



REPORTS

OF THE

COUNCIL AND AUDITORS

OF THE

ZOOLOGICAL SOCIETY

OF LONDON,

READ AT THE ANNUAL GENERAL MEETING,

APRIL 29тн, 1850.

LONDON:

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1850.



REPORT OF THE COUNCIL.

IN accordance with the provisions of the Charter, the Council of the Zoological Society have now the honour of submitting their Twenty-first Annual Report to the Fellows, upon the progress and prospects of the Institution during the twelve months which have elapsed since the last Anniversary.

I. GENERAL ESTABLISHMENT.

1. MEMBERS.

a. Fellows and Annual Subscribers.

The Fellows, Fellows Elect, and Annual Subscribers at the present time amount to 1665, viz. :--

Compounders, having p	aid	l £	20			317
_ Ditto ditt			10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			140
Pay annual contribution						572
Ditto ditto		£	23			483
Annual Subscribers .	•	•	•	•		17
Dormant	•	•	•			
Admission Fees unpaid	•	•	•	•	•	3

1665

Of this number, 43 have been elected since the last Anniversary, and 5 have been re-admitted under the provisions of the Bye-Laws, Chap. I. sect. 9.

The number of resignations during the same period has been 53, and of deaths 41.

The Candidates are 5.

b. Honorary and Foreign Members. The number of Honorary and Foreign Members is 29. c. Corresponding Members.

The number of Corresponding Members is 155.

Among the Honorary Members, the Society has to regret the loss of Sir Thomas Reade, for many years H.M. Consul-General at Tunis, where he liberally availed himself of the power afforded by his position to advance the objects of Zoology. The donations of Sir Thomas Reade to the Menagerie extended over a period of eighteen years, and included many of the most valuable Carnivora and Struthious Birds which have existed in the Collection.

2. FINANCES.

a. Income.

The Council have again the satisfaction of reporting an increase in the gross income of the Society, as compared with that of the preceding year. The total receipts of 1849, having amounted to $\pounds 8771$ 9s. 8d., give an increase of $\pounds 606$ 8s. 5d. as compared with 1848, and of $\pounds 1005$ 14s. 2d. as compared with 1847.

The Council regard this important result as conclusive evidence in favour of the vigorous measures which they commenced in 1848 for the improvement of the Menagerie, and the extension of the facilities for visiting it. The increase of $\pounds 1124\ 19s.\ 6d.$ in the sum received at the Garden Gates in 1849 as compared with 1847, confirms the hope expressed in the last Annual Report, that this source of the Society's income will gradually resume the importance presented in the earlier period of its operations.

The actual increase in the number of Visitors in 1849 as compared with 1848, was 25,265; and it is scarcely to be doubted that this increase would have been still larger, had there not been a manifest loss during the months of August and September, as in the case of every other place of public resort, in consequence of the general diminution of travelling, and the removal of large numbers of residents from the metropolis through dread of the prevailing epidemic. The Report from the Gates for the current year exhibits an increase of £130 in the Receipts, as compared with the corresponding weeks of 1849, and of £259 10s. 6d. as com-

pared with 1848.

In reference to the various heads of Income, the Council have to observe that in comparison with 1848—

The decrease of £57 8s. 10d. in the DIVIDENDS, is the result of Sales of Stock at the close of 1848, which were an nounced in the last Report.

The decrease of £186 in the ANNUAL SUBSCRIPTIONS, is chiefly attributable to the excess of Resignations and Deaths to the extent of 56 cases above the new elections. But although this circumstance cannot be regarded otherwise than as unfortunate, there is some ground of hope in referring to the increase of £55 in the ADMISSION FEES, and of £70 in the payment for LIFE COMPOSITIONS, as strikingly indicative of a more prosperous future.

An increase of $\pounds 50$ has been obtained in the rent paid for the privilege of selling refreshments to the Visitors in consequence of the increase in their number.

There has also been an increase of $\pounds 62\ 17s.\ 4d.$ in the sum derived from the sale of the SCIENTIFIC PUBLICATIONS of the Society; and the Council have reason to believe that the return under this head in the current year will be found capable of further development.

The increase of $\pounds409\ 19s$. 1*d*. in the GARDEN SALES, will be more particularly noticed in connection with the Expenditure on account of the Menagerie.

To sum up,—the decrease of Subscriptions has been checked, as compared with the ratio of preceding years, although not determined : the decrease, which for many years continuously down to 1847, was presented in the *Receipts at the Garden Gate*, has not only been determined, but the Receipts are rapidly rising, and exhibit so vigorous a tendency to advance, that they more than counterbalance the other heads of permanent income which still remain in an unfavourable condition; while the *Garden Sales* of the current year will certainly

exceed those of the past.

b. Expenditure.

In the balance-sheet attached to the Auditors' Report, will be found the usual statement of payments, distributed under separate heads. The total amount of payments presents a decrease of $\pounds 241$ 10s. 1d. as compared with 1848, but as the Liabilities present an increase of $\pounds 412$, the true expenditure of the year, including a heavy payment of $\pounds 1359 \ 17s. \ 3d$. for arrears carried over from 1848, is to be taken as at an increase of $\pounds 171 \ 10s$.

The payment of £562 1s. 5d. for the CARRIAGE OF ANI-MALS, presents the most conspicuous increase of the year; but as it was for the most part incurred in the transport of the beautiful collection which was given to the Society by the late Viceroy of Egypt, of purchases made on very favourable terms by the Hon. C. A. Murray in that country, and of the animals presented to the Society by Lieut.-Col. Butterworth, the aggregate value of which cannot be taken at less than £1600,—this increase, amounting to £476 17s. 2d., will certainly be no cause of regret to the Society.

