

RHINO RESOURCE CENTER

www.rhinoresourcecenter.com

NEWSLETTER #35 MAY 2014

Dear colleagues and friends,

This is the 35th 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 18,621. We have again conquered another thousand! This is an increase of 247 items in the last quarter.

Over 18,000 references are available as PDF on RRC website



**SUPPORT the RRC
CLICK ON RHINO**

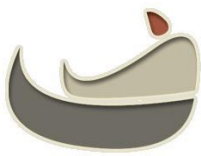
IN THIS ISSUE:

Black Rhino Studbook	p. 2
Tierpark Berlin in pictures	p. 3
Whiteley – Saving The Queen	p. 3
Reports of Borneo Rhino Alliance	p. 4
The RRC Library	p. 4
Our sponsors	p. 5
Contents of the RRC website	p. 6
Yes, you can help	p. 6
New Literature	p. 7
General	p. 7
African	p. 8
Asian	p.12
Fossil	p.15
Contact Information	p. 17

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

Board Members: Prof. Robert Visser, Dr. Esmond Bradley Martin

Founding Chairman: Dr. Nico J. van Strien



OUR EXECUTIVE TEAM

Director and Chief Editor: Kees Rookmaaker
Database Maintenance & Web Design: Willem J. van Strien

SPECIALIST EDITORS:

Emmanuel Billia (Italy)	Henri Carpentier (France)
Adam Felts (USA)	Jim Monson (France)
Haowen Tong (China)	Dan Ziegler (USA)

THE BLACK RHINO STUDBOOK

TIERPARK BERLIN



Internationales Zuchtbuch für das Spitzmaulnashorn (*Diceros bicornis* Linné, 1758)

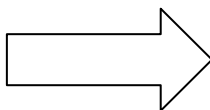
International Studbook for the Black rhinoceros

Berlin, 1. 1. 2013

14

The studbooks for the black and white rhinos were for a long time established and updated by the staff of the Zoo in Berlin. My appreciation of their efforts was published in International Zoo News in 2005. Since that time, the white rhino studbook was taken over by Disney's Animal Kingdom (published in 2011) and the black rhino studbook by the Tierpark in Berlin. Christian Kern has just sent me copies of the two latest updates reflecting status on 1.1.2012 and 1.1.2013 respectively. I wish to acknowledge how much such cooperation of authors and institutions means to me to keep the RRC up-to-date.

The studbook provides details of black rhinos kept under captive conditions as far as they were alive on the publication date. Besides animals in zoos and safari parks, there are listings of rhinos in semi-wild conditions at Lewa, Ol Jogi and Ol Pejeta in Kenya and at Mkomazi in Tanzania. There are no listings at all for any of the black rhinos kept on private land in South Africa under very similar conditions. When I read the recent report *The viability of legalising trade in rhino horn in South Africa* published by the Department of Environmental Affairs (2014) it reinforces my belief that there is a need for a comprehensive register of all black and white rhinos kept on private land (animals as well as horn stock). Such a register would ensure that we could vouch for the legality of every scrap of rhino material on the market. Surveys in the past have only been partially successful, due to an uneven response rate by owners and their managers. Although security issues will have to be overcome, the lack of transparency of the situation hampers all arguments over trade issues. There is so much great work being done in South Africa, so many personal sacrifices are made, so much effort is put into protection and conservation. A register of all existing animals would provide important baseline data which can be used to convince parties in matters of protection, conservation, management and trade.



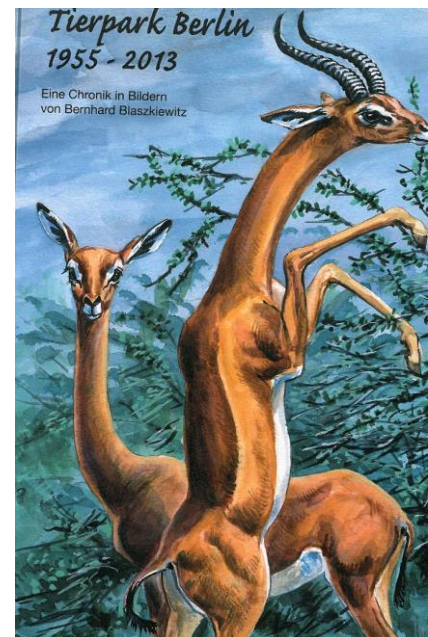
FIND THE STORY OF NARAYANI

[THIS LINK](#) PROVIDES THE INFORMATION.



TIERPARK BERLIN IN PICTURES

A few weeks back I received a copy of a new book published by the Tierpark in Berlin, Germany giving a history of the zoo over the past half century in pictures. It is a nice way of dealing with the subject without providing too many words. There are two zoological gardens in Berlin, both famous institutions in their own right, with the Zoologische Garten on Hardenbergplatz first opened in 1834. Rhinos were and are important exhibits in both gardens. In modern history, two of the directors have had a special interest in rhinoceros research and husbandry, which shows in their publications: the retired director of the Berlin Zoo, Dr Heinz-Georg Klös and the current director of the two parks, Dr Bernhard Blaszkiewitz. The latter is now introducing this book of pictures. It may be added that these zoos have a remarkable program of publications, with their house journals *Bongo* and *Milu*, a series of studbooks, annual reports and guidebooks, and obliquely the well-established zoo journal *Der Zoologische Garten*.



