PD Dr. Niels Blaum

Personal Details

Since 2011 permanent position at University of Potsdam Department of Plant Ecology and Nature Conservation, Prof. Dr. Florian Jeltsch
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Professional Preparation

2012	Habilitation and venia legendi in biodiversity research and animal ecology, Univ. of Potsdam Habilitation thesis: Dynamics of biodiversity in savannas – from genes to communities
2004	PhD in Ecology (Grade: summa cum laude), University of Frankfurt/ Main
1999	Diploma Degree in Biology (Grade: 1,0), University of Frankfurt/ Main
1995	Licence en Biologie, Université Sophia Antipolis Nice, France

Research Projects (selected)

Since 2019	Project lead and PI of ORYCS (BMBF): Options for sustainable land use adaptations in savanna systems: Chances and risks of emerging wildlife-based management strategies under regional and global change. (www.orycs.org)
Since 2015	Co-speaker and PI of DFG-Research Training Group BioMove: Integrating biodiversity research with movement ecology in dynamic agricultural landscapes. (www.biomove-org)
2014-2018	Co-lead and PI of OPTIMASS (BMBF): Options for sustainable geo-biosphere feedback management in savanna systems under regional and global change. A cooperative Namibian-German research project. (www.optimass.org)

Teaching (selected)

Since 2011	Lecture, seminar and practical course dryland ecology
Since 2010	Lecture ecology I, part population ecology
Since 2008	Seminar conservation biology

Reviewer Activities (selected)

Acta Oecologica, African Journal of Ecology, American Naturalist, Basic & Applied Ecology, Biological Conservation, Conservation Biology, Diversity and Distributions, Ecology, Ecological Entomology, Journal of Mammalogy, Landscape Ecology, Mammalian Biology, Oecologia, Oikos, TREE

DFG (German research foundation), European Commission, Netherlands Organisation for Scientific Research, National Research Foundation South Africa

Publications (selected, >50 publications in ISI-listed journals)

Maestre FT et al., **Blaum N**, et al., Gross N. (2022). Grazing and ecosystem service delivery in global drylands. Science 387: 915-920.

Mayer M, Fischer C, **Blaum N**, Sunde P, Ullmann W (2022). Influence of roads on space use by European hares in different landscapes. Landscape Ecology. doi: 10.1007/s10980-022-01552-3.

Hering R, Hauptfleisch M, Kramer-Schadt S, Stiegler J, **Blaum N** (2022). Effects of fences and fence-gaps on the movement behavior of three southern African antelope species. Frontiers in Conservation Science. doi: 10.3389/fcosc.2022.959423

Stiegler J, Lins A, Dammhahn M, Kramer-Schadt S, Ortmann S, **Blaum N** (2022). Personality drives activity and space use in a mammalian herbivore. Movement Ecology 10:33.

Hering R, Hauptfleisch M, Jago M, Smith T, Kramer-Schadt S, Stiegler J, **Blaum N** (2022). Don't stop me now: Managed fence gaps could allow migratory ungulates to track dynamic resources and reduce fence related energy loss. Frontiers in Ecology and Evolution. doi: 10.3389/fevo.2022.907079

Reinhard J, Geissler K, **Blaum N** (2022). Grass and ground dwelling beetle community responses to holistic and wildlife grazing management using a cross-fence comparison in Western Kalahari rangeland, Namibia. Journal of Insect Conservation 26: 711-720. doi: 10.1007/s10841-022-00410-6

Broekman MJE et al., **Blaum N**, et al., Tucker MA (2022). Evaluating expert-based habitat suitability information of terrestrial mammals with GPS-tracking data. Global Ecology and Biogeography 31: 1526-1541. doi: 10.1111/geb.13523

Irob K, **Blaum N**, Baldauf S, Kerger L, Kanduvarisa A, Strohbach B, Lohmann D, Tietjen B (2022). Browsing herbivores improve the state and functioning of savannas: a model assessment of alternative land use strategies. Ecology and Evolution. doi/10.1002/ece3.8715

Stiegler J, Kiemel K, Eccard J, Fischer C, Hering R, Ortmann S, Strigl L, Tiedemann R, Ullmann W, **Blaum N** (2021). Seed traits matter – endozoochoric dispersal through a pervasive mobile linker. Ecology and Evolution 11: 18477-18491. doi:10.1002/ece3.8440

Kuerschner T, Scherer C, Radchuk V, **Blaum N**, Kramer-Schadt S (2021). Movement can mediate temporal mismatches between resource availability and biological events in host-pathogen interactions. Ecology and Evolution 10: 5728-5741.

Marquart A, Goldbach L, **Blaum N** (2020). Soil-texture affects the influence of termite macropores on soil water infiltration in a semi-arid savanna. Ecohydrology. doi: 10.1002/eco.2249

Noonan MJ et al., **Blaum N**, et al., Calabrese JM (2020). Effects of body size on estimation of mammalian area requirements. Conservation Biology doi: 10.1111/cobi.13495

Schlägel UE, Grimm V, **Blaum N**, et al., Jeltsch F (2020). Movement-mediated community assembly and coexistence. Biological Reviews 96: 1073-1096.

Marquart A, Eldridge DJ, Geissler K, Lobas C, **Blaum N** (2020). Interconnected effects of shrubs, invertebrate-derived macropores and soil texture on water infiltration in a semi-arid savanna rangeland. Land Degradation and Development. doi: 10.1002/ldr.3598

Marquart A, Geissler K, Heblack J, Lobas C, Münch E, **Blaum N** (2020). Individual shrubs, large scale grass cover and seasonal rainfall explain invertebrate-derived macropore density in a semi-arid Namibian savanna. Journal of Arid Environments 176: 104101.