

PUBLIKATIONER 2022

Peer-reviewed Scientific papers

Bolton RL, A Mooney, MT Pettit, AE Bolton, L Morgan, GJ Drake, R Appeltant, SL Walker, JD Gillis, C Hvilson. Resurrecting biodiversity: advanced assisted reproductive technologies and biobanking. *Reproduction and Fertility*. 2022 Jun;3(3):121-146. doi: 10.1530/RAF-22-0005.

Gunner RM, RP Wilson, MD Holton, P Hopkins, NJ Marks, SH Bell, CM Duarte, NC Bennett, S Ferreira, D Govender, MC van Rooyen, CJ Tambling, A Bruns, L van Schalkwyk, P Viljoen, MF Bertelsen, DM Scantlebury. Decision rules for determining terrestrial movement and the consequences for filtering high-resolution GPS tracks – A case study using the African Lion (*Panthera leo*). *J R Soc Interface*. 2022 Jan;19(186):20210692. doi: 10.1098/rsif.2021.0692.

Hvilson C, G Segelbacher, R Ekblom, MC Fischer, L Laikre, K Leus, D O'Brien, R Shaw, V Sork. Selecting species and populations for monitoring of genetic diversity. 2022. Gland, Switzerland: IUCN. doi.org/10.2305/IUCN.CH.2022.07.en

Jensen EL, D Díez-Del-Molino, MTP Gilbert, LD Bertola, F Borges, V Cubric-Curik, M de Navascués, P Frandsen, M Heuertz, C Hvilson, B Jiménez-Mena, A Miettinen, M Moest, P Pečnerová, I Barnes, C Vernesi. Ancient and historical DNA in conservation policy. *Trends in Ecology and Evolution*. 2022 May;37(5):420-429. doi: 10.1016/j.tree.2021.12.010.

Kane D, B Tapley, A Guthrie, S Sparrow, SA Tahas, C Michaels. A novel approach to sexing *Lachesis sternophrys* (Serpentes: Viperidae): using radiography. *Herpetological Review*, 2022, 53(1):54-57.

Lynggaard C, MF Bertelsen, CV Jensen, MS Johnson, TG Frøslev, MT Olsen, K Bohmann. Airborne environmental DNA for terrestrial vertebrate community monitoring. *Current Biology* 2022 Feb 7;32(3):701-707.e5. doi: 10.1016/j.cub.2021.12.014.

Malungo IB, R Mokale, MF Bertelsen, PR Manger. Cholinergic, catecholaminergic, serotonergic and orexinergic neuronal populations in the brain of the lesser hedgehog tenrec (*Echinops telfairi*). *Anatomical Record (Hoboken)*. 2022 Sep 30. doi: 10.1002/ar.25092.

Manger PR, D Oddes, A Ngwenya, IB Malungo, A Burkevica, T Hård, MF Bertelsen, M Spocter, MD Scantlebury. Orexinergic neurons in the hypothalami of an Asiatic lion, an African lion, and a Southeast African cheetah. *Journal of Comparative Neurology*. 2022 Nov 10. doi: 10.1002/cne.25431. Online ahead of print.

Mosbacher JB, JP Desforages, A Michelsen, SV Hansson, M Stelvig, I Eulaers, C Sonne, R Dietz, BM Jenssen, TM Ciesielski, S Lierhagen, TP Flaten, G Le Roux, MR Aggerbeck, NM Schmidt. Hair mineral levels as indicator of wildlife demographics?—a pilot study of muskoxen. *Polar Research*, 2022, 41. doi: 10.33265/polar.v41.8543.

