



Chester Zoo News

AND GUIDE

THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

July 1979

Price 15p



The North of England Zoological Society

ZOOLOGICAL GARDENS, UPTON-BY-CHESTER

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COVER PICTURE

Hand-rearing "Ranee"

By courtesy of Kevin Fitzpatrick, Daily Mirror

Annual subscription — Two Pounds and Seventy Pence, postage paid

Telephone Chester 20106/7/9

GIANT SPURRED TORTOISES

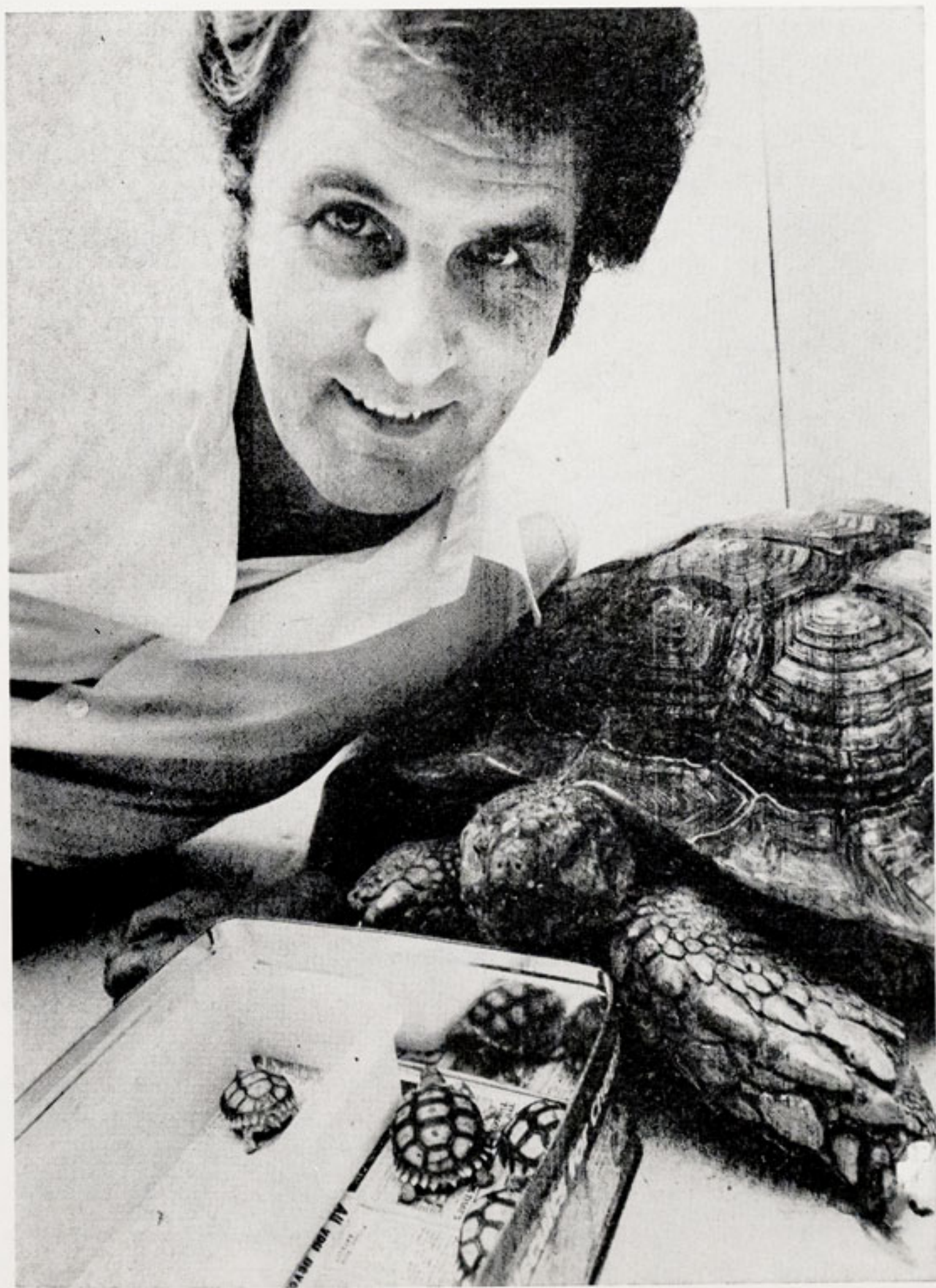
Three years ago we received into the Collection a pair of African Giant Spurred Tortoises (*Geochelone sulcata*). Many readers will already know from the publicity they have been given on television that we have been successful in hatching five tiny tortoises in a human baby incubator. We have had more hatchings and we hope there are still many to come. We are very pleased with this breeding as it is a "first" in this country and the youngsters are doing very well.

