

THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY

Annual Report 1984



**THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY**  
**Zoological Gardens, Upton-by-Chester**  
**NOTICE OF THE 51st ANNUAL GENERAL MEETING**  
**To be held on Saturday, 1st June, 1985, at 3.30 p.m.**  
**at the Russell Allen Lecture Hall**

**AGENDA**

1. Apologies for Absence.
2. Reading of the Minutes of the Annual General Meeting held on 16th May, 1984.
3. Presentation of Accounts and Balance Sheet and Auditors' Report.
4. Discussion of Auditors' Report.
5. Presentation of Council's Report.
6. Discussion of Council's Report.
7. Appointment of Auditors.
8. Appointment of Scrutineers and Ballot for election of members of the Council and confirmation of Mr. Yule's co-option.
9. Report of Scrutineers on the result of the Ballot.
10. Any Other Business.

**MEMBERS OF COUNCIL — 1984**

PROFESSOR J. O. L. KING, Ph.D., M.V.Sc., B.Sc.(Agric.), F.R.C.V.S., F.I.Biol.  
*(Chairman)*

Dr. J. R. BAKER, Ph.D., B.V.Sc., M.R.C.V.S.

\*A. J. BLAND Esq., Dipl.Arch., R.I.B.A.

B. H. COLES, Esq., B.V.Sc., M.R.C.V.S.

H. D. COOPER Esq., F.I.M., F.S.F., F.I.F.F., Cert.A.I.B.

B. J. D'ARCY, Esq., B.S., M.Sc., M.I. Biol.

\*R. HEATON Esq., B.Ed., Cert.Ed., F.G.S., F.R.G.S.

G. B. HIBBERT Esq.,

Mrs. S. IRONMONGER, B.Sc., M.I.Biol.

\*Mrs. B. H. IRVINE,

PROFESSOR D. H. MOLYNEUX, M.A., Ph.D., F.I.Biol.

F. MOSFORD Esq.,

Mrs. E. PARKINSON

G. R. PRYOR Esq., *(Vice-Chairman, Died 18 June 1984)*

\*Sir LESLIE YOUNG C.B.E., B.Sc.(Econ.)

**Note:**

Mr. I. Yule, E.R.D. (Member of Council from May 1980 to October 1982, when he left the area) was co-opted onto the Council in March 1985 in succession to Mr. Pryor on his return to the area. Under Article 20 of the Articles of Association his co-option is subject to confirmation at the next Annual General Meeting and his term of office will end at the same time as Mr. Pryor's, in 1986.

There are four vacancies on the Council. Retiring Members who are offering themselves for re-election are indicated thus \*. If any Life Member or fully paid-up Annual Member wishes to be nominated for election to Council, she or he must be nominated in writing by seven Life Members or fully paid-up Annual Members, the nomination to be in the hands of the Secretary not later than 14 days before the Annual General Meeting (i.e. by noon Saturday, 18th May, 1985).

The Society is a Company Limited by Guarantee (Registered in England No. 287902), Registered Office Zoological Gardens, Caughall Road, Upton-by-Chester, CH2 1LH. The Society is the Registered Charity No. 306077.

**Director and Company Secretary**

Dr. M. R. BRAMBELL, M.A., Ph.D., Vet.M.B., M.R.C.V.S.

## THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY ANNUAL REPORT 1984

### The Golden Jubilee

1984 was the Golden Jubilee Year of the Society which was founded on May 9th, 1934 and took over Chester Zoo on June 13th that year. The Jubilee was celebrated by a series of events throughout the year. The Right Honourable Viscount Leverhulme, Lord Lieutenant of Cheshire, visited the Gardens on May 23rd to open the Children's Playground, built with help from the Lion's Club International. Lord Leverhulme also relaid the foundation stone of the old Lion House, which his father had laid in 1937, on a site near the refurbished Lion Enclosure, where he also planted a commemorative tree.

On May 18th a celebration dinner was held at the Chester Grosvenor Hotel which was attended by over one hundred guests and members. The Lord Bishop of Chester, the Right Reverend Michael Baughen said the Grace. The Chairman, Professor J. O. L. King proposed the toast to the guests who included Their Worships the Mayor and Mayoress of Chester, Councillor and Mrs. Cecil Eimerl, the Chairman of Cheshire County Council, Councillor Mrs. Margaret Melrose, Mr. Andrew Pearce, M.E.P., and Mrs. Pearce, the Chief Executive of Cheshire County Council and Mrs. Robin Wendt and the Chief Executive of the City of Chester and Mrs. Dennis Burton. Dr Janet Kear replied on behalf of the guests and proposed the toast to the Society to which the Director replied.

On May 2nd the Society invited disabled people from a wide area in the north-west to join in the Fellowship Day. Over 1800 people came to the Zoo as guests of the Society that day. On a lighter note the Society published the booklet of family jokes on an animal theme 'Animal Antics'. During the year a history of the Zoo "Chester Zoo; The First Half Century" written by Miss A. L. Howard, former Society Secretary, was published.

Other events included an exhibition of carnivorous plants, a concert by the Liverpool University Singers under Dr. Judith Blezzard, a production of 'Captain Noah and his Floating Zoo', by five local primary schools under the co-ordination of Miss Brenda Norgain, the Senior Education Officer, and a Barbeque for members.

The World Wildlife Fund organised a sponsored walk jointly with the Zoo at which almost £2,000 was raised for the Society. The North West of England Hydrobiologists Group and the Institute of Biology joined with the Society in organising a one day Symposium at the Zoo on the Biology of the River Dee. His Grace, the Duke of Westminster opened the proceedings. The two sessions were chaired by Professor W. G. Hale of Liverpool Polytechnic and Professor A. D. Bradshaw, F.R.S. of Liverpool University.

In October the Zoo was the subject of the first special display to be exhibited in the new Chester Public Library. The Society is particularly grateful to Mr. Graham Fisher, the Principal Librarian at the Chester Library,

and to Miss Sue Benson of Cheshire County Council Libraries and Museums Department for their work in preparing for this display. It is planned that the display will move from library to library in the County over the next two years, after which we hope to exhibit in the Zoo itself.

The Jubilee received considerable coverage in the media, especially by the local radio stations. In particular Mrs. Susan Ironmonger broadcast about the Zoo on Marcher Sound every Saturday morning during the summer season.

For the organisation of these and many other celebratory events the Society wishes to thank the many people involved but especially Mr. Ray Heaton, Mrs. Susan Ironmonger, Miss Brenda Norgain, Mrs. Penny Rudd, Miss Louise Howard, Mr. Michael Coupe, Professor David Molyneux, Dr. Michael Pugh Thomas and also Miss Bella Neate (who left the Society's employment to become Marketing Manager of Paignton Zoo at the start of the year).

### **Visitors**

The number of visitors to the Zoo during the year was 717,443, a marked drop on previous years. With there being an increase in visitors up until the middle of May followed by a sharp fall, especially in school parties and organised coach trips, we believe that the competition provided by the Liverpool International Garden Festival proved too big for the Zoo to fend off. The hope that tours attracted into the area would also visit Chester Zoo was realised as far as some of those who stayed overnight in the region was concerned. However, the vast majority of groups coming into the region to the Garden Festival were one-day trips. Perhaps the ease with which such groups found they could travel to the north-west will encourage them to explore the other attractions of the area including Chester Zoo in future years. The Society co-operated with Cheshire County Council's Cheshire Garden at the Festival by stocking an aviary of exotic soft-bill birds and providing the staff to look after it throughout the length of the Festival. It is hoped to re-establish the Cheshire Garden as a permanent feature at the Zoo itself.

### **Financial Outcome**

The year ended with a surplus of £3,201 on the income and expenditure account before the addition of extraordinary items. This implies the Zoo was operated on a break-even number of visitors of about 710,000 (785,000 in 1983).

Though the Government has not yet exempted charties from V.A.T., (the Society paid over to the Government £309,000 in the year), there was encouraging news from the European Commission, which is intent on making zoos and similar cultural institutions free of this tax.

### **Mr. G. R. Pryor**

Very sadly, Mr. G. R. Pryor, Vice-Chairman of the Council, had a road accident while returning home after the Council Meeting in May. Though he was appearing to be recovering from the accident he had to face the added burden of his wife's sudden death while he was in hospital and he died on June 18th. The Society mourns the loss of a very great friend and supporter.

### **Members' Meetings**

Five Members' Meetings were held in the year at which Mr. John Knowles, Director of Marwell Zoo, spoke on Oryxes and related antelopes; Dr. John Raines spoke on the Birds of Sri Lanka, the Director gave his annual review of the Zoo; Dr. Wilkinson spoke on the Birds of Nigeria and Mr. Chris Hynes gave a talk on Insectivorous Plants.

### **Junior Membership**

This is a growing part of the Society. During the year there were many events organised. Some allowed the junior members to contribute to the running of the Zoo by helping to rebranch the Cat House enclosures, cleaning out the Sealion and Penguin Pools. The junior members also conducted their annual survey of the wildlife in the ponds in the Zoo, had opportunities to get a closer look at some of the safer animals and paid visits to the Liverpool Natural History Museum, Martin Mere and Llyn Brenig reservoir. Two parties for junior members were held in the year.

### **Finance Officers**

At the end of 1983, Mr. V. K. F. Barrowcliff became ill and felt it advisable to relinquish his post as Accountant. Fortunately, Mr. Barrowcliff has made a good recovery and we wish him a long and happy retirement. Mr. Michael Johnson acted as temporary Accountant until Mr. Alan Du Cros joined the Zoo as Financial Controller in June. The Society is extremely grateful to Mr. Johnson for the help he was able to give at a very difficult time.

### **Company Secretary**

On Mr. Barrowcliff's retirement, Council appointed the Director to be Company Secretary.

### **Curatorships**

Mr. P. A. Wait was promoted to Senior Curator during the year, with overall charge of all the Animal Sections. Mr. N. G. Ellerton was promoted to Curator of Mammals, while Dr. R. Wilkinson, Curator of Birds, has also overall responsibility for the Reptile, Amphibian and Aquarium collections.

## The Animal Collections

The Mammal Collection showed several notable births. The ring-tail lemurs (*Lemur catta*) produced ten youngsters, (this species is notable for producing up to 80% male youngsters in zoos). The black spider monkey group (*Ateles paniscus*) successfully reared a female baby and two chimpanzees (*Pan troglodytes*) were born and reared. Three jungle cats (*Felis chaus*), four caracals (*Felis caracal*), two Grant's zebra (*Equus burchelli*), three guanaco (*Lama guanicoe*), three Pére David's deer (*Elaphurus davidianus*) four reindeer (*Rangifer tarandus*), four red lechwe (*Kobus leche*), three blackbuck (*Antilope cervicapra*) and two Arabian gazelle (*Gazella gazella*) were successfully reared.

The most important additions to the Bird Collection were two male red-crowned cranes (*Grus japonensis*) from Rotterdam. We also obtained roul-roul partridges (*Rollulus roulroul*). The grey peacock pheasants (*Polyplectron bicalcaratum*) and the golden pheasants (*Chrysolophus pictus*) successfully reared chicks as did the spectacled owls (*Pulsatrix perspicillata*), fire-tufted barbets (*Psilopogon pryolophus*) and ostriches (*Struthio camelus*). In all 125 chicks were reared in 35 species.

In the Reptile Collection, tokay geckos (*Gekko gekko*), Guenther's geckos (*Phelsuma guentheri*) and leopard geckos (*Eublepharis macularius*) all produced young, as did the New Guinea blue-tongued skinks *Tiliqua gigas*, the prehensile-tailed skinks (*Corcucia zebrata*) and the Indian python (*Python molurus*). Both the dwarf crocodiles (*Osteolaemus tetraspis*) and Johnston's river crocodiles (*Crocodylus johnstoni*) showed reproductive behaviour but no young resulted.

Four Mississippi paddlefish joined the Aquarium Collection. Freshwater stingrays (*Potomotrygon sp*) again bred successfully, and the tomato clown fish (*Amphiprion frenatum*) are spawning regularly. Successful breeding also took place with Australian rainbow fish (*Melanotaenia sp*), long finned characins (*Alestes longipinnis*), yellow-belly live-bearer fish (*Girardinus falcatus*), butterfly goodeid fish (*Ameca splendens*) and Livingstone's mbuna fish (*Pseudotropheus livingstoni*). The cleaner shrimps (*Lysmata grabhami*) have also bred successfully in the Aquarium.

The Invertebrate Collection was rehoused at the end of the Reptile Exhibit in the Tropical House. Seventeen displays have been installed, with the help of the Manpower Services Commission Youth Training Scheme at the Zoo. A variety of larger arthropods including stick insects, mantises, beetles and spiders are now exhibited here.



Chimpanzee with Baby  
*Courtesy of J Walker, Daily Mirror*

## Veterinary Service

The Society wishes to thank Messrs. Edwards, Edgington and Lyon for continuing to act as veterinary surgeons, and also to the University of Liverpool Veterinary Field Station at Leahurst for support given especially over post mortem examinations.

## Gardens

Although no major landscaping took place in 1984, improvements were made to the shrub areas. The border between the Penguin and Sealion Pools was cleared of outgrown *Cupressus*, *Berberis*, and Golden Privet. Younger *Cupressus* and a wide variety of other shrubs were planted in their place.

These included:— *Hamamelis mollis* (Wych-Hazel) which has fragrant flowers in January and February and a nice autumn-tinted foliage. *Hydrangea paniculata*, *H. villosa*, *Piptanthus laburnifolius*, *Abelia grandiflora*, *Potentilla* Red Ace, *Genista lydia*, *Spiraea* Gold Flame, *Caryopteris clandonensis*, and *Ceratostigma plumbaginoides*.

Another border behind the *Fuchsia* garden and facing the Lemur Island was cleared of *Cupressus* and shrubs which had outgrown themselves. The back half of this was replanted with *Buddleia* in the hope of attracting a large concentration of butterflies. The front half was planted with scented plants. These included Lilac, Lavender, Rosemary, Thyme, Honeysuckle, *Azalia pontica*, *Viburnum burkwoodii*, *V. bodnantensis*, *Cytisus praecox* and space was left for summer bedding plants.

As part of the Mammal House reconstruction, borders at the entrance and sides were made and planted with dwarf shrubs. There has also been planting of contorted hazels and willows in the outside cages of this building.

