

RHINO RESOURCE CENTER

www.rhinoresourcecenter.com

NEWSLETTER #63 JUNE 2021

Dear colleagues and friends,

This is the 63rd 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 **25,270**. This is an increase of 160 items in the last quarter. Over 25,000 references are **available** as PDF on the RRC website.



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The Rhino Resource Center is a Charity (Registered KvK Utrecht 30185802)

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NEPAL COUNT 2021

The population rose to 752 across four national parks in the southern plains, up from 645 in 2015, the Department of National Parks and Wildlife Conservation said Saturday.

The recently concluded Rhino Census 2021 (March 22 – April 10) has counted 752 Greater onehorned rhinoceroses in Nepal. Of the total animals, 694 were counted in and around Chitwan National Park, 38 in Bardia National Park, 17 in Shuklaphanta National Park and 3 in Parsa National Park. The last census conducted in 2015 had recorded 645 individuals in the country. Jointly conducted by The Department of National Parks and Wildlife Conservation (DNPWC), Department of Forests (DoF), WWF and National Trust for Nature Conservation, the operation involved 57 domesticated elephants and a team of 350 park technicians and staff. An increase of over 100 animals in six years is welcome news. It, however, also raises questions about the carrying capacity of the rhino habitats in Chitwan – and its effect on the current population.

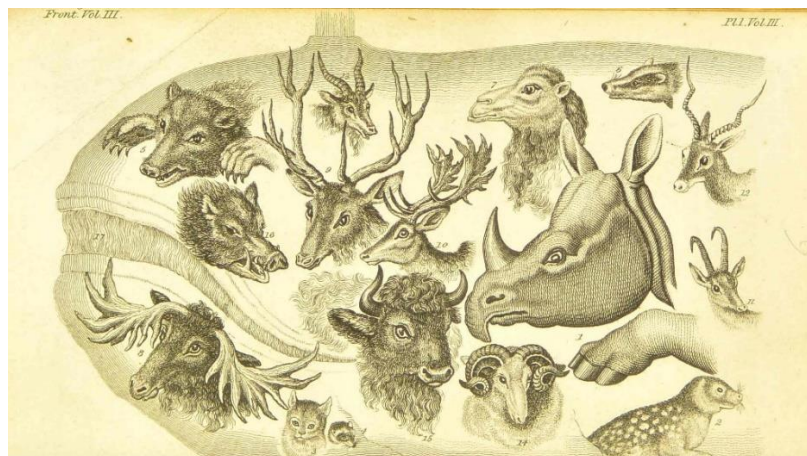
A NEW RHINO BY SAMUEL HOWITT

EXETER 'CHANGE MENAGERIE, STRAND, LONDON

The animal artist Howitt made drawings in London at the start of the 19th century. one of the history is here:

[click](#)

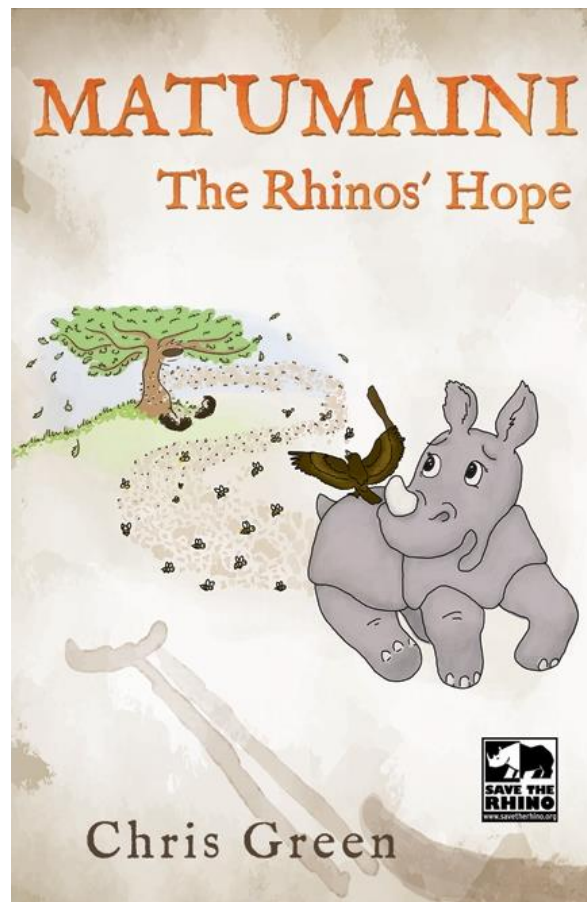
Here is another one hitherto overlooked.



