

PUBLICATION LIST – 2020

BOOKS, BOOK CHAPTERS AND PROCEEDINGS

1. Byrne, M.J., du Plessis, D., Ivey, P.J., Measey, J., Robertson, M.P., Robinson, T.B. & Weaver, K.N. 2020. Education, training and capacity building in the field of biological invasions in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp. 731-755. https://doi.org/10.1007/978-3-030-32394-3_25.
2. Davies S.J., Jordaan M.S., Karsten M., Terblanche, J.S., Turner, A.A., van Wilgen, N.J., Veldman, R., Zengeya, T.A. & Measey J. 2020. Experience and lessons from invasive and alien animal control projects carried out in South Africa. In: van Wilgen, B.W., Measey J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 629-663. https://doi.org/10.1007/978-3-030-32394-3_22.
3. Davis, A.L.V., Deschodt, C.M. & Scholtz, C.H. 2020. Conservation assessment of Scarabaeine dung beetles in South Africa, Botswana and Namibia: IUCN Red List categories, atlas and ecological notes. Suricata 6. South African National Biodiversity Institute, Pretoria, pp i–799.
4. Duangphakdee, O., Rod-im, P. & Pirk, C.W.W. 2020. The dance language of *Apis florea*. In: *The Future role of dwarf honeybees in natural and agricultural systems*. DP Abrol (eds) Taylor & Francis. <https://doi.org/10.1201/9781003033936-18>.
5. Faulkner, K.T., Burness, A., Byrne, M., Kumschick, S., Peters, K., Robertson, M.P., Saccaggi, D.L., Weyl, O.L.F. & Williams, V.L. 2020. South Africa's pathways of introduction and dispersal and how they have changed over time. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 311-352. https://doi.org/10.1007/978-3-030-32394-3_12.
6. Hammerbacher, A., Wright, L.P. & Gershenzon, J. 2020. Spruce phenolics: Biosynthesis and ecological functions. In: Porth, I. & De la Torre, A. (eds) *The Spruce Genome. Compendium of Plant Genomes*. Springer, Cham. Pp, 193-214. https://doi.org/10.1007/978-3-030-21001-4_12.
7. Measey, G.J., Robinson, T.B., Kruger, N., Zengeya, T.A., Hurley, B.P. 2020. South Africa as a donor of alien animals to other parts of the world. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 787-830. https://doi.org/10.1007/978-3-030-32394-3_27.
8. Measey, J., Cang, H., Somers, M.J. 2020. Terrestrial vertebrate invasions in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R. Zengeya, T.A. (eds) *Biological Invasions in South Africa*. Springer, Berlin, pp 115-151. https://doi.org/10.1007/978-3-030-32394-3_5.
9. Monadjem, A., Taylor, P.J. Cotterill, F.P.D. & Schoeman, M.C. 2020. Bats of southern and central Africa: A Biogeographic and Taxonomic Synthesis. 2nd Edition. University of the Witwatersrand, Johannesburg. pp714. <https://dx.doi.org/10.18772/22020085829>.
10. Nicolson, S. 2020. Nectar. In: Starr, C. (eds) *Encyclopedia of Social Insects*. Springer, Cham, pp 1-4. https://doi.org/10.1007/978-3-319-90306-4_82-1.
11. Pirk, C.W.W. 2020. African Honey Bees. In: Starr C. (eds) *Encyclopedia of Social Insects*. Springer, Cham. https://doi.org/10.1007/978-3-319-90306-4_2-1.
12. Schmitt, M.H. & Shrader, A.M. 2020. Browser population-woody vegetation relationships in savannas: from bites to landscapes. In: Scogings, P.F., Skarpe, C. and Sankaran, M. (eds) *Browsing animals and woody vegetation in savannas: A resource-based approach*. Wiley-Blackwell Press, pp 245-278.
13. Van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. (eds). 2020. Biological invasions in South Africa. Springer, Berlin. pp 1 -975. <https://doi.org/10.1007/978-3-030-32394-3>.

14. van Wilgen, B.W., Measey, G.J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. 2020. Overview of biological invasions in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R., Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 3-31. https://doi.org/10.1007/978-3-030-32394-3_1.