NICK WHITELEY - SAVING THE QUEEN – TO BE PUBLISHED SOON



Abstract: Two groups of poachers converge on the biggest rhino in South Africa's Kruger National Park, intent on removing her valuable horn for sale in the Far East.

Determined to thwart their missions, a park ranger and his team embark on a desperate race against time to find the rhino, known to the few who have seen her as Indlovukazi, Zulu for the Queen. Oblivious to the advancing predators, the Queen forms a loving family around her - a calf, two tickbirds and a tiny gazelle who has lost her partner in a snare. Love, hate, corruption and greed drive the adversaries to a violent climax in the heart of the bush. Through the characters, important questions are raised about the future of this magnificent prehistoric beast which could soon be threatened with extinction.

Nick Whiteley is an award-winning investigative journalist who has covered the South African news landscape almost all his working life. His work in newspapers, radio and magazines has taken him to many scenes that made the headlines, including numerous incidents of violence and brutality. The protection of wildlife has always been close to his heart, and the sudden upsurge in rhino horn poaching in South Africa sparked his determination to write this, his first novel.



REPORTS OF THE BORNEO RHINO ALLIANCE

A few weeks ago I was approached by the Board of the Borneo Rhino Alliance in Sabah, Malaysia, to say that they were happy to provide their reports on a public website. The BORA staff have regularly compiled quarterly reports of all that is happening at the Borneo Rhino Sanctuary (BRS). Sixteen reports spanning the period 2010-2014 are therefore now available on the websites of the [RRC](#) and of [BORA](#).

These reports are important. They help to understand the splendid work that is being done in Sabah to save the Sumatran Rhinoceros. And we know for sure: the species is doomed unless we act NOW.

Of course we were all happy to hear about the capture of a female rhino on 10 March 2014 in the forest of Danum Valley and her safe relocation to Tabin. Sad of course that her body was found riddled with cysts probably preventing her to breed.

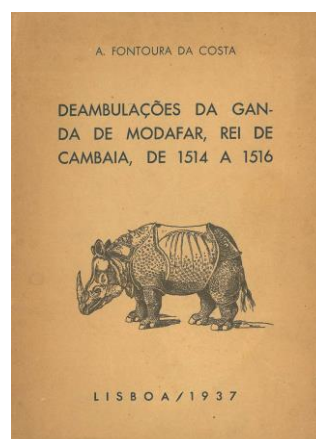
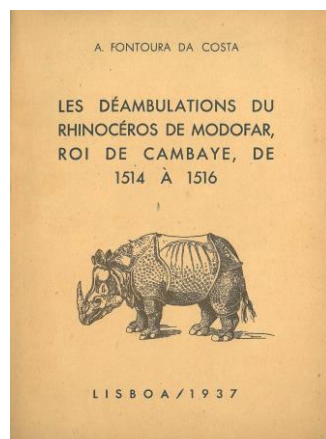
The RRC is happy to assist conservation bodies
to bring their reports in the public domain.

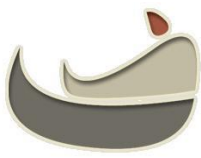
THE RRC LIBRARY

The Rhino Resource Center is of course best known for its presence on the internet. Our website receives close to 500 visits per days. It is quite heart-warming to think that thousands of people anywhere in the world have access to the best and latest information about the rhinoceros, to help in school projects, major research activities, university programs, as well as conservation.

One of the few restrictions which I have imposed from the start of the RRC is that no reference is added unless the original work was consulted or a copy was obtained. As such, the RRC has a comprehensive rhinoceros library of books and reports about the rhinoceros. At the moment the books alone fill some 8 metres (24 feet) of shelf space, a world of knowledge which can largely also be explored on the website.

One of the more 'quaint' books is one published by Abel Fontoura da Costa in 1936 about the history of the first post-medieval rhinoceros in Europe, which arrived in Portugal in 1515. Published in three languages, all editions are now in our collection.





OUR SPONSORS

The board and staff of the Rhino Resource Center gratefully acknowledge the support of our two main sponsors, the International Rhino Foundation and SOS Rhino.

A generous donation was received from the WWF Areas Programme.



INTERNATIONAL RHINO FOUNDATION



SOS RHINO



WWF AREAS

We receive regular donations from Save the Rhino International and Rhino Carhire.



SAVE THE RHINO



RHINO CARHIRE

We are grateful to all individuals who donate to the RRC to show their appreciation of our work.

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	2013 May	2013 August	2013 November	2014 February	2014 May	ANNUAL INCREASE
References	17,711	17,986	18,145	18,374	18,621	+ 950
PDF files	17,179	17,456	17,663	17,900	18,173	+ 994
Images	3,202	3,236	3,272	3,369	3,419	+ 217
Members	1,765	1,885	1,942	2,000	2,062	

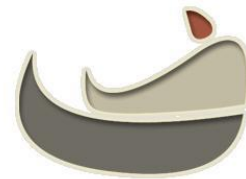
I thank everybody who has helped us by sending copies of books and papers.

