

familiar environment with ease. Coping behaviours included shading her eyes with her fingers to see around the cataracts, and moving around the enclosure. After a period of settling in and learning about her new indoor environment, Romina was assessed for remedial surgery in one eye, which was performed successfully in March 2002. Vision is important for gorilla social interactions and surgery was undertaken on welfare grounds. Behavioural observations of the gorillas were made over a six-week period prior to surgery and again for three months after surgery, after she had become familiar with the external enclosure. Prior to surgery Romina moved around more than the others and spent significantly more time manipulating objects. There were few interactions recorded between her and the others. After surgery she interacted more with the others, chasing and playing, and spent less time moving from place to place. The restoration of her sight has improved her social integration within the group.

Abridged from the abstract of a poster presentation by S. Dow, J. Sherwin, A. Gray and S. Redrobe at the UFAW Symposium 'Science in the Service of Animal Welfare' (Edinburgh, April 2003), published in *Animal Welfare* Vol. 13 (Supplement), p. 240.

Calgary Zoo, Alberta, Canada

Several years ago the zoo's Conservation Fund made a grant to the Nature Conservation Research Centre, a non-governmental organization that manages appropriate ecological projects in Ghana. The money was used to fund a biological survey to assess the viability of creating a park to preserve the hippopotamus population that lives there. The survey collected baseline ecological, sociological, economic and cultural information necessary to prepare a sanctuary development plan. An important

part of this study included a cultural view of the people near the proposed area, as their impact on the land and involvement with the sanctuary will make or break the success of the park.

In Ghana, there are only two populations of hippo left, one fully protected by the Bui National Park, and one at the Wechiau Hippo Sanctuary. There are about 25 hippos in the Wechiau population, and about 250 in total in Ghana. The sanctuary was established in 1999, and the zoo has been financially supporting it ever since, buying a fleet of ten bicycles for the wardens, equipment and tools for trail building and maintenance, and the money to pay a staff of ten including seven wardens, two maintenance workers and an accountant.

Formerly found everywhere south of the Sahara, hippos now occupy only a fraction of their original range. The community-managed Wechiau Hippo Sanctuary is a long-term project to conserve one of the only remaining populations in West Africa. This remote reserve will also protect the area's other wildlife, and community involvement is an integral part of its success.

Hippos come out at night to feed, and a farmer's field beside the river makes for a tasty treat. To make the Wechiau Hippo Sanctuary successful, the community felt that they had to develop a 'core' area for the hippos. And it's working. Since the reserve was conceived in 1997, all the farming and most of the fishing camps have been moved away from the river's edge, eliminating the conflicts that had existed between the farmers and the hippos. Today, the reserve is about 40 km long and the core area extends away from the river for about one kilometer.

The long-term relationship between the zoo and the sanctuary was cemented in January 2003 by the visit to Calgary of three chiefs from the Wechiau area for the official opening of our 'Destination Africa' exhibit. Then, in September 2003, the zoo's President and CEO Alex

Graham and I travelled to Ghana for an official ceremony in which Alex became the Honorary Chief of the Wechiau Hippo Sanctuary and I became the Honorary Chief of a local village.

The zoo's Conservation Fund has donated over \$30,000 to the Wechiau Hippo Sanctuary since it was established in 1999 (one of nearly 20 conservation outreach projects the Fund was able to contribute to over the past year), and Calgary Zoo has re-confirmed its commitment by sending a full-time staff person to work in Ghana with the park officials and the community. Donna Sheppard, who recently completed a four-year term in Guyana in South America with our sister zoo, the Guyana Zoo, is now living at Wechiau, focusing initially upon an education program of wildlife appreciation for the local communities who surround the park.

Abridged and adapted from Brian Keating, Head of Conservation Outreach, Calgary Zoo, in *Communiqué* (American Zoo and Aquarium Association), April 2004

Edinburgh Zoo, Scotland, U.K.

Kruger, our male white rhinoceros, died on 26 April as a result of serious kidney failure. He was elderly (35 years), had been unwell for several weeks and had no hope of recovery, so he was euthanased painlessly in the familiar surroundings of his sleeping quarters; his keepers were with him.

Kruger arrived at the zoo in 1976 on breeding loan from Whipsnade. He was a firm favourite with staff and visitors alike, and made a wonderful contribution over the years to the conservation programme for his species, fathering a total of 12 calves with his partner, Umfolozi. Together, they were world record holders for the number of calves born to the same pair, all managed as part of the EEP for this threatened species. Most of their calves went on to form

breeding groups at other zoos and safari parks around the world. Their last calf was Kei, born in October 2000, who left for Givskud Zoo in Denmark in February 2002.

Kruger's body will be sent for a full post mortem, after which it will be delivered to the National Museums of Scotland. Their curator of mammals and birds, Dr Andrew Kitchener, said: 'Although it is sad that Kruger has died, by studying his skeleton we can gather important new data about the ageing process in zoo mammals, which will help zoos and wildlife managers to improve the health and welfare of living rhinos. Being from the wild and of known age, Kruger's skeleton has enormous scientific value and is one of only three (and the only male) white rhino skeletons in the collections of the National Museums of Scotland.'

Over the years, keepers developed all sorts of ways to stimulate Kruger and encourage his natural behaviours. As with most rhinos, he had a very strong sense of smell, and they sprayed all sorts of interesting scents around his enclosure, which he enjoyed searching for. They even made ice blocks containing dung and urine collected from Umfolozi's sleeping quarters - he reacted very enthusiastically to these, spending a great amount of time smashing them up, smelling them and spraying them himself. His dung was also used successfully several years ago to encourage mating in a pair of rhinos at Glasgow Zoo.

Abridged from an Edinburgh Zoo press release

John G. Shedd Aquarium, Chicago, Illinois, U.S.A.

When it came time for her annual checkup in January, Ginsu, the green sawfish (*Pristis zijsron*) in our Wild Reef exhibit, was anesthetized in a net, then lifted from the exhibit's veterinary pool to a foam examination cushion. Keeping