15. Weyl, O.L.F., Ellender, B., Wassermann, R.J., Truter, M., Dalu, T., Zengeya, T.A. & Smit, N.J. 2020. Alien freshwater fauna in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R., Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 153-183. https://doi.org/10.1007/978-3-030-32394-3_6.
16. Wilson, J.R., Measey, G.J., Richardson, D.M., van Wilgen, B.W. & Zengeya, T.A. 2020. Potential futures of biological invasions in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R., Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 917-946. https://doi.org/10.1007/978-3-030-32394-3_31.
17. Wilson, J.R., Foxcroft, L.C., Geerts, S., Hoffman, M.T., MacFadyen, S. Measey, G.J. Mills, A., Richardson, D.M., Robertson, M.P. and van Wilgen, B.W. 2020. The role of abiotic factors in promoting and limiting biological invasions in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R., Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 355-385. https://doi.org/10.1007/978-3-030-32394-3_13
18. Zengeya, T.A., Kumschick, S., Weyl, O.L.F. & van Wilgen, B.W. 2020. The impact of alien species on biodiversity in South Africa. In: van Wilgen, B.W., Measey, J., Richardson, D.M., Wilson, J.R. & Zengeya, T.A. (eds) *Biological invasions in South Africa*. Springer, Berlin, pp 489-512. https://doi.org/10.1007/978-3-030-32394-3_17.

ARTICLES

1. Ackermann, S., Bennett, N.C. & Oosthuizen, M.K. 2020. The effect of varying laboratory conditions on the locomotor activity of the nocturnal Namaqua rock mouse (*Micaelamys namaquensis*) and the diurnal four-striped grass mouse (*Rhabdomys dilectus*). *Zoology*, **141**, 125804, 1-7. doi:10.1016/j.zool.2020.125804.
2. Agbessenou, A., Akutse, K.S., Yusuf, A.A., Ekese, S., Subramanian, S. & Khamis, F.M. 2020. Endophytic fungi protect tomato and nightshade plants against *Tuta absoluta* (Lepidoptera: Gelechiidae) through a hidden friendship and cryptic battle. *Scientific Reports*, **10**, 22195, 1-13. doi:10.1038/s41598-020-78898-8.
3. Akolade, J.O., Nasir-Naeem, K.O., Swanepoel, A., Yusuf, A.A., Balogun, M. & Labuschagne, P. 2020. CO₂-assisted production of polyethylene glycol/lauric acid microparticles for extended release of *Citrus aurantifolia* essential oil. *Journal of CO₂ Utilization*, **38**, 375-384. doi:10.1016/j.jcou.2020.02.014.
4. Alagaili, A.N., Bennett, N.C., Amor, N.M. & Hart, D.W. 2020. The locomotory activity patterns of the arid-dwelling desert hedgehog, *Paraechinus aethiopicus*, from Saudi Arabia. *Journal of Arid Environments*, **177**, 104141, 1-9. doi:10.1016/j.jaridenv.2020.104141.
5. Azeem, S., Bengis, R., van Aarde, R.J. & Bastos, A.D.S. 2020. Mass die-off of African elephants in Botswana: Pathogen, poison or perfect storm? *African Journal of Wildlife Research*, **50**, 149-156. doi:10.3957/056.050.014 .
6. Azrag, A.G.A., Yusuf, A.A., Pirk, C.W.W., Niassy, S., Guandaru, E. K., David, G. & Babin, R. 2020. Modelling the effect of temperature on the biology and demographic parameters of the African coffee white stem borer, *Monochamus leuconotus* (Pascoe) (Coleoptera: Cerambycidae). *Journal of Thermal Biology*, **89**, 102534, 1-11. doi:10.1016/j.jtherbio.2020.102534.
7. Azrag, A.G.A., Yusuf, A.A., Pirk, C.W.W., Niassy, S., Mbugua, K.K. & Babin, R. 2020. Temperature-dependent development and survival of immature stages of the coffee berry borer *Hypothenemus*

- hampei* (coleoptera: Curculionidae). *Bulletin of Entomological Research*, **110(2)**, 207-218. doi:10.1017/S0007485319000476.
