

# RHINO RESOURCE CENTER

[www.rhinoresourcecenter.com](http://www.rhinoresourcecenter.com)

# **NEWSLETTER #47**

## **JUNE 2017**

Dear colleagues and friends,

This is the 47th issue of the quarterly e-newsletter of the Rhino Resource Center. Edited by Dr Kees Rookmaaker.

Edited by Dr Kees Rookmaaker.

The total number of references in the collection of the RRC now stands at **21,290**. This is an increase of 370 items in the last quarter (4 each day of the week, or 6 every working day).

**Over 20,900 references are available as PDF on RRC website**

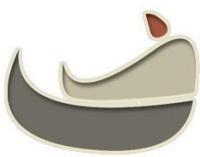


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The Rhino Resource Center is a Charity (Registered KvK Utrecht 30185802)  
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## THE HISTORY OF RHINOS IN SOUTH ASIA – A WORK IN THE MAKING

The short report issued by WWF India and Nepal (found [here](#)) contains good information about the outlook of conservation of the Greater One-Horned Rhino in India and Nepal.

There is, of course, a great deal more data about the historical changes in the distribution and numbers of these animals over the ages. I have started a rather ambitious program to collect all published information. I hope to be able to produce a definitive work which will, in one volume, combine all current knowledge.

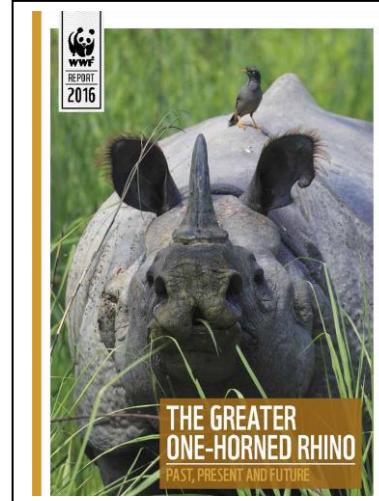
I hope to be able to look at all old hunting records, specimens in museums and private collections, rhinos that have been kept in captivity both in the region and elsewhere, all relevant artworks, Mughal paintings, rhino trophies, record specimens, rock engravings, and much more. Info on rhinos in India, Nepal, Bangladesh, Pakistan, maybe even Sri Lanka?

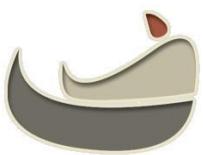
My compilation will not only look at the demise of *Rhinoceros unicornis* in much of its range, followed by good hopes that conservation efforts are going to be successful. But of course, both the one-horned *Rhinoceros sondaicus* and the two-horned *Dicerorhinus sumatrensis* are equally well-known in the region, even though references are few and far between. The Javan rhinoceros is the only one known from the Sunderbans in Bangladesh, and maybe had a wider distribution. The Sumatran rhinoceros was found in the north-eastern mountain ranges and maybe further afield.

Not only historical data will be included, also all about current conservation challenges, as long as it concerns the rhinoceros in the subcontinent.

It might take me a year, or maybe two, and then there will be the challenge to find an adventurous publisher, who will not mind academic detail combined with a great range of illustrations and maps. I hope that I will live to see the results.

It goes without saying. Any help is always welcome. If you have pictures, information that you think would be forgotten, any suggestions – you will know how to find me.



