

CURRICULUM VITAE – Jörg Melzheimer, PhD

Office address: Leibniz Institute for Zoo and Wildlife Research, Alfred-Kowalke-Str. 17,
10315 Berlin, Germany

Phone: +49 30 5168462

Email: melzheimer@izw-berlin.de

Field address: Cheetah Research Project, P.O. Box 6604, Windhoek, Namibia

Phone: +264 81 1287812,

Email: melzheimer@izw-berlin.de

Higher Education

2019 PhD, Freie University Berlin, Germany

2004 Diploma (equiv. to MSc) in Biology, University of Potsdam, Germany

1998-2004 Academic studies of Ecology, Evolution and Nature Conservation at the Universities of Potsdam (Germany), Santa Catarina (Brasil) and Witwatersrand (South Africa)

Employment

Since 2005: spatial ecologist and project coordinator of the Cheetah Research Project in Namibia of the Leibniz Institute for Zoo and Wildlife Research

Work experience

2017 - today team leader and fieldwork coordinator Cheetah Research Project

2012 - 2016 outreach officer Leibniz IZW- Namibia

2010 - today liaison manager Leibniz IZW- Namibia

2005 - today spatial and evolutionary ecologist IZW-Cheetah Research Project

Expertise

- Statistical skills including developing study designs
- Geospatial analyses in GIS
- Animal handling
- Very experienced in darting and chemical immobilizing of cheetahs and leopards (licensed paraprofessional Vet)
- Excellent communication skills
- Long experience in stakeholder dialogue and stakeholder involvement
- Imperturbable trouble shooter
- Good leadership skills

Selected invited lectures

Counting the rare and elusive Cheetahs, February 14th 2013, Large Carnivore Task Group, Ministry of Environment and Tourism, Namibia

Spatial behaviour of cheetahs and implications on herd management, April 2016, Etosha Conservancy, Namibia

Leopards on farmlands – implications on farm management, April 2016, Auas Oanob Conservancy, Namibia

Citizen science and stakeholder dialogue as important components for conservation – the example of the farmer-cheetah conflict in Namibia, July 2016, European Conference on Behavioural Biology, Vienna, Austria

The science before and after the collaring of wildlife, November 2016, Namibian Chamber of Environment

Spatial behaviour of kudu and implications on trophy hunting quota, March 2017, Seeis Conservancy, Namibia

Journal Publications

Peter Andreas Seeber, Gayle K. McEwen, Ulrike Löber, Daniel W. Förster, Marion East, Joerg Melzheimer, Alex D Greenwood: Terrestrial mammal surveillance using hybridization capture of environmental DNA from African waterholes. *Molecular Ecology Resources* 07/2019; DOI:10.1111/1755-0998.13069

M. P. G. Hofman, M. W. Hayward, M. Heim, P. Marchand, C. M. Rolandsen, J. Mattisson, F. Urbano, M. Heurich, A. Mysterud, J. Melzheimer, N. Morellet, U. Voigt, B. L. Allen, B. Gehr, C. Rouco, W. Ullmann, Ø. Holand, N. H. Jørgensen, G. Steinheim, F. Cagnacci, M. Kroeschel, P. Kaczensky, B. Buuveibaatar, J. C. Payne, I. Palmegiani, K. Jerina, P. Kjellander, Ö. Johansson, S. Lapoint, R. Bayraksmith, J. D. C. Linnell, M. Zaccaroni, M. L. S. Jorge, J. E. F. Oshima, A. Songhurst, C. Fischer, Mc Bride, R.T., Jr, J. J. Thompson, S. Streif, R. Sandfort, C. Bonenfant, M. Drouilly, M. Klapproth, D. Zinner, R. Yarnell, A. Stronza, L. Wilmott, E. Meisingset, M. Thaker, A. T. Vanak, S. Nicoloso, R. Graeber, S. Said, M. R. Boudreau, A. Devlin, R. Hoogesteijn, J. A. May-Junior, J. C. Nifong, J. Odden, H. B. Quigley, F. Tortato, D. M. Parker, A. Caso, J. Perrine, C. Tellaeche, F. Zieba, T. Zwijacz-Kozica, C. L. Appel, I. Axsom, W. T. Bean, B. Cristescu, S. Périquet, K. J. Teichman, S. Karpanty, A. Licoppe, V. Menges, K. Black, T. L. Scheppers, S. C. Schai-Braun, F. C. Azevedo, F. G. Lemos, A. Payne, L. H. Swanepoel, B. V. Weckworth, A. Berger, A. Bertassoni, G. Mcculloch, P. Šustr, V. Athreya, D. Bockmuhl, J. Casaer, A. Ekori, D. Melovski, C. Richard-Hansen, D. van de Vyver, R. Reyna-Hurtado, E. Robardet, N. Selva, A. Sergiel, M. S. Farhadinia, P. Sunde, R. Portas, H. Ambarli, R. Berzins, P. M. Kappeler, G. K. Mann, L. Pyritz, C. Bissett, T. Grant, R. Steinmetz, L. Swedell, R. J. Welch, D. Armenteras, O. R. Bidder, T. M. González, A. Rosenblatt, S. Kachel, N. Balkenhol: Right on track? Performance of satellite telemetry in terrestrial wildlife research. *PLoS ONE* 05/2019; 14(5)., DOI:10.1371/journal.pone.0216223