On several occasions the tortoises had mated and laid eggs but none hatched. Then, just before Christmas, ten eggs were laid in a deep sand-pit which had been provided by the Curator so as to create as near natural conditions as possible. The eggs were removed and placed in the incubator at about 85°F. An interesting difference between eggs of reptiles and those of birds is that the reptilian eggs may be put into the incubator and left alone, as in the wild, whereas the birds' eggs must be turned regularly as the hen would do in the nest, otherwise they will not develop properly.

Calculation of dates has revealed that the first egg was hatched eighteen weeks after laying, and the fifth egg twenty weeks after laying; the approximate dates known for the hatching of eggs of this species is between eighteen and twenty weeks!

When the youngsters hatch they still carry the yolk-sac under the belly or plastron (the upper shell is known as the carapace) and this is slowly absorbed into the body to provide food for about the first two weeks of their life during which the tiny tortoises are not active enough to eat sufficient food to maintain themselves.

The male at Chester now weighs about 65 lb and the female 45 lb so the babies, which at birth weighed only 1 oz, have some way to grow before reaching anything like the record weight of about 185 lb! However, records aside, the average weight of a fully grown adult is about 140 lb. These animals often live to great ages and some are reputed to have attained 100 years old. The youngsters,



By courtesy of Steve Cartwright, Mel Grundy Photographic Agency
BABY GIANT SPURRED TORTOISES

once they have absorbed the yolk-sac, have voracious appetites as they showed during their TV appearance on BBC "Look North—Nationwide" when they began to devour with great relish the plastic grass put into the studios to make them look more at home, much to the horror of Curator, Roger Ainsley!

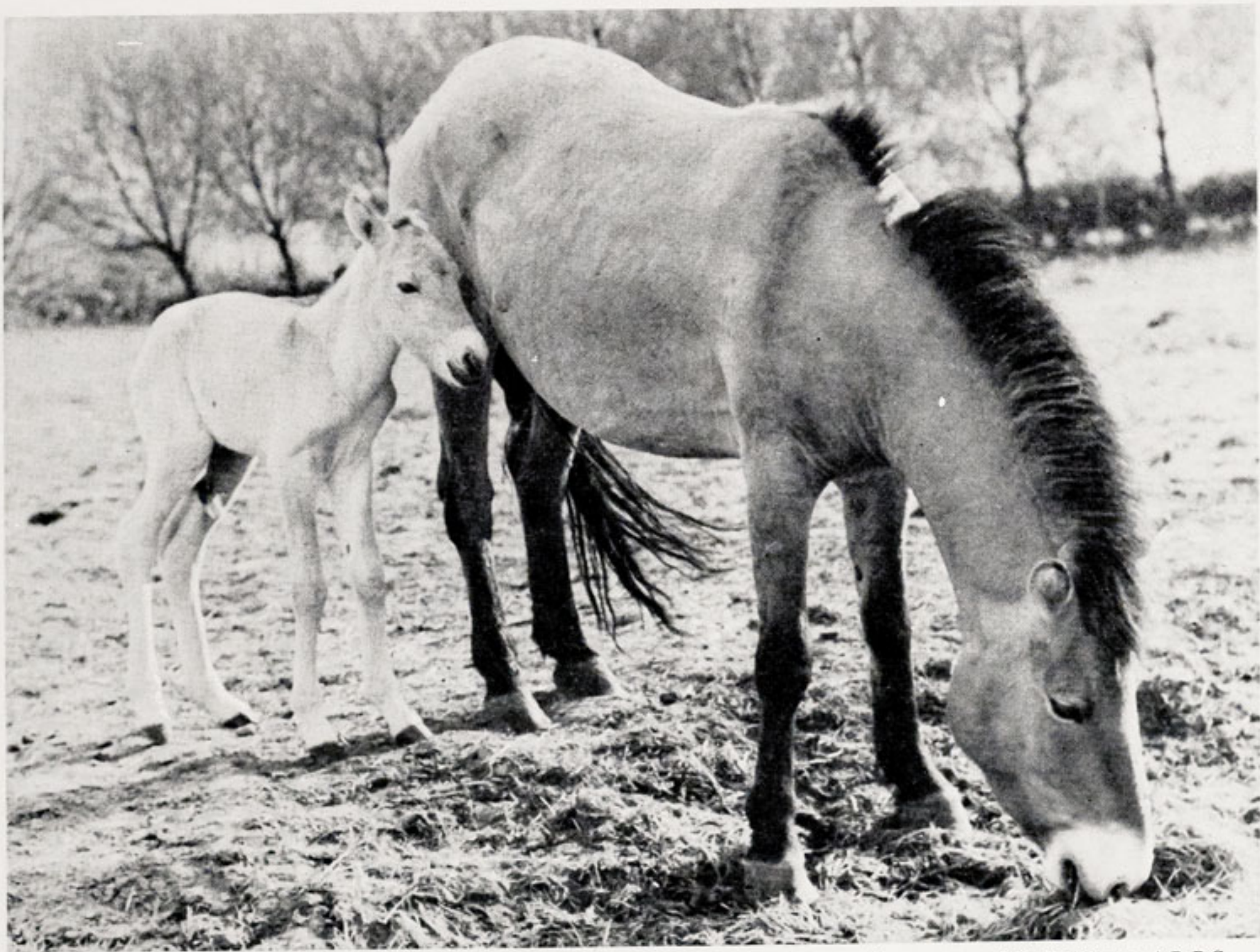
The Giant Spurred, or Grooved Tortoise, as they are also known, originate from the sub-Saharan parts of Africa where they feed on low-lying shrubs. Their diet at the Zoo consists of a wide variety of fruit and vegetables, together with mineral and vitamin supplements. From time to time the shells of the tortoises are rubbed with olive oil.

