

# CHEZ NOUS



CHESTER ZOO NEWS

SUMMER 1987



## Editorial

As usual, there has been a great deal of competition for space in the summer edition of *Chez Nous*, but we have managed to bring you as up-to-date as possible with happenings at the Zoo over the past few months.

Many Members have enquired about how the young Orang "Subis" is coming along. She has been on show in the Monkey House now for several months, and adores the attention she receives there. Her Keeper, Neil Spooner, was working in the Ape House at the time she was born and then, a couple of months later, was asked to become the Section Head at the Monkey House, although—as you will see from the article Neil has written—"Subis" is starting to spend some time each day in the Ape House.

It is always sad to have to report the death of one of the Zoo's characters, and Niall Ormerod has written an obituary for one of his oldest charges, the Chimpanzee "Bolden", who certainly made the most of his time at the Zoo. However, on a much brighter note, Niall has also documented what we believe to be a "first" in primate management, and that is the reintroduction of the infant Chimp "Sarah" to her mother "Halfpenny", after a serious bout of illness during the winter.

Junior Members will (I hope) be excited to see the list of events arranged for them for the forthcoming year. We have topped over 500 Junior Members now, and the Club goes from strength to strength, I am glad to say. I hope, too, that Senior Members will enjoy their trip to Twycross, arranged for September. I gather that the Director of Twycross Zoo, Miss Molly Badham, has agreed to show our Members around her collection, which is well worth a visit.

An extremely exciting piece of news for Members is that Gerald and Lee Durrell will be visiting Chester on 21st October, 1987. Full details of the visit will be issued later, but this will certainly be a date to book into your diaries if you would like to meet and listen to major personalities who have done so much for zoos and conservation worldwide.

The 1987 season is just about to move into top gear now, with the schools breaking-up and the summer sunshine appearing at last. Visitor numbers are significantly up on the same time last year, so we hope to maintain this advantage (dare one say even gain some more?) as the season progresses.



"Halfpenny", "Sarah" and "Cleo"

Chris Vere

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THE NORTH WEST GROUP OF THE

**Fauna & Flora  
Preservation Society**

**F.F.P.S.  
North West**

**Autumn Programme**

**Friday, 18th September, 1987**

**"IN THE SHADOW OF FUJISAN"**

AN EVENING OF JAPANESE WILDLIFE

**Friday, 16th October, 1987**

**"WILDLIFE OF THE FALKLANDS"**

- Meetings start at 7.30 p.m. (Doors open 7.00 p.m.).
- Tickets £3.50, to include a light buffet and wine. Please book tickets in advance from Penny Rudd, c/o Chester Zoo. (Some tickets available at the door).
- Meetings will be held in the Russell Allen Lecture Hall, Chester Zoo.

### Editorial Board

Penny Rudd ..... *Editor*  
Dr. Michael Brambell ..... *Director*

### Cover Photo:

"Halfpenny" with baby "Sarah" at Easter, when they had been reunited  
*Courtesy of Ken Evans, Chester Chronicle*

## "Bolden"

We are very sad to have to report the death of our oldest male Chimpanzee, "Bolden". He suffered a stroke on the night of Saturday, 30th May, 1987, and died the following Monday morning, 1st June. He was not only the oldest male in the collection at Chester, but the oldest male in the country.

will not maintain the dominant position for too long, as "Bolden's" oldest son—"Wilson", who is 19 years old—is starting to make his move to usurp "Boris". Although "Wilson" is a little younger, and quite a bit smaller than "Boris", he has a close ally in "Nicky", aged 18, our largest Chimp, who could be the deciding factor when it comes to a showdown with "Boris".

"Bolden" sired many offspring during his days at



Courtesy of Nigel Hillier

"Bolden" arrived at Chester on 3rd May, 1955, aged 4½ years, from Sierra Leone, West Africa. Along with "Prince", who died in 1981 aged 30 years, and our two old females, "Meg", who is 40 years old, and "Babu", who is 39 years old, and who both remain at Chester, "Bolden" formed the nucleus of our group at Chester. These four provided the strength, wisdom and experience needed in a successful group.

"Bolden" had a very strong character and a unique personality. He adored the youngsters and would play with them for as long as they wanted. He also had a tough side to his character. He made sure that our 11-year-old male "Friday" did not get above his station, and kept 21-year-old "Boris" as the second most dominant Chimp for years. Last summer, as old age started to catch up with him, "Bolden" relinquished his dominance, which was quickly seized by "Boris". It is probable that "Boris"

Chester. Still remaining in our group are "Wilson", "Mandy", who is ten years old, and his grand-daughter, "Rosie", aged 14, who has had youngsters of her own. Further afield, in Perth, Australia, is his 13-year-old son "Jamie"; in Northern Ireland is 12-year-old "Digby"; and Colwyn Bay have just been given his three-month-old grand-daughter "Kutu", who was born to "Mandy", and, most unfortunately, is having to be hand-reared.

As far as his attitude towards people was concerned, you certainly could not say that "Bolden" was the friendliest Chimp. He would as soon spit in your eye as give you a friendly greeting. In fact, a nickname frequently used by his keepers for him was "Grumpy". I think that it was because of his indifference towards people, his cocky attitude, always trying to boost his own ego, and his sheer bravado which gave him such a unique character.

# Reintroduction

## OF INFANT CHIMPANZEE "SARAH" TO HER MOTHER, "HALFPENNY"

"Halfpenny" arrived at Chester Zoo, together with her half-sister, "Farthing", on 16th September, 1984, from the Welsh Mountain Zoo, Colwyn Bay, where she was born on 20th May, 1974. The two Chimps came to Chester on breeding loan, and settled into our group reasonably quickly, and, by the time "Halfpenny" gave birth, they were well integrated. "Halfpenny's" baby was born on the evening of 15th October, 1986, and was duly called "Sarah".

Early in 1987, quite a few of the Chimps, including "Sarah", had developed very bad colds. Vibramycin was prescribed and administered to them, but, as "Sarah" was too young to take it directly, the drug was given to "Halfpenny" in the hope that some would be passed to "Sarah" via her mother's milk. It is always the very young and the elderly who suffer most in these situations, and, on 15th February, we lost an infant male called "Benson". The *post mortem* report revealed acute bronchial pneumonia. "Sarah" was also very poorly that day, and the decision was made to remove her from "Halfpenny". This was quickly done, with "Halfpenny" being tranquilised. "Sarah" was examined by the Vet and given an antibiotic injection of Clamoxil. I took her home that night and kept her in a cardboard box, wrapped in woollens and placed in an incubator set at 73 degrees Fahrenheit. She was extremely weak, gulping for air; her breathing was very noisy and rattling, and she had an acute nasal discharge. During the night, I managed to persuade her to accept a little milk (SMA White Top) from a syringe.