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 (finalised 30 April 2014)

In this quarter (February to April 2014), we have added 247 new references, to bring the total number of items in the database to 18,621.

Of these, 18,173 or 95 percent are available as PDF and searchable.

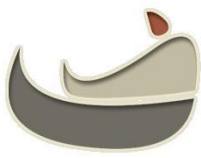
Below I have listed new entries published in the 21st century in four categories: General (all species), African rhinos, Asian rhinos and Fossil rhinos.

This quarter saw the publication of some pivotal papers and reports, all well worth the attention for anybody interested in rhinos. Search for them on the RRC, it's easy.

If you are interested in one of these titles, always check the [RRC website](#) first, because most are available there.

NEW BOOKS AND GENERAL PUBLICATIONS

- Allen, W.R., 2013. Ivory and rhino horn: Legal sale versus illegal poaching. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 226-267.
- Anonymous, 2014. UK's wildlife crimefighters. *BBC Wildlife* 32 (3): 40-41.
- Blazkiewitz, B., 2013. *Tierpark Berlin 1955-2013: eine Chronik in Bildern*. Berlin, Tierpark, pp. 1-460.
- Clauss, M.; Kaiser, T.; Hummel, J., 2008. The morphophysiological adaptations of browsing and grazing mammals. In: Gordon, I.J. & Prins, H.H.T. (eds). *The ecology of browsing and grazing*. Berlin: Springer, pp. 47-88.
- Cotterill, F.P.D.; Taylor, P.J.; Gippoliti, S.; Bishop, J.M.; Groves, C.P., 2014. Why one century of phenetics is enough: response to 'are there really twice as many bovid species as we thought?'. *Systematic Biology* 2014: 1-41.
- Damen, M., 1989. Neushoorns in gevangenschap. *Vriendennieuws (Vereniging Vrienden van Blijdorp)* Februari 1989: 32-33.
- International Rhino Keeper Association, 2014. Various notes. *The Crash* April 2014: 1-13.
- Kawata, K., 2014. Injuries by rhinos. *International Zoo News* 51 (2): 147-149.
- Kennedy, J., 2013. Relationships among birth presentation, amniotic sac rupture and stillbirths in rhinoceros. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 1033-1079.
- Lavers, C., 2009. Thermal imagery for wildlife management applications. *BIAZA Zoo Research News* 10 (3): 3-4.
- Linzmeier, R., 2013. Current studies on molecular mechanisms of iron homeostasis in rhinoceroses. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 487-505.
- Maciejewski, K.; Kerley, G., 2014. Understanding tourists' preference for mammal species in private protected areas: is there a case for extralimital species for ecotourism. *PLoS ONE* 9(2): e88192. doi:10.1371/journal.pone.0088192: 1-8.
- Murillo, S., 2013. The lonely rhino: analyzing anthropomorphism toward solitary animals. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 708-742.



General Literature – continued

- Schwarzenberger, F.; Brown, J.L., 2013. Hormone monitoring: an important tool for the breeding management of wildlife species. *Wiener Tierärztliche Monatsschrift* 100: 209-225.
- Sutherland, W.J.; and 19 others, 2014. A horizon scan of global conservation issues for 2014. *Trends in Ecology & Evolution* 29 (1): 15-23.
- Vira, V.; Ewing, T., 2014. *Ivory's Curse the militarization and professionalism of poaching in Africa*. Born Free USA, Washington D. C. April: pp 1-104.
- Waters, E., 2013. Zoological analysis of the unicorn as described by classical authors. *Archeometriai Mhely* 2013/X./3: 231-236.



White rhinoceros with prominent horn on the shoulders in the Zoo of Alexandria. Photographed in 1973 by Mick Kurtz.

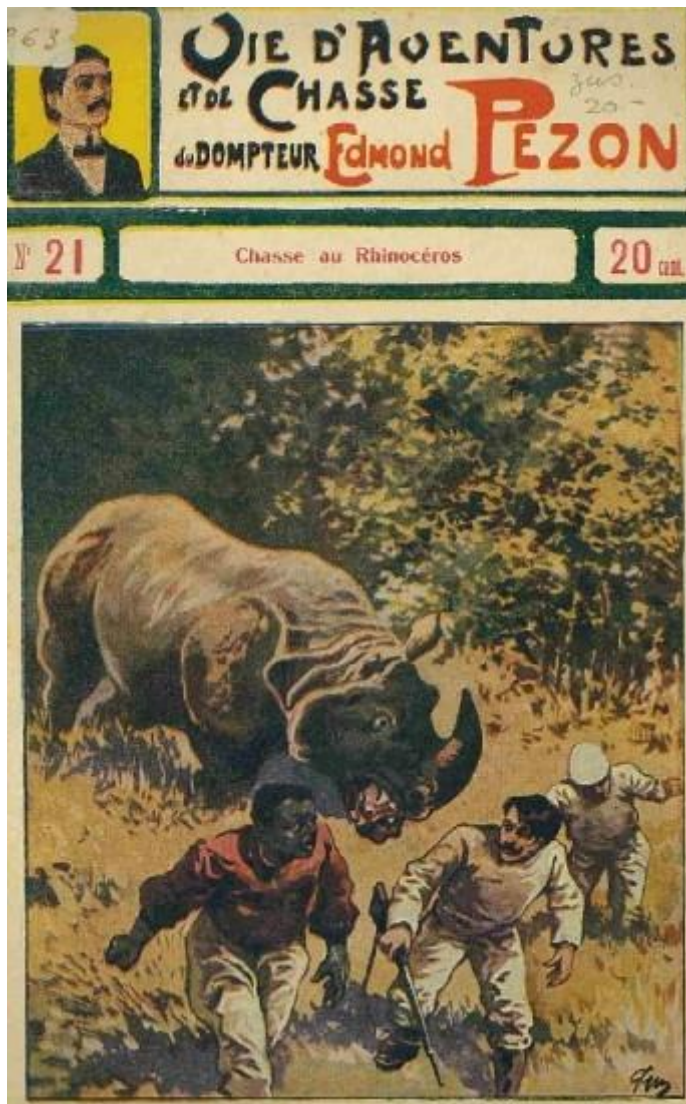
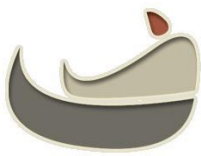
NEW PUBLICATIONS ON AFRICAN RHINOS