THE PRZEWALSKI HORSE

Mr. John M. Knowles is the Director of Marwell Zoological Park, which is near Winchester, Hants. We would like to thank him for preparing the following article on Przewalski Horses for publication in the *Chester Zoo News*.

It is unlikely that many members of the public, if asked to name some animals they would expect to see in a Zoo, would think of horses, and yet one horse, the Przewalski (pronounced Shove-al-ski) or Mongolian Wild Horse (*Equus przewalskii*) is probably the most important wild animal whose future lies solely in the hands of Zoos. This is because this species is now thought to be extinct in the wild; there have been no sightings confirmed for over a decade. In July of this year an expedition is going to the former range of this species, the South West Gobi Alti of Mongolia. The last known whereabouts are the Takhin-Shara range of mountains (intersection of 44°N and 94°E).

The Przewalski is the last truly Wild Horse left in the world, as the so-called "Tarpan" became extinct in Europe in the early part of this century. All other horses referred to as wild are in fact feral populations which are derived from domestic horses which have either escaped or deliberately been turned loose, such as the Mustangs of North America.



By courtesy of K. W. Green, A.R.P.S.

PRZEWALSKI HORSE—MARE AND FOAL

The Przewalski Horse differs considerably from the domestic horses with which we are familiar. Scientifically, the most important difference is that it possesses two more chromosomes than the domestic horses (66 instead of 64). However, it must not be thought of as more than a distant cousin to our familiar horses, whether they be Shetland Ponies or Shire Horses.

To those accustomed to the fluid grace of thoroughbred and Arab horses, the Mongolian Wild Horse may at first seem a stocky and unattractive animal, and indeed I suspect that if one was broken-in for the saddle, its short back and upright pasterns would make it an uncomfortable ride. Look at them more closely when next you visit the Zoo, and you will notice the Zebra-type markings on their legs, which is particularly obvious in their summer coats; almost always they have the characteristic upright mane, no forelock, and a tail which is very thin at the base. Notice also the extremely intelligent head.