Bingley, W., 1825. *Useful knowledge: or a familiar account of the various productions of nature, mineral, vegetable, and animal, which are chiefly employed for the use of man.* London, Baldwin, Cradock and Joy, vol. 3 Animals, 4th edn.



HOPE FOR CHILDREN: MATUMAINI



Green, Chris, 2020. *Matumaini: the rhino's hope*. Cambridge, Nightingale Books, pp. 1-25

In “Matumaini: The Rhinos’ Hope”, hope comes in the form of a little rhino called Matumaini (the Swahili word for hope). My dream is that through her adventures, “little Matu” can inspire a love of rhinos and in her own small way bring about much-needed change.

In this, the first of a series rhino adventure books, the “Rhinolympics” have arrived! Rhinos from all over have gathered for the grassland games and the greatest race of all – the Rhinathon. So, I’d love you to join Matu and her best friend Ndege as they come across every kind of running, jumping, weight lifting, boulder shifting rhino you could ever imagine.

This is my little book, full of a lot of Hope. I’m hoping that children of all ages will fall in love with this story and the rhinos within it. Not only are there rhino adventures to be shared and educational rhino fun facts too, but ultimately, by purchasing the book you will actually be helping to save the rhino and make a difference, as 50% of my net profit from the sale of every book will be going to Save the Rhino International, while I will also be donating as many copies as possible to various children’s charities.

<https://www.savetherhino.org/fundraising/partners/matumaini-the-rhinos-hope/>



A MEDLEY OF RHINOS IN POPULAR MAGAZINES AND BOOKS

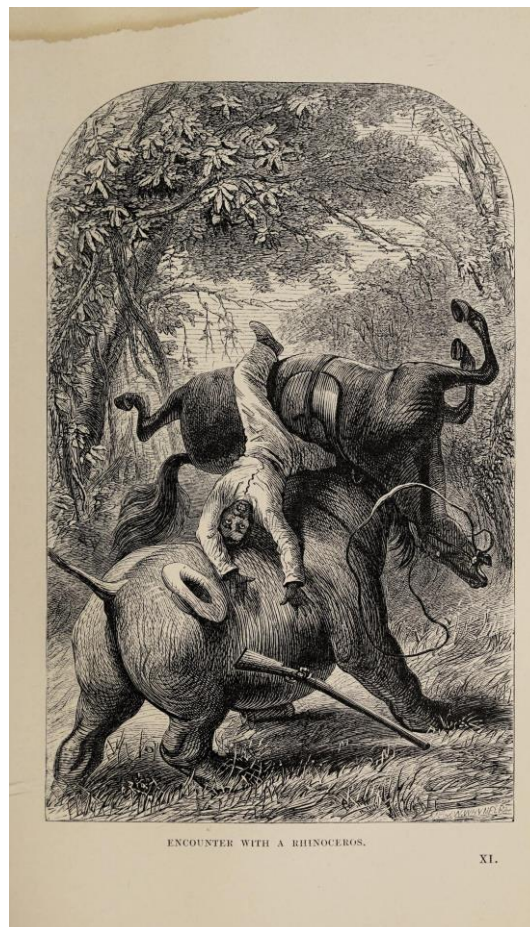
This month I thought I would share some plates or engravings published in popular magazines and books, mainly in the course of the 19th century. You don't generally come across these but there are some interesting scenes, even if none are very much likely to have any kind of relationship with reality. The stories were invented, the drawings were made up, the rhinos were just vaguely based on what the artist could find in the library.

Not high art, no depictions of reality events. Yet, for many children such images might have been their first encounter with a rhinoceros. How did that influence our perception of the rhinoceros?

This time the bias is definitely on images of Asian rhinos with a single horn. Just because that reflects my current project on the *Chronicles of the Rhinoceros in South Asia*, now nearing completion.

