birds by waste oil. The British Section is in great need of support; this can be given by becoming a Patron at a subscription of Three Guineas a year, or an Associate at Ten Shillings and Sixpence a year.

(3) *British Trust for Ornithology*.—This body has also been empowered to use the Society's Offices as their registered address; Mr. James Fisher is undertaking the duties of Honorary Secretary.

The Trust has as its object the co-ordination of the work of field ornithologists throughout the country, and is largely responsible for the financing of the new Edward Grey Institute

of Field Ornithology at Oxford. The minimum subscription is 10s. per annum.

51. CHILLINGHAM CATTLE.—The Society's agreement to contribute to the fund for the preservation of the unique herd of English White Park Cattle at Chillingham Castle, Northumberland, expired on Dec. 31st, 1938, and will not be renewed. A new body has now taken over the task of safeguarding the existence of the herd. Anyone interested should write to The Secretary, Chillingham Wild Cattle Association, Estate Office, Chillingham, Chatton, Northumberland.

52. ANIMALS AND FILMS.—An advisory panel was appointed in 1935 to advise the British Board of Film Censors on this subject. Mr. H. G. Maurice, C.B., was appointed by the Council in succession to the late Major E. E. Austen to represent the Society. Mr. Maurice was also appointed to represent the Society on the Advisory Council of the British Film Institute.

E. REGENT'S PARK GARDENS.

(I) VISITORS, &c.

53. NUMBER OF VISITORS.—The total number of visitors to the Gardens in 1938 was 1,816,012. The following Tables give comparative figures:—

Visitors to the Gardens.

1929	2,047,090	1934	1,639,611
1930	2,101,438	1935	1,962,136
1931	1,816,052	1936	1,962,122
1932	1,552,535	1937	1,946,897
1933	1,557,791	1938	1,816,012

Visitors on Sundays and Week-days.

	1937.	1938.
Sundays	188,693	184,573
Weekdays	1,758,204	1,631,439

Visitors on Bank Holidays.

	1937.	1938.
Easter Monday	82,775	79,623
Whit Monday	67,180	61,079
First Monday in August ...	49,568	31,330
Boxing Day ... (Dec. 27th.)	3,624	2,873 (Dec. 26th.)
	<u>203,147</u>	<u>174,905</u>

54. AQUARIUM: VISITORS.—The Aquarium remains popular and was patronised by nearly 15 per-cent. of those that entered the Gardens. The total number of visitors was 283,248 as compared with 271,933 in 1937. The increase is largely due to the increased number who availed themselves of the reduced charge of 6*d.* on Saturdays, instituted during the year. The Aquarium was opened on Wednesday and Thursday evenings from June 2nd to September 9th, at the usual charges for admission.

Visitors to the Aquarium.

		1937.	1938.
Sundays	... ..	40,910	41,032
Week-days	... ..	231,023	242,216

55. OPEN EVENINGS.—It is impossible to state the exact number of visitors, as many who came during the day remained until evening. The total number booked in after 7 o'clock on the Wednesday and Thursday evenings from June 2nd to August 31st, inclusive, was 39,078, of whom 10,502 entered by Fellows' signatures or tickets, 27,477 were adults paying one shilling each, and 1,099 were children paying sixpence. The Gate money was £1,401 6*s.* 6*d.* and £255 15*s.* 6*d.* was paid for admission to the Aquarium.

This year the Gardens will be open on Wednesday and Thursday evenings until 11 p.m. from June 14th to August 31st, both inclusive.

Dinners at 7*s.* 6*d.* and 5*s.* 0*d.* will be served in the Fellows' Restaurant during the season on the open evenings. It would greatly assist the Catering Department if Fellows wishing to dine there on those nights would kindly advise the Management beforehand, at latest on the same day before noon. The Management would also be glad to receive any cancellations of tables reserved for the evening before 6.0 p.m.

56. BAND.—The Band of the 65th (8th London) Brigade, Royal Artillery (T.A.) was engaged for the summer, and played on Sunday afternoons and on the Open Evenings.

57. MEDICAL ATTENDANCE AT THE GARDENS.—With the number of visitors to the Gardens nearly reaching 2,000,000, and with a numerous staff, illness and accidents requiring first-aid assistance inevitably take place. There is a well-equipped Red

Cross Room attached to the Prosectorium to which cases are taken, and, during the summer, a Red Cross Tent.

58. GUIDES AND PICTURE POST-CARDS.—The Guides to Regent's Park and to Whipsnade were rewritten. 68,232 copies of the London Guide were sold, as compared with 88,215 in 1937. 61,686 copies of the Whipsnade Guide were sold in 1938, compared with 54,288 in 1937.

Of the Society's picture postcards 348,951 were sold in the London Gardens and 142,736 at Whipsnade during 1938, as compared with 308,537 and 87,172 respectively during 1937.

The totals for London and Whipsnade together were as follows :—

	1936.	1937.	1938.
Guides	132,729	142,503	129,918
Picture Postcards ...	380,691	395,709	491,887

(II) CATERING.

59. REFRESHMENT DEPARTMENT.—Mr. A. Schorno, as Catering Manager, has continued to be successful in regard both to the standard of the catering and to the financial side of his department.

60. REFRESHMENT DEPARTMENT : ACCOUNTS.—Messrs. W. B. Keen & Co., the Society's Auditors, audited the accounts for the year.

The sales for the year 1938 amounted to £71,870 8s. 10*d.*, and the gross profit was £40,818 3s. 2*d.* Deducting the manufacturing and other working expenses amounting to £35,094 13s. 3*d.* and adding lavatory and other sundry receipts (£1,399 0s. 0*d.*) there remains a trading profit of £7,122 9s. 11*d.* After deducting the Manager's bonus (£200) and the contribution to the Equipment and Repairs Stabilization Fund (£5,000), there was a net profit of £1,922 9s. 11*d.* In addition £4,800, 18s. 2*d.* was received by way of rent of the department and lavatories, making a total of £6,723, 8s. 1*d.* Of this a sum of £2,362 15s. 5*d.* has been repaid to the Works Department for work carried out during the year. The balance of £4,360 12s. 8*d.* has been passed to the General Account.

The expenditure on Equipment and Repairs amounted to £3,888 4s. 3*d.*, against the contribution of £5,000, leaving a balance of £1,111 15s. 9*d.*, which has been placed to the credit of the Equipment and Repairs Stabilization Fund.

(III) GARDENS, REGENT'S PARK.

61. STAFF.—*Menagerie* : Overseers, 5; 1st Class Keepers, 34; 2nd Class Keepers, 15; 3rd Class Keepers, 15; Helpers and miscellaneous men, 49. Total 118.

Works Department : Normal number, about 23, increases to more than double this number during the season.

Gardening Staff : 17.

Electricians : 6.

Refreshment Department : Summer staff, 330; Winter staff, 83.

62. GARDENING DEPARTMENT.—In spite of the dry season, the Gardening staff maintained a brilliant show of flowers throughout the summer months, under the supervision of Mr. W. E. Puddle, who is head gardener both at London and Whipnade. The cut-flower department, which supplies table decorations for the restaurants in Regent's Park and Whipnade, is now in its third year and is working successfully and to full capacity.

63. ELECTRICAL DEPARTMENT.—Under the supervision of Mr. H. P. Davolls, the Society's engineer, this department has, in addition to routine work, extended the system of flood-lighting for the illumination of the Gardens on late evening openings during the summer months.

64. WORKS DEPARTMENT.—The Works staff, under the supervision of the Clerk of Works, Mr. E. A. Temperton, has carried out the following major works in addition to many items of routine maintenance and repair :—

Painting :—

Refreshment Department : stores and kitchens, bakehouse.

Pheasantries.

Sanatorium.

Photographic dark-room.

Reptile House.

North and South Gates.

Waders Aviary.

Aquarium : entrance hall, exterior, and Manatees' tank.

Garden seats.

Waste-paper baskets.

Zebra and Wild Asses House.
 Wolves Dens.
 Bandstand.
 Parrot House : exterior.
 Antelope House : interior and exterior.
 Old Tunnel.
 Owls' Aviaries.
 Offices : interior.
 Old Bears' Dens : ironwork.
 Prosectorium : laboratories.
 Tortoise House : exterior.
 Monkey House : interior.

Miscellaneous Works :—

Refreshment Department. Cellar accommodation was extended, refrigerators installed, and the wine lift extended from the buffet bar to the cellar.

Sanatorium. The X-ray apparatus kindly presented by Dr. T. F. Tierney was installed in one of the dens in the Sanatorium. In connection with this a dark-room was also made for Dr. Tierney's use.

Lion House. A new meat-safe, cookhouse, and sun cage for cubs were constructed. The floors of several dens were relaid with teak blocks.

Reptile House. An additional office was made for Mr. J. Fisher, Assistant Curator.

Tortoise House. A glass screen was made in front of the Marmoset cages to prevent infection from the public.

Owls' Aviary. This aviary was entirely re-wired.

Monkey House. The section housing the anthropoid apes was entirely re-modelled. The wire partitions were replaced by reinforced concrete and all the cages were re-wired with strong interlink netting.

Roads. Upwards of 10,000 square yards of paths and roads were relaid in tarmacadam during the year. A large area was also tarred and dressed with granite chippings.

Children's Zoo. This was entirely reconstructed on a larger scale in two of the paddocks adjoining the Park. It was ready for occupation shortly before Whitsun.

Air-Raid Precautions. An A.R.P. scheme for the Gardens was drawn up, and received the approval of the Chief Air Warden for Marylebone. During the week of crisis

in September, the scheme was applied. Emergency splinter-proof shelters were prepared sufficient to house the entire staff of the Gardens and several hundred visitors. The A.R.P. scheme contains detailed instructions to the staff, and can be put into action at the shortest notice.

65. NEW WORKS, 1938.—For details see pp. 11–12.

(IV) MENAGERIE.

66. COMMISSARIAT.—In the following table are given the quantities of the principal kinds of food, etc., consumed in the Gardens in 1938 :—

Class.	Description.	Number or Quantity.
Fodder, etc.	Hay	91 tons.
"	Clover	156½ tons.
"	Straw	95½ tons.
"	Tares	26,198 bundles.
"	Peat-Moss Litter ...	55 bales.
Grain, etc.	Oats	273¾ qtrs.
"	Quaker Oats	1 ton, 14½ cwts.
"	Bran	186 cwts.
"	Wheat	57½ qtrs.
"	Wheat-Mixture	62 cwts.
"	Barley Meal	12 cwts.
"	Maize	44 qtrs.
"	Locust Beans	3 tons, 19 cwts.
"	Beans	3½ qtrs.
"	Rice	3 tons, 6 cwts.
"	Canary Seed	59½ cwts.
"	Hemp Seed	22½ cwts.
"	Millet	25¼ cwts.
"	Millet Spray	30 bunches.
"	Sunflower-seed	45 cwts.
Fish	Herrings and Whiting ...	53 tons, 11 cwts.
"	Shrimps	21½ bushels.
Flesh	Horse-flesh	124 tons, 9½ cwts.
"	Beef	3½ cwts.
"	Fat	1 ton, 14 cwts.
Milk	Condensed—Sweetened ...	7,200 lbs.
"	" Unsweetened	4,032 lbs.
"	Special	2,519¾ gals.
Nuts	Spanish	104 qtrs.
"	Monkey	9 tons, 9½ cwts.
"	Brazil	104 lbs.
"	Mixed	71 lbs.

Class.	Description.	Number or Quantity.
Fruit, etc.	Bananas	244,649.
"	Apples	12 tons, 7 cwts.
"	Grapes	5 tons, 1 $\frac{3}{4}$ cwts.
"	Oranges	25,087.
"	Grapefruit	1,082
"	Dates	1 ton, 5 cwts.
"	Currants	12 cwts.
"	Sultanas	47 lbs.
"	Pears	3 $\frac{3}{4}$ cwts.
"	Figs	94 lbs.
"	Lemons	167.
"	Lettuce	53,930
"	Greens	1,940 bushels.
"	Cabbages	58.
"	Carrots	8 tons, 17 $\frac{1}{2}$ cwts. and
"	Tomatoes	4 cwts. [1447 bunches.
"	Potatoes	26 tons, 15 $\frac{1}{2}$ cwts.
"	Onions	4 $\frac{3}{4}$ cwts.
"	Mangolds	33 tons, 14 $\frac{1}{2}$ cwts.
"	Celery	7 heads.
Miscellaneous	Biscuits	28 tons, 18 cwts.
"	Biscuit Meal	12 tons, 18 cwts.
"	Honey	4 $\frac{1}{4}$ cwts.
"	Mellin's Food	49 pots.
"	Bread	12 tons, 13 $\frac{3}{4}$ cwts.
"	Sponge Cakes	364.
"	Eggs	29,344.
"	Sugar	25 cwts.
"	Ant-eggs	7 $\frac{1}{4}$ cwts.
"	Mealworms	6 $\frac{1}{4}$ cwts.
"	Dried Flies	4 $\frac{3}{4}$ cwts.
"	Egg Yolk	100 lbs.
"	Golden Syrup	110 lbs.
"	Jam	196 lbs.
"	Prunes	14 lbs.
"	Oilcake	1 ton, 6 cwts.
"	Butter	70 lbs.
"	Margarine	4 $\frac{3}{4}$ cwts.

67. NUMBERS OF THE COLLECTION.

Additions to the Collection, 1936-38.