O'Brien D, L Laikre, S Hoban, MW Bruford, R Ekblom, MC Fischer, J Hall, C Hvilson, PM Hollingsworth, F Kershaw, CS Mittan, TA Mukassabi, R Ogden, G Segelbacher, RE Shaw, C Vernesi, AJ MacDonald. Bringing together approaches to reporting on within species genetic diversity 2022 May;59:2227–2233. DOI: 10.1111/1365-2664.14225

Palmada-Flores M, JD Orkin, B Haase, J Mountcastle, MF Bertelsen, O Fedrigo, L Kuderna, ED Jarvis, T Marques-Bonet. Data Note: A high-quality, long-read genome assembly of the endangered ring-tailed lemur (*Lemur catta*). *GigaScience* 2022 Apr 1;11:giac026. doi: 10.1093/gigascience/giac026.

Petersen HH, R Stenbak, C Blaabjerg, AKH Krogh, MF Bertelsen, P Buss, PMH Heegaard. Development of a quantitative immunoassay for serum haptoglobin as a putative disease marker in the southern white rhinoceros (*Ceretotherium simum simum*). *J Zoo Wildl Med*. 2022 Mar;53(1):141-152. doi: 10.1638/2020-0010.

Roumazeilles L, FJ Lange, RA Benn, JLR Andersson, MF Bertelsen, PR Manger, E Flach, AA Khrapitchev, KL Bryant, J Sallet, RB Mars. Cortical Morphology and White Matter Tractography of Three Phylogenetically Distant Primates: Evidence for a Simian Elaboration. *Cereb Cortex*. 2022 Apr 5;32(8):1608-1624. doi: 10.1093/cercor/bhab285.

Schuppe ER, C Lindsey, M Chakraborty, MT Biegler, ER Jarvis, C Chen, E Hara, MF Bertelsen, CC Witt, ED Jarvis, M Fuxjager. Neural substrates for territorial drum displays in woodpeckers mirror vocal learning nuclei in songbirds. *PLOS Biology* 2022 Sep 20;20(9):e3001751. doi: 10.1371/journal.pbio.3001751.

Tendler BC, T Hanayik, O Ansorge, S Bangerter-Christensen, GS Berns, MF Bertelsen, KL Bryant, S Foxley, P Martijn van den Heuvel, AFD Howard, IN Huszar, AA Khrapitchev, A Leonte, PR Manger, RAL Menke, J Mollink, D Mortimer, M Pallebage-Gamarallage, L Roumazeilles, J Sallet, LH Scholtens, C, Scott, A Smart, MR Turner, C Wang, S Jbabdi, RB Mars, KL Miller. The Digital Brain Bank, an open access platform for post-mortem datasets. *Elife*. 2022 Mar 17;11:e73153. doi: 10.7554/eLife.73153.

Van de Weyer Y, LR Rowden, A Guthrie, SA Tahas. Rectal Prolapse in the Sulawesi Crested Macaque (*Macaca nigra*): morbidity, mortality and risk factors. *Journal of Zoo and Wildlife Medicine*, 2022, 53(4):722-732 doi: 10.1638/2021-0143

Williams VM, A Bhagwandin, J Swiegers, MF Bertelsen, T Hård, CC Sherwood, PR Manger. Nuclear organization of serotonergic neurons in the brainstems of a lar gibbon and a chimpanzee. *The Anatomical Record (Hoboken)*. 2022 Jun;305(6):1500-1515. doi: 10.1002/ar.24795.

Williams VM, A Bhagwandin, J Swiegers, MF Bertelsen, T Hård, CC Sherwood, PR Manger. Nuclear organization of catecholaminergic neurons in the brains of a lar gibbon and a chimpanzee. *The Anatomical Record (Hoboken)*. 2022 Jun;305(6):1476-1499. doi: 10.1002/ar.24788.

Williams VM, A Bhagwandin, J Swiegers, MF Bertelsen, T Hård, CC Sherwood, PR Manger. Distribution of cholinergic neurons in the brains of a lar gibbon and a chimpanzee. *The Anatomical Record (Hoboken)*. 2022 Jun;305(6):1516-1535. doi: 10.1002/ar.24844.