The payment of $\pounds 408$ 3s. 4d. for Miscellaneous MENAGERIE EXPENSES, including Coals, Straw, &c., presents the trifling increase of $\pounds 11$ 13s. 5d., which is more than accounted for by the increase in the average number of Animals.

The payment of £149 19s. 8d. to the BAND, presents an increase of £43 8s. 8d., in consequence of the Council having extended the period of the Musical Performances on Saturdays in accordance with what they believed to be the prevailing desire of the Society.

The slight increase of £15 in the expenses of the MUSEUM was necessary for the preservation of the specimens.

The increase of £46 7s. 9d. in the cost of producing the PROCEEDINGS and the ILLUSTRATIONS now published with them, has been answered by an increase of £57 9s. 8d. in the money received by their sale; while the payment of £42 2s. 10d. for the expenses of producing the TRANSACTIONS, presents a decrease of £20 5s.

The payment of £28 5s. 10d. on account of the LIBRARY,

presents an increase of £7 12s. 6d.

The payment of £49 5s. for KEEPERs' DRESSES, presents a decrease of £13 3s.

The payment of $\pounds 514$ 3s. 7d. for the expenses of the GARDENER'S CONTRACT and other work executed by him, presents a decrease of $\pounds 49$ 3s. 10d.

The payment of £302 7s. for HOUSE AND OFFICE expenses,

including Coals, Lighting, Advertising, &c., presents a decrease of £13 13s. 2d.

The payment of £48 8s. for Stationery and Printing, presents a decrease of £17 0s. 6d.

In the payments for WORKS, REPAIRS AND NEW BUILD-INGS, there is a decrease of £616 4s. 7d.; but it is to be observed that £627 9s. 8d. belonging to this head remained due on the 31st of December, and forms part of the item of £2162 16s. Liabilities of that date, which have now been reduced to £735 18s. 11d. by payments made in the current year.

In the payment of £1739 17s. 9d. for PROVISIONS, there is a decrease of £311 16s. 5d.; but as this sum only includes the consumption of eleven months, the actual amount of saving as compared with 1848 is to be taken at £161. Considering that the average number of animals maintained in the Menagerie during the twelve months ending on the 31st of December, 1849, exceeded the average number of animals in the twelve months ending on the 31st of December, 1848, by no less than 180 head, and that this increase included six young Lions, the Council have reason to congratulate themselves on having been fortunate enough to avoid a material increase in this branch of the expenditure, notwithstanding the favourable state of the markets.

The payment of $\pounds705\ 17s$. for the PURCHASE OF ANIMALS, has added many beautiful accessions to the Menagerie, and it presents a decrease of $\pounds73\ 18s$. 6d. as compared with the payment under this head in 1848.

It is worthy of notice that the recent liberal expenditure on this, the main and vital feature of the Institution, has not only been rewarded by the re-establishment of the celebrity of the Collection as the finest public Vivarium in Europe, has not only attracted immense crowds of approving Visitors, but has enabled the Council to create a considerable source of Income in the disposal of duplicates, which, while the most desirable specimens have been invariably reserved for the Menagerie, has produced the increase of £409 19s. 1d. under the head of "Garden Sales," as shown on the Income side of the Balance-Sheet. The actual condition of the Menagerie seems to indicate that, with moderate success, and a continuance of the active support of our Correspondents, this source of Income will maintain its importance as long as the Collection is kept up to its present strength. In evidence of the truth of this anticipation, it is sufficient to state that the Council have, in consequence of the accessions of last year, been enabled to part with the youngest male Giraffe, and thereby realize £350 without in any degree impairing the prospective increase of the herd, which now consists of three females and two males.

The Memorial which the Council addressed to the Commissioners of Her Majesty's Woods, Forests and Land Revenues in 1848, has, with the consent of the Lords of the Treasury, obtained a reduction in the Ground-Rent paid for the Gardens, which is now taken at £337 per annum, and will therefore effect a reduction in the Annual Expenditure under that head to the amount of $\pounds 167$.

The Council gratefully recognize, in this act of attention to their statement of the Society's educational resources, a desire on the part of Her Majesty's Government to promote the study of Natural History, and an appreciation of the recent efforts to extend it by the facilities which are now afforded to Visitors of all classes.

The comparison of Income with Expenditure is, however, still unfavourable, if the extraordinary outlay for New Buildings is not regarded as a change of investment rather than expenditure.

But the great advance which has been made in the permanently productive Property of the Society by the erection of substantial Buildings since the year 1842, and especially in the years 1848 and 1849, has brought the establishment to a state of efficiency and attractiveness which the Council have reason to believe will, for the present, obviate the necessity of immediate operations of this character beyond the works now in progress.

The Buildings completed or erected during the year 1849 are of the most important description, and, the Council flatter themselves, have already had great effect in reference to Income, while they have undeniably been the means of preserving in health some of the most interesting animals in the The payments on account of the completed por-Collection.

tion of the New Aviary, the Reptile House, the West Wing of the Giraffe House, the Inclosure for Grallatorial Birds, and some minor works, amount to upwards of $\pounds 1000$, and the value of them, whether taken as elements of Income or simply as facilities for the preservation of the live-stock by which they are tenanted, certainly far exceeds the annual dividend which the capital they represent would yield to the Society in Government Securities.

The ordinary expenditure of the Establishment on its present footing, including the purchase of Animals to the amount of about £700, may be taken as not exceeding £8500 a year. As the gross receipts of 1849 exceeded £8700, there is, consequently, every probability that the increasing Income of the Society will again produce a surplus sufficient for all the purposes of a reserve.

c. Assets and Liabilities.

The preceding analysis of the Expenditure will, it is hoped, evince the vigilance with which the Council have considered the various necessities of the Establishment, and the most effectual measures for the production of Income. Convinced by experience that an energetic development of its resources is the only basis on which the success of the Institution can be permanently maintained, the Council found it necessary to provide for a part of the extraordinary expenditure of the year 1849 by the sale of £700 3 per cent. Stock in November last, and, consequently, the comparative state of the Cash Assets of the Society on the 31st of December 1849, as compared with the same day in 1848, presented a decrease of about £809 in actual value, being—

1848.