	Presentation.	Purchase.	Deposit.	Exchange.	Birth.	TOTAL.
1936	... 1,517	551	126	239	218	2,651
1937	... 1,158	538	261	365	333	2,655
1938	... 1,139	441	277	400	233	2,490

Animals in Regent's Park Gardens on December 31st, 1938.

Animals of all kinds (except Fish and Invertebrates) on January 1st, 1938	3,801
Animals of all kinds (except Fish and Invertebrates) re- ceived in 1938 by presentation, exchange, deposit, pur- chase or birth	2,490
	<hr/>
	6,291
Animals of all kinds (except Fish and Invertebrates) dead, sold, sent in exchange, or returned to depositors in 1938	2,667
Animals of all kinds (except Fish and Invertebrates) in the Gardens on December 31st, 1938	<hr/> <hr/> 3,624

68. MAMMALS, BIRDS AND REPTILES, BRED IN THE LONDON GARDENS, 1938.—233 animals were bred in the Gardens in 1938 as compared with 332 in 1937.

	1937.	1938.
Mammals	131	149
Birds	59	73
Reptiles	142	11
	<hr/>	<hr/>
	332	233
	<hr/> <hr/>	<hr/> <hr/>

R = reared to maturity. D = died. L = living.

Mammals.

- 1 Rhesus Monkey (*Macaca mulatta*), D.
- 1 Pig-tailed Monkey (*Macaca nemestrina*), R.
- 1 Guinea Baboon (*Papio papio*), R.
- 1 Brown Capuchin Monkey (*Cebus fatuellus*), D.
- 1 Brown Lemur (*Lemur fulvus*), R.
- 1 Moholi Bush Baby (*Galago moholi*), R.
- 7 Lions (*Felis leo*), R.
- 5 Tigers (*Felis tigris*), 4 D, 1 R.
- 2 Leopards (*Felis pardus*), R.
- 1 Northern Lynx (*Felis lynx*), R.
- 8 Dingoes (*Canis familiaris dingo*), 5 R, 3 D.
- 6 Wolves (*Canis lupus*), 1 R, 5 D.
- 2 Common × Plain's Wolves (*Canis lupus* × *C. l. nubilus*), R.
- 1 Indian Wolf (*Canis pallipes*), D.
- 6 Silver Foxes (*Vulpes fulva*), D.

- 2 Cape Hunting Dogs (*Lycaon pictus*), D.
 8 Polecats (*Putorius putorius*), R.
 2 Brown Bears (*Ursus arctos*), D.
 1 Californian Sea Lion (*Zalophus californianus*), R.
 4 Golden Hamsters (*Cricetus auratus*), R.
 2 Sumichrast's Night Mice (*Nyctomys sumichrasti*), R.
 2 Western Coucha Rats (*Mastomys erythroleucus*), D.
 4 Hybrid House × Faroe Island Mice (*Mus musculus* × *M. m. faroensis*), R.
 3 Hybrid mice (back-cross of above to *Mus musculus faroensis*), R.
 4 Kenya Pouched Rats (*Saccostomus isiola*), R.
 12 Guenther's Voles (*Microtus guentheri*), R.
 1 Hairy-rumped Agouti (*Dasyprocta prymnolopha*), D.
 3 Variegated Agoutis (*Dasyprocta variegata*), R.
 1 Patagonian Cavy (*Dolichotis magellanica*), D.
 1 Beecroft's Hyrax (*Procavia dorsalis*), D.
 1 Shetland Pony (*Equus caballus*), D.
 1 Hartmann's Mountain Zebra (*Equus zebra hartmanni*), R.
 1 American Bison (*Bison bison*), L.
 1 Cape Buffalo (*Syncerus caffer*), D.
 2 Big Horn Sheep (*Ovis canadensis*), 1 R, 1 D.
 4 Mouflon (*Ovis musimon*), D.
 2 Hybrid Punjab × Cyprian Wild Sheep (*Ovis vignei* × *O. ophion*), D.
 4 Barbary Wild Sheep (*Ammotragus lervia*), R.
 6 Common Goats (*Capra hircus*), 5 R, 1 D.
 1 Grecian Wild Goat (*Capra aegagrus*), R.
 2 Caucasian Wild Goats (*Capra caucasica*), 1 R, 1 D.
 2 Thar (*Hemitragus jemlahicus*), 1 R, 1 D.
 1 Blesbok (*Damaliscus albifrons*), R.
 1 Bay Duiker (*Cephalophus dorsalis*), R.
 7 Blackbuck (*Antilope cervicapra*), 4 R, 3 D.
 1 Harnessed Antelope (*Tragelaphus scriptus*), D.
 1 Eland (*Taurotragus oryx*), D.
 1 Reeves' Muntjac (*Muntiacus reevesi*), R.
 1 Axis Deer (*Axis axis*), L.
 5 Hog Deer (*Hyelaphus porcinus*), 3 R, 2 D.
 1 Hangul Deer (*Cervus hanglu*), R.
 1 Arabian Camel (*Camelus dromedarius*), L.
 2 Collared Peccaries (*Pecari tajacu*), 1 R, 1 D.
 1 Red Wallaroo (*Macropus robustus rubens*), R.
 2 Black Wallabies (*Macropus ualabatus*), D.
 1 Bennett's Wallaby (*Macropus ruficollis bennetti*), R.
 1 Hybrid Bennett's × Red-necked Wallaby (*Macropus ruficollis bennetti*
 × *M. ruficollis*), L.
 1 Silver Grey Opossum (*Trichosurus vulpecula*), R.

Birds.

- 1 Superb Glossy Starling (*Spreo superbus*), R.
 1 Hybrid Western × North American Bluebird (*Sialia mexicana occidentalis* × *Sialia sialis*), R.
 3 Scaly-breasted Lorikeets (*Eutelipsitta chlorolepidota*), D.
 2 Illiger's Macaws (*Ara maracana*), R.
 6 Masked Lovebirds (*Agapornis personata*), 5 R, 1 D.
 2 Hybrid Masked × Fischer's Lovebirds (*Agapornis personata* × *A. fischeri*), R.
 28 Budgerigars (Green). (*Melopsittacus undulatus*), R.
 7 " (Blue var.) " "
 3 " (Yellow var.) " "
 4 " (Cobalt var.) " "
 3 " (White var.) " "
 8 Cockatiels (*Leptolophus hollandicus*), 7 R, 1 D.
 2 White-fronted Sheld Duck (*Casarca cana*), 1 R, 1 D.
 3 Silver Gulls (*Larus novae-hollandiae*), R.

Reptiles.

- 5 Indian Pythons (*Python molurus*), R.
 6 Aldrovandi's Snakes (*Elaphe quatuorlineata*), D.

69. LIST OF GENERA, SPECIES AND SUB-SPECIES NEW TO THE COLLECTION IN 1938.—52 new species and sub-species were added to the collection in the year as compared with 67 in 1937 :—

	1937.	1938.
Mammals	9	15
Birds	26	10
Reptiles	3	3
Amphibians	—	1
Fishes	29	23
	—	—
	67	52
	==	==

(The figures placed before each name indicate its approximate position in the current Vertebrate List.)

NEW GENERA. (18)

(I) MAMMALS. (4)

ORDER PRIMATES.

Genus *Seniocebus* Gray.

126b. *Seniocebus leucopus* (Gunther). White-footed Karmoset.

ORDER CARNIVORA.

Genus *Ailuropoda* Milne-Edwards.

378a. *Ailuropoda melanoleuca* (David). Giant Panda.

ORDER RODENTIA.

Genus *Grammomys* Thomas.

- 499c. *Grammomys surdaster* Thomas and Wroughton. African
Tree Rat.

Genus *Zelotomys* Osgood.

- 509c. *Zelotomys hildegardae* Thomas. Hildegarde's Rat.

(II) BIRDS. (2)

ORDER PASSERIFORMES.

Genus *Cyanomitra* Reichenbach.

- 626b. *Cyanomitra verticalis verticalis* (Latham). Green-headed
Sunbird.

ORDER CORACIIFORMES.

Genus *Cyanolesbia* Stejneger.

- 994c. *Cyanolesbia coelestis* (Gould). Heavenly Sylph.

(III) REPTILES AND AMPHIBIANS. (3)

ORDER SALIENTIA.

Genus *Trichobatrachus* Boulenger.

- 142d. *Trichobatrachus robustus* Boulenger. Hairy Frog.

ORDER SERPENTES.

Genus *Scaphiophis* Peters.

- 603a. *Scaphiophis albopunctatus* Peters. White-spotted Snake.

Genus *Carphophis* Gervais.

- 608a. *Carphophis amoena* Say. Worm Snake.

(IV) FISHES. (9)

ORDER OSTARIOPHYSI.

Genus *Carnegiella* Eigenmann. 1909.

- 42a. *Carnegiella strigata* (Gthr.). Hatchet Fish.

Genus *Leporinus* Spix 1829.

- 46a. *Leporinus fasciatus* (Bloch). Banded Fish.

ORDER PERCOMORPHI.

Genus *Centropristes* Cuv. & Val. 1829.

- 149a. *Centropristes striatus* (Linn.). Black Sea Bass.

Genus *Seriola* Cuv. 1817.

- 164a. *Seriola nigrofasciata* (Rüppell). Caranx.

Genus *Scolopsis* Cuv. 1814.

- 171a. *Scolopsis cancellatus* Bloch. Olive-lined Sea Perch.

Genus *Chaetodipterus* Lacépède 1802.

- 174a. *Chaetodipterus faber* (Broussonet). Spade Fish.

Genus *Cheilinus* Lacépede 1802.

214a. *Cheilinus trilobatus* (Lacep.). Changeable Wrasse.

Genus *Boleophthalmus* Cuv. & Val. 1837.

244b. *Boleophthalmus dentatus* (Cuv. & Val.). Spotted-finned Mudskipper.

244c. *Boleophthalmus boddaerti* (Pallas). Barred Mudskipper.

ORDER PLECTOGNATHI.

Genus *Monocanthus* Scudder 1882.

269a. *Monocanthus setifer* Bennett. Egyptian File Fish.

NEW SPECIES. (47)

(I) MAMMALS. (11)

- 126b. *Seniocebus leucopus* (Gunther). White-footed Marmoset.
Colombia.
- 378a. *Ailuropoda melanoleuca* (David). Giant Panda.
Mountains of Szechwan, S.W. China.
- 470a. *Marmota robusta* (Milne-Edwards). Chinese Marmot.
Tibet and China.
- 478b. *Graphiurus murinus* Desmarest. Murine Dormouse.
Kenya.
- 499c. *Grammomys surdaster* Thomas & Wroughton. African Tree Rat.
Kenya.
- 508c. *Saccostomus isiolae* Heller. Kenya Pouched Rat.
Kenya.
- 509c. *Zelotomys hildegardae* Thos. Hildegarde's Rat.
Highlands of Kenya.
- 514b. *Apodemus hirtensis* Barrett-Hamilton. St. Kilda Field Mouse.
Hirta, St. Kilda.
- 560a. *Allactaga euphratica* Thomas. Euphrates Jerboa.
Kuwait, Arabia.
- 566a. *Pedetes surdaster* Thomas. Kenya Jumping Hare.
Kenya.
- 590a. *Thryonomys gregorianus* Thomas. Gregory's Cane Rat.
Kenya.

(II) BIRDS. (9)

- 621c. *Cinnyris cupreus* (Shaw). Coppery Sunbird.
West Africa.
- 626b. *Cyanomitra verticalis verticalis* (Latham). Green-headed Sunbird.
W. Africa.

- 994c. *Cyanolesbia coelestis* (Gould). Heavenly Sylph.
Ecuador.
- 1091a. *Ara manilata* (Boddaert). Yellow-faced Macaw.
British Guiana.
- 1343a. *Bubo aharoni* (Rothschild & Hartert). Aharoni's Eagle Owl.
Palestine.
- 1739a. *Plegades ridgwayi* (Allen). Ridgway's Ibis.
South America.
- 1853a. *Larus serranus* Tschudi. Andean Gull.
South America.
- 1906a. *Spheniscus mendiculus* Sundevall. Galapagan Penguin.
Galapagos Is.
- 2153b. *Colinus insignis* Nelson. Guatemala Bobwhite.
Guatemala.

(III) REPTILES AND AMPHIBIANS. (4)

- 227a. *Cyclura caymanensis* (Barbour & Noble). Cayman Island Ground
Iguana. Cayman Is.
- 603a. *Scaphiophis albopunctatus* Peters. White-spotted Snake.
Kenya.
- 608a. *Carphophis amoena* Say. Worm Snake.
N. America.
- 142d. *Trichobatrachus robustus* Boulenger. Hairy Frog.
West Africa.

(IV) FISHES. (23)

- 24a. *Salvelinus willughbii* Gthr. Windermere Char.
Lake District, England.
- 42a. *Carnegiella strigata* (Gthr.). Hatchet Fish.
N.E. South America.
- 46a. *Leporinus fasciatus* (Bloch). Banded Fish.
Amazon and Guiana.
- 52a. *Danio devario* (Hamilton). Fresh-water Silver Fish.
E. Asia.
- 83a. *Clarias fuscus* (Lacép.). Chinese Catfish.
China.
- 148a. *Epinephelus chorostigma* (Cuv. & Val.). Spotted Sea Perch.
Gulf of Suez.
- 148b. *Epinephelus caeruleopunctatus* (Bloch). Changeable Sea Perch.
Gulf of Suez.