Kees Rookmaaker

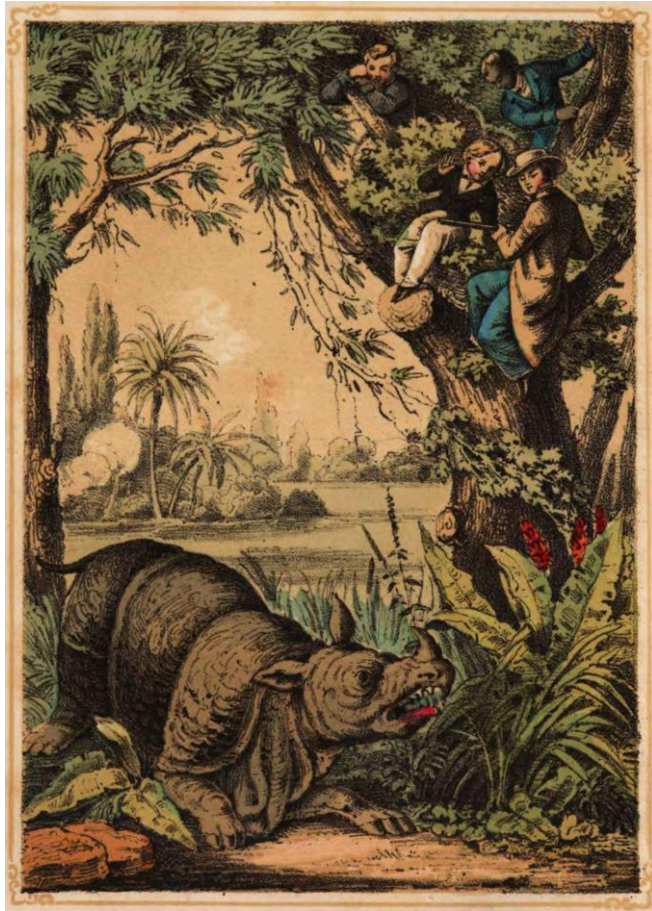
Philip Henry Gosse (1810-1888) – Rhino and Horse 1850



Gosse, P.H., 1860. *The romance of natural history*.
London, James Nesbit and Co, p.250



Philipp von Körber (1812-1861) – Rhino chasing boys in India 1853

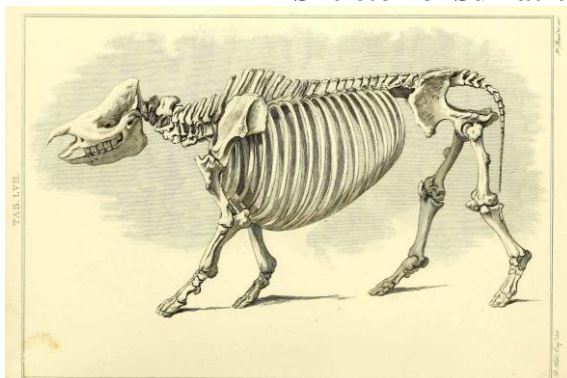


"Noch schlug es sterbend mit dem Horn".

Körber, P., 1853. Julius Bath's malerisch-romantische Reise nach Calcutta und seinen Umgebungen: unterhaltende und belehrende Erzählung für die Jugend . Nürnberg, Plate at p. 92.

Everard Home (1756-18320

Skeleton of Sumatran Rhino in collection of John Hunter



Home, E., 1823. *Lectures on comparative anatomy; in which are explained the preparations in the Hunterian collection.*

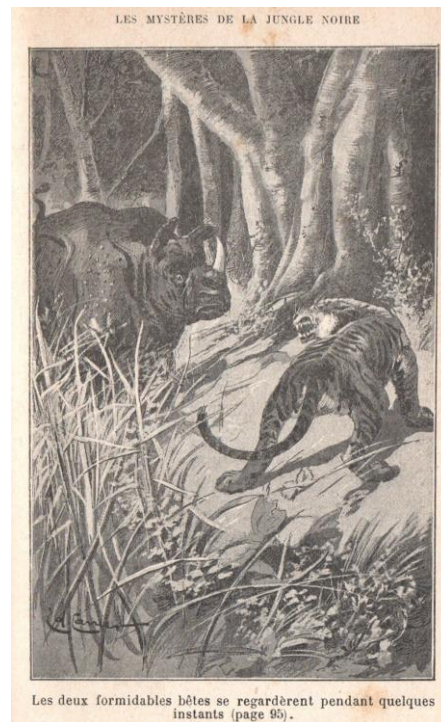
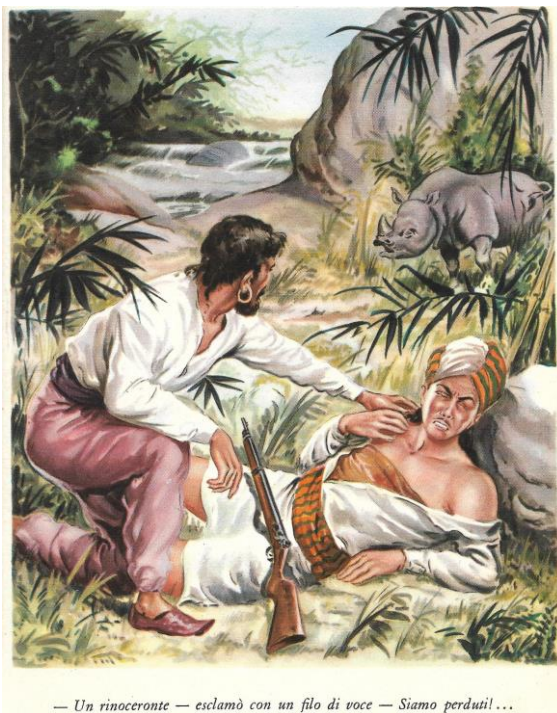
London: Hurst, Rees, Orme and Brown, vol. 4.