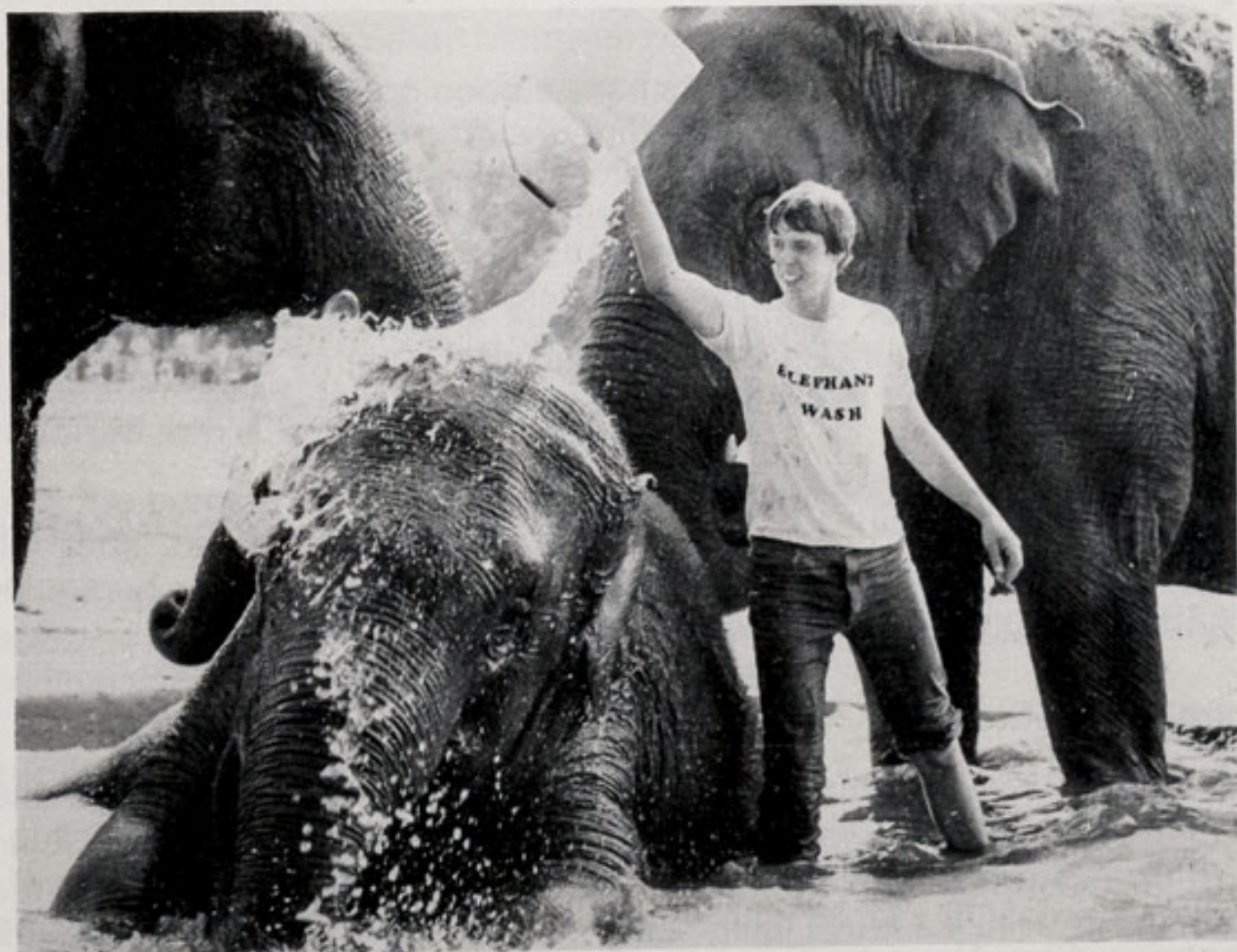
More trees have been planted in various parts of the grounds. A Hornbeam was put in place of a dangerous Beech tree in the Jubilee Garden which was threatening to fall across the statue of 'Noah and the Four Winds'. Also, a Weeping Oak was planted in the lawn nearby.

By the side of the Waterbus landing stage, opposite the Lion Enclosure, three Evergreen Oaks, *Quercus ilex*, and five False Acacia, *Robinia pseud-acacia*, were planted. In various parts of the grounds ten Whitebeam *Sorbus aria lutescens* Majestic were planted.

On the Islands, two *Abies grandis* and two Siberian Crab Apples were planted. Other trees planted included an *Acacia frisia* near the Rhino House and a Swamp Cypress, *Taxodium distichum*, still only two feet tall, by the side of the Jubilee Cafeteria pond.



Ostrich with Chicks  
*Courtesy of Nigel Hillier*



Bath Time for Elephants  
*Courtesy of Daily Express*

Elsewhere, two *Prunus sargentii*, two *Prunus serrula*, and twelve Scots Pines *Pinus sylvestris* were planted near the Boat Shed.

A highlight of the year was the display of the Handkerchief Tree, *Davidia involucreata*, which had the first full flush of white bracts since it had been planted 18 years ago among the Rhododendrons in front of the Oakfield. The species was discovered by P re Armand David, of Giant Panda and P re David Deer fame.

A sad point occurred on 13th January when a gale blew down a swathe of trees across the Society's property including the Italian Cypress and Turkey Oak growing near the South Lodge. These two trees had been planted probably at the end of the last century.

A relationship was started with Ness Gardens for exchange of plants and trees with conservation in view. Thirty kinds of Mountain Ash, *Sorbus*, were collected from them and twelve of the larger ones were planted among the Rhododendrons at the end of the Monkey House. It is the intention that the Zoo provides growing space for a number of rare and endangered species of trees and shrubs which are being preserved at Ness Gardens.

There are over 7,000 rose-bushes in over a hundred varieties throughout the grounds. When any variety shows signs of deterioration it is replaced during the winter months and at the same time the opportunity is taken to change the soil in the beds.

From the middle of July visitors have a good opportunity to compare the varieties of roses growing here before deciding which to plant in their own gardens. One of the outstanding hybrid tea varieties in the garden at present is Silver Jubilee, which has orange-red petals with paler reverse.

During the summer months there was an exhibition of insectivorous plants within the Fountain Building and these plants could still be seen throughout the winter in the Kiosk at the end of the Sealions.

Approximately 80,000 summer bedding plants were planted out in early June and remained in bloom until the end of September, after which another 80,000 spring bedding plants were put in ready for the beginning of the 1985 season.

### **Animal Adoptions**

In March of 1984 the Society launched an Animal Adoption Scheme whereby members of the public could contribute towards the cost of feeding the animals by taking out adoptions in £25 units, or in the case of some of the smaller animals in £12.50 half units. The Adopters receive the Zoo's news magazine, *Chez Nous*, and an annual update of the state in the collection of the species they have adopted. The Society is most grateful to all the people

who have adopted animals. Their contributions made a significant saving in the cost of feeding the animals. £11,358 was transferred into the revenue Account to reduce the cost from £138,296 to £126,938.

### **Sponsorships**

Several companies have sponsored animal exhibits and other items in the Zoo, including certain maps and signs. In 1984 the Society was very grateful to have received £8,958 from this source, as well as receiving £2,530 in donations and £458 in memory of Mr. G. R. Pryor. These sums have been retained in the Trust Fund until they are utilised in suitable developments.

### **Energy costs**

The cost of heating the Zoo and providing it with other forms of energy fell from almost £161,000 to just under £139,500. The Society's Energy consultant, Mr. Philip Janes, has played an especially important role in enabling the staff to monitor effectively the usage of energy.

### **New Building and Alterations**

The main structural additions to the Zoo were the Children's Playground, the new Lion House and the adaption of the Elephant House to allow "Jubilee" to be managed safely now that he is becoming a mature male. The Youth Training Scheme completed the conversion of the old Mandarin Duck Pond beside the Small Mammal House into a new Capybara Exhibit.

Considerable changes have been made to the Marketing side of the Zoo. The Gazelle Cafeteria was renamed the Jubilee (partly to eliminate the confusion caused by visitors looking for antelopes in it!) and the entrance was redesigned. The Mpila Cafe was also renamed and is now called The Oasis. The Fountain building was converted into two shops, a souvenir shop and a gift shop, both of which were very successful. The Oakfield Restaurant was redecorated and the former kitchen area at the back of the building was converted into a licensed bar, The Acorn.

### **The Zoo Licensing Act**

In 1984, the Zoo Licensing Act 1981, came into force and the Zoo was inspected in December. The licence to continue operating as an existing zoo was issued by the local authority in April 1985.

### **Inter Zoo Co-operation**

The Fourth World Conference on "The Breeding of Endangered Species in Captivity" was held, in conjunction with the annual conference of the International Union of Directors of Zoological Gardens, in Holland in September and was attended by the Director and the Curators of Birds and of Mammals.

The Society was also represented on the United Kingdom Great Ape Advisory Panel and on the Joint Management of Species Group. The annual meeting of the British Zoo Directors was held at Chester Zoo in June.

### **Education**

The Education Department, under Miss Brenda Norgain, who is on secondment from Cheshire County Council, has been expanding the service it is able to offer schools and colleges. With the help of three senior part-time teachers and a Manpower Services Commission Community Project the Department has been able to prepare a series of Teachers' Packs, in consultation with teachers in schools in our catchment area. Towards the end of the year, when it is customary for schools only to bring parties as part of their formal teaching, there was a marked increase in the number of such parties booking to come to the Zoo.

### **Manpower Services Commission**

Apart from the Education Department's Community Programme, the Manpower Services Commission also supports a Youth Training Scheme in the Zoo in which fifteen young people receive training under three supervisors. The Society handled over £64,000 on behalf of the Commission.

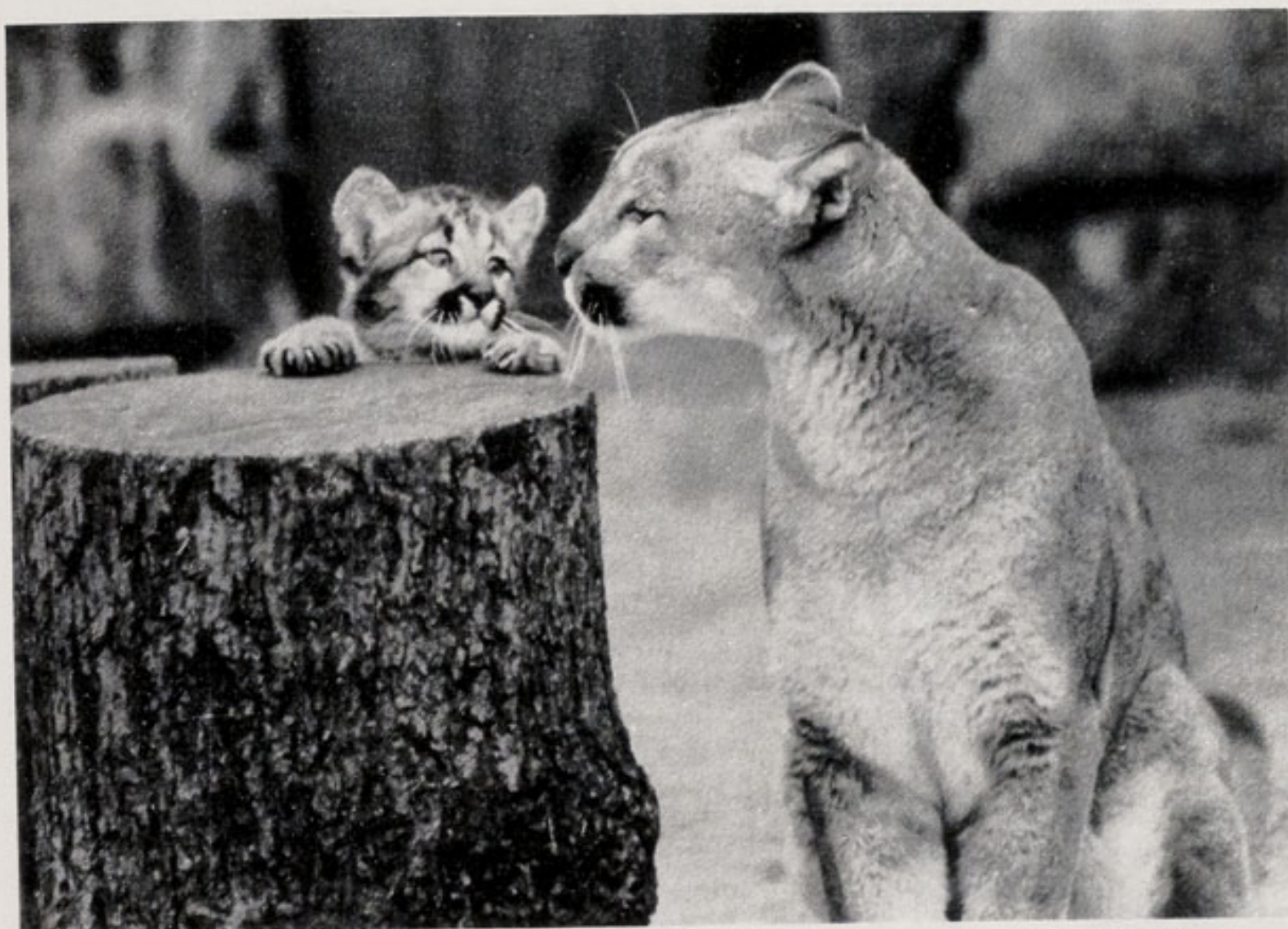
### **Staff**

The number of permanent staff employed at the end of the year was 133 and the average number of staff employed in the year was 168 (171 in 1983).

The Society is particularly grateful to the way its staff tackled what proved to be a difficult year, and wishes to thank all those who worked for it during the year, both permanent and temporary, for what they did.

### **Representation on Outside Organisations**

Several members of staff were members of committees, etc., of other organisations related to the interest of the Society. The Director continued to serve as a member of the Nature Conservancy Council and was Chairman of its Advisory Committee on animals endangered by trade. He also continued to serve as a director of Chester Marketing Bureau Ltd. Dr. Roger Wilkinson served on the Avicultural Advisory Group of the Wildfowl Trust, Martin Mere; Mr. Nicholas Ellerton served on the Captive Care Working Party of the Primate Society and was elected to the Council of the Primate Society and Mr. Michael Coupe is a Council Member of the Lancashire and Cheshire Entomological Society.



Puma with Kitten  
*Courtesy of Dave Pearson, Chester Chronicle*

### Retirements

As well as Mr. Barrowcliff's retirement after 17 years service, Mr. Ted Hall, Senior Gardener (16 years service) retired, Mr Leslie Hills, Section Officer, Elephants Section (18 years service), Mr Leslie Nield, Senior Keeper in charge of the Giraffe Section (27 years service) and Mrs. Daisy Pearson, Shop Supervisor (18 years service). The Society wishes them all a long and happy retirement and wishes to record its thanks to them for the years of service they have put into the Zoo.