- 148c. *Epinephelus hemistictus* (Rüppell). Maroon Sea Perch.
Gulf of Suez.
- 149a. *Centropristes striatus* (Linn.). Black Sea Bass.
Eastern Coast of N. America.
- 164a. *Seriola nigrofasciata* (Rüppell). Caranx.
Gulf of Suez.
- 171a. *Scolopsis cancellatus* Bloch. Olive-lined Sea Perch.
Gulf of Suez.
- 174a. *Chaetodipterus faber* (Broussonet). Spade Fish.
Western Atlantic Coast.
- 195a. *Amphiprion polymnus* (Linn.). Yellow-nosed Coral Fish.
East Indies.
- 206a. *Glyphisodon coelestinus* (Cuv. & Val.). Banded Demoiselle Fish.
Gulf of Suez.
- 206b. *Pomacanthus maculosus* (Quoy & Gaim.). Red Sea Angel Fish.
Gulf of Suez.
- 214a. *Cheilinus trilobatus* (Lacép.). Changeable Wrasse.
Gulf of Suez.
- 214b. *Pseudoscarus schlegelii* (Bleek). Schlegel's Parrot Wrasse.
Gulf of Suez.
- 214c. *Pseudoscarus forskalii* (Klunxinger). Forskal's Parrot Wrasse.
Gulf of Suez.
- 244a. *Periophthalmus barbarus* Linn. Linnaeus Mudskipper.
India.
- 244b. *Boleophthalmus dentatus* (Cuv. & Val.). Spotted-finned Mudskipper.
India.
- 244c. *Boleophthalmus boddaerti* (Pallas). Barred Mudskipper.
India.
- 269a. *Monocanthus setifer* Bennett. Egyptian File Fish.
Gulf of Suez.
- 272a. *Tetraodon testudinus* Bloch. Egyptian Ball Fish.
Gulf of Suez.

NEW SUB-SPECIES. (5)

(I) MAMMALS. (4)

- 1a. *Gorilla gorilla beringeri* (Matschie). Mountain Gorilla.
Kivu District, Belgian Congo.
- 424b. *Sciurus stramineus grayanus* Thos. Ecuadorean Squirrel.
Ecuador.
- 454b. *Eutamias asiaticus lineatus* (Siebold). Japanese Chipmunk.
Japan.
- 672a. *Pseudois nahoor szechuanensis* Rothschild. Chinese Bharal.
West China.

(II) BIRDS. (1)

1520c *Cathartes aura septentrionalis* Wied. North American Turkey-Vulture.
N. America.

70. ACKNOWLEDGMENTS.—The Society is as usual much indebted to Fellows, Corresponding Members, Private Donors, and to Institutions, Societies and Shipping Companies for their most kind help in maintaining the collection of animals by gifts and by assistance in transport. Specially to be mentioned in respect of 1938 are H.G. The Duke of Bedford, K.G., F.R.S., the Belgian Government, the Rt. Hon. the Lord Moyne, P.C., D.S.O., Mr. Alfred Ezra, O.B.E., F.Z.S., Mr. G. C. Upstone, F.Z.S., Mr. J. J. Morris, C.M.Z.S., the Bombay Natural History Society, the Zoological Gardens of Calcutta, Messrs. Alfred Holt & Co., Monsieur Jean Delacour, Pacific Steam Navigation Co., The Blue Star Line, the P. & O. Steamship Co., the Union-Castle Steamship Co., and the British India Steam Navigation Co., through Messrs. Gray, Dawes & Co., and Messrs. Mackinnon, Mackenzie & Co.

71. LIST OF DONORS TO LONDON GARDENS.

* = New to Collection.

- ABRAHAM, H. C., F.Z.S., 1 Agile Gibbon.
 AHARONI, Dr. Bathscheba, *2 Aharoni's Eagle Owls.
 AILWYN, Lady, 2 Purple-rumped Sunbirds, 1 Purple Sunbird.
 ALDERMAN, Miss E. E., 2 Greek Tortoises.
 ALEXANDER, Sir Claud, Bt., 1 Ocelot.
 ALLENBY, The Dowager Viscountess, F.Z.S., 2 Green Singing Finches,
 3 Zebra Finches, 1 Pileated Finch.
 ANGORA TRADING COMPANY, 1 Kirtland's Tree Snake, 1 African Beauty Snake.
 ARNAUD, Miss Yvonne, F.Z.S., 1 Ornate Terrapin.
 ASHTON, H. F., 3 Natterjack Toads.
 ATKINSON, Robert, *2 St. Kilda Field Mice.
 BALLANCE, Michael H., 1 Crested Newt.
 BAKER, F., Golden Tench.
 BARKER, R. J., 1 Puffin.
 BARNETT, Dr. Burgess, F.Z.S., 4 Russell's Vipers.
 BARRETT, Miss Elizabeth, 2 Chameleons.
 BARTLE, John, 1 Shaw's Jird.
 BARTLETT, Miss, 2 Thrushes.

- BEAVEN, Miss, 1 Fat Dormouse.
- BEDFORD, H.G. THE DUKE OF, K.G., F.R.S., 2 Andean Geese, 4 Falcated Teal, 2 Ruddy-headed Geese, 2 Common Rheas, 3 Black-necked Swans, 2 Ashy-headed Geese, 1 Citron-crested Cockatoo, 2 Bare-eyed Cockatoos, 2 Great American Egrets, 1 Chestnut-breasted Teal, 6 Barnacle Geese, 1 Red-billed Tree Duck, 1 Ypecaha Rail, 3 Cayenne Wood Rails, Golden Trout.
- BEESON, A., 1 Garden Tree Boa.
- BEETHAM, W., 3 Greek Tortoises.
- BELGIAN GOVERNMENT, *1 Mountain Gorilla.
- BIGGS, A., 4 Common Vipers.
- BINNS, W. L., 3 Fat Dormice.
- BRADLEY, Frederic, 1 Grey Mongoose.
- BRAND, J. B. (in conjunction with Miss B. A. Snowdon), 8 Ornate Terrapins.
- BRIGGS, Superintendent, 1 Woodcock.
- BRIGHTON AQUARIUM, Collections of fishes and marine invertebrates.
- BRISTOW, Mrs. C., 1 Greek Tortoise.
- BROOK, Mrs. L. L., 1 Chameleon.
- BROWN, A., 1 Muntjac.
- BUCKMAN, Captain, 1 Guillemot.
- BURNABY, R. H., Goldfish.
- BURNABY, Raymond, 1 Budgerigar.
- BUSH, A. J., F.Z.S., 1 Brahminy Kite, 1 Chinese Myna.
- BUTLER, A., 1 Royal Antelope.
- BUTLER, A. W. C., 1 Greater Spotted Woodpecker.
- CARTER, E. W., 12 Budgerigars.
- CARTER, Mrs., 1 Greek Tortoise.
- CHAMBERS, Mrs. E. H., 1 Tawny Owl.
- CHAMBERS, Lt.-Col. G. H., 1 Indian Chukor.
- CHARLTON, G., 1 Chameleon, 1 Pygmy Chameleon.
- CHRISTIAN, Mrs., 2 Green Lizards.
- CLARKE, Mrs. A. P., 1 Greek Tortoise.
- CLASEN, B., F.Z.S., Crayfish.
- CLEALL, J. R., 1 Guillemot.
- COMMINGS, Miss Cynthia, 1 Green Lizard.
- COOKE, Mrs., 4 European Squirrels.
- COOMBER, S. G., 1 Chameleon.
- CRINGLE, John, 2 Finlayson's Squirrels.
- CRONLY, H., 2 Ostriches.
- DAVIDSON, Miss Barbara H. L., 1 Agile Gibbon.
- DAVIS, A., 1 Tawny Owl.
- DEANS, C. C., F.Z.S., 5 Zebra Finches, 2 Common Fire Finches, 1 African Silverbill, 1 Goldfinch mule, 2 Black-headed Siskins.
- DELACOUR, Jean, F.Z.S., *1 Yellow-faced Macaw, 1 Hahn's Macaw, 2

- Black-headed Caiques, 1 Pileated Tinamou, 2 Magpie Tanagers, 1 Black-headed Tanager, 2 Cayenne Crakes, *2 Guatemala Bobwhites, 1 Reddish Finch, 2 Scarlet Tanagers, 3 Yellow-winged Sugar Birds, 2 Martinique Gallinules, 1 Banded Aracari, 1 White-crested Guan, 1 Swallow-tailed Humming Bird, 1 Pucheran's Emerald Humming Bird, 1 Blue-chinned Sapphire Humming Bird, 1 Ruby-crested Humming Bird, 2 Meyer's Sicklebill Birds of Paradise, 1 Red Bird of Paradise, 3 Egyptian Plovers, 4 Turnstones, 3 Ruffs, 1 Redshank.
- DELGADO, W., 1 Flap-necked Chameleon.
- DICKSON, Mrs. H. R. P., F.Z.S., *4 Euphrates Jerboas.
- DIGBY, Miss Lettice, 2 Californian Quail.
- DODS, W. K., C.M.Z.S., 2 Brahminy Kites, 4 Egyptian Kites.
- DOYLE, A. M. Conan, *4 Hairy Frogs.
- DUK, Miss, 1 Greek Tortoise.
- s.s. "DUNSTAN," 3rd Engineer, 1 Anaconda.
- DUTTON, L. J., 1 Common Fox.
- ELKAN, Dr. E. R., 2 Smooth-clawed Xenopus.
- ELLICE, R. G., 1 Brazilian Tree Frog.
- ELLIOTT, Miss, 4 Green Lizards, 1 Yellow-bellied Toad.
- ELSWORTH, Miss Beryl, 1 Pygmy Chameleon.
- EVANS, E., 1 Chameleon.
- EZRA, Alfred, O.B.E., F.Z.S., 1 Tayra, 9 Ruby-crested Humming Birds, 5 Black-tailed Emerald Humming Birds, 1 Lesson's Emerald Humming Bird.
- FAHN, K. Slingsby, F.Z.S., 1 Alligator.
- FINMARK SCIENTIFIC EXPEDITION 1938, 7 Norwegian Lemmings.
- FIRMINGER, M. M., 1 St. Helena Waxbill, 1 Crimson-eared Waxbill, 1 Crimson Fire Finch, 1 Common Fire Finch, 1 Indian Silverbill, 2 African Silverbills, 1 Black-headed Siskin, 2 White-headed Mannikins.
- FISHER, A., Lobster.
- FORESTRY COMMISSION, THE, 1 Roe Deer.
- FROST, W. J. C., 1 Salvadori's Rail, Collection of small tropical fish.
- FRYE, W., 1 Humboldt's Woolly Monkey.
- FRYER, Mrs. R. E., 2 Budgerigars.
- FUERST, G. M., F.Z.S., 2 Tenrecs.
- GATES, Mrs. L., 1 European Otter.
- GIBBINGS, Miss J. M., 11 Iguanas.
- GIBBS, Cyril L., 1 Bridled Skink.
- GIBSON, A. T., 2 European Vipers, 8 Grass Snakes.
- GILBERT, A., 1 Chinese Silver Pheasant.
- GILLESPIE, H. G., F.Z.S., 3 Hairy Armadilloes.
- GOODENDAY, J., 1 Grass Snake.
- GRANT, Mrs., 1 Greater Sulphur-crested Cockatoo.
- GRAVELEY, G., 1 Budgerigar (Blue var.).
- GRAY, R. T. M., 2 Alligators.
- GREEN, H. B., 2 Golden Hamsters.

- GREEN, M. J., *10 Japanese Chipmunks, 7 Palm Squirrels.
 GREGORY, D., 1 Alligator, 1 European Pond Tortoise.
 GUNNER, A., 2 Common Vipers.
 HALES, A. (in conjunction with E. Saunders), 1 Slowworm.
 HAMILTON, Miss J., Anemones, Sea-Snails.
 HARRIS, Robert G., 1 Peregrine Falcon.
 HART, Julian Tudor, 2 Ornate Terrapins.
 HAYWARD, C. H., 4 Spectacled Cayman.
 HERNE, G. R., 1 Kestrel.
 HICKEL, Mrs., 2 Cockatiels.
 HIGGINS, Mrs. M., 1 Zebra Finch.
 HILL, M. D., F.Z.S., 1 European Hare.
 HIRST, Edward, 1 Moorhen.
 HOWARD DE WALDEN, Lord, F.Z.S., 1 Peregrine Falcon.
 HUBBARD, Mrs. J., 1 Cockatiel.
 HUDSON, Dr. J. S., 1 Red-crested Cardinal, 1 Martinique Gallinule.
 ILES, J., 1 European Pond Tortoise.
 INSALL, Group-Capt. G. S. M., 1 Grey Monitor, 3 Egyptian Dabb Lizards,
 17 Chameleons.
 JACKSON, Miss K., 1 Greek Tortoise.
 JOHNSON, E., 1 Ferret, 5 young Stoats.
 JOHNSTON, Mrs., 1 Guillemot.
 JUNIO, Mrs., 1 Java Sparrow.
 KEMP, F., 1 Dormouse.
 KEMP, S. A., F.Z.S., 5 Guillemots.
 KENCH, A., 1 Moholi Bush Baby.
 KERSWELL, A. W. G., 1 Barn Owl.
 KING, E. C., 1 Grey Squirrel.
 KING, Mrs., 1 Greek Tortoise.
 KNAPP, Mrs., 1 Slowworm.
 KNIGHT, Maxwell, F.Z.S., 1 Smooth Snake, 1 Gecko (sp. inq.)
 LAMBERISH, D. L., 1 Green Lizard.
 LANGLEY, W., 1 Water Rail.
 LEARDIE, G. J., 1 Chameleon.
 LEWIN, A. J., 1 Guillemot.
 LEWIS, J. Spedan, F.Z.S., 1 Barrow's Golden Eye.
 LEWIS, W., 1 Imperial Boa.
 LIPPENS, L., 8 Ruffs.
 LLOYD, Mrs. E., 1 Patas Monkey.
 McCLEERY, H. H., 1 Milky Eagle-Owl.
 MACKENZIE, J. M. D., F.Z.S., 3 Nutria.
 MACLEOD, N. H., 1 Golden Agouti.
 MADRE, Mrs., 1 Alexandrine Parrakeet.
 MAGDALEN PET STORES, 1 Woodcock.

