

Captive management of the white rhinoceros for reproductive studies

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ABSTRACT

Global population pressure has resulted in the depletion of many natural resources with the subsequent compromise of the natural habitat which supports much of the world's wildlife. Zoos have become "the custodians of the irreplaceable products of nature's evolution", and zoo management philosophy has changed in focus from one of exhibition and entertainment to one which embraces education, research and conservation.

More intensive management practices at the Houston Zoological Gardens have made possible the adaptation of artificial reproduction techniques to a pair of southern white rhinoceroses (*Ceratotherium simum simum*). Both animals have been trained to enter a chute for blood collection, rectal palpation, external massage and olfactory stimulation. Regular collection of urine and nasal mucus samples for steroid evaluation and vaginal smears for cytological examination provide a further basis for monitoring ovarian activity in the female. Daily behavioral observations are correlated with other parameters in order to establish the normal reproductive cycle. The ultimate goal is successful artificial insemination of the white rhinoceros.