

length threefold – 1,050 g (about 2 lb) and 76 cm (30 in). From the age of ten weeks the mother no longer looked after the young so carefully and they started to eat independently. During the first two months the young uttered a shrill vibrating cry and sometimes, when they felt disturbed, a ‘tapir-like’ hacking cough. We have recorded this on a tape-recorder. We have never heard any vocalisation by the parents. The young were vaccinated against feline distemper with a series of three injections of between 1 and 2 ml between the age of 2 to 4 months. By the age of six months the young almost equalled their parents in size and had the same coloration, except that the orange-buff coloration on the neck and belly was still absent.

Our experience with our Banded linsangs was very similar. We received them on 21 February 1968 and on 15 October 1968. They were kept in an indoor cage in the same way as our mother Banded palm civet was kept. Their wooden breeding-box was a little smaller at 22 × 22 × 22 cm (8.5 × 8.5 × 8.5 in) with a round entrance hole measuring 7 cm (2.75 in) in diameter. Our male linsang once managed to squeeze through the bars of his cage which were only 40 mm (1.57 in) apart. They eat the same as the Banded palm civet except for the bananas. On 4 December 1968 between 1200 and 1300 hours a pair of linsangs were born. A few days before we had noticed that the female had slightly swollen nipples although without any reddening. Immediately after the birth the male was removed. Unfortunately the birth was not observed and it may be that it was not accidental that the female gave birth when our keeper was absent having his lunch, because this also occurred with our Banded palm civets. We believe that they may

have delayed giving birth because an observer was present.

We are not sure if the female linsang was mated by our male or was already pregnant at the time of her arrival at the zoo. The coloration of the young was the same as that of the parents, except that they had pink noses. We were lucky that our female linsang was fairly tame, for it meant that it was possible to weigh and measure the young ones regularly. At birth they weighed only 40 g (1.4 oz) and had a head to tail length of 16 cm (6.3 in). When being weighed, the young ones made a shrill vibrating cry, similar to that of the young Banded palm civets, but the parents did not make any sounds. After weighing them we had to put the young back in their box, and we have never seen the mother linsang carrying her young. When the young were about ten days old, the mother left the breeding-box for one or two hours every afternoon. We did not hear the young call when their mother was away. Their eyes opened very gradually, finally being wide open at 18 and 21 days. They doubled their birth weight at day 18 and after eight weeks their birth-weight had increased sevenfold and their length 2.5 times – 275 g (9.7 oz) and 40 cm (15.7 in). They were vaccinated like the civets and by the age of four months the young equalled their parents in size. At this age their colour was similar to that of the parents except that their undersides were still white.

ACKNOWLEDGEMENT

I should like to acknowledge the help of head-keeper D. van Helsdingen, who helped compile the records on which this report is based.

PRODUCT MENTIONED IN THE TEXT

Gistocal is manufactured by Brocades.

Hand-rearing an aardwolf

Proteles cristatus

NATASCIA SPINELLI

16 Via del Ginestreto, 00040 Cecchina (Roma), Italy

The aardwolf *Proteles cristatus* was obtained by my husband Luciano Spinelli in Eritrea, when he was filming there with some of his animals. When captured, the pup was about 25 days old,

was half dead, and weighed only about 350 g (12.3 oz). Its lack of weight may have been due to lack of food or to the cold but with a few drops of milk Luciano succeeded in resuscitating it and

subsequently kept it in his caravan at a temperature of about 35°C (95°F). After four or five days the aardwolf was eating 20 g (0.7 oz) of chopped beef and 5 to 6 teaspoonsful of milk every three hours.

The pup was brought to me in Italy around Christmas 1968, when it was about three months old. Although it was kept with great care the change of climate was almost fatal. Twice it suffered from very severe gastro-enteritis but each time it recovered after treatment with injections of antibiotics (Dycristein 250 mg balanced with colloidal calcium plus Ostelin and vitamin B₁₂).

Now (June 1969) he is nearly ten months old and is very lively and tame; he quite easily overcame the shyness which is typical of the species. He lives free in the house, sleeps in the armchairs

and goes out into the garden whenever he feels like it. However, he is not allowed out when the weather is cold or wet. During the winter he is kept indoors at a temperature of 35°C (95°F).

The main difficulty in keeping this kind of animal which, in the wild, feeds mainly on insects, is in the presentation of food. It seems to have great difficulty in feeding on what one would regard as 'normal' food because it uses its tongue, which is coated with sticky saliva, to pick up its food. The difficulties appear to be so great that it soon stops feeding altogether. We have overcome this trouble by preparing small balls of ground meat mixed with powdered bone and milk which we offer to the aardwolf on the palms of our hands. He is fed twice a day and receives a daily total of 350 g (12.3 oz) of meat, 50 g (1.75 oz) of bone meal and 50 g (1.75 oz) of milk.

Breeding and rearing the Northern lynx

Felis l. lynx

at Ostrava Zoo

LUDVIK KUNC

Zoologická zahrada, Ostrava-Stromovka, Czechoslovakia

In most west European countries the Northern lynx *Felis l. lynx* has been exterminated but in Czechoslovakia they still live in the wild. In 1935 only about 50 lynxes lived in the country (for this purpose including sub-Carpathian Ruthenia) and in that year steps were taken to protect them. Their numbers gradually rose until, by 1966, there were estimated to be about 500 of these cats. Recently the protective measures have been cancelled and in Slovakia the lynx can be hunted throughout the year. Some are caught for zoos in special baitless cages without suffering any injury. From 1965 to 1968 our zoo acquired 15 lynxes in this way. Ten were adult and the remainder were about 21 months old. Two females were captured with their young. The weight range of the 15 varied from 17 to 25 kg (37–55 lb). Their coloration was not constant; some were prominently spotted while others, coming from the same area, were spotted only indistinctly. They were acting as hosts to the parasites *Toxocara mystax* and *T. leonine*, which are found also in lynxes living in captivity.

After they arrived at the zoo the lynxes were fed on live rabbits for a month or so. These were given in the afternoon. Once they had become accustomed to captivity we gave them chickens and guinea pigs. Occasionally they refused food for as long as 13 days. We believe that, although they eventually accepted meat, they need to be given large quantities of live food to keep them in good condition.

In 1968 we formed four pairs from the adult animals during the mating season, although at other times of the year the males and females were kept separately. Thus they were kept together from the end of February to the middle of April and mating was observed on 26 and 27 March. Mating took place during the afternoon, although the greatest activity apparently occurred at night. Unfortunately this was not observed. By the end of the mating season some of the females had their hair considerably shortened, or even torn out, on the nape of the neck where they had been held by the males.

Owing to disturbance females 1 and 2 gave