- Anderson, N., 2013. The significance of pre-existing social bonds in translocated black rhinos. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 890-929.
- Anonymous, 2010. The rhino orphans. *Newsletter of the David Sheldrick Wildlife Trust* 2010: 15-18.
- Anonymous, 2013. The rhinos and other orphans. *Newsletter of the David Sheldrick Wildlife Trust* 2013: 39-41.
- Baldus, R.D., 2014. Poaching in Africa: facts, causes and solutions. *African indaba, e-newsletter*12 (3): 6-8.
- Baldus, R.D., 2014. Tanzania: the Selous revisited. *African indaba, e-newsletter*12 (3): 3-4.
- Barron, C., 2014. Southern white rhino training protocol - voluntary blood collection from inner front leg without a chute. *The Crash* April 2014: 4-5.



African Rhinos – continued

- Bell, C., 2014. Rhinos: it's time for Plan B. *African indaba, e-newsletter* 12 (2): 11-12.
- Boulay, G.H. du, 1991. A note on the cerebral arteries of Perissodactyla: the rete caroticum of *Diceros bicornis*. *Neuroradiology* 33 [Suppl]: 462-463.
- Brell, B., 2013. Second case of rhino poaching since 1994 puts Namibian teams on high alert. *Wildlife Matters* no. 42 (Spring): 6.
- Carter, B., 2014. Rhino conservation isn't just about rhinos. *African indaba, e-newsletter* 12 (2): 13-14.
- Churcher, C.S., 2014. A vacant niche? The curious distributions of African Perissodactyla. *Transactions of the Royal Society of South Africa* 2014: (10.1080/0035919X.2013.867909): 1-8.
- Cinkova, I., 2013. Contact calls of the Northern and Southern white rhinoceros: Source of information on individual identity and species of the caller?. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 960-961.
- Cinkova, I., 2013. Social and reproductive behavior of critically endangered Northern white rhinoceros (*Ceratotherium cottoni*) in a zoological garden. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 1203-1215.
- Connelly, M., 2014. Rhino conditioned blood draw at the Tulsa Zoo. *The Crash* April 2014: 3-4.
- Dalberg, 2013. *Fighting illicit wildlife trafficking: a consultation with governments*. WWF Report: pp. 1-36.
- Downie, S.P., 2013. Focus on black rhino: *Diceros bicornis bicornis* population dynamics and a formula for successful conservation of the species 2002-2012. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 293-319.
- Duncan, N.; SAVE Foundation of Australia, 2014. News and events. *Newsletter of the SAVE Foundation of Australia* 28 (1): 1-6.
- Edwards, K. L.; McArthur, H.; Liddicoat, T.; Walker, S.L., 2014. A practical field extraction method for non-invasive monitoring of hormonal activity in the black rhinoceros, *Diceros bicornis*. *Conservation Physiology* 2 (1): 1-8.
- Edwards, K.; Walker, Sue; Shultz, S., 2014. Investigating population performance and factors that influence reproductive success in the eastern black rhinoceros (*Diceros bicornis michaeli*). *BIAZA Zoo Research News* 15 (1): 2-4.
- Edwards, K.L., 2013. Reproduction and population performance in the European captive population of Eastern black rhinoceros (*Diceros bicornis michaeli*). *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 1112-1130.
- Eloff, C., 2012. Rhino poaching in South Africa: is it a losing battle?. *PositionIT* Jan/Feb 2012: 57-62.
- Freeman, E.W.; Meyer, J.; Adendorff, J.; Schulte, B.A.; Santymire, R.M., 2014. Scraping behavior of black rhinoceros is related to age and fecal gonadal metabolite concentrations. *Journal of Mammalogy* 95 (2): 340-348.
- Freeman, E.W.; Meyer, J.; Bird, J.; Adendorff, J.; Santymire, R.M., 2014. Impacts of environmental pressures on the reproductive physiology of subpopulations of black rhinoceros (*Diceros bicornis bicornis*) in Addo Elephant National Park, South Africa. *Conservation Physiology* 2 (1): 1-13.



Another recent acquisition of a rare story book of the early 20th century.

