Proceedings of an International Conference

# RHINOCEROS BIOLOGY AND CONSERVATION

Oliver A. Ryder Editor



MAY 9 - 11, 1991 San Diego, California, USA

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### Table of Contents

1

### RHINOCEROS BIOLOGY AND CONSERVATION

#### Oliver A. Ryder, Editor

| PREFACE<br>Oliver A. Ryder, Ph.Div  |
|---|
| STRATEGIC PLANNING FOR RHINOCEROS CONSERVATION:<br>Saving the rhino in today's world  |
| The present-day trade routes and markets for rhinoceros products<br>Esmond Bradley Martin1  |
| Rhino population dynamics, illegal hunting and law enforcement in the lower<br>Zambezi Valley in Zimbabwe<br>R.B. Martin  |
| Global management of rhinos<br>Thomas J. Foose  |
| What will it take to save the rhino?<br>Mark R. Stanley Price   |
| Theory and pragmatism in the conservation of rhinos<br>N. Leader-Williams   |
| NEW INSIGHTS INTO RHINOCEROS BIOLOGY:<br>Genetics, evolution, reproduction and communication  |
| Fifty million years of rhinoceros evolution<br>Donald R. Prothero   |
| Testing rhinoceros subspecies by multivariate analysis<br>Colin P. Groves   |
| Molecular genetic studies of Southern African rhinoceros<br>Eric H. Harley and Colleen O'Ryan101  |
| Genetic differentiation of white rhinoceros subspecies: Diagnostic differences in mitochondrial DNA and serum proteins <i>M. George, Jr., L.G. Chemnick, D. Cisova, E. Gabrisova, A. Stratil, and O.A. Ryder</i> 105                                    |
| Molecular evolution in living species of rhinoceros, implications for conservation<br>George D. Amato, Mary Ashley and John Gatesy114   |
| Determination of species and geographic origin of rhinoceros horn by isotopic analysis<br>and its possible application to trade control<br>A.J. Hall-Martin , N.J. van der Merwe, J.A. Lee-Thorp, R.A. Armstrong,<br>C.H. Mehl, S. Struben and R. Tykot |
| Infrasound from the rhinocerotidae<br>Elizabeth K. von Muggenthaler, John W. Stoughton, Joseph C. Daniel, Jr  |
| Recent advances in reproductive monitoring of rhinos in captivity and in the wild Joanne E. Hindle, J. Vahala and J.K. Hodges   |

| Progress in reproductive physiology research in rhinoceros<br>R. W. Godfrey, L. Srivastava, P.T. Russell and B.L. Dresser  |
|--|
| Reproductive procedures and restraint for rhinoceroses<br>N.E. Schaffer, R.S. Jeyendran and B. Beehler153  |
| AFRICAN RHINO STATUS AND CONSERVATION PLANS:<br>National conservation plans  |
| African rhinos: Current numbers and distribution<br>C. K. Gakahu160  |
| Conserving rhinos in Garamba National Park<br>Kes and Fraser Smith166  |
| Strategies for the conservation of rhino in Zaire<br>Mbayama Atalia  |
| Development and management of rhino sanctuaries in South Africa: The effects<br>of socio economic and political changes in Southern Africa<br>on developments<br>Nick Steele   |
| Development of the Zimbabwe national conservation strategy for black rhinoceros<br>W.K. Nduku and R.B. Martin  |
| BIOLOGY AND CONSERVATION OF THE GREATER ONE-HORNED<br>RHINOCEROS   |
| Greater one-horned rhinoceros populations in Nepal<br>Eric Dinerstein  |
| Space and habitat use by a small re-introduced population of greater one-horned rhinoceros (Rhinoceros unicornis) in Royal Bardia National Park in Nepal.<br>A preliminary report.<br>Shant Raj Jnawali and Per Wegge208 |
| Management of the reintroduced great one horned rhinoceros (Rhinoceros unicornis)<br>in Dudhwa National Park Uttar Pradesh, India<br>S.P. Sinha and V.B. Sawarkar218   |
| Genetic variation in the greater one-horned rhino and implications for population structure Gary F. McCracken and E. Jean Brennan  |
| BIOLOGY AND CONSERVATION OF SUMATRAN AND JAVAN RHINOS  |
| In-situ conservation of the Sumatran rhinoceros (Dicerorhinus sumatrensis):<br>A Malaysian experience<br>Mohd. Khan Bin Momin Khan, Burhanuddin Hj. Mohd. Nor, Ebil Yusof,<br>Mustafa Abdul Rahman                       |
| Conservation and management of Javan rhino (Rhinoceros sondaicus) in Vietnam<br>Charles Santiapillai, Pham Mong Giao, Vu Van Dung248   |
| Conservation and management of Sumatran rhino (Dicerorhinus sumatrensis) in<br>Indonesia<br>Charles Santiapillai, Kathy MacKinnon257   |
| Conservation and management of Javan rhino (Rhinoceros sondaicus) in Indonesia<br>Widodo S. Ramono, Charles Santiapillai, Kathy MacKinnon  |