1849.

The Liabilities on the 31st of December 1849 amounted to £2162, of which £300 consisted of Rent of the House in Hanover Square, belonging to 1848 and 1849 (for which there is at present no legal claimant), and £200 for presents

to Egyptian officers, and other expenses connected with the Hippopotamus, for which the Society were indebted to the Hon. C. A. Murray.

The Report of the Council on this branch of the Society's affairs cannot be concluded without recording their thanks to the Committees of Audit and Finance for the uniform attention and care with which they have applied themselves to the business which has been brought before them.

II. SCIENTIFIC DEPARTMENT.

a. PUBLICATIONS.

The Proceedings for the year 1849 contain an unusual quantity of valuable papers, which have been illustrated in a series of twenty-seven plates, exclusive of woodcuts embodied in the text. The immediate result of this new form of the Society's Journal has been a considerable increase in its circulation, and the accession of several valuable names to the list of contributors in the current year. The cheap rate at which this work is issued to the Fellows will, it is hoped, in combination with the excellence of the plates, ensure a still more extensive support as its merits become known.

The First Part of the Fourth Volume of the Transactions is in preparation, and will contain a paper by Professor Owen, in continuation of his previous researches on the Extinct Gigantic Wingless Birds of New Zealand, and a paper by Professor Van der Hoeven on the Pearly Nautilus.

b. MUSEUM.

The additions to the Collection of mounted specimens are limited to such rare species as have died in the Menagerie, and had no previous representatives in the Museum. Many duplicates have been presented to the cognate provincial Institutions of Norwich, Ipswich, Dover, Worcester, &c., which, without impairing the value of the Society's accumulated stores, have, it is hoped, afforded some proof of sympathy with the movement in favour of Natural Science, which is in rapid development throughout the country. The Council regard with pleasure the progress which has recently been made in the National and Provincial Collections, and which, presenting so striking a contrast with their condition at the time when the Zoological Society was founded, renders the maintenance of our own Museum, as a separate collection, no longer an object of the importance which it formerly possessed.

The principal Donations to the Museum since the last Anniversary have been presented by Rear-Admiral Bowles, V.P.; A. Grace, Esq.; Capt. Sir Edward Belcher, R.N., C.B.; A. N. Ward, Esq., H.E.I.C. Civil Service; and J. Patten, Esq.

c. LIBRARY.

Although no important purchases have been effected in the Library, several desirable and valuable works have been added by donations and by exchange for the Publications of the Society.

The principal DONATIONS to the Library since the last Anniversary consist of *Transactions* and *Proceedings* from

The Academy of Sciences of Paris. The Royal Academy of Sciences of Munich. The Imperial Academy of Naturalists of Breslau. The Royal Society of Sciences of Göttingen. The Academy of Natural Sciences of Philadelphia. The Royal Academy of Sciences of Berlin. L'Institut Royal des Pays Bas. The Royal Academy of Sciences of Stockholm. The Royal Society of Van Diemen's Land. The Institute of France. The American Philosophical Society. The American Academy of Arts and Sciences. The Royal Irish Academy. The Royal Society of Literature. The Linnean Society. The Horticultural Society. The Royal Society of Edinburgh; and The Literary and Philosophical Society of Liverpool. also been received from

The Royal Academy of Sciences of Brussels.

The Royal Academy of Sciences of Turin.

The Agricultural Society of Lyons.

The Asiatic Society of Bengal.

The National Academy of Metz.

The Natural History Society of the Department of the Moselle.

The Franklin Institute.

The Smithsonian Institution.

The Royal Agricultural Society of England.

The Royal Geographical Society.

The Imperial Academy of Sciences of St. Petersburg.

The British Association for the Advancement of Science.

The Asiatic Society of Great Britain.

The Geological Society of London.

The Geological Society of Dublin.

The Leeds Philosophical Society.

The State of New York.

Her Majesty's Government; and

L'Académie des Sciences et Lettres de Montpellier.

Donations have also been received from William C. Domvile, Esq.; Dr. Andrew Smith; George Ransome, Esq.; Dr. Mantell; Dr. Wyman; Dr. Morton; Dr. Leidy of Philadelphia; M. Alfred Malherbe; Dr. Baikie, and Robert Heddle, Esq.; J. D. Dana, Esq.; Arthur Adams, Esq., R.N.; Jacob Bell, Esq.; the Editor of the Athenæum Journal; H. J. Carter, Esq.; P. Kernan, Esq.; Professor Pictet; E. Newman, Esq.; the Editor of the Agricultural Magazine, and the Royal Botanic Society.

III. GARDEN ESTABLISHMENT.

1. WORKS AND REPAIRS.

The attention of the Council has been actively directed towards the improvement and extension of the Buildings rendered necessary by the increasing richness of the Menagerie, and especially by the presents of His Highness Ibrahim Pasha and other Donors.

The principal Works executed since the 1st of January 1849 have been—the completion of that portion of the New Aviary which was commenced in 1848: the arrangement of the House for Reptiles: a large Inclosure for Grallatorial Birds: the erection of a Wing at the West End of the Giraffe House: the commencement of a similar Building at the East End: the thorough Repair of the Head Keeper's apartments at the back of the old Aviary; and the restoration of the artificial support of the walk adjoining the Elephant House.

In the Gardener's department the Council have again the pleasure of recording Donations from

The Horticultural Society.
His Grace the Archbishop of Dublin.
H. Melville, Esq.
R. Sanders, Esq., F.Z.S.
H. Cuming, Esq., Corr. Memb. Z.S.
J. J. Bennett, Esq., Sec. L.S.
D. W. Mitchell, Esq., Sec. Z.S.