David Costantini, Gábor Árpád Czirják, Joerg Melzheimer, Vera Menges, Bettina Wachter: Sex and species differences of stress markers in sympatric cheetahs and leopards in Namibia. *Comparative biochemistry and physiology. Part A, Molecular & integrative physiology* 01/2019; 227:8-13., DOI:10.1016/j.cbpa.2018.09.002

Sarah Edwards, Ruben Portas, Lise Hanssen, Piet Beytell, Joerg Melzheimer, Ken Stratford: The spotted ghost: Density and distribution of serval *Leptailurus serval* in Namibia. *African Journal of Ecology* 08/2018; 56(10)., DOI:10.1111/aje.12540

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- Sarah Edwards, Manuela Fischer, Bettina Wachter, Joerg Melzheimer: Coping with intrasexual behavioral differences: Capture-recapture abundance estimation of male cheetah. *Ecology and Evolution* 07/2018; 8(18)., DOI:10.1002/ece3.4410
- David Costantini, Peter A. Seeber, Sanatana-Eirini Soilemetzidou, Walid Azab, Julia Bohner, Bayarbaatar Buuveibaatar, Gábor Á. Czirják, Marion L. East, Eva Maria Greunz, Petra Kaczensky, Benjamin Lamglait, Jörg Melzheimer, Kenneth Uiseb, Alix Ortega, Nikolaus Osterrieder, Ditte-Mari Sandgreen, Marie Simon, Chris Walzer, Alex D. Greenwood: Physiological costs of infection: Herpesvirus replication is linked to blood oxidative stress in equids. *Scientific Reports* 07/2018; 8(1):10347., DOI:10.1038/s41598-018-28688-0
- Joerg Melzheimer, Bettina Wachter, Heribert Hofer, Manuela Fischer, Sabrina Streif, Bernd Wasiolka, Sonja Kirsten Heinrich, Annika Weigold, Susanne Thalwitzer: Queuing, takeover and becoming a fat cat: Long-term data reveal two distinct male spatial tactics at different life-history stages in Namibian cheetahs. *Ecosphere* 06/2018; 2018(6)., DOI:10.1002/ecs2.2308C. C. Voigt, M. Krofel, V. Menges, B. Wachter, J. Melzheimer: Sex-specific dietary specialization in a terrestrial apex predator, the leopard, revealed by stable isotope analysis. *Journal of Zoology* 05/2018;., DOI:10.1111/jzo.12566
- Didone Frigerio, Pavel Pipek, Sophia Kimmig, Silvia Winter, Jörg Melzheimer, Lucie Diblíková, Bettina Wachter, Anett Richter: Citizen science and wildlife biology: Synergies and challenges. *Ethology* 04/2018; 124(6)., DOI:10.1111/eth.12746
- Sarah Edwards, Sue Cooper, Kenneth Uiseb, Matt Hayward, Bettina Wachter, Joerg Melzheimer: Making the most of by-catch data: Assessing the feasibility of utilising non-target camera trap data for occupancy modelling of a large felid. *African Journal of Ecology* 02/2018;., DOI:10.1111/aje.12511