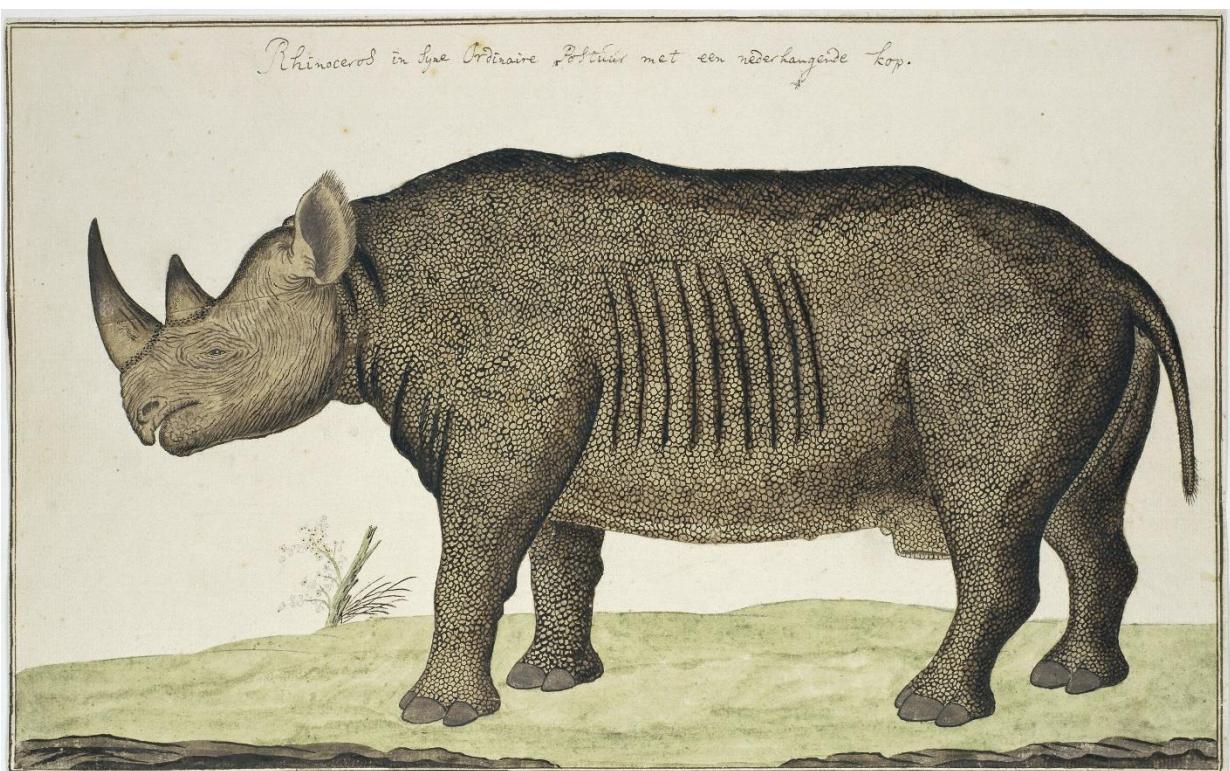


## FORTHCOMING MEETINGS

**IRKA** has announced the next *Rhino Keepers Workshop*  
Presented by the International Rhino Keepers Association  
Hosted by Denver Zoo on 7-11 August 2017.

## ZOOLOGICAL ASSOCIATION OF AMERICA

The Board of [ZAA](#) has invited the RRC to share its commitment as a Conservation Partner. The ZAA promotes responsible ownership, management, conservation, and propagation of animals in both privately funded and publicly funded facilities through professional standards in husbandry, animal care, safety and ethics.



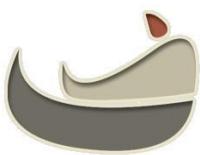
## THE ZOOLOGY OF R.J. GORDON – SOUTH AFRICA 1770s

My dissertation on the Zoological Exploration of Southern Africa of 1989 (see [here](#)) was initiated to discover the significance of the drawings left by Gordon, and preserved in the Rijksmuseum, Amsterdam. In my days, I had to have photographs (in black-and-white) taken especially for my project, and as the collection is very large, it wasn't always easy to work on this.

Now all drawings by Gordon, showing animals, plants, landscapes, men are superbly scanned and annotated. The results are available on this website.

