

CELEBRATING THE TENTH EDITION OF THE AFRICAN RHINO STUDBOOKS

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The studbooks for the black (*Diceros bicornis*) and white (*Ceratotherium simum*) rhinos were initiated in 1966 to be kept by the Zoological Gardens in Berlin. They were placed on a solid foundation by Dr Heinz-Georg Klös assisted by Dr Reinhard Frese, continued from the sixth edition of 1995 by Dr Reinhard Göttenboth and Dr Andreas Ochs. When the data were first published in 1970, there were at least 11,000 black rhinos in the wild and 128 in zoos, while there were 950 white rhinos in the wild and 76 in zoos (Klös and Frädrich, 1970). These figures have changed dramatically in the span of the last 35 years. The latest data give 3,610 black rhinos in the wild and 277 in zoos, and 11,350 white rhinos in the wild and 758 in zoos. The recent figures of the African rhinos in captivity are contained in the tenth edition of the *International Studbook for the African black (white) rhinoceros*, two volumes in red covers of 233 and 407 pages respectively, summarizing data received until the beginning of 2005.

An overview cannot do justice to the great achievement of the successive studbook keepers and their assistants at Berlin Zoo. The amount of data is quite staggering, with confirmed details about every transaction of almost every specimen ever held in a zoo or similar institution, including causes of death and particulars about offspring. Both studbooks were expanded retrospectively over the years – partly based on my own research about the rhinoceros in captivity (Rookmaaker, 1998) – to include all rhinos ever held in captivity, not just those kept from 1970 onwards. As such, the current edition of the studbook has data on 1,510 white and 931 black rhinos. These were kept on every continent, in small and large establishments, in breeding centres, zoological gardens and safari parks.

All species of rhinoceros are endangered. The white rhino is currently listed in the IUCN Red List as Near Threatened, while the black rhino is Critically Endangered, i.e. it faces an extremely high risk of extinction in the wild. Owners and keepers of rhinos should therefore be regarded as custodians of an irreplaceable heritage. This is a unique responsibility which implicitly involves certain commitments. These include state-of-the art management, husbandry and veterinary care, as well as – in my view – responsible disposal of surplus animals and proper record-keeping. None of this can be in any way negotiable, because the individual animals belong to such fragile species. Apparently, though, there is a flaw in my argument, because in almost every edition of the studbooks there is an urgent plea asking owners to cooperate and to provide information when prompted – a plea that often goes unheeded, resulting in the absence of data for many specimens in the database. It should be simply unacceptable that a zoo or other rhino keeping facility fails to report changes in their rhino population, or is unaware where surplus animals end up. Traders should equally have an

obligation to report all transactions affecting endangered species and to keep accurate details of all shipments. Such records can be archived and deposited in appropriate institutions for use in the future.

The same burden of care and data management should naturally be extended to owners and custodians of rhinos in the range states. Those responsible for an endangered species like a rhinoceros must keep track of stock and be willing to report on changes to a central body. With few exceptions, the rhinos in African semi-wild collections are not recorded in the studbooks kept by Berlin Zoo. This is justifiable, because gathering the data would greatly surpass both their resources and their objectives. At the same time there is very little obvious difference between a rhino exhibited in a zoo and one shown to tourists in a private fenced reserve in Africa. When a country wants to allow trophy hunting of an endangered species like the black rhino responsibly and transparently (Leader-Williams *et al.*, 2005), a register of all animals is an important prerequisite. In South Africa, there have been regular surveys of rhinos in private ownership. The most recently published ones show that, as far as owners of 'known' populations are concerned, there was a response of 86% for the white rhino (Castley and Hall-Martin, 2003), and a better 95% for the black rhino (Hall-Martin and Castley, 2003) – but one can only wonder about the status of 'unknown' populations. Neither in South Africa nor in any of the other range states have the private holdings of rhinos ever been published comprehensively, allegedly for security reasons, nor have they been deposited in a public archive to become available after a certain period. The impact of policies is therefore hard to monitor by anybody outside a small circle of persons chosen to be entitled to such apparently privileged information. A studbook-like register of all rhinos outside national parks should be initiated and non-cooperation should be discouraged. If the responsibility and cooperation of black rhino owners is as commendable as Castley and Hall-Martin suggest, this should be an easy task, and it would remove some of the (perceived) problems associated with the lack of data about the privately-owned rhino populations in Africa.

It cannot be denied that all studbooks are valuable documents, invariably edited with great care, indispensable to zoo managers and zoo historians. It is disconcerting, therefore, to note that soon after their release they all but disappear from the record. An internet search of the mainstream libraries in Europe reveals that only three had incomplete sets of the ten studbooks of African rhinos. The online catalogue of the Zoological Society of London (one of few zoos to offer this advanced facility) only lists three studbooks of any species. Most zoos have libraries for their staff, but few of these are catalogued and even fewer will retrospectively keep material that is not directly relevant to their collections. Zoo publications like annual reports, guidebooks, postcards, posters and zoo magazines might be preserved by private collectors, but many of these items are soon unavailable even to the more ardent student of zoo history. I have said before that zoological gardens need a central library where zoo publications are collected, preserved and made available, but for the moment that will remain a dream – while important documents continue to be lost.

From the fifth edition of the black rhino studbook, the captive population is divided into two sets, as subspecies *D. b. michaeli* and *D. b. minor*. This division differs from the four conservation units (styled subspecies) advocated by the IUCN/SSC African Rhino Specialist Group. It is implied that zoo managers should not interbreed rhinos from the two groups. Unfortunately, both sets are rather artificial, even admitting that the current subspecific classification is in

a state of confusion (Rookmaaker, 2005). All specimens of unknown origin tend to be listed as *D. b. michaeli*, while the *D. b. minor* set includes rhinos from Angola and Namibia. Admittedly, queries are often associated with animals which are no longer alive, and a more detailed analysis might ascertain if a further division would serve any practical purpose (beyond scientific accuracy) for the current rhino population in zoos. However, it is important to keep the limitations in mind when deciding on cross-breeding specimens originating from stock of different countries.

The current editions of the African rhino studbooks are an admirable achievement. The detail of the data is quite staggering, as must be the amount of correspondence that was needed to get this outstanding result. Mrs. Hannelore Mercado has been involved with this project from the start and she must be commended for her devotion, accuracy and persistence in retrieving and recording the available information. The consecutive studbook keepers as well as the directors of the zoological gardens in Berlin who have provided the expertise and resources for this project are to be thanked for their valuable contribution to zoo management and conservation.

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