8. Baleba, S.B.S., Torto, B., Masiga, D., Getahun, M.N., & Weldon, C.W. 2020. Stable flies, *Stomoxys calcitrans* L. (Diptera: Muscidae), improve offspring fitness by avoiding oviposition substrates with competitors or parasites. *Frontiers in Ecology and Evolution*, **8**, 5, 1-12. doi:10.3389/fevo.2020.00005.
 9. Bhagwandin, A., Ndlovu, N., Bronner, G.N, Bennett, N.C. & Manger, P.R. 2020. The hypercholinergic brain of the Cape mole (*Chrysochloris asiatica*). *Journal of Chemical Neuroanatomy*, **110**, 101856, 1-12. doi:10.1016/j.jchemneu.2020.101856.
 10. Baenyi, S.P., Birindwa, A.B., Mutwedu, V.B., Mugumaarhahama, Y., Munga, A., Mitima, B., Kamgang, V.W. & Ayagirwe, R.B.B. 2020. Effects of coat color pattern and sex on physiological traits and heat tolerance of indigenous goats exposed to solar radiation. *Journal of Animal Behaviour and Biometeorology*, **8**, 142-151. doi.org/10.31893/jabb.20017.
 11. Barends, J.M., Pietersen, D.W., Zambatis, G., Tye, D. R. C. & Maritz, B. 2020. Sampling bias in reptile occurrence data for the Kruger National Park. *Koedoe*, **62(1)**, a1579, 1-9. doi:10.4102/koedoe.v62i1.1579.
 12. Bashant, J., Somers, M.J., Swanepoel, L. & Dalerum, F. 2020. Facilitation or competition? Effects of lions on brown hyenas and leopards. *Diversity*, **12(9)**, 325, 1-17. doi:10.3390/d12090325.
 13. Bester, M.N., Dilley, B.J., Davies, D. & Glass, T. 2020. Sub-antarctic fur seals depredate northern rockhopper penguins at Nightingale Island, Tristan da Cunha. *Polar Biology*, **43(7)**, 925-927. doi:10.1007/s00300-020-02688-1.
 14. Bester, M.N., Wege, M., Oosthuizen, W.C. & Bornemann, H. 2020. Ross seal distribution in the Weddell sea: Fact and fallacy. *Polar Biology*, **43(1)**, 35-41. doi:10.1007/s00300-019-02610-4.
 15. Bestley, S., Ropert-Coudert, Y., Bengston Nash, S., Brooks, C.M., Cotté, C., Dewar, M., Friedlander, A., Jackson, J.A., Labrousse, S., Lowther, A.D., McMahon, C.R., Phillips, R.A., Pistorius, P.A., Puskic, P.S., Olivia de A. Reis, A., Reisinger, R.R., Santos, M., Tarszisz, E., Tixier, P., Trathan P.N., Wege, M., & Wienecke, B. 2020. Marine ecosystem assessment for the Southern Ocean: Birds and marine mammals. *Frontiers in Ecology and the Environment*, **8**, 566936, 1-39. doi: 10.3389/fevo.2020.566936.
 16. Blecher, A.S., Bennett, N.C., Medger, K., Hagenah, N., Ganswindt, A., & Oosthuizen, M.K. 2020. Effect of colony disruption and social isolation on naked mole-rat endocrine correlates. *General and Comparative Endocrinology*, **295**, 113520, 1-6. doi:10.1016/j.ygcen.2020.113520.
 17. Bouwer, M.C., MacQuarrie, C.J.K., Aguirre-Gil, O.J., Slippers, B. & Allison, J.D. 2020. Impact of intercept trap type on plume structure: A potential mechanism for differential performance of intercept trap designs for *Monochamus* species. *Journal of Pest Science*, **93(3)**, 993-1005. doi:10.1007/s10340-020-01204-y.
 18. Boyles, J.G., Swart, J.M., Bennett, N.C., Ferguson, W., Speakman, J.R. & Scantlebury, D.M. 2020. Energetics suggest cause for even further conservation concern for Temminck's ground pangolin. *Animal Conservation*, **23(3)**, 245-249. doi:10.1111/acv.12536.