- MAHONEY, G. A., 1 Ferret.
- MANOR INFANTS' SCHOOL, 1 Chameleon.
- MARSH, Dr. G., 1 Spotted Salamander.
- MARSHALL, W. M., 1 Little Owl.
- MARTIN, H. C., 1 White-capped Tanager.
- MARTIN, H. W., 1 Chameleon.
- MAXWELL, P. H., 1 Lesser Blue-winged Pitta.
- MELLOR, J., 5 White-throated Song Sparrows, 2 White-crowned Song Sparrows, 2 Pigeon-Hawks, 1 Kestrel.
- MELROSE, E. A., 1 Jackdaw.
- MILLER, A., 8 Black & White Cobras, 1 Black-necked Cobra, 1 Royal Python, 1 African Beauty Snake, 1 Bell's Hinged Tortoise.
- MOLLER, T. A., 2 Garden Dormice.
- MOORE, A. J., F.Z.S., 1 Reddish Finch.
- MORGAN, Miss D. Carey, 2 Long-eared Foxes.
- MORRIS, J. J., C.M.Z.S., 1 Negro Tamarin Monkey, 1 Hairy-rumped Agouti, 2 Chopi Starlings, 2 Silky Cowbirds, 1 Brown Gannet, 1 Chestnut-fronted Marsh Starling, 2 Great Teguxins, 1 Cope's Terapin, 28 South American Sand Toads, 16 Spotted Bladder Frogs, 1 Cainana Rat Snake, 1 Harlequin Coral Snake, 18 Delalande's Geckos, 1 Brown Escuerzo, 49 Madeira Wall Lizards, Hawksbill and Green Turtles.
- MORRISON, A. R. G., F.Z.S., 2 Chilean Pintails, *3 Andean Gulls, *1 Ridgway's Ibis, 1 Andean Goose.
- MOYNE, The Rt. Hon. Lord, P.C., D.S.O., F.Z.S., 1 Honduras Squirrel, 2 Brazilian Tree Porcupines, 6 Swan Island Hutias, 6 Golden Agoutis, 1 Black-faced Spider Monkey, 1 Weeper Capuchin Monkey, 3 Squirrel Monkeys, 1 Central American Agouti, 2 Cayman Island Parrots, 2 Yellow-cheeked Parrots, 2 Red & Blue Macaws, 5 Nose-crested Iguanas, 5 Black-pointed Teguxins, 1 Surinam Lizard, 2 Bibron's Snakes.
- MUNRO, James, 1 Peregrine Falcon.
- NEILSON, Mrs. A., 1 Red-crested Cardinal.
- NEWSTEAD, L. W., 1 Eyed Skink.
- NEW YORK AQUARIUM, Collections of fish and King Crabs.
- NOTT, Miss, 1 Amboina Box Tortoise.
- O'CONNOR, J. C. J., 1 Thick-billed Seed Finch.
- OLLINGTON, H., 1 Dormouse.
- O'REILLY, Michael, 1 Sky Lark.
- OXFORD UNIVERSITY CAYMAN BIOLOGICAL EXPEDITION, 34 Bibron's Snakes, *16 Cayman Island Ground Iguanas, 60 Gray's Anolis Lizards, 18 Wrinkled Terrapins, 2 Golden Agoutis, 8 Black-tailed Jubo Boas, 4 Hawk-billed Turtles, 2 Green Turtles, 40 Land Hermit Crabs, 3 Cuban Keeled Lizards.
- PARBURY, D., F.Z.S., F.R.H.S., 16 Crested Newts, 31 Common Smooth Newts.
- PATTERSON, J. A., 1 Chameleon.

- PEEL, Col. E. T., F.Z.S., Dragon Fish, Coral Fish.
- PEIRCE, Charles, 1 Small Hill Mynah.
- PHILLIPS, Major L. H., F.Z.S., 3 European Badgers.
- PHIPPS, Mrs. L. N. G., F.Z.S., 1 Baillon's Aracari, 1 Coppery Sunbird,
*1 Green-headed Sunbird, 2 Ruffs.
- PICKBURN, J., 1 Spotted Salamander.
- PILLIN, Mrs., 1 Jackdaw.
- PITMAN, Capt. C. R. S., D.S.O., C.M.Z.S., Lung-Fish.
- PORTAL, Maurice, D.S.O., F.Z.S., 2 de Winton's Wood Mice, 1 Noctule
Bat. 11
- PORTER, Julius, 1 Hybrid Lady Amherst \times Gold Pheasant.
- PRESTON, Miss, 1 Occipital Blue Pie.
- PRITCHARD, Miss R., 1 Roseate Cockatoo.
- PROUT, W. C., 2 White-throated Song Sparrows.
- QUAYLE, Anthony, 4 Ornate Terrapins.
- RAMPTON, A., 1 White Pelican.
- RIBEAUX, Louis F., 1 Common Turtle Dove.
- RICHARDS, G., Lobsters, Razor Shells, Clams.
- RICHARDSON, Capt. R. McA., 1 African Crested Porcupine.
- RIDDLE, C. W., 1 Greek Tortoise.
- RIENZI, Mrs. A. C., 1 Red Howler Monkey.
- RILEY, Dr. N. D., F.Z.S., 1 Razorbill.
- ROGERS, Miss, 1 British Bullfinch, 1 Red-faced Lovebird, 1 Budgerigar.
- ROTCHELL, E., 2 Flap-necked Chameleons.
- ROWAN, Prof. William, F.Z.S., 8 Prairie Rattlesnakes, 1 Northern Pygmy
Rattler, 1 Bull Snake.
- RYDE, Miss Mary, 2 Boa Constrictors.
- SAMPIERI, The Marquis Basily-, 3 Great Teguexins.
- SAUNDERS, E. (in conjunction with A. Hales), 1 Slowworm.
- SAUNDERS, S. G., 1 Greek Tortoise.
- SCALE, Lt.-Col. J. D., D.S.O., O.B.E., F.Z.S., 2 Pallas's Eared Pheasants.
- SEGAL, H., 2 Mississippi Alligators.
- SCOTLAND, Zoological Society of, 1 King Penguin.
- SEVASTOPULO, Mrs. G. D., 1 European Squirrel.
- SHAW, Miss Pamela, 1 Moholi Bush Baby.
- SHEPHERD, W., 10 House Mice.
- SIMPSON, Dr. & Mrs. I. A., 1 Leopard Cat.
- SLAUGHTER, R. J. H., 1 Chameleon.
- SMITH, A. G. H., 1 Hybrid Common Pheasant \times Domestic Fowl.
- SMITH, C., 1 House Sparrow (White var.).
- SNOWDON, Miss B. A. (in conjunction with J. B. Brand), 8 Ornate
Terrapins.
- SOPWITH, T. O. M., C.B.E., F.Z.S., *6 Galapagan Penguins, 6 Galapagan
Land Iguanas.
- STEVENSON, Capt. F. H. L., F.Z.S., Golden Orfe, Crucian Carp, Goldfish.

- STEWART, Sir James Purves-, K.C.M.G., C.B., M.A., M.D., F.R.C.P.,
1 Ocelot.
- STONOR, The Hon. E., 1 Northern Nuthatch.
- STROUD, G., 1 Fer-de-Lance.
- STUART, Douglas, 2 Lesueur's Water Lizards.
- STUBBS, Miss Heath, 1 Virginian Cardinal.
- SWEETNAM, Prebendary J. E., 1 Cuckoo.
- TAYLOR, Miss P. C., 1 Grey Mongoose.
- TEUTEN, Dr. Montague, 1 Indian Shama.
- TIGAR, Mrs. Wharton-, F.Z.S., 1 Malachite Sunbird.
- TRAYLEN, Miss Gladys, 3 European Pond Tortoises.
- TURNER, R. C., 2 Marbled Newts, 1 Axolotl, 1 Alpine Newt.
- UNITED PROVINCE FOREST DEPARTMENT, 1 Indian Elephant.
- UPSTONE, G. C., F.Z.S., 1 White-spotted Squirrel, 2 Royal Antelopes,
1 Nile Monitor, 1 Crowned Hawk-Eagle, 1 Fraser's Eagle Owl, 1
Spotted Eagle Owl, 7 Tambourine Doves, 1 Schlegel's Dove, 7 Green
Singing Finches, 5 Bronze-winged Mannakins, 2 Bay Duikers, 1 Blue-
Beaked Weaver, 1 Blackcap, 1 Senegal Touracou, 1 Great-billed
Touracou, 1 Red-flanked Duiker, 1 Maxwell's Duiker, 5 Cape Palmas
Mannakins, 1 African Brush-tailed Porcupine, 1 Raddon's Skink, 1
Sikapus's Mouse, 25 Western Coucha Rats, 1 Elegant Striped Mouse.
- URWIN, C. R., 1 Greater Sulphur-crested Cockatoo.
- VAN DER HORST, A. M., F.Z.S., 6 Wall Lizards, 6 Moorish Geckos, 4
Turkish Geckos, 2 Eyed Lizards, 1 Ladder Snake, 2 Montpellier
Snakes, 1 Sand Lizard, 1 Green Lizard, 1 Spotted Salamander, 3
Slowworms, 1 Midwife Toad, 2 Common Toads, 4 Crested Newts, 2
Alpine Newts, 2 Japanese Newts, 1 Fire-bellied Toad, 3 Viperine
Snakes, 1 Asp Viper, 17 Marbled Newts, 19 Yellow-bellied Toads.
- WALKER, Miss, 2 Pygmy Chameleons.
- WALKER, Mrs., 1 Pallas's Glass Snake.
- WALLER, Miss Evelyn, 1 Ornate Terrapin.
- WALPOLE, Douglas, 1 European Pond Tortoise.
- WALTON, R. F., 1 Little Owl.
- WALTON, Messrs. T., Ltd., 2 Sumichrast's Night Mice.
- WARBURG, Wolfgang, 7 Daudin's Fringe-fingered Lizards, 2 Starred
Lizards.
- WARNER, Mrs., 1 Corn Crake.
- WARNER, Mrs. M., 1 Greek Tortoise.
- WARWICK, The late Countess of, Bequest of, 1 Patas Monkey, 1 Green
Monkey, 1 Moustache Monkey, 2 Alexandrine Parrakeets, 2 Blue-
fronted Parrots, 4 Grey Parrots, 1 Festive Parrot.
- WATHEN, Mrs., 1 Harvest Mouse.
- WATSON, Mrs. H. Henry, 2 Beecroft's Hyrax.
- WATSON, Mrs., 1 Spotted Salamander.
- WEBB, C. S., 1 Grison, *1 White-footed Marmoset, *2 Ecuadorean Squirrels.
- WHITE, A. J., 1 Common Hangnest.
- WHITTEN, Miss, 1 Greek Tortoise.

- WILKINSON, Mrs. J. S., 1 Fat Dormouse.
 WILLIAMS, Mrs. M. Watts, 2 Beecroft's Hyrax.
 WILLIS, G. W., 1 Eyed Skink.
 WILTSHIRE, R., Common Perch.
 WOOD, Capt. M. Forrester, 1 Razorbill.
 WOODS, A. T. R., 1 Gray's Frog.
 WOODWARD, Stanley F., C.M.Z.S., 1 Nose-horned Viper, 2 African Pythons,
 1 Royal Python.
 WOODWARD, W. Adam, 7 Brazilian Tortoises.
 WORTHINGTON, E. B., Windermere Char.
 YOUNG, J., 1 Grey Mongoose.
 YOUNG, Mrs. N. E. Cochrane-, F.Z.S., 1 Indian Shama.

72. LIST OF ANIMALS DEPOSITED DURING 1938.

* = New to Collection.

Mammals.

- | | |
|--------------------------------------|-----------------------------|
| 3 Lar Gibbons. | *2 Hildegard's Rats. |
| 2 Agile Gibbons. | 8 Large Bamboo Rats. |
| 1 Pileated Gibbon. | *7 Kenya Jumping Hares. |
| 1 Brown Capuchin Monkey. | 1 Crested Bush Rat. |
| 2 Moholi Bush Babies. | *3 Gregory's Cane Rats. |
| 2 Tenrecs. | 1 Patagonian Cavy. |
| 1 Cheetah. | 2 Shetland Ponies. |
| *2 Giant Pandas. | 2 Mongolian Wild Horses. |
| 1 Sun Bear. | 1 Donkey. |
| 1 Large Red Kashmir Flying Squirrel. | 1 Nedji Ram. |
| *3 Murine Dormice. | 1 Musk Deer. |
| *5 African Tree Rats. | 2 Chinese Water Deer. |
| *6 Kenya Pouched Rats. | 3 Giant Forest Hogs. |
| | 1 Matschie's Tree Kangaroo. |

Birds.