Title page of Pezon, E., 1910. Vie d' aventures et de chasse du dompteur Edmond Pezon. No. 21: Chasse au rhinoceros. Paris, Albin Michel, pp. 1-32

African Rhinos – continued

- Goot, A. van der, 2013. Attempt to control estrus and ovulation in white rhinoceros using a synthetic progestagen and slow-release GnRH analogue. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 423-436.
- Gripper, J., 2013. Notes on the work in Sebakwe, Zimbabwe. *Sebakwe News* 2013 Winter: 1-12.
- Holeckova, D., 2011. Ochranské projekty nosorožc ZOO Dvur Králové v Africe. *Annual Report of Dvur Kralove Zoo 2012*: 162-167.
- Hollmann, J.C.; Lewis-Williams, J.D., 2006. Species and supernatural potency: an unusual rock painting from the Motheo District, Free State province, South Africa. *South African Journal of Science* 102: 509-512.
- Kenya Government, 2013. The wildlife conservation and management act, 2013. Act no. 47 of 2013, pp. 1-116.



African Rhinos – continued

- Kern, C., 2012. *International studbook for the black rhinoceros, 1.1.2012, Nr. 13*. Berlin, Tierpark, pp. 1-56.
- Kern, C., 2013. *International studbook for the black rhinoceros, 1.1.2013, Nr. 14*. Berlin, Tierpark, pp. 1-56.
- Kondrashov, F.A., 2014. *Ceratotherium simum* (white rhinoceros) tRNA(Trp). Barcelona, Evolutionary Genomics Lab.
- Law, P.R.; Fike, B.; Lent, P.C., 2013. Birth sex in an expanding black rhinoceros (*Diceros bicornis minor*) population. *Journal of Mammalogy* 95 (2): 349-356.
- Lawson, K.; Vines, A., 2014. *Global impacts of the illegal wildlife trade: the costs of crime, insecurity and institutional erosion*. London, Chatham House, pp. 1-62.
- Lewa Wildlife Conservancy, 2013. Annual report 2013. Kenya: LWC: pp. 1-12.
- London Conference on the illegal wildlife trade, 2014. Declaration. London, Zoological Society, pp. 1-12.
- Mailland, F., 2009. Geoglyphs on the Har Karkom Plateau (Negev, Israel). Papers, XXIII Valcamonica Symposium 2009: 208-214.
- Mavrandonis, L.; Downie, S., 2012. Sascha, a survivor's story. *Wildlife Matters* no. 41 (Autumn): 9.
- Miller, M., 2013. Boma adaptation and development of a scoring system for recently captured white rhinoceros (*Ceratotherium simum*) in South Africa. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 930-959.
- Miller, M.; Buss, P.; Hofmeyr, J.; Olea-Popelka, F., 2014. Saving the white rhino: use of biochemical panels to evaluate health status for translocation. *Vetcom* 53: 40-42.
- Nowers, R., 2012. Game industry flourished in 2012. *Agriprobe* 9 (3): 28.
- Oliver, K.; Dean, C., 2013. Reaching through teaching. *Zooquaria* 84: 12-14.
- Pootoolal, J., 2014. White rhino blood draws at the African Lion Safari. *The Crash* April 2014: 2.
- Santymire, R., 2013. Determining potential environmental and social factors affecting the success of the black rhinoceros in Addo Elephant National Park, South Africa. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 348-385.
- Sheldrick, D., 2011. An overview of 2011: is there any hope for the rhinos?. *Newsletter of the David Sheldrick Wildlife Trust* 2011: 8, 50-51.
- Sheldrick, D., 2012. An overview of 2012: the orphaned rhinos; the mobile veterinary unit. *Newsletter of the David Sheldrick Wildlife Trust* 2011: 8, 51-56.
- Stevenson, H., 2011. Diary of William Stevenson: elephant hunter. *Society of Malawi Journal* 64 (1): 46-76.
- Swaisgood, R., 2013. White rhinoceros reproduction: Insights from the wild and semi-wild. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh 2013*: 386-422.
- Taylor, L.A.; Mueller, D.W.H.; Schwitzer, C.; Kaiser, T.M.; Codron, D.; Schulz, E.; Clauss, M., 2014. Tooth wear in captive rhinoceroses (*Diceros*, *Rhinoceros*, *Ceratotherium*: *Perissodactyla*) differs from that of free-ranging conspecifics. *Contributions to Zoology* 83 (2): 107-117.