"Sarah" was still alive next morning, but so seriously ill that she showed no signs of stress during handling. She was brought back into the Zoo in her incubator and was again examined by the Vet, Mr. Derek Lyon. He gave her little chance of survival, but arranged for some oxygen to be brought down. This was given to her in 30-second bursts every two hours. She was also given an injection of a half-c.c. of Amoxycillin. During the day, she managed to take 11½ ounces of milk from a syringe. "Halfpenny" had recovered well from being immobilised, but was kept by herself in one of the sleeping areas.

The next day, 17th February, Sarah was given another injection. Her breathing seemed a little easier, but it was still very noisy. Fortunately, she showed no aversion to being handled, or any distress or fear about being separated from her mother. There was no real change in her condition until Thursday 19th, when she had enough strength to take her milk from a bottle, sucking very well. "Halfpenny" was still separated from the rest of the Chimps and was being given extra drinks to try to ensure that her milk did not dry up. The Vet felt that "Sarah's" condition had improved enough for her to be taken and shown to her mother that afternoon. As soon as "Halfpenny" saw her, her hands shot through the mesh on the front of the bed and she was whimpering and screaming frantically for her baby to be returned. Unfortunately, "Sarah's" health had not improved enough for this to be done.

On the following day—Friday—we stopped giving oxygen to "Sarah", as her breathing was much smoother

and easier, although still a little noisy. She was given her daily Amoxycillin injection and taken to see "Halfpenny" again. "Halfpenny's" reaction was the same as the day before, but, unfortunately, "Sarah" showed very little interest in her mother. She seemed more interested in myself and her other Keeper, Tim Haywood. "Sarah's" improvement continued the next day; her breathing was quieting down, her nose had stopped running, she was feeding well and kept trying to get out of her box in the incubator. "Halfpenny" still begged for her when she was taken to see her, but there was no response from "Sarah".

When the Vet listened to "Sarah's" lungs with his stethoscope on Sunday 22nd, he was very pleased to say that her lungs were now clear and that her cold had dried up nicely. He gave her an injection and then we took her to see "Halfpenny", who still begged for her, but not as frantically as over the previous three days. At the times when "Sarah" was not being shown to her mother, "Halfpenny" was spending a lot of time playing with the two three-year-old youngsters ("Kan Kan" and "Poppy") in the adjoining bed, through the mesh.

On Monday, nine days after she looked as if she was going to die, "Sarah" was becoming quite a handful. She was very active and screamed for attention whenever she was put back in the incubator. She was given her last injection of Amoxycillin by the Vet, whose job was now completed. Then "Sarah" was taken to see "Halfpenny" in the morning, and the reaction was the same as the day before. Later on, however, "Halfpenny" just reached briefly through the mesh, then turned around and walked away, sitting with her back to "Sarah", as if she had given up hope of ever getting her baby back, and that we were just tormenting her by showing "Sarah" to her.

A unanimous decision was made the following day (ten days after removing "Sarah") to try a reintroduction, which, as far as we knew, had never been tried before after such a long separation. "Halfpenny" still had plenty of milk, so we began at 11.15 a.m. "Sarah" was placed on some wood-wool in an empty bed next to "Halfpenny's", and the connecting slide was opened. "Halfpenny" just looked at the slide, but did not move. "Sarah" then started crying and "Halfpenny" darted through to her and picked her up. After a few minutes, "Sarah" fell/crawled off her mother and lay on the wood-wool, while "Halfpenny" literally "grovelled" in front of her, vocalising all the time, pressing her whole body to the floor. "Sarah" looked unsure as to whom she should go to, "Halfpenny" or us. "Halfpenny" then picked her up, but "Sarah" again crawled off her and tried to crawl over to her foster parents. At this point, "Halfpenny" covered "Sarah" with her body, and was whimpering, as if trying to show or tell "Sarah" that she was in fact her real mother. "Halfpenny" picked her up again and held her in a nursing position. By now the time was 11.40 a.m. By 12 noon, "Halfpenny" was lying down, cuddling "Sarah", who was holding on well and in suckling range. Half an hour later, "Sarah" was looking very relaxed and calm, but "Halfpenny" was still unable to settle. "Sarah" was still looking over to us at 1.00 p.m., as if unsure whom she should be with. An unsettled "Halfpenny" at 1.20 p.m. seemed to be having trouble lying down, without lying on "Sarah", who looked as though she was searching for a nipple. "Halfpenny" gave up trying to lie down, and sat in a corner instead.

By 1.40 p.m., "Sarah" had fallen asleep and "Halfpenny" was very calm and quiet. "Sarah" slept for 30 minutes, during which time "Halfpenny" moved around, for what appeared to be her own amusement.

At 3.15 p.m., "Halfpenny" put "Sarah" down on the wood-wool, walked around her bed area, then picked her baby up, placed her on her stomach, and lay down. She repeated this a few times until 4.00 p.m., when she started grooming "Sarah". Shortly after this, she held some wood-wool out to me. When I reached to take it, she threw it at me and half tried to grab me, as if she was trying to fend me off, rather than get reassurance.

