

### RHINO RESOURCE CENTER

www.rhinoresourcecenter.com

### NEWSLETTER #71 JUNE 2023

Dear colleagues and friends,

This is the 71st issue of the quarterly e-newsletter of the Rhino Resource Center. Edited by Dr Kees Rookmaaker.

The total number of references in the collection of the RRC now stands at **27,490**. This is an increase of 123 items in the last quarter. Over 27,000 references are available as PDF on the RRC website.



SUPPORT the RRC

### THE RRC IMAGE GALLERY

Regular users will know that the RRC has a fantastic Image Gallery with now over 6200 pictures of rhinos. The search engine finds any word in the description, or you can browse by species. Unsurpassed.

IN THIS ISSUE: The Rhinoceros of South Asia - preparing p. 2 Selection of rhino books p. 6 Watercolours by Hamilton Smith p. 9 Our sponsors p.10									
New Literature General Asian Contact Information	-	12 17	African Fossil p. 29	-	14 19				

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ISSUE NO. 71 JUNE 2023

### THE RHINOCEROS OF SOUTH ASIA

### BY KEES ROOKMAAKER

#### NOW IN FINAL DRAFT

This book will be published later this year by Brill in The Netherlands. It will be part of their new series The Emergence of Natural History <a href="https://brill.com/display/serial/ENH?contents=about">https://brill.com/display/serial/ENH?contents=about</a>

The rhinoceros is an iconic animal, well-known to live in the region of South Asia. Comprising countries from Afghanistan, Pakistan to India, Bhutan and Bangladesh, this was once inhabited by three species of rhinoceros. This book traces the interactions of the animals with men to chronicle their historical occurrence and to focus on their significance in the cultures of the region. The research was multi-faceted, documenting traces of the rhinoceros in archaeology, in rock art, in Mughal art, in Rajasthani wall paintings, in past hunting records through to the modern conservation efforts in a series of outstanding national parks.

The historical narrative is based on over 3000 sources written in over 16 different languages. The earliest dates from 1515 and coverage continues straight to the present. Naturally most are from the 19th (30%), 20th (40%) or 21st (22%) centuries. Every record of a rhinoceros being seen or caught or hunted or tamed or transported is documented in detail.

Written records tell the bulk of the story, and these are supplemented by a wide array of photographs, art work and other iconographic sources. There will be 700 illustrations, many of which reproduced in colour. Not to make this into a coffee table book, but to tell the story in a different way.

The historical distribution of each of the three species is analyzed in detail. There are 37 new maps, culminating in accurate maps of the occurrence of the Great Indian Rhinoceros, the Javan Rhinoceros and the Sumatran Rhinoceros in the South Asian region.

The book will have two additional chapters

Kelly Enright about "Reading Rhinos through the Lens of Human-Animal Studies" Joachim Bautze about "A pictorial survey of the rhinoceros in the art of Rajasthan". This documents previously unseen depictions of rhinos in unexpected places.

At present I am working to license each and every illustration – a necessity which is sometimes hard, sometimes very rewarding.

There is a possibility to publish this book as **OPEN ACCESS**. That requires funding. Any firm believer (like me) in this option, please get in touch with me to discuss.

A selection of possible illustrations follows on the next pages. These images are under copyright and may not be transmitted or copied in any way.



ISSUE NO. 71 JUNE 2023

Illustrations from The Rhinoceros of South Asia – under copyright













JUNE 2023

Illustrations from The Rhinoceros of South Asia – under copyright













JUNE 2023

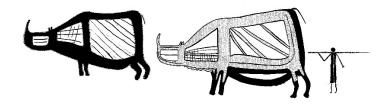
Illustrations from The Rhinoceros of South Asia – under copyright













JUNE 2023

### A SELECTION OF RECENT BOOKS ON THE RHINOCEROS

#### **How to Raise A Rhino – 2023**

A biography of Anna Merz, founder of Lewa Downs Black Rhino Sanctuary by Deb Aronson ISBN 978-1960373045 Available soon

### PACHYDERM, volume 63 for 2022

Edited by Suzannah Goss on behalf of the IUCN/SSC African Elephant, African Rhino and Asian Rhino Specialist Groups, with assistance of Lydia Tiller and Kees Rookmaaker.