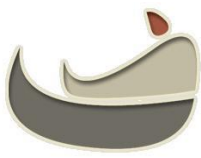


African Rhinos – continued

- Taylor, M.; Brebner, K.; Coetzee, R.; Davies-Mostert, H.; Lindsey, P.; Shaw, J.; t Sas Rolfes, M., 2014. *The viability of legalising trade in rhino horn in South Africa*. Pretoria, Department of Environmental Affairs, pp. 1-108.
- Vegter, I., 2014. Cherry-picking 'grey literature' on rhino horn. *African indaba, e-newsletter*12 (2): 9-10.
- Wagner, S.; Uri-Khob, S.; Brell, B., 2012. Namibia: of calves, collars and cameras. *Wildlife Matters* no. 41 (Autumn): 8.
- Watson, R.; Edwards, K.; Walker, Sue; Moralie, C.; Brown, J., 2010. The development of an enzyme immuno-assay to non-invasively measure adrenal activity in the okapi (*Okapia johnstoni*), black rhino (*Diceros bicornis*) and Asian elephant (*Elephas maximus*). *BIAZA Zoo Research News* 11 (3): 17.
- Waweru, F.K.; Githaiga, A.N., 2014. Resource partitioning by the black rhinoceros (*Diceros bicornis*), elephant (*Loxodonta africana*) and the giraffe (*Giraffa camelopardalis*) in Tsavo West National Park, Kenya. *International Journal of Engineering Research & Technology (IJERT)* 3 (1): 2530-2544.
- WESSA, 2014. Background to rhino poaching . *African indaba, e-newsletter*12 (2): 8-9.
- Wildlands Conservation Trust, 2013. [Various notes]. *Rhino Reporter* August 2013: 1-15.

NEW PUBLICATIONS ON ASIAN RHINOS

- Ahmad, A.H.; Payne, J.; Zainuddin, Z.Z., 2013. Preventing the extinction of the Sumatran rhinoceros. *Journal of Indonesian Natural History* 1 (2): 11-22.
- Bapodra, P.; Cracknell, J.; Wolfe, B.A., 2014. Comparison of butorphanol-detomidine versus butorphanol-azaperone for the standing sedation of captive greater one-horned rhinoceroses (*Rhinoceros unicornis*). *Journal of Zoo and Wildlife Medicine* 45 (1): 60-68.
- Benco, A., 2013. Urinary hormone concentrations and pharmacokinetics/ pharmacodynamics of haloperidol in a female Indian rhinoceros (*Rhinoceros unicornis*). *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 462-486.
- Bishal, K.C.; Manandhar, N., 2014. 'Zero poaching year' success in rhino conservation in Chitwan. *Headlines Himalaya* no.291: 2.
- Blaszkiwicz, B., 2013. Review of Kinzelbach: Augusta, das erste Panzernashorn in Europa. *Zoologische Garten* 82 (6): 343-344.
- Borneo Rhino Sanctuary (BRS) Programme. 2010-2014. Quarterly reports nos. 1-16. Kota Kinabalu, Borneo Rhino Alliance [with permission of BORA].
- Brook, S.M.; Dudley, N.; Mahood, S.P.; Polet, G.; Williams, A.C.; Duckworth, J.W.; Thinh Van Ngoc; Long, B., 2014. Lessons learned from the loss of a flagship: The extinction of the Javan rhinoceros *Rhinoceros sondaicus annamiticus* from Vietnam. *Biological Conservation* 174: 21-29.
- Bunya, K.W.; Marni, W.; Hussin, H.I.; Malim, T.P.; Kamaruddin, K.N.; Mat Saad, M.N.; Abang, F.; Tajuddin Abdullah, M., 2011. Preliminary taxonomic checklist of mammals in Imbak Canyon Conservation Area. In: Latiff, A.; Sinun, W. (eds), *Imbak Canyon Conservation Area, Sabah*. Publisher: Akademi Sains Malaysia and Sabah Foundation: pp. 253-264.



Asian Rhinos – continued

- Capiro, J.M.; Stoops, M.A.; Freeman, E.W.; Clawson, D.; Schook, M.W., 2014. Effects of management strategies on glucocorticoids and behavior in Indian rhinoceros (*Rhinoceros unicornis*): translocation and operant conditioning. *Zoo Biology* 33 (2): 131-143.
- Cincinnati Zoo, 2014. Cincinnati Zoo devastated by loss of endangered Sumatran Rhino. Press release.
- Citino, S.B., 2012. Historic birth in Indonesia. *Karatasi (White Oak)* Summer 2012: 4-5.
- Coleman, D., 2013. Menageries and museums: John Simons' The tiger that swallowed the boy (2012) and the lives and afterlives of historical animals. *Animal Studies Journal* 2 (1): 114-132.
- Davison, G.W.H.; Hoi Sen Yong; Wells, D.R., 2014. Cranbrook at eighty: his contributions so far: ornithologist, mammalogist, zooarchaeologist, chartered biologist and naturalist. *Raffles Bulletin of Zoology* Supplement No. 29: 1-7.
- Devkota, R.; Brant, S.V.; Thapa, A.; Loker, E.S., 2014. Sharing schistosomes: the elephant schistosome *Bivitellobilharzia nairi* also infects the greater one-horned rhinoceros (*Rhinoceros unicornis*) in Chitwan National Park, Nepal. *Journal of Helminthology* 88: 32–40.
- Evnike, M.F., 2013. *Pengaruh Pengendalian Langkap (Arenga obtusifolia) Terhadap Komposisi Tumbuhan Pakan Badak Jawa (Rhinoceros sondaicus)*. Thesis presented to the University of Bogor, pp. 1-42.
- Hegener, M., 2013. Saving the Sumatran rhino. *NRC Handelsblad* 8 April 2013.
- Hermes, R.; Goeritz, F.; Saragusty, J.; Stoops, M.A.; Hildebrandt, T.B., 2014. Reproductive tract tumours: the scourge of woman reproduction ails Indian Rhinoceroses. *PlosOne* 9 (3) e92595: 1-10.



