naturalistic enclosures and group compositions. Already the number of births has increased enormously the last years and only because a large number of old animals (from the original imports from the 1970s) are dying there is not yet a positive growth rate but the anticipation is that this will change in the next years. At this time 20% of the population is breeding, and of the 80% (n=201)which is not (yet) breeding 45% is younger than 10 years and 16% between 10 and 20 years of age. This means that there is a huge potential and much effort is put into getting these animals to breed. Efforts consist of complete reproductive checkups by veterinary experts, hormonal investigations and exchange of non breeding animals to provide them with new surroundings and social group composition. Another initiative is the exchange of young females out of their maternal herd to imitate the natural dispersal of these individuals. A total of 68 institutions participate in the White rhino EEP. Of these 50 have breeding potential, 6 hold a single sex group, 6 hold one last animal and 6 several older animals. Of the 50 zoos with breeding potential, 24 are already breeding with a large majority of their animals, 20 have relatively newly established groups and 6 institutions face breeding difficulties which are addressed.

OESTROUS SYNCHRONIZATION IN WHITE RHINOCEROS

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Ovulation in the white rhinoceros, like in most mammals, is induced by LH surge that occurs at the end of the follicular phase. LH induces the rupture of the Graafian follicle which is followed by the formation of a corpus luteum as the primary source of progesterone synthesis. The length of the oestrous cycle, predominantly measured by pregnane concentrations in the faeces, is 35d or - in extended cycles - 70d. Yet, many of the adult captive white rhinoceros display long periods of anoestrous or erratic cycles despite regular formation of a Graafian follicle. Frequent luteinisation and formation of haemorrhagic follicles instead of follicle rupture and CL formation characterize this commonly occurring anoestrous. Anoestrous in the white rhinoceros is considered as a primary cause for the low reproductive rate in captivity. Transport of females to other facilities or the introduction of new males has shown to initiate regular oestrous cycle activity in some animals. This study attempted to employ an inexpensive and easy to apply hormone treatment to overcome anoestrous periods and to induce oestrous. Thirty-three oestrous synchronizations were attempted in 22 animals. Oral synthetic progesterone was given in combination with either hcG or GnRH analogue to induce ovulation at the end of the oestrous induction protocol. Ovulation was induced in 91% of the treatments. The induced oestrous cycle was in 30 % of the treatments 35d and in 70% 70d long. Forty-one percent of females showed a regular oestrous cycle after the initial oestrous synchronization. In conclusion, oestrous synchronization reliably induced oestrus and ovulation in previously anoestrous white rhinoceros

females. In a considerable proportion of treated animals the oestrous synchronization showed a lasting effect as they exhibited a regular oestrous cycle thereafter.

ABSTRACT BODY CONDITION SCORING OF CAPTIVE WHITE RHINOCEROS (*CERATOHERIUM SIMUM*)

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The Body Condition Scoring (BCS) system has been developed by the domestic hoofstock industry as a tool to optimise production, evaluate health and assess nutritional status. The advantages of BCS are that it can be done none invasive, low cost and is not hugely time consuming. Scoring systems are based on body shape and appearance of skeletal features. Body Condition Scoring has been developed for several species in zoos and has been found useful in judging the adequacy of energy supplies. Body Condition Scoring has originally been developed by the domestic hoofstock industry and which requires handling of the animals to assess the relevant body parts. The close handling of animals for body condition scoring is not always possible for wild animals in zoos and therefore body condition scoring of wild animals in zoos is based on visual scoring. A detailed descriptive work on white rhino body condition scoring is not currently available. The goals of this research were to compare the body condition of captive white rhino within European collections and to develop a body condition scoring system that can be used for captive white rhino. A request for pictures has been sent out to all collections within the European breeding programme. 20 Collections responded to the request for pictures, which resulted in pictures for 65 (17.45.3) rhinos. There are 5 scores used within the body condition system: 1=very poor, 2=poor, 3=fair, 4=good and 5=fat. There were no rhinos found that classified within BCS 1. There was 1 animal in BCS 2, 15 animals in BCS 3, 30 animals in BCS 4 and 19 animals in BCS 5. This study was done to assess the BCS of captive white rhino within Europe and to develop a scoring system that can be used for this species.