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### THE MEMBERSHIP OF THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY AS AT 31st DECEMBER, 1984

Life Member .....	185	
Honorary Members .....	7	
Annual Members .....	309	
Members with over 25 years Membership		
Who are over pensionable age .....	11	512
	-----	
Associate Members .....	231	
Junior members .....	273	504
	-----	-----
TOTAL (all categories)		1016

**THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY  
BALANCE SHEET AS AT 31st DECEMBER, 1984**

		1984		1983	
	Notes	£	£	£	£
<b>FIXED ASSETS</b>					
<b>Tangible assets:</b>	9				
Special Buildings, Enclosures and Equipment		1,036,004		963,382	
Freehold Properties		328,260		332,434	
Animals		81,000		101,000	
		<u>1,445,264</u>		<u>1,396,816</u>	
<b>CURRENT ASSETS</b>					
Stocks	10	76,849		54,308	
Debtors	11	17,646		52,326	
Balance at Bank		3,149		5,867	
Cash in Hand		5,764		4,538	
Trust fund bank account	12	20,217		—	
		<u>123,625</u>		<u>117,039</u>	
 Creditors: Amounts falling due within one year					
Current Instalments due on loans		17,351		20,062	
Bank Overdraft (secured)		424,275		357,619	
Trade Creditors		56,260		48,993	
Taxes and Social Security Costs		23,564		24,419	
Other Creditors		23,815		10,359	
Accruals		13,095		10,842	
		<u>558,360</u>		<u>472,294</u>	
 <b>NET CURRENT LIABILITIES</b>			<u>(434,735)</u>		<u>(355,255)</u>
 <b>TOTAL ASSETS</b>					
<b>LESS CURRENT</b>					
<b>LIABILITIES</b>			<b>1,010,529</b>		<b>1,041,561</b>
Creditors: Amounts falling due after more than one year					
Loan	13		277,622		341,058
			<u>£732,907</u>		<u>£700,503</u>
 <b>RESERVES</b>					
Income and Expenditure Account			712,690		692,458
Trust Fund	12		20,217		8,045
			<u>£732,907</u>		<u>£700,503</u>
J. O. L. King, <i>Chairman</i> M. R. Brambell, <i>Director</i> 31st March, 1985			<u>£732,907</u>		<u>£700,503</u>

**THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY  
INCOME AND EXPENDITURE ACCOUNT  
FOR THE YEAR ENDED 31st DECEMBER, 1984**

		1984		1983	
	Notes	£	£	£	£
TURNOVER	2		2,088,689		2,086,113
Less Direct Costs of:—					
Catering		408,538		394,210	
Souvenir Shops		152,919		143,407	
Animal Welfare		429,303		413,777	
Garden Upkeep		145,737		136,183	
		1,136,497		1,087,577	
			952,192		998,536
Indirect Costs (including £212,374 Maintenance— 1983 £229,305)			904,981		905,445
Operating Surplus	3		47,211		93,091
Other Income	5		28,263		20,751
			75,474		113,842
Interest Receivable	6	1,971		1,918	
Interest Payable	7	(74,244)		(100,776)	
			(72,273)		(98,858)
Surplus on Ordinary Activities			3,201		14,984
Extraordinary Items	8		17,031		45,622
			20,232		60,606
Transfer from Capital Reserve Accumulated Surplus brought forward			—		59,373
			692,458		572,479
Accumulated Surplus carried forward			£712,690		£692,458

**Report of the Auditors to the Members of the North of England Zoological Society**

In our opinion, the annexed Balance Sheet, Income and Expenditure Account and related notes and schedules give, under the historical cost convention, a true and fair view of the state of the Society's affairs at the 31st December, 1984 and of the surplus and source and application of funds for the year ended on that date and comply with the Companies Acts, 1948 to 1981 in so far as the provisions of those Acts apply to these financial statements.

31 Wellington Road.  
Nantwich

AFFORD, BOND & CO.  
Chartered Accountants  
31st March, 1985

**THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY  
STATEMENT OF SOURCE AND APPLICATION OF FUNDS  
FOR THE YEAR ENDED 31st DECEMBER, 1984**

	1984		1983	
	£	£	£	£
<b>SOURCE OF FUNDS</b>				
Surplus for the year on Ordinary Activities		3,201		14,984
Adjustment for items not involving the movement of funds				
Depreciation	92,850		78,308	
(Profit)/Loss on sale of Fixed Assets	(393)		6	
	-----	92,457	-----	78,314
<b>FUNDS FROM OTHER SOURCES</b>				
Sale of Fixed Tangible Assets	43,364		161,468	
Trust Fund	12,172		8,045	
	-----	55,536	-----	169,513
		151,194		262,811
<b>APPLICATION OF FUNDS</b>				
Purchase of Fixed Tangible Assets		167,238		109,610
		£(16,044)		£153,201
		=====		=====
<b>MOVEMENT IN WORKING CAPITAL</b>				
Increase/(Decrease) in stock	22,541		(14,464)	
(Decrease) in Debtors	(34,680)		(11,464)	
(Increase)/Decrease in Creditors	(22,121)		6,838	
Decrease in Bank Loan	63,436		101,689	
	-----	29,176	-----	82,599
<b>MOVEMENT IN LIQUID FUNDS</b>				
(Decrease) in cash at Bank and in Hand	(1,492)		(3,750)	
Decrease in Current Instalments due on Loans	2,711		4,535	
(Increase)/Decrease in Bank Overdraft	(66,656)		69,817	
Increase in Trust Fund Bank Account	20,217		—	
	-----	(45,220)	-----	70,602
		£(16,044)		£153,201
		=====		=====

**THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY  
NOTES TO THE ACCOUNTS  
FOR THE YEAR ENDED 31st DECEMBER, 1984**

1. ACCOUNTING POLICIES

There have been no changes in the accounting policies during the year.

**Basis of Accounting**

The accounts have been prepared under the historical cost convention.

**Fixed Assets:**

**Properties** — In accordance with practice adopted in previous years no depreciation has been provided on freehold land or properties. It is the Society's policy to maintain its property in good condition, prolonging its useful life and making any depreciation provision immaterial. Repairs and maintenance costs are charged against income in the year as they are incurred. The Council is of the opinion that the market value of the Society's land and buildings is in excess of the book values and for insurance purposes, the Zoo buildings and house properties are valued at £3,280,000 replacement cost.

Special Buildings, Enclosures and Equipment depreciation is provided at rates varying between 2% and 20% per annum estimated to write off each asset over the term of its useful life. The rates and method of depreciation are consistent with those used in previous years.

**Animals** — No valuation is made of the animal collection at the end of each year. Purchases and sales appear in the accounts in the year in which they arise.

The amount of £20,000 has been written off this year to bring the net book value at 31st December 1984 to £81,000. It is intended to write off a further £20,000 each year for the next four years to bring the net book value at 31st December 1988 to £1,000.

**Stock:**

Valued on a basis consistent with that used in previous years at the lower cost or net realisable value.

**Pensions**

The Society operates a pension scheme covering the majority of employees, and contributions are charged in the accounts as payments are made. Contributions by employees and by the Society are held in trustee-administered funds completely independent of the Society's finances.

### Property Sales

Profit on sales of property consists of the difference between the net amount realised and the sum of cost and subsequent additions and is reported as an extraordinary item.

## 2. TURNOVER

Turnover represents cash and invoiced amounts of admission charges, goods sold and services provided (stated net of Value Added Tax).

The Turnover is attributable as follows:—

	1984 £	1983 £
Admission Charges	1,168,538	1,269,660
Catering Receipts	569,029	514,714
Souvenir Receipts	249,944	207,552
Motor Boat Trips	35,202	34,266
Zoo Guides	48,839	47,043
Members Subscriptions and Entrance Fees	4,789	5,354
Sundry Income	12,348	7,524
	<u>£2,088,689</u>	<u>£2,086,113</u>

## 3. OPERATING SURPLUS

This is after charging:—

	£	£
Auditor's Remuneration	3,500	2,000
Depreciation (other than Animals)	92,850	78,308
(Profit)/Loss on Sale of Fixed Assets	(393)	6
Hire of Equipment	7,847	5,651
	<u>=====</u>	<u>=====</u>

## 4. STAFF COSTS

	£	£
Wages and Salaries	872,088	803,997
Social Security Costs	88,297	80,663
Other Pension Costs — current year	28,159	19,463
— prior year	5,275	—
	<u>£993,819</u>	<u>£904,123</u>

The average number of employees during the last year was made up as follows:—

	1984	1983
	No.	No.
Administration	25	40
Maintenance and Gardens	54	52
Keeping	49	45
Catering and Shops	40	34
	<u>168</u>	<u>171</u>
	===	===
5. OTHER INCOME	£	£
Zoo Property Rents	12,977	13,813
Zoo Farm Rents (net)	15,286	6,938
	<u>£28,263</u>	<u>£20,751</u>
	=====	=====
6. INTEREST RECEIVABLE	£	£
Bank Deposit and Money Market Interest	1,591	1,655
Interest Charged on Employee Loans	380	263
	<u>£1,971</u>	<u>£1,918</u>
	=====	=====
7. INTEREST PAYABLE	£	£
Bank	35,760	48,532
Other Loans not wholly repayable within five years	38,484	52,244
	<u>£74,244</u>	<u>£100,776</u>
	=====	=====
8. EXTRAORDINARY ITEMS		
Extraordinary Income:		
Profit on Sale of Property	37,031	94,307
Extraordinary Charge:		
Amount Written Off Stock of Animals	20,000	48,685
	<u>£17,031</u>	<u>£45,622</u>
	=====	=====

## 9. TANGIBLE FIXED ASSETS

	Freehold Property	Building & Enclosures	Machinery & Equip	Animals	Total
Cost as at 1.1.84	332,434	1,438,544	367,951	149,685	2,288,614
Additions	1,329	117,000	48,909	(see below)	167,238
Disposals	(5,503)	—	(3,850)		(9,353)
At 31.12.84	<u>£328,260</u>	<u>£1,555,544</u>	<u>£413,010</u>	<u>£149,685</u>	<u>£2,446,499</u>
Depreciation As at 1.1.84	—	662,358	180,755	48,685	891,798
Provided during year	—	57,953	34,897	20,000	112,850
Disposals	—	—	(3,413)	—	(3,413)
At 31.12.84	<u>£ —</u>	<u>£720,311</u>	<u>£212,239</u>	<u>£68,685</u>	<u>£1,001,235</u>
Net book value at 31.12.84	<u>£328,260</u>	<u>£835,233</u>	<u>£200,771</u>	<u>£81,000</u>	<u>£1,445,264</u>
Net book value at 31.12.83	<u>£332,434</u>	<u>£776,186</u>	<u>£187,196</u>	<u>£101,000</u>	<u>£1,396,816</u>

Animal purchases of £8,575 and sales of £6,960 have been treated as revenue transactions in 1984.

	1984 £	1983 £
10. STOCKS		
Goods for Resale	61,312	35,411
Consumables	15,537	18,897
	<u>£76,849</u>	<u>£54,308</u>
11. DEBTORS		
Trade Debtors	1,728	5,230
Other Debtors	8,561	42,894
Prepayments and Accrued Income	7,357	4,202
	<u>£17,646</u>	<u>£52,326</u>

		1984	1983
12. TRUST FUND			
Balance 1.1.84		8,045	
Adoptions	11,584		
Less: Transferred to Animal Foods	11,358		
		226	
Sponsorship		8,958	
In Memoriam - Mr. G. R. Pryor		458	
Donations		2,530	
		<u>£20,217</u>	
Balance 31.12.84		<u>£20,217</u>	

13. LOAN			
Amounts Repayable Within Five Years		69,404	80,249
Amounts Repayable After Five Years		208,218	260,809
		<u>£277,622</u>	<u>£341,058</u>

The current portion of the loan amounting to £17,351 is shown in current liabilities.

The loan is secured on the freehold property.

#### 14. SHARE CAPITAL

The Company is limited by guarantee and has no share capital. Members of the Company have guaranteed the liabilities of the Company to the extent of £1 each.

#### 15. STATUS

The Company is registered with the Charity Commission No. 306077 and no taxation liability (other than V.A.T.) arises on income.

#### 16. CAPITAL COMMITMENTS

The estimated amounts of commitments for future capital expenditure are:

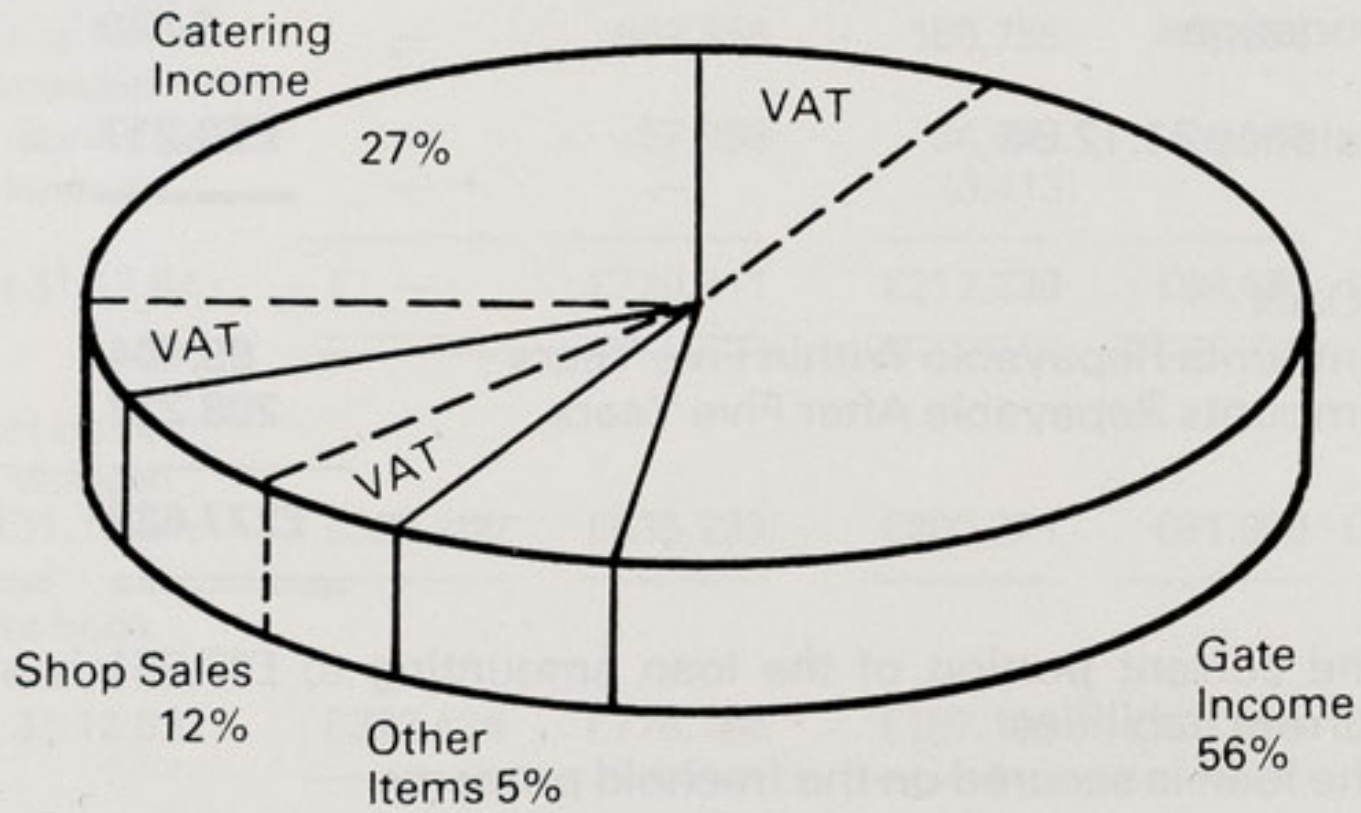
	1984	1983
Under contracts	14,500	12,000
Authorised by the Council but not contracted	—	38,000