- | | |
|---------------------------------|--------------------------------|
| 3 Occipital Blue Pies. | 1 Singing Bush Lark. |
| 1 King Bird of Paradise. | 1 Australian Spinebill. |
| 1 Small Hill Myna. | 2 Himalayan Yellow-backed Sun- |
| 5 Long-tailed Glossy Starlings. | birds. |
| 2 Royal Starlings. | 1 Purple Sunbird. |
| 2 Superb Glossy Starlings. | 1 Coppery Sunbird. |
| 1 Crimson & Black Oriole. | 2 Double-collared Sunbirds. |
| 1 Painted Finch. | 6 Mariqua Sunbirds. |
| 2 Purple Sugar Birds. | 1 Chinese White Eye. |
| 1 Great Saltator. | 1 Northern Nuthatch. |
| 1 British Bullfinch. | 1 White-backed Piping Crow. |

- | | |
|----------------------------------|--|
| 1 Indian Grey Shrike. | 1 Ground Hornbill. |
| 2 Orange-headed Ground Thrushes. | 2 Brazilian Motmots. |
| 1 Grey-winged Ouzel. | 1 Ganga Cockatoo. |
| 1 Horsfield's Whistling Thrush. | 3 Merlins. |
| 1 White-spotted Bluethroat. | 1 White Pelican. |
| 3 Japanese Robins. | 1 Muscovy Duck. |
| 1 Loo Choo Robin. | 2 Maned Geese. |
| 1 Javan Dhyal Bird. | 1 Rajah Duck. |
| 2 Stonechats. | 1 Eider Duck. |
| 1 Wheatear. | 1 Sandhill Crane. |
| 4 White-crested Jay Thrushes. | 15 Demoiselle Cranes. |
| 2 White-throated Jay Thrushes. | 2 Cayenne Lapwing. |
| 1 Bengal Red-vented Bulbul. | 1 Red-wattled Lapwing. |
| 1 Lesser Niltava. | 2 Martinique Gallinules. |
| 1 Hooded Pitta. | 1 Barbary Turtle Dove (white
var.). |
| 3 Blue-cheeked Barbets. | 6 Crowned Pigeons. |
| 1 Fire-tufted Barbet. | 2 Red-crested Wood Quail. |
| 2 Senegal Touracous. | 1 Javan Jungle Fowl. |
| 2 Buffon's Touracous. | |
| 1 Garnet-throated Humming Bird. | |

Reptiles.

- | | |
|---------------------------|---|
| 1 European Pond Tortoise. | 10 Boa Constrictors. |
| 4 Greek Tortoises. | 1 Sooty Snake. |
| 1 Grooved Tortoise. | *1 White-spotted Snake. |
| 1 Alligator. | 1 Black & Gold Tree Snake. |
| 4 Great Striped Geckos. | 3 Elegant Small-spotted Tree
Snakes. |
| 13 Margouillat Lizards. | 1 Peter's Long-line Snake. |
| 2 Fischer's Chameleons. | 1 Black-necked Cobra. |
| 10 Jackson's Chameleons. | 9 Puff Adders. |
| 1 Great Moluccan Skink. | 1 European Tree Frog. |
| 5 Sun Lizards. | 1 Canary Island Tree Frog. |
| 1 Diamond Python. | 7 Hallowell's Tree Frogs. |
| 1 Blood Python. | |

73. LIST OF ANIMALS RECEIVED IN EXCHANGE DURING 1938.

* = New to Collection.

Mammals.

- | | |
|------------------|------------------|
| 1 Orang Utan. | 3 Blackbuck. |
| 1 Dingo. | 1 Hangul Deer. |
| 2 Cacomistles. | 1 Hippopotamus. |
| 3 Fat Sand Rats. | 4 Red Kangaroos. |

Birds.

- | | |
|------------------------------------|-------------------------------------|
| 2 Bourke's Grass Parrakeets. | 2 Sun Bitterns. |
| 1 Budgerigar. | 2 Black-tailed Godwits. |
| 2 Bald Eagles. | 1 Barbary Turtle Dove (white var.). |
| 1 Great Condor. | 2 Victoria Crowned Pigeons. |
| *2 North American Turkey-Vultures. | 2 Pallas's Eared Pheasants. |
| 1 White-eyed Pochard. | 1 One-Wattled Cassowary. |
| 24 Cattle Egrets. | |

Reptiles.

- | | |
|--------------------------------|---------------------------|
| 4 Pennsylvanian Mud Terrapins. | 1 Pilot Black Snake. |
| 3 Painted Terrapins. | 4 American Black Racers. |
| 2 Serrated Terrapins. | 1 Pine Snake. |
| 6 Ornate Terrapins. | 2 Hog-nosed Snakes. |
| 2 Florida Terrapins. | 2 King Snakes. |
| 1 Red-bellied Terrapin. | 1 Red-bellied Mud Snake. |
| 2 Small-headed Map Terrapins. | *6 Worm Snakes. |
| 1 Sculptured Terrapin. | 9 Banded Kraits. |
| 2 Speckled Terrapins. | 17 Indian Cobras. |
| 8 Carolina Anolis Lizards. | 2 King Cobras. |
| 4 Spiny Swifts. | 4 Russell's Vipers. |
| 1 Five-lined Skink. | 7 Cotton-mouth Moccasins. |
| 1 Gila Monster. | 17 Copperheads. |
| 6 Indian Pythons. | 101 Prairie Rattlesnakes. |
| 1 Emperor Boa. | 7 Red Rattlesnakes. |
| 9 Indian River Snakes. | 2 Oregon Rattlesnakes. |
| 3 North American Water Snakes. | 9 Timber Rattlesnakes. |
| 16 Garter Snakes. | 39 Green Newts. |
| 5 Greater Indian Rat Snakes. | 3 Fowler's Toads. |
| 1 Indigo Snake. | 2 Golden Hylas. |
| 2 Corn Snakes. | 3 Bull Frogs. |
| 1 Aldrovandi's Snake. | 6 Leopard Frogs. |
| 2 Fox Snakes. | |

74. LIST OF ANIMALS PURCHASED DURING 1938.

* = New to Collection.

Mammals.

- | | |
|-----------------------------|--------------------|
| 66 Rhesus Monkeys. | 1 European Otter. |
| 7 Guinea Baboons. | 1 Kinkajou. |
| 1 Illiger's Tamarin Monkey. | *3 Giant Pandas. |
| 1 Geoffroy's Marmoset. | *1 Chinese Marmot. |
| 1 Eyra Cat. | *1 Chinese Bharal. |
| 1 Maned Wolf. | |

Birds.

- | | |
|---|--------------------------|
| 1 Lesser Bird of Paradise. | 2 Cockatiels. |
| 2 Crimson-crowned Weaver Birds. | 1 Harpy Eagle. |
| 2 Scarlet-bellied Tanagers. | 6 Greater Flamingoes. |
| 3 White-bellied Emerald Humming
Birds. | 2 Black-banded Geese. |
| 1 Violet-eared Humming Bird. | 2 Fulvous Tree Ducks. |
| 1 Ruby-crested Humming Bird. | 2 Eider Ducks. |
| *1 Heavenly Sylph. | 16 Ruffs. |
| 2 Queen Alexandra's Parrakeets. | 3 Black-footed Penguins. |
| | 10 Crowned Pigeons. |

Reptiles.

- | | |
|---------------------------|--------------------------|
| 1 Ceylon Terrapin. | 1 Corais Snake. |
| 5 Greek Tortoises. | 2 Leopard Snakes. |
| 4 Rhinoceros Iguanas. | 2 Aldrovandi's Snakes. |
| 37 Starred Lizards. | 2 Aesculapian Snakes. |
| 1 Lesueur's Water Lizard. | 12 Dark Green Snakes. |
| 4 Bell's Dabb-Lizards. | 2 Boipevussu Snakes. |
| 34 Chameleons. | 2 Egg-eating Snakes. |
| 1 Cunningham's Skink. | 2 Boomslangs. |
| 2 Stump-tailed Lizards. | 3 Yellow Cobras. |
| 4 Schneider's Skinks. | 4 Ringhals. |
| 30 Green Lizards. | 1 Night Viper. |
| 2 Eyed Lizards. | 10 Yellow-bellied Toads. |
| 50 Wall Lizards. | 62 European Tree Frogs. |
| 8 Slowworms. | 2 Warty Tree Frogs. |
| 12 Armoured Zonures. | 8 Edible Frogs. |
| 1 Southern Anaconda. | |

75. INSECTS.—The Insect House, well stocked throughout the year with many attractive exhibits, received its full quota of visitors. Beside the usual features such as silk-moths, caterpillars, aquatic insects, mantids, ants, spiders, scorpions, etc., giant centipedes and black widow spiders may be especially mentioned. During the autumn the land-crabs were transferred to the Reptile House, and the space vacated by them was adapted for an exhibition of insects of economic importance—pests of timber, stored products, and gardens, and beneficial species. Another new feature is a range of low-power lenses for the exhibition of small aquatic animals, etc.

76. AQUARIUM.—Large collections were received at regular intervals from our collecting station on the coast of Madeira and the Zoological Society is again indebted to Mrs. E. B. Carter,

F.Z.S., for organising the capture of the specimens. The Union Castle Mail Steamship Company very kindly allowed the transportation of the specimens in tanks, specially built for the purpose and through which the sea water circulates, on two of their mail steamers.

Two expeditions were organised for the collection of specimens from the Gulf of Suez. Although a number of new fish were added to the collection, the results were not good enough to justify our sending out any further expeditions to that locality in future.

Several valuable collections were received from the Aquarium of the New York Zoological Society, those emanating from the coast of Florida being specially appreciated.

The thanks of the Aquarium authorities are due to Mr. A. Hebden and Miss Eleanor M. Brown, F.Z.S., for analysing the sea water and giving valuable advice in connection with its composition.

77. PRICE OF ADMISSION TO THE AQUARIUM.—As the experiment of charging 6*d.* for admission of everyone on Saturday was a success it has been agreed to continue during 1939.

78. AQUARIUM TICKETS.—The 1*s.* tickets sold to Fellows are now available in any year, the three years' restriction on their validity having been removed.

F. WHIPSNADE ZOOLOGICAL PARK.

(I) VISITORS AND GENERAL.

79. NUMBER OF VISITORS.—The figures for the year 1938 show a decrease of 23,073 as compared with 1937, but they are the second best in the history of the Park.

The figures for the last five years are as follows :—

1934.	1935.	1936.	1937.	1938.
516,411	471,545	484,453	546,418	523,345

80. BEDFORDSHIRE COUNTY POLICE.—As in previous years this force has been available and has worked in harmony with the Society's staff.

81. **FIRST AID AND MEDICAL ATTENDANCE.**—The Area Commandant of the local section of the St. John Ambulance Brigade has placed at our Ambulance Station every Sunday, from 1st April to 30th October, one non-commissioned officer, two privates, and one sister. On very busy days an officer has been in charge of the unit.

82. **GUIDE.**—Of the guide to the Park, 54,957 copies were sold in 1938, as compared with 54,288 in 1937.

83. **POSTCARDS.**—142,788 of the Society's postcards were sold during the year, as compared with 87,172 in 1937.

84. **EASTERN NATIONAL OMNIBUS SERVICE.**—This service operates from Luton Stations and from Bedford to the Car Park at Whipsnade. It is the connecting link between the rail service from St. Pancras to Whipsnade. 90,821 visitors were carried to Whipsnade by this bus service.

85. **METEOROLOGY.**—Mr. E. L. Hawke, M.A., F.R.A.S., visited our station weekly and presented us with a Stevenson screen of standard pattern for the exposure of our thermometers, and the Council of the Royal Meteorological Society loaned us verified standard maximum and minimum thermometers. Both gifts have been operating at our station since January 1st, 1938.

86. **ADMISSION OF CARS TO PARK.**—It was decided that cars might be admitted every day from October 1st to March 31st and on Mondays during the rest of the year, at a fee of 5s. plus normal admission for the occupants.

(II) CATERING.

87. **ASSISTANT MANAGER.**—Mr. Bonvin was reappointed Assistant Manager at Whipsnade for the summer (March 15th to September 30th).

88. **ACCOUNTS.**—The Catering Department Accounts for the year have been audited by Messrs. W. B. Keen & Co., the Society's Auditors.

The sales for the year 1938 amounted to £28,361 3s. 10d., and the gross profit was £16,263, 15s. 2d. Deducting the manufacturing and other working expenses amounting to £13,830 13s. 5d., and adding lavatory and other sundry receipts

(£912 3s. 3d.), there remains a trading profit of £3,345 5s. 0d. After deducting the Assistant Manager's bonus (£40), and the contribution to the Equipment and Repairs Stabilization Fund (£1,500), there was a net profit of £1,805 5s. 0d. In addition £1,764 12s. 8d. was received by way of rent of the department and lavatories, making a total of £3,569 17s. 8d. Of this a sum of £711 1s. 9d. has been repaid to the Works Department for work carried out during the year. The balance of £2,858 15s. 11d. has been passed to the General Account.

The expenditure on Equipment and Repairs amounted to £1,463 15s. 7d., against the contribution of £1,500 leaving a balance of £36 4s. 5d., which has been placed to the credit of the Equipment and Repairs Stabilization Fund.

(III) PARK.

89. GENERAL REPORT.—The general health of the animals throughout the year has been good. Events worth recording are as follows:—

Young Giraffe, born December 26th, 1937; measured 10 feet 6 inches in height at December 31st, 1938.

Three Brown Bear cubs born—two reared.

Four Tigers born, one died and three reared.

