

INTERNATIONAL ZOO NEWS

Basel Zoo, Switzerland

It was a big event when the new African bull elephant, Callimero, arrived from Rome Zoo on 12 October 2000. But the arrival was spectacular not only because 20-year-old Callimero is such a huge animal (3.2 metres high, weighing 6.6 tons!), but also because of what happened in the following weeks. Callimero immediately started to destroy his facilities and successfully damaged some gates and doors; furthermore he is very aggressive towards his new keepers. But maybe his behaviour is not surprising, if one remembers that he lived for over ten years at Rome Zoo on his own in a very small and boring enclosure.

Callimero is only at Basel on a temporary loan agreement; his final destination, in 2002, will be Beekse Bergen Safari park, the Netherlands, where he will be joining five African cows when the new bull facilities there are ready. Meanwhile Basel temporarily has 2.5 African elephants, including a three- or four-year-old bull elephant and the 50-year-old cow Ruaha, the oldest African elephant in Europe.

*Jürgen Schilfarth,
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Bronx Zoo (Wildlife Conservation Park), New York, U.S.A.

The zoo has three (2.1) Bulwer's pheasants (*Lophura bulweri*). Breeding success with this species in captivity has been universally poor, so the zoo's bird staff have been making concerted efforts to simulate the

birds' natural habitat in order to promote mating. John Rowden, assistant curator of the Bird Department, has collected information through both research at the zoo and fieldwork in Borneo on the mating habits of Bulwer's pheasants. This has led to the finding that these birds use an 'exploded lek' breeding system, meaning that the males will gather in the same general area and set up display arenas, while remaining visually isolated from one another. The key way males keep track of each other in this system is by vocalization, consisting of a loud, two-note call, performed during display. So in summer 2000, every day at one-minute intervals from 6.30 to 7.30 a.m. and 5.30 to 6.30 p.m., the zoo broadcast recorded male display vocalizations on the speakers of the park-wide audio system located within the pheasant aviary. These hours were chosen because Bulwer's pheasants tend to be more active early and late in the day. In addition to mimicking the bird calls, the department provides the pheasants with daily rain showers (they breed during the rainy season in Borneo) and dust baths. In attempting to recreate the pheasants' natural habitat in these ways, the zoo hopes to augment its collection of Bulwer's pheasants, as well as to expand general knowledge of how to successfully maintain a population of these birds in captivity. According to initial observations of the ongoing projects, both the males and the female increase their activity when the vocalizations are playing.

WPA News (November 2000)



Emi, Cincinnati Zoo's female Sumatran rhinoceros. (Photo: Ron Austing)

Cincinnati Zoo and Botanical Garden, Ohio, U.S.A.

The zoo is proud to announce that its female Sumatran rhinoceros, Emi, has completed her eighth month of gestation. In the next six to eight months, Emi is expected to produce her calf, an event that would be the most outstanding conservation achievement in the history of Cincinnati Zoo. The only record of a Sumatran rhino successfully breeding and producing a calf in captivity dates back 112 years to 1889 in Calcutta Zoo.

The potential significance of the coming event for a species on the very brink of extinction is profound. The Sumatran rhinoceros is considered the most endangered of all rhino species, and one of the most endangered mammalian species on earth. In the last ten years, more than 60% of the species' population has been lost; today, an estimated 300 animals are thought to exist in isolated pockets of Malaysia and Indonesia. To date, a

captive-breeding program initiated in 1984 has unfortunately failed to produce any offspring, and the captive population has dwindled from 40 to just 16 animals. With so few left in the wild, it is absolutely essential to this species' survival that the captive-breeding program achieve success.

The challenges faced by animal managers trying to breed the Sumatran rhino in captivity have been numerous. Initial struggles included determining appropriate diets for maintaining health. Furthermore, when pairs were introduced for breeding, aggressive interactions often resulted, placing both animals at risk of serious injury. Eventually, there was just one male remaining in the U.S. This animal, Ipuh, is on loan from the Indonesian government to Cincinnati Zoo. Following the recommendations of the SSP, Los Angeles and Bronx Zoos moved their female rhinos to Cincinnati, where one final all-out effort to breed the species was launched.

Dr Terri Roth, Director of Cincinnati Zoo

nati's Center for Research of Endangered Wildlife (CREW), used ultrasound and hormone monitoring technology to learn about the reproductive cycle of the female Sumatran rhino. This knowledge and technology were then incorporated into the breeding program. This program has resulted in 23 matings between Ipuh and Emi with no injuries to either animal. Following the second successful mating in 1997, Emi became pregnant, and the zoo announced this pregnancy when the embryo was 29 days old. Unfortunately, this pregnancy was lost less than two weeks later. Emi has experienced pregnancy loss four more times, with all losses occurring within the first three months of gestation.

After much consultation at two international workshops attended by scientists and animal managers concerned about breeding this species, it was decided that the time had come to intervene. When Emi became pregnant for the sixth time, Dr Roth prescribed a daily dose of oral progesterone starting on the 16th day of pregnancy. This sixth pregnancy has now progressed to the eighth month, and the fetus appears to be healthy and growing. Although not much is known about gestation in this species, it is believed Emi has about eight months to go, and conservationists worldwide are becoming hopeful that, this time, she will carry the pregnancy to term. If successful, the event will become known among zoos as the most significant birth in more than a century and, hopefully, will be the turning point for the Sumatran rhino captive-breeding program.

Cincinnati Zoo is also involved in *in situ* work for this species. The zoo's Conservation Fund has helped the International Rhino Foundation support the Sungai Dusun Sumatran Rhino Conservation Center in Malaysia. Additionally, the zoo has provided

keeper assistance to the reserve and has shared all its scientific knowledge regarding health and reproduction with animal managers in Malaysia and Indonesia. Says Roth, 'We realize that this single birth will not save the species from extinction and that global conservation efforts are absolutely essential for preserving the Sumatran rhinoceros, but if successful, this birth will be the spark of hope that we all so desperately need.'

Abridged from a Cincinnati Zoo press release, 30 January 2001

Edinburgh Zoo, U.K.

The giant kidney worm (*Diectophyma renale*) is native to the Americas and is a serious parasite, most commonly of the mink. However other carnivores are occasional hosts of the three-foot [0.9 m] nematode, and one in particular is the maned wolf. The life cycle of the worm includes both definitive host (maned wolves) and an intermediate host, an oligochaete annelid which may be ingested by certain predatory fish and frogs. Consumption of these prey items passes the parasite to the wolf. The larva finds its way through the gut wall, dines briefly on the liver and then migrates through the body cavity to the kidney, usually the right one. As the worm grows, the kidney becomes dysfunctional, the left kidney enlarging to compensate. One item in the wolf's diet is the lobia (*Solanum lycocarpum*), also known as the 'fruit of the maned wolf'. Like so many other plant species from the neotropics, the lobia is believed to have key medicinal properties: in this case, consumption of the fruit counteracts the effects of – by a strange coincidence – the giant kidney worm.

Probably the greatest threat to this species, however, is the all-too-familiar one of habitat loss. Being

shy and reclusive, maned wolves tend to move away from encroaching areas of human habitation. The wild population, which stretches from northern Argentina to the upper reaches of the Amazon basin, is believed to number only a few thousand and remains in decline. The European captive population stands at around 160 animals in 68 zoos, with between 30 and 40 pups born each year. However, births and successful rearing of young are so far restricted to only a few collections. Beyond Europe there are very well developed and managed programmes for the species in North America, Australia and, importantly, Brazil. Maned wolves last arrived in Edinburgh in 1993, but the pair was moved on again, to London Zoo, in 1999. Another pair has now joined the collection; the female, from Chester Zoo, is one-and-a-half years old, and her partner, aged one year, is from Krefeld Zoo in Germany.

Abridged from Rob Thomas in Arkfile Vol. 9, No. 4 (Winter 2000)

Gänserndorf Safaripark, Austria

In October 1999 the park sent its three female Burmese elephants to Port Lympne Wild Animal Park in the U.K. on a breeding loan agreement. Port Lympne keeps two proven breeding bulls and has had some elephant births in the past, though unfortunately none of the calves survived. It was the intention to bring the two big cows La Grande and Momo (born in 1982 and 1985) back to Austria after a five-month stay, but to transfer the smaller cow La Petite (born 1985) permanently stay to Port Lympne and to integrate her into their herd, as she did not get along well with the two other Burmese elephants.

La Grande and Momo were mated twice by the 27-year-old bull Luka,

and they returned to Austria on 19 March 2000. One of them, Momo, was pregnant and the pregnancy seemed to be running smoothly, so it was a real shock when she aborted a nine- or ten-month-old fetus on 10 December 2000. The reason for this is not clear (the post-mortem showed no results), but it seems that Momo has no health problems.

Meanwhile the Safaripark's new elephant house, built to be a rescue and rehabilitation centre to give the best possible care to physically and mentally damaged elephants, was nearly finished, and the park agreed to take over a female Asian elephant from a small German circus. The 24-year-old cow Citta arrived in August 2000 and brought some problems with her. She was sold by her owner, Mr Jacky Quaiser, because she is a human-imprinted elephant – more accurately, she is a one-man imprinted elephant, and this one man is Jacky Quaiser. And Mr Quaiser's children didn't want to keep the elephant in the future. Citta had been kept like a pet and is a very well-cared-for elephant, but she is also very dangerous. Several attempts to integrate her into different elephant groups in zoos and circuses brought the same result – no success and risks to the lives of the staff, because she started attacking the keepers and trainers. She showed the same behaviour at first in Gänserndorf, but with a lot of patience and dedication from the keepers over many weeks, she slowly gained confidence and is now much more relaxed. There are also some conflicts with the two resident cows, but fortunately they both dominate her.

The stay of the Gänserndorf elephants at Port Lympne was overshadowed by the tragic accident on 7 February 2000 when keeper Darren Cockrill was killed by an elephant. No one was present at the time and it