Available online, open access: here

### Clara, the Rhinoceros – 2022

by Gijs van der Ham Supplement to exhibition in the Rijksmuseum, Amsterdam https://www.rijksmuseumshop.nl/nl/clara-de-neushoorn

### Clara, de eerste neushoorn in Nederland – 2022

Agnita de Ranitz

https://www.uitgeverijdebrouwerij.nl/boeken/clara-de-neushoorn/

#### Rhino War - 2022

by Johan Jooste and Tony Park ISBN 9781770107908

### https://www.panmacmillan.co.za/authors/johan-jooste/rhino-war/9781770107908

In 2012, retired South African general Johan Jooste was parachuted into the seemingly unwinnable war against rhino poaching in the Kruger National Park. With poaching spiralling out of control, Jooste was given the mandate to 'go military', to convert Kruger's ranger corps into a paramilitary force capable of taking the fight to the poachers. Rhino War tells how Jooste, facing an unprecedented assault on a national park and a single species, turned a force of demoralised men and women into arguably the finest anti-poaching unit on the African continent. Told through his eyes, these stories of the courage and grit of rangers who risked their lives to protect wildlife in the face of a wily and determined foe are an account of heroism, sacrifice and determination. Humbly, honestly and decisively, Jooste tells of the successes and failures of his bold strategy, and shares his vision for the future.

### Un Rhinocéros à Versailles – 2021

Alexandra de Broca

https://www.alexandradebroca.fr/un-rhinoceros-a-versailles/

En 1788, plusieurs animaux en provenance d'Afrique du Sud arrivent au Havre après un éprouvant voyage. Ils sont convoyés jusqu'à Versailles, où des enclos royaux les attendent pour achever leur vie.

Claire, vingt ans, est née à la Ménagerie. Elle accompagne depuis son enfance son père soigneur. Ce qui est un travail pour Martin est une vocation pour elle : chaque animal est un être qu'il faut nourrir, mais aussi aimer en lui offrant un nom. Elle est la seule à oser entrer dans les cages pour caresser la crinière d'un lion ou les oreilles d'un rhinocéros.

ISSUE NO. 71 JUNE 2023

More books

### The Hairy Rhinoceros - 2022

History, ecology and some lessons for management of the last Asian megafauna by John Payne

https://www.nhpborneo.com/book/the-hairy-rhinoceros/

Like many other endangered large mammal species, the Hairy rhinoceros is drifting to extinction not primarily because of ongoing and future habitat loss or poaching. Those impacts started hundreds and thousands of years ago, and were the issues of immediate concern in the twentieth century. The issue to address now is paralysis in making the best decisions on what exactly to do about the remaining and mostly non-viable clusters.

The story of the Hairy rhino, told here from a Malaysian perspective, can help to inform governments on how to prevent further megafauna extinctions, through targeted interventions for population recovery.

### Rhino at the Brink of Extinction - 1999

by Anna Merz

https://www.nhbs.com/rhino-at-the-brink-of-extinction-book

A classic, still available at NHBS

### The Story of India's Unicorns – 2018

by Divyabhanusinh, Asok Kumar Das, Shibani Bose <a href="https://marg-art.org/product/UHJvZHVjdDo1MjM3">https://marg-art.org/product/UHJvZHVjdDo1MjM3</a>

India is blessed with a unique variety of fauna, not to mention other forms of life. If one were to look at its mega fauna alone, the country boasts of lion, tiger, leopard, elephant, gaur, wild buffalo and rhinoceros—more specifically the Greater One-horned Rhinoceros, India's unicorn. The natural habitats of all species of fauna and flora are under threat as a result of the present and ever-increasing pressure of the growing human population which stands today at 1.32 billion in India. The Greater One-horned Rhinoceros is endemic to the Indian subcontinent and it is entirely up to India, Nepal and possibly Bhutan to ensure that this species survives for all time. While the rhino at present enjoys a "return" of sorts in its remaining strongholds, it is hoped that this book will generate awareness among a wider audience of the need for continuing and proactive protection of the animal and its habitat.