It is fascinating to watch the social relationships between these animals, especially the protectiveness of the male towards his herd. This was dramatically illustrated with our own herd at Marwell, when in October of 1975 we suffered an incursion by a pack of foxhounds into the horses' paddock, whereupon the mares formed themselves into an outward-facing circle with the foals of that year in the centre, and the stallion galloped around the circle driving off the threat to his herd. This incident and other observations, encouraged me to believe that there would be no great difficulty in returning this species to their former wild habitat, if sufficient protection could be given them in a Reserve.

A studbook on the species is maintained by Prague Zoo, and on 1st January 1978 there were 299 Przewalski Horses in captivity in 68 collections. 49 of these Horses were in British Zoos, representing one sixth of the world herd which had grown from 59 in 17 collections since 1st January 1960 and which is descended from only 12 animals which were available in the early part of this century (the last wild-born Przewalski Horse was brought into the herd in 1947).

Britain is fortunate in having three large breeding groups at Marwell, Whipsnade, and the Port Lympne collection of John

Aspinall. London Zoo has a pair which breed regularly, and there are also Przewalski Horses at the Highland Wildlife Park, Kingussie, the Welsh Mountain Zoo, Colwyn Bay, Paignton Zoo and, of course, at Chester.

I am extremely pleased that Chester has now joined the group of Zoos which are breeding this most endangered and most interesting horse. The pair at Chester are a male from the Marwell collection and a female from Whipsnade. Co-operation between Marwell and Whipsnade has also resulted in two major new potential breeding groups being established, one at the new Minnesota Zoo in the USA, and one in a private collection belonging to Mr. Tim Walker, at Bradford-on-Avon, Wilts.

Regular international symposia are held by those Zoos who have Przewalski Horses to plan the best possible future for the species, which are held in trust for the future generations of people yet to come.

For those conservationists who do not believe that Zoos have a role in the saving of species, the Przewalski story is an example of the success that a captive breeding programme can achieve. If you would like to read further on this fascinating species, the following books are suggested:—

The Przewalski Horse—Dr. Sandor Bokonyi (Souvenir Press)

The Asiatic Wild Horses—translated by Daphne Machin
Goddall (J. A. Allen & Co. Ltd.)

Horses, Asses & Zebras in the Wild—Colin P. Groves (David
& Charles)

31.5.1979

INSECTARIUM

The Insectarium, situated in the Tropical House, has been open for about two years; the Keeper who runs this department is Terry Sanders, who is at present getting in some new stock and hopes to encourage more interest in an often shunned area of animal life.