<https://www.robertjacobgordon.nl/>

Gordon was one of the first to look at the anatomy of the black rhinoceros, after shooting an animal in the Eastern Cape. I worked on this aspect together with the famous morphologist, Prof. A.J.E.Cave, who we lost not long ago at the nice age of a century. (see [here](#))



# RRC NEWSLETTER

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## OUR SPONSORS

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



SOS RHINO



INTERNATIONAL RHINO FOUNDATION



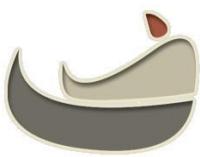
SAVE THE RHINO



RHINO CARHIRE

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.*



# RRC NEWSLETTER

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## CONTENTS OF THE RHINO RESOURCE CENTER

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

RRC	2016 June	2016 Sept	2016 Dec	2017 March	2017 March	ANNUAL INCREASE
References	20,250	20,511	20,810	20,920	<b>21,290</b>	+ 1040
PDF files	20,000	20,209	20,487	20,600	<b>20,990</b>	+ 990
Images	3,800	3,831	3,900	3,910	<b>3,966</b>	+ 166
Members	2,924	3,016	3,108	3,300	<b>3,389</b>	+ 465

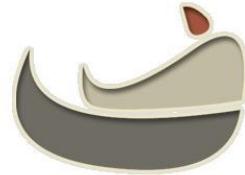
I thank everybody who has helped us by sending copies of books and papers.

All contributions are [acknowledged on the website](#).

## 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\*\*](#)

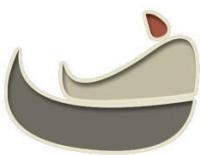


The Rhino Resource Center is an essential tool for

- ◆ 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
- ◆ 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 2017)

In this quarter (March to May 2017), we have added 370 new references, to bring the total number of items in the database to **21,290**.

Of these, 20,990 or 98.8 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.**

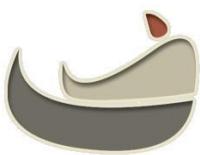
**Search for them on the RRC, it's easy.**

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

### NEW GENERAL PUBLICATIONS

- Biggs, D.; Cooney, R.; Roe, D.; Dublin, H.T.; Allan, J.R.; Challender, D.W.S.; Skinner, D., 2017. Developing a theory of change for a community-based response to illegal wildlife trade. *Conservation Biology* 2017: 1-19.
- Conley, S., 2016. 15th International Elephant & Rhino Conservation and Research Symposium. *Gajah* 45: 46-47.
- Damm, G.R., 2017. Al Jazeera's Investigative Unit exposes people and powers behind illegal rhino horn trade. *African Indaba e-Newsletter* 15 (1): 16-18.
- Gippoliti, S.; Cotterill, F.P.D; Zinner, D.; Groves, C.P., 2017. Impacts of taxonomic inertia for the conservation of African ungulate diversity: an overview. *Biological Reviews* 2017: DOI: 10.1111/brv.12335.
- International Rhino Keeper Association, 2017. Various notes. *The Crash*, March 2017: 1-14.
- Janssens, B.M.M., 2015. International wildlife law and the rhinoceros: a legal assessment. Thesis presented to Tilburg University Law School, Netherlands, pp.1-67.



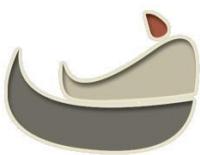


## General – continued

- Johnson, L., 2012. Project proposal: Breaking the brand of rhino horn in Vietnam. Melbourne, Breaking the Brand, pp. 1-21.
- Johnson, L., 2013. Breaking the brand of rhino horn in Vietnam: the first 12 months. Melbourne, Breaking the Brand, pp. 1-21.
- Johnson, L., 2015. Breaking the brand of rhino horn in Vietnam: Second Annual Report (March 2014-April 2015). Melbourne, Breaking the Brand, pp. 1-31.
- Johnson, L., 2016. Breaking the brand of rhino horn in Vietnam: demand reduction campaigning. Melbourne, Breaking the Brand, pp. 1-8.
- Koen, H.; De Villiers, J.P.; Roodt, H.; De Waal, A., 2017. An expert-driven causal model of the rhino poaching problem. *Ecological Modelling* 347: 29-39.
- Krebs, B.L.; Watters, J.V., 2017. Simple but temporally unpredictable puzzles are cognitive enrichment. *Animal Behavior and Cognition* 4 (1): 119–134.
- Langerman, F., 2015. Dürer's rhino: five centuries of an elusive representation. In: *Impact 9 International Printmaking Conference*. China Academy of Art Press: Hangzhou. ISBN: 978-7-5503-0957-9. 555pp, pp.459-464.
- Mangat, R., 2017. Conservationist Esmond Bradley Martin on saving the rhino. *Swara*, April-June 2017: 26-31.
- Maritz, P.G., 2017. On the life of rhinos: Written into the simple stars. *Literator - Journal of Literary Criticism, Comparative Linguistics and Literary Studies* 38 (1): 1.