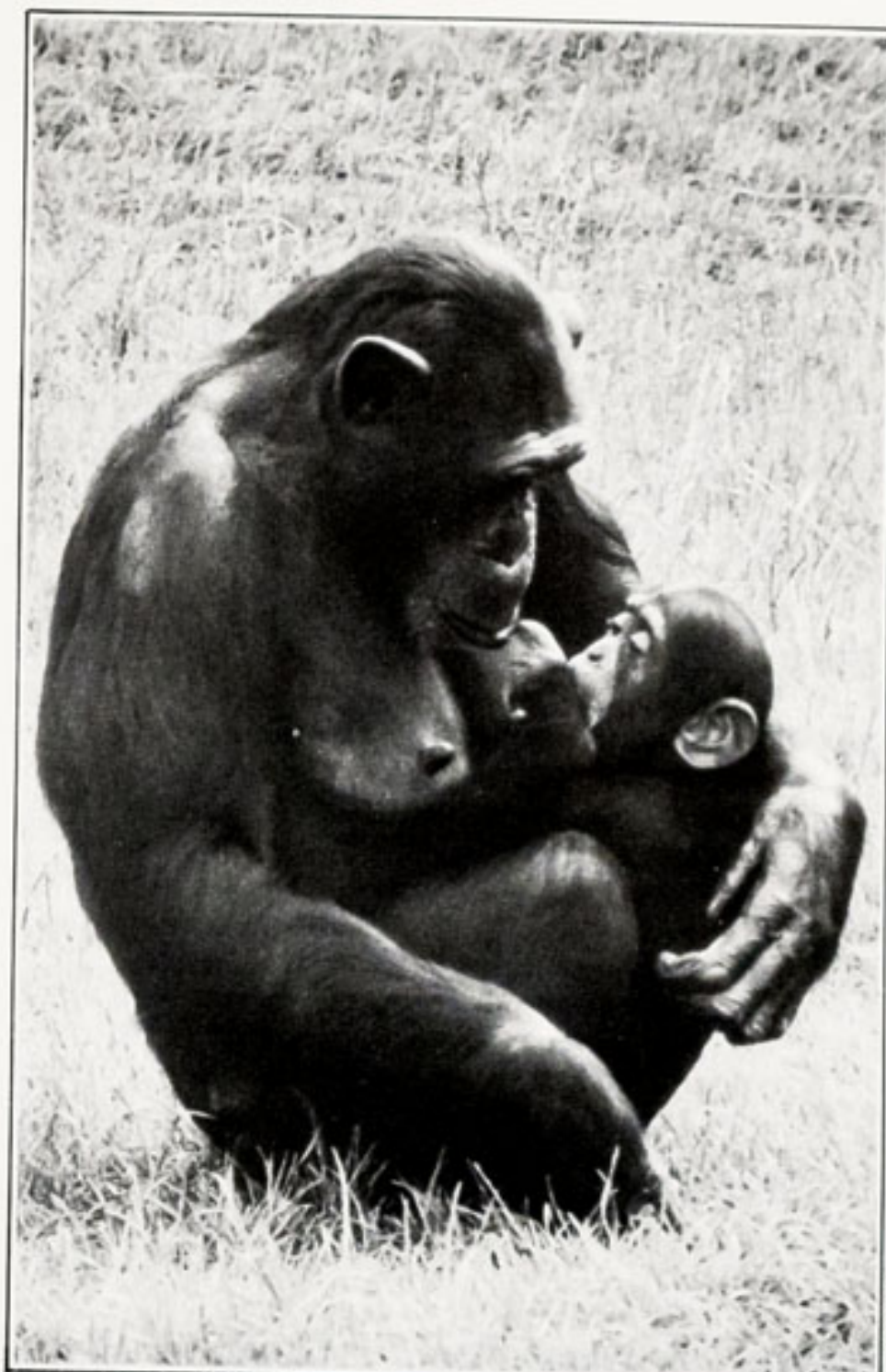
"Sarah" was seen to suckle at 4.13 p.m. from both nipples, but only for a few seconds from each one. At 4.20 p.m., "Halfpenny" was given her evening food and drink, during which procedure "Sarah" was watching us with great interest. She suckled again five minutes later for two minutes from the left nipple, and seemed to be getting milk all right; then for three minutes on the right side. She seemed satisfied after this feed, and then played with her mother's nipple, as she used to do with the teat on the bottle when she had had enough. "Halfpenny" tried to put her down and move off, but "Sarah" kept whimpering, and was duly picked up again.

The following morning, mother and baby both seemed very relaxed and happy. While "Halfpenny" was having her morning drink, "Sarah" tried to hang on to the mesh, but was pulled back on to "Halfpenny's" chest, away from us. "Halfpenny" was obviously mistrustful of us, in case we tried to take "Sarah" away again. "Sarah" was seen suckling well that day, and watched us with a lot more interest than she had done before the separation. By the afternoon, they were both calm and quiet and behaving normally. As we knew that "Sarah" was feeding all right, we left the two of them alone as much as possible, in an attempt to allow them to restore a normal mother/baby relationship.

The next day they were moved to a bed area next to the other Chimps. "Halfpenny" acted slightly nervously and held "Sarah" just out of reach, if any of the others tried to reach through the mesh to touch her. "Sarah" appeared totally oblivious to it all and was observed suckling many times during the day. Normal mother/baby activity seemed to be returning. On Friday, 27th February, both mother and baby looked very contented. One of the females next to them was holding "Sarah's" hand through the mesh, and "Sarah" made no attempt that day to reach or touch us, but did show recognition—and I think trust—in her eyes. She obviously felt safe and secure, and where she should be—with her real mother.

On 28th, two weeks after "Sarah" had been removed from her mother, they were both reintroduced to the other Chimps. It was a very quiet reintroduction, with only the two three-year-olds acting over-excitedly. They kept running over and touching "Sarah", then running off, and back again. The rest of the group spent time grooming "Halfpenny" and smelling "Sarah", but seemed to accept them back without any bother.

"Sarah" is now nine months old. She is a perfectly normal young Chimp, growing fast, and both she and her mother seem to show no adverse reactions to what must have been a very traumatic experience.



"Halfpenny" and infant "Sarah"

Francis Fox

Considering that "Sarah" was "Halfpenny's" first offspring, we were very much in the dark as to how "Halfpenny" would react to motherhood, even without being separated from her baby for ten days. I feel that we were indeed fortunate that "Halfpenny" is such a good mother, and, although she has seen other mothers and babies, both at Colwyn Bay and Chester, I doubt that the maternal instinct in other first-time mothers would have been as strong. I am convinced, however, that our success with this reintroduction was partly due to the fact that "Halfpenny" was not put back with the other Chimps when "Sarah" was removed. If she had been, I am sure that she would have got over the loss of her baby fairly quickly, as a result of the interaction between herself and the rest of the group, especially the two youngsters. Also, by showing "Sarah" to "Halfpenny" as soon as possible after she was well enough, this helped "Halfpenny" to maintain her strong maternal instincts.

The whole procedure was only made possible with great help from many people. Apart from Tim Hayward and myself, the Curator of Mammals, Nick Ellerton; the Vet, Derek Lyons; the Reptile Section, who provided the incubator at such short notice; our Laboratory Technician, Donald Dinning; and the Stores Department all played a great part in this success.