# **Mega Mammals in Ancient India: Rhinos, Tigers, and Elephants** – 2020 by Shibani Bose

https://global.oup.com/academic/product/mega-mammals-in-ancient-india-9780190120412?

The book ventures to look into eras bygone in order to chronicle the passage of three mega species-the rhinoceros, tiger, and elephant across millennia in early north India. It carefully sifts through an archive comprising faunal remains and visual depictions retrieved from the archaeological record as well as a gamut of Sanskrit, Pali, Prakrit, and classical Western accounts to document the presence of these big mammals in various cultural niches from huntergatherer societies to the first urban civilization of India and beyond. The narrative goes beyond treating these species as mere cultural icons to one that is also sensitive to their importance as markers of ecology. The focus is two-fold: to comprehend perceptions, attitudes, and sensibilities oscillating between veneration and persecution in order to reconstruct the cultural dimensions of human-megafaunal relations in the past, as also to use these species to understand the larger ecology of ancient India.

At a time when the conservation of our megafaunal heritage is a major concern for biologists, ecologists as well as conservationists, this book underlines the need to historicize human interactions with these mega mammals keeping in mind that an animal's past is critical in thinking about its future.



ISSUE NO. 71 JUNE 2023

More books

### Diard & Duvaucel – 2022

French Natural History Drawings of Singapore and Southeast Asia (1818-1820) with a contribution by Kees Rookmaaker

https://epigrambookshop.sg/products/diard-duvaucel

In the 1800s, two French naturalists named Pierre-Médard Diard and Alfred Duvaucel travelled to Singapore and other parts of Southeast Asia to collect and study the local flora and fauna. Knowing that it was important to supplement the specimens they sent back to scientists in Europe with sketches, Diard and Duvaucel commissioned artists to create hundreds of drawings of animals and plants at each of the locations they visited. Today, the Muséum National d'Histoire Naturelle in Paris houses 120 of these drawings, and the entire collection has been digitised and transferred to Singapore's National Library for safekeeping. Diard & Duvaucel is an initiative between the Embassy of France in Singapore and the National Library to celebrate the deep ties between France and Singapore, as well as the regional biodiversity. The stunning illustrations are accompanied by essays and captions written by curators and scientists.

### Alfred Russel Wallace – 2015

Letters from the Malay Archipelago

Edited by John van Wyhe and Kees Rookmaaker

https://global.oup.com/academic/product/alfred-russel-wallace-9780199684007?

This volume brings together the letters of the great Victorian naturalist Alfred Russel Wallace (1823-1913) during his famous travels of 1854-62 in the Malay Archipelago (now Singapore, Malaysia, and Indonesia). it was these travels which led him to come independently to the same conclusion as Charles Darwin: that evolution occurs through natural selection. Beautifully written, the letters are filled with lavish descriptions of the remote regions he explored, the peoples, and fascinating details of the many new species of mammals, birds, and insects he discovered during his time there.

### The crash of rhinos: preventing the extinction of an iconic species -2021

by Ray Dearlove

https://www.rhinoray.com.au/

Worth to take a look.

### J. G. Schneider's Historiae Amphibiorum - 2022

Herpetology at the Dawn of the 19th Century

by Aaron M. Bauer and Esteban O. Lavilla

https://ssarherps.org/2021/07/schneiders-historiae-amphibiorum/

J.G. Schneider was a classical philologist by profession, and an experienced naturalist of the first order. His discussions on crocodiles, frogs, salamanders, lizards, and snakes review virtually all of the herpetological knowledge of the ancient and Medieval worlds as well as providing his own "modern" insights. \* No rhinos but a *magnum opus*.