Horns and toe of a rhinoceros from the Apo Kajan in East Borneo. Picture taken in 1931 in relation to the filming expedition of H.F. Tillema. Image acquired by [KITLV Leiden](http://www.kitlv.leiden.nl/) in 1980 from archives of the Missionarissen van de Heilige Familie, Goirle.



Asian Rhinos – continued

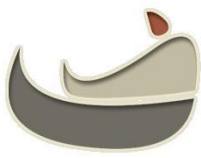
- Johnson, D., 2014. Conservation corner: the land of Narayani. *The Crash* April 2014: 5-6.
- Kan Yaw Chong, 2014. Rhino captured in Danum. *Daily Express (Sabah)* 11 March 2014: 1.
- Kan Yaw Chong, 2014. Sabah rhinos headed for US zoo on loan. *Daily Express (Sabah)* 13 february 2014: 1.
- Luskin, M.S.; Christina, E.D.; Kelley, L.C.; Potts, M.D., 2014. Modern hunting practices and wild meat trade in the oil palm plantation-dominated landscapes of Sumatra, Indonesia. *Human Ecology* 2014: 1-11.
- Pandit, P.K., 2013. Biodiversity of mangrove forests of Indian Sundarbans and its conservation. *Tigerpaper (FAO)* 40 (3), 1-11.
- Philip, A.; Chang Hong How; Hee Siong Poh; Yu On Lee; Rische, H.; Sze Jiat Tan; Zi Chao Shiah; Awara, O., 2014. *Aerial surveillance to tackle poaching*. Skyno Project (EE2 Project Group), pp. 1-43.
- Rajkumar, H.S.; Klein, H., 2014. First Perissodactyl footprints from Flysch deposits of the Barail Group (Lower Oligocene) of Manipur, India. *Journal of Earth System Science* 123 (2): 413-420.
- Roth, T., 2013. Sumatran rhino returns to the Cincinnati Zoo in the face of crisis. Website of Cincinnati Zoo 21 July 2013: 1-3.
- Roth, T.L.; Stoops, M., 2013. The peaks and valleys of rhino conservation research. *CREW Review* Fall 2013: 4.
- Sabah Wildlife Department, 2014. Female Sumatran rhino rescued and translocated from Danum Valley to the Borneo rhino sanctuary in Tabin Wildlife Reserve. Press release, 21 March 2014, pp. 1-5.
- Sectionov, I., 2013. Control of invasive arenga palm (*Arenga obtusifolia*) in habitat suitable for Javan rhino (*Rhinoceros sondaicus*), Ujung Kulon National Park, Indonesia. *Proceedings of the 2013 International Elephant and Rhino Conservation and Research Symposium, Pittsburgh* 2013: 823-847.
- Sharma, S.P.; Joshi, Y.R., 2014. India: Rhino poaching increases. *Headlines Himalaya* no.292: 2.
- Talukdar, B.K., 2013. Rhino crisis in Assam: supporting the Kaziranga authorities to stop rhino killing. *Wildlife Matters* no. 42 (Spring): 6.
- Talukdar, B.K., 2014. Rhino conservation in Assam. *Assam Tribune* 7 March 2014.
- Talukdar, B.K.; Bonal, B.S.; Sharma, A.; Sarma, K.; Singh, S.P., 2014. Re-introduction of greater one-horned rhino in Manas National Park, Assam, India - under the Indian Rhino Vision 2020. In: Soorae, P.S. (ed.). *Global re-introduction perspectives: 2013 - Further case-studies from around the globe*, IUCN/SSC Re-Introduction Specialist Group, pp. 164-167.
- Wahyudi, D.; Stuebing, R., 2013. Camera trapping as a conservation tool in a mixed-use landscape in East Kalimantan. *Journal of Indonesian Natural History* 1 (2): 37-45.



NEW PUBLICATIONS ON FOSSIL RHINOS

Section edited by Emmanuel Billia, Dan Ziegler and Athanassios Athanassiou.

