

# Curriculum Vitae

## Petra Kretzschmar

Scientist; Leibniz Institute for Zoo and Wildlife Research

Department of Evolutionary Ecology

Sabah Rhino Project coordinator

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### Job description

Research scientist in behaviour, evolutionary ecology and conservation with a focus on rhinos in South East Asia and Africa. Coordinator of the Sabah Rhino Project, director of the Rhino and Forest Fund and breeding advisor for African rhinos on private land in South Africa

### Research fields and interests

My main research interest is species and nature conservation especially in Southeast Asia and in southern Africa. Here, I study the influence of ecological and anthropogenic factors on the survival and reproductive success of African and Asian rhinoceroses. To do so, I apply a variety of methods ranging from classical field investigations, such as behavioural observations, habitat analysis and telemetry, to non-invasive hormone investigations, food analyses and genetic paternity analyses including statistics.

My work involves research, dialogues with politicians, NGO's and the industry as well as fundraising. My research interests include mate choice, territorial behaviour, habitat use, conservation of endangered species, habitat restoration, captive breeding and genetics.

### Professional appointments

Since 2010	Research scientist and project coordinator of the Sabah Rhino Project, Leibniz Institute for Zoo and Wildlife Research, Berlin, Dept. Evolutionary Ecology
2008 - 2010	Conference organiser, Leibniz Institute for Zoo and Wildlife Research, Berlin, Dept. Public Relations
2004 - 2005	Scientific director and program coordinator on Sumatran rhinos in Sabah, Malaysia for the organisation „SOS Rhino“
Since 1999	Breeding advisor for African rhinos in South Africa, Thaba Tholo game farm, South Africa

### Education

2003	Dr. rer. nat at the Mathematic-Science Faculty of the University of Greifswald: "Ecological, endocrinological and ethological investigations of female mate choice in free-ranging white rhinoceros ( <i>Ceratotherium simum simum</i> )" in cooperation with the Leibniz Institute for Zoo and Wildlife Research, Ludwig Maximilian University Munich, Arc-Livestock Business, Pretoria, South Africa, Queen's University, Kingston, Ontario, Canada
1995	Diploma in Biology at the Free University Berlin: "Home range, habitat selection and group size of female eastern grey kangaroos, <i>Macropus giganteus</i> Shaw" in cooperation with the Department of Zoology, Melbourne University, Australia

### Selected publications

KRETZSCHMAR, P., AULD, H., BOAG, P., GANSLOSSER, U., SCOTT, C., DE GROOT, J.P.V.C. AND COURTIOL, A. (2019). Mate choice, reproductive success and inbreeding in white rhinoceros: New insights for conservation management. *Evolutionary Applications*. <https://doi.org/10.1111/eva.12894>

KRETZSCHMAR P, KRAMER-SCHADT S, AMBU L, BENDER J, BOHM T, ERNSING M, GÖRITZ F, HERMES R, PAYNE J, SCHAFER N, THAYAPARAN ST, ZAINAL ZZ, HILDEBRANDT TB, HOFER H (2016). The catastrophic decline of the Sumatran rhino (*Dicerorhinus sumatrensis harrissoni*) in Sabah: Historic exploitation reduced female reproductive performance and population viability. *Global Ecology and Conservation* 6, 257-275.

KRETZSCHMAR P (2015): The conservation history of the Sumatran rhino (*Dicerorhinus sumatrensis*)-a story of success? In: SCHUMANN A, FICKEL J, HOFER H (eds). *Proceedings of the 10<sup>th</sup> international conference on behaviour, physiology and genetics of wildlife*. Leibniz Institute for Zoo and Wildlife Research (IZW):109.

FIUZA R, HERMES R, GÖRITZ F, ZAINUDDIN ZZ, GALLI C, LAZZARI G, GALAT V, LENK M, JEWGENOW K, RYDER O, KRETZSCHMAR P, WALZER C, PAYNE J, HILDEBRANDT TB (2015). The Sabah Rhino (*Dicerorhinus sumatrensis harrissoni*) breeding programme: current situation and first conclusions. In: *Proceedings of the international conference on diseases of zoo and wild animals 2015*:116.

FIUZA R, HERMES R, GÖRITZ F, ZAINUDDIN ZAINAL Z, KRETZSCHMAR P, PAYNE J, HILDEBRANDT TB (2015). The Sabah Rhino breeding programme: reproductive pathology and its implications in wild-caught Sumatran rhinoceros. In: SCHUMANN A, FICKEL J, HOFER H (eds). *Proceedings of the 10<sup>th</sup> international conference on behaviour, physiology and genetics of wildlife*. Leibniz Institute for Zoo and Wildlife Research (IZW): 70.