Niall Ormerod  
Section Head, Anthropoid Apes

# Arrivals and Births

(Week ending 27th February to 26th June)

## Mammals

0.5	Bison ( <i>Bison bison</i> )	Birth
0.2	Eland ( <i>Taurotragus oryx</i> )	Birth
1.6	Red Lechwe ( <i>Kobus leche</i> )	Birth
1.0	Arabian Gazelle ( <i>Gazella gazella arabica</i> )	
	Received from Marwell	
0.0.6	Ring-tailed Lemur ( <i>Lemur catta</i> )	Birth
1.0	Père David's Deer ( <i>Elaphurus davidianus</i> )	Birth
0.0.1	Lesser Bushbaby ( <i>Galago senegalensis</i> )	Birth
0.1	Axis Deer ( <i>Cervus axis</i> )	Birth
0.2	Axis Deer ( <i>Cervus axis</i> )	Received from Whipsnade
0.0.2	Scottish Wildcat ( <i>Felis sylvestris</i> )	Birth
0.0.2	Rodrigues Fruit Bat ( <i>Pteropus rodricensis</i> )	Birth
0.0.2	Cotton-topped Tamarin ( <i>Saguinus oedipus</i> )	Birth
0.0.1	White-lipped Tamarin ( <i>Saguinus labiatus</i> )	Birth
1.1	Chimpanzee ( <i>Pan troglodytes</i> )	Birth
0.0.1	Patas Monkey ( <i>Erythrocebus patas</i> )	Birth
1.0	Wapiti ( <i>Cervus canadensis</i> )	
	Received from Hamm Court Farm	
0.0.1	Wapiti ( <i>Cervus canadensis</i> )	Birth
0.0.5	Coati ( <i>Nasua nasua</i> )	Birth
1.0	Capybara ( <i>Hydrochoerus hydrochaeris</i> )	
	Received from Cotswold Wildlife Park	
1.0	Ocelot ( <i>Felis pardalis</i> )	Received from Kilverstone
0.0.1	Margay ( <i>Felis wiedi</i> )	Birth
0.0.1	Caracal Lynx ( <i>Felis caracal</i> )	Birth
0.0.5	Meerkat ( <i>Suricata suricata</i> )	Birth
4.2	Reindeer ( <i>Rangifer tarandus</i> )	Birth
1.0	Ankole Cattle ( <i>Bos taurus</i> )	Birth
0.3.1	Blackbuck ( <i>Antelope cervicapra</i> )	Birth
1.0	South American Tapir ( <i>Tapirus terrestris</i> )	Birth
0.0.1	European Lynx ( <i>Felis lynx</i> )	Birth
0.0.1	Guanaco ( <i>Lama guanicoe</i> )	Birth



Wapiti Calf

Kenneth W. Green, ARPS

0.0.1	Sealion ( <i>Zalophus californianus</i> )	Birth
1.0	Giraffe ( <i>Giraffa camelopardalis</i> )	
	Received from London	
0.0.1	Tammar Wallaby ( <i>Macropus eugenii</i> )	Birth
0.0.2	Grey Kangaroo ( <i>Macropus fuliginosus</i> )	Birth
0.0.9	Bennetts Wallaby ( <i>Macropus rufogriseus</i> )	Birth
0.0.7	Prairie Marmot ( <i>Cynomys ludovicianus</i> )	Birth
0.0.2	Golden Agouti ( <i>Dasyprocta aguti</i> )	Birth
0.0.2	Jungle Cat ( <i>Felis chaus</i> )	Birth
1.2	Cheetah ( <i>Acinonyx jubatus</i> )	
	Received from Whipsnade	
0.1	Llama ( <i>Lama glama</i> )	Birth
0.0.1	Porcupine ( <i>Hystrix cristata</i> )	Birth

## Birds

0.0.10	Waldrapp Ibis ( <i>Geronticus eremita</i> )	Received from Jersey
1.0	Crimson-winged Parakeet ( <i>Aprosmictus erythropterus</i> )	Received from Rode Bird Gardens
0.1	Yellow-naped Macaw ( <i>Ara auricollis</i> )	Received from Edinburgh
0.1	Melba Finch ( <i>Pytilia melba</i> )	Purchased
0.2	Musschenbroeks Lorikeet ( <i>Neopsittacus musschenbroekii</i> )	Received from Mr. C. Surtess
0.0.1	Blacksmiths Plover ( <i>Vanellus armatus</i> )	Bred
0.0.1	Silver-blue Tanager ( <i>Thraupis episcopus</i> )	Bred
1.0	Indian Hornbill ( <i>Buceros bicornis</i> )	Received from Mr. C. Vince
0.0.5	Hawaiian Geese ( <i>Branta sandvicensis</i> )	Bred
0.0.2	Red-cowled Cardinal ( <i>Paroria dominicana</i> )	Bred
0.0.4	Crowned Plover ( <i>Vanellus coronatus</i> )	Bred
1.0	Variable Chachalaca ( <i>Ortalis motmot</i> )	Received from Mr. W. Harrison
3.2	Chilean Flamingo ( <i>Phoenicopteros chilensis</i> )	Received from Harewood Bird Gardens
0.0.9	Humboldts Penguin ( <i>Spheniscus humboldti</i> )	Bred
0.0.2	Mountain Witch Dove ( <i>Geotrygon veniscolor</i> )	Bred
0.0.1	Hartlaubs Touraco ( <i>Tauraco hartlaubi</i> )	Received from Mr. Highton
0.0.4	Grey Peacock Pheasant ( <i>Polyplectron bicalcaratum</i> )	Bred
1.0	Little Egret ( <i>Egretta garzetta</i> )	Received from Rode Bird Gardens
0.0.1	Fischers Starling ( <i>Spreo fischeri</i> )	Received from Mr. D. Campbell
0.0.12	Barn Owl ( <i>Tyto alba</i> )	Bred
0.0.1	Great Horned Owl ( <i>Bubo virginianus</i> )	Bred