Emilio Salgari (1862-1911) and the Rhinoceros

By chance I came across a recent paper by Michelguglielmo [Torri](#) about an adventure in India involving a rhinoceros. This was written by Emilio Salgari (1862-1911), who, admittedly, was unknown to me. He was a prolific author of adventures in all parts of the world. Although probably best known in Italy, his works were translated into most European languages. I bought a copy dated 1958 of his book 'The mystery of the black jungle' (*I misteri della jungla nera*) hoping more than anything that it would have an illustration. Luck would have it that there was one indeed showing a rhinoceros in attack mode. Although these pictures have no relation to the reality of the rhinos in India, they make for an interesting excursion.

With the kind and generous help of Dr. Paola Irene Galli Mastrodonato and Mr. Felix Pozzo, over the next few weeks a large number of rhinos were found in different editions of Salgari's books, the oldest dating from 1895 and 1899. It was quite an eye-opener and I must thank my new Italian friends for their introduction into a whole new world.



(left) Salgari, E., 1958. *I misteri della jungla nera*. Bologna, Carroccio-Aldebaran (Collana Nord-Ovest no.39). Illustrator not named in the booklet.

(right) Salgari, E. 1899. *Les mystères de la jungle noire*. Paris, Montgredien. Illustrated by Edouard-Auguste Carrier



Rhinoceros in pulp fiction - Beadle's Weekly 1882

Thomas Mayne Reid (1818-1883) wrote a large series of fictional romance and adventure stories published as books and as stories in a long range of pulp magazines. One of these was *Beadle's Weekly*, published 1882-1897 by the successful team of William Adams and Erastus Flavel Beadle (1821-1894) in New York. The first issues contained an account in eight parts of a "Chase in Assam" edited by Reid and said to be the real experiences of a British officer. It is unfortunately difficult to separate this reality from a possible fictional element. This appeared rather late in Reid's life after he had retired to England, and might have been written or even published before, but not yet retrieved. Reid (1882) told about a party of hunters starting out from Rungpoor (Rangpur) and hunting along the Brahmaputra. The unnamed British officer is accompanied by a friend who is Superintendent of Police in Assam, his 16 year old brother Henry B – , and two indigo-planters Mr. Edwards and Mr. James. The second day after arrival was 25 April, without a year. They capture a quarter grown rhinoceros in nets after killing the mother with a hog-hunting spear. The young one is tamed and proposed to be sold to an Afghan agent of Jamrach for \$110.