One Buffalo calf reared.

A litter of Raccoon-like Dogs reared.

24 Emu chicks reared.

Two Rhea chicks reared.

Two American Bison calves reared.

Quaker Parakeets hatched and reared.

Three Sarus Crane chicks reared.

One Wombat reared.

One White Tailed Gnu reared.

90. AGRICULTURE.—Fifty tons of agricultural lime have been used in the Park and subsidy has been claimed on 20 tons. About 90 tons of hay have been conserved and 200 tons have been bought and are held in reserve for 1939.

The Regent's Park Gardens have been supplied with about 900 wild rabbits.

1,168 rats were killed, which is 31 less than for the year 1937.

About one acre of thousand-headed kale and a half acre of winter cabbage were planted, and were a valuable asset for

feeding. 41 lambs were reared and sold to the Catering Department.

91. GARDENING.—This department has been maintained in an efficient manner. Work of a major nature included: planting of trees in the Chartley and Fallow Deer Paddocks, Willow Lagoon, Horseshoe Plantation, garden work on the Reptiliary, in the erection of the rockwork and stocking with rock plants and shrubs. The cut-flower section has increased its supply to both the London and Whipnade Restaurants. The hedges in the Park have been trimmed and gaps planted with young Quickthorn.

92. ENGINEER'S SECTION.—This department has attended to the general maintenance of electrical and water systems, including work in connection with lavatories, plumbing, refrigeration and Elephant House purification plant; disinfection of all ponds, supervision of fire drills, fire extinguishers, and also work in connection with A.R.P.

New installations include:

1. Gate Kiosk—60 yards of 4/19/064 P.C.S.T. cable for supply of 3 meters, heating, lighting and power. Also hot and cold water.
2. Reptiliary—water supply.
3. Slaughter House and Stables—electric light.
4. Keepers' Bothy—new domestic boiler, and alterations to system.

The amount of water pumped during the year amounted to 6,219,175 gallons, being 1,581,675 gallons more than that for the year 1937. The amount of water softened for drinking purposes was 3,636,400 gallons, an excess of 230,700 gallons over last year.

93. WORKS.

Only one piece of major work was undertaken during the year—namely, the building of a Reptiliary. When completed it was stocked with snakes and lizards and has been a valuable adjunct in maintaining the interest of the visitors in the Park.

Minor works undertaken by our Works Department include the following:

- 5 Arctic Fox enclosures with kennels.
- Erection of postcard machines.
- New Wart Hog dens.
- Fixing barriers to Elephant House.
- Secondary Buffalo enclosure.

In addition to the above, the usual maintenance work including repairs and painting has been undertaken.

Contract Work. The main road of the Park has been tarred and shingled.

94. STAFF.—1 Clerk of Works; 1 Engineer; 3 Clerks; 1 Overseer; 1 Head Keeper; 18 Keepers; 48 Works Staff; 6 Gardeners. Total 78.

Refreshment Dept.—Summer 80, Winter 20.

95. NUMBERS IN THE COLLECTION.

Animals at Whipsnade on December 31st, 1938.

Mammals	...	...	...	...	...	840
Birds	...	...	...	...	...	521
Reptiles	...	...	...	...	...	364
						<hr/> 1725 <hr/>

[In the case of the Chinese Water Deer, Muntjac, Wild Turkeys, etc., loose in the Park and breeding freely, the numbers are only an estimate.]

96. BRED AT WHIPSNAD, 1938.

R = reared to maturity. D = died. L = Living.

Mammals.

- 1 Rhesus Monkey (*Macaca mulatta*), D.
- 7 Tigers (*Felis tigris*), 4 R, 3 D.
- 39 Husky Dogs (*Canis familiaris*), 38 R, 1 D.
- 4 Dingoes (*Canis familiaris l. dingo*), D.
- 7 Hybrid Common × Timber Wolves (*Canis l. lupus* × *C. l. occidentalis*), R.
- 5 Raccoon-like Dogs (*Nyctereutes procyonoides*), 4 R, 1 D.
- 3 Brown Bears (*Ursus arctos*), D.
- 27 Prairie Marmots (*Cynomys ludovicianus*), R.
- 12 American Marmots (*Marmota monax*), R.
- 2 Canadian Beavers (*Castor canadensis*), 1 R, 1 D.
- 22 Guinea Pigs (*Cavia porcellus*), R.
- 2 Patagonian Cavies (*Dolichotis magellanica*), 1 R, 1 D.
- 6 Shetland Ponies (*Equus caballus*), R.
- 1 Donkey (*Equus asinus*), R.

- 3 Chartley cattle (*Bos taurus*), D.
 3 Yaks (*Poephagus grunniens*), 2 R, 1 D.
 2 American Bison (*Bison bison*), R.
 1 Cape Buffalo (*Syncerus caffer*), R.
 15 Park Sheep (*Ovis aries*), R.
 43 Spanish Sheep (*Ovis aries*), R.
 7 Mouflon (*Ovis musimon*), 5 R, 2 D.
 1 Common Goat (*Capra hircus*), R.
 1 White-tailed Gnu (*Connochaetes gnou*), R.
 1 Hybrid Brindled \times White-bearded Gnu (*Connochaetes taurinus* \times *C. taurinus albojubatus*), D.
 3 Lechwe Waterbuck (*Kobus leche*), 1 R, 2 D.
 2 Blackbuck (*Antilope cervicapra*), R.
 3 Nylghaie (*Boselaphus tragocamelus*), R.
 5 Muntjac (*Muntiacus muntjak*), R.
 10 Fallow Deer (*Dama dama*), R.
 2 Axis Deer (*Axis axis*), R.
 4 Hog Deer (*Hyelaphus porcinus*), R.
 2 Sambar Deer (*Rusa unicolor*), R.
 7 Red Deer (*Cervus elaphus*), R.
 3 Virginian Deer (*Odocoileus virginianus*), D.
 27 Chinese Water Deer (*Hydropotes inermis*), R.
 3 Llamas (*Lama glama*), 2 R, 1 D.
 2 Great Grey Kangaroos (*Macropus giganteus*), R.
 12 Bennett's Wallabies (*Macropus ruficollis bennetti*), R.
 4 Dama Wallabies (*Macropus eugenii*), R.
 1 Mitchell's Wombat (*Phascolomis mitchelli*), R.

Birds.

- 3 Quaker Parrakeets (*Myiopsittacus monachus*), R.
 4 Black Swans (*Chenopsis atrata*), 3 R, 1 D.
 1 Spurwing Goose (*Plectropterus gambensis*), D.
 2 Ruddy Shelduck (*Casarca ferruginea*), R.
 40 Mallard (*Anas platyrhynchos*), R.
 7 American Black Duck (*Anas rubripes*), R.
 3 Eastern Sarus Cranes (*Megalornis antigone*), R.
 4 Hybrid Manchurian Eared Pheasants \times Black-breasted Kalij Pheasants (*Crossoptilon mantchuricum* \times *Gennaesus horsfieldii*), R.
 14 Red Jungle Fowl (*Gallus gallus*), R.
 2 Japanese Long-tailed Fowl (*Gallus gallus* var.), R.
 9 Common Peafowl (*Pavo cristatus*), R.
 21 North American Turkeys (*Meleagris gallopavo*), R.
 24 Emus (*Dromiceius n. hollandiae*), 18 R, 6 D.
 4 Common Rheas (White var.) (*Rhea rothschildi*), 2 R, 2 D.

97. LIST OF DONORS TO WHIPSNADÉ PARK.

- BAILEY, Mrs., 22 Guinea Pigs.
 CLEMENTS, O. E., 2 Canadian Geese.
 GREENE, B., 2 Common Goats.
 HARTLEY, Mrs. H., 3 Common Peafowl.
 LYALL, C. E., 3 Shetland Ponies.
 MAURICE, Mrs., 2 Domestic Geese.
 ROBERTS, G., 23 Guinea Pigs.
 ROTHSCHILD, The late Lord, Executors of, 1 Emu, 1 Common Rhea, 3
 Hybrid Common \times Darwin's Rheas.
 WOOD, Mrs. M., 8 Grey-breasted Helmet Guineafowl.
 YONGE, Norman, 1 Chameleon.

98. LIST OF ANIMALS PURCHASED DURING 1938.

Mammals.

- 1 Chapman's Zebra.

99. LIST OF ANIMALS DEPOSITED DURING 1938.

Mammals.

- 1 Spanish ram.

G. FINANCE.

100. INCOME AND EXPENDITURE.

- (a) REGENT'S PARK. *Income*.—There were 130,885 Visitors less in 1938 than in 1937, the number (1,816,012) being the twelfth highest in the history of the Society. The receipts under the heading Admissions to Gardens are £5,628 9s. 1d. less than the previous year. The total income amounted to £112,957 13s. 10d., a decrease of £12,165 9s. 7d.
- (b) REGENT'S PARK. *Expenditure*.—The expenditure amounted to £112,488 13s. 8d., a decrease of £5,061 18s. 9d.
- (c) *Excess of Income over Expenditure*.—There is thus an excess of Income over Expenditure of £469 0s. 2d.
- (d) WHIPSNADÉ PARK. *Income*.—There was a decrease of 23,073 in the number of Visitors, and the receipts for admission show a decrease of £1,077 9s. 5d. The total income amounted to £33,575 4s. 4d., a decrease of £2,421 15s. 4d.

(e) WHIPSNADE PARK. *Expenditure.*—The expenditure amounted to £27,568 1s. 7*d.*, a decrease of £738 13s. 1*d.*

(f) *Excess of Income over Expenditure.*—There was an excess of Income over Expenditure of £6,007 2s. 9*d.*

101. ASSETS 1937 AND 1938.—At the end of the year the total Assets of the Society amounted to £261,603 17s. 5*d.*, an increase of £6,284 11s. 0*d.* on the corresponding figure for 1937. The Assets do not include the de Arroyave Fund.

102. LIABILITIES 1937 AND 1938.—The liabilities amounted to £46,199 12s. 5*d.*, a decrease of £3,056 12s. 2*d.* on the corresponding figures for 1937.

103. PENSIONS FUND.—The Pensions Fund, instituted in 1926, increased in 1938 by £210 0s. 0*d.*, being the amount of the composition fees of 5 compounders who had died in the course of the year. It now amounts to £11,060 9s. 0*d.*

104. BALANCE 1937 AND 1938.—The balance, a surplus of assets over liabilities, amounted to £215,404 5s. 0*d.*, an increase of £9,341 3s. 2*d.* on the corresponding figure for 1937, representing the total of the increase in assets (paragraph 101) and the decrease in liabilities (paragraph 102).

105. DE ARROYAVE FUND.—The Capital of this is shown separately, as it is a Trust Fund and not part of the assets of the Society (see pp. 78–79).

Signed (for the Council),
 JULIAN S. HUXLEY,
Secretary, Zoological Society, London.

Zoological Society,
 Regent's Park,
 London, N.W.8.

March 15th, 1939.

REPORT OF THE AUDITORS OF THE ACCOUNTS
OF THE
ZOOLOGICAL SOCIETY
OF LONDON

To the Council and Fellows,
The Zoological Society of London,
Regent's Park, N.W.8.

In accordance with Chapter X of the By-laws, we hereby certify that we have audited the Accounts of the Society for the year ended 31st December, 1938, as shown by our certificate attached to the accompanying Accounts. We report to the Society that at that date the total Assets amounted to £261,603 17s. 5d., and the Liabilities to £46,199 12s. 5d., showing a surplus of Assets over Liabilities amounting to £215,404 5s. 0d., subject to the estimated values of some of the Assets. The Cash in the Bankers' hands and at the Office amounted to £35,044 4s. 8d.

(Signed) W. B. KEEN & Co.,
Chartered Accountants.

23, Queen Victoria Street, London, E.C.4.
22nd February, 1939.

Comp.
Figures,
1937.

LIABILITIES.

£	£	s.	d.	£	s.	d.
	To Sundry Creditors for Provisions, Materials and General Expenses—					
	£6,091 General Account	5,594	11	3		
	1,739 Catering Departments	2,154	15	10		
7,830				7,749	7	
631	„ Subscriptions, etc., received in advance			469	11	
	„ Reserve for Cost of "Zoological Record," being special donations towards Vols. 59 and onwards:—					
	Balance at 1st January, 1938	1,831	0	5		
	Add Donations received during year	436	0	4		
		2,267	0	9		
	Deduct Transfer to Income and Expenditure Account during year (see page 69)	340	4	9		
1,831				1,926	16	
	„ "Nomenclator Zoologicus" Suspense Account—					
	Grants received during the year			1,383	8	
	„ Drummond's Branch, Royal Bank of Scotland, Loan Accounts—					
	Regent's Park Catering Department Building—					
	Balance at 1st January, 1938	16,000	0	0		
	Deduct Amount repaid during year	4,450	0	0		
16,000				11,550	0	
	Art Studio Building—					
	Balance at 1st January, 1938	4,120	0	0		
	Deduct Amount repaid during year	360	0	0		
4,120				3,760	0	
	Purchase of Land and Premises at Whipsnade—					
	Balance at 1st January, 1938	1,080	0	0		
	Deduct Amount repaid during year	110	0	0		
1,080				970	0	
	„ Mortgage on Quarantine Station, Gloucester Gate—					
	Balance at 1st January, 1938	4,500	0	0		
	Deduct Amount repaid during year	250	0	0		
4,500				4,250	0	
	„ Pensions Fund—					
	Balance at 1st January, 1938	10,850	9	0		
	Add Transfer of Fees of deceased Compounders	210	0	0		
10,850				11,060	9	
	„ Depreciation of Investments Reserve Fund—					
	Balance at 1st January, 1938	2,333	13	11		
	Add Transfer from Income and Expenditure Account (see page 71)	666	6	1		
2,334				*3,000	0	
	„ Heer Bequest—					
	Legacy received from the late Madame Berthe Heer			80	0	
80				80	0	
49,256				46,199	12	
	„ Balance being Excess of Assets over Liabilities—					
	Composition Fund—					
	Balance at 1st January, 1938	19,650	0	0		
	Add Fees received during year	630	0	0		
		20,280	0	0		
	Deduct Transfer to Pensions Fund—Fees of deceased Compounders	210	0	0		
19,650				20,070	0	0
68,906	Carried forward	£20,070	0	0	46,199	12

* The Market Value of the Securities held on 31st December, 1938, at minimum Stock Exchange quotations was £34,175 19s. 9d., showing a Depreciation of £2,919 7s. 9d. on original cost.

