

## CURATOR'S REPORT

The animal collection at Marwell Zoological Park on 31 December 1978 and 1979 consisted of:—

	MAMMALS		BIRDS		TOTAL NUMBER	
	Number of species	Number of individuals	Number of species	Number of individuals	Species	Individuals
31.12.78	62	377	63	246	125	623
31.12.79	64	430	63	266	127	696

Changes during the period under review:

1. **Species acquired:**

- (a) Red Mantled Tamarin — *Saguinus illigeri* (2.2+1)
- (b) Congo Buffalo — *Syncerus caffer nanus* (2.3)
- (c) Ankole Cattle — *Bos taurus* (1.1)
- (d) Chinchilla — *Chinchilla laniger* (2.1)
- (e) Small Clawed Otter — *Aonyx cinerea* (1.1)
- (f) Red Jungle Fowl — *Gallus gallus* (3)

2. **Species no longer in the collection:**

- (a) Vietnamese pot-bellied Pig (1.0)
- (b) White Tailed Gnu (0.2)
- (c) Impala (2.1)
- (d) White Stork (1)
- (e) Lesser Sulphur Crested Cockatoo (0.1)

3. **Additions to existing species:**

- (a) Births — 256 animals of 49 species were born/hatched.
- (b) Arrivals from other collections — 48 animals of 21 species.

4. **Departures:**

Transfers and Deaths — a total of 69 animals of 21 species were sent to other collections. Deaths, as recorded in the analysis of the animal collection, were 90 mammals and 51 birds. The majority of these were neo-natal deaths.

A more detailed analysis of changes to the collection appears elsewhere in this Annual Report.

### SIGNIFICANT EVENTS

#### ANTELOPE and CATTLE

##### Scimitar Horned Oryx

A total of 3.9 calves were born during the period under review, of which 1.6 survived. This is significantly better than previous years, when losses due to diarrhoea were high. A full account of this problem to date appears elsewhere in this Annual Report.

#### Nilgai

The death of all the calves born this year (5.3) has dramatically highlighted the need to change our management of this species. The reasons for such mortality are:

*The extreme nervousness of adults*, which prevents us managing them as we do other species, i.e. by providing enclosed accommodation during parturition and by limiting access of the dominant male to the breeding females. Being equatorial, they will breed during almost any month of the year.

*Twinning.* A high percentage of births are twins. This sometimes results in the birth weight of individuals being approximately half that of a single calf, and this severely reduces their chances of survival.

Various plans to solve this problem are currently being considered.

#### Congo Buffalo

The arrival of 2 males and 3 females at the beginning of November was, one of the most important events of 1979. They all arrived in excellent condition, having spent the previous twelve months in quarantine at London Zoo.

They were all born in captivity, 1.3 in West Berlin and 1.0 in Hanover Zoo, during the period 1975-78.

Congo or Dwarf Forest Buffalo are found in the dense forested regions of West and Central Africa. Their body colour is dark to bright reddish bay and they are much smaller than other Buffalo races, weighing approximately 220-300 Kg and attaining a shoulder height of 100-120 cms.

Though still numerous in the wild state, only a few zoos exhibit them. The International Zoo Yearbook records 8 births in five zoos throughout the world in 1978.

#### EQUINES

##### Hartmann's Mountain Zebra

The birth in May of a filly foal to EILEEN (F1) and a colt foal to MAGGIE (F3) in September, ended six years of non-breeding. This achievement followed the maturation of a young male called ANTWERP, imported from Belgium during December 1976.

The Zoological Society of London and Marwell Preservation Trust jointly own and manage their Hartmann's Zebras.

The total number in the two herds are:

Whipsnade	1.2
Marwell	2.5
Total	3.7

## FELINES

The deaths in September of a Snow Leopard, Cheetah, Lynx and Serval, all within a four-day period, caused grave concern. The veterinary report gives further details of these cases.