 19. Broadbent, A.A.D., Firn, J., McGree, J.M., Borer, E.T., Buckley, Y.M., Harpole, W.S., Komatsu, K.J., MacDougall, A.S., Orwin, K.H., Ostle, N.J., Seabloom, E.W., Bakker, J.D., Biederman, L., Caldeira, M.C., Eisenbauer, N., Hagenah, N., Hautier, Y., Moore, J.L., Nogueira, C., Peri, P.L., Risch, A.C., Roscher, C., Schuetz, M. & Stevens, C.J. 2020. Dominant native and non-native graminoids differ in key leaf traits irrespective of nutrient availability. *Global Ecology and Biogeography*, **29(7)**, 1126-1138. doi:10.1111/geb.13092.
 20. Brooke, C.F., Fortin, D., Kraaij, T., Fritz, H., Kalule-Sabit, M.J. & Venter, J.A. 2020. Poaching impedes the selection of optimal post-fire forage in three large grazing herbivores. *Biological Conservation*, **241**, 108393, 1-8. doi:10.1016/j.biocon.2019.108393.

21. Burns, D.D.R., Franks, D.W., Parr, C., Hawke, C., Ellis, S., & Robinson, E.J.H. 2020. A longitudinal study of nest occupancy, trail networks and foraging in a polydomous wood ant population. *Insectes Sociaux*, **67(3)**, 419-427. doi:10.1007/s00040-020-00777-2.
22. Bush, S.J., Slippers, B., Dittrich-Schröder, G. & Hurley, B.P. 2020. Host specificity tests reveals new host of a global biological control agent *Psyllaephagus bliteus* (Hymenoptera: Encyrtidae). *African Entomology*, **28(2)**, 238-248. doi:10.4001/003.028.0238.
23. Bush, S.J., Slippers B. & Hurley B.P. 2020. Eucalypt susceptibility towards the invasive *Glycaspis brimblecombei* Moore (Hemiptera: Aphalaridae) in South Africa. *Southern Forests*, **82(3)**, 243-252.
24. Callealta, I., Ganswindt, A. & Lueders, I. 2020. Reproductive cycle stage assessment using vaginal cytology evaluation in African lions (*Panthera leo*). *Animal Reproduction Science*, **213**, 106260, 1-10. doi:10.1016/j.anireprosci.2019.106260.
25. Callealta, I., Lueders, I., Luther-Binoir, I. & Ganswindt, A. 2020. Positive reinforcement conditioning as a tool for frequent minimally invasive blood and vaginal swab sampling in African lions (*Panthera leo*). *Journal of applied Animal Welfare Science*, **23(4)**, 508-519. doi:10.1080/10888705.2019.1709066.
26. Callen, A., Hayward, M.W., Klop-Toker, K., Allen, B.L., Ballard, G., Broekhuis, F., Clarke, R., Clulow, J., Daltry, J. C., Davies-Mostert, H.T. . . . Wüster, W. 2020. Envisioning the future with ‘compassionate conservation’: An ominous projection for native wildlife and biodiversity. *Biological Conservation*, **241**, 108365, 1-12. doi:10.1016/j.biocon.2019.108365.
27. Carlin, E., Teren, G. & Ganswindt, A. 2020. Non-invasive assessment of body condition and stress-related fecal glucocorticoid metabolite concentrations in African elephants (*Loxodonta africana*) roaming in fynbos vegetation. *Animals*, **10(5)**, 814, 1-10. doi:10.3390/ani10050814.
28. Carroll, E. L., Ott, P.H., McMillan, L.F., Galletti Vernazzani, B., Neveceralova, P., Vermeulen, E., Gaggioti, O.E., Andriolo, A., Baker, S.C., Bamford, C., Best, P., Cabrera, E., Calderan, S., Chirife, A., Fewster, R.M., Flores, P.A.C., Frasier, T., Freitas, T.R.O., Groch, K., Hulva, P., Kennedy, A., Leaper, R., Leslie, M.S., Moore, M., Oliveira, L., Seger, J., Stepien, E.N., Valenzuela, L.O., Zerbini, A. & Jackson, J. A. 2020. Genetic diversity and connectivity of southern right whales (*Eubalaena australis*) found in the Brazil and Chile-Peru wintering grounds and the South Georgia (Islas Georgias del Sur) feeding ground. *The Journal of Heredity*, **111(3)**, 263-276. doi:10.1093/jhered/esaa010.