- Aiglstorfer, M.; Bocherens, H.; Böhme, M., 2014. Large mammal ecology in the late Middle Miocene Gratkorn locality (Austria). *Palaeobiodiversity and Palaeoenvironment* 94: 189-213..
- Aiglstorfer, M.; Heissig, K.; Böhme, M., 2014. Perissodactyla from the late Middle Miocene Gratkorn locality (Austria). *Palaeobiodiversity and Palaeoenvironments* 94: 71-82.
- Akgün, F.; Kaya, T.; Forsten, A.; Atalay, Z., 2000. Biostratigraphic data (Mammalia and Palynology) from the Upper Miocene Incesu Formation at Düzyayla (Hafik-Sivas, Central Anatolia). *Turkish Journal of Earth Sciences* 9: 57-67.
- Asfaw, S.; Gilbert, W.H.; Beyene, Y.; Hart, W.K.; Renne, P.R.; WeldeGabriel, G.; Vrba, E.S.; White, T.D., 2002. Remains of *Homo erectus* from Bouri, Awash, Ethiopia. *Nature* 416 (21 March): 316-318.
- Bachura, O.P.; Kosintsev, P.A., 2010. Fauny mlekopitayushchikh v Pozdnem Pleystozene i Golozene na Yuzhnom Urale [Southern Ural Late Pleistocene and Holocene mammal fauna] [in Russian]. *Vestnik OGU, Institut Ekologii Rastanii i Zivotnikh, Ural'skoe otdel. RAN, Ekaterinburg*; 12 (118): 42-48.
- Boehme, M.; Aiglstorfer, M.; Antoine, P.O.; Appel, E.; Havlik, P.; Metais, G.; Laq The Phuc; Schneider, S.; Setzer, F.; Tappert, R.; Dang Ngoc Tran; Uhl, D.; Prieto, J., 2013. Na Duong (northern Vietnam) – an exceptional window into Eocene ecosystems from Southeast Asia. *Zitteliana A* 53: 120-167.
- Codrea, V.A.; Ratoi, B.G., 2014. The early Upper Miocene *Aceratherium incisivum* (Mammalia: Rhinocerotidae) from Bozieni (Moldavian Platform, Romania). *North-western Journal of Zoology* 10 (1) art.131901: 1-5.
- Diedrich, C.G., 2012. An Ice Age spotted hyena *Crocuta crocuta spelaea* (Goldfuss, 1823) population, their excrements and prey from the Late Pleistocene hyena den of the Sloup Cave in the Moravian Karst, Czech Republic. *Historical Biology* 24: 161-185.
- Duijn, A. van, 2012. Strandvondst Kijkduin blijkt bot van wolharige neushoorn [apparent bone of woolly rhinoceros found at Kijkduin Park beach] [In Dutch and English]. Netherlands Center for Biodiversity [NCB Naturalis] *Natuurinformatie*: 1-4.
- Gross, M.; Böhme, M.; Havlik, Ph.; Aiglstorfer, M., 2014. The late Middle Miocene (Sarmatian s.str.) fossil site Gratkorn – the first decade of research, geology, stratigraphy and vertebrate fauna. *Palaeobiodiversity and Palaeoenvironment* 94: 5-20.
- Guerin, C.; Pickford, M., 2005. *Ancylotherium cheboitense* nov. sp., nouveau Chalicotheriidae (Mammalia, Perissodactyla) du Miocène supérieur des Tugen Hills (Kénya). *Comptes Rendus Palevol* 4 (3): 225-234.
- Havlik, Ph.; Aiglstorfer, M.; Beckmann, A.K.; Gross, M.; Böhme, M., 2014. Taphonomical and ichnological considerations on the late Middle Miocene Gratkorn locality (Styria, Austria) with focus on large mammal taphonomy. *Palaeobiodiversity and Palaeoenvironment* 94: 171-188.
- Kahlke, R. D., 2013. The origin of Eurasian mammoth faunas (Mammuthus-Coelodonta Faunal Complex). *Quaternary Science Reviews* Article in Press: 1-18, 9 figs.



Fossil Rhinos – continued

- Kayseri Oezer, M.S.; Akgun, F.; Mayda, S.; Kaya, T., 2013. Palynofloras and vertebrates from Mugla-Oeren region (SW Turkey) and palaeoclimate of the Middle Burdigalian-Langhian period in Turkey. *Bulletin of Geosciences* 89 (1): 137-162.
- Kosintsev, P., 2007. Late Pleistocene large mammal faunas from the Urals. *Quaternary International* 160: 112-120, 1 fig, 5 tabs.
- Kosintsev, P.A.; Orlova, M.V., 2002. Krupnye mlekopitayushchie iz mestonakhozhdenii “Lobvinskaya pishchera” i “Lobva 1” [Large mammals from the deposits in the caves “Lobva” and “Lobva 1” (in: Fauna Urala v Pleystozene i Golozene [Urals Fauna at Pleistocene and Holocene Times]) [in Russian, English summ.]. Sborn. Nauchn. Trudov, Biota Severnoy Evrazii v Kaynozoe, RAN-Ural’skoe otd., Inst. Ekologii Rastenii i Zhivotnikh, Izd. “Universitet”, Ekaterinburg; vyp. 2: 136-145, 3 figures, 3 tables.
- Sandom, C.J.; Ejrnæs, R.; Hansen, M.D.D.; Svenning, J.C., 2014. High herbivore density associated with vegetation diversity in interglacial ecosystems. *Proceedings of the National Academy of Sciences of the United States of America* 111 (11): 4162-4167.
- Wang, X.M.; Li, Ping, 2011. A new fossil site with a re-worked paleogene assemblage at Baogeda Ula, Central Neimongol. *Vertebrata Palasiatica, Beijing* 49 (1): 114-122.
- Willerslev, E.; Davison, J.; Moora, M.; Zobel, M.; Coissac, E.; Edwards, M.E.; Lorenzen, E. D., 2014. Fifty thousand years of arctic vegetation and megafaunal diet. *Nature* 506: 47-51 with extended data.





[Contact us:](#)

Rhino Resource Center
Dr Kees Rookmaaker

c/o IUCN Species Survival Programme
219c Huntingdon Road
Cambridge CB3 0DL
United Kingdom

Dr Kees Rookmaaker 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 over two hundred shorter publications, many in peer-reviewed journals. He works as a Senior Research Fellow on [Darwin Online](#) and [Wallace Online](#).