Constant attention has been paid to the effective arrangement of the Flower Garden, but with that regard to economy which is demanded by the more urgent claims on the Funds of the Society.

2. MENAGERIE.

The Council have great satisfaction in reporting that the actual condition and prospects of the Menagerie are such as cannot but afford gratification to every one who visits it. They are aware that great improvements still remain to be effected, but they rely with confidence on the sympathy which has been expressed on all sides at the progress which has already been made, and they depend on the gradually increasing funds which the approval of the Public continues to place at their disposal for the ultimate realization of the most complete Vivarium which the knowledge and opportunity of the present times seem to indicate as attainable. The Council have been fortunate in obtaining, since the last anniversary, the support of several valuable correspondents, among whom they particularly desire to mention

- Alexander Elphinston, Esq., H.E.I.C.C.S., Bombay. The Lord Harris, Governor of Trinidad. Captain Scanlan.

A. Grant, Esq., M.D., Colombo.

Alexander Grace, Esq., Deputy Queen's Advocate, Galle.

- A. N. Ward, Esq., H.E.I.C.C.S., Madras.
- -J. Dunbar, Esq., Judge of the Suddur Court, Calcutta.

Dr. Bowring, H.B.M. Consul, Canton.

H. Grace, Esq., H.M. Vice-Consul, Mogador.

-H. E. Tyler, Esq., Lieut. R.E., Sta Lucia.

J. Davis, Esq., M.D., S. Carolina.

Don Javier Ovalle, of Valparaiso.

Martin Stevenson, Esq., of Valparaiso.

Capt. The Hon. C. Keppel, R.N., H.M.S. Mæander.

From several of these gentlemen donations have already arrived, or are on their passage to this country; from all of them the Society may anticipate cooperation of the most effectual character.

The Collection of living Animals which was announced in the last annual Report as presented to the Society by His late Highness Ibrahim Pasha, through the influence of the Hon. C. A. Murray, was successfully transported to the Gardens in charge of the Under-Keeper Henry Hunt, who was despatched to Cairo for that purpose. The gifts of the Viceroy were accompanied by several other interesting animals obtained by the energy and judgment of Mr. Murray, to whom the thanks of the Society are eminently due.

Within a few days of the arrival of this important collection, the Council were fortunate enough to receive in safety a valuable gift from the Governor of Singapore: so that in the first week of July 1849 the united accessions to the Menagerie may be considered as having reached their highest point of value, compared with any similar period since the foundation of the Society.

It is worthy of remark that the number of Visitors, as indicated by the receipts at the Gate during the month of July last, exceeded by a very large number the average of the last ten years : and the Council are consequently induced to believe that the repute of the additions above mentioned had a material influence in producing so unequivocal a proof of the public interest in our prosperity.

With reference to the prospects of the Menagerie in the course of the present season, the Council have already had the good fortune to make mention in their reports to the Monthly General Meetings, that they received information in December last that His Highness the Viceroy of Egypt, Abbas Pasha, had on the 14th of November confided to the care of the Hon. C. A. Murray, a young living HIPPOPOTAMUS, which had been brought down from the White Nile expressly for the acceptance of the Society. The extreme care and good management with which Mr. Murray has preserved this most valuable and unexpected gift, gives the Council every ground to hope that it will be successfully transported to this country before the expiration of the month of May.

The Council feel that it is unnecessary to advert in greater detail to the interest which the possession of this animal will impart to the Society's Collection; and content themselves by stating that they have taken every possible precaution to ensure its safety during the voyage from Alexandria.

They have also thought proper to give proof of the gratitude of the Society for the munificent aid of His Highness, without which it would have been entirely impossible to obtain a living example of the Hippopotamus, by transmitting to him a small stud of Greyhounds and Deerhounds under the care of an experienced trainer. His Highness has signified to Mr. Murray his great satisfaction at the course adopted by the Council, and his admiration of the animals themselves.

The Council have also succeeded in opening a communication with the King of Dahomey, which but for the untimely death of Mr. Duncan, H.M. Vice-Consul at Whydah, in November last, would doubtless have produced some novel and valuable additions to the Menagerie during the current year. The extracts from Mr. Duncan's letter to the Secretary which are printed in the Proceedings of the Meeting of December 11, 1849, have a mournful interest from its being one of the last from his pen which reached this country, although full of hope for the continuance of his ability to aid in carrying out the desire of the Society for Zoological Research in the interior of Africa adjacent to his station.

Notwithstanding the obstacles at present intervening, there is good reason to expect that the King of Dahomey will fulfill, to the successor of Mr. Duncan, the promises which he gave at their interview on the 3rd of September; and that some of the unknown treasures of his territory will at no distant period be added to the African types which have been already in possession of the Society.

The increasing influence of Dr. Bowring in China, gives also hope of the most valuable results from his desire to assist the Society, and the Council have been so fortunate as to obtain the liberal cooperation of one of the most extensive shipping firms in securing the transport of any objects of Natural History which may be obtained by him at Canton or any other of the Ports of China.

Notwithstanding the encouraging aspect imparted to the affairs of the Society by this cordial and effective support from the most remote regions, and the probability of success in the most difficult operation which zoological enterprise has yet undertaken, the Council have still a stronger topic of congratulation to offer to the Fellows, in the fact that they are authorized to express the approval of our Gracious Sovereign in the efforts which they have made for the restoration of this Institution, and for the diffusion of intellectual recreation, by its resources, among the great masses of the people.

Her Majesty and the Prince Consort have obtained their knowledge of our progress by personal observation; and in proof of their approbation, which is so flattering to the Society, Her Majesty has lately added to the numerous Royal Gifts already in the Collection, six very valuable animals which formed the principal portion of a present transmitted for Her Majesty's acceptance by the Emperor of Morocco.