29. Chen, J., Ullah, C., Reichelt, M., Beran, F., Yang, Z., Gershenson, J., Hammerbacher, A. & Vassão, D.G. 2020. The phytopathogenic fungus *Sclerotinia sclerotiorum* detoxifies plant glucosinolate hydrolysis products via an isothiocyanate hydrolase. *Nature Communications*, **11(1)**, 3090, 1-12. doi:10.1038/s41467-020-16921-2.
30. Chipangura, J.K., Ganswindt, A. & Naidoo, V. 2020. A report on the housing vervet monkeys adjacent to domestic cats as a means of environmental enrichment. *Onderstepoort Journal of Veterinary Research*, **87(1)**, a1870, 1-6. doi:10.4102/ojvr.v87i1.1870.
31. Cinková, I., & Shrader, A.M. 2020. Rival assessment by territorial southern white rhinoceros males via eavesdropping on the contact and courtship calls. *Animal Behaviour*, **166**, 19-31. doi:10.1016/j.anbehav.2020.05.013.
32. Clément, L., Dietrich, M., Markotter, W., Fasel, N.J., Monadjem, A., López-Baucells, A., Scaravelli, D., Theou, P., Pigeault, R., Ruedi, M. & Christe, P. 2020. Out of Africa: The origins of the protozoan blood parasites of the *Trypanosoma cruzi* clade found in bats from Africa. *Molecular Phylogenetics and Evolution*, **145**, 106705, 1-11. doi:10.1016/j.ympev.2019.106705.
33. Conlon, B.H., Kastally, C., Kardell, M., Kefuss, J., Moritz, R.F.A. & Routtu, J. 2020. Selection for outbreeding in *Varroa* parasitising resistant honey bee (*Apis mellifera*) colonies. *Ecology and Evolution*, **10(14)**, 7806-7811. doi:10.1002/ece3.6506.

34. Connelly, E., Hywood, L., Donaldson, M. & Pietersen, D.W. 2020. Haematology and biochemistry values for Temminck's pangolins (*Smutsia temminckii*) from Zimbabwe. *African Zoology*, **55(2)**, 161–165. doi:10.1080/15627020.2020.1739555.
35. Conradie, S.R., Woodborne, S.M., Wolf., B.O., Pessato, A., Mariette, M.M. & McKechnie, A.E. 2020. Avian mortality risk during heat waves will increase greatly in arid Australia during the 21st Century. *Conservation Physiology*, **8(1)**, coaa048, 1-14. doi: 10.1093/conphys/coaa048.
36. Conradie, W., Keates, C., Lobón-Rovira, J., Pinto, P. V., Verburgt, L., Baptista, N.L., Harvey, J. & Júlio, T. 2020. New insights into the taxonomic status, distribution and natural history of De Witte's clicking frog (*Kassinula wittei* Laurent, 1940). *African Zoology*, **55(4)**, 311–322. doi/10.1080/15627020.2020.1821771.
37. Cosa, S., Rakoma, J.R., Yusuf, A.A. & Tshikalange, T.E. 2020. *Calpurnia aurea* (Aiton) benth extracts reduce quorum sensing controlled virulence factors in *Pseudomonas aeruginosa*. *Molecules*, **25(10)**, 2283, 1-21. doi:10.3390/molecules25102283.
38. Cox, P.G., Faulkes, C.G. & Bennett, N.C. 2020. Masticatory musculature of the African mole-rats (Rodentia: Bathyergidae). *PeerJ*, **8**, e8847, 1-19. doi:10.7717/peerj.8847.
39. Crossey, B., Chimimba, C., du Plessis, C., Hall, G., & Ganswindt, A. 2020. Using faecal glucocorticoid metabolite analyses to elucidate stressors of African wild dogs *Lycaon pictus* from South Africa. *Wildlife Biology*, **2020**, wlb.00646, 1-10. doi: 10.2981/wlb.00646.