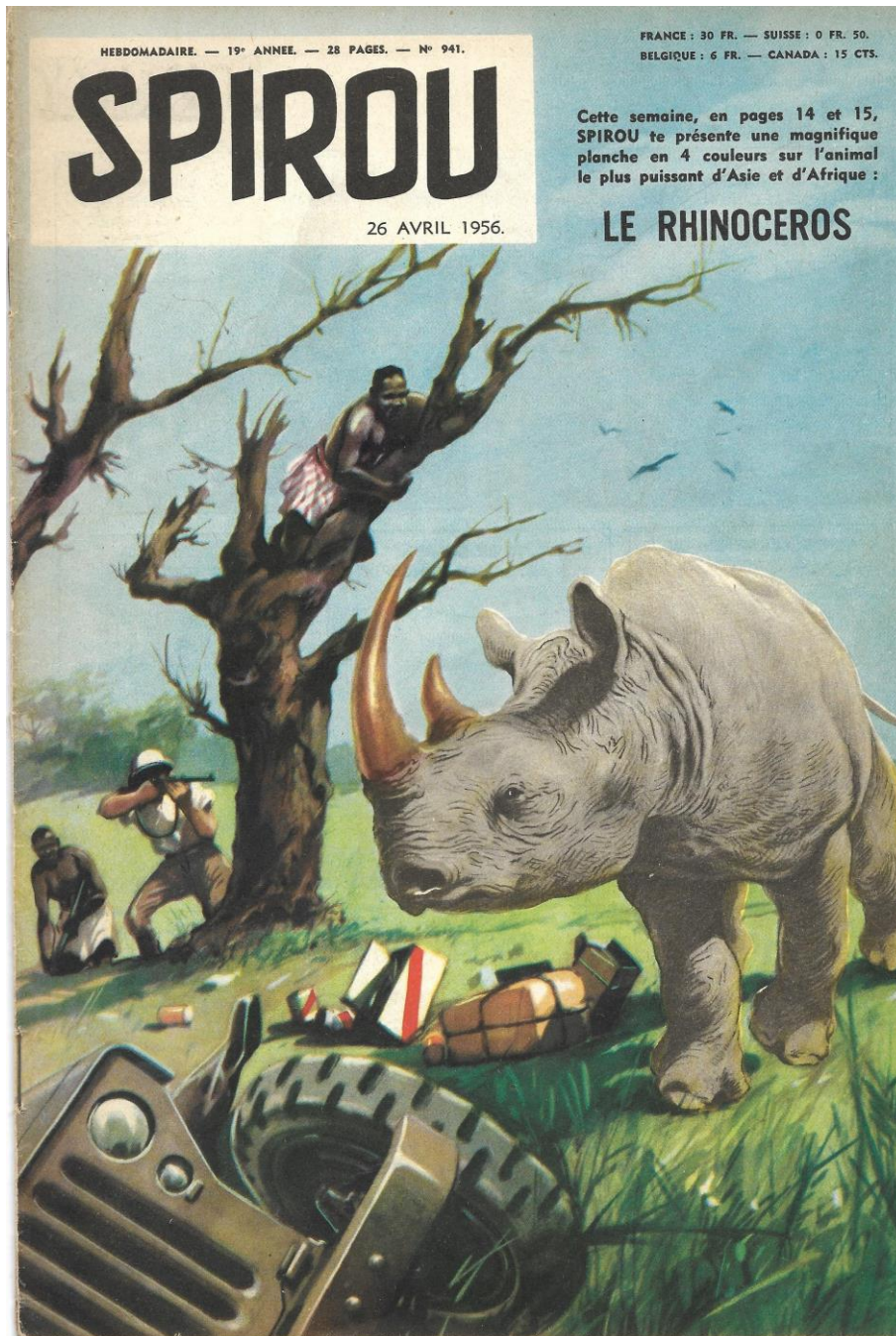
The mother rhinoceros takes her revenge.

"The Mother Rhinoceros takes her Revenge"

Reid, M., 1882. The chase in Assam; being real experiences of a British Officer. III. A rhinoceros chase. *Beadle's Weekly*, 1 (3), 2 December 1882, 8, 1 fig.



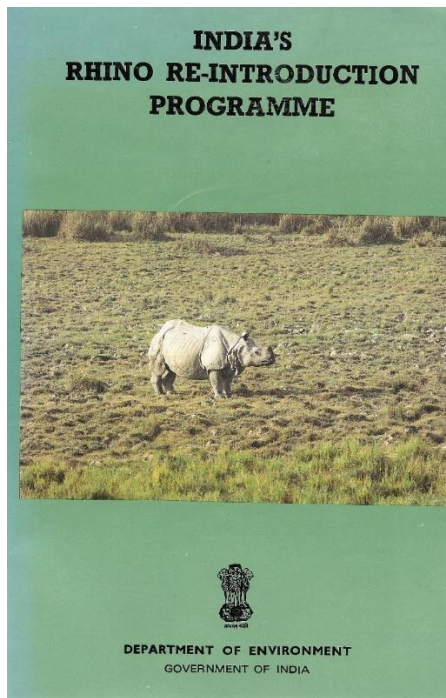
The Belgian magazine SPIROU 1956



African Rhinoceros – Artist not retrieved.

Anonymous, 1956. Le rhinoceros.

Spirou (hebdomadaire) 19 (no.941), 26 April 1956: 1, 14-15.



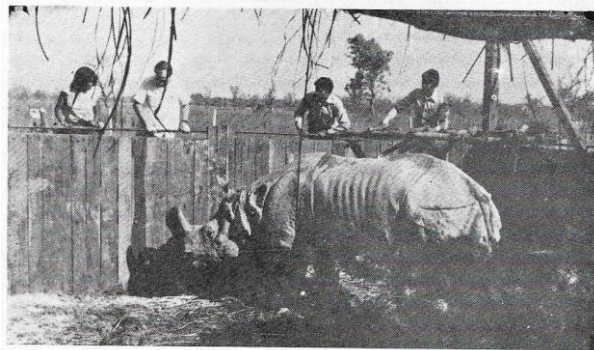
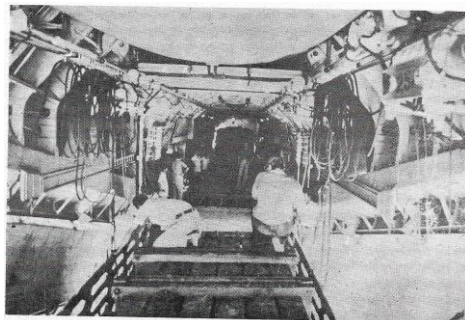
A RARE BOOK OF 1984