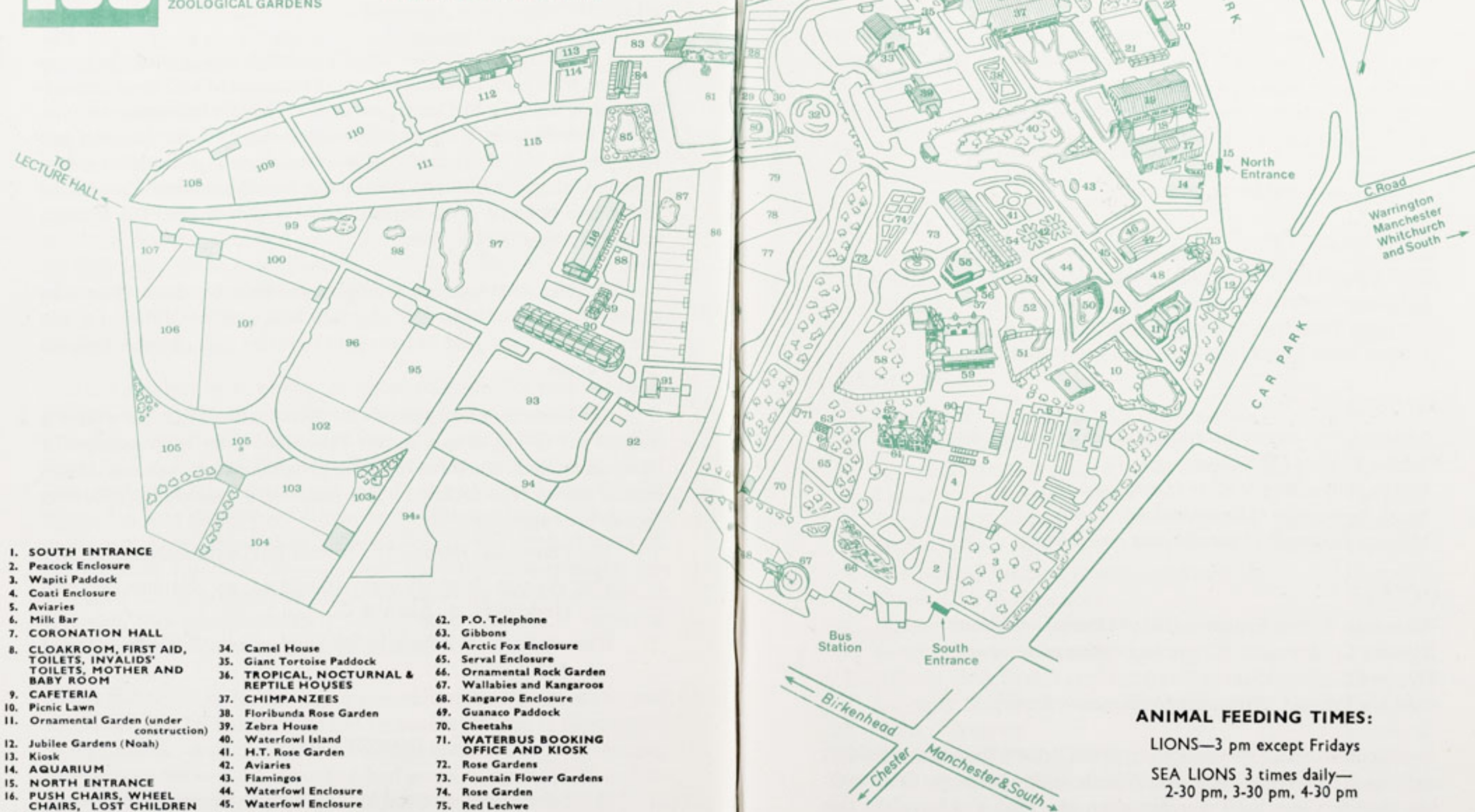
Although we refer to this part of the Collection as the Insec-

CHESTER ZOO

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ZOOLOGICAL SOCIETY
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FOR A COMPLETE TOUR OF THE ZOO — Follow Nos 1-14 to South Entrance.
or Nos 116-115 from North Entrance then return to Nos 1-14.

**Chester Zoo is Open Daily
from 9.00 a.m. until dusk.**



1. SOUTH ENTRANCE

2. Peacock Enclosure
3. Wapiti Paddock
4. Coatî Enclosure
5. Aviaries
6. Milk Bar
7. CORONATION HALL
8. CLOAKROOM, FIRST AID, TOILETS, INVALIDS' TOILETS, MOTHER AND BABY ROOM
9. CAFETERIA
10. Picnic Lawn
11. Ornamental Garden (under construction)
12. Jubilee Gardens (Noah)
13. Kiosk
14. AQUARIUM
15. NORTH ENTRANCE
16. PUSH CHAIRS, WHEEL CHAIRS, LOST CHILDREN
17. PARROT HOUSE
18. Free Flight Aviary
19. APE HOUSE
20. Shop and Kiosk
21. Aviaries and Picnic Lawn
22. CLASSROOM
23. TOILETS
24. TUATARA EXHIBIT
25. Peccaries
26. Birds of Prey Aviaries
27. Condor Aviary
28. Jackal and Hyaena Enclosures
29. Animal Enclosure
30. Porcupine Enclosure
31. Coypus
32. Beavers
33. Giraffe House

34. Camel House
35. Giant Tortoise Paddock
36. TROPICAL, NOCTURNAL & REPTILE HOUSES
37. CHIMPANZEES
38. Floribunda Rose Garden
39. Zebra House
40. Waterfowl Island
41. H.T. Rose Garden
42. Aviaries
43. Flamingos
44. Waterfowl Enclosure
45. Waterfowl Enclosure
46. Waterfowl Enclosure
47. Penguins
48. Sealions
49. Rock Garden
50. Polar Bears
51. Big Cat Enclosure
52. Waterfowl Enclosure
53. Anteaters
54. BIRD HOUSE
55. FOUNTAIN RESTAURANT
56. Ape Nursery
57. TOILETS
58. Lions
59. SOUVENIR SHOP
60. TOILETS
61. OAKFIELD RESTAURANT & G. S. Mottershead Memorial Gds