	<u>£14,500</u>	<u>£50,000</u>
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#### 17. POST BALANCE SHEET EVENT

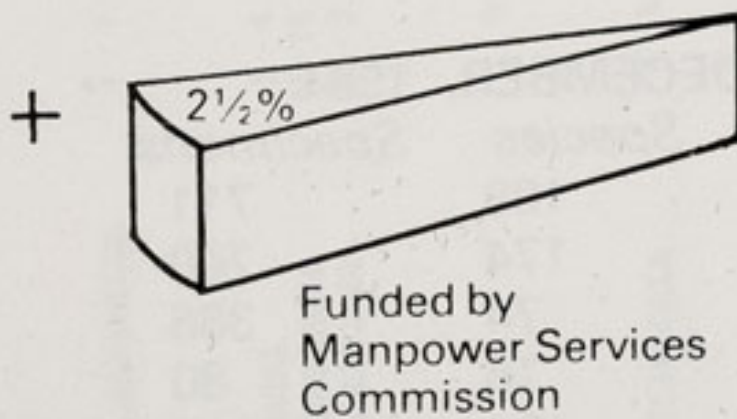
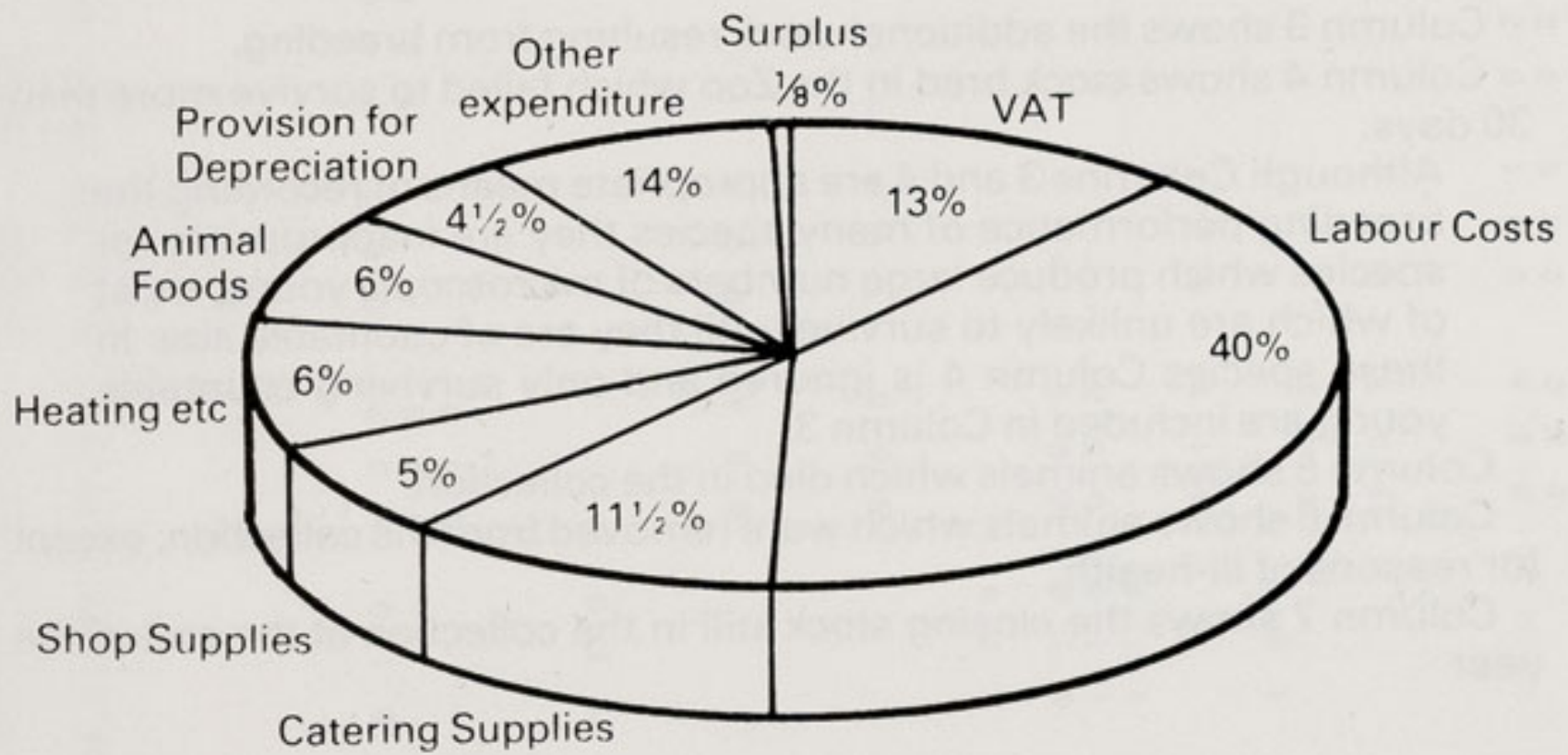
The Society has by auction contracted to sell the Caughall Manor Farm outbuildings for £80,000. This transaction was completed on 3rd January 1985.

## INCOME



	Adults	Children/ O.A.P
Normal Visitors	370,014	175,710
Party Visitors	58,983	102,942
Students/School Children with Zoo teaching	1,241	8,553
TOTALS	430,238	287,205
	717,443	

## EXPENDITURE



	1984	1983
	£	£
Animal Welfare	429,303	413,777
Gardens	145,737	136,183
Maintenance	212,374	229,305
Public Utilities	178,934	207,858

## THE SEVEN COLUMN SYSTEM

The seven column accounting system of animal stocks is in line with all other major zoological institutions in the world.

The first column, Column 1, shows the opening stock, subdivided into three columns representing males, females and unsexed animals, including unsexed young.

Column 2 shows the stock which came into the collection from outside sources.

Column 3 shows the additional stock resulting from breeding.

Column 4 shows stock bred in the Zoo which failed to survive more than 30 days.

Although Columns 3 and 4 are appropriate means of recording the breeding performance of many species they are inappropriate for species which produce large numbers of microscopic young, most of which are unlikely to survive until they are of countable size. In these species Column 4 is ignored and only surviving countable young are included in Column 3.

Column 5 shows animals which died in the collection.

Column 6 shows animals which were removed from the collection, except for reasons of ill-health.

Column 7 shows the closing stock still in the collection at the end of the year.

### STOCK AT 31st DECEMBER, 1984

	<i>Species</i>	<i>Specimens</i>
Mammals	108	711
Birds	174	740
Reptiles	74	386
Amphibians	16	80
Fish	184	ca1619
Invertebrates	23	ca158
TOTALS:	<u>579</u>	<u>3694</u>

MAMMALS		1 STOCK 1/1/1984			2 RECEIVED			3 BORN/H'CH			4 D.N.S 30 DAYS			5 DEATHS OTHER			6 DISPOSALS			7 STOCK 31/12/1984		
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?
MONOTREMATA																						
Australian Echidna	<u>Tachyglossus aculeatus</u>	1	1	0																1	1	0
MARSUPIALIA																						
Tamar Wallaby	<u>Macropus eugenii</u>	5	4	1	0	1	0	1	0	2	0	0	1	0	1	0	1	0	0	5	4	2
Red-necked Wallaby	<u>Macropus rufogriseus</u>	18	11	0				7	2	0				11	3	0	2	0	0	12	10	0
Western Grey Kangaroo	<u>Macropus fuliginosus</u>	2	3	0				0	1	0										3	3	0
SCANDENTIA																						
Common Tree Shrew	<u>Tupaia glis</u>	0	0	0	1	1	0													1	1	0
CHIROPTERA																						
Rodrigues Fruit Bat	<u>Pteropus rodricensis</u>	7	4	0				0	0	4	0	0	4							7	4	0
PRIMATES																						
Ring-tailed Lemur	<u>Lemur catta</u>	11	8	0				5	6	0	1	0	0				2	3	0	13	11	0
Mayotte Lemur	<u>Lemur macaco</u> <u>mayottensis</u>	1	3	0																1	3	0
Ruffed Lemur	<u>Lemur variegatus</u>	0	0	0	2	1	0													2	1	0
Slow Loris	<u>Nycticebus coucang</u>	0	3	0										0	3	0				0	0	0
Lesser Bushbaby	<u>Galago senegalensis</u>	2	1	0	0	1	0	0	0	1										2	2	1
Common Marmoset	<u>Callithrix jacchus</u>	0	0	0	1	1	0	0	0	2										1	1	2
White-lipped Tamarin	<u>Saguinus labiatus</u>	0	0	0	1	1	0							1	0	0				0	1	0
White-fronted Capuchin	<u>Cebus albifrons</u>	3	4	0																3	4	0
Spider Monkey (black face) (form)	<u>Ateles paniscus</u>	2	4	0				0	1	1	0	0	1							2	5	0
Lion-tailed Macaque	<u>Macaca silenus</u>	4	1	0	1	0	0										1	1	0	4	0	0
Barbary Macaque	<u>Macaca sylvanus</u>	5	8	0				1	1	1				1	1	0	1	0	0	4	8	1
Celebes Ape	<u>Macaca niger</u>	4	1	0													2	0	0	2	1	0
Hamadryas Baboon	<u>Papio hamadryas</u>	5	6	0				3	0	3	0	0	3							8	6	0
Sykes Guenon	<u>Cercopithecus</u> <u>alboocularis</u>	3	2	0																3	2	0
De Brazza Monkey	<u>Cercopithecus neglectus</u>	2	7	1													0	1	0	2	6	1
Talapoin Monkey	<u>Miopithecus talapoin</u>	5	5	0				0	0	1	0	0	1	0	2	0	1	0	0	4	3	0
Patas Monkey	<u>Erythrocebus patas</u>	3	5	0				0	2	0	0	2	0	0	2	0				3	3	0

## MAMMALS

		1			2			3			4			5			6			7			
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK			
		1/1/1984									30 DAYS			OTHER			31/12/1984						
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	
Lar Gibbon	<u>Hylobates lar</u>	1	0	0	1	2	0						1	1	0	1	0	0	0	0	1	0	0
Chimpanzee	<u>Pan troglodytes</u>	5	10	0	1	2	0	0	2	0						0	1	0			6	13	0
Orang utan (Bornean Form)	<u>Pongo pygmaeus pygmaeus</u>	5	4	0																	5	4	0
Orang utan (Sumatran Form)	<u>Pongo pygmaeus abelii</u>	2	1	0				0	1	0	0	1	0								2	1	0
Western Lowland Gorilla	<u>Gorilla gorilla gorilla</u>	1	0	0																	1	0	0
Eastern Lowland Gorilla	<u>Gorilla gorilla graueri</u>	1	0	0																	1	0	0

## RODENTIA

Malay Giant Squirrel	<u>Ratufa bicolor</u>	1	1	0									0	1	0						1	0	0
Fire-footed Squirrel	<u>Funisciurus pyrrhopus</u>	2	5	0									1	1	0						1	4	0
Prairie Marmot	<u>Cynomys ludovicianus</u>	0	0	145				0	0	40			0	0	35						0	0	150
Beaver	<u>Castor canadensis</u>	3	1	0																	3	1	0
African Crested Porcupine	<u>Hystrix cristata</u>	1	2	0																	1	2	0
Indian Crested Porcupine	<u>Hystrix indica</u>	1	1	0																	1	1	0
Capybara	<u>Hydrochoerus hydrochaeris</u>	1	2	3				0	0	2						0	0	2			1	2	3
Golden Agouti	<u>Dasyprocta aguti</u>	3	2	0				0	0	2	0	0	1	1	0	0					2	2	1
Coypu	<u>Myocastor coypus</u>	3	1	12				0	0	6											2	1	18
Mountain Viscacha	<u>Lagidium viscaccia</u>	2	0	0																	2	0	0

## CARNIVORA

Jackal	<u>Canis mesomelas</u>	1	0	0												1	0	0			0	0	0
Dingo	<u>Canis familiaris</u>	2	2	0				1	0	1			0	0	1						3	2	0
Arctic Fox	<u>Alopex lagopus</u>	2	2	0									0	1	0						2	1	0
Fennec Fox	<u>Vulpes zerda</u>	1	0	0																	1	0	0
Brown Bear	<u>Ursus arctos</u>	2	3	0									0	1	0	1	0	0			1	2	0
Polar Bear	<u>Thalarchos maritimus</u>	0	1	0	1	1	0						0	1	0						1	1	0
Common Raccoon	<u>Procyon lotor</u>	1	2	0				0	2	1			0	0	1						1	4	0
Coati	<u>Nasua nasua</u>	1	2	0																	1	2	0
Kinkajou	<u>Potos flavus</u>	4	3	0				0	0	1						3	1	0			1	2	1
Small-clawed Otter	<u>Aonyx cinerea</u>	1	1	0																	1	1	0
Striped Skunk	<u>Mephitis mephitis</u>	1	1	0																	1	1	0
Spotted Skunk	<u>Spilogale putorius</u>	1	1	0									1	1	0						0	0	0
African Civet	<u>Viverra civetta</u>	1	0	0																	1	0	0
Blotched Genet	<u>Genetta tigrina</u>	2	2	0									0	1	0						2	1	0
Binturong	<u>Arctictis binturong</u>	1	1	0																	1	1	0
African Banded Mongoose	<u>Mungos mungo</u>	4	4	0																	4	4	0
Meerkat	<u>Suricata suricatta</u>	2	0	0									1	0	0	1	0	0			0	0	0