It is a small book with soft covers, nicely printed and well-produced. It's been on my "to find" list for ages, but no chance in any of the library catalogues. A copy was obtained by Hemut and Gertrud Denzau which they kindly donated to the Rhino Resource Center. It contains information about the first translocation of Indian rhinoceros in 1984, well worth reading for well-researched information.

Singh, Samar; Rao, Kishore, 1984. India's rhino re-introduction programme. New Delhi, Government of India, Department of Environment, pp. i-iii, 1-76

Contents:

- Singh, Samar; Rao, Kishore, 1984. Minutes of the first meeting of the Wild Life Status Evaluation Committee of the Indian Board for Wild Life held on 5.11.79 at Krishi Bhawan, New Delhi, pp. 17-20
- Schenkel, R., 1984. Report on the suitability of Dudhwa National Park U.P. as potential site for re-introduction of the Indian Rhinoceros, pp. 21-24
- Sale, J.B.; Woodford, M.H., 1984. Preliminary report on drug immobilisation and transport of the Great Indian Rhinoceros, pp. 25-51
- Hajra, P.K.; Shukla, U., 1984. Dudhwa National Park: some botanical aspects of the proposed new habitat for rhino, pp. 52-62
- Singh, Samar; Rao, Kishore, 1984. Extracts from the final recommendations of the Rhino Sub-Committee of the Wildlife Status Evaluation Committee of the IBWL in the translocation of Great Indian Rhinoceros, pp. 63-68
- Singh, Samar; Rao, Kishore, 1984. Rhino research project, pp. 69-74.





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We are grateful to all individuals who show their appreciation by their donation.
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.*



CONTENTS OF THE RHINO RESOURCE CENTER

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

RRC	2020 June	2020 Sept	2020 Dec	2021 March	2021 June	ANNUAL INCREASE
References	24,572	24,728	24,952	25,110	25,270	+ 698
PDF files	24,523	24,682	24,936	25,054	25,240	+ 717
Images	4,549	4,569	4,589	4,603	4,641	+ 92

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.

RRC VISITORS

During three months September to November 2020, www.rhinoresourcecenter.com the RRC recorded 43,200 total clicks (excluding robots).

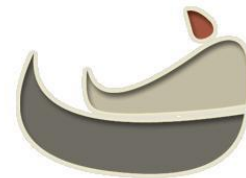
This is 480 per day.

Thank you for visiting the RRC








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.







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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
-  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.



NEW LITERATURE

(finalized 31 May 2021)

In this quarter (March to May 2021), we have added 160 new references, to bring the total number of items in the database to **25,270**.

Of these, 25,054 or 99 percent are available as PDF and searchable.

Below I have listed new entries published in the 21st century in four categories: General (all species), African rhinos, Asian rhinos and Fossil rhinos.

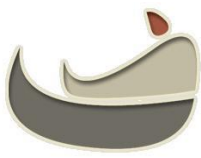
Most additions are available on the website.

Search for them on the RRC, it's easy.

Always check the [RRC website](#) first, many papers are available there.