Recently arrived young Cheetah

Chris Vere

- 1.1 Laysan Teal  
(*Anas platyrhynchos laysanensis*)  
Presented by Mrs. Hart
- 0.0.1 Mandarin Duck (*Aix galericulata*)  
Presented by Mrs. Hart
- 1.0 Carolina Duck (*Aix sponsa*)  
Presented by Mrs. Hart
- 0.1 Ringed Teal (*Anas leucophrys*)  
Presented by Mrs. Hart
- 1.0 Ringed Teal (*Anas leucophrys*)  
Received from Mr. N. Manning
- 1.0 Blue-Eared Pheasant  
(*Crossoptilon auritum*)  
Received from Mr. W. Harrison
- 0.1 Emu (*Dromaius novaehollandiae*) Received
- 0.0.3 Black Swan (*Cygnus atratus*) Bred
- 0.0.3 European Eagle Owl (*Bubo bubo*) Bred
- 0.0.3 Zebra Finch (*Poephila guttata*) Bred
- 0.1 Pink Pigeon (*Nesoenas mayeri*)  
Received from Jersey
- 0.0.1 Palawan Peacock Pheasant  
(*Polyplectron emphanum*)  
Received from Jersey



Scottish Wildcat Kitten

- 0.0.3 Round Island Gecko (*Phelsuma guentheri*)  
On Loan from Jersey
- 0.0.7 Plumed Basilisk (*Basiliscus plumifrons*)  
On Loan from Jersey
- 0.0.2 Prehensile-tailed Skink (*Corucia zebrata*) Bred
- 0.0.2 Tokay Gecko (*Gecko gecko*) Bred
- 1.0 Gaboon Viper (*Bitis gabonica*) Received
- 0.0.20 Whites Tree Frog (*Litoria caerulea*) Received
- 1.0 Corn Snake (*Elaphe guttata*) Purchased
- 0.1 Malayan Box Turtle (*Cuora amboinensis*)  
Received
- 0.0.3 Indian Python (*Python molorus bivittatus*) Bred
- 0.0.30 Leopard Gecko (*Eublepharus macularius*) Bred
- 0.0.70 Fire-bellied Toad (*Bombina orientalis*) Bred
- 0.0.18 American Green Tree Frogs (*Hyla cinerea*)  
Received

**Aquarium**

- 0.0.7 Stingray (*Potamotrygo sp*) Bred
- 0.0.50 Dwarf Seahorse (*Hippocampus zosterae*) Bred
- 0.0.50 Congo Tetra (*Phenacogrammus interruptus*)  
Bred
- 0.0.30 Catfish sp (*Corydoras habrosus*) Bred
- 0.0.100 Burton's Mouthbrooder  
(*Haplochromis burtoni*) Bred
- 0.0.30 Sparkling Gourami (*Trichopsis pumilis*) Bred
- 0.0.100 Livingstone's Mbuna  
(*Pseudotropheus livingstonii*) Bred
- 0.0.60 Angelfish (*Pterophylum scalare*) Bred
- 0.0.3 Banded Cichlid (*Cichlasana severum*) Presented
- 0.0.1 Surinam Toad (*Pipa pipa*) Exchange
- 0.0.2 Scorpion Fish (*Pterois volitans*) Purchased
- 0.0.1 Silver Shark (*Balantiocheilos melanopterus*)  
Presented
- 0.0.50 Golden Rudd (*Scardinisu erythrophthalmus*)  
Bred
- 0.0.300 Elongate Hemichromus  
(*Hemichromus elongatus*) Bred

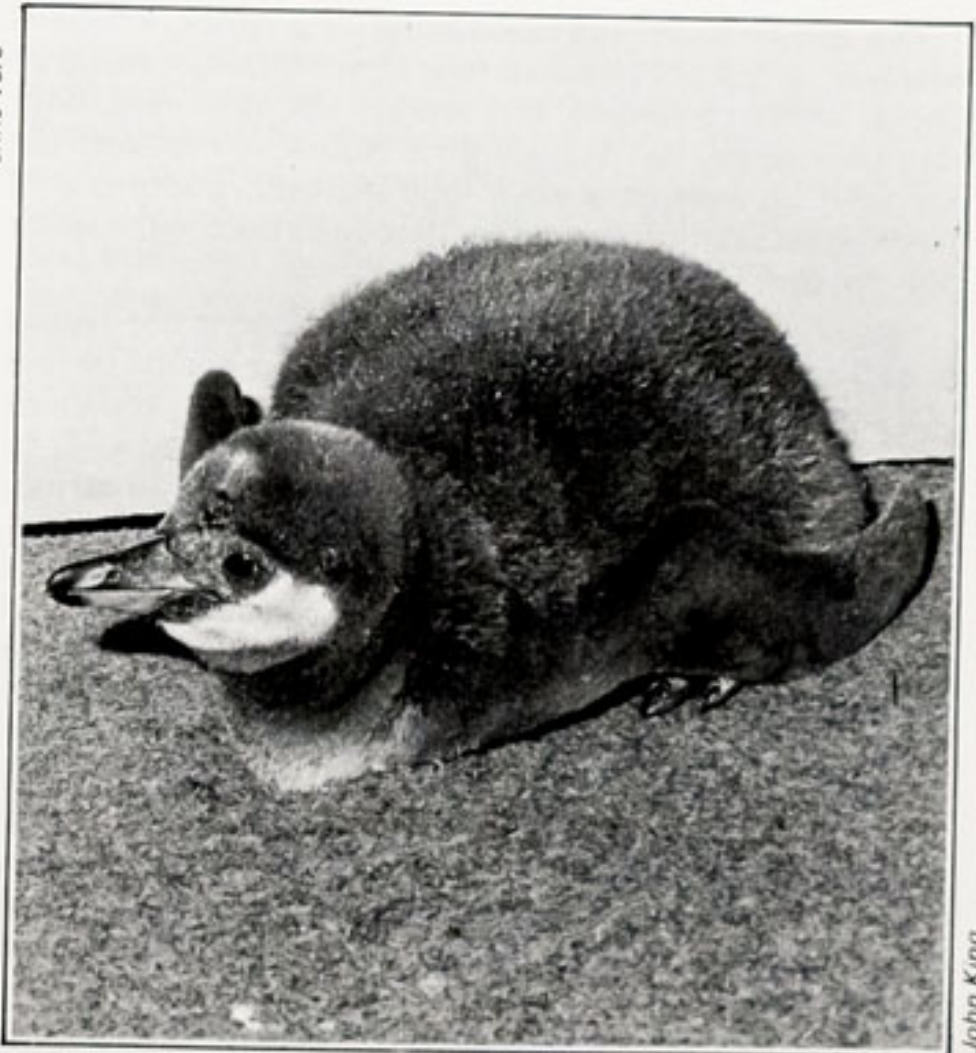
- 0.0.5 Mexican House Finch  
(*Carpodacus mexicanus*) Fledged
- 0.0.7 Red-crested Pochard (*Netta rufina*) Bred
- 2.0 Andean Condor (*Vultur gryphus*) Bred
- 0.0.1 Fairy Bluebird (*Irena puella*) Bred
- 0.0.5 Common Shelduck (*Tadorna tadorna*) Bred
- 0.0.4 Golden Pheasant (*Chrysolophus pictus*) Bred
- 0.0.3 Fulvous Tree Duck (*Dendrocygna bicolor*) Bred
- 0.0.2 Goldies Lorikeet (*Trichoglossus goldiei*) Bred
- 0.0.3 Laysan Teal  
(*Anas platyrhynchos laysanensis*) Bred
- 0.0.2 Ruddy-headed Goose  
(*Chloephaga rubidiceps*) Bred
- 0.0.13 Mandarin Duck (*Aix galericulata*) Bred
- 0.0.10 Carolina Duck (*Aix sponsa*) Bred
- 0.0.1 Derbyan Parakeet (*Psittacula derbiana*) Bred
- 0.0.4 Patagonian Conure  
(*Cyanoliseus patagonus*) Bred
- 0.0.1 Chiloe Wigeon (*Anas sibilatrix*)  
Presented by Mr. N. Manning
- 0.0.2 White-winged Wood Duck  
(*Cairina scutulata*) Bred