62. P.O. Telephone
63. Gibbons
64. Arctic Fox Enclosure
65. Serval Enclosure
66. Ornamental Rock Garden
67. Wallabies and Kangaroos
68. Kangaroo Enclosure
69. Guanaco Paddock
70. Cheetahs
71. WATERBUS BOOKING OFFICE AND KIOSK
72. Rose Gardens
73. Fountain Flower Gardens
74. Rose Garden
75. Red Lechwe
76. Red Lechwe
77. Deer or Antelope Enclosure
78. Zebra and Deer Enclosure
79. Zebra and Deer Enclosure
80. Brown Bears
81. ELEPHANTS
82. Hippos
83. Tapirs
84. Small Mammal House
85. Waterfowl Enclosure
86. Ankole Cattle
87. Emus, Cranes and Flamingos
88. Outside Monkey Enclosures
89. Baboon Pens
90. Cat House
91. Tiger Enclosures

92. Antelope Enclosure
93. Antelope Enclosure
94. Reindeer Enclosure
- 94a. Llamas
95. Antelope Enclosure
96. Antelope Enclosure
97. Waterfowl Enclosure
98. Waterfowl Enclosure
99. Waterfowl Enclosure
100. Blackbuck
101. Wallabies
102. Ostrich
103. Wallabies
- 103a. Animal Enclosure

104. Pere David's Deer Paddock
105. Przewalski's Horses
- 105a. Onager
106. Arabian Gazelles
107. Musk Oxen
108. Bison
109. Pere David's Deer Paddock
110. Prairie Marmots, Alpacas
111. Antelope Enclosure
112. RHINOS
113. TOILETS
114. Mpila Snack Bar
115. Antelope Enclosure
116. MONKEY HOUSE

ANIMAL FEEDING TIMES:

LIONS—3 pm except Fridays

SEA LIONS 3 times daily—
2-30 pm, 3-30 pm, 4-30 pm

ANIMALS MAY BE MOVED
FROM TIME TO TIME

tarium some of the exhibits are not insects; these include spiders which are Arachnids, and also some other invertebrates which are at present off show.

So often people think of spiders and insects merely as rather nasty "creepy-crawlies", but close observation as well as dipping into the many books on entomology and arachnology as the study of insects (six-legged animals and arachnids, eight-legged spider-like animals) shows how fascinating these animals can be.

Some of the exhibits include:

STICK INSECTS

- Pink-winged Stick Insect (*Sipyloidea sipyilus*)
- Macleay's Spectre (*Extatosoma tiaratum*)
- Corsican Stick Insects (*Bacillus gallicus*)
- Florida Stick Insects (*Anisomorpha buprestoides*)

SPIDERS

- Mexican Red-legged Tarantula (*Brachyrelma smithii*)
- *Edible Spiders (*Melopaious sp.*)
- Brown Bird-eating Spiders (*Lasio dora sp.*)
- Black Bird-eaters (*Theriaphosi avicularia*)
- Haitian Tarantula (*Phormicoptus cancerides*)

OTHERS

- European Brown Scorpion (baby) (*Buthus occitanus*)
- Hissing Cockroaches (*Gromphadorrhina portentosa*)
- *Winged Cockroaches
- African Praying Mantis (*Sphirodomantis lineda*)

We have about 40 youngsters of the Brown Bird-eating Spiders and this is believed to be a "first" birth in this country. The female had only five legs until recently when she shed a skin; when this was completed it was discovered that she had grown three new legs to replace the missing ones! These legs are shorter than the five she already had but will probably grow with each successive moulting.

* Indicates not on show at present.

LATEST BIRTHS AND ARRIVALS

MAMMALS

	Prairie Marmot (<i>Cynomys ludovicianus</i>)	Births
1	Onager (<i>Asinus hemionus</i>)	Birth
3	Siberian Tigers (<i>Panthera tigris siberica</i>)	Births
1	Axis Deer (<i>Axis axis</i>)	Birth
10	Arctic Foxes (<i>Alopex lagopus</i>)	Births
4	Red Lechwe (<i>Kobus leche</i>)	Births
2	Fallow Deer (<i>Dama dama</i>)	Births
1	Slow Loris (<i>Nycticebus coucang</i>)	Purchased
1	De Brazza Monkey (<i>Cercopithecus neglectus</i>)	Purchased
2	Capybara (<i>Hydrochoerus hydrochaeris</i>)	Purchased
1	Brazilian Tapir (<i>Tapirus terrestris</i>)	Exchange
1	Arabian Gazelle (<i>Gazella arabica</i>)	Loan