40. Czenze, Z.J. & Dunbar, M. 2020. Body mass affects short-term heterothermy in Neotropical bats. *Biotropica*, **52**, 963-968. doi:10.1111/btp.12807.
41. Czenze, Z. J., Naidoo, S., Kotze, A. & McKechnie, A. E. 2020. Bat thermoregulation in the heat: Limits to evaporative cooling capacity in three southern African bats. *Journal of Thermal Biology*, **89**, 102542, 1-7. doi:10.1016/j.jtherbio.2020.102542.
42. Czenze, Z.J., Kemp, R., van Jaarsveld, B., Freeman, M.T., Smit, B., Wolf, B.O. & McKechnie, A.E. 2020. Regularly-drinking desert birds have greater evaporative cooling capacity and higher heat tolerance limits than non-drinking species. *Functional Ecology*, **34**, 1589–1600. doi: 10.1111/1365-2435.13573.
43. Dalerum, F., Selby, L.O.K., & Pirk, C.W.W. 2020. Relationships between livestock damages and large carnivore densities in Sweden. *Frontiers in Ecology and Evolution*, **7**, 507, 1-14. doi:10.3389/fevo.2019.00507.
44. Dalerum, F., Ganswindt, A., Palme, R., Bettega, C., del Mar Delgado, M., Dehnhard, M., Freire, S., García González, R., Marcos, J., Miranda, M., Vázquez, V.M., Sánchez Corominas, T., Tuñón Huerta, J., Zedrosser, A., Ordiz, A. & Penteriani, V. 2020. Methodological considerations for using faecal glucocorticoid metabolites as stress indicators in the brown bear (*Ursus arctos*). *Physiological and Biochemical Zoology*, **97**: 227-234. doi: 10.1086/708630.
45. Dall'Olio, R., Blacquiere, T., Bouga, M., Brodschneider, R., Carreck, N.L., Chantawannakul, P., Dietemann, V., Kristiansen, L.F., Gajda, A., Gregorc, A., Ozkirim, A., Pirk, C. W. W., Soroker, V., Williams, G.R. & Neumann, P. 2020. COLOSS survey: Global impact of COVID-19 on bee research. *Journal of Apicultural Research*, **59(5)**, 731-734. doi:10.1080/00218839.2020.1799646.
46. Daniel, G.M., Davis, A.L.V., Sole, C.L. & Scholtz, C.H. 2020. Taxonomic review of the tribe Sisyphini *sensu stricto* Mulsant, 1842 (Coleoptera: Scarabaeidae: Scarabaeinae) in southern Africa, including new species descriptions. *Insect Systematics and Evolution*, **51(1)**, 1-61. doi:10.1163/1876312X-00002195.
47. Daniel, G.M., Deschodt, C.M., Davis, A.L.V. & Sole, C.L. 2020. The enigmatic dung beetle genus *Stiptopodius* Harold, 1871 (Coleoptera: Scarabaeidae: Scarabaeinae) revisited: New species descriptions from southern Africa. *Zootaxa*, **4763(3)**, 394-404. doi:10.11646/zootaxa.4763.3.4.
48. Daniel, G.M., Sole, C.L., Davis, A.L.V., Strümpher, W.P. & Scholtz, C.H. 2020. Systematics of the dung beetle tribe Sisyphini Mulsant (scarabaeidae: Scarabaeinae) inferred from a molecular phylogeny

- and biogeography of southern African species. *Systematic Entomology*, **45(1)**, 73-84. doi:10.1111/syen.12380.
49. Daniel, G.M., Davis, A.L.V., Sole, C.L. & Scholtz, C.H. 2020. Evolutionary history and eco-climatic diversification in southern African dung beetles genus *Sisyphus*. *Journal of Biogeography*, **47**, 2698-2713. doi:10.1111/jbi.13974.
 50. Davis, A.L.V. & Scholtz, C.H. 2020. Dung beetle conservation biogeography in southern Africa: Current challenges and potential effects of climatic change. *Biodiversity and Conservation*, **29**, 667-693. doi:10.1007/s10531-019-01904-7.