## MAMMALS

		1			2			3			4			5			6			7			
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK			
		1/1/1984									30 DAYS			OTHER			31/12/1984						
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	
Margay	<u>Felis wiedi</u>	1	1	0				1	0	0											2	1	0
Jungle Cat	<u>Felis chaus</u>	2	3	0				0	0	4	0	0	1			1	2	3			1	1	0
Wildcat (Scottish form)	<u>Felis silvestris</u>	1	2	0				0	0	2	0	0	2								1	2	0
Ocelot	<u>Felis pardalis</u>	1	2	0																	1	2	0
Caracal	<u>Felis caracal</u>	1	1	0				0	0	4						0	0	2			1	1	2
European Lynx	<u>Felis lynx</u>	1	2	0																	1	2	0
Bobcat	<u>Felis rufus</u>	1	0	0																	1	0	0
Serval	<u>Felis serval</u>	1	2	0				0	0	1											1	2	1
Geoffroy's Cat	<u>Felis geoffroyi</u>	2	2	0				1	0	0											3	2	0
Jaguarundi	<u>Felis jaguarundi</u>	1	2	0																	1	2	0
Puma	<u>Felis concolor</u>	1	2	0	0	0	1	0	0	1				0	0	1					1	2	1
Lion (African form)	<u>Panthera leo leo</u>	1	2	0	3	3	0							2	0	0					2	5	0
Lion (Asiatic form)	<u>Panthera leo persica</u>	0	0	0	1	1	0														1	1	0
Tiger (Sumatran form)	<u>Panthera tigris sumatrae</u>	1	0	0																	1	0	0
Tiger (Siberian form)	<u>Panthera tigris altaica</u>	1	1	0																	1	1	0
Leopard (Black form)	<u>Panthera pardus pardus</u>	1	1	0				0	0	2						0	0	2			1	1	0
Leopard (Chinese form)	<u>Panthera pardus japonensis</u>	1	1	0				0	0	1	0	0	1								1	1	0
Clouded Leopard	<u>Neofelis nebulosa</u>	0	0	0	1	1	0														1	1	0
Jaguar	<u>Panthera onca</u>	0	0	0	2	0	0														2	0	0
Cheetah	<u>Acinonyx jubatus</u>	1	1	0	1	0	1							0	0	1					2	1	0

## PINNIPEDIA

Californian Sealion	<u>Zalophus californianus</u>	1	3	0	1	1	0	0	1	0	0	1	0	0	1	0	0				1	4	0
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## PROBOSCIDEA

Indian Elephant	<u>Elephas maximus</u>	1	2	0																	1	2	0
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## PERISSODACTYLA

Przewalski's Horse	<u>Equus przewalskii</u>	1	3	0																	1	3	0
Common Zebra	<u>Equus burchelli</u>	4	8	0	1	0	0	2	0	0			0	1	0	2	0	0			5	7	0
Grevy's Zebra	<u>Equus grevyi</u>	1	1	0												1	1	0			0	0	0
Zebroid (Horse x Zebra)	<u>Equus (hybrid)</u>	1	0	0																	1	0	0

## MAMMALS

		1			2			3			4			5			6			7		
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK		
		1/1/1984									30 DAYS			OTHER						31/12/1984		
	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	
Onager (Persian form)	<u>Equus hemionus</u> <u>onager</u>	2	2	0									1	0	0				1	2	0	
Onager (x bred)	<u>Equus hemionus</u>	0	1	0			1	0	0										1	1	0	
Donkey (domestic)	<u>Equus asinus</u>	0	0	0	2	1	0												2	1	0	
Brazilian Tapir	<u>Tapirus terrestris</u>	4	2	0												2	0	0			2	
Black Rhinoceros	<u>Diceros bicornis</u>	1	0	0	1	1	0														2	
White Rhinoceros	<u>Ceratotherium simum</u>	1	1	0									0	1	0						1	
ARTIODACTYLA																						
Vietnam Pig (domestic)	<u>Sus acrofa</u>	1	4	0									0	1	0	1	3	0	0	0	0	
Collard Peccary	<u>Tayassu tajacu</u>	1	0	0															1	0	0	
Common Hippopotamus	<u>Hippopotamus amphibius</u>	1	1	0															1	1	0	
Llama	<u>Lama glama</u>	1	2	0	0	0	2	1	0	0									2	4	0	
Guanao	<u>Lama guanicoe</u>	2	9	0			3	0	0						1	1	0		4	8	0	
Alpaca	<u>Lama pacos</u>	2	1	0			0	1	0										2	2	0	
Bactrian Camel	<u>Camelus bactrianus</u>	1	0	0	0	0	1								0	0	1		1	0	0	
Arabian Camel (? hybrid)	<u>Camelus dromedarius</u>	1	1	0															1	1	0	
Axis Deer	<u>Cervus axis</u>	8	4	0			1	1	1	0	0	1	2	0	0				7	5	0	
Sika Deer (Formosan form)	<u>Cervus nippon</u>	0	3	0											0	3	0		0	0	0	
Wapiti	<u>Cervus canadensis</u>	3	4	0			0	0	2				0	0	2				3	4	0	
Pere David's Deer	<u>Elaphurus davidianus</u>	4	10	0			2	1	0						1	1	0		5	10	0	
Reindeer	<u>Rangifer tarandus</u>	5	7	0			2	2	1	0	0	1							7	9	0	
Chinese Water Deer	<u>Hydropotes inermis</u>	0	1	0	3	3	0						0	1	0				3	3	0	
Giraffe	<u>Giraffa camelopardalis</u>	0	3	0									0	1	0				0	2	0	
Eland	<u>Taurotragus oryx</u>	4	3	0			2	0	0						1	0	0		5	3	0	
Nilgai	<u>Boselaphus tragocamelus</u>	1	1	0															1	1	0	
Ankole Cattle (domestic)	<u>Bos taurus</u>	1	2	0			0	1	0										1	3	0	
American Bison	<u>Bison bison</u>	4	5	0			2	1	0	0	1	0							6	5	0	
Congo Buffalo	<u>Syncerus caffer nanus</u>	0	0	0	1	1	0												1	1	0	
Gaur	<u>Bos gaurus</u>	1	0	0															1	0	0	
Red Lechwe	<u>Kobus lechwe</u>	2	11	4			0	0	5	0	0	1	0	0	1				4	14	2	
Beisa Oryx	<u>Oryx gazella beisa</u>	1	0	0									1	0	0				0	0	0	
Wildebeeste	<u>Connochaetes taurinus</u>	1	1	0			0	0	1						1	0	0		0	1	1	
Blackbuck	<u>Antelope cervicapra</u>	3	5	0	1	0	0	1	1	1			1	1	0	1	0	0	3	5	1	
Arabian Gazelle	<u>Gazella gazella</u> <u>arabica</u>	5	6	0			2	2	0	1	1	0	3	1	0	0	3	0	3	3	0	
Bagot Goat (domestic)	<u>Capra hircus</u>	1	3	0			1	2	0										2	5	0	
Soay Sheep (domestic)	<u>Ovis aries</u>	0	0	12			0	0	5						0	0	8		0	0	9	
		681			55			174			27			102			70			711		

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## BIRDS

		1			2			3			4			5			6			7		
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK		
		1/1/1984									30 DAYS			OTHER						31/12/1984		
	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	
STRUTHIONIFORMES																						
Ostrich	<u>Struthio camelus</u>	1	1	0			0	0	13	0	0	2			0	0	3		1	1	8	
RHEIFORMES																						
Common Rhea	<u>Rhea americana</u>	0	1	0	1	2	0	0	0	2	0	0	1	0	1	0			1	2	1	
CASUARIIFORMES																						
Emu	<u>Dromaius novaehollandiae</u>	1	1	0	1	0	0												2	1	0	
TINAMIFORMES																						
Chilean Tinamou	<u>Nothoprocta perdicaria</u>	0	0	16			0	0	15	0	0	3	0	0	3	0	0	4	0	0	21	
SPHENISCIFORMES																						
Humboldt's Penguin	<u>Spheniscus humboldti</u>	7	4	5	0	0	8	0	0	6	0	0	5	0	0	1			7	8	9	
Blackfooted Penguin	<u>Spheniscus demersus</u>	4	7	3			0	0	1						4	7	4		0	0	0	
CICONIIFORMES																						
Common Grey Heron	<u>Ardea cinerea</u>	0	0	2									0	0	1	0	0	1	0	0	0	
Little Egret	<u>Egretta garzetta</u>	0	1	0	1	0	0												1	1	0	
Night Heron	<u>Nycticorax nycticorax</u>	3	3	7											0	0	7		3	3	0	
Sacred Ibis	<u>Threskiornis aethiopicus</u>	0	0	9			0	0	4	0	0	2							0	0	11	
Straw-necked Ibis	<u>Threskiornis spinicollis</u>	0	0	6															0	0	6	
Indian White Ibis	<u>Threskiornis</u> <u>melanocephalus</u>	1	1	1															1	1	1	
Chilean Flamingo	<u>Phoenicopterus ruber</u> <u>chilensis</u>	7	13	0									0	0	1				6	12	1	
Caribbean Flamingo	<u>Phoenicopterus ruber</u> <u>ruber</u>	5	3	0	0	0	12						0	0	1				5	3	11	
ANSERIFORMES																						
White-faced Whistling Duck	<u>Dendrocygna viduata</u>	2	2	0	2	2	0												4	4	0	
Fulvous Tree Duck	<u>Dendrocygna bicolor</u>	1	3	1			0	0	3	0	0	3							1	3	1	
Black Swan	<u>Cygnus atratus</u>	1	1	0			0	0	9	0	0	1			0	0	8		1	1	0	

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## BIRDS

		1			2			3			4			5			6			7				
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK				
		1/1/1984									30 DAYS			OTHER						31/12/1984				
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?		
Mute Swan	<u>Cygnus olor</u>	1	1	0																				
Lesser Snow Goose	<u>Anser caerulescens</u>	3	1	2										1	0	0					0	1	0	
Emperor Goose	<u>Anser canagicus</u>	0	2	0										1	0	0					2	1	2	
Pink-footed Goose	<u>Anser fabalis</u> <u>brachyrhynchus</u>	0	0	1																	1	1	0	
Bar-headed Goose	<u>Anser indicus</u>	2	1	0																	0	0	1	
Ross's Snow Goose	<u>Anser rossi</u>	1	1	0				1	1	0											1	1	0	
Barnacle Goose	<u>Branta leucopsis</u>	1	1	0				2	1	0											2	2	0	
Red-breasted Goose	<u>Branta ruficollis</u>	0	0	0				4	4	0											2	2	0	
Hawaiian Goose	<u>Branta sandvicensis</u>	2	1	0				2	2	0											4	3	0	
Cereopsis Goose	<u>Cereopsis novaehollandiae</u>	1	2	0							0	0	1								1	0	0	
Andean Goose	<u>Chloephaga melanoptera</u>	1	1	0							0	0	1								0	1	0	
Common Shelduck	<u>Tadorna tadorna</u>	2	2	0																	1	1	0	
Bahama Pintail	<u>Anas bahamensis</u>	1	3	0																	2	2	0	
Wigeon	<u>Anas penelope</u>	1	1	0																	1	3	0	
Northern Shoveler	<u>Anas clypeata</u>	2	2	0										0	1	0					1	0	0	
Red Shoveler	<u>Anas platalea</u>	3	2	0																	2	2	0	
Laysan Teal	<u>Anas platyrhynchos</u> <u>laysanensis</u>	8	0	0				0	1	0				0	1	0					3	1	0	
Chiloe Wigeon	<u>Anas sibilatrix</u>	2	2	0																	7	0	4	
Ringed Teal	<u>Anas leucophrys</u>	1	1	0							0	0	4								0	0	1	
Tufted Duck	<u>Aythya fuligula</u>	3	3	0							0	0	3								2	2	0	
Rosy-billed Pochard	<u>Netta peposaca</u>	2	2	0																	0	0	3	
Red-crested Pochard	<u>Netta rufina</u>	2	2	0																	3	3	0	
Maned Goose	<u>Chenonetta jubata</u>	2	2	0							0	0	5								2	2	0	
Mandarin Duck	<u>Aix galericulata</u>	2	2	0				1	1	0											2	3	0	
Carolina Duck	<u>Aix sponsa</u>	5	4	0				0	3	0				0	0	7					3	3	0	
White-winged Wood Duck	<u>Cairina scutulata</u>	3	4	0				2	0	0				0	1	0					6	6	0	
Duck (domestic)	<u>Anas platyrhynchos</u>	1	1	0										1	0	0					1	1	0	
		0	0	2				0	0	2											0	0	4	
FALCONIFORMES																								
Andean Condor	<u>Vultur gryphus</u>	1	1	0																				
White-headed Vulture	<u>Trigonoceps occipitalis</u>	0	2	0																		1	1	0
Bateleur Eagle	<u>Terathopius ecaudatus</u>	0	1	0																		0	2	0
Wedge-tailed Eagle	<u>Aquila audax</u>	1	1	0																		0	1	0
																						1	1	0



Red-Crowned Cranes  
*Courtesy of Keith Freeburn, Mel Grundy Photographic Agency*