BIRDS

2	Blue-eared Pheasants (<i>Crossoptilon auritum</i>)	Hatched
6	Mandarin Ducks (<i>Aix galericulata</i>)	Hatched
1	Laysan Teal (<i>Anas platyrhynchos laysanensis</i>)	Hatched
1	Carolina Duck (<i>Aix sponsa</i>)	Hatched
1	Barn Owl (<i>Tyto alba</i>)	Hatched
4	Peafowl (<i>Pavo cristatus</i>)	Hatched
1	Red-headed Amazon Parrot (<i>Amazonus sp.</i>)	Presented
1	Tawny Owl (<i>Strix aluco</i>)	Presented
1	Quaker Parakeet (<i>Myiopsitta monachus</i>)	Presented
1	Kestrel (<i>Falco tinunculus</i>)	Presented
1	African Grey Parrot (<i>Psittacus erithacus</i>)	Presented
4	Go-away Birds (<i>Corythaixoides concolor</i>)	Exchange
20	Golden Weavers	Exchange
20	Red-eared Waxbills (<i>Estrilda troglodytes</i>)	Exchange
20	Orange-cheeked Waxbills (<i>Estrilda melpoda</i>)	Exchange
2	Dusky Lories (<i>Pseudeos fuscata</i>)	Exchange
2	Stella's Lories (<i>Charmosyna papou stellae</i>)	Exchange
2	Ypecaha Wood Rails (<i>Aramides ypecaha</i>)	Exchange
5	Andean Geese (<i>Chloephaga melanoptera</i>)	Exchange
1	Black-necked Crowned Crane (<i>Balearica pavonina</i>)	Exchange
5	Sonnerat's Jungle Fowl (<i>Gallus sonneratii</i>)	Exchange

BIRDS (*continued*)

3	Pekin Robins (<i>Leiothrix lutea</i>)	Exchange
1	Red-crested Cardinal (<i>Paroaria coronata</i>)	Exchange
1	Red & Blue Macaw (<i>Ara chloroptera</i>)	Exchange
2	Blacksmith's Plovers (<i>Hoplopterus armatus</i>)	Exchange

The birth of ten Arctic Foxes is very pleasing. The youngsters are just beginning to venture out of their den under the watchful eyes of the parents. An article on the Arctic Fox was written in the August 1978 issue but we hope soon to have pictures of the youngsters for our readers.

TIGER NEWS

On 26th May, "Ranji", a female Bengal Tiger, gave birth to two cubs; sadly, one of the youngsters was dead when they were discovered by the Keepers but the remaining cub was removed for hand-rearing as it was obvious that the female would have nothing to do with the youngster. The cub, named "Ranee", was fed more or less on demand to begin with but this gradually settled down to once every three hours around the clock. At present she is taking 4 oz of cow's milk seven times a day and is slowly being introduced to solids such as minced meat.

Mr. Wait, the Curator, owns a Great Dane named "Genghis" and this huge dog has taken quite a liking to the tiny cub, as can be seen from the picture opposite. The pair have become quite popular recently with Press, TV and Radio and visitors will be able to see the youngster when she is returned to the Zoo in some eight weeks time, in Enclosure 91.

Three days after "Ranee" was born, her grandmother "Isis", gave birth to two cubs which can also be seen in the Cat House.

"Lotus", the female Siberian Tiger, has also given birth to three cubs; this is her second litter, her first consisting of four youngsters which were born in April of last year. The Siberian Tiger is the largest of the cat family, males sometimes reaching a length of 13 feet! The Chester male, "Chang", is about 11½ feet long and weighs



By courtesy of Kevin Fitzpatrick, Daily Mirror
"RANEE," BENGAL TIGER CUB AND "GENGHIS"

in at about 400 lb. Adult tigers each receive a 15 lb joint of meat each day to which is added various vitamins and minerals to keep the animals in good health.