NEW GENERAL PUBLICATIONS

- Alves, R.R.Npbrega; Borges, A.K. Martins; Barboza, R.R.D.; Souto, W.M.S.; Goncalves-Souza, T.; Provete, D.B.; Albuquerque, U.P., 2021. A global analysis of ecological and evolutionary drivers of the use of wild mammals in traditional medicine. *Mammal Review* 51: 293-306 - doi: 10.1111/mam.12233.
- Eikelboom, J.A.J.; Muijten, R.J.M.; Wang, Y.X.G.; Schroder, B.; Heitkonig, I.M.A.; Mooij, W.M.; Langevelde, F.van; Prins, H.H.T., 2020. Will legal international rhino horn trade save wild rhino populations. *Global Ecology and Conservation* 23 (e01145): 1-14 - <https://doi.org/10.1016/j.gecco.2020.e01145>.
- Etienne, C.; Houssaye, A.; Hutchinson, J.R., 2021. Limb myology and muscle architecture of the Indian rhinoceros *Rhinoceros unicornis* and the white rhinoceros *Ceratotherium simum* (Mammalia: Rhinocerotidae). *PeerJ* 9:e11314: 1-45 - <https://doi.org/10.7717/peerj.11314>.
- Guertler, W.D., 2020. Wer war das - oder: von wem hat dieses Viech seinen Namen? Teil V [Australien]. *Buletto: Mitteilungen aus der Tiergartenbiologie* 8: 48-101.
- Hildebrandt, T.B.; Hermes, R.; Goeritz, F.; Appeltant, R.; Colleoni, S.; Mori, B.de; Diecke, S.; Drukker, M.; Galli, C.; Hayashi, K.; Lazzari, G.; Loi, P.; Payne, J.; Renfree, M.; Seet, S.; Stejskal, J.; and 5 others, 2021. The ART of bringing extinction to a freeze - history and future of species conservation, exemplified by rhinos. *Theriogenology* 2021: doi.org/10.1016/j.theriogenology.2021.04.006.
- Langmeyer, S., 2020. Vom Landwehrkanal an den Auer-Muhlbach - Erinnerungen an Tierparkdirektor Heinz Heck und sein Hellabrunn. *Buletto: Mitteilungen aus der Tiergartenbiologie* 8: 215-264.
- Neushoornstichting, 2021. [Various notes on rhinos, in Dutch]. *Nieuwsbrief Spring* 2021: 1-3.



General – continued

- Pasicka, E.; Nowakowski, D.; Bendrey, R.; Melnyk, O.P., 2021. A model for dental age verification using ultrastructural imaging for modern and fossil representatives of the Rhinocerotidae family. *Animals* 11 (910): 1-17, 14 figs - <https://doi.org/10.3390/ani11030910>.
- Phillips, M.J.; Zakaria, S.S., 2021. Enhancing mitogenomic phylogeny and resolving the relationships of extinct megafaunal placental mammals. *Molecular Phylogenetics and Evolution* 158 (107082): 1-11 - <https://doi.org/10.1016/j.ympev.2021.107082>.
- Robin des Bois, 2021. Information sur braconnage des rhinoceros. *A La Trace* (Bulletin d'information et d'analyses sur le braconnage et la contrebande d'animaux) no.29: 42-51.
- Robin des Bois, 2021. Notes on rhinoceros poaching. *On the Trail* (Information and analysis bulletin on animal poaching and smuggling) no.29: 42-51.
- Rookmaaker, L.C.; Rhino Resource Center; Ziegler, D.; Billia, E.M.; Monson, J.; Strien, W. van; Athanassiou, A., 2021. New literature in the Rhino Resource Center. *Electronic Newsletter of the Rhino Resource Center* no. 62 (March): 1-19.
- Save The Rhino International, 2017. *Impact report 2016-2017*. London, SRI.
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- Schmidt, C.R.; Schmidt, F., 2020. Vögel auf Grosstieren. *Bulette: Mitteilungen aus der Tiergartenbiologie* 8: 106-134.
- Schuerer, U., 2020. Giza Zoo Kairo - Jahresbericht von 1899 bis 1910. *Bulette: Mitteilungen aus der Tiergartenbiologie* 8: 10-34.
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- Wimbles, R.; Melling, L.M.; Cain, B.; Davies, N.; Doherty, J.; Johnson, B.; Shaw, K.J., 2021. On-site genetic analysis for species identification using lab-on-a-chip. *Ecology and Evolution* 11: 1535-1543.

NEW PUBLICATIONS ON AFRICAN RHINOS

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- Barichiev, C.; Altwegg, R.; Balfour, D.; Brett, R.; Gordon, C.; Henry, D.A.W.; Jeffries, G.; Khayale, C.; Wanyama, H.; Withers, O., 2021. A demographic model to support an impact financing mechanism for black rhino metapopulations. *Biological Conservation* 257 (109073): 1-11 - <https://doi.org/10.1016/j.biocon.2021.109073>.