 51. Davies, A.B., Brodrick, P.G., Parr, C.L. & Asner, G.P. 2020. Resistance of mound-building termites to anthropogenic land-use change. *Environmental Research Letters*, **15(9)**, 094038, 1-13. doi:10.1088/1748-9326/aba0ff.
 52. DeLory, T., Funderburk, K., Miller, K., Zuluaga-Smith, W., McPherson, S., Pirk, C. W., . . . Rueppell, O. 2020. Local variation in recombination rates of the honey bee (*Apis mellifera*) genome among samples from six disparate populations. *Insectes Sociaux*, **67(1)**, 127-138. doi:10.1007/s00040-019-00736-6.
 53. Deschodt, C.M., Sole, C.L., & Scholtz, C.H. 2020. *Upsa centennial*, a new genus and species (Coleoptera: Scarabaeidae: Scarabaeinae: Endroedyolini) from the southern Mistbelt forest in South Africa: Celebrating 100 years of entomology at the University of Pretoria. *Zootaxa*, **4728(3)**, 357-362. doi:10.11646/zootaxa.4728.3.4.
 54. Diallo, S., Shahbaaz, M., Torto, B., Christoffels, A., Masiga, D. & Getahun, M.N. 2020. Cellular and molecular targets of waterbuck repellent blend odors in antennae of *Glossina fuscipes fuscipes* Newstead, 1910. *Frontiers in Cellular Neuroscience*, **14**, 137, 1-18. doi:10.3389/fncel.2020.00137.
 55. Dippenaar-Schoeman, A.S., Wiese, L., Foord, S.H. & Haddad, C.R. 2020. A list of spider species found in the Addo Elephant National Park, Eastern Cape Province, South Africa. *Koedoe*, **62(1)**, a1578, 1-13. doi:10.4102/koedoe.v62i1.1578.
 56. Dittrich-Schröder, G., Hurley, B.P., Wingfield, M.J., Nahrung, H.F. & Slippers, B. 2020. Invasive gall-forming wasps that threaten non-native plantation-grown *Eucalyptus*: Diversity and invasion patterns. *Agricultural and Forest Entomology*, **22(4)**, 285-297. doi:10.1111/afe.12402.
 57. Do Linh San, E., Nqinana, A., Madikiza, Z.J.K & Somers, M.J. 2020. Diet of the marsh mongoose around a non-permanent reservoir: response of a generalist opportunist forager to the absence of crabs. *African Zoology*, **55:3**, 240-244, doi:10.1080/15627020.2020.1768145.
 58. Donaldson, J.E., Parr, C.L., Mangena, E.H. & Archibald, S. 2020. Droughts decouple African savanna grazers from their preferred forage with consequences for grassland productivity. *Ecosystems*, **23(3)**, 689-701. doi:10.1007/s10021-019-00438-x.
 59. Duncan, F. & Nicolson, S. 2020. Obituary: Shirley Anne Hanrahan (1939-2018). *African Entomology*, **28(2)**, 469-470. doi:10.4001/003.028.0469.
 60. du Rand, E.E., Stutzer, C., Human, H., Pirk, C.W.W. & Nicolson, S.W. 2020. Antibiotic treatment impairs protein digestion in the honeybee, *Apis mellifera*. *Apidologie*, **51(1)**, 94-106. doi:10.1007/s13592-019-00718-4.
 61. Eberl, F., Fernandez de Bobadilla, M., Reichelt, M., Hammerbacher, A., Gershenson, J. & Unsicker, S B. 2020. Herbivory meets fungivory: Insect herbivores feed on plant pathogenic fungi for their own benefit. *Ecology Letters*, **23(7)**, 1073-1084. doi:10.1111/ele.13506.
 62. Episcopio-Sturgeon, D.J. & Pienaar, E.F. 2020. Investigating support for management of the pet trade invasion risk. *The Journal of Wildlife Management*, **84(6)**, 1196–1209. doi:10.1002/jwmg.21867.