Comp.
Figures,
1937.

ASSETS.

£	£	s.	d.	£	s.	d.	
	By Freehold Property, Whipsnade Park—						
	Cost of Land and Buildings, Enclosures, etc., including Redemption of Land Tax and Tithes at 1st January, 1938	82,619	16	0			
	Add Redemption of Land Tax during year	2	12	1			
		82,622	8	1			
	Deduct Amount borrowed from Composition Fund (see page 63)	12,094	4	4			
70,526				70,528	3	9	
	„ Leasehold Property, Quarantine Station, Gloucester Gate—						
	Balance at 1st January, 1938	4,500	0	0			
	Deduct Amount written off transferred to Income and Expenditure Account (see page 67)	250	0	0			
4,500				4,250	0	0	
	„ Plant, Fittings and Furniture—						
	In Buildings and Enclosures at Regent's Park and Whipsnade Park (not valued)						
	In Catering Departments	3,122	2	11			
3,122				*3,122	2	11	
	„ Animals belonging to the Society—						
	Regent's Park—						
	Balance at 1st January, 1938	37,792	1	0			
	Deduct Net Decrease at 31st December, 1938	436	11	0			
	Whipsnade Park—						
	Balance at 1st January, 1938	15,606	12	0	37,355	10	0
	Add Net Increase at 31st December, 1938	579	1	6			
					16,185	13	6
53,398					*53,541	3	6
	„ Books in Library—						
	Balance at 1st January, 1938				*35,000	0	0
35,000							
	„ Stocks in hand—						
	General Account—						
	Publications	*500	0	0			
	"Zoological Record"	*500	0	0			
	Electrical Sundries (at cost)	*224	14	2			
	Official Guides, Regent's Park (at cost)	121	6	10			
	Do. Whipsnade Park (at cost)	154	13	2			
	Picture Post Cards, Regent's Park (at cost)	228	9	11			
	Do. Whipsnade Park (at cost)	57	13	10			
	Photographic Films, Souvenirs, etc. (at cost)	140	13	4			
	Petrol, Oil, etc., Whipsnade Car Park (at cost)	65	7	3			
6,526	Catering Departments—Provisions, etc. (at cost)	*4,439	8	4			
					6,432	6	10
	Carried forward				£172,873	17	0

* As per valuations by Society's Officials.

Comp.
Figures,
1937.

LIABILITIES.

£	£	s.	d.	£	s.	d.	£	s.	d.	
68,906	Brought forward ...			20,070	0	0	46,199	12	5	
	To Balance being Excess of Assets over Liabilities—continued—									
	Animals Purchase and Insurance Fund—									
	Balance at 1st January, 1938 ...	2,722	5	5						
	Add Interest on Investments ...	66	6	2						
2,722				2,788	11	7				
	Aquarium Reserve Fund—									
11,080	Balance at 1st January, 1938 ...			11,079	9	3				
	Staff Compensation Fund—									
	Contribution from Income and Expenditure Account (see page 71) ...			50	0	0				
	Catering Departments Equipment and Repairs Stabilisation Fund—									
	Balance at 1st January, 1938 ...	2,427	9	7						
	Add Annual Contribution by Catering Departments ...	6,500	0	0						
		8,927	9	7						
	Deduct Expenditure by Catering Departments during year	5,351	19	10						
2,427				3,575	9	9				
	Elephant House Re-building Fund—									
	Balance at 1st January, 1938 ...	215	3	0						
	Add Donation received during year ...	2,500	0	0						
		2,715	3	0						
	Deduct Transfer to Income and Expenditure Account (see page 71) ...	120	6	9						
215				2,594	16	3				
	Purchase of Animals Suspense Account—									
	Balance at 1st January, 1938 ...	450	0	0						
	Add Further Grant received during year ...	500	0	0						
		950	0	0						
	Deduct Transfer to Income and Expenditure Account (see page 67) ...	950	0	0						
450										
	Legacies Suspense Account—									
	Legacy received from the Trustees of the late Herbert Spencer to be applied towards the cost of the "Nomenclator Zoologicus"									
	Balance at 1st January, 1938 ...	335	18	8						
	Deduct Transfer to Income and Expenditure Account (see page 69) ...	228	5	10						
336				107	12	10				
86,136	Carried forward ...	107	12	10	40,158	6	10	46,199	12	5

Comp.
Figures,
1937.

ASSETS.

£	£	s.	d.	£	s.	d.	£	s.	d.
173,072	Brought forward ...						172,873	17	0
	By Debts due to the Society (since received or considered good)—								
	General Account—								
	Arrears of Fellowship Subscriptions £719, estimated to realise ...	200	0	0					
	Arrears of Admission Fees (Fellows) £291, estimated to realise ...	220	0	0					
	"Zoological Record" Subscriptions and Sales £1,169 2s. 9d., estimated to realise ...	1,133	15	0					
	Publication Subscriptions and Sales £255 16s. 10d., estimated to realise ...	226	2	10					
	Sundry Sales, etc. ...	369	14	2					
	Income Tax Recoverable ...	10	9	0					
	Miscellaneous ...	176	1	2					
	Catering Department—Miscellaneous ...	325	15	8					
2,031							2,661	17	10
	Rates, Insurances, etc., paid in advance—								
	£911 General Account ...	847	8	2					
	362 Catering Departments ...	347	18	8					
1,273							1,195	6	10
	"Zoological Record" Compilation Fees, etc., paid in respect of Vol. 75, not yet published ...						98	19	3
80	Investments (at cost)—								
	Pensions Fund—								
10,850	£10,693 6s. 1d. Conversion 2½ per cent. Stock ...						11,059	19	0
	Heer Bequest—								
80	£90 8s. 10d. Local Loans 3 per cent. Stock ...						80	0	0
	Composition Fund—								
	Whipsnade Park (Part Purchase Price) (see page 61) £7,692 11s. 6d. Conversion 2½ per cent. Stock ...	12,094	4	4					
		7,885	15	8					
19,560							19,980	0	0
	Animals Purchase and Insurance Fund—								
	£2,652 8s. 3d. Conversion 2½ per cent. Stock ...						2,719	0	1
2,719	Aquarium Reserve Fund—								
	£10,763 1s. 1d. Conversion 2½ per cent. Stock ...						11,079	9	3
11,079	Catering Departments—Equipment and Repairs Stabilisation Fund—								
	£2,071 11s. 9d. Conversion 2½ per cent. Stock ...	2,127	9	7					
	£288 16s. 10d. Funding 3 per cent. Stock ...	300	0	0					
1,801							2,427	9	7
	Depreciation of Investments Reserve Fund—								
	£2,254 14s. 4d. Conversion 2½ per cent. Stock ...						2,333	13	11
2,334	Staff Compensation Fund—								
	£50 13s. 7d. Conversion 2½ per cent. Stock ...						50	0	0
	Cash at Bank—								
	General Accounts—Deposit Account ...	27,000	0	0					
	Do. —Current Account ...	771	4	10					
	Catering Departments—Deposit Account ...	1,500	0	0					
	Do. —Current Account ...	41	15	7					
	Do. —Equipment and Repairs Stabilisation Fund ...	1,148	0	2					
	Composition Fund ...	90	0	0					
	Elephant House Re-building Fund ...	2,594	16	3					
	Pensions Fund ...	10	0	0					
	Animals Purchase and Insurance Fund ...	69	11	6					
	Depreciation of Investments Reserve Fund ...	666	6	1					
	Carried forward ...	£33,882	4	5	£226,559	12	9		

Comp. Figures, 1937.

LIABILITIES.

£	£	s.	d.	£	s.	d.	£	s.	d.
86,136				107	12	10	40,158	6	10
	Brought forward	...	...				46,199	12	5
	To Balance being Excess of Assets over Liabilities—continued—								
	Legacies Suspense Account—continued—								
	Legacies received from the late Miss J. Lindley and Mrs. M. L. Paget—								
	Balance at 1st January, 1938	...	...	1,250	0	0			
				1,357	12	10			
	Deduct Transfer to Income and Expenditure Account—								
	Reptiliary at Whipsnade (see page 75)	£	s.	d.					
	New Labels (see page 67)	...	...	...		
1,250				663	4	0			
							694	8	10
	General Purposes Account—								
	Balance at 1st January, 1938	...	...	167,932	15	11			
	Add Increase in value of Animals			142	10	6			
	Excess of Income over Expenditure during year (see page 75)	...	...	6,476	2	11			
167,933							174,551	9	4
							215,404	5	0

255,319

£261,603 17 5

Comp. Figures, 1937.

ASSETS.

£	£	s.	d.	£	s.	d.	£	s.	d.
24,879				33,882	4	5	226,559	12	9
	Brought forward	...	...				
	By Cash Floats—								
	General Account	...	...	710	0	0			
	Catering Departments	...	...	288	1	0			
							998	1	0
	„ Cash in Office—								
	General Account	...	...	58	17	2			
	Catering Departments	...	...	105	2	1			
							163	19	3
30,440									
							35,044	4	8

255,319

261,603 17 5

INCOME AND EXPENDITURE ACCOUNT.

FOR THE YEAR ENDING 31ST DECEMBER, 1938.

Comp. Figures, 1937.	<i>INCOME.</i>					
£	<u>REGENT'S PARK.</u>			£	s.	d.
	<u>FELLOWS.</u>					
2,613	Admission Fees	...	...	1,759	0	0
22,650	Subscriptions	...	...	22,603	0	0
100	Transferable Ivory Tickets, Sale of	...	...	40	0	0
				24,402 0		
	<u>GARDENS.</u>					
62,929	Admission of Visitors to Gardens	...	...	57,300	15	5
	Children's Zoo and Photography—					
	Admission of Visitors, Photography and Sundry					
6,248	Receipts	...	...	3,655	16	8
60	Photographers', Artists' and Students' Permits	...	...	48	5	0
10	Cinematograph Film Permits	...	...	22	10	0
2,439	Riding Receipts	...	...	2,212	12	6
354	Automatic Feeding Machines—Receipts	...	...	161	11	8
195	Bath and Push Chairs, Hire of	...	...	244	15	8
585	Animals, etc., Sale of	...	...	251	2	0
63	Prosectorium Specimens, Sale of	...	...	109	0	0
	Zoo Shop: Sale of Photographic Films, Souvenirs,					
453	Books, etc.	...	...	536	13	4
	Art Studio—					
	Grants for the Year—					
	London County Council	...	£350	0	0	
	Middlesex County Council	...	150	0	0	
			500	0	0	
	Artists' Permits	...	2	6	6	
378				502	6	6
				65,045 8		
99,077				89,447 8		
	<u>AQUARIUM.</u>					
9,146	Admission of Visitors	...	...	8,469	1	3
250	Interest on Aquarium Reserve Fund Investment	...	...	269	1	6
				8,738 2		
	<u>LIBRARY, PUBLICATIONS, ETC.</u>					
	"Zoological Record"—					
	Subscriptions and Sales—					
	Vols. 1-58	...	£138	13	11	
	„ 59-73	...	£624	4	5	
	Vol. 74	...	838	6	11	
			1,462	11	4	
1,383				1,601	5	3
	Scientific Publications—					
955	Subscriptions and Sales	...	...	1,157	8	5
4,224	Official Guides, Sale of	...	...	3,242	5	1
1,192	Picture Post Cards, Sale of	...	...	1,346	1	4
54	Animal Wheel, Sale of	...	...	9	15	0
				7,356 15		
	<u>INTEREST.</u>					
409	Investments and Bank Deposit	...	...	485	17	
£116,690	Carried forward	...	...	£106,028 4		

Comp. Figures, 1937.	<i>EXPENDITURE.</i>					
£	<u>REGENT'S PARK.</u>			£	s.	d.
	<u>GARDENS.</u>					
2,836	Rent, Rates and Insurance	...	...			2,925 2 2
25,433	Salaries—Menagerie Staff and Keepers	...	...			26,023 5 2
	Animals, Cost and Carriage of	...	...	3,643	5	8
	Deduct Transfer from Purchase of Animals Suspense Account (see page 62)	...	...	950	0	0
2,828						2,693 5 8
11,720	Provisions	...	...			11,857 15 2
	Menagerie Maintenance—Fuel, Light, Water, Uniforms, Cleaning, Utensils, Transport and Other Expenses	...	...	9,741	9	11
	Deduct Transfer from Legacies Suspense Account (see page 64)	...	...	69	2	1
9,808						9,672 7 10
	Prosectorium Expenses—					
	£1,686 Salaries and Wages	...	...	1,429	3	11
	222 Chemicals, Apparatus, etc.	...	...	119	11	4
1,908						1,548 15 3
	Gardeners' Expenses—					
	£3,595 Salaries and Wages	...	...	3,567	3	0
	460 Seeds, Plants, Implements, etc.	...	...	546	11	1
4,055						4,113 14 1
	Resident Curator's House and Keepers' Lodges—					
372	Fuel, Light, Wages, etc.	...	...			347 3 11
	Band Expenses—					
1,410	Band, Programmes, Licence, etc.	...	...			628 8 0
	Advertising	...	...			563 13 7
535	Children's Zoo and Photography—					
	£1,601 Salaries and Wages	...	...	1,236	17	7
	Exhibits, Provisions, Repairs, Furniture, Fittings, Uniforms, Stationery, Postages, etc.	...	...	829	13	2
3,927						2,066 10 9
	Zoo Shop—					
	£86 Salaries and Wages	...	...	93	5	9
	Equipment, Stationery, etc.	...	...	44	12	11
	266 Photographic Films, Souvenirs, Books, etc.	...	...	371	10	0
				509	8	8
	Less Income from Advertisements	...	...	24	7	6
352						485 1 2
	Leasehold Property (Quarantine Station), Amount written off (see page 61)	...	...			250 0 0
375						
65,559				£63,175 2 9		
	<u>WORKS AND ELECTRICAL DEPARTMENTS.</u>					
	Upkeep of Electrical Installations, Paths and Buildings in Gardens, House and Offices, Minor Improvements, etc. (excluding Aquarium, Children's Zoo and Catering Department)—					
	£7,781 Salaries and Wages	...	...	7,988	4	6
	6,693 Materials and Sundries...	...	...	5,862	9	7
14,474						13,850 14 1
£80,033	Carried forward	...	...	£77,025 16 10		

FOR THE YEAR ENDED 31st DECEMBER, 1938.