- Neushoornstichting, 2017. [Various notes on rhinos, in Dutch]. *Nieuwsbrief*, March 2017: 1-4.
- Nuwer, R., 2015. 3D printed horns may put rhinos at greater risk of extinction. *New Scientist* <https://www.newscientist.com/article/dn27459-3d-printed-horns-may-put-rhinos-at-greater-risk-of-extinction/#.VUTiPtNViko>: 2 plates.
- Nuwer, R., 2015. DNA and databases help untangle the web of the illegal wildlife trade. <http://www.smithsonianmag.com/science-nature/dna-databases-untangle-web-illegal-wildlife-trade-180955634/> June 18, 2015: 1 plate, 2 figures.
- Pimentel, J., 2017. *The rhinoceros and the megatherium, an essay in natural history*. Translated by Peter Mason. Cambridge, Mass., Harvard University Press, pp. 1-356
- Rathe, M., 2016. IJzerstapelingsziekte bij browsende neushoorns in gevangenschap. Thesis Faculteit Diergeneeskunde, Universiteit van Gent, pp. 1-48.
- Robin des Bois, 2016. Notes on rhinoceros poaching. *On the Trail (Information and analysis bulletin on animal poaching and smuggling)* no.14: 59-73.



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## General – continued

- Rookmaaker, L.C., 2017. The zoological contributions of Andrew Smith (1797–1872) with an annotated bibliography and a numerical analysis of newly described animal species. *Transactions of the Royal Society of South Africa* 72 (2): 105-173 - <http://dx.doi.org/10.1080/0035919X.2016.1230078>.
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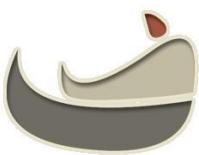


The artwork by Charles Bell, made during the Expedition for Exploring Central Africa (1834-36) is made available by the University of Cape Town ([here](#))

- Traffic, 2016. Changing behaviour to reduce demand for illegal wildlife products: workshop proceedings. Cambridge, UK, Traffic, pp. 1-17.
- Traffic, 2016. Rhino forensics to expand to meet international needs. *SWFS News* 1 (2): 1, 9.
- Traffic, 2017. Thorough investigations needed following major rhino horn seizures in SE Asia. *Latest News* 3-23-2017: <http://www.traffic.org/>.
- Vigne, L.; Martin, E.B., 2017. *Decline in the legal ivory trade in China in anticipation of a ban*. London, Save the Elephants, pp. 1-88.

## NEW PUBLICATIONS ON AFRICAN RHINOS

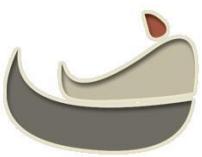
- Abdul-Rahman, R., 2016. Lewa Wildlife Conservancy: programmatic and financial report to the American Association of Zoo Keepers. *Proceedings of the 43rd National Conference of the American Association of Zoo Keeper's Inc.* Memphis, Tennessee, September 19-23: 1-7, 4 tables.
- African Parks, 2017. Rhinos return to Rwanda after ten-year absence. Internet May 2017.



White rhinoceros in Lesna Zoo. Jan Robovsky sent several photos for the RRC image Gallery.