**Reptiles**

- 0.0.10 Jungle Runners (*Ameiva ameiva*) Received
- 0.0.5 Jamaican Boa (*Epicrates subflavus*)  
On Loan from Jersey
- 0.0.5 Red-footed Tortoise (*Geochelone carbonaria*)  
On Loan from Jersey
- 0.0.6 Round Island Skink (*Leiopisma telfairii*)  
On Loan from Jersey

**Key**

- 1.0 = One male
- 0.1 = One female
- 0.0.1 = One of undetermined sex



Young Penguin

# Hand-Rearing "Subis"

A SUMATRAN ORANG-UTAN

There is no great trick or secret to fostering any healthy great ape, such as an Orang-utan. The simple, most important prerequisite is a limitless supply of patience and care, and the willingness to "write off" about one year of one's life—this being the approximate duration that the infant will be "in care"—and, accordingly, the foster parents' lifestyle must, to a great extent, revolve around the youngster and its needs.

Rearing a baby Orang is a 24-hour job. The baby's needs change and alter as it progresses from one stage to the next; from being 100 per cent dependent, and feeding every couple of hours, through teething problems, to becoming more adventurous and independent, only to experience insecurity traumas at a later stage, screaming for attention and comfort at every opportunity.

It is safe to say that the first three to four months are the most demanding. After this, night feeds have usually been cut down to a minimum, or ceased altogether, and—on the "plus" side—the baby is beginning to become more interesting as its character develops.

"Subis" was born at exactly midday on 30th November, 1986. It was lunch-break—or at least it should have been, until "Subis" made her appearance. This obviously set a precedent, as she has been interrupting lunch-breaks ever since, wanting to feed, play or defecate as soon as you make a move towards thinking about yourself eating!

The actual birth was conducted in a quick, efficient manner, in the presence of four other Orangs, none of which tried to interfere, but merely sat passively, with ring-side seats, as "Ramona" ("Subis's" mother) sat propped up against a wall, legs akimbo, panting and pushing for no more than a few seconds before the baby popped out.

"Ramona's" track record for motherhood is not a good one. She is a highly potent creature, but seems to feel that the contribution of procreation is enough, and there her responsibility ends, and should be handed over to someone more suited to the menial task of child-rearing. This—her fourth birth—was to prove no exception and, after an encouraging start, cradling the baby in her arms and holding her near to her breast, she suddenly decided that enough was enough, and placed the baby on the floor and walked away from her. From that point on, no amount of encouragement or cajoling would induce her to have anything further to do with her offspring.

So, after only three hours, "Subis" was to become a ward of the Zoo staff, and has since endeared herself to all who have come into contact with her, in a way only a baby ape can.

A major drawback for any infant taken from its mother, not having had the benefit of that first all-important drink of mother's milk (colostrum) is its lack of resistance to infection. Under normal circumstances, the mother would pass on antibodies from her own immunity system to the baby, via her milk. Without the benefit of colostrum, some extra care is needed to prevent the infant coming into contact with possible sources of infection too quickly.



"Subis" with Neil in the Monkey House kitchen

A gradual lowering in hygiene standards is, however, essential as the months pass by, in an effort gradually to build up an active resistance in the infant itself. Orangs can indulge in some fairly unsavoury pastimes, so it is necessary that they do have an acceptable level of resistance to viral and bacterial diseases.

To date, "Subis" has had only one minor disorder—albeit a recurring one—and that is with her bowels! For the first three months, she seemed to alternate between constipation and diarrhoea. This is common enough amongst primates, and more often than not is linked to diet. It is always with great reluctance that an infant's diet is changed, but this had to be done when "Subis" was several months old, because of a lactose intolerance which she had developed. Lactose is a major component in milk powders; problems arise when the body's enzyme lactase no longer efficiently breaks down the lactose in the milk, resulting in loose, watery faeces droppings, which, if left untreated, can cause dehydration. The new formula milk which was substituted is a soya-based product, with all the necessary vitamins and minerals—minus the lactose, of course—and, even then, it was necessary to do some juggling and experimenting with the powder/water ratio.

## MILK ANALYSIS COMPARISON

Orang-utan		Human	
Water	88.53 g	Water	87.00 g
Fat	3.50 g	Fat	4.80 g
Protein	1.43 g	Protein	1.50 g
Lactose	6.02 g	Lactose	6.40 g
Ash	0.24 g	Ash	0.03 g

As already stated, the most important factor in hand-rearing a baby Orang such as "Subis" is patience and care. The two are subtly different, but go hand-in-hand; and it is critical that care and attention are lavished upon the baby during the early months of life. Substitute human attention, usually associated with the one person who handles the baby most frequently, is a compensating factor for environmental deficiencies. The foster parent has the ability to give or deprive, to increase or to reduce the stimulus or interaction between themselves and the infant. Close infant-parent bonding in the early stages

of development appears to be, in many cases, the prerequisite to normal development later in life. By way of an analogy, it is generally accepted that human infants subjected to less than desirable environmental conditions, both within and outside their household, have a far greater chance of progressing towards extreme forms of behavioural aberration as they reach adulthood. As a general "rule of thumb", the same could be said to be true of baby apes, although admittedly on an entirely different plane of complexity.

