Black Rhinos in Captivity

Management of Black Rhinos at London Zoo

In a relatively confined area in an urban zoo, our rhinos are managed intensively. Four adult animals and a calf occupy the four inside dens and the single paddock of 60m x 20m. Inside and out; they are on public view, but we also have one other indoor den where animals can be shut away out of sight. The three different compatible groupings of animals – two whites, two blacks, and an odd black – take turns in having access to the outside paddock.

A dry moat surrounds the paddock; it has a shallow (320) slope on the inside, and in consequence the rhinos walk up and down the slope with ease, and spend a lot of time walking along in the moat and being visible at very close range, but from above. Indoors, the dry moats are too steep for rhinos to go up or down. There have been occasional cases of animals falling into the moat; and being retrieved only with difficulty. There≠fore the indoor dens used by the black rhinos now have bars to prevent the loss of calves through falls into the moat.

The black rhinos are fed mainly on clover hay and pelletted horse food, with carrot and potato, and browse material as available. They always have access to water.

The animals are put out into the paddock in all weathers. They are encouraged to go in or out as required by the promise of food on the other side. The-outside paddock also provides opportunities for exercise, wallowing in a mud pool, and scratching on a variety of different objects. The indoor areas are kept at a comfortable temperature of about 1 8 There are very few problems in persuading animals to go out or come in, once they know the routine. Keepers go into the enclosures with most of the animals, and thus can inspect, scrub, and if necessary treat them.

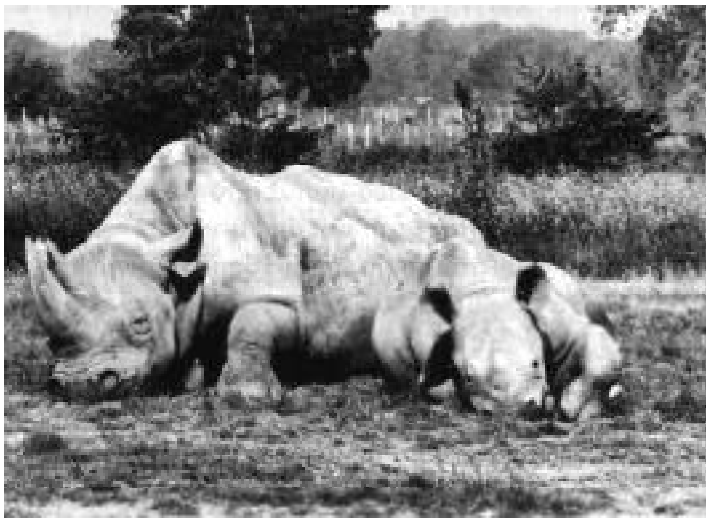
Male and female become familiar with one another through bars before they are first put together. Oestrus is detected by observing increased restlessness and aggressiveness by the female, and greater interest in her by the male. The two sexes are run together until the pregnant female becomes too aggressive towards the male, usually around half-way through pregnancy.

After a birth, female and calf are kept shut in alone together for about a week before being allowed out into the paddock. The calf continues to suckle until we separate it from the mother, which we now aim to do at 15-20 months old. During and after the enforced weaning, in order to reduce stress it is kept in a den adjoining that of its mother. We expect to send it away when about 21/2 years old, keeping only the breeding pair.

The World's Captive Population of Black Rhinos

Despite considerable breeding successes, and despite improve≠ments in the captive husbandry of black rhinos, the species in captivity is in a very precarious state. There are four particularly disturbing aspects.

1. The data provided by the International Studbook Keeper and by the International Zoo Yearbook show clearly that the captive black rhinos population has been declining steeply since the last import from the wild in 1976.
   Births in captivity have not been enough to compensate for the deaths
2. There have certainly been great improvements in husbandry and management of black rhinos in recent years. However, it is disturbing that this has not produced as great an improvement in breeding as one would expect. Since captive breeding got under way around 1958.64, there has been no significant increase in the rhino birth rate. The average figure is ten young per 100 females each year and is far lower than it should be. Obviously, given an average three-year intercalving interval, and perhaps six years to reach maturity, we cannot expect the re≠productive rate to be higher than about 25 calves per 100 females per year, but we are nowhere near that figure yet.
3. Juvenile mortality is unacceptably high. This is disturbing both because it is still so little understood and because it results in greater wastage of time and effort than if the mortality took place around birth; then at least the inter≠calving interval would probably be appreciably shorter.
4. It is possible that the sex ratio of calves born is under≠going shifts from 50:50. Certainly the overall sex ratio of al calves born is almost 50:50, but there are suggestions that over the past few years the proportion of female calves has dropped. The drop may prove not to be statisti≠cally significant. We must hope it is a chance fluctuation; otherwise the captive rhino population faces dire problems.



Black rhino in Whipsenade Park Zoo, U.K. [H.B. Hansen]

There are three main remedies we must adopt in working for an improvement in the status of the black rhinos in captivity. First, we must ensure that all potentially reproductive animals, particularly all females, are enabled to breed. The co-operative management arrangements in Britain show how this can some≠times be done, given the will. Second, juvenile mortality must be reduced; examination and analysis of more and better post mortem reports should show the way to go in achieving this. And third, efforts should be made to reduce the inter-calving interval, provided this can be done without detriment to the previous calf; in principle it should be possible, because wild rhinos manage it. We ought to be able to do as well as they can. At present we cannot, and it is urgent that we succeed in doing so.

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