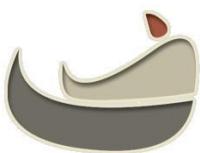
## African Rhinos – continued

- Andres-Brümmer, D., 2016. Drei Jahrzehnte für Luangwa. *ZGF-Gorilla* 2016 (1): 10-13.
- Bekele, A.; Yalden, D.W., 2013. *The mammals of Ethiopia and Eritrea*. Addis Ababa, University Press.
- Berghaier, R., 2002. "The state of the game" (Observations on conservation of large mammals in Kenya). *Animal Keeper's Forum* 29 (11): 469-474, 3 plates.
- Bobko, C.M., 1996. Detection and treatment of a possible new disease syndrome in a captive Black rhinoceros (*Diceros bicornis*). *Proceedings of the 23rd National Conference of the American Association of Zoo Keeper's Inc.* Detroit, Michigan, October 6-10: 26-30, 2 tables.
- Bouwens, N., 2011. Zoo Atlanta's hoofstock enrichment program. *Animal Keeper's Forum* 38 (7-8): 315-317, 1 plate 2 figures.
- Broberg, G., 2016. In the shadow of Thunberg and Sparrman: Hendrik Jacob Wikar at the Cape. *Svenska Linnesällskapets Arsskrift* 2016: 53-70.
- Candra, D., 2016. Helminthiases identification of wildlife (tiger, rhino and elephants) and domestic livestock (cattle, buffalo and goat) in Way Kambas National Park, Lampung [in Indonesian]. Thesis presented to the University of Lampung, Sumatra, pp. 1-88.
- Capistron, C., 2012. Successful treatment of nail cracks for a Black Rhinoceros (*Diceros bicornis*). *Animal Keeper's Forum* 39 (12): 553-555, 4 plates.



## African Rhinos – continued

- Cronin, B., 2014. Bowling for more than just rhinos: Using Cinco de Rhino to highlight other species saved by rhino conservation. *Proceedings of the 41st National Conference of the American Association of Zoo Keeper's Inc.* Orlando, Florida, September 8-12: poster.
- Cross, C.L., 2016. An ecofeminist ethic of care approach to rhinoceros protection in South Africa. Thesis presented to University of Pretoria, pp. 1-108.
- Damm, G.R., 2017. WESSA: How to enhance value of legal rhino horn. *African Indaba e-Newsletter* 15 (1): 9-10.
- De Lange, S.S.; Fuller, A.; Haw, A.; Hofmeyr, M.; Buss, P.; Miller, M.; Meyer, L.C.R., 2017. Tremors in white rhinoceros (*Ceratotherium simum*) during etorphine-azaperone immobilisation. *Journal of the South African Veterinary Association* 88: 1-11.
- Deaton, T.; Bouwens, N., 2015. Building confidence in a fearful (Black) rhino. *Animal Keeper's Forum* 42 (9): 272-274, 5 plates.
- Duncker, L.C.; Goncalves, D., 2017. Community perceptions and attitudes regarding wildlife crime in South Africa. *International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering* 11 (3): 1-7.
- East, B.; Tell, L. ; Citino, S.B.; Fredholm, D.V.; Gamble, K.C.; Fajt, V., 2016. Pharmacokinetics of a single oral dose of flunixin meglumine in the white rhinoceros (*Ceratotherium simum*). *Joint AAZV/EAZWV/IZW Conference Proceedings* 2016: 303-304.
- Fitzpatrick, L.; Piazza, J.; Elam, C.; Smith, B., 1997. Management of a (Black) rhinoceros medical problem without behavioral conditioning and the subsequent development of a conditioning program. *Proceedings of the 24th National Conference of the American Association of Zoo Keeper's Inc.* Houston, Texas, October 5-9: 76-82, 1 figure.
- Grams, K.; Roletto, J., 2001. Enrichment options: Tamarins, rhinos, meerkats, fishing cat and bears. *Animal Keeper's Forum* 28 (5): 206-207, 2 plates.
- Groves, C.P.; Cotterill, F.P.D.; Gippoliti, S.; Robovsky, J.; Roos, C.; Taylor, P.J.; Zinner, D., 2017. Species definitions and conservation: a review and case studies from African mammals. *Conservation Genetics* 2017 - DOI 10.1007/s10592-017-0976-0: 1-11.
- Grzimek, B., 2012. Ein Kampf um Nashorner. *ZGF-Gorilla* 2017 (1): 7.
- Hnath, P. T., 2003. Making a connection: A Save the Rhino Trust journal. *Animal Keeper's Forum* 30 (9): 385-389, 5 plates, 1 map.
- Horak, I.G.; Boshoff, C.R.; Cooper, D.V.; Foggin, C.M.; Govender, D.; Harrison, A.; Hausler, G.; HofmeyrM.; Kilian, J.W.; MacFadyen, D.N.; Nel, P.J.; Peinke, D.; Squarre, D.; Zimmermann, D., 2017. Parasites of domestic and wild animals in South Africa, XLIX. Ticks (Acari: Ixodidae) infesting white and black rhinoceroses in southern Africa. *Onderstepoort Journal of Veterinary Research* 2017: 1-11.
- Huntley, N.F.; Naumann, H.D.; Kenny, A.L.; Kerley, M.S., 2017. Black rhinoceros (*Diceros bicornis*) and domestic horse (*Equus caballus*) hindgut microflora demonstrate similar fermentation responses to grape seed extract supplementation in vitro. *Journal of Animal Physiology and Animal Nutrition* 2016 - doi: 10.1111/jpn.12587.