ISSUE NO. 71 JUNE 2023

### WATERCOLOURS BY CHARLES HAMILTON SMITH

Arader Galleries, New York <a href="https://aradergalleries.com/">https://aradergalleries.com/</a>

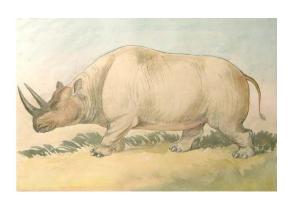
Charles Hamilton Smith was born at Vrommen-hofen in East Flanders. Smith's ability to sketch and draw in the field came to the fore during the last phase of the Napoleonic Wars. Though settling in Plymouth, Smith continued to travel extensively, visiting no less than thirty-four menageries in his study of natural history. Among these he listed; the Leverian and British Museums, Bullock's, the Missionaries', the India Company's, the Jardin du Roi at Paris, the museums of Munich, Dresden and Berlin, those of Bonn and also of Philadelphia, New York and Baltimore."

This remarkable and exotic collection of watercolors is comprised of elephants, rhinos, tapirs, horses, peccaries, hyrax and hippos all placed within landscapes to replicate their natural habitats. The work was perhaps intended for eventual publication as that the illustrations are more than just anatomical studies. They elegantly marry the art of watercolor painting with that of science to create enduring works with visual appeal.

Some watercolours of rhinoceros species are still available for sale. Contact me or mention the Rhino Resource Center for a possible purchase.











ISSUE NO. 71 JUNE 2023

### **OUR SPONSORS**

The board and staff of the Rhino Resource Center gratefully acknowledge the support of our main sponsors:



**SOS RHINO** 



INTERNATIONAL RHINO FOUNDATION



**SAVE THE RHINO** 



**RHINO CARHIRE** 

Thank you very much.

The Rhino Resource Center is a registered charity. We need your assistance to provide our service to all rhino lovers worldwide.



ISSUE NO. 71 JUNE 2023

### CONTENTS OF THE RHINO RESOURCE CENTER

The development of the Rhino Resource Center is shown in the table here.

RRC	2022	2022	2022	2023	2023	ANNUAL
	June	Sept	Dec	March	June	INCREASE
Referenc	26,092	26,720	27,175	27,367	27,490	+ 1,398
es						
PDF files	26,095	26,820	27,265	27,400 *	27,565	+ 1,530
Images	4,818	6,005	6,202	6,229	6,250	+ 1,432

<sup>\*</sup> Some references have more than one PDF attached, mostly due to file size restrictions.

Many thanks to everybody who has helped us by sending copies of books and papers, information, data, news, pictures, photographs – all shared across the globe.

### **DONATIONS TO THE RRC**

It is really very easy. No problem to the audience of the RRC. To show appreciation of our work and to make future contents even better, a small donation goes a long way. Visits to libraries are no longer necessary, just think of the expensive time gained and research results improved. The button leads to a page with instructions.

# **DONATE HERE**



The Rhino Resource Center is an essential tool for

- Information and image supply to media
- Academic research in biology, conservation studies, art history
- Education in primary, secondary and tertiary levels
- Conservation of rhinos both in-situ and ex-situ
- Latest information supply of all rhino-related projects
- **ఆ** Information on all the latest conservation efforts
- All the historical and most current literature.

### YES, YOU CAN HELP:

- Authors of books, papers and reports can send us a copy after publication.
- We are always looking for images of all rhinos in books and in the wild
- We aim to include a picture of every rhino ever kept in captivity
- Contribute a message to our blog and get into contact with others
- Place a link on your website to the RRC which will be reciprocated
- Give us a **DONATION** when you feel the RRC has helped your work.

ISSUE NO. 71 JUNE 2023

### **NEW LITERATURE**

(finalized 27 May 2023)

In this quarter (April to June 2023), we have added 123 new references, to bring the total number of items in the database to **27,490**.

Below I have listed all new entries since 2000 in four categories: General (all species), African rhinos, Asian rhinos and Fossil rhinos.

### Most additions are available on the website. Search for them on the RRC, it's easy.

Always check the <u>RRC website</u> first, many papers are available there.