African Rhinos – continued

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- Browning, G.R.; Kinney, M.E. ; Clancy, M.M. ; Mama, K.; Knych, H., 2020. Plasma concentrations and clinical effects of butorphanol-azaperone for standing sedation of southern white rhinoceros (*Ceratotherium simum simum*). *Proceedings of the American Association of Zoo Veterinarians (AAZV) 2020*: 96-97.
- Cersosimo, L.M.; Sullivan, K.E.; Valdes, E.V., 2021. Species and individual rhinoceros affect the bacterial communities, metabolites, and nutrient composition in faeces from Southern black rhinoceros (*Diceros bicornis minor*) and Southern white rhinoceros (*Ceratotherium simum simum*) under managed care. *Journal of Animal Physiology and Animal Nutrition 2021*: 1-13.
- Chanyandura, A.; Muposhi, V.K.; Gandiwa, E.; Moboko, N., 2021. An analysis of threats, strategies, and opportunities for African rhinoceros conservation. *Ecology and Evolution 2021 - early view*: 1-19 - <https://doi.org/10.1002/ece3.7536>.
- Duncan, N.; Save African Rhino Foundation, 2021. News and events. *Newsletter of the Save African Rhino Foundation 35 (1)*: 1-24.
- Emslie, R., 2020. Red List, supplementary information: African Rhinos (*Ceratotherium simum* and *Diceros bicornis*, including the subspecies). In: IUCN 2020. IUCN Red List of Threatened Species. <www.iucnredlist.org>: pp. 1-54.
- Green, Chris, 2020. *Matumani: the rhino's hope*. Cambridge, Nightingale Books, pp. 1-25.**
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African Rhinos – continued

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- Samain, M., 2020. Comment prévenir l'hypoxie pendant l'anesthésie du rhinocéros d'Afrique (*Ceratotherium simum* et *Diceros bicornis*)? Thesis presented to the Veterinary Faculty of the University of Liege, pp. 1-40.
- Schenkel, R., 1987. Breitlippennashorn. In: *Grzimeks Enzyklopaedie, Saugetiere*, vol. 4, pp. 617-620.
- Swenson, J.; Haefele, H.J.; Davis, J.L., 2020. Systemic mycotic disease and subsequent itraconazole testing in the southern black rhinoceros (*Diceros bicornis minor*). *Proceedings of the American Association of Zoo Veterinarians (AAZV)* 2020: 31.
- Zaffarano, G.P.; De Klerk-Lorist, L.M.; Junker, K.; Mitchell, E.; Bhoora, R.V.; Poglayen, G.; Govender, D., 2021. First report of cystic echinococcosis in rhinos: A fertile infection of *Echinococcus equinus* in a Southern white rhinoceros (*Ceratotherium simum simum*) of Kruger National Park, South Africa. *International Journal for Parasitology: Parasites and Wildlife* 14: 260-266 - <https://doi.org/10.1016/j.ijppaw.2021.02.007>.

NEW PUBLICATIONS ON ASIAN RHINOS

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**A DATABASE OF OLD WORLD NEOGENE AND QUATERNARY
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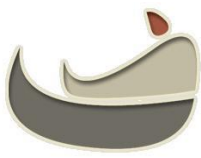
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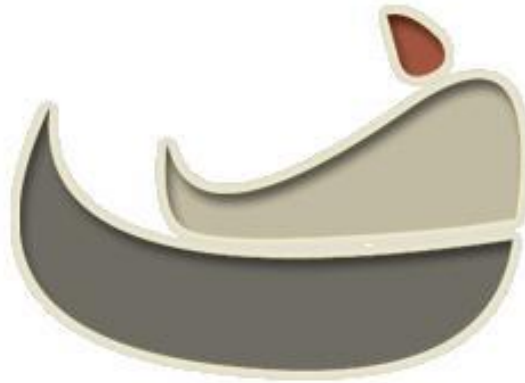


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Dr Kees Rookmaaker has actively worked on the biology and history of the rhinoceros for 50 years. He is a member of the IUCN-SSC Asian Rhino Specialist Group, and advisor to the EAZA Rhino TAG and to the International Rhino Foundation. He is the editor of the rhino section of *Pachyderm*. Author of eight books on African and Asian exploration and on the rhinoceros, as well nearly 250 shorter publications, many in peer-reviewed journals. Until 2015, he worked as a Senior Research Fellow on [Darwin Online](#) and [Wallace Online](#) at the National University of Singapore. He was Secretary of the International Commission on Zoological Nomenclature (ICZN) for a short period in 2015. The Society for the History of Natural History awarded him their Founder's Medal, and he served in the Council for several years.

CHRONICLES OF THE RHINOCEROS IN SOUTH ASIA

This is a new project to review and archive the historical information on the interaction between men and rhinoceros in the South Asian subcontinent. There is much amazing information in all kinds of publications, as well as data on rhino trophies and specimens in museums and private collections. I am particularly excited about some of the older artwork and photographs which can still be found.

-  Pictures of any rhinoceros in art or alive in Indian subcontinent
-  Historical photographs of rhinos hunted or seen before 1970
-  Data on trophies and specimens in museums and private collections

All contributions are always welcome

Kees Rookmaaker – 2021