BIRDS		1	2	3	4	5	6	7
		STOCK	RECEIVED	BORN/H'CH	D.N.S	DEATHS	DISPOSALS	STOCK
		1/1/1984			30 DAYS	OTHER		31/12/1984
		M F Y/?	M F Y/?	M F Y/?	M F Y/?	M F Y/?	M F Y/?	M F Y/?
<b>GALLIFORMES</b>								
Variable Chachalaca	<u>Ortalis motmot</u>	2 0 0				1 0 0		1 0 0
Solater's Crested Curassow	<u>Crax fasciolata solateri</u>	1 2 0						1 2 0
Crested Guan	<u>Penelope purpurascens</u>	2 5 0		0 0 1	0 0 1		0 1 0	2 4 0
Madagascar Partridge	<u>Margaroperdix madagarensis</u>	0 0 0	1 1 0			0 1 0		1 0 0
Roullou Partridge	<u>Rollulus roulroul</u>	0 0 0	1 1 0					1 1 0
Blue Eared-Pheasant	<u>Crossoptilon auritum</u>	0 0 4	0 0 2			0 0 2		0 0 4
Brown Eared-Pheasant	<u>Crossoptilon manchuricum</u>	1 1 0						1 1 0
White Eared-Pheasant	<u>Crossoptilon crossoptilon</u>	1 1 0						1 1 0
Golden Pheasant	<u>Chrysolophus pictus</u>	0 0 0	1 1 0	0 0 19	0 0 11		0 0 8	1 1 0
Grey Peacock-Pheasant	<u>Polyplectron bicalcaratum</u>	0 0 0	1 1 0	1 1 0				2 2 0
Palawan Peacock Pheasant	<u>Polyplectron emphanum</u>	2 1 0	1 1 0	0 0 4	0 0 2	1 1 0		2 1 2
Veillot's Crested Fireback Pheasant	<u>Lophura ignita rufa</u>	1 0 0					1 0 0	0 0 0
Sonnerat's Jungle Fowl	<u>Gallus sonneratii</u>	1 1 0						1 1 0
Common Peafowl	<u>Pavo cristatus</u>	3 5 1	3 2 0	2 4 7	0 0 6	0 0 1	2 2 0	6 9 1
Bantam (domestic)	<u>Gallus sp.</u>	0 0 0	0 0 2					0 0 2
<b>GRUIFORMES</b>								
Red-crowned Crane	<u>Grus japonensis</u>	0 0 0	2 0 0					2 0 0
Sarus Crane	<u>Grus antigone</u>	2 2 0				1 0 0		1 2 0
Demoiselle Crane	<u>Anthropoides virgo</u>	1 1 0						1 1 0
Purple Gallinule	<u>Porphyrio porphyrio</u>	1 1 0				1 0 0		0 1 0
Red and White Crake	<u>Laterallus leucopyrrhus</u>	0 0 4	0 0 2	0 0 1		0 0 3		1 1 2
Sun Bittern	<u>Eurypyga helias</u>	1 1 1				0 0 1		1 1 0
<b>CHARADRIIFORMES</b>								
Grey-headed Gull	<u>Larus cirrocephalus</u>	2 2 0						2 2 0
Southern Stone Curlew	<u>Burhinus magirostris</u>	2 0 0						1 1 0
Blacksmith's Plover	<u>Vanellus armatus</u>	0 0 6				0 0 1		0 0 5
Crowned Plover	<u>Vanellus coronatus</u>	2 1 1		0 0 4	0 0 2			2 1 3
<b>COLUMBIFORMES</b>								
Speckled Pigeon	<u>Columba guinea</u>	0 0 4	0 0 2			0 0 1		0 0 5
Chinese Necklaced Dove	<u>Streptopelia chinensis</u>	1 0 0						1 0 0

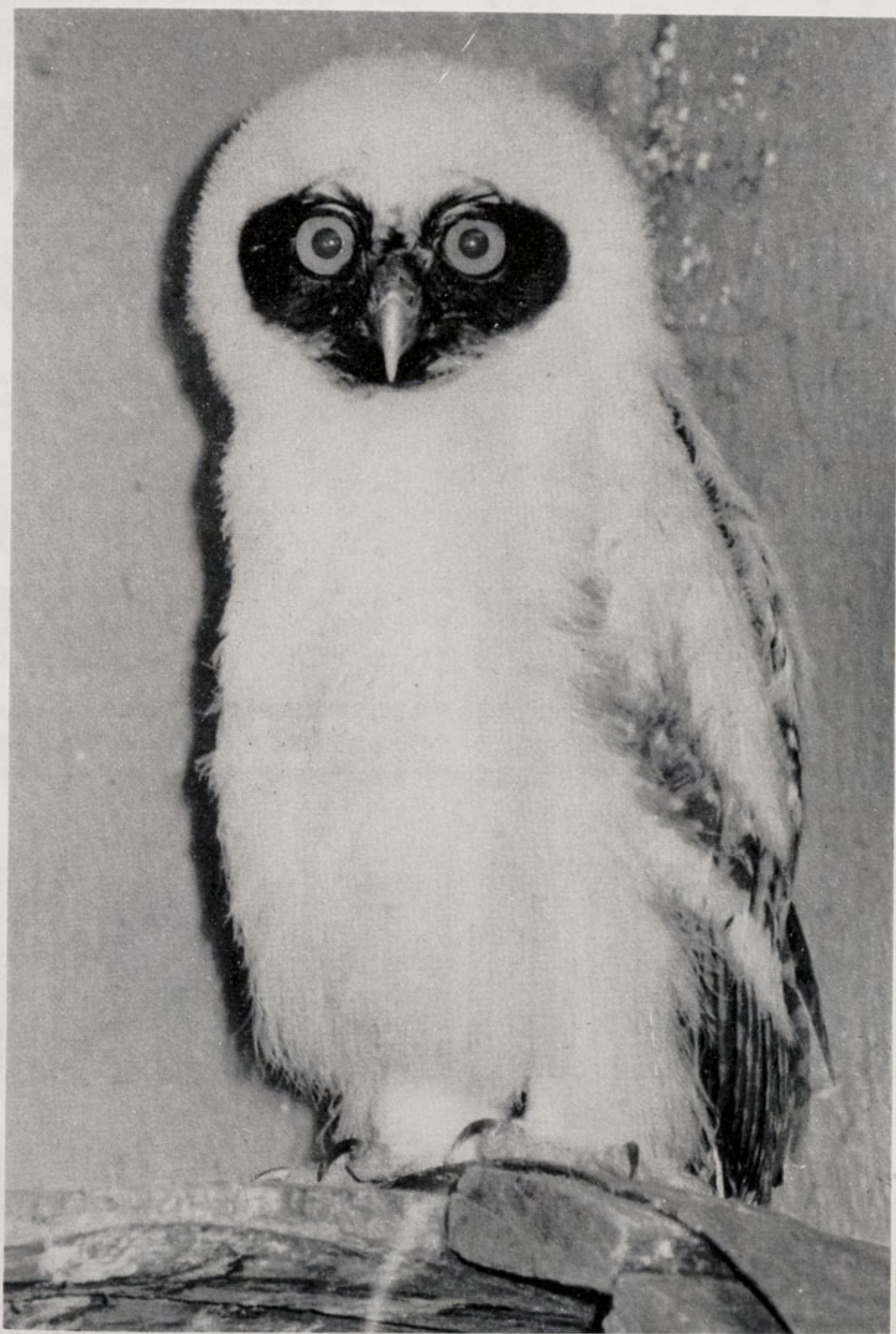
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BIRDS		1	2	3	4	5	6	7
		STOCK	RECEIVED	BORN/H'CH	D.N.S	DEATHS	DISPOSALS	STOCK
		1/1/1984			30 DAYS	OTHER		31/12/1984
		M F Y/?	M F Y/?	M F Y/?	M F Y/?	M F Y/?	M F Y/?	M F Y/?
Laughing Dove	<u>Streptopelia senegalensis</u>	1 1 0						1 1 0
Bar-tailed Cuckoo Dove	<u>Macropygia unchall</u>	0 0 0	1 1 0					1 1 0
Crested Bronzewing Pigeon	<u>Ocyropsis lophotes</u>	0 0 2	0 0 2	0 0 2	0 0 1			1 1 3
Mountain Witch Dove	<u>Geopelia versicolor</u>	0 0 5						0 0 5
<b>PSITTACIFORMES</b>								
Blue-streaked Lory	<u>Eos reticulata</u>	0 0 2				0 0 1	0 0 1	0 0 0
Red Lory	<u>Eos bornea</u>	2 1 0					1 0 0	1 1 0
Scaly-breasted Lorikeet	<u>Trichoglossus chlorolepidotus</u>	0 0 3						0 0 3
Edward's Lorikeet	<u>Trichoglossus haematodus capistratus</u>	0 2 0					0 2 0	0 0 0
Swainson's Lorikeet	<u>Trichoglossus haematodus moluccanus</u>	0 0 5	0 1 0	0 0 1				1 2 4
Weber's Lorikeet	<u>Trichoglossus haematodus weberi</u>	1 1 0						1 1 0
Ornate Lorikeet	<u>Trichoglossus ornatus</u>	1 1 0						1 1 0
Goldie's Lorikeet	<u>Trichoglossus goldiei</u>	1 1 0						1 1 0
Dusky Lory	<u>Pseudeos fuscata</u>	2 2 0				0 1 0	1 0 0	1 1 0
Palm Cockatoo	<u>Probosciger aterrimus</u>	2 1 0						2 1 0
White-tailed Black Cockatoo	<u>Calyptrorhynchus funereus baudini</u>	1 0 0					1 0 0	0 0 0
Moluccan Cockatoo	<u>Cacatua moluccensis</u>	1 1 0						1 1 0
Blue-eyed Cockatoo	<u>Cacatua ophthalmica</u>	4 2 2	2 0 0	0 0 1	0 0 1	1 0 0		6 3 0
Cockatiel	<u>Nymphicus hollandicus</u>	1 5 0					1 5 0	0 0 0
Kea	<u>Nestor notabilis</u>	3 1 0					1 0 0	2 1 0
Red-sided Eclectus Parrot	<u>Eclectus coratus goodsoni</u>	1 1 0		0 0 3	0 0 1		0 0 1	1 1 1
Crimson-winged Parrakeet	<u>Aprosmictus erythropterus</u>	2 1 0					1 0 0	1 1 0
Barraband Parrakeet	<u>Polytelis swainsoni</u>	1 1 0		0 0 1				1 1 1
Lesser Vasa Parrot	<u>Coracopsis nigra nigra</u>	1 2 0	2 1 0			0 1 0		3 2 0
Vernall's Hanging Parrot	<u>Loriculus vernalis</u>	1 1 0						1 1 0
Crimson Rosella	<u>Platycercus elegans</u>	0 0 0	1 1 0					1 1 0
Hooded Parrakeet	<u>Psephotus chrysopsoteris dissimilis</u>	0 0 0	2 2 0					2 2 0
Splendid Parrakeet	<u>Neophema splendida</u>	0 0 0	1 1 0	0 0 6			0 0 6	1 1 0
Senegal Parrot	<u>Poicephalus senegalus</u>	4 1 0	0 0 1				0 0 3	0 0 3
African Grey Parrot	<u>Pittacus erithacus erithacus</u>	0 0 1					0 0 1	0 0 0

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## BIRDS

		1			2			3			4			5			6			7				
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK				
		1/1/1984									30 DAYS			OTHER						31/12/1984				
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?		
Tianeh African Grey Parrot	<u>Psittacus erithacus</u> <u>timneh</u>	0	0	0	0	0	1									0	0	1	0	0	0			
Derbyan Parrakeet	<u>Psittacula derbiana</u>	4	4	0				0	0	2				0	1	0					4	3	2	
Blue & Yellow Macaw	<u>Ara ararauna</u>	2	1	2													2	1	2			0	0	0
Red-fronted Macaw	<u>Ara rubrogenys</u>	2	7	0										1	0	0						1	7	0
Red-masked Conure	<u>Aratinga erythrogastra</u>	3	1	4				0	0	1												3	1	5
Queen of Bavaria Conure	<u>Aratinga guarouba</u>	1	1	0																		1	1	0
Lesser Patagonian Conure	<u>Cyanoliseus patagonus</u>	0	0	20				0	0	4				0	0	1	0	0	4			0	0	19
Maroon-tailed Conure	<u>Pyrrhura melanura</u>	2	2	0																		2	2	0
Slender-billed Parrakeet	<u>Enicognathus leptorhynchus</u>	1	2	11										1	2	1	0	0	7			1	2	0
Quaker Parrakeet	<u>Myiopsitta monachus</u>	0	0	4										0	0	1	0	0	3			0	0	0
Yellow-faced Parrotlet	<u>Forpus xanthops</u>	1	2	9				0	0	3												1	2	12
Yellow-billed Amazon	<u>Amazona collaria</u>	3	1	0	0	1	0	0	0	1	0	0	1	1	0	0						2	2	0
Yellow-fronted Amazon	<u>Amazona ochrocephala</u>	0	0	1	0	0	1										0	0	2			0	0	0
Blue-fronted Amazon	<u>Amazona aestiva</u>	0	0	0	0	1	0															0	1	0
Lilacine Amazon Parrot	<u>Amazona autumnalis</u> <u>lilacina</u>	2	2	0																		2	2	0
Hawk-headed Parrot	<u>Deropitrus accipitrinas</u>	1	1	0																		1	1	0
CUCULIFORMES																								
Grey Go-Away Bird	<u>Crinifer concolor</u>	0	1	0										0	1	0						0	0	0
Hartlaub's Turaco	<u>Tauraco hartlaubi</u>	0	0	2	0	0	2							1	0	2						0	1	0
Schalow's Turaco	<u>Tauraco schalowi</u>	0	0	0	1	1	0															1	1	0
Renauld's Ground Cuckoo	<u>Carpococcyx renauldi</u>	1	1	0																		1	1	0
STRIGIFORMES																								
Barn Owl	<u>Tyto alba</u>	1	1	3													1	1	3			0	0	0
Spotted Eagle Owl	<u>Bubo africanus</u>	1	1	0																		1	1	0
Great Eagle Owl	<u>Bubo bubo</u>	1	1	0	1	1	0															2	2	0
Great Horned Owl	<u>Bubo virginianus</u>	0	2	1																		0	3	0
Fishing Owl	<u>Scotopelia bouvieri</u>	0	1	0																		0	1	0
Spectacled Owl	<u>Pulsatrix perspicillata</u>	2	2	0	1	0	0	0	0	1												3	2	1
Snowy Owl	<u>Nyctea scandiaca</u>	2	1	0	1	1	0	0	0	2							0	0	2			3	2	0
Boobook Owl	<u>Ninox novaeseelandiae</u>	1	1	0																		1	1	0