KRETZSCHMAR P, BENDER J, BOSI E, ERNSING M, HOFER H, PAYNE JB, SCHAFER N, SIVA T, KRAMER-SCHADT S (2014): Using 10 years' survey data to assess environmental variables associated with the distribution of Sumatra rhino in Sabah, Malaysia. In: *proceedings of the European conference of tropical ecology*.

Ancrenaz M, Sollmann R, Meijaard E, Hearn AJ, Ross J, Samejima H, Cheyne SM, Stark DJ, Gardner PC, Goossens B, Mohamed A, Bohm R, Matsuda I, Nakabayasi M, Khee S, Bernard LH, Brodie J, Wich S, Fredriksson G, Hanya G, Harrison ME, Kanamori T, KRETZSCHMAR P, Macdonald DW, Riger P, Spehar S, Ambu LN, Wilting A (2014): Coming down from the trees: Is terrestrial activity in Bornean orangutans natural or disturbance driven? *Scientific reports* 4.

WALZER C, GÖRITZ F, HERMES R, NATHAN S, KRETZSCHMAR P, HILDEBRANDT T (2010): Immobilization and intravenous anesthesia in a Sumatran rhinoceros (*Dicerorhinus sumatrensis*). *Journal of Zoo and Wildlife Medicine* 41(1):

GANSLOSSER U, KRETZSCHMAR P, VERSTEEGE L (2009): From EEP to high-end research and back: the example of the southern white rhino. In: SOMMER S, KRETZSCHMAR P, SEET S, HOFER H (eds) *Proceedings of the 7<sup>th</sup> international conference on behaviour, physiology and genetics of wildlife*. Leibniz Institute for Zoo and Wildlife Research (IZW): 78 - 79.

KRETZSCHMAR P, SIPANGKUI R, SCHAFER N (2009): Eye disorders in captive Sumatran rhinoceros (*Dicerorhinus sumatrensis harrissoni*) in Sabah, Malaysia. In: WIBBELT G, KRETZSCHMAR P, HOFER H, SEET S (eds) *Proceedings of the international conference on diseases of zoo and wild animals 2009*. Leibniz Institute for Zoo and Wildlife Research (IZW), Berlin, Germany & European Association of Zoo and Wildlife Veterinarians (EAZVV), Liebefeld-Berne, Switzerland: 236 - 242.

KRETZSCHMAR P, GANSLOSSER U, DEHNHARD M (2004): Relationship between androgens, environmental factors and reproductive behavior in male white rhinoceros (*Ceratotherium simum simum*). *Hormones & Behavior* 45/1: 1 - 9.

KIEFER B, GANSLOSSER U, KRETZSCHMAR P, KIENZLE E (2003): Food quality of free-ranging and captive male white rhinoceros (*Ceratotherium simum simum*) with special emphasize on food selection. In: FIDGETT A, CLAUSS M, GANSLOSSER U, HATT JM, NIJBOER J (eds), *Zoo Animal Nutrition Volume II*, Filander Verlag, Fürth 199 - 208.

KRETZSCHMAR P, GANSLOSSER U, GOLDSCHMID A, ABERHAM A (2002): Stimulation of territorial and mating behavior by fecal samples. A comparative study on behavior of captive and free-living white rhinoceros. In: Schwammer HM, FOOSE TJ, FOURAKER M, OLSON D (eds). *A research update on elephants and rhinos. Proceedings of the International elephant and rhino research symposium*, Vienna, June 7 - 11, 2001. Schüling Verlag, Münster: 299 - 302.

## Outreach

Public talks and stakeholder dialogues in Germany and Malaysia

Numerous press releases in newspapers, German radio interviews and television contributions (ZDF, Planet e),

Conceptual development of 3 short movies, 1 children movie and 7 viral marketing videos on the Sabah Rhino Project (e.g. Sustainable Management of Natural Resources, Cutting edge research for Conservation, Tam Tam my friend)

### **Professional roles and services to the scientific community**

Co-organizer of the International Conference on Behaviour, Physiology and Genetics of Wildlife (2009) 200 - 280 participants

Co-organizer of the international conference on diseases of zoo and wild animals (2009, 2010) 300 - 350 participants

Director of the Rhino & Forest Fund