Comp. Figures, 1937.	INCOME.			
£	REGENT'S PARK.			
116,690	Brought forward	£	s. d.	£ s. d.
				106,028 4 2
	DONATIONS, LEGACIES AND MISCELLANEOUS.			
14	Donations	£	s. d.	141 16 6
1,492	De Arroyave Trust Fund—Balance of Income (see page 77)	£	s. d.	2,403 15 6
51	Miscellaneous Receipts	£	s. d.	23 5 0
				2,568 17 0
£118,247				£108,597 1 2
	CATERING DEPARTMENT, REGENT'S PARK.			
£3,911	Profit for the year...	£	s. d.	1,922 9 11
4,000	Rent of Department	£	s. d.	4,000 0 0
924	„ Lavatories	£	s. d.	800 18 2
				8,835
	Deduct Cost of Repairs, Alterations, etc., carried out by Works Department	£	s. d.	2,362 15 5
6,876				4,360 12 8
125,123	Carried forward			£112,957 13 10

Comp. Figures, 1937.	EXPENDITURE.			
£	REGENT'S PARK.			
80,033	Brought forward	£	s. d.	£ s. d.
				77,025 16 10
	AQUARIUM.			
£3,588	Salaries and Wages	£	s. d.	3,343 17 11
898	Exhibits, Cost and Carriage of	£	s. d.	938 9 1
	Provisions, Sea Water, Repairs, Fittings, Uniforms, Fuel, Light, Rates, Insurance, and			
2,735	Other Expenses	£	s. d.	2,798 1 6
1,000	Contribution to Aquarium Reserve Fund			—
				7,080 8 6
8,221				—
280	Deduct Transfer from Aquarium Reserve Fund			—
7,941				7,080 8 6
	CORONATION CELEBRATIONS.			
619	Dinner, Entertainment, Decorations, etc....			—
	LIBRARY, PUBLICATIONS, ETC.			
	Library—			
£917	Salaries and Wages	£	s. d.	1,020 11 2
662	Books and Binding, etc.	£	s. d.	829 16 6
1,579				1,850 7 8
	“Zoological Record”—			
	Preparation and Printing of Vol. 74	£	s. d.	2,302 16 1
	Deduct Transfers from—			
	Davis Fund (see page 77)	£	s. d.	76 0 0
	De Arroyave Trust Fund (see page 77)	£	s. d.	424 0 0
	Donations transferred from Reserve Fund (see page 60)	£	s. d.	340 4 9
				840 4 9
1,229				1,462 11 4
	“Nomenclator Zoologicus”—			
	Preparation of	£	s. d.	228 5 10
	Deduct Amount appropriated from			
	Legacy (see page 62)	£	s. d.	228 5 10
3,096				—
	Scientific Publications, Cost of			
	Official Guides, Cost of—			
£2,832	Preparation and Printing	£	s. d.	2,750 2 11
	Deduct Income from Advertisements			
404		£	s. d.	345 12 0
2,428				2,404 10 11
	Picture Post Cards, Cost of—			
£425	Printing, Envelopes, etc.	£	s. d.	478 14 7
20	Purchase of and Repairs to Machines	£	s. d.	139 18 0
				618 12 7
445				—
	Deduct Income from Advertisements			
200		£	s. d.	200 0 0
245				418 12 7
	Animal Wheel, Cost of (balance)	£	s. d.	10 0 0
				8,984 10
£97,170	Carried forward			£93,090 15

INCOME.

Comp. Figures, 1937.	WHIPSNAD PARK.			£	s.	d.	£	s.	d.	£	s.	d.
	GARDENS.											
22,968	Admission of Visitors to Park	...	...	21,890	14	7						
278	Do. Cars Do.	...	...	379	15	0						
	Car Park—						22,270	9	7			
3,725	Parking Fees	...	...	3,228	10	8						
1,347	Petrol, Oil, etc., Sale of	...	...	1,188	14	0						
							4,417	4	8			
4	Cinematograph Film Permits	...	...							
760	Omnibus Receipts	...	...				722	2	6			
734	Riding Receipts	...	...				746	2	8			
62	Bath and Push Chairs, Hire of	...	...				82	3	3			
2	Field Glasses, Hire of	...	...						16	0		
375	Animals, etc., Sale of	...	...				432	16	5			
										28,671	15	1
30,255												
	PUBLICATIONS, ETC.											
1,288	Official Guides, Sale of	...	...				1,479	3	6			
243	Picture Post Cards, Sale of	...	...				468	13	10			
										1,947	17	4
	ESTATE OFFICE, BOTHY, COTTAGES, ETC.											
52	Rent of Cottages	...	...				52	0	0			
	Subsidy under Housing (Financial Provisions) Act 1924											
44	re Cottages	...	...				44	0	0			
1	Miscellaneous Receipts	...	...						16	0		
										96	16	0
31,883										30,716	8	5
	CATERING DEPARTMENT.											
	£4,920	Profit for the year	...				1,805	5	0			
	—	Rent of Department	...				1,500	0	0			
	—	„ Lavatories	...				264	12	8			
										3,569	17	8
	4,920	Deduct Cost of Repairs, Alterations, etc., carried out by Works Department...					711	1	9			
4,114										2,858	15	11
£35,997	Carried forward						£33,575	4	4			

EXPENDITURE.

Comp. Figures, 1937.	WHIPSNAD PARK.			£	s.	d.	£	s.	d.				
	GARDENS.												
900	Rent, Rates and Insurance	...	...						1,007	13	8	
8,434	Salaries, Menagerie Staff, Keepers, etc. (incl. Annuity)	...	...						8,792	17	1	
309	Animals, Cost and Carriage of	...	...						287	13	8	
4,063	Provisions, including Cultivation of Land, etc.	...	...						4,505	11	7	
2,059	Menagerie Maintenance—Fuel, Light, Water, Uniforms, Cleaning, Utensils, Transport and Other Expenses	...	...						1,654	16	0	
	Gardeners' Expenses—												
	£982	Salaries and Wages	...				935	7	5				
	159	Seeds, Plants, Implements, etc.	...				143	11	5				
										1,078	18	10	
1,141										1,037	19	10	
1,194	Car Park—Cost of Petrol, Oil, etc.	...	...							411	13	0
857	Advertising	...	...								
102	Midsummer Eve Party	...	...								
19,059										18,777	3	8	
	WORKS DEPARTMENT.												
	Upkeep of Paths, Enclosures, Buildings, Minor Improvements, etc. (excluding Catering Department)—												
	£3,447	Salaries and Wages	...				2,926	19	8				
	2,370	Materials and Sundries...	...				2,858	16	11				
										5,785	16	7	
5,817													
	PUBLICATIONS, ETC.												
	Official Guides, Cost of—												
	£1,261	Preparation and Printing...	...				1,161	4	10				
	Deduct Income from Advertisements												
	148		...				100	16	0				
										1,060	8	10	
1,113													
	Picture Post Cards, Cost of—												
		Preparation and Printing	...				108	8	10				
		Purchase of Machines	...				114	0	0				
										222	8	10	
82													
	ESTATE OFFICE, BOTHY, COTTAGES, ETC.												
	Fuel, Light, Wages, Refreshments, Telephones, Cleaning, Postages, Fittings and Furniture, etc.						561	15	1				
500							86	18	4				
133	Stationery and Printing (General)						42	5	6				
5	Law Expenses and Compensation						30	12	9				
28	Income Tax (Schedule A)						1	6	0				
1	Miscellaneous Payments												
										722	17	8	
	INTEREST.												
	33	Purchase of Land and Premises—Loan									37	16	0
26,771										£26,606	11	7	
£26,771	Carried forward									£26,606	11	7	

Comp. Figures, 1937.	INCOME.					£	s.
£	WHIPSNAD PARK.					£	s.
35,997	Brought forward ...	...	...	...	...	33,575	4
35,997	Total Income, Whipsnade Park ...	...	...	...	...	33,575	4
125,123	Total Income, Regent's Park (see page 70) ...	...	...	...	...	112,957	13
<u>£161,120</u>						<u>£146,532</u>	<u>18</u>

Comp. Figures, 1937.	EXPENDITURE.					£	s.	d.
£	WHIPSNAD PARK.					£	s.	d.
26,771	Brought forward ...	...	...	...	...	26,606	11	7
	DEVELOPMENT ACCOUNT.							
	Improvement and Extension of County Roads—							
	Moiety of Loan Charges repaid to Bedfordshire County Council ...					961	10	0
	Construction of Reptiliary ...					594	1	11
	Deduct Transfer from Legacies Suspense Account (see page 64) ...					594	1	11
1,535								
28,306	Total Expenditure, Whipsnade Park...	...	...	...	...	27,568	1	7
117,551	Total Expenditure, Regent's Park (see page 71) ...	...	...	...	...	112,488	13	8
145,857						140,056	15	3
15,263	Balance being Excess of Income over Expenditure for the year carried to Balance Sheet (see page 64)					6,476	2	11
<u>£161,120</u>						<u>£146,532</u>	<u>18</u>	<u>2</u>

Comp.
Figures,
1937.

INCOME.

DE ARROYAVE

Trustees—The Official Trustees

of Charitable Funds.
£103,305 7 9 Funding

£		£	s.	d.	£	s.	d.
3,099	Interest on Investment (per Official Trustees of Charitable Funds)	3,099	3	2			

£3,099£3,099 3 2

CHILLINGHAM

Trustees—The Right Hon. the Earl Grey

136	Subscriptions and Donations	228	9	6			
	Contribution by the Society transferred from the De Arroyave Trust Fund (see page 77)	240	11	10			
		469	1	4			

£464£469 1 4

DAVIS

£1,520 Southern Railway

76	Interest on Investment	76	0	0			
----	-------------------------------	----	---	---	--	--	--

£76£76 0 0

We hereby certify that we have audited the Books, Accounts and Vouchers of the Society for the year ended 31st December, 1938, and have found them to be in order and that the above Balance Sheet and accompanying Income and Expenditure Accounts truly set forth the position as shown by the books of the Society. We have verified the Investments and the Cash Balances and have received all the information and explanations we have required.

23, Queen Victoria Street, London, E.C.4.
22nd February, 1939.

31st DECEMBER, 1938.

Comp.
Figures,
1937.

EXPENDITURE.

TRUST FUND.

of Charitable Funds.

3 per cent. Stock.

£		£	s.	d.	£	s.	d.
3	Upkeep of the De Arroyave Grave at Highgate	3	3	0			
3	Expenses <i>re</i> Inspection of Mausoleum at Westbury	3	5	0			
							6 8 0
	Balance of Income appropriated to—						
328	Chillingham Cattle Fund—Contribution (see page 76)	240	11	10			
424	“Zoological Record”—Cost of Vol. 74 (see page 69)	424	0	0			
779	Scientific Grants—Regent's Park (see page 71)	24	7	10			
70	Do. Whipsnade Park	—					
1,492	Transfer to Income and Expenditure Account (see page 68)	2,403	15	6			

£3,099£3,092 15 2£3,099 3 2

CATTLE FUND.

H. S. Gladstone, Esq., and Captain Cecil G. Graves, M.C.

250	Rent of Park	250	0	0			
214	Contribution towards cost of Maintenance	219	1	4			
		469	1	4			

£464£469 1 4

TRUST FUND.

Co. 5 per cent. Preference Stock.

76	Applied towards Fees of Editor of “Zoological Record” (see page 69)	76	0	0			
----	--	----	---	---	--	--	--

£76£76 0 0

Society for the year ended 31st December, 1938, and have found them to be in order and that they fully and the Investments and the Cash Balances and have received all the information and

W. B. KEEN & CO.,
Chartered Accountants.

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