Owing to the fact that "Subis" was born at the onset of winter, it was desirable for her to wear clothing for much of the time, in an effort to maintain an optimum body temperature. Under normal circumstances, she would effectively have gained this from her mother through 24-hour-a-day contact. This constant source of contact serves a number of different purposes—perhaps most notably that of reassurance. Should "Subis" be mildly frightened or hungry, a gentle soothing tone of voice would quite often be sufficient to allay her fears. If the stimulus were more acute—for example, should her foster parent oversleep (heaven forbid!) and be late with that first, much-needed early-morning feed, after a whole seven or eight hours' culinary abstinence, no amount of soothing talk would be able to calm the baby and stop her from screaming. Picking her up and simply holding her would immediately have the desired calming effect, even without the feeding-bottle to hand. This response again emphasises the great importance of close physical contact.



"Subis" with her foster parent, Neil Spooner



Dutch student Maryke Van Eerd teaching "Subis" to drink from her covered cup

When "Subis" was very young, she was held and carried at every opportunity. At first, she was very insecure and often whimpered or cried to be picked up at all times of the day and night. Some people believe that it is a mistake to "give in" to a baby's demands in such a way, as it will only lead to an increase in the frequency of these incidents. I believe the opposite to be true. Rejecting a very young infant's plea for contact will not make it grow up any faster—this is an absolutely mistaken idea that rejection will facilitate independence. As time passes and the baby gets older, it is quite acceptable to be a little tougher with the infant, as in fact the natural mother would be. One can actually tell real trauma from a feigned temper tantrum quite easily.

It is a little more difficulty disciplining a young Orang than it is, say, an infant Chimpanzee of "Subis's" age. Simply speaking, this is because of the difference in the social structure between the two groups, Chimps being social, highly volatile creatures, used to being chastised and punished by their peers, which serves to fit them correctly into their respective places and teach them the various rules and regulations of Chimp society. Orangs, however, are essentially solitary, and have little use for such social impediments, having no group or hierarchy into which to fit.

As baby apes grow older, they tend to become a little more selective about who can and who cannot handle them. Again, Chimpanzees seem to be more choosy than Orangs. In "Subis's" case, she will, with a few exceptions, allow herself to be touched and handled by just about anyone, only picking out the occasional person who, for whatever reason, she appears to resent or distrust. She particularly dislikes being patted on the head or being forcibly picked up under the arms—quite natural things to do with human infants, but not with Orangs.

At about five months old, "Subis" was weaned off her milk feeding-bottle and on to a baby's covered cup with a spout. It took a couple of weeks of persistence (and mopping up quantities of spilt milk) before she finally got the hang of things. By this stage, of course, she was getting her milk-teeth through, and treating everyone to the benefit of these wonderful new acquisitions. Significantly, as she gets larger, so do her nappy requirements, and these days she can be seen crawling around her

cage in the Monkey House attached to huge volumes of "Paddy Nappy Roll", which—once wet—could weigh as much as she does—at around five kilograms—quite an awesome thought!



"Subis" at 7 1/2 months

Francis Fox

The long-term prospects for "Subis's" integration with her brothers is opportunistically good. Her two brothers before her, "Sidney" and "Douglas", encountered no real problems with their gradual introduction. "Subis" is presently being taken inside the enclosure with "Sidney" and "Douglas" as often as possible. Initially, she treated this dubious form of recreation as something approaching slow torture. After several months, though, she is far less traumatised by the whole affair, as long as she thinks that she is not going to be abandoned. There is still some way to go before she can be safely left indefinitely in the Ape House, although, no matter how slowly and carefully this is done, there will inevitably be some stress involved—that hopefully will be kept to a minimum.

Over the past ten to 15 years, there has been a marked reduction in perinatal mortality amongst apes as a whole. This must, in part, be attributed to new improved ideas, technology, and modes of thinking regarding exotic animal husbandry as a science. The emergence of a change in attitudes towards zoos and wildlife parks as places of learning and education—as well as recreation—is a definite step in the right direction. Shedding the somnambulistic ideals which were once—and, in some cases, still are—associated with zoos is a slow process. Owing to the fact that the world is in such a disastrous state of environmental upheaval, zoos have to be considered of paramount importance . . . and, on the off-chance that mankind wakes up to what he is doing on his planet, there will be places where captive animal life still complements nature and her resources.

Neil Spooner  
Section Head, Monkey House

## Junior Members' Field Trips & Meetings 1987-88

The following events have been arranged for the Junior Members during the forthcoming year.

### JUNIOR MEMBERS' BARBEQUE AND MOTH-TRAPPING SESSION Saturday, 22nd August, 1987

Once again, we will call on our friend, "entomologist extraordinaire" Jon Delf, to help set up live moth traps and identify what we find. Whilst we are setting up the moth traps and waiting for it to get dark, we will have a barbeque on the Jubilee Lawn, so fingers crossed that it is a dry evening! **Over ten-year-olds** are invited to join us, as it will be a very late evening.

Please meet **outside the Oakfield at 7.00 p.m.**, collection at **11.30 p.m.**

### BUTTERFLY JUNGLE AND OCEAN WORLD

Saturday, 26th September, 1987

This will be our first visit to the Butterfly Jungle and Ocean World at Rhyl on the North Wales coast. It is a chance to see this relatively new venture, which has been set up by Terry Sanders, who used to work on the Bird Section at Chester Zoo. **Over eights** are invited.

The bus will leave the Staff Car Park at **9.30 a.m.**, returning around 5.00 p.m.

### KNOWSLEY SAFARI PARK Saturday, 17th October, 1987

We received lots of requests this year to visit other collections, so this has been arranged so that Juniors can see and compare a completely different way of exhibiting animals. **Over eights** welcome.

The bus will leave the Staff Car Park at **10.00 a.m.**, returning around 4.30 p.m.

**BEHIND THE SCENES AT LIVERPOOL MUSEUM**  
Saturday, 21st November, 1987

Unfortunately last year, plans for this event fell through, but we will try again this year. It will be a rare opportunity to see behind the scenes at the Natural History Museum, with one of the Museum's Curators to show us around. **Over ten-year-olds** are invited to come with us.