### Jaguars

TUNJA, a black female imported from Rotterdam in January 1978, gave birth in September for the second time, producing 1.2 cubs, of which 1.1 were black. TUNJA and her offspring are the only black Jaguars in Britain at the present time. Her first litter was stillborn in April 1979.

### Snow Leopards

One of the most disappointing aspects of 1979 was our failure to establish viable breeding pairs of this species.

Our Snow Leopard history to date is:—

VILKKU — female, arrived 12.5.77 from Helsinki. Born 10.8.68, died 3.9.79, cause still unknown (see Veterinary Report).

PAVEL — male, arrived 2.11.77 from Seattle. Born 2.5.75, still in collection. Very nervous on arrival, but has now settled down.

VIKTORIA — female, arrived 16.6.78 from Helsinki. Born 24.4.76, died 4.3.79 after becoming entangled in a cable attached to a sliding door.

Whilst every care is taken in designing suitable accommodation for new arrivals, only the test of time and sometimes accidents, reveal the shortcomings. In the case of the Snow Leopard accommodation, a small ledge around half of the den provided sufficient foothold for this very agile species to reach the cables. All the cables have since been boxed in.



Snow Leopard *Photograph by Courtesy of Ian W. Dalgleish*

IRKUST — male, arrived 23.5.79 from the Rare Feline Breeding Centre, Florida. Born 1968, still in the collection and hopefully will be our first breeding male.

TIMI — male, arrived 23.5.79 from Blijdorp Zoo, Rotterdam. Date of birth is unknown; still in collection. Imported as a female, but subsequently proved to be a male.

VANDA — female, arrived 12.12.79 from Helsinki Zoo. Born 23.6.78. On arrival, she totally refused to eat anything for two weeks and during the third week took only a few ounces. On the fourth week, tempted by best quality heart, liver and kidney her abstinence ended. Hopefully she will be our first breeding female.

We are awaiting U.S. government papers so we may import a female born 27.5.79 in San Antonio Zoo, Texas, U.S.A.

## BIRDS

### Rheas

A total of 19 chicks were successfully hatched during July and August and artificially reared. This was done in order to carry out a detailed investigation into growth problems which have caused high mortalities in this species (100% in 1978) during the last five years.

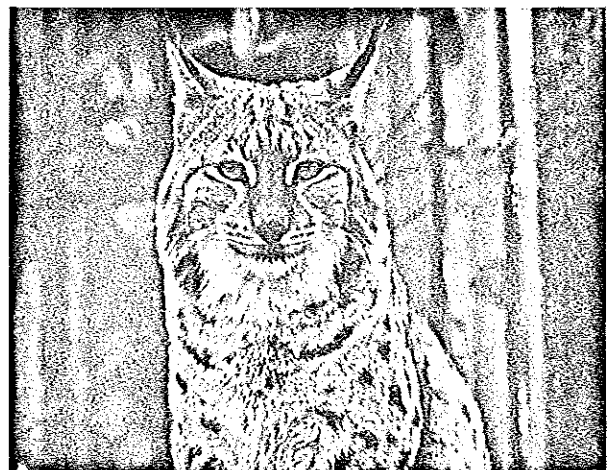
The problem manifests itself in poor growth and various forms of leg deformity. A provisional investigation during 1978 suggested that the cause might partly be due to protein quality and intake.

This year, a newly-formulated ration, in meal form, was fed to hatchlings. The protein component of this diet, unlike previous rations, was almost entirely of animal origin. In all other respects it resembled a standard turkey ration. Chick growth rates and food intake were recorded weekly, and X-ray analysis of bone development in selected chicks, monthly.

16 chicks survived and developed well. The remaining 3 were destroyed (for detailed examination) after a period of poor growth.

The investigation will continue with 1980 hatchlings in order to obtain further data.

*Peter Bircher*



Northern Lynx *Photograph by Courtesy of Ian W. Dalgleish*