Williams VM, A Bhagwandin, J Swiegers, MF Bertelsen, T Hård, TC Thannickal, JM Siegel, CC Sherwood, PR Manger. Nuclear organization of orexinergic neurons in the hypothalamus of a lar gibbon and a chimpanzee. *The Anatomical Record (Hoboken)*. 2022 Jun;305(6):1459-1475. doi: 10.1002/ar.24775.

Worsøe Havmøller L, R Worsøe Havmøller, VA Nawangsari, A Pratiwi, PR Møller, C Træholt. Status and conservation of dholes in Indonesia. *Canid Biology & Conservation* 2022, 24(2):4-12.

Yıldız B, HJ Megens, C Hvilsum, M Bosse. Genomic consequences of a century of inbreeding and isolation in the Danish wild boar population. *Evolutionary Applications*. 2022 May;15(6):954-966. doi: 10.1111/eva.13385.

ANDRE VIDENSKABELIGE PUBLIKATIONER

Andersen EE, JD Henriksen, NL Corfixen, A-K Garn, K Leus, C Lees (eds.) Moving from Assessment to Conservation Planning for Hoverflies in Denmark. IUCN SSC Conservation Planning Specialist Group, Apple Valley, MN USA, 2022.

Hanel J, G Dick, K Pynnonen-Oudman, W van Lint W, K Leus, M Corlay M. (eds.) Regional Collection Plan for the EAZA Raptor Taxon Advisory Group – Birds of Prey, First edition. EAZA Executive Office, Amsterdam, 2022.

Hofman S, K Simonsen, M Zimmermann, R van der Meer, N Hausen, K Leus. (eds.) Regional Collection Plan for the EAZA Antelope and Giraffid Taxon Advisory Group. First edition, EAZA Executive Office, Amsterdam, 2022.

Hvilsom C, G Segelbacher, R Ekblom, MC Fischer, L Laikre, K Leus, D O'Brien, R Shaw, V Sork. Selecting species and populations for monitoring of genetic diversity. 2022. Gland, Switzerland: IUCN. doi.org/10.2305/IUCN.CH.2022.07.en

IUCN SSC HSG/CPSG European Hoverflies: Moving from Assessment to Conservation Planning. Conservation Planning Specialist Group, Apple Valley, MN, USA, 2022.

Lammers J, M Huyghe, K Pynnonen-Oudman, W van Lint W, K Leus, M Corlay. (eds.) Regional Collection Plan for the EAZA Raptor Taxon Advisory Group –Vultures, First edition. EAZA Executive Office, Amsterdam, 2022.

Lawrenz A, K Gries, A-K Oerke, K Leus, R van der Meer, M Voorham, D de Man. Long-term management plan for the African elephant (*Loxodonta africanus*) EAZA *Ex situ* Programme (EEP). Zoo Wuppertal, Germany, 2022.

Leus K, J Weerman. Chapter 16 - The role of *ex situ* management in the conservation of red panda. Glatston A. (Ed.) Red Panda (Second Edition). Academic Press, 289-309, 2022. <https://doi.org/10.1016/B978-0-12-823753-3.00017-X>.

Lim EAL, CL Puan, MWH Hiew, MM Sanusi, D Magintan, D Yawah. Conservation of Malayan Tapir (*Tapirus indicus*): A Joint Effort Among Southeast Asian Countries. Serdang: Faculty of Forestry and

Environment, Universiti Putra Malaysia, 2022, 64pp. eBook - ISBN 978-967-5526-23-7.

Nielsen F, A Winkler, M Papiés, K Hermann, K Lavooij-van Leeuwen (eds.). EAZA Monotreme & Marsupial Taxon Advisory Group Regional Collection Plan – First edition. EAZA Executive Office: Amsterdam, the Netherlands. 2022.

