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## THE EFFECTS OF ANIMAL TRANSFERS ON THE REPRODUCTIVE SUCCESS OF FEMALE WHITE RHINOCEROSES (CERATOTHERIUM SIMUM SIMUM) KEPT IN EUROPEAN ZOOS

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## **Short Abstract**

Southern white rhinoceroses (Ceratotherium simum simum) remain an endangered species due to continued poaching. Despite being kept in European zoos since the 1960s, captive breeding success has been low, with social composition, diet and available space all seeming to play a role.

Female rhinoceroses that have never bred or have not bred for a long time have a greatly increased risk of developing reproductive tract pathology. In many cases, this leads to infertility occurring at a young age, which is why it is important to keep looking for methods that increase reproductivity. Therefore, for healthy females, transfers, i.e. either transferring females to other zoos or integrating males into new groups, are recommended.

The aim of this study was to provide concrete figures on the success of transfers, by analysing the European and International studbooks as well as hormone data (individual faecal progesterone levels) collected over a period of 30 years (1991 - 2021).

We found that births occurred within a maximum of four years in 26.2% of male (n=65) and 30.0% of female transfers (n=40). Through analysis of available data, positive hormonal responses to transfers were seen in 84% of resident females after a male transfer (n=25), and in 50% of transferred females (n=16).

Transfers are an important tool of stimulating breeding but are not sufficient on their own. Sonographic and hormonal examinations must be continued to rule out pathology in the reproductive tract. Breeding support measures, such as ovulation induction, should also be pursued to overcome the frequently occurring acyclicity.