In so large a collection as that now possessed by the Society, it is impossible to avoid some serious annual casualties; and the Council have since the last Report to record the loss of the female Aurochs and three Bisons, carried off by Pleuropneumonia, the scourge of horned cattle, for which as yet no remedy has been discovered, although the ravages of this

disease have caused the most serious losses to almost every breeder of stock throughout the country.

The Rhinoceros and the African Buffalo died in November last, but as the former had been upwards of fifteen years in the Menagerie, and the latter nearly as long, their longevity, rather than their decease, is to be remarked on.

In other respects, the health of the animals in the Menagerie is a subject of the utmost congratulation, and sufficiently attested by their beautiful condition, which also speaks favourably for the improvements which have been effected in the Buildings. The only death among the Carnivora, for instance, has been that of a Black Leopard received upwards of six years since, and even at that time an old animal.

The following list of species which have bred since the last Report, will render any further comment superfluous.

LIST OF SPECIES WHICH BRED IN THE SEASON 1849-50.

MAMMALIA.

B

Vervet Monkey. Cercopithecus pygerythrus, F. Cuv. Capuchin Monkey. Cebus capucinus, Erxl. Red-fronted Lemur. Lemur rufifrons, Benn. Wolf. Canis lupus, Linn. Indian Wolf. Canis pallipes, Sykes. Jackal. Canis mesomelas, Schreb. Hog Deer. Cervus porcinus, Zimm. Virginian Deer. Cervus virginianus, Gm. Sambur Deer. Cervus hippelaphus, Cuv. Wapiti Deer. Cervus canadensis, Brisson. Gazelle. Antilope (Gazella) dorcas, Pall. Bison. Bison americanus (Gm.). Corsican Goat. Capra hircus, Linn. Cashmere Goat. Capra hircus, var. Scinde Goat. Capra hircus, var. Angora Goat. Capra hircus, var. Chinchilla. Chinchilla lanigera, Benn.

BIRDS.

Ocyphaps lophotes (Temm.). Crested Dove. Senegal Dove. Turtur senegalensis (Linn.). Collared Turtle. Turtur risorius (Linn.). Crowned-Pigeon. Goura coronata (Lath.). Victoria Crowned-Pigeon. Goura Victoria, Fraser. Gold Pheasant. Thaumalea picta (Linn.). Silver Pheasant. Gallophasis nycthemerus (Linn.). Jungle Fowl, Hybrid from Gallus varius, Shaw. Capercaillie. Tetrao urogallus, Linn. Black Swan. Cygnus atratus, Latham. Sandwich-Island Goose. Bernicla sandvicensis, Vig. Cereopsis Goose. Cereopsis novæ-hollandiæ (Latham). Bean Goose (cross). Anser segetum, Linn. Pintail Duck (cross). Dafila acuta (Linn.). Garganey. Querquedula circia (Linn.). Eider. Somateria mollissima (Linn.). Tufted Duck. Fuligula cristata (Ray). Castaneous Duck (cross). Nyroca leucophthalma (Bechst.). Penguin Duck. Anas boschas, var.

REPTILES.

Salamander. Salamandra maculata, Lam. Viper. Pelias berus (Linn.). Slow Worm. Anguis fragilis, Linn.

The Council believe that no better test of the progress of the Institution can be appealed to than the List of Animals exhibited for the first time. They have great pleasure in reporting that during the past twelve months they have been able to obtain nearly seventy species, notwithstanding the long lists published in 1848 and 1849.

LIST OF SPECIES EXHIBITED FOR THE FIRST TIME,

1849-50.

MAMMALIA.

QUADRUMANA.

Monkey.	Cercocebus albigena, Gray, n. sp.	
Monkey.	Cercopithecus — ? n. sp. ?	

CARNIVORA.

The Eyra. Felis eyra, Desmar. Himalayan Bear. Ursus isabellinus, Horsfield.

RUMINANTIA.

Moluccan Rusa. Cervus moluccensis.
Barasingha Deer. Cervus Duvaucellii, Cuvier.
Leucoryx Antilope. Antilope (Oryx) leucoryx, Pall.
Addax Antilope. Antilope (Oryx) nasomaculata, Blainv.
Isabelline Antilope. Antilope (Eleotragus) isabellina, Afzel.
Cuvier's Gazelle. Antilope (Gazella) Cuvieri, Ogilby.
Indian Antilope, albino. Antilope (Cervicapra) bezoarctica.
Turkish Water-Buffalo. Bos taurus, var.
Parik Sheep. Ovis aries, var.

PACHYDERMATA.

Vlacke-Vark. Phacochærus æthiopicus (Linn.).

RODENTIA.

Hamster Rat. Cricetus vulgaris, Desmar. Pilori. Hesperomys pilorides (Desmar.).



RAPTORES.

Fisher-Eagle. Haliaëtus vocifer (Daud.). Kestril. Tinnunculus cenchris, Bechstein. Falcon. Falco columbarius, Linn. Kite? Milvus ater?

в 2

INSESSORES.

Whidah Bird. Vidua ——? n. sp.? Weaver Bird. Hyphantornis ——? Brazilian Jay. Cyanocorax pileatus, Temm. Peruvian Meadow Lark. Sturnella loyca, Mol. Porto-Rico Boat-tail. Scaphidurus niger (Gm.). Chestnut-fronted Troupial. Chrysomus frontalis (Vieill.).

SCANSORES.

Toucan. Rhamphastos carinatus, Sw.

COLUMBÆ.

White-Fruit-Pigeon. Carpophaga alba (Gm.).

RASORES.