Young Spectacled Owl  
*Courtesy of Cliff Brett, Mel Grundy Photographic Agency*

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BIRDS		1			2			3			4			5			6			7				
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK				
		1/1/1984									30 DAYS			OTHER						31/12/1984				
	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?			
CAPRIMULGIFORMES																								
Tawny Frogmouth	<u>Podargus strigoides</u>	2	0	0																	2	0	0	
APODIIFORMES																								
Amazilia Hummingbird	<u>Amazilia amazilia</u>	0	0	1											0	0	2				0	0	1	
Red-backed Mousebird	<u>Colius castanotus</u>	0	0	6	0	0	4														0	0	8	
CORACIIFORMES																								
Kookaburra	<u>Dacelo novaeguineae</u>	3	3	1	0	1	0							0	1	0	2	1	0		2	2	0	
Red-billed Hornbill	<u>Tockus erythrorhynchus</u>	0	0	0	0	0	3							0	0	1					0	0	2	
Indian Pied Hornbill	<u>Antracoceros malabaricus</u>	0	1	0													0	1	0		0	0	0	
Great Indian Hornbill	<u>Buceros bicornis</u>	0	1	0	1	0	0														1	1	0	
PICIFORMES																								
Red-headed Barbet	<u>Eubucco bourcierii</u>	0	1	0																		0	1	0
Fire-tufted Barbet	<u>Psilopogon pyrolophus</u>	0	0	0	1	3	0	0	0	2				1	0	1					0	3	1	
Crimson-rumped Toucanet	<u>Aulacorhynchus haematopygus</u>	1	0	0																	1	0	0	
Channel-billed Toucan	<u>Ramphastos vitellinus</u>	0	0	0	1	1	0														1	1	0	
Toco Toucan	<u>Ramphastos toco</u>	0	0	1										0	0	1					0	0	0	
White Woodpecker	<u>Leuconerpes candidus</u>	1	1	0										1	0	0					0	1	0	
PASSERIFORMES																								
Red-eared Bulbul	<u>Pycnonotus locosus</u>	0	0	0	0	0	6							0	0	1					0	0	5	
Fairy Bluebird	<u>Irena puella</u>	0	0	0	2	2	0														2	2	0	
Red-headed Laughing Thrush	<u>Garrulax erythrocephalus</u>	2	1	2										0	0	1					2	1	1	
White-crested Laughing Thrush	<u>Garrulax leucolophus</u>	0	0	6										0	0	1					0	0	5	
Pekin Robin	<u>Leiothrix lutea</u>	0	0	2																	0	0	2	
Silver-eared Mesia	<u>Leiothrix argentauris</u>	0	0	0	0	0	4							0	0	1					0	0	3	
Blue-headed Tanager	<u>Thraupis cyanocephala</u>	0	0	3										0	0	1					0	0	2	
Japanese White-eye	<u>Zosterops japonica</u>	0	0	6										0	0	5					0	0	1	
Black-capped White-eye	<u>Zosterops atricapilla</u>	0	0	0	0	0	10							0	0	7					0	0	3	
Red-cowled Cardinal	<u>Paroria dominicana</u>	0	0	0	0	0	4							0	0	1					0	0	3	

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BIRDS		1			2			3			4			5			6			7				
		STOCK			RECEIVED			BORN/H'CH			D.N.S			DEATHS			DISPOSALS			STOCK				
		1/1/1984									30 DAYS			OTHER						31/12/1984				
	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?			
Wagler's Oropendola	<u>Psarocolius wagleri</u>	0	0	9																		0	0	9
Boat-tailed Grackle	<u>Cassidix mexicanus</u>	1	0	0																		1	0	0
Brown & Yellow Marshbird	<u>Pseudoleistes virescens</u>	0	0	1																		0	0	1
Mexican House Finch	<u>Carpodacus mexicanus</u>	4	4	0			1	0	12	0	0	5	0	0	7							5	4	0
Orange-cheeked Waxbill	<u>Estrilda melpoda</u>	0	0	2	0	0	4							0	0	1					0	0	5	
Red-eared Waxbill	<u>Estrilda troglodytes</u>	0	0	1																		0	0	1
Zebra Finch	<u>Poephila guttata</u>	0	0	19			0	0	13					0	0	8					0	0	24	
Bengalese Finch	<u>Lonchura striata</u>	1	1	0			0	0	3					0	0	1					1	1	2	
Spice Bird	<u>Lonchura punctulata</u>	0	0	6										0	0	1					0	0	5	
Red-billed Buffalo Weaver	<u>Bubalornis niger</u>	0	0	0	1	1	0														1	1	0	
Golden Sparrow	<u>Passer luteus</u>	1	0	0																	1	0	0	
Java Sparrow	<u>Padda oryzivora</u>	0	0	2	0	0	6							0	0	2					0	0	6	
Giant Cowbird	<u>Scapudura oryzivora</u>	1	1	0																	1	1	0	
Baya Weaver	<u>Ploceus philippinus</u>	0	0	3	0	0	1							0	0	1					0	0	3	
Red-billed Weaver	<u>Quelea quelea</u>	0	0	11																	0	0	11	
Napoleon Weaver	<u>Euplectes afer</u>	0	0	0	3	1	0														3	1	0	
Long-tailed Glossy Starling	<u>Lamprolornis caudatus</u>	2	2	0	0	0	1														2	2	1	
Purple Glossy Starling	<u>Lamprolornis purpureus</u>	0	0	0	0	0	4														2	2	0	
Blue-eared Glossy Starling	<u>Lamprolornis chalybaeus</u>	0	0	0	3	0	0														3	0	0	
Cape Glossy Starling	<u>Lamprolornis nitens</u>	0	1	0																	0	1	0	
Superb Starling	<u>Spreo superbus</u>	0	0	2	0	0	7	0	0	6	0	0	6	0	0	1	0	0	1		2	2	3	
Chestnut-bellied Starling	<u>Spreo pulcher</u>	1	1	0										1	1	0					0	0	0	
Hildebrandt's Starling	<u>Spreo hildebrandti</u>	0	0	3	0	0	4	0	0	3	0	0	3	0	0	5					0	0	2	
Spotted-wing Stare	<u>Saroglossa spiloptera</u>	0	1	0																	0	1	0	
Jerdon's Starling	<u>Sturnus burmanicus</u>	1	1	0																	1	1	0	
Rothschild's Mynah	<u>Leucopsar rothschildi</u>	1	1	0	1	0	0														2	1	0	
Common Mynah	<u>Acridotheres tristis</u>	0	0	0	1	1	0	0	0	5	0	0	1								1	1	4	
Jungle Mynah	<u>Acridotheres fuscus</u>	0	0	1																	0	0	1	
White-vented Mynah	<u>Acridotheres javanicus</u>	0	0	2	0	0	1														0	0	3	
Hill Mynah	<u>Gracula religiosa</u>	0	0	2	0	0	2										0	0	1		0	0	3	
Coleto Mynah	<u>Sarcops calvus</u>	0	0	0	0	0	4							0	0	1					1	2	0	
Black-naped Oriole	<u>Oriolus chinensis</u>	0	0	0	1	1	0														1	1	0	
Raquet-tailed Treepie	<u>Crypsirina temia</u>	0	0	0	0	0	2							0	0	2					0	0	0	
Occipital Blue Pie	<u>Uroclasa erythrochyncha occipitalis</u>	1	3	0	1	0	0														2	3	0	
San Blas Jay	<u>Cisilopha sanblasiana</u>	1	1	2			0	0	5	0	0	2	0	0	4						1	1	1	
Green Jay	<u>Cyanocorax yocaa</u>	0	0	0	2	2	0														2	2	0	
Red-billed Chough	<u>Pyrrhocorax pyrrhocorax</u>	0	0	0	0	0	4														0	0	4	
		642			215			199			74			112			130			740				



REPTILES

		1 STOCK 1/1/1984			2 RECEIVED			3 BORN/H'CH			4 D.N.S 30 DAYS			5 DEATHS OTHER			6 DISPOSALS			7 STOCK 31/12/1984		
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?
Californian Mountain King Snake	<u>Lampropeltis zonata</u>	1	1	0																1	1	0
Black Rat Snake	<u>Elaphe obsoleta</u>	1	1	2									0 1 0							1	0	2
Baird's Rat Snake	<u>Elaphe obsoleta bairdi</u>	0	0	2																0	0	2
Russian Rat Snake	<u>Elaphe schrenkii</u>	1	3	0										0	3	0	1	0	0	0	0	0
Corn Snake	<u>Elaphe guttata</u>	2	1	0				0	0	4				2	1	0				0	0	4
Brown Tree Snake	<u>Boiga irregularis</u>	4	0	0																4	0	0
Indian Cobra	<u>Naja naja</u>	1	1	0	0	1	0													1	2	0
Green Mamba	<u>Dendroaspis angusticeps</u>	1	1	0																1	1	0
Cerastes Viper	<u>Cerastes cerastes</u>	1	2	0									0 0 1	0	0	1	0	0	1	0	1	0
Gaboon Viper	<u>Bitis gabonica</u>	1	1	0																1	1	0
Emerald Pit Viper	<u>Trimeresurus aurethroalmerus</u>	0	1	0																0	1	0
Bamboo Pit Viper	<u>Trimeresurus albolabris</u>	1	1	5																1	1	5
Cantil Moccasin	<u>Akistrodon bilineata</u>	2	2	0									0 1 0							2	1	0
Western Diamond-backed Rattlesnake	<u>Crotalus atrox</u>	0	1	5									0 0 1							0	1	4
Pygmy Rattlesnake	<u>Sistrurus miliaris</u>	2	1	0																2	1	0
CROCODYLIA																						
Mississippi Alligator	<u>Alligator mississippiensis</u>	2	1	0																2	1	0
Broad-fronted Crocodile	<u>Osteolaemus tetraspis</u>	2	1	0																2	1	0
Johnston's Crocodile	<u>Crocodylus johnstoni</u>	1	1	0																1	1	0
		285			130			91			1			34			85			386		

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AMPHIBIA

		1 STOCK 1/1/1984			2 RECEIVED			3 BORN/H'CH			4 D.N.S 30 DAYS			5 DEATHS OTHER			6 DISPOSALS			7 STOCK 31/12/1984		
		M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?	M	F	Y/?
Australian Tree Frog	<u>Litoria caerulea</u>	5	5	0										2	0	0	1	0	0	2	5	0
Cuban Tree Frog	<u>Hyla septentrionalis</u>	0	0	3												0 0 3				0	0	0
Brazilian Tree Frog	<u>Hyla rubra</u>	0	0	0	0	0	1													0	0	1
American Green Tree Frog	<u>Hyla cinerea</u>	0	0	0	0	0	4							0	0	1				0	0	3
Golden Tree Frog	<u>Rhacophorus sp</u>	0	0	2																0	0	2
Argentine Horned Frog	<u>Ceratophrya ornata</u>	2	1	0																2	1	0
Asian Horned Frog	<u>Megophrys nasuta</u>	0	0	0	0	0	4							0	0	1				0	0	3
Poison-arrow Frog	<u>Dendrobates bistrionicus</u>	0	0	10										0	0	10				0	0	0
Poison-arrow Frog	<u>Dendrobates azureus</u>	0	0	0	0	0	6													0	0	6
Poison-arrow Frog	<u>Dendrobates auratus</u>	0	0	0	0	0	10							0	0	8				0	0	2
Poison-arrow Frog	<u>Phyllobates bicolor</u>	0	0	0	0	0	10							0	0	10				0	0	0
Poison-arrow Frog	<u>Phyllobates trivittatus</u>	0	0	0	0	0	15							0	0	15				0	0	0
Nigerian Clawed Frog	<u>Xenopus tropicalis</u>	0	0	5																0	0	5 Aq
South African Clawed Frog	<u>Xenopus laevis</u>	0	0	0	0	0	2													0	0	2 Aq
Dwarf Aquatic Frog	<u>Hymenochirus boettgeri</u>	0	0	6																0	0	6 Aq
Fire-belly Toad	<u>Bombina orientalis</u>	0	0	0	0	0	6													0	0	6
Axolotl (black form)	<u>Amblystoma mexicanum</u>	0	0	9										0	0	1				0	0	8 Aq
Axolotl (white form)	<u>Amblystoma mexicanum</u>	0	0	3				0	0	10										0	0	13 Aq
Italian Crested Newt	<u>Triturus cristatus</u>	0	0	1																0	0	1 Aq
Japanese Fire-bellied Newt	<u>Cynops pyrrhogaster</u>	0	0	3				0	0	9										0	0	12 Aq
		55			58			19			0			48			4			80		

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\* indicates that stock deposited by HM Customs is included in the figure given. Aq indicates species kept by the Aquarium.

FISH

<u>Acipenseridae</u>		
Sterlet	( <u>Acipenser ruthenus</u> )	3
Mississippi Paddlefish	( <u>Polyodon spathula</u> )	3
<u>Osteoglossidae</u>		
South American Arowana	( <u>Osteoglossum bicirrhosum</u> )	8
Asiatic Arowana	( <u>Scleropages formosus</u> )	1
<u>Gymnotidae</u>		
Banded Knife Fish	( <u>Gymnotus carapo</u> )	1
<u>Notopteridae</u>		
African Knife Fish	( <u>Xenomystus nigri</u> )	10
Clown Knife Fish	( <u>Notopterus chitala</u> )	1
<u>Sternarchidae</u>		
Black Ghost Knife Fish	( <u>Apteronotus albifrons</u> )	2
<u>Mormyriadae</u>		
Longnosed Elephant Trunkfish	( <u>Gnathonermus petersi</u> )	4
<u>Anguillidae</u>		
Common Eel	( <u>Anguilla anguilla</u> )	2
<u>Polypteridae</u>		
Birchirs	( <u>Polypterus senegalis</u> )	3
<u>Characidae</u>		
Red-eyed Tetra	( <u>Moenkhausia sanctae filomenae</u> )	1
Black Widow Tetra	( <u>Gymnocorymbus ternetzi</u> )	17
Glowlight Tetra	( <u>Hemigrammus erythrozonus</u> )	20
Neon Tetra	( <u>Paracheirodon innesi</u> )	14
Lemon Tetra	( <u>Hyphessobrycon pulchripinnis</u> )	3
	( <u>Pyrrhulina stoli</u> )	16
Bucktoothed Tetra	( <u>Exodon paradoxus</u> )	1
Emperor Tetra	( <u>Nematobrycon palmeri</u> )	24
Rosy Tetra	( <u>Hyphessobrycon bentosi</u> )	22
Blind Cave Fish	( <u>Astynax fasciatus mexicanus</u> )	25
Cardinal Tetra	( <u>Cheirodon axelrodi</u> )	43
Red-eyed Characin	( <u>Arnoldichthys spilopterus</u> )	5
Long-finned Characin	( <u>Alestes longipinnis</u> )	16
Congo Tetra	( <u>Phenacogrammus interruptus</u> )	26
Rummy-nosed Tetra	( <u>Hemigrammus rhodostomus</u> )	20
Bloodfin Tetra	( <u>Aphyocharax anisiti</u> )	24
Piranha	( <u>Rooseveltiella nattereri</u> )	1
Black Neon Tetra	( <u>Hyphessobrycon herbertaxelrodi</u> )	4
Spraying Characin	( <u>Copeina arnoldi</u> )	2
Platinum Tetra	( <u>Gephyrocharax atracaudatus</u> )	1