The bus will leave the Staff Car Park at 10.30 a.m., returning around 4.00 p.m.

**THE CHRISTMAS PARTY**  
Friday, 11th December, 1987

Lots of you will be relieved to know that we have decided to skip the Fancy Dress element this year! However, the VIP Raffle (the prize being to spend a day with the Curator) and the usual disco and games are still planned, and, of course, there will be the hamburger/hot dog supper. All **over eights** are invited to kick off the Christmas season with us.

Meet at the Staff Car Park at 7.00 p.m., ending around 10.00 p.m.

**CONTACT SESSION**  
Saturday, 23rd January, 1988

As usual, I do say that, with this outing, there are not too many of the Zoo's animals which can be handled, but you are invited to come along to meet those who do not mind, such as snakes, tarantulas, lizards, goats, chicks, locusts, and—hopefully—a few surprises. **Over eights**.

Please assemble outside the Oakfield at 2.30 p.m.

**ANNUAL JUNIOR MEMBERS' CONFERENCE DAY**  
Saturday, 20th February, 1988

Experienced Juniors will know what a good day this can be! It is important for as many Juniors as possible to take up the opportunity of putting forward ideas and views about the Zoo and to tell us what kind of things you would like to do within the Club. During the morning, we will be touring the Zoo and, after a picnic lunch, we will spend the afternoon in the Lecture Hall. If anyone has some slides they would like us to show, this is your chance! **Everyone welcome**.

**TRACKS AND SIGNS**  
Saturday, 19th March, 1988

There was such a great demand that we should repeat this trip again this year, that we have opted to have it at the same time as last year, as we succeeded in obtaining some superb plaster casts in the muddy ground of March. Wellies essential! **Over eights** are invited to come along.

Meet outside the Oakfield at 11.00 a.m., finishing around 4.00 p.m.

**COLWYN BAY ZOO**  
Saturday, 23rd April, 1988

Another chance to see another zoo—this is always a popular trip, and, when we have visited the zoo, depend-

ing on the weather, we aim to have a walk on the beach. **Over eights** are invited.

The bus will leave the Staff Car Park at 9.30 a.m., returning around 5.00 p.m.

**VISIT TO A TROUT FARM**

Saturday, 21st May, 1988

We will be visiting one of the trout farms in North Wales to see how they rear and prepare trout for release into the lakes and reservoirs of the area. **Over tens** should enjoy this trip.

The bus will leave the Staff Car Park at 9.30 a.m., returning around 4.30 p.m.

**DAY HELPING A KEEPER**

Saturday, 18th June, 1988

Perhaps the most eagerly-awaited event of the year, this is the day when you are invited along to "help" the Keepers with their regular duties or to help with special projects. Be prepared to be very tired when you have finished the day. Only **over 12-year-olds** are invited to join us, unfortunately, but it is worth waiting for!

Please meet outside the Oakfield at 11.00 a.m., ending around 4.00 p.m.

**JUNIOR MEMBERS' BAZAAR**  
Sunday, 31st July, 1988

Full details of the Bazaar will be issued in *Chez Nous* nearer the time, but please note this day in your diaries, as we would like everyone to support us. Note also that we have chosen to hold the Bazaar on a Sunday this year, as this tends to be a busy day in the Zoo. **Everyone welcome**.

We will be holding the Bazaar on the Jubilee Lawn, and times and requirements will be sent out to everyone in due course.

**PLEASE NOTE**

Bookings must be made for **all** events. Please ring me at the Zoo not more than two weeks before an event if you would like to attend. Places may be limited.

For those trips which involve either a bus, or provision of food, a charge will have to be made in order for us to cover basic costs. This will be collected on the day, and will vary according to the distance travelled/food provided.

The list is provisional, and, in exceptional circumstances, we may have to alter the dates and times of some of the trips, so please keep an eye on the listing in *Chez Nous* to keep up-to-date.

Penny Rudd (Mrs.)  
Junior Members' Club

# adopta

MAMMAL · BIRD OR REPTILE



## Chester Zoo's Adopt an animal scheme

### ATTENTION ALL ADOPTERS

#### "ADOPTA" DAY, 1987

Due to the continued growth in the number of adopters, there will be a choice of dates for the event this year:—

Wednesday, 7th October  
Wednesday, 14th October  
Saturday, 17th October.

We hope that as many of you as possible will come along and enjoy the fun-packed day with us on one of the above dates. Invitations will be issued later in the year.

The Director is sorry that he will not be able to join adopters on 14th and 17th October, because he will be away from the Zoo on both of these dates.

The food bill for the animals last year was in the region of £176,000, of which nearly £30,000 was contributed by you through your generous support of our animals.

"Adopta" Day is one way in which the Zoo can say "Thank you".

Maureen Allsopp (Mrs.)  
*Animal Adoption Secretary*



## Members' Visit to Twycross Zoo

### THE EAST MIDLANDS ZOOLOGICAL SOCIETY

A visit to Twycross Zoo in Warwickshire has been arranged for Senior Members on **Saturday, 12th September, 1987.**

We aim to depart from the Zoo by coach at 9.00 a.m. prompt, and are due back about 7.00 p.m.

The cost of the excursion, including the coach, entry to Twycross and lunch, will be £7.00.

If you would like to come on the visit, please telephone Maureen Allsopp at Chester Zoo to reserve your seat. It would be helpful if, at the same time as you make your reservation, you state your preference for lunch between chicken salad or plaice and chips. It is important to book as soon as possible, as places may be limited.

### MEMBERS' CONCESSIONARY TICKETS

These tickets cost £1.50 each to Life/Annual Members and £2.50 each to Associate Members. (Junior Members are not entitled to purchase concessionary tickets). Each ticket will admit one adult or two O.A.P.s/children.

These tickets can only be obtained from the Membership Office—they are **not on sale at the Entrance Gates**. If you are ordering by post, please make your cheque payable to Chester Zoo, and **enclose a stamped addressed envelope** for the return of your tickets.

Maureen Allsopp (Mrs.)  
*Membership Secretary*

### EDUCATION DEPARTMENT

There will be two preliminary meetings to explain what is involved in becoming a "FED" (Friend of the Education Department) at the Zoo. These will be held in the Members' Room, Oakfield House, on:—

Tuesday, 8th September, 1987, at 7.30 p.m.  
or  
Monday, 14th September, 1987, at 1.30 p.m.

Anyone interested in knowing more about this project is most welcome to attend.