 63. Fàbregas, M.C., Fosgate, G.T., Ganswindt, A., Bertschinger, H., Hofmeyr, M. & Meyer, L.C.R. 2020. Rehabilitation method affects behavior, welfare, and adaptation potential for subsequent release of orphaned white rhinoceros. *Acta Ethologica*, **23(2)**, 105-114. doi:10.1007/s10211-020-00343-w.

64. Faccoli, M., Gallego, D., Branco, M., Brockerhoff, E.G., Corley, J., Coyle, D.R., Hurley, B., Jactel H, Lakatos F, Lantschner V, Lawson S, Martínez G, Gómez DF, Avtzis, D. 2020. A first worldwide multispecies survey of invasive Mediterranean pine bark beetles (Coleoptera: Curculionidae: Scolytinae). *Biological Invasions*, **22(5)**, 1785-1799. doi:10.1007/s10530-020-02219-3.
65. Fasel, N.J., Mamba, M.L. & Monadjem, A. 2020. Penis morphology facilitates identification of cryptic African bat species. *Journal of Mammalogy*, **101(5)**, 1392-1399. doi:10.1093/jmammal/gyaa073.
66. Faulkner, K.T., Robertson, M.P. & Wilson, J.R.U. 2020. Stronger regional biosecurity is essential to prevent hundreds of harmful biological invasions. *Global Change Biology*, **26(4)**, 2449-2462. doi:10.1111/gcb.15006.
67. Faulkner, K.T., Hulme, P.E., Pagad, S., Wilson, J.R.U. & Robertson, M.P. 2020. Classifying the introduction pathways of alien species: Are we moving in the right direction? *NeoBiota*, **62**, 143–159. doi: 10.3897/neobiota.62.53543.
68. Ferretti, F., Lovari, S., Lucherini, M., Hayward, M. & Stephens, P.A. 2020. Only the largest terrestrial carnivores increase their dietary breadth with increasing prey richness. *Mammal Review*, **50(3)**, 291-303. doi:10.1111/mam.12197.
69. Finn K., Voigt C., van Jaarsveld, B. & Hart, D.W. 2020. *Pseudaspis cana* (Mole Snake). Diet and habitat use. *Herpetological Review*, **51(3)**, 626-7.
70. Francioli, Y., Thorley, J., Finn, K., Clutton-Brock, T. & Zöttl, M. 2020. Breeders are less active foragers than non-breeders in Damaraland mole-rats. *Biology Letters*, **16**, 20200475, 1-5. doi:10.1098/rsbl.2020.0475.
71. Freeman, M.T., Czenze, Z.J., Schoeman, K. & McKechnie, A.E. 2020. Extreme hyperthermia tolerance in the world's most abundant wild bird. *Scientific Reports*, **10**, 13098, 1-6. doi: 10.1038/s41598-020-69997-7.
72. Gaget, E., Parr, C.L. & Sirami, C., 2020. Effects of fire frequency on savanna butterfly diversity and composition: A preliminary study. *Koedoe*, **62(1)**, a1617, 1-9. doi:10.4102/koedoe.v62i1.1617.
73. Ganser, C., Monadjem, A., McCleery, R.A., Ndlela, T. & Wisely, S.M. 2020. Is it best on the nest? Effects of avian life-history on haemosporidian parasitism. *International Journal for Parasitology: Parasites & Wildlife*, **13**, 62-71. doi:10.1016/j.ijppaw.2020.07.014.
74. Garnas, J.R., Vann, K.E., & Hurley, B.P. 2020. Biotic and abiotic effects on density, body size, sex ratio, and survival in immature stages of the European woodwasp, *Sirex noctilio*. *Ecology and Evolution*, **10(24)**, 13752-13766. doi:10.1002/ece3.6966.
75. Green, S.R., al-Attar, R., McKechnie, A.E., Naidoo, S. & Storey, K.B. 2020. Role of Akt signaling pathway regulation in the speckled mousebird (*Colius striatus*) during torpor displays tissue specific responses. *Cellular Signalling*, **75**, 109763, 1-10. doi: 10.1016/j.cellsig.2020.109763.
76. Gridley, T., Martin, M.J., Slater, J., Roux, J-P., Swift, R.J. & Elwen, S.H. 2020. Towed passive acