

ANNUAL REPORTS

BURGERS' ZOO, ARNHEM, THE NETHERLANDS

Summary of the Annual Report 2000

In 2000 no less than 1.83 million people visited Burgers' Zoo. This is not only a record for the zoo, but also for the Netherlands; never in history has a Dutch zoo attracted so many visitors in one year. This 20% increase can easily be explained by the official opening of our fourth large-scale ecodisplay, Burgers' Ocean, on 7 April 2000. [For some details of this exhibit, see *I.Z.N.* 47:2, p. 114.]

Notable births in 2000 included 4.0.1 sun bitterns (*Eurypyga helias*) from five clutches from two pairs. Three offspring were parent-reared in the 13,500-m² indoor rainforest ecodisplay, Burgers' Bush, the other two hatched and were parent-reared in the off-exhibit breeding centre. Also in Burgers' Bush, no fewer than 22 hooded pittas (*Pitta sordida*) were born. As London, Bristol and Chester Zoos want to initiate a breeding programme for this species in the British Isles, four birds were sent to the U.K. to add some new founders. As in 1999, the pair of anhingas produced two clutches with four offspring in total. A male anhinga was sent to Tierpark Berlin; but as it is very difficult to catch anhingas in Burgers' Bush, he is still waiting for a female. Other hatchings in the Bush include, among many others, nine speckled mousebirds (*Colius striatus*), four golden-fronted leafbirds (*Chloropsis aurifrons*), five black-capped babblers (*Pellorneum capistratum*) and one ashy tailorbird (*Orthotomus ruficeps*). Furthermore, for the first time in the history of Burgers' Bush, green igua-

nas hatched without any human interference; the eggs were incubated by the temperature of the Bush.

In Burgers' Desert, a three-acre [1.2 ha] indoor replica of the Arizona Sonora Desert, the ultramarine grosbeaks (*Passerina brissonii*) did very well, with four chicks; we also received seven confiscated birds from Antwerp Zoo. Also in the Desert, two turkey vultures (*Cathartes aura*) were hatched and parent-reared.

In the bird department two Congo peafowl hatched from two clutches and were parent-reared. Unfortunately the second chick, a male, died, but the first, a female, is doing fine and will be placed in another institution upon recommendation of the EEP coordinator. After a five-year break, our pair of Sulawesi hornbills (*Aceros cassidix*) again produced an egg; the female incubated it and reared the offspring, while the male was continuously feeding her. But sadly, a couple of days before fledging the offspring died from an infection. Our two breeding pairs of white-tailed sea eagles produced a total of three chicks, of which two were sent to Israel to take part in a reintroduction project.

Almost 400 specimens were sent to other collections during 2000, over 350 of whom were born in Burgers' Zoo. The whole herd of eland, 22 in all, was sent to other zoos as part of our collection plan. It is foreseen that Burgers' Safari will be upgraded in the not-too-distant future, and as this species is in no need of conservation, and because it is getting more difficult to dispose of surplus animals, we decided to give up the eland in favour of a more important species.

We acquired a new baringo giraffe

(*G. c. rothschildi*) male as successor of our present breeding male. It was almost impossible to find a new male, because there are not many pure baringo giraffes in Europe, and they are almost all related to our herd, as we have bred nearly a hundred in past decades, from which quite a number have been spread over Europe.

Other additions among mammals include a young female wart hog and an adult male bongo, both from Rotterdam Zoo.

Two remarkable species were added to the bird community of Burgers' Bush: northern green-winged king parrots (*Alisterus chloropterus moszkowskii*) from Walsrode Birdpark, a very colourful and attractive new species, and red-rumped cacique (*Cacicus haemorrhous*) from Bochum Zoo, Germany, a very noisy addition. Both species adapted well to their new environment.

We removed no less than eight species from our inventory list, as a result of the transformation of some breeding loan agreements into donations.

A final important event was the birth of a female blue duiker (*Cephalophus monticola*). Burgers' Zoo is the European studbook keeper for this species, as well as for aardvark, greater kudu and king vulture.

Marc Damen

HOWLETTS AND PORTLYMPNE WILD ANIMAL PARKS, U.K., Summer 1999 to Summer 2000

Extracts from *Help Newsletter* No. 22

This was a dreadful year for everyone connected with the parks. The lingering death of John Aspinall was tortuous but expected, but the ghastly death of the Port Lympe elephant

keeper Darren Cockrill was a terrible shock. John's eldest son Damian has taken on the mantle of chairman of Howletts and Port Lympe Estates Ltd, and he and John's brother James Osborne plan to further as far as possible the ideals John Aspinall stood for. In future the breeding programme of the two parks will be focused more concentratedly on animals that are endangered in the wild, and in particular ones that have a chance of being reintroduced, at the expense of the less rare species; for example, we will concentrate on Pallas cats while phasing out caracals, and European bison will have a priority over American.

John was too ill to go to California in May 2000 to accept in person the Zoological Society of San Diego's Conservation Medal. This was the first award of any kind bestowed upon him for his life's work, and the fact that it came from the U.S.'s most famous and prestigious zoological society gave him great pleasure. Just before John died he was also awarded the 'Year 2000 International Conservation Award' by the Wilderness Conservancy in Los Angeles. In ten years this award has only been made four times. The citation reads: 'In recognition of his achievement in the care and propagation of gorillas while in captivity and of qualitative release of select animals back into the wild. The methodology created and implemented by John Aspinall over a period of many years evidences his dedication to endangered and threatened wildlife conservation and justly entitles him to worldwide recognition.' Sadly, John was too ill to be aware of this final honour.

Primates

At Howletts, 19 infants were successfully parent-reared – two moloch gibbons, five Javan langurs, two ban-



Damian Aspinall with silverback Kifu at Howletts. (Photo: Eleanor Bentall)

ded leaf monkeys, two grizzled leaf monkeys, two black-and-white colobus, two white-faced sakis and four black-and-white ruffed lemurs. The moloch gibbon births were, as always, of great importance. One was particularly noteworthy as the first birth to a new pairing between a Howletts-born female and a Munich-born male, and also as the world's first ever third-generation captive birth of a moloch gibbon. The other offspring was born to our original breeding female, who caused some trepidation when she was discovered in labour, as she has had three caesareans in the past. Later that day, however, she successfully delivered another daughter. Earlier that same day, the first pure-born banded leaf monkey (*Presbytis melalophos nobilis*) was born at Howletts. The experienced mother was overly relaxed with her new arrival, and particularly at feeding times would leave her dependent son on his own, very distressed. A previously successful cooperative system of keeper

'auntieing' was used during the early days, and later a mature daughter was reintroduced to ably assist with infant care-giving.

The major events of the year were the first births of grizzled leaf monkeys (*Presbytis comata*) in December 1999. Unfortunately the first infant born was dead, but our disappointment was relieved by a successful birth five days later, and a second live infant was born in early September 2000 to the previously unsuccessful mother. To the best of our knowledge, these are the first recorded births of this species in captivity; three births at London Zoo between 1912 and 1915 were incorrectly recorded as *P. aygula* (= *comata*), but were in fact capped langurs (*Trachypithecus pileatus*) imported from Calcutta, an identification backed up by photographic evidence.

A new pairing of sakis produced their first offspring, the 44th saki birth recorded at Howletts since 1977. The original breeding female is still alive at 27, which appears to be the

longevity record for the species.

At 30 September 2000 the two parks housed a total of 67 (29.38) gorillas, seven (4.3) of whom were born since the last report. The matriarch Shamba, who arrived at Howletts in 1960 at an estimated two years old, died in October 1999. Three other females in Bitam's group are now around 40, so they are not as lively as they once were, but they still enjoy life, spending most of the day foraging for food or just lying around. They tend to retire to the sleeping dens around four o'clock, and little will then entice them out until morning. Months of construction and anticipation culminated in the move of Djala's group (4.7) from Howletts to Port Lympne on 6 June 2000. They are housed in what may be the largest gorilla enclosure in the world, 'The Palace of the Apes'. Designed – mainly by John Aspinall – to accommodate up to 30 gorillas in one family, and based on all the successful elements from past gorilla buildings, the complex has some new ideas as well. The front of the outside enclosure is glass, and the wall of the garden enclosure has viewing windows along with a raised walkway that follows the top of the wall. These give unparalleled views of the gorillas in the garden, where there are a number of 'hot-wired' trees, rocks and climbing apparatus. The outside enclosure is festooned with ropes and nets, contains a slide and a paddling pool and is on two tiers. Inside, as usual, no expense has been spared, and the indoor play area is covered with high-quality tiles, as are the 14 bedrooms.

Carnivores

In August 1999 the Barbary lioness (*Panthera l. leo*) Jade came into season and deserted her young cub; so we had no choice but to remove it for hand-raising. She had two more cubs

in December and has raised them without problem. The hand-raised cub, a female, is to receive a mate from Rabat Zoo in Morocco. Our breeding pair of clouded leopards, Chiang and Thai, produced two (1.1) more kittens. They were sexed and vaccinated at eight weeks, and we were delighted to find that we had one male, Nanyo, and one female, Sulu. Both are in good health.

In December 1999 two male ocelots, Pablo and Santos, began to refuse food. They were offered a large variety of items, but nothing would tempt them, and all tests proved negative. After Pablo had been refusing food for about ten days he had deteriorated to a critical condition, so he was sedated and put on an intravenous drip, while 50 ml of liquidised rabbit was tube-fed into his stomach. To our surprise and relief he began to feed the following day. Although Santos's condition had not been as critical, we gave him the same treatment, and he too began to feed. Both cats were in separate enclosures with no contact, and their symptoms began one week apart. As Pablo was housed next to an older male who was not affected, we assumed the condition was not contagious. The only thing that connected both cases was the consumption of pigeon the day before; pigeons are known to build up toxins from the consumption of contaminated cereal crops etc., and over-indulgence can result in these toxins being passed on to the animals consuming them. Both cats made a full recovery, and after a four-month gap pigeon was reintroduced to their diet, but restricted to no more than one feed every seven to ten days.

In January 2000 a second pair of margays arrived from the Ridgeway Trust; they have settled well together, and we hope they will breed in 2001. Our original pair gave birth to our first margay kitten on 6 July 2000.

Infra-red camera and 24-hour video have proved to be invaluable equipment, allowing us to monitor mating behaviour and infant development in this highly nocturnal species.

Breeding in African hunting dogs, dholes and maned wolves was less successful than in recent years, largely because of an outbreak of salmonella and campylobacter. A rusty-spotted cat at Port Lympne gave birth in August 1999 and again in April 2000, but neither litter survived overnight; we hope that in future camera surveillance in nest-boxes will enable us to learn why she loses her young. Successful births at the two parks included a desert cat, two fishing cats and three bush dogs.

Hoofstock

Only one bongo calf, a male, was born this year; he was the last offspring of our bull Molo, who died late in 1999 from a viral infection. But the two new bulls have successfully covered eight females between them, so we wait in anticipation for mid-2001. Other births at Howletts were three (1.2) European bison, a female Brazilian tapir and a number of blackbuck.

Births at Port Lympne included 1.0 Eld's deer, 0.1 Malayan tapir, 0.3 American bison, 2.2 water buffalo, 0.1 banteng, 0.0.2 blackbuck, 0.0.2 hog deer, 0.0.3 sambar, and numbers of axis deer, barasingha and nilgai. No Przewalski horses were bred, as our bloodlines are over-represented.

The black rhino herd grew with the birth of a second male calf to Addo and Nakuru in October 1999. The following month Jaga, a seven-year-old female, arrived from Dvur Králové, and settled in quickly. After a couple of months, we introduced her to the male Baringo; they got on well for two weeks, until he suddenly attacked her so fiercely that she had to be rescued. She was then put in with two younger animals to restore her confidence, and we hope soon to try mixing her with breeding bulls again. There have been some serious health problems in the herd: a female calf born in November 1999 died in March, and the post-mortem showed a blockage of lucerne in her stomach. The 30-year-old cow Naivasha had a benign tumour removed from her leg and made a complete recovery. Naivasha's daughter Arusha, however, had a much more serious problem; she

developed a nasty growth in her mouth, which was diagnosed by pathologists as a haemangiosarcoma – a particularly unpleasant form of cancer. Prognosis was deemed extremely poor. She was sedated seven times in three months over the summer for the tumour to be frozen and cut back, only for it to re-appear, sometimes within days of the last sedation. Eventually, however, it seemed to disappear, and at the time of writing we are cautiously optimistic. At 30 September 2000, our black rhino herd numbered 19 (7.12) animals.

Elephants

There was no breeding in the Howletts African elephant herd this year. The calves from previous years are very healthy, though Jumar and Jassa, our three-year-old bull calves, both had to have surgery on their right tusks after breaking them and exposing the pulp chambers. Next year we hope to have access to another three acres [1.2 ha] of ground, which should allow us to breed more elephants and improve our facilities even further.

At Port Lympne, the year was overshadowed by the death of Darren Cockrill [see pp. 131–132 – *Ed.*]. Darren gave 100% in everything he did, adored his elephants and was a vital part of the team. He is sorely missed by us all.

The elephants from Rotterdam Zoo – three cows and two bull calves – have all settled in well, and two of the cows have been mated by Luka, though it is still too early to confirm any pregnancies. The two calves are now undergoing a regular training routine; they are already presenting their feet on a stool for foot care and lying down on command for us to examine them and wash them. Getting them used to these basic behaviours now, while they are only two

years old, will pay dividends when they are adult, as lying down and being washed and having their feet trimmed will be quite normal to them.

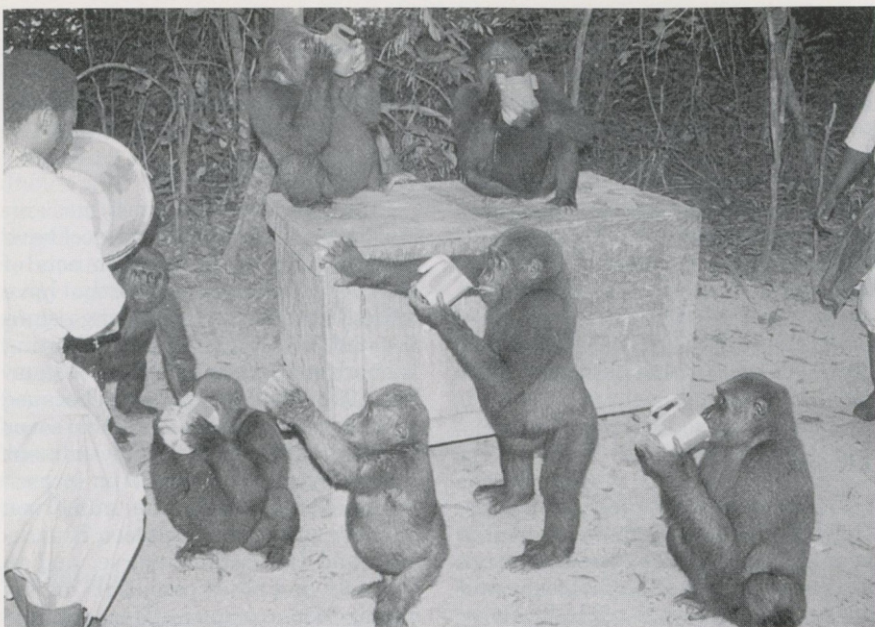
Overseas projects

Thankfully, neither staff nor animals in our Congo gorilla project have fallen victim to the random acts of violence and rampant crime that have afflicted the Republic of Congo since the end of the last spate of fighting that erupted in Brazzaville in December 1998. This is primarily because we have retained our invaluable corps of bodyguards from the government armed forces, who enable us to pass unimpeded through the numerous barriers on the road between Brazzaville and the Lefini reserve, and to find fuel and other essentials on our supply trips to town. This predicament of relying on military forces to protect our team and charges is by no means something that we relish: non-profit conservation organisations cannot be seen to be partisan to any particular government. However, the reality of life in the field separates us from such noble ideals – either we stay with military backup and the gorillas have a chance to live, or we have to leave Lefini and the gorillas are likely to perish.

We lost two of the Lefini gorillas – a male, Kabo, died apparently from shock following injury in a fight, and a female, Loubomo, went missing after showing symptoms suggestive of concussion. An eight-month-old female arrived after being offered for sale to the wife of the French ambassador and subsequently confiscated by us. She was the only exception to the suspension of confiscations that we made last year in the light of the serious problem of overcrowding in the sanctuary. Because of the shortage of space for the various groups and the resulting aggression, we have



Malayan tapirs Lidana, Daeng and their calf Lidaeng at Port Lympne. (Photo: Robert Savill)



Gorilla orphans at the Mpassa reserve, Gabon. (Photo: Amos Courage)

been prospecting several new sites further north in the Lefini reserve; the most suitable would be some 20 kilometres north-west of the main camp, but it will need more prospecting and anti-poaching patrols before any move can go ahead.