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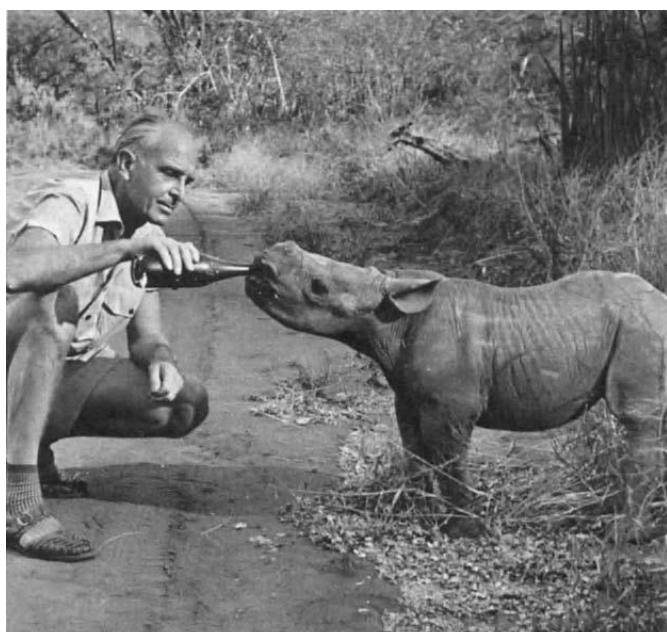
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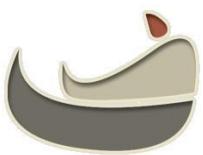
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## African Rhinos – continued

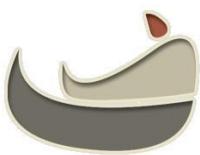
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- Jones, K., 2016. The Rhinoceros and the Chatham Railway: taxidermy and the production of animal presence in the 'Great Indoors'. *History (Journal of the Historical Association)* 2016: 710-735.
- Kamradt, A., 2013. BFR's Conservation Resource Fund (abstract). *Proceedings of the 40th National Conference of the American Association of Zoo Keeper's Inc.* Greensboro, North Carolina, September 22-26.
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- Keeley, L., 2017. Training 1.1 Eastern black rhinos (Diceros bicornis michaeli) for voluntary head radiographs. *AAZK Behavioral Husbandry Committee Training Tales* 2017: 1-5.
- Kirk, D., 2017. *Rhino in the house: the true story of saving Samia*. New York, Adams Books for Young Readers, [pp. i-xxxiv]
- Kottwitz, J.; Boothe, M.; Harmon, R.; Citino, S.B.; Zuba, J.R.; Boothe, D.M., 2014. Results of the 2012-2013 megavertebrate analgesia survey: elephants and rhino. *Proceedings of the American Association of Zoo Veterinarians* 2014: 75.





