TWO DOZEN AND COUNTING – THE PRECARIOUS STATE OF THE NORTHERN WHITE RHINO

Troubled Czechoslovakia seems an unlikely place for northern white rhino recovery, but it's the key location for captive breeding.

The northern white rhino *(Ceratotherium simum cottoni)* is today one of the rarest of the five species of rhinoceros. In the wild state, a population of just seventeen is hanging on in the Garamba National Park in Zaire. The captive population is even smaller. There are seven specimens at the Dvur Kralove Zoo in Czechoslovakia, one male at London Zoo, and a pair at the San Diego California Wild Animal Park.

This is not an encouraging picture. And yet, it's not hopeless. Thinking back on the plight of the southern white rhino *(C.s. simum)*, this subspecies was almost annihilated in the 1800s. Predictions of extinction were gloomily issued. But rigid conservation laws, concerted management, and improved law enforcement changed all that. Today there are around 3 500 southern white rhino in the major parks, 500 in captivity, and 1 500 or more in breeding cores in reserves and on private lands, where it is hoped that wild or semi-wild conditions will encourage population growth.

The situation for northern white rhinos is, however, still critical. Unfortunately, reproduction rates for most kinds of rhinos have been poor, with the notable exception of the San Diego Zoo, which has had great success in breeding the Indian rhino. Now, with their recent acquisition of the northern whites, one hopes their success may equal that with the Indian animals.

The Dvur Kralove Zoo has three species of rhinoceros – the black, Indian, and northern white. Their chief interest is of course the northern white rhino, and this zoo was the first to breed this species in captivity. The zoo has two rhino houses.

The newer house has 20 box stalls measuring 500x635 cm or 620x635 cm. The flooring is rough tile and is heated electrically when necessary. In winter, the temperature in this stable is maintained at about 18 degrees centigrade. Stalls are separated by brick walls faced with plain ceramic tiles, or wooden walls made of 8 cm planks. All stalls are interconnected with small gates made of 10 cm diameter pipes. The stalls have entrances on both sides, one from the feeding corridor, the second from the observation corridor.

There are five outside enclosures at this house, the smallest being 675 square metres, the largest 2 000 square metres. Every animal can use each enclosure, because there is an outside through corridor alongside this house.

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later he appeared to be moving back for another try at the territory. In August he was found well within M9's area and in a region frequently used by females and subadults. When approached M9 was seen feeding in the direction of the signal and Channel 2 walking rapidly south of M9's home range. Later Channel 2's collar was found in an area of well trampled grass where the two males had obviously been fighting.

His collar had been fitted on 6 June, and came off on 5 August in the fight, broken at the point of attachment of elastic to collar. The first collar fitted, Channel 1's, was attached on 3 June and came off shortly before 3 August. It was found close to a dead tree: it appeared the rhino had caught the collar in a projection tree and broken it, and it further appeared to be a relatively focused action rather than the passing result of general rubbing. This collar had also broken at the point of attachment of the elastic.

The canvas had rotted and torn, exposing the vulnerable point of entry into the stiff material of the collars. It was felt that the elastic-modified collars are well worthwhile for the safety and comfort of the rhino, but that at least two layers of elastic are needed, stronger canvas, and possibly reinforcement at the point of attachment.

Plans are to continue radio collaring as early as possible in the next dry season to allow maximum time for intensive follow-up. Double elastic and reinforcing will be used, and a solid state digital sound recorder will be attached to one collar to make recordings of all rhino communication, and to investigate communication by infrasound.

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Collar attachment and measurements, Channel 1. Brian Clarke, Kes Smith, Mbayma Atalia and guards.

The Tree

Let us pause for the taking of inventory,
To measure the debt we owe the tree.
For the searching root that knits the soil,
The cooling shade for those who toil,
The air we breathe, nature's greatest gift,
And the leaf that heralds each season's shift.

Forget not the fruit that feeds man and beast,
The branch that burns to prepare the feast.
That sturdy frame that builds the home,
And the paper on which you read this poem.
The tree gives all and asks no prize,
Even making the axe that ends its life.

Anon

First National Bank

The visitors are separated from the rhinos by a ditch. The enclosure is made from grey rubble.

The old rhino house has 10 box stalls measuring 580x600 cm. There is combined heating, both in the floor and by electric space heaters. Here temperature is kept at about 16-18 degrees centigrade in cold weather. Two small enclosures and a paddock adjoin this house, and it is used chiefly for the black rhinos.

The Dvur Kralove Zoo uses a special combined feeding pellet, of which northern white rhinos each receive 2.6 kg a day. On the average, 20-30 kg of hay is also fed to them daily. In winter these rations are supplemented with apples or carrots, 2-3 kg of each daily, and in summer they get green fodder in the outside enclosures. (They are not fed lucerne, as it has been found best to feed them with cruder hay.)

In breeding the northern white rhino, only two females are kept together. These are visited by the male every day, in the outside enclosure – never inside the house. A male is never allowed with a mother and baby. Babies are weaned after one year. If there are several babies on hand after weaning, they are held together, with both black and northern white rhinos kept in these groups. Since it is difficult to detect the heat period of the females, the behaviour of the male in the next stall is closely watched to determine when he should join the females. The shortest cycle is 22 days and the longest 30 days.

Rhinos today are among the most endangered species of wildlife. In the wild, most species were brought to their present precarious state by the combined forces of poaching, human population growth, agriculture and, in Asia, industrial operations like logging. The senseless killing for rhino horn has in recent years been especially dismaying, but even if this can be controlled by international trade bans, the other hazards of human pressure will persist and increase. For northern white rhinos, with only a single wild population left, it is essential to devote maximum efforts to captive breeding.

Conditions are not as favourable now as they were during the time of the southern white rhino comeback, but we must persist. Rhinos are unique animals, serving a definite place in the ecology of our earth. It is urgent that more people become involved in the northern white rhino's struggle for survival, to have any real chance for success. Only in numbers will there be victory. They deserve a chance to live.

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