| Sumatran rhino ( <i>Dicerorhinus sumatrensis</i> ) captive propagation in relation to its conservation  |
|---|
| Linda Prasetyo and Muchidin Noordin   |
| CAPTIVE AND OTHER MANAGED POPULATIONS   |
| Preliminary determination of nutritional requirements of the pregnant black<br>rhinoceros (Diceros bicornis)<br>Petr Spala, Petr Hradecky   |
| Breeding experience with Northern white rhinos ( <i>Ceratotherium simum cottoni</i> )<br>at Zoo Dvur Kralove<br>Svitalsky, M., Vahala, J., and P. Spala                           |
| Management of translocated white rhino in South Africa<br>J.L. Anderson   |
| Rhinoceros SSP programs in North America: An overview<br>Robert W. Reece  |
| Rhinoceros breeding at the San Diego Wild Animal Park<br>Randy Rieches  |
| The management of black and Sumatran rhinos at Port Lympne Zoopark, U.K.<br>C. Furley   |
| HEALTH, DISEASE, NUTRITION AND PHARMACOLOGY:<br>Veterinary aspects of rhinoceros conservation   |
| Health concerns and veterinary research in the North American black rhinoceros (Diceros bicornis) population<br>R. Eric Miller  |
| Black rhinoceros <i>Diceros bicornis</i> capture and translocation techniques and boma management as used in Namibia<br>L. Geldenhuys   |
| Health data gained from black rhino immobilized for relocation<br>David A. Jessup, Michael D. Kock, Peter Morkel  |
| Capture and translocation of the black rhinoceros ( <i>Diceros bicornis</i> ) in Zimbabwe:<br>Management modifications to reduce stress and mortalities<br><i>Michael D. Kock</i> |
| Veterinary management of three species of rhinoceroses in zoological collections<br>Richard A. Kock and Julia Garnier   |
| Pathological findings in captive rhinoceros<br>Richard J. Montali and Scott B. Citino   |
| Dehorning of black rhinoceros (Diceros bicornis bicornis) in Namibia<br>P.vdB. Morkel, L. J. Geldenhuys350  |
| Mucosal and cutaneous ulcerative syndrome in black rhinoceros (Diceros bicornis)<br>Linda Munson  |
| The clinical history of the adult female Sumatran rhinoceros, called "Subur"<br><i>C. Furley</i>  |
| Perinatal mortality in rhinos<br>Susan J. Noble and Oliver A. Ryder   |

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#### Preface

The International Conference on Rhinoceros Biology and Conservation was organized as part of the activities surrounding the seventy-fifth anniversary of the Zoological Society of San Diego. Remarkably, it was the first international conference to consider the biology and conservation of the five extant species of rhinoceros.

The Conference was attended by nearly 300 participants coming from over 30 countries. Plenary sessions were organized around the widely varying issues that are relevant to gaining a better understanding of rhinos and their environments and the efforts underway to conserve rhinos at the population and species level, often within the context of national conservation strategies.

The Conference was opened by local schoolchildren welcoming Michael Werikhe, whose efforts in drawing attention to the plight of rhinos and gaining public support for increased efforts in support of rhino conservation serve as a dramatic illustration of what one concerned individual can accomplish.

The cause of the decline in rhinos in Asia over the last four centuries and in Africa, most dramatically in this century, is the action of a single species, our own. Human fascination with rhinos, their horns, hides, flesh and blood has reduced their numbers within the last century by something approaching 99%. Whether rhinos can survive this population crash and recover to live in their natural environment again is similarly up to the expression of human values, human intentions and human actions. Rhinos could recover immediately were it not for the agency of human destruction that has brought them to the brink of extinction. Nonetheless, if rhinos are to be saved it will be because enough people are concerned about their future and act upon that concern.

To the poachers who are the primary cause of depletion of especially African black rhinos, rhinos are their livelihood and the means whereby their families are supported. Clearly, rhinos can have an economic value as wildlife and, as well a value beyond their appeal to viewers of wildlife. How this value may be realized is a current focus of controversy that was presented and discussed at the Conference. Rhinoceros horn continues to be in demand for medicinal purposes. Interest in hunting rhinos is viewed in many countries as a potential force for conservation. The de-horning of rhinos in Namibia and Zimbabwe has been undertaken in an attempt to reduce poaching pressure and harvest a commercially valuable commodity that might be used, it is argued, for underwriting increased conservation efforts.

Through the precipitous decline in rhino populations it has become abundantly clear that previous efforts in conserving rhino populations through much of their range have failed to achieve their goals. Given the intensity of poaching efforts, it has been too ambitious to try to protect and conserve rhino populations over their formerly wide range. At the present, it appears that rhino sanctuaries offer the best available option for preserving rhinos and their gene pools.

The current status of each of the five species of rhino and the state of conservation planning and action in support of their conservation was presented at the Conference and is included in this volume. Nationally based conservation plans and the geographic variation in rhinos suggested by morphological studies have focused attention on the conservation of rhino subspecies. The issue of subspecies of black and Sumatran rhinos was addressed in some detail, but it also became clear that some additional studies are desirable. Health and disease issues affecting translocated wild rhinos and for rhinos in zoological parks is an area of great importance that was given its most thorough discussion to date at the conference. Similarly, improvements in reproductive assessment and monitoring were discussed as well as problems and opportunities for future advancements. The perception of a dichotomy between efforts in rhino conservation through captive breeding and research involving captive populations in contrast to efforts to conserve wild rhinos in their habitats was discussed in sessions considering strategic planning for rhino conversation. The intensity of the these discussions made it clear that significant differences of opinion exist. Nonetheless, it was possible to identify a variety of ways that conservation science, conservation policy and conservation action can be strengthened by increased cooperation and coordination of *in situ* efforts with *ex situ* conservation efforts for rhinos. The appearance of this material is important beyond its implications for rhinos alone.

The issues presented and discussed at the Conference continue to reflect the significant issues in conservation of rhinos. Increasingly, the generation and implementation of action plans for conservation of threatened species is inextricably imbedded in discussions of population management, habitat protection and management, potential for utilization and economic benefits at the local, national and international level. Concern for rhinos has propelled consideration of their plight into the international arena. Progress made with the diversity of biological, political and economic issues involved in ensuring a secure future for the charismatic rhinos will inevitable stand as a measure of our own species capabilities. The future the five species of rhinoceros and much more clearly hangs in the balance.

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