## African Rhinos – continued

- Lamoreaux, M.; Brewer, C., 2016. Reintroduction of orphaned White rhino (*Ceratotherium simum simum*) calves. *Proceedings of the 43rd National Conference of the American Association of Zoo Keeper's Inc.* Memphis, Tennessee, September 19-23: 1-3.
- Langer, S.; Czerwonka, N.; Ternes, K.; Herbst, W.; Koehler, K., 2016. Oral squamous cell carcinoma in an aged captive white rhinoceros (*Ceratotherium simum*). *Journal of Zoo and Wildlife Medicine* 47 (4): 1090–1092.
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- Mehrdadfar, F., 2002. The Save the Rhino Trust (SRT) Field notes/Introduction. *Animal Keeper's Forum* 29 (3): 133-137, 4 plates, 1 map.
- Monne Rodriguez, J.M.; Chantrey, J.; Unwin, S.; Verin, R., 2017. Cardiac truncus arteriosus in an eastern black rhinoceros (*Diceros bicornis michaeli*). *Journal of Comparative Pathology* 156: 54e141.
- Moodley, Y., 2017. The divergent evolutionary histories of the black and white rhinoceros. *Proceedings of the Plant and Animal Genome Conference XXV (San Diego)* Abstract W424: 1.
- Moore, M., 2010. Zimbabwe's rhinos under attack by poachers. *Animal Keepers Forum* 36 (10): 427-428.
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- North Carolina Zoo, Asheboro, North Carolina, 2013. Mixed species management and facility design (at Watani Plains exhibit). *Proceedings of the 40th National Conference of the American Association of Zoo Keeper's Inc.* Asheboro, North Carolina, September 22-26: presentation.
- Nuwer, R., 2016. Do the world's three remaining Northern White Rhinos have a future? PBS NatureNOW <http://www.pbs.org/wnet/nature/blog/can-science-save-northern-white-rhino-sudan-najin-fatu/>: 2 plates, 1 figure.
- Pearthree, P., 2014. 2014 AAZK's BFRs "Making a difference with AAZK's Bowling for Rhinos". *Proceedings of the 41st National Conference of the American Association of Zoo Keeper's Inc.* Orlando, Florida, September 8-12: 1-8, 2 tables.
- Pearthree, P., 2015. 2015 AAZK's BFRs "Making a difference with AAZK's Bowling for Rhinos". *Proceedings of the 42nd National Conference of the American Association of Zoo Keeper's Inc.* St. Louis, Missouri, September 27-October 1: 1-8, 2 tables.
- Pearthree, P., 2016. 2016 AAZK's BFRs "Making a difference with AAZK's Bowling for Rhinos". *Proceedings of the 43rd National Conference of the American Association of Zoo Keeper's Inc.* Memphis, Tennessee, September 19-23: 1-8, 2 tables.

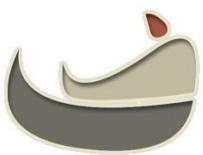


## African Rhinos – continued

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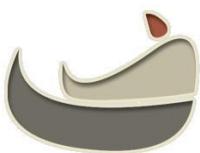