Bleeding Heart Tetra	( <u>Hyphessobrycon rubrostigma</u> )	10
Flame Tetra	( <u>Hyphessobrycon flammeus</u> )	8
Black-line Tetra	( <u>Hyphessobrycon scholzei</u> )	3
X-ray Fish	( <u>Pristella riddlei</u> )	1
Black Phantom Tetra	( <u>Megalamphodus megalopterus</u> )	3
Red Phantom Tetra	( <u>Megalamphodus sweglesi</u> )	2
<u>Anostomidae</u>		
Marbled Headstander	( <u>Abramites microcephalus</u> )	11
Striped Anostomus	( <u>Anostomus anostomus</u> )	15
Three Spot Anostomus	( <u>Anostomus trimaculatus</u> )	1
Pellegrin's Leporinus	( <u>Leporinus pellegrini</u> )	6
<u>Hemiodontidae</u>		
Golden Pencil Fish	( <u>Nannostomus anomalus</u> )	12
<u>Citharinidae</u>		
Six Barred Distichodus	( <u>Distichodus sexfaciatus</u> )	1
<u>Gasterapelecidae</u>		
Marbled Hatchetfish	( <u>Carnegiella strigata</u> )	2
Silver Hatchetfish	( <u>Gasteropelecus sternicla</u> )	4
<u>Cyprinidae</u>		
Bream	( <u>Abramis brama</u> )	2
Mirror Carp	( <u>Cyprinus carpio</u> )	15
Golden Orfe	( <u>Idus idus</u> )	11
Golden Rudd	( <u>Scardinius erythrophthalmus</u> )	5
Tench	( <u>Tinca tinca</u> )	1
Goldfish (various)	( <u>Carassius auratus</u> )	37
Koi Carp	( <u>Cyprinus carpio</u> )	14
Silver Shark	( <u>Balantiocheliu melanopterus</u> )	1
Zebra Danio	( <u>Brachydanio rerio</u> )	50
Red-tailed Black Shark	( <u>Labeo bicolor</u> )	8
Hi-goi Carp	( <u>Cyprinus carpio</u> )	7
Checker Barb	( <u>Carpoeta oligolepis</u> )	2
Rosy Barb	( <u>Puntius conchonus</u> )	18
Cummings Barb	( <u>Barbus cumingi</u> )	24
Striped Barb	( <u>Puntius lineatus</u> )	1
Filament Barb	( <u>Puntius filamentosus</u> )	1
Spanner Barb	( <u>Barbodes lateristriga</u> )	1
Black Ruby Barb	( <u>Puntius nigrofasciatus</u> )	9
Scissor-tail Rasbora	( <u>Rasbora trilineata</u> )	2
Tiger Barb	( <u>Capoeta tetrazona</u> )	5
Golden Barb	( <u>Puntius sachsi</u> )	24
Tinfoil Barb	( <u>Barbodes schwanefeldi</u> )	4
Red-tailed Scissor Tail	( <u>Rasbora caudimaculata</u> )	13
Flying Fox	( <u>Epalzeorhynchus kallopterus</u> )	6
Elegant Rasbora	( <u>Rasbora lateristriata elegans</u> )	16
Glowlight Rasbora	( <u>Rasbora pauciperforata</u> )	10
Red-tailed Rasbora	( <u>Rasbora borapetensis</u> )	9
<u>Gyrinocheilidae</u>		
Sucking Loach	( <u>Gyrinocheilius aymonieri</u> )	40

<u>Cobitidae</u>		
Skunk Botia	( <u>Botia horae</u> )	10
<u>Centropomidae</u>		
Indian Glassfish	( <u>Chandra ranga</u> )	3
<u>Nandidae</u>		
Dwarf Chameleon Fish	( <u>Badid badis</u> )	3
<u>Cichlidae</u>		
Oscar or Marbled Cichlid	( <u>Astronotus ocellatus</u> )	4
Texas Cichlid	( <u>Cichlasoma cyanoguttatum</u> )	3
Convict Cichlid	( <u>Cichlasoma nigrofasciatum</u> )	6
Albino Convict Cichlid	( <u>Cichlosoma nigrofasciatum</u> )	4
Banded Cichlid	( <u>Cichlosoma severum</u> )	3
Blue-eyed Cichlid	( <u>Cichlosoma spilurum</u> )	2
Red Devil Cichlid	( <u>Cichlosoma erythroaeum</u> )	14
Angel Fish	( <u>Pterophyllum scalare</u> )	13
Blue Discus	( <u>Symphysodon aequifasciata haraldi</u> )	2
Heckel Discus	( <u>Symphysodon discus</u> )	2
Green Discus	( <u>Symphysodon a aequifasciata</u> )	5
Burton's Mouthbrooder	( <u>Haplochromis burtoni</u> )	24
	( <u>Haplochromis venistratus</u> )	20
Jewel Cichlid	( <u>Hemichromis bimaculatus</u> )	11
Maria's Tilapia	( <u>Tilapia maria</u> )	7
Mozambique Mouthbrooder	( <u>Saratherodon mossambicus</u> )	1
Rainbow Cichlid	( <u>Herotilapia multispinosa</u> )	1
Livingstone's Mbuna	( <u>Pseudotropheus livingstoni</u> )	30
Ocellated Cichlid	( <u>Cichla ocellaris</u> )	1
Fire-mouth Cichlid	( <u>Cichlasoma meeki</u> )	2
Rainbow Cichlid	( <u>Pelvicachromis pulcher</u> )	3
Frontosa	( <u>Cyphotilapia frontosa</u> )	9
<u>Eleotridae</u>		
Chameleon Goby	( <u>Hyperselectris guntheri</u> )	5
Broad-headed Sleeper Goby	( <u>Dormitator latifrons</u> )	1
African Goby	( <u>Eleotris sp</u> )	2
Rainbow Goby		1
<u>Anabantidae</u>		
Comb-tailed Paradise Fish	( <u>Belontia signata</u> )	22
Pearl Gourami	( <u>Trichogaster leerii</u> )	1
Moonlight Gourami	( <u>Trichogaster microlepis</u> )	4
Three-spot Gourami	( <u>Trichogaster trichopterus</u> )	14
Tail-spot Climbing Perch	( <u>Ctenopoma kingsleyae</u> )	2
Croaking Gourami	( <u>Trichopsis vittatus</u> )	4
Paradise Fish	( <u>Macropodus opercularis</u> )	8
<u>Atherinidae</u>		
Australian Rainbow Fish	( <u>Melanotaenia sp</u> )	17
Celebes Rainbow Fish	( <u>Telmatherima ladigesii</u> )	18
Australian Rainbow Fish	( <u>Melanotaenia maccullochi</u> )	20

<u>Bagridae</u>		
Bumblebee Catfish	( <u>Leiocassis poecilopterus</u> )	3
<u>Chacidae</u>		
Frogmouth Catfish	( <u>Chaca chaca</u> )	1
<u>Schilbeidae</u>		
Congo Catfish	( <u>Etropiella debauwi</u> )	17
<u>Mochokidae</u>		
Upside-down Catfish	( <u>Synodontis sp</u> )	8
Polka-dot Upside-down Catfish	( <u>Synodontis angelicus</u> )	1
<u>Pimelodidae</u>		
Catfish	( <u>Pimelodus pictus</u> )	4
Shovel-nosed Catfish	( <u>Sorubim lima</u> )	2
<u>Malapteruridae</u>		
Electric Catfish	( <u>Malapterus electricus</u> )	1
<u>Callichthyidae</u>		
Bronze Catfish	( <u>Corydoras aeneus</u> )	8
Albino Bronze Catfish	( <u>Corydoras aeneus</u> )	4
Peppered Catfish	( <u>Corydoras paleatus</u> )	20
Porthole Catfish	( <u>Hoplosternum littorale</u> )	1
	( <u>Corydoras metae</u> )	2
Arched Corydoras	( <u>Corydoras arcuatus</u> )	5
	( <u>Corydoras bondi</u> )	4
<u>Loricasiidae</u>		
Plecostomus Catfish	( <u>Hypostomus plecostomus</u> )	30
Bristle-nosed Plecostomus	( <u>Xenocara sp</u> )	12
Clown Plecostomus	( <u>Plecostomus sp</u> )	14
Royal Plecostomus	( <u>Panaque nigrolinatus</u> )	1
<u>Cyprinodontidae</u>		
Guppy	( <u>Lebistes reticulatus</u> )	8
Tuxedo Swordtail	( <u>Xiphophorus helleri</u> )	24
Green Swordtail	( <u>Xiphophorus helleri</u> )	80
Red Swortail	( <u>Xiphophorus helleri</u> )	2
Red Wagtail Platy	( <u>Xiphophorus maculatus</u> )	75
Yellow-belly Live Bearer	( <u>Girardinus falcatus</u> )	100
<u>Goodeidae</u>		
Butterfly Goodeid	( <u>Ameca splendens</u> )	60
	( <u>Ilydon xantusi</u> )	15
	( <u>Chapalichthys pardalis</u> )	10

<u>Doradidae</u>		
Talking Catfish	( <u>Doras hancocki</u> )	1
Spotted Talking Catfish	( <u>Doras pectinifrons</u> )	2
Striped Talking Catfish	( <u>Platydoras costatus</u> )	2
Driftwood Catfish	( <u>Auchenipterichthys thoracactus</u> )	20
Two-spot Catfish	( <u>Mystus micracanthus</u> )	2
<u>Monodactylidae</u>		
Finger Fish	( <u>Monodactylus argenteus</u> )	3
<u>Potamotrygonidae</u>		
Fresh-water Stingray	( <u>Potamotrygon sp</u> )	4
<u>Dipnoi</u>		
African Lung Fish	( <u>Protopterus annectens</u> )	1
South American Lun Fish	( <u>Lepidosiren paradoxa</u> )	1
<u>Hemiramphidae</u>		
Halfbeak	( <u>Dermogenys pusillus</u> )	2
<u>Belonidae</u>		
Asian Garfish	( <u>Xenetodon cancila</u> )	3
<u>Ophichthyidae</u>		
Black Spotted Snake Eel	( <u>Myrichthys sp</u> )	1
<u>Muraenidae</u>		
Snowflake Moray Eel	( <u>Echidna nebulosa</u> )	1
<u>Balistidae</u>		
Picasso Triggerfish	( <u>Rhinecanthus aculeatus</u> )	1
<u>Pomacentridae</u>		
Common Clown Fish	( <u>Amphiprion ocellaris</u> )	3
Tomato Clown Fish	( <u>Amphiprion frenatus</u> )	5
Saddle Clown Fish	( <u>Amphiprion polymnus</u> )	1
Yellow-tailed Blue Damsel Fish	( <u>Pomacentrus melanochir</u> )	2
Fire Clown Fish	( <u>Amphiprion ephippium</u> )	2
Surge Damsel Fish	( <u>Glyphidodontops eucopomus</u> )	2
Yellow-finned Clown Fish	( <u>Amphiprion clarkii</u> )	2
Black-tailed Humbug Damsel Fish	( <u>Dascllus melanurus</u> )	1
Yellow-tailed Blue Damsel Fish	( <u>Abudedef cyaneus</u> )	5
<u>Diodontidae</u>		
Spiny Puffer Fish	( <u>Chilomycterus antennatus</u> )	1
<u>Acanthuridae</u>		
Regal Tang	( <u>Paracanthurus hepatus</u> )	2

Clown Surgeon Fish	( <u>Acanthurus lineatus</u> )	1
Yellow Tang	( <u>Zebrasoma flavescens</u> )	1
Sailfin Tang	( <u>Zebrasoma veliferum</u> )	1
Chevron Tang	( <u>Ctenochaetus hawaiiensis</u> )	1
Achilles Tang	( <u>Acanthurus achilles</u> )	1
Moorish Idol	( <u>Zanclus canescens</u> )	1
Gold-rimmed Tang	( <u>Acanthurus japonicus</u> )	1
<u>Monacanthidae</u>		
Long-nosed File Fish	( <u>Oxymonacanthus longirostris</u> )	1
<u>Ostraciidae</u>		
Cowfish	( <u>Lactoria cornuta</u> )	2
<u>Callionyidae</u>		
Psychedelic Fish	( <u>Synchiropus picturatus</u> )	1
<u>Lutjanidae</u>		
Treadfin Snapper	( <u>Lutjanus nematophorus?</u> )	1
<u>Gobiidae</u>		
Green Gobiodon	( <u>Gobiodon sp</u> )	5
<u>Pomacanthidae</u>		
Queen Angelfish	( <u>Holocanthus ciliaris</u> )	1
<u>Chaetodontidae</u>		
Whimble Butterfly Fish	( <u>Hemiochus acuminatus</u> )	1
Copperband Butterfly Fish	( <u>Chelmon rostratus</u> )	1
Pearscale Butterfly Fish	( <u>Chaetodon chrysurus</u> )	1
Butterfly Fish	( <u>Chaetodon sp</u> )	1
<u>Labridae</u>		
Bi-colour Wrasse	( <u>Hemigymnus melapterus</u> )	1
<u>Scorpaenidae</u>		
Sailfin Leaf Fish	( <u>Taenionotus triancanthus</u> )	1
Scorpion Fish	( <u>Pterios volitans</u> )	1
<u>Apogonidae</u>		
Cardinal Fish	( <u>Apogon orbicularis</u> )	3

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Number of Species = 184

Number of Specimens = c 1619

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INVERTEBRATES

Coelenterates

Curlyque Anemone	( <u>Bartholomaya annulata</u> )	2	Aq
Beadlet Anemone	( <u>Actina equina</u> )	40	Aq
Sea Anemone	( <u>Stoichactis sp</u> )	1	Aq
Tube Anemone	( <u>Cerianthus membranaceus</u> )	1	Aq
Sea Anemone	( <u>Radianthus malu</u> )	3	Aq

Crustacea

Banded Coral Shrimp	( <u>Stenopus hispidus</u> )	2	Aq
Cleaner Shrimp	( <u>Lysmata grabhami</u> )	29	Aq

Myriapods

Giant Asian Millipede	( <u>Spirostrptida sp</u> )	4	TH
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Insecta

Rhinoceros Horned Beetle	( <u>Scarabidae family</u> )	7	TH
Hissing Cockroach	( <u>Gromphadorhina portentosa</u> )	12	TH
African Field Cricket	( <u>Gryllus bimaculatus</u> )	c20	TH
Stick Insect	( <u>Pharnacia sp</u> )	3	TH
Vietnamese Stick Insect	( <u>Baculum extradentatum</u> )	7	TH
Praying Mantis	( <u>Sphodromantia centralis</u> )	1	TH

Arachnida

Red-kneed Tarantula	( <u>Eurypelma smithii</u> )	3	TH
Bird-eating Spider	( <u>Xenesthis monstrosa</u> )	3	TH
Emperor Scorpion	( <u>Pandinus imperator</u> )	4	TH

Mollusca

Giant African Land Snails	( <u>Achatina fulica</u> )	6	TH
Lesser Octopus	( <u>Eledone cirrhosa</u> )	2	Aq

Echinoderms

Slate-pencil Sea Urchin		2	Aq
Common Star Fish	( <u>Asterias rubens</u> )	3	Aq
Red Sea Star Fish	( <u>Protoreaster lincki</u> )	1	Aq
Blue Spotted Sea Urchin		2	Aq

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Number of Species = 23

Number of Specimens = c 158

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KEY: Aq = Exhibited in Aquarium,

TH = Exhibited in Tropical House

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