Although we now have fifteen tigers, including cubs, and they are breeding well in other Zoos too, tigers are still an endangered species in the wild. At present their habitat is being destroyed at a dangerous rate, so that we have the situation where there are as many tigers in the wild as the wild can now support and there is no room for more. This means that until mankind starts to give back some of the land to the tigers there is no point in Zoos trying to release tigers. All we can do is to make sure that when times change there will still be tigers available to restock any wild habitats that need them.

ARABIAN GAZELLES

Visitors can see two young Arabian Gazelles which were hand-reared by Mr. Peter Wait in Enclosure 67. "Yasmin" was born on 1st December 1978 and "Tabitha" on 21st April, 1979. One would think that having been rejected by their mothers such tiny and fragile beings would have had a bad enough start without any mishaps; "Yasmin", however, had an accident.

She had been housed in our Nursery Paddock, Enclosure No. 67, where hand-reared youngsters can learn to adjust to being with others of their own species instead of constantly with humans. It was in this paddock that "Yasmin" was found with her tibia (lower leg bone) shattered; 1½ inches of bone was in pieces.

"Yasmin" was seen by the Zoo Vet, who subsequently performed a very delicate operation entailing the removal of the shattered bone and the insertion of a stainless steel pin; the tiny leg was then set in splints for further support.

A constant check was kept on the youngster and the dressings changed regularly; careful nursing has now brought this animal back to full health. We are pleased to be able to tell readers that despite the removal of bone the leg has healed extremely well and "Yasmin"



By courtesy of J. Walker, Daily Mirror
MALE ARABIAN GAZELLE

walks and bounds around her paddock like any other gazelle; there is not even the slightest suggestion of a limp.

At the moment we have seventeen Arabian Gazelles (*Gazella arabica*) but during the summer of 1978 we reached an all-time "high" of twenty-two!

The history of Chester's Arabian Gazelles begins in September, 1964 when two were presented to the Society; one of these animals died in quarantine but the number rose in 1965 when four more were presented. In 1966 three more gazelles were added to the herd and this now numbered eight, the largest number we had ever had. During 1966 the RAF and the Army were responsible for the presentation of four more gazelles which brought the herd to ten, and, allowing for births and deaths, this number remained constant until 1973.

From 1973 the herd steadily increased, reaching twenty-two during 1978. Earlier on this year a pair "Omar" and "Salome", were sent to Bristol. There is also a smaller herd at Dudley Zoo and another at Blackpool Zoo, but it is the Chester Zoo herd which is so important because it is possibly the largest herd now existing outside the state of Abu Dhabi, where the last wild ones survive.

SUBSCRIPTIONS

CHESTER ZOO NEWS is at present being produced every month and readers who would like to receive the magazine regularly can obtain subscription forms at the Souvenir Shops. The current charge for 12 issues, including postage, is £2.70 per year. Completed forms can be handed in to the Souvenir Shops or posted to Chester Zoo News, Chester Zoo, Chester.



**The following notice is displayed on several boards in the grounds
Please comply with it at all times**

FEEDING OF ANIMALS AND BIRDS

IT IS AN OFFENCE for any member of the public to offer food of any description to any Animal or Bird in Chester Zoo.

This regulation is made for the sake of the health of the Animals and Birds. Since the **NO FEEDING** rule was introduced, the number of deaths has dropped appreciably and sickness due to wrong feeding has been virtually eliminated.

What you may be offering to an animal may only be a sweet or an inoffensive piece of bread, but it can mean a death sentence for the animal. For example, a cough drop, which may relieve your cough, can cause instant death to many Animals and Birds in the Zoo.

You must not lose sight of the fact that you are only one of over a million visitors who visit the Zoo annually. If for instance an elephant had one bun from only one tenth of a day's visitors during the summer, it would eat between three and four thousand. You can guess the result.

We realise what a temptation it is for visitors, particularly children, to feed our Animals and Birds and this is why we invite members of the public to be present at the official feeding times.

This is a polite warning to you, asking you not to feed the animals. If you ignore it, the Keepers are authorised to ask you to leave the Gardens.

If you really love Animals and Birds, you will appreciate the wisdom of the ruling—No feeding by members of the public.

**PLEASE HELP US TO KEEP OUR COLLECTION OF
ANIMALS NOT ONLY ALIVE BUT IN FIRST CLASS
CONDITION**

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