Rüppell's Guinea Fowl. Numida ptilorhyncha, Licht. Great Tinamou. Tinamus major (Linn.). Indian Quail. Coturnix coromandelica, Gm. Australian Quail. Coturnix (Synæcus) australis, Gould. Hybrid Pheasant, from Phasianus versicolor.

GRALLATORES.

Goliath Heron. Ardea goliat, Temminck.
Squacco Heron. Ardea comata, Pall.
Sparmann's Night-Heron. Nycticorax caledonicus (Gm.).
Brazilian Tiger-Bittern. Tigrisoma brasiliense (Linn.).
Mortier's Rail. Tribonyx Mortieri, Dubus.
Australian Moorhen. Gallinula tenebrosa, Gould.
Philippine Rail. Rallus philippensis, Linn.
— Rail. Eulabeornis torquata (Linn.).
Flamingo. Phænicopterus antiquorum, Temm.

NATATORES.

Hybrid Duck, from Anas boschas & Mareca penelope. Crested Pelican. Pelecanus crispus, Bruch.

REPTILES.

Psammosaurus griseus (Daud.). Uromastix spinipes, Merrem. —— acanthinurus, Bell. Acanthodactylus scutellatus (Audouin). Scincus officinalis, Laur. Sphænops sepsoides (Audouin). Gongylus ocellatus, Wagler. Tarentola ægyptiaca. Cyclura Collei, Gray. Iquana tuberculata, Laur. Stellio vulgaris, Daud. Agama colonorum, Daud. Python regius, Dum. et Bibr. Eunectes murinus, Wagler. Boa divinilogua, Dum. et Bibr. Coluber constrictor? Naia haje. Craspedocephalus atrox, Gray. Cerastes Hasselquistii. Salamandra maculosa, Lam. Triton palmatus. - marmoratus.

The Council have the pleasure of recording an unusually important list of Supporters who have presented

DONATIONS TO THE MENAGERIE.

HER MAJESTY THE QUEEN.

A Lioness, a Leopard, a Pair of Ostriches,

and a Pair of Gazelles. H.H. Івканім Разна.

A Giraffe (female), Two Dromedaries, Two Leucoryx Antelopes, Two Addax Antelopes, Two Ostriches, and Two Gazelles. The Marquis of Salisbury, F.Z.S. &c. Two Cinereous Eagles. The Earl of Derby, K.G. &c., President. Fourteen Senegal Pigeons, Ten Passenger Pigeons, and Three Game Fowls. The Earl of Radnor. Two Chinese Sheep. The Earl of Sheffield, F.Z.S. &c. Three Hybrids between Pheasant and Common Fowl. The Earl Spencer, F.Z.S. &c. A White-fronted Goose. The Lord Braybrooke, F.Z.S. &c. A Badger. Sir Thomas Erskine Perry. A Dshikketai. The Hon. C. A. Murray, H.M. Consul-General in Egypt. Fourteen Purple Gallinules. Colonel Butterworth, Governor of Singapore. A Malay Bear, Two Sarus Cranes, and a Cassowary. J. Drummond Hay, Esq., H.M. Consul and Agent at Tangiers. Two Gazelles. Joseph James Forrester, Esq., Corresponding Member. Nine Snakes, Twenty-one Lizards, and Ten Frogs. Lieut. Tyler, R.E. A Boa (diviniloqua), Five Snakes, an Agouti, and a Pilori. F. Hale Thomson, Esq., F.Z.S. A Grey Ichneumon. A. Mackenzie, Esq., F.Z.S. A Griffon Vulture. Wm. Bridger, Esq. Twenty-two Canary Finches. An African Civet Cat. Miss Congreve.

22

Miss Barrow.A Lesser Sulphur-crested Cockatoo.Mrs. Macdonald.A Collared Turtle Dove.- Gray, Esq.A Mona Monkey.The Rev. E. Dixon.A Herring Gull.Richard Davis, Esq., F.Z.S.Two Rattle-Snakes.

The Rev. James Allen.

An African Ram.

A. Anderson, Esq., M.P.

A Fezzan Sheep. A Capuchin Monkey and a Grey Squirrel. J. Craigie, Esq. A Jacchus Monkey. John Biehl, Esq. A Slow-paced Lemur. D. Ross, Esq. Three Ground Squirrels and a Chamæleon. Capt. Abell. A Ground Squirrel. - Selby, Esq. A Wedge-tailed Eagle. E. K. Watts, Esq. Two Peregrine Falcons. J. R. Shaw, Esq. William C. Domvile, Esq., F.Z.S. A Squacco Heron. William Rogers, Esq. Ten Vipers, Six Slow-worms, and Ten Toads. Dr. Andrew Smith, F.Z.S. An Iguana. Dr. Dickson, Corresponding Member. Two Lizards. Sir Wm. J. Hooker. A Squirrel Flying Opossum. S. Fitzgerald, Esq. A Gannet. W. D. Christie, Esq. A Spider Monkey, a White-throated Capuchin Monkey, and a Turtle. A Spotted Cavy. - Gray, Esq. An Axis Deer. Col. Messiter. A Ring-necked Parrakeet. - Conway, Esq. A Sky Lark. Mrs. Hoffmann. Lieut. Cave, 53rd Regiment. A Boa (diviniloqua). T. R. France, Esq. Two Rooks (white variety). J. H. Spencer, Esq. A Patas Monkey.

Capt. Worth, R.N. A Brown Coati Mondi.

George Ransome, Esq. An Osprey. Capt. Sir Edward Belcher, F.Z.S. Four Cochin China Fowls. The Marchioness of Westminster. A Weaver Bird.