As well as being home to the gorillas, the sanctuary is also inhabited by quite a number of other animals, most of which seem to be thriving, especially within the core of our protected area. Notable species include hippopotamus, forest buffalo, sitatunga, otter and duiker amongst the large mammals, and grey parrot, Egyptian goose, European stork and giant kingfisher amongst the birds. There is still a significant amount of hunting pressure from the local population, a problem that has been exacerbated by the influx of refugees from the former Zaire, where the war is still continuing. It is a great credit to our rangers, most of whom are from the local villages themselves, that

the wild animal population is in such a good state despite these pressures.

At our other site, Mpassa in Gabon, the gorillas (currently 17 in number) are well on their way in the reintroduction process considering their young ages. In April 2000 the oldest seven broke the cage, releasing themselves. Two chose to sleep in the cage, but the other five began making nests in the forest. To expand the territory they are able to utilize at this point, we built a platform in the forest several kilometres from the old cage. After moving the group to the new platform, we have observed an increasing number of night nests. The animals are almost self-maintained with the exception of milk, which we still provide. In November 1999 we sent two young hand-reared Howletts-born males to Mpassa. After an eventful journey, they settled in well, but three months later, tragically, two-and-a-half-year-old Kwa-Kwa died of peritonitis as a result of a ruptured

appendix. This was a hard blow for everyone involved, but in the greater scheme of things does not affect the ongoing work of reintroducing gorillas back to the wild.

NEWQUAY ZOO, U.K.

Annual review 2000

In common with many British zoos, the gains of the spring and summer were largely washed away during an autumn and winter of unremittingly awful weather. Nonetheless, our visitor figures remained buoyant, with approximately 200,000 people entering the zoo during the course of the year.

There were no major construction projects this year, but several smaller improvements and renovations. Among these were the remodelling and enlargement of the otter enclosure and the mixed exhibit for raccoons and prairie dogs. As our raccoon population has increased (at the year's end we held a total of six), these notoriously recalcitrant animals have begun to show themselves rather more readily, and they now make for a good display. Their interaction with the prairie dogs – a new group of which arrived from Twycross Zoo – is also quite interesting to see: the rodents have learned to disappear quickly down their burrows when their cage-mates come sniffing around. Our Asian short-clawed otters, too, have clearly relished the extra space available to them, but they have unfortunately not yet rewarded us with youngsters. We also established a selection of invertebrate displays in a short tunnel – the 'Bugs Tunnel', as it is not-altogether-satisfactorily known. This exhibit is not yet perfect and will require some further modifications.

The story which attracted the most interest during the course of the year was that of our lions. Through the summer Major, our male lion, showed

a marked decline in his condition. As well as using conventional medicines, we attempted to cure him with homeopathic remedies, but without success. In August he was euthanased; subsequently the post-mortem showed that he was carrying feline spongiform encephalitis, the feline form of BSE. Press coverage of both his death and his BSE was extensive and largely sympathetic. On a happier note, in November a new male lion, Ronnie, arrived from Longleat Safari Park. Again, the press were very excited about an animal who amongst zoo people would merit barely a second glance.

Most new arrivals during the year were additions to established groups, amongst them capybara, crested porcupine and silvery marmoset. The only new mammal species to join us was very much at the smaller end of the spectrum: a group of Guenther's voles from Bristol Zoo is displayed alongside the invertebrates in our Bugs Tunnel. Even more diminutive were the many harvest mice which arrived from Chester as we continued to play a part in the breeding programme for these tiny rodents [see *I.Z.N.* 47:8, p. 524]. Several new bird species were added to the collection: lilacine amazon parrots (1.1, from Chester), little egrets (1.1, from Banham) and white-naped cranes (1.1, from Rode Bird Gardens). A pair of sacred ibis arrived from a private breeder and can now be seen in our walk-through aviary alongside two other ibis species – puna and scarlet. It is interesting to see the three species together and to be able to make comparisons between them. Among the birds joining established groups were Temminck's tragopans (1.1, from Paradise Park and Cotswold Wildlife Park).

Four veiled chameleons arrived at the zoo from Whipsnade; unfortunately the three females died, but the male continues to thrive. A pair of Kenyan sand boas came to the zoo on