#### **New General Publications**

- Belyaev, R.I.; Kuznetsov, A.N.; Prilepskaya, N.E., 2023. Truly dorsostable runners: Vertebral mobility in rhinoceroses, tapirs, and horses. *Journal of Anatomy* 242: 568–591 https://doi.org/10.1111/joa.13799.
- Benoit, J.; Legendre, L.J.; Farke, A.A.; Neenan, J.M.; Mennecart, B.; Costeur, L.; Merigraud, S.; Manger, P.R., 2020. A test of the lateral semicircular canal correlation to head posture, diet and other biological traits in "ungulate" mammals. *Scientific Reports* 10, 19602: [https://doi.org/10.1038/s41598-020-76757-0].
- Bruce, M.D., 2023. The Genera of Birds (1844–1849) by George Robert Gray: A review of its part publication, dates, new nominal taxa, suppressed content and other details. *Sherbornia* 8 (1): 1-93.
- Burnham, C.M.; Ange-van Heugten, K.; McKenney, E.A.; Minter, L.J.; Trivedi, S., 2023. Conservation innovations and future directions for the study of rhinoceros gut microbiome. *Journal of Zoological and Botanical Gardens* 4 (2): 396-412 https://doi.org/10.3390/jzbg4020030.
- Dadone, L.; Foxworth, S., 2022. Footcare for Zoo Ungulates (Zoo Hoofstock Trim Program). In: *Fowler's Zoo and Wild Animal Medicine*, 10th edition (Chapter 46): 303-312 https://doi.org 10.1016/B978-0-323-82852-9.00046-0.
- Des Pallieres, C.G.; Rose, P.E., 2023. Two's company, three species is a crowd? A webcambased study of the behavioural effects of mixed species groupings in the wild and in the zoo. *Plos ONE* 18 (4) e0284221 April 20: 1-25.
- Gribben, J.; Wilson, T.R.; Eberhart, M.E., 2023. Unicorns, rhinoceroses and chemical bonds. *Molecules* 28 (1746): 1-12 doi.org/10.3390/molecules28041746.
- Gribbin, R., 2020. The last rhino. Bloomington, iUniverse, pp. 1-209.
- Grouw, H.van; Dekkers, W., 2023. The taxonomic history of Black-shouldered Peafowl; with Darwin's help downgraded from species to variation. *Bulletin of the British Ornithologists' Club* 143 (1): 111-121.
- International Rhino Foundation, 2022. Annual Report for 2021: pp 1-22 Strasburg, VA. Ft Worth, TX.
- International Rhino Foundation, 2023. IRF's 2023 Rhino Research Funding. https://rhinos.org/blog/ posted 4-4-2023: 1-12 https://rhinos.org/blog/irfs-2023-rhino-research-funding/.
- Jauch, D., 2022. Gedenken an einen toten Freund (Bernhard Blaszkiewitz). *Bulette: Mitteilungen aus der Tiergartenbiologie* 10: 18-23.



ISSUE NO. 71 JUNE 2023

General - continued

Kawata, K., 2023. The Balkans: a zoo enthusiast's blind spot. *Zoo Grapevine and International Zoo News* Winter 2022-2023: 19-23.

Robin des Bois, 2022. Information sur braconnage des rhinoceros. *A La Trace* (Bulletin d'information et d'analyses sur le braconnage et la contrebande d'animaux) no.36: 42-53.

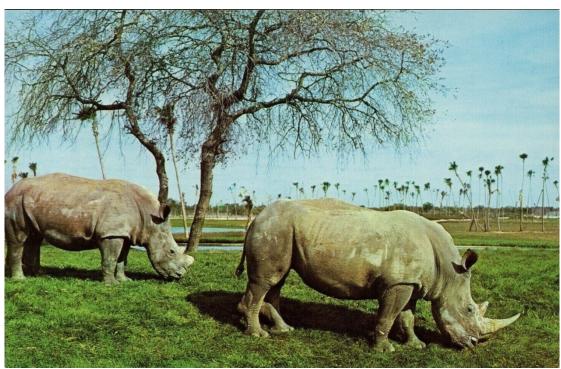
Robin des Bois, 2022. Notes on rhinoceros poaching. *On the Trail* (Information and analysis bulletin on animal poaching and smuggling) no.36: 42-53.