Thos. Byron, Esq. An Emu and an Australian Dog. W. Danford, Esq. A Buffon's Touraco. Capt. Ouseley, Bengal Army. A Rose-crested Cockatoo. Col. Gunning, F.Z.S. Five Collared Turtle Doves. H. L. Freeling, Esq. Three Collared Turtle Doves. Richard Sanders, Esq., F.Z.S. Eighteen Toads, a Frog, and a Lizard. James Balfour, Esq. A Green Monkey. T. F. Reade, Esq. Two Ostriches and Six Jerboas. Mrs. Foy. A Brown Bear. W. Bencraft, Esq. A Grey Ichneumon. C. G. Webber, Esq., F.Z.S. A Turkey and Four Fowls from Oporto. F. H. Salvin, Esq. Three Little Grebes. Two Crocodiles. H. Ward, Esq. John Leonard, Esq. A Rhesus Monkey. Mrs. Martin Stevenson. Two Pumas and Two Chilian Sea Eagles. Prof. Wheatstone. A Chamæleon. A Macaque Monkey and a Toque Monkey. Dr. Davey. A Guinea Parrakeet. Mrs. May. William S. Gillett, Esq., F.Z.S. A Merlin Hawk and Two Kites. R. Allen, Esq., Staff Surgeon. A Tortoise. J. M. Ramsbottom, Esq. A Chamæleon. J. H. Phillips, Esq. A Guinea Baboon. Capt. Molison. A Chacma Baboon.

Charles St. John, Esq. A Pine Marten. — Wilkinson, Esq. A Red-backed Shrike. Dr. Thompson, R.N., Corresponding Member. Three Surat Doves and a Collared Turtle Dove. F. Buckland, Esq. A Little Owl.

A Herring Gull. F. Gilson, Esq. Capt. Pixley. A Chacma Baboon. - Nichol, Esq. A Goat. E. N. Berry, Esq. Two Chamæleons. Samuel Gurney, Esq., F.L.S. A Salamander. John Hoffmann, Esq., F.Z.S. Trochetia subviridis. J. Anderdon, Esq. Two Mountain Doves. J. Edwards, Esq. A Bonneted Monkey. The Ladies Boyle. A Patas Monkey and a Talapoin Monkey. Mrs. Sadd. A Monkey. A. Elliott Fuller, Esq., M.P., F.Z.S. Five Gold Pheasants. Vernon Abbott, Esq., F.Z.S. An Antelope. C. A. Peirce, Esq., F.Z.S. A Fallow Deer. Edw. Wyndham, Esq., F.Z.S. A Crested Porcupine. Alexander Elphinston, Esq., Hon. E.I.C. Civil Service. An Albino Antelope. Jacob Bell, Esq., F.Z.S. A Barbary Partridge. Pierce Serocold, Esq. A Brown Capuchin Monkey. Thos. Burwash, Esq. A Cashmere Goat. Miss Walton. A Sea Eagle. W. B. Abbott, Esq. A Gazelle and Two Goats. N. Calvert, jun., Esq. A Green Monkey and a Macaque Monkey. H. Wickens, Esq. A Lesser Sulphur-crested Cockatoo.

Donations to the Menagerie have also been received from H. Hall, Esq., S. Willson, Esq., — Gwyn, Esq., and Mr. Jamrach.

VISITORS.

The total number of Visitors to the Gardens in 1849 was 168,895; of these, 33,998 were privileged, and 134,897 unprivileged; of whom upwards of 72,000 were admitted on Mondays.

The Increase in the number of Visitors, as compared with 1848, was 25,265.

The money received for admission was $\pounds 4651 \ 10s.$, being an increase over 1848 of $\pounds 611 \ 6s. \ 6d.$

The Council, in concluding their Report, beg to direct the attention of the Fellows to the following Statement of the number of paying Visitors to the Gardens on *Monday only*, during the last nine months in 1846 and 1847, at which time the Admission was 1s. each—compared with the same months in 1848 and 1849, the admission then being 6d. each :—

	1846.	1847.	Total.	1848.	1849.	Total.
April	1,274	1,094	2,368	1,488	5,253	6,741
May	1,683	2,658		10,692	and the second second	19,114
June	3,737	1,916	5,653			23,194
July	2,391	2,005	4,396	14,276	17,226	31,502
August	1,635	1,975	3,610	7,756	12,440	20,196
September	1,084	913	1,997	11,782	8,832	20,614
October	434	566	1,000	2,618	2,894	5,512
November	232	450	682	769	1,163	
December	93	275	368	627	616	1,243
	12,563	11,852	24,415	60,566	69,482	130,048

In 1848 and 1849 at 6*d*. each 130,048 In 1846 and 1847 at 1*s*. each 24,415

Increase in favour of 1848 and 1849 . 105,633 persons.

REPORT

OF THE

AUDITORS OF THE ACCOUNTS,

Appointed February 7, 1850.

THE Committee of Auditors having carefully examined the Accounts of the Society for the Year ending December 31, 1849, and having inspected all the Books and seen Vouchers for all the Payments,—now beg to lay before the Society the following Abstract of such Accounts, together with a Statement of the Assets and Liabilities of the Society, and a Report thereon.



RECI	EIPTS	5.			
Balance brought from Dec. 31, 1848					£. s. d. 265 10 7
INCOME.					
longing	e.	.2	d.	£. s. d.	
to years 340 to ∫ Annual Subscriptions		0			
846. Ivory Tickets			Ő		
tore. (Iter Thereis				48 2 0	
1847. Annual Subscriptions				28 0 0	
Admission Fees			0		
Annual Subscriptions	73	0	0		
Ivory Tickets	5	5 9 2	0		
1848 Transactions	5	9	0		
Proceedings and Illustrations	8	2	0	133221.32 Mar -	
Farm Rent		0	0		
				. 141 16 0	
Admission Fees	90	0	0	Alter Martin	
Compositions		0	0		
Annual Subscriptions	2459	3	0		
Ivory Tickets	73	10			
Admissions to Gardens	4651			STATES AND A STATE	
1849 darden Sales	473	8	6		
Rent for Refreshment Rooms					
Farm Rent			0		
Dividends on 3 per Cents. Reduced	145		6	ALL BRIDE AND AND ASSA	
Transactions			10	A State of the second	
Proceedings and Illustrations	78	8	10	0540 11 0	
1850. Annual Subscriptions anticipated				8542 11 8 11 0 0	
INCOME IN 1849				£8771 9 8	8771 9 8