Normander B, J Woollhead, A Petersen, A-K Garn. Vurdering af otte områder under Den Danske Naturfond efter IUCNs standard for beskyttet natur. NaturTanken, Parks'nTrails, GEON, Zoologisk Have København og IUCN SSC Conservation Planning Specialist Group Europe. <https://naturfonden.dk/wp-content/uploads/2022/08/Vurdering-af-otte-omraader-under-Den-Danske-Naturfond-efter-IUCNs-standard-for-beskyttet-natur.pdf>

Normander B, J Woollhead, A Petersen, F Feyeh, A-K Garn. Vurdering af fem nationalparker efter IUCNs standard for beskyttet natur. NaturTanken, Parks'nTrails, GEON, SustainParks, Zoologisk Have København og IUCN SSC Conservation Planning Specialist Group Europe. <https://nst.dk/media/324719/rapport-vurdering-af-fem-nationalparker-efter-iucns-standard-for-beskyttet-natur.pdf>

Rode-Margono J, M Zimmermann, K Leus, L Przybylska, M Siebert, W Walker, R Snipp, B Holst, B Beck, J Pluhaček, J Beckmann. Joining forces in pig and peccary conservation: European zoos follow the IUCN 'One Plan Approach'. Conference Poster Abstract 40, 13th International Symposium on Wild Boar and Other Suids, 6-9 September 2022. Seva, Barcelona, Spain, 2022.

Rodriguez-Clark KM, A Echeverry-Alcendra, L Penfold, K Leus, B Coyle, E Sullivan. The Group Management Initiative: Strategic Framework and 2023-2024 Plan. IUCN SSC Conservation Planning Specialist Group (CPSG), Apple Valley, MN, USA, 2022.

Schmidt H, J Kappelhof, K Leus, R van der Meer, M Voorham, D de Man. Long-term management plan for the Asian elephant (*Elephas maximus*) EAZA *Ex situ* Programme (EEP). Rotterdam Zoo, The Netherlands, 2022.

Skovlund CR. Towards an evidence-based welfare assessment protocol for polar bears (*Ursus maritimus*) in zoos. PhD Thesis, Department of Health and Veterinary Sciences, University of Copenhagen, 2022.

Smith E, NJ Masters, H MacIntosh, SA Tahas. Pedal lameness in captive Artiodactyla: A retrospective study. Proceedings of the British Veterinary Zoological Society Conference 2022, p54.

Tahas SA, C Grøndahl. Before recumbency: walking sedation for loading exported Plains zebra (*Equus quagga*). Proceedings of the British Veterinary Zoological Society Conference 2022, p90.

Tahas SA, EL Taylor, E Flach, A Ferguson, C Benfield, T Strike, M Stidworthy, D Denk. Decennial retrospective mortality analysis of Humboldt penguin chicks (*Spheniscus humboldti*) at ZSL London Zoo. Proceedings of the Zoo and Wildlife Health Conference 2022, p66.

Taylor EL, E Flach E, T Strike, A Ferguson, SA Tahas. Retrospective Analysis of Humboldt Penguin (*Spheniscus humboldti*) egg production and survivability at ZSL London Zoo – 6 years of egg pathology. Proceedings of the Zoo and Wildlife Health Conference 2022, p65.

Traeholt C. The Malayan Tapir: Recent history – managing its future. In: Lim EAL, CL Puan, MWH Hiew, MM Sanusi, D Magintan, D Yawah. Conservation status of Malayan Tapir. Faculty of Forestry and Environment, Universiti Putra Malaysia, 2022, 64pp. eBook - ISBN 978-967-5526-23-7). p 10-11.

Van de Weyer Y, LR Rowden, A Guthrie, SA Tahas. Rectal Prolapse in the Sulawesi Crested Macaque (*Macaca nigra*): morbidity, mortality and risk factors, Proceedings of the Zoo and Wildlife Health Conference 2022, p30.

Zimmermann M, K Leus K, J Pluháček, J Rode Margono, J Beckmann, B Holst. One Plan Approach to save species — a new integrative Regional Collection Plan for hippos, pigs, peccaries, and tapirs. Suiform Soundings 2022 March;20(2):9-14.