- Florian J. Weise, Varsha Vijay, Andrew P. Jacobson, Rebecca F. Schoonover, Rosemary J. Groom, Jane Horgan, Derek Keeping, Rebecca Klein, Kelly Marnewick, Glyn Maude, Jörg Melzheimer, Gus Mills, Vincent van der Merwe, Esther van der Meer, Rudie J. van Vuuren, Bettina Wachter, Stuart L. Pimm: The distribution and numbers of cheetah (*Acinonyx jubatus*) in southern Africa. *PeerJ* 12/2017; 5(6):e4096., DOI:10.7717/peerj.4096
- David Costantini, Bettina Wachter, Joerg Melzheimer, Gábor Á Czirják: Socioecological and environmental predictors of physiological stress markers in a threatened feline species. *Conservation Physiology* 11/2017; 5(1):cox069., DOI:10.1093/conphys/cox069
- Sebastian Menke, Matthias Meier, John K E Mfunu, Joerg Melzheimer, Bettina Wachter, Simone Sommer: Effect of host traits and land-use changes on the gut microbiota of the Namibian black-backed jackal (*Canis mesomelas*). *FEMS Microbiology Ecology* 09/2017; 93(11)., DOI:10.1093/femsec/fix123
- Wasim Uddin, Sebastian Menke, Jörg Melzheimer, Susanne Thalwitzer, Sonja Heinrich, Bettina Wachter, Simone Sommer: Gut microbiomes of free-ranging and captive Namibian cheetahs: Diversity, putative functions and occurrence of potential pathogens. *Molecular Ecology* 08/2017; 26(20)., DOI:10.1111/mec.14278
- Sonja K. Heinrich, Heribert Hofer, Alexandre Courtiol, Jörg Melzheimer, Martin Dehnhard, Gábor Á. Czirják, Bettina Wachter: Cheetahs have a stronger constitutive innate immunity than leopards. *Scientific Reports* 03/2017; 7:44837., DOI:10.1038/srep44837
- Gail Christine Potgieter, Florian Johannes Weise, Bettina Wachter, Jörg Melzheimer, Ingrid Wiesel, Ken Stratford: Comment on Rust et al.: Human–Carnivore Conflict in Namibia Is Not Simply About Black and White. *Society and Natural Resources* 02/2017;., DOI:10.1080/08941920.2017.1283077
- SM Durant, N Mitchell, R Groom, N Pettorelli, A Ipavec, AJ Jacobson, R Woodroffe, M Bohm, LTB Hunter, M Becker, F Broekhuis, S Bashir, L Andresen, O Aschenborn, M Beddiaf, F Belbachir, A Belbachir-Bazi, A Berbash, I Machado, C Breitenmoser, M Chege, D Cilliers, H Davies-Mostert, AJ Dickman, E Fabiano, M Farhadinia, P Funston, P Henschel, J Horgan, H de longh, H Jowkar, R Klein, P Lindsey, L Marker, K Marnewick, J Melzheimer, J Merkle,

J Msoka, M Msuha, H O'Neill: The global decline of cheetah *Acinonyx jubatus* and what it means for conservation.

Sarah M Durant, Nicholas Mitchell, Rosemary Groom, Nathalie Pettorelli, Audrey Ipavec, Andrew P Jacobson, Rosie Woodroffe, Monika Böhm, Luke T B Hunter, Matthew S Becker, Femke Broekhuis, Sultana Bashir, Leah Andresen, Ortwin Aschenborn, Mohammed Beddiaf, Farid Belbachir, Amel Belbachir-Bazi, Ali Berbash, Iracelma Brandao de Matos Machado, Christine Breitenmoser, Monica Chege, Deon Cilliers, Harriet Davies-Mostert, Amy J Dickman, Fabiano Ezekiel, Mohammad S Farhadinia, Paul Funston, Philipp Henschel, Jane Horgan, Hans H de Iongh, Houman Jowkar, Rebecca Klein, Peter Andrew Lindsey, Laurie Marker, Kelly Marnewick, Joerg Melzheimer, Johnathan Merkle, Jassiel M'soka, Maurus Msuha, Helen O'Neill, Megan Parker, Gianetta Purchase, Samaila Sahailou, Yohanna Saidu, Abdoukarim Samna, Anne Schmidt-Küntzel, Eda Selebatso, Etotépé A Sogbohossou, Alaaeldin Soultan, Emma Stone, Esther van der Meer, Rudie van Vuuren, Mary Wykstra, Kim Young-Overton: The global decline of cheetah *Acinonyx jubatus* and what it means for conservation. *Proceedings of the National Academy of Sciences* 12/2016; 114(3)., DOI:10.1073/pnas.1611122114

Ken J. Stratford, Florian Weise, Jorg Meltzheimer, Natasha De Woronin-Britz: Observations of servals in the highlands of central Namibia.

Sonja K Heinrich, Bettina Wachter, Ortwin H K Aschenborn, Susanne Thalwitzer, Jörg Melzheimer, Heribert Hofer, Gábor Á Czirják: Feliform carnivores have a distinguished constitutive innate immune response. *Biology Open* 05/2016; 5(5):550-555., DOI:10.1242/bio.014902

Vera Menges and Joerg Melzheimer J 2014. Stakeholder-driven research: Studying the ecology of leopards on farmland in Namibia. *Roan News*

Annika Krengel, Valentino Cattori, Marina L Meli, Bettina Wachter, Jürg Böni, Leslie R Bisset, Susanne Thalwitzer, Jörg Melzheimer, Mark Jago, Regina Hofmann-Lehmann, Heribert Hofer, Hans Lutz: Gammaretrovirus-Specific Antibodies in Free-Ranging and Captive Namibian Cheetahs. *Clinical and vaccine Immunology: CVI* 03/2015; 22(6)., DOI:10.1128/CVI.00705-14

Sebastian Menke, Wasim Uddin, Matthias Meier, Jörg Melzheimer, John Kazgeba Elijah Mfuné, Sonja Heinrich, Susanne Thalwitzer, Bettina Wachter, Simone Sommer: Oligotyping reveals differences between gut microbiomes of free-ranging sympatric Namibian carnivores (*Acinonyx jubatus*, *Canis mesomelas*) on a bacterial species-like level. *Frontiers in Microbiology* 10/2014; 5(526):1-12., DOI:10.3389/fmicb.2014.00526

Christian C Voigt, Susanne Thalwitzer, Jörg Melzheimer, Anne-Sophie Blanc, Mark Jago, Bettina Wachter: The Conflict between Cheetahs and Humans on Namibian Farmland Elucidated by Stable Isotope Diet Analysis. *PLoS ONE* 08/2014; 9(8):e101917., DOI:10.1371/journal.pone.0101917

Christian C Voigt, Jörg Melzheimer, Susanne Thalwitzer, Bettina Wachter, Jörg Melzheimer: A breath test to assign carnivore diets to browsers or grazers. *Wildlife Biology* 10/2013; 19(3):311-316., DOI:10.2981/13-012

Sandra Johnson, Laurie Marker, Kerrie Mengersen, Chris H Gordon, Bettina Wachter, Johnson, L Marker, K Mengersen, Joerg Melzheimer, A Schmidt-Kü, E Nghikembua, J Fabiano, B Henghali: Modeling the viability of the free-ranging cheetah population in Namibia: An object-oriented Bayesian network approach. *Ecosphere* 07/2013; 4(7):1-19., DOI:10.1890/ES12-00357.1

Annika Krengel, Marina L Meli, Valentino Cattori, Bettina Wachter, Barbara Willi, Susanne Thalwitzer, Jörg Melzheimer, Heribert Hofer, Hans Lutz, Regina Hofmann-Lehmann: First evidence of hemoplasma infection in free-ranging Namibian cheetahs (*Acinonyx jubatus*). *Veterinary Microbiology* 03/2013; 162:972–976., DOI:10.1016/j.vetmic.2012.10.009

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Aines Castro-Prieto, Bettina Wachter, Joerg Melzheimer, Susanne Thalwitzer, Heribert Hofer, Simone Sommer: Immunogenetic Variation and Differential Pathogen Exposure in Free-Ranging Cheetahs across Namibian Farmlands. *PLoS ONE* 11/2012; 7(11):e49129., DOI:10.1371/journal.pone.0049129

Bettina Wachter, Anne-Sophie Blanc, Jörg Melzheimer, Oliver P Höner, Mark Jago, Heribert Hofer: An Advanced Method to Assess the Diet of Free-Ranging Large Carnivores Based on Scats. *PLoS ONE* 06/2012; 7(6):e38066., DOI:10.1371/journal.pone.0038066

Aines Castro-Prieto, Bettina Wachter, Joerg Melzheimer, Susanne Thalwitzer, Simone Sommer: Diversity and Evolutionary Patterns of Immune Genes in Free-Ranging Namibian Leopards (*Panthera pardus pardus*). *The Journal of heredity* 09/2011; 102(6):653-65., DOI:10.1093/jhered/esr097

Book Chapters

Bettina Wachter, Femke Broekhuis, Joerg Melzheimer, Jane Horgan, Elena V. Chelysheva, Laurie Marker, Gus Mills, Tim Caro: Behavior and Communication of Free-Ranging Cheetahs. *Cheetahs: Biology and Conservation*, 01/2018: pages 121-134; , ISBN: 9780128040881, DOI:10.1016/B978-0-12-804088-1.00009-5

Laurie Marker, Anne Schmidt-Küntzel, Ruben Portas, Amy Dickman, Kyle Good, Axel Hartmann, Bogdan Cristescu, Joerg Melzheimer: Capture, Care, Collaring, and Collection of Biomedical Samples in Free-Ranging Cheetahs. *Cheetahs: Biology and Conservation. Biodiversity of the World: Conservation from Genes to Landscapes*, Edited by Laurie Marker, Lorraine Boast, Anne Schmidt-Kuentzel, Philip Nyhus, 11/2017: chapter 33: pages 457-469; Elsevier. Academic Press., ISBN: 9780128040881, DOI:10.1016/B978-0-12-804088-1.00034-4

Laurie Marker, Bogdan Cristescu, Amy Dickman, Matti T. Nghikembua, Lorraine K. Boast, Tess Morrison, Joerg Melzheimer, Ezequiel Fabiano, Gus Mills, Bettina Wachter, David W. Macdonald: Ecology of Free-Ranging Cheetahs. *Cheetahs: Biology and Conservation. Biodiversity of the World: Conservation from Genes to Landscapes*, Edited by Laurie Marker, Lorraine Boast, Anne Schmidt-Kuentzel, Philip Nyhus, 11/2017: chapter 8: pages 107-119; Elsevier. Academic Press., ISBN: 9780128040881, DOI:10.1016/B978-0-12-804088-1.00008-3

Laurie Marker, Bogdan Cristescu, Tess Morrison, Michael V. Flyman, Jane Horgan, Etotépé A. Sogbohossou, Charlene Bissett, Vincent Van Der Merwe, Iracelma B. De Matos Machado, Ezequiel Fabiano, Esther Van Der Meer, Ortwin Aschenborn, Joerg Melzheimer, Kim Young-Overton, Mohammad S. Farhadinia, Mary Wykstra, Monica Chege, Samna Abdoukarim, Osman G. Amir, Ahmed Sh Mohanun, Osman D. Paulos, Abel R. Nhabanga, Jassiel L.J. M'soka, Farid Belbachir, Zelealem T. Ashenafi, Matti T. Nghikembua: Cheetah Rangewide Status and Distribution. *Cheetahs: Biology and Conservation. Biodiversity of the World: Conservation from Genes to Landscapes*, Edited by Laurie Marker, Lorraine Boast, Anne Schmidt-Kuentzel, Philip Nyhus, 11/2017: chapter 4: pages 33-54; Elsevier. Academic Press., ISBN: 9780128040881, DOI:10.1016/B978-0-12-804088-1.00004-6