		Ρ.	AY	MEN	ITS	3.		-							
,		Farm.		Gardens.			Museum.			General Estabt.			Total.		
EXPENDITURE.															
Belonging	£.	8.	d.	£.	<i>s</i> .	d.	£.	8.	d.	£.	s.	d.	£.	s.	d.
to years 1847 and { Rent, Rates, Taxes, &c. 1848. { Bills	30	0	0	511 577	14 17	8 5	11	10	9	5 223	1 13	5 0	546 813		
				1089	12	1	11	10	9	228	14	5	1359	17	3
												=			
(Rent, Rates, and Taxes	45	0	0	150	4	7									
Salaries and Wages				1287		3	55	9	0	524	12	0		-	
Keepers' Dresses		•••••		49 705		0						12			
Cost of Animals Carriage of Animals and Keepers' Expenses }						5			*						
Provisions				1739	17	9									
Menagerie Expenses			200 - CO - CO - E	408		4									
Garden Expenses				514		7						-	1. 1. 1. 1		
Garden Guides			(10) (C) (C) (C)	5									1		
Band Expenses										0	12	0			
1849 Works and Repairs	• • • • • • • • •	••••			10	0		•••••	••••	0	12	9			
Buildings and Works in- cidental thereto}				593	2	4									
House and Office Expenses				37	17	11				264	9	1			
Printing				30	3	9				5	19	9			
Library Expenses							28	5	10						
Museum Expenses							35	1	6				and the second		
Stationery										12	4	6			
Transactions		•••••				••••			••••	42	2	10			
Proceedings and Illus- trations}										111	8	7	1 JULY		
Returned Subscriptions										6	0		120		
															-
Paid on account of the current year	45	0	0	7053	2	2	118	3 16	4	1003	19	3	8220	17	10



The Assets and Liabilities of the Society on the 31st of December, 1849, were as follow :---



The Committee, in presenting their Report to the Society, are much gratified in being able to notice the steady increase in the receipts of the Society, indicating as it does a greater appreciation on the part of the Public of the attractions of the Collection, and, it is to be hoped, an increased interest in the study of Zoology.

On the other hand, they regret to find that with an increase of £606 over the Income of 1848, and of £1006 over that of 1847, it has been found necessary further to diminish the funded property of the Society by the sale of £700 Stock, which was, by a recommendation of the last Committee of Audit, limited to a minimum of £5000, "except under circumstances of extraordinary pressure."

The Liabilities are greater by $\pounds 412$, *i. e.* $\pounds 2162$ for 1849, against $\pounds 1750$ for 1848, $\pounds 291$ of which is for unclaimed Rent of the house in Hanover Square; the Committee strongly recommend this sum and the accruing rent to be set apart and invested to meet the demand whenever it may be legally made.

The Assets are £809 less, *i.e.* £3932 for 1849, against £4741 in 1848.

C

The Garden Sales have greatly increased this year, but this of course is an exceptional case and cannot be looked to for Income.

The Collection of Animals in the Gardens has unfortunately been diminished by the death of the Bison, the Rhinoceros, and some other valuable specimens; but many Animals have been added by the munificent gifts of several friends of the Society (the cost of transport of which forms a considerable item in the Expenditure); the Value of the Collection may therefore be taken as at least equal to the last Estimate.

The Committee have great pleasure in noticing the diminished cost for Provisions, although the number of Animals is considerably augmented; as this is necessarily one of the large items of Expenditure, every saving consistent with the proper keep of the Animals is most satisfactory. The increase in the number of Elections of new Fellows is also a source of congratulation and another proof of the greater attraction of the Society; but nevertheless, from deaths and resignations during the last year, the numbers have been reduced by seventy, which, although much below the average of the last few years, is still a strong argument in favour of enforcing the most rigid economy and curtailing every expense that will not interfere with the efficacy and usefulness of the Establishment.

The increased number of Visitors to the Gardens is also deserving of especial notice, being 25,265 above 1848, and 75,349 above 1847. As this increase consists not only of Fellows and their friends, but also of the Public in general, the Committee have to congratulate the Council on the complete success of the measure for admitting the Public on Mondays and Holidays at a reduced rate. They are moreover strongly of opinion, that an elementary and popular course of Lectures at the Gardens would be the means of greatly increasing the receipts and at the same time carry out more completely the intentions of the founders of this Society, by diffusing information on and facilitating the study of Zoology.

The Committee refer with much gratification to one example of judicious expenditure, the Reptile House, which at the small cost of $\pounds 240$ has vastly increased the attraction of the Gardens, and been not only useful to the student of Natural History, but conducive to the healthful preservation of the specimens.

The Committee are of opinion that in all probability the receipts would have been much greater but for the lamentable visitation of last Autumn, which sensibly affected the prosperity of all large undertakings, more especially those places of recreation usually visited by the Public at that period : they hope therefore, should no unforeseen contingency arise, and the present system of efficient and active management be carried on with judicious economy, having a due regard to income and a proper supervision of the expenditure, that the Society will be placed in a permanent and flourishing condition.

In conclusion, they have to notice with much commendation the exact and concise manner in which the accounts have been kept and placed before them by the Accountant, Mr. Leigh.

LIONEL BOOTH. JOHN VAN VOORST. EDWARD NEWMAN. EDW. GREENAWAY. W. EWER. GEORGE DANIELL. ROBERT TUBBS.

11 Hanover Square, March 18, 1850.