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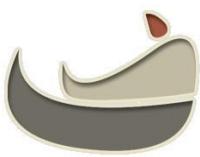
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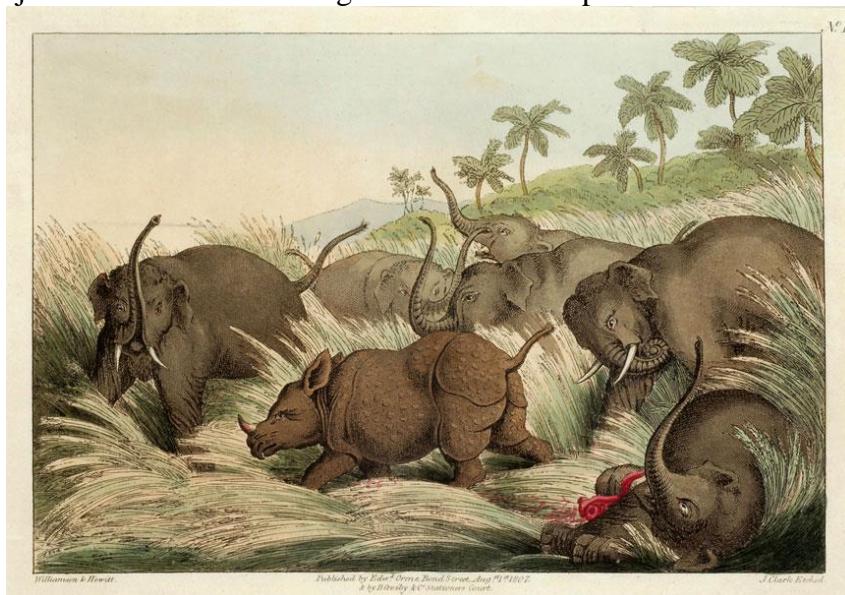
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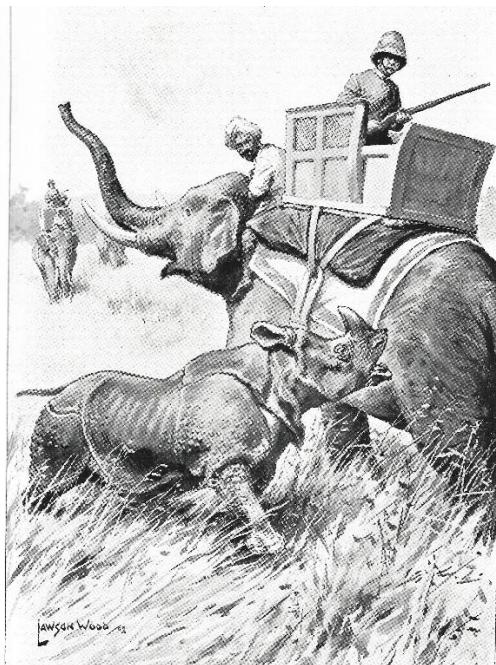
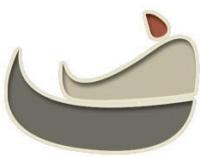
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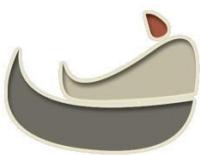
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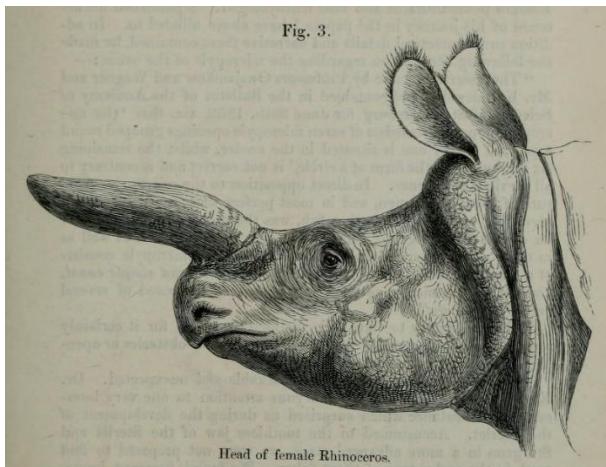
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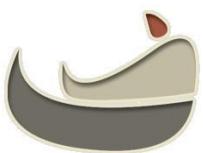


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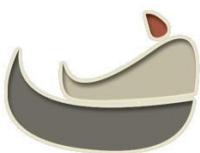


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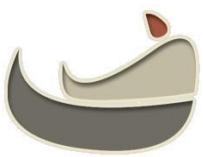
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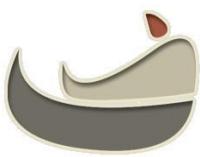
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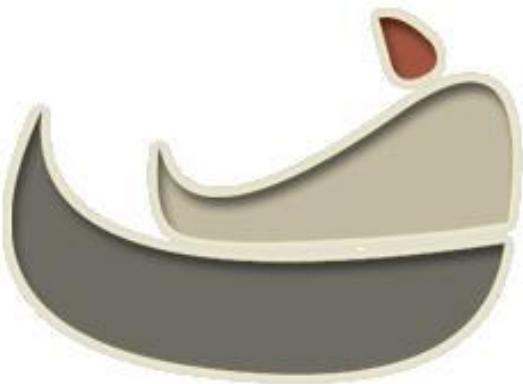


# RRC NEWSLETTER

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