Robovsky, J.; Rookmaaker, L.C., 2023. Rhinoceros specimens included in anatomical and morphological studies by Professor Alexander J. E. Cave (Perissodactyla: Rhinocerotidae). *Lynx* (*Praha*) (n.s.) 53 (1): 333–350 https://doi.org/10.37520/lynx.2022.022.

Sanisidro, O.; Arganda-Carreras, I.; Cantalapiedra, J.L., 2023. Folded: A toolkit to describe mammalian herbivore dentition from 2D images. *Methods in Ecology and Evolution* 14: 556-568 https://doi.org/10.1111/2041-210X.14042.

Schuerer, U., 2022. Vom Wolf zu Fuchs, vier Jahrzehnte Freundschaft mit Bernhard Blaszkiewitz. *Bulette: Mitteilungen aus der Tiergartenbiologie* 10: 13-17.

Tomanska, A.; Janeczek, M.; Borawski, W., 2023. Poaching and illegal trade in rhino horn: A significant problem for an endangered species [in Polish]. *Medycyna Weterynaryjna* 79 (5): 216-222 - DOI: dx.doi.org/10.21521/mw.6759.



Originally from Natal 'George' and 'Maude' arrived at Busch Gardens in October 1965. Maude passed away in June of 1989 and George was transferred to the International Wildlife Park, Grand Prairie, Texas in August of 1991. In December of 1991 flooding from the Trinity River covered the entire park and forced the closure of this Texas drive-thru facility.

JUNE 2023

#### **NEW PUBLICATIONS ON AFRICAN RHINOS**

- Anonymous, 2023. Taxidermy of last male Northern White Rhino displayed in museum. *Swara, Nairobi*, April-June 2023: 16.
- Axmann, J., 2023. Mkomazi National Park: Tanzania's new star in the safari sky. *Swara, Nairobi*, April-June 2023: 30-31.
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- Burnham, C.M.; McKenney, E.A.; Ange-van Heugten, K.; Minter, L.J.; Trivedi, S., 2023. Effect of fecal preservation method on captive Southern White rhinoceros gut microbiome. *Wildlife Society Bulletin* e1436 12 Jan 2023: 1-19.
- Burnham, C.M.; McKenney, E.A.; van Heugten, K.A., 2023. Effects of age, seasonality and reproductive status on the gut microbiome of the Southern White rhinoceros (Ceratotherium simum simum) at the North Carolina Zoo. *Animal Microbiome* 5 Article 27, with supplemental material: 1-16 https://doi.org/10.1186/s42523-023-00249-5.
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- Johanisova, L.; Mauerhofer, V., 2023. Assessing trophy hunting in South Africa by comparing hunting and exporting databases. *Journal of Nature Conservation* 72 (2023) 126362 23 Feb 2023: 1-10, https://doi.org/10.1016/j.jnc.2023.126363.
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ISSUE NO. 71 JUNE 2023

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- Onzere, K.; Lewa Wildlife Conservancy, 2021. Current State of Rhino Conservation in Lewa-Borana Landscape. *Proceedings of the 46th National AAZK Conference Los Angeles* Aug 29-31: unpaginated (1 page).
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ISSUE NO. 71 JUNE 2023



On January 2nd 2023, the Dublin Zoo recorded a new extraordinary birth of a Ceratotherium simum. Born to mother Nyala, the female calf is estimated to weigh approximately 50 kg.

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JUNE 2023

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THE COUNTRY-SIDE STEREOGRAPH. YOUNG-INDIAN RHINOCERC 200 SERIES NO. 23.

A stereographic image with text by Edward Kay Robinson (1855-1928), the editor of the popular nature magazine *The Country-Side*, was offered for sale to readers in February 1907 as no. 23 of The Country-Side Stereograph Zoo Series. The male *R. unicornis* from Nepal lived in the London Zoo from 8 June 1906 to 4 January 1924.

JUNE 2023

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JUNE 2023

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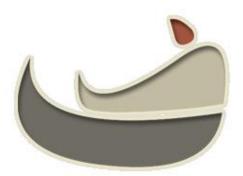
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