

CONTENTS

International Zoo News Vol. 53/6 (No. 351)

September 2006

OBITUARIES – Thomas John Foose; Warren J. Iliff;
Steve Irwin; Frank Wheeler 322

EDITORIAL 325

FEATURE ARTICLES

Primates in Japanese Collections, 2001
Ken Kawata 326

'Know-how' and 'Know-why'
in American Zoos
Julia Innes 338

Management and Breeding of
Owston's Civet at Newquay Zoo
Owen Taylor 344

Book Reviews 350

Conservation 352

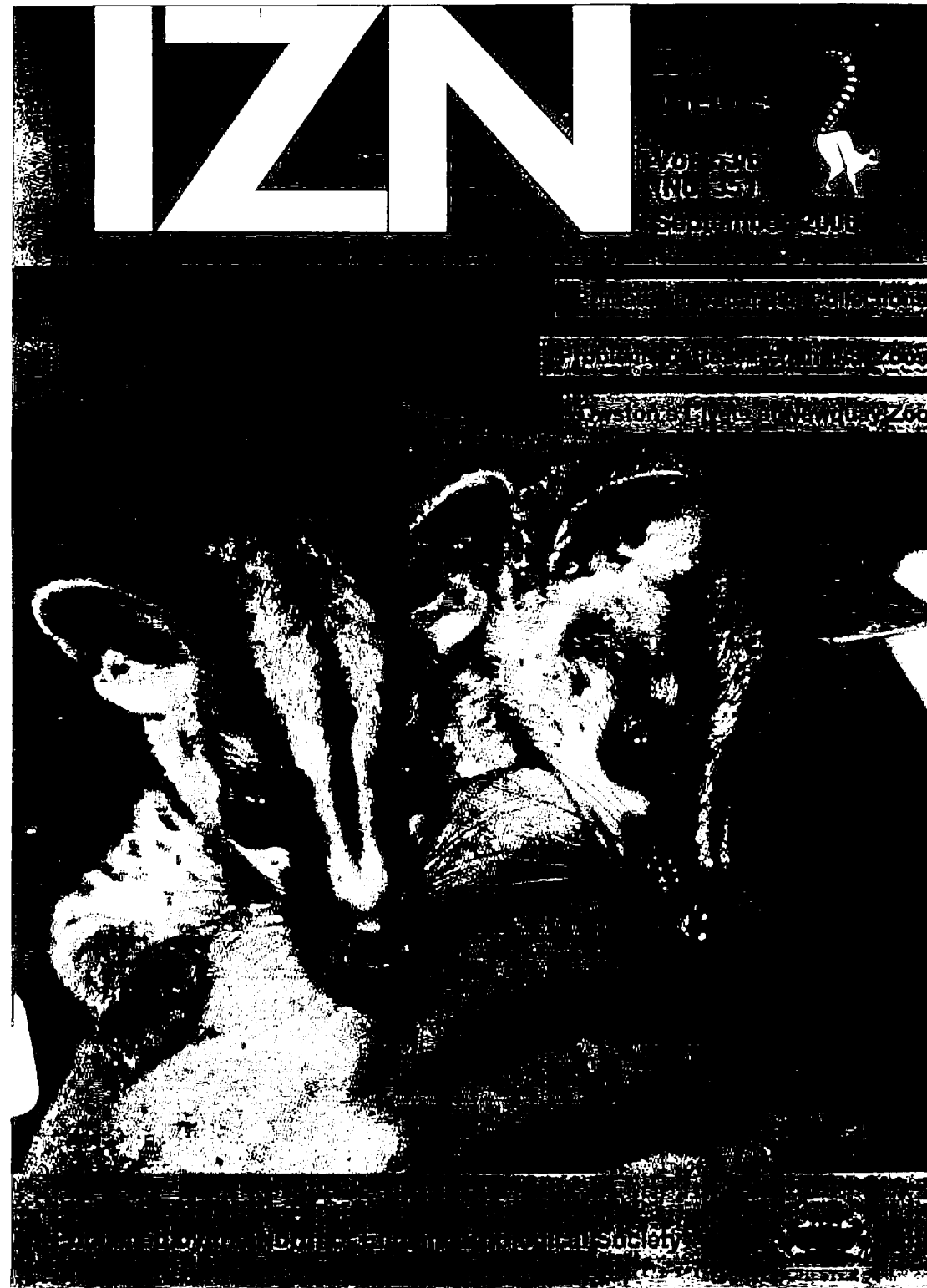
Miscellany 358

Annual Report 360

International Zoo News 363

Recent Articles 378

Cover Illustration: Twin Owston's civets born at Newquay Zoo, U.K. (Photo:
Michelle Turton)



able in exchange for buffalo, which will be bred at Makopane. More than 50 white rhino have been bred at Lichtenburg, and the animals have been given to farmers throughout South Africa to strengthen their genetic pool. The breeding centres have also managed to increase their populations of the rare roan antelope, wild dogs and cheetahs.

Abridged from *Pretoria News* (20 August 2006)

Planckendael Zoo, Belgium

The bonobo EEP looks very promising in 2006. We have had no fewer than three infants at Planckendael this year, to add to our group of 3.3 adults. Djanoo, our youngest female, delivered a son on 29 January, a month earlier than expected. Habari is her first offspring, but she obviously learned about how to take care of a baby while growing up in the group at Berlin Zoo, as she was a good mother from the start. Wild-caught female Hortense gave birth to a son, Hongo, on 25 February: she is already the mother of six offspring, of whom Hongo and her three oldest sons Vifijo, Redy and Zamba are still alive. Founder Hermien, the third female, delivered her fifth baby on 6 July; two of her earlier offspring survive. We suspect that Vifijo may be the father of at least one of the 2006 youngsters. Last year this young male indirectly caused the death of two babies by pestering the mothers, Hortense and Hermien. It was recently discovered that he was also the father of Hortense's last baby. Given that he is also a son of Hortense, and inbreeding should be avoided, he was transferred to Berlin in October last year. However, we fear he may well have managed to sire at least one other offspring before he left, though we hope we may be wrong!

Peter Galbusera and Kristin Leus in *EAZA News* No. 55 (July–September 2006)

San Diego Wild Animal Park, California, U.S.A.

Conservation of Indian rhinos, both *ex* and *in situ*, is one of the highest priorities of the Zoological Society of San Diego (ZSSD), both in our facilities and through participation in the AZA Rhinoceros Advisory Group and coordination of the Indian Rhino SSP.

In terms of *ex situ* efforts, ZSSD has a long history with this species, one that has at times proven to be difficult, but usually most rewarding. During the initial years of attempts to propagate them, breeding Indian rhino in a large multi-species habitat was incredibly challenging. Introductions were difficult to control due to aggression and the terrain in the enclosure. Over the next 30 years, much was learned about this species' behavior that greatly improved management. Behaviors have been catalogued, ethograms produced, and video methods developed to facilitate introductions, breeding and calving. To date, 51 calves, including a fifth-generation one, have been produced at the Wild Animal Park (SDWAP) – a world record!

Over the years, great relationships and partnerships have significantly increased the amount and the exchange of information about Indian rhino behavior and propagation. Regionally, working with the SSP has provided opportunities to move animals to other institutions to create new breeding pairs or provide animals for exhibit purposes. Internationally, animals have been placed in the European EEP and also in Asian zoos. Now, in partnership with the International Rhino Foundation (IRF), there will be an exchange of rhinos with Indian zoos, enhancing the gene pools of both regional populations.

To arrange for this exchange, Dr Tom Foose and I traveled to India in July 2005. Many different options were discussed with officials of both the Indian Central Zoo Authority and various zoos. After visiting several zoos, it became

apparent they could also benefit from exchanging other species as well, to increase genetic diversity in those populations. After much discussion, an exchange agreement was reached, identifying the rhinos for exchange but also including reticulated giraffes and plains zebras from the U.S. that would be advantageous for the Indian zoos' breeding programs.

Exporting reticulated giraffe is no simple matter. First there was the challenging task of locating giraffes young (and hence short) enough and available for transport to India. After extensive communications, Como Zoo and Cheyenne Mountain Zoo provided giraffes, despite the fact that neither of these institutions have Indian rhinos. The giraffes were then relocated to SDWAP to be prepared (crate training, medical tests) for the shipment. And then there was the paperwork, a daunting task to verify import requirements for India – complicated by the Indian veterinary authorities' preoccupation with avian flu issues. A further challenge was securing an air carrier for shipment of crates measuring a little over nine feet [2.7 m] in height. Then, there was the weather. By the time all the preceding preparations were completed, daytime temperatures in India were over 100°F [38°C]. The shipment had to be rescheduled, creating another saga.

The U.S.–India zoo rhino exchange complements the significant and increasing involvement of the AZA Rhino Advisory Group/SSP and IRF with *in situ* conservation of the species in India through a unifying program known as Indian Rhino Vision 2020 (IRV 2020). IRV 2020 is a major population and range expansion program for the species in the state of Assam. Numbers of rhino in Assam have increased from a low of 20 in 1905 to about 2,000 in 2006. However, the animals are restricted to three protected areas and most are in Kaziranga National Park. Concentrating so many rhinos in a single protected area like

Kaziranga exposes the species to risks of calamities (epidemics, floods, massive poaching events) – the 'all the eggs in one basket' syndrome. Further, rhinos have exceeded carrying capacity and numbers must be reduced to protect the habitat and mitigate the increasing rhino–human conflicts.

Thus the goals of IRV 2020 are: (1) to increase population numbers from 2,000 to 3,000 by the year 2020, i.e. over the next 14 years (about one rhino generation); and, just as importantly, (2) to distribute the rhinos over more protected areas (from the current three to seven) to protect against localized catastrophes. These goals will be achieved through increased protection in all protected areas with rhinos and through translocations of rhinos from source populations like Kaziranga to target areas such as Manas National Park. Manas once had at least 100 rhinos, but they were exterminated during a period of ethnic conflicts that have now subsided. In fact, the local Bodo people now want the rhinos back in Manas to develop conservation tourism. IRV 2020 is an eminent example of a collaborative partnership between governmental (Assam Wildlife Department) and non-governmental partners (IRF and WWF being the lead NGOs providing financial and technical advice).

Because of its significance for the conservation of *Rhinoceros unicornis*, IRV 2020 is one of the main programs supported by the North American Save the Rhinos Campaign. ZSSD is playing a major role in the Campaign by contributing funds itself and also by recruiting funds from other zoological institutions.

ZSSD has joined the partnership between IRF and *ecko unltd., a U.S. urban wear and accessories company and primary corporate sponsor of the Campaign. Marc Ecko founded the company using a rhino logo on items marketed along themes of hip hop and graffiti culture, and his announcement of a large multi-year financial commitment to IRF in January 2005 came about the time an

Indian rhino calf was born and orphaned at SDWAP. In April 2005, Marc visited the park to become acquainted with the young rhino who was being hand-raised and was named Ecko in recognition of the contribution by Marc Ecko that really launched the Campaign. ZSSD, *ecko untd., and IRF are partnering to market a t-shirt bearing a hangtag telling the story of the Indian rhino calf and featuring the Campaign logo – which happens to be a rhino covered in graffiti saying 'Save the Rhino'.

Randy G. Rieches in *Communiqué* (American Zoo and Aquarium Association), August 2006

San Diego Zoo, California, U.S.A.

The 200th hatching of a puaiohi (*Myadestes palmeri*) at the zoo's Hawaiian bird breeding center is a milestone that renews optimism for the fate of this critically endangered bird species native to the island of Kauai. The birds, representing a species that is believed to number fewer than 500, have been part of a breeding program since 1996 when the first captive hatching of a wild egg took place. The breeding and release program is part of a collaborative effort undertaken by the U.S. Fish and Wildlife Service, the Hawaii Division of Forestry and Wildlife, the U.S. Geological Survey and San Diego Zoo to build a sustainable population of these birds in the wild.

The puaiohi, also known as the small Kauai thrush, is a small songbird that has been reduced to a single relict population in the wet forest of the Alakai Wilderness Preserve. Habitat degradation caused by feral ungulates and invasive alien plants, and the joint threats from introduced predators and diseases, are thought to be contributing factors in the decline of this species. More than half of Hawaii's surviving songbirds are listed as endangered by the state and federal governments.

Puaiohi are released into the wild of the Alakai Swamp after they are flown to Lihue, Kauai, then transported to the release site. There they are placed in an aviary where they spend seven to ten days adjusting to the environment. More than 110 have been released into the wild since the program started in 1996.

Communiqué (American Zoo and Aquarium Association), July 2006

Schönbrunn Zoo, Vienna, Austria

It is 16 years since the last rhinoceros, a black rhino called Toni, died of old age at Schönbrunn. Now these ancient mammals have returned, inhabiting a large, new and modern enclosure in the centre of this old zoo.

A pair of Indian rhinos, Jange and Sundari, arrived in Vienna on 11 March 2006. Both are wild-born and both of their mothers were killed by poachers when they were only a few months of age. They were hand-raised by staff members of Chitwan National Park in the south of Nepal. All efforts to reintroduce them to the wild failed, so they remained at the park's orphanage even though they were already three and nine years old.

Through mediation of the King Mahendra Trust for Nature Conservation it was possible to transfer Jange and Sundari to Austria, a transfer which was well planned by a number of experts in animal transport. To ensure that the transport would run smoothly and would not be disturbed by extreme animal rights activists, three routes were carefully prepared. (Apparently both Munich and Whipsnade had delays due to such actions when they received rhinos from Nepal.) At short notice it was then decided to take a direct flight from Kathmandu to Bratislava. From there the rhino crates were loaded onto a truck and driven to Vienna. The transport was accompanied by the Nepalese keeper Nanda Ram Acharya, veterinarian Bal

Krishna Giri, Helmut Ulzer, Peter Heindl and veterinarian Thomas Voracek from Vienna, and Peter Linhart as the transport expert. The unloading of the rhinos at their new home was stress-free. Both animals left their crates calmly and started feeding on bamboo immediately. The accompanying persons seemed to be more exhausted by the long flight than the animals!

Both rhinos seemed to settle well in their new home. At first, Jange and Sundari were quarantined within the inside enclosure. The new rhino house was constructed according to the husbandry guidelines established by the Indian rhino EEP, featuring all elements that are necessary for successful husbandry and the animals' well-being. Sealed rubber flooring covers all 400 m² of the indoor floor to protect the rhinos' feet. Heated pools with showers, wallows and brushes allow for many behaviours to occur. The house consists of two enclosures of 219 m² and 130 m² and one smaller holding area. Mechanically-operated doors separate these from each other and from the outside enclosure. The interior is heated by underfloor heating as well as conventional radiators along the walls. Large skylights enable daylight to enter. A food preparation area, hay storage and a trash room are also inside the house. The animals' main meals consist of straw mixed with hay, bamboo left over from the giant pandas, twigs, horse pellets to supplement vitamins and minerals, and small amounts of vegetables and apples. Olive oil is fed for essential fatty acids.

Now that the quarantine period is over and the weather is finally getting better, Jange and Sundari are allowed into the spacious outside enclosure. On a total of around 6,000 m² three divisions are established, two of which have pools and mud wallows, contain trees and rocks for body rubbing, and feature different kinds of substrate such as grass, soil, and deep, loose sand. One of these is reserved for rhinos only, but can be connected with the

centre enclosure, which also allows access to Asian hoofstock like nilgai, axis deer and blackbuck. This mixed-exhibit enclosure is separated from an area that is reserved for Asian hoofstock only by vertical poles with a maximum width of 46 cm, shutting the rhinos out.

Wild-born Jange and Sundari are now part of the EEP for this species and hopefully in time will pass on their valuable genes to the next generations. Until then they are serving as ambassadors for their wild relatives, making this endangered species and their problems known in Austria, enabling us to financially support field projects in Nepal in cooperation with the King Mahendra Trust and also to pass on knowledge to our Nepalese colleagues through training courses on husbandry, management and conservation.

Regina Pfistermüller in *EAZA News* No. 55 (July–September 2006)

Toledo Zoo, Ohio, U.S.A.

The zoo's second lesser bird of paradise (*Paradisaea minor*) chick continues to flourish after being hatched in January and leaving the nest for the first time in February. There are fewer than 25 individuals of this species in four North American zoos, and Toledo houses five of them. These birds are being raised by their parents rather than being hand-reared: this is quite rare, as the birds must feel very comfortable in their surroundings to raise their offspring in human care. Lesser birds of paradise are very intelligent, and are capable of mimicking a wide range of sounds.

Communiqué (American Zoo and Aquarium Association), June 2006

Wilhelma Zoo, Stuttgart, Germany

The drill is one of the most endangered of all African primates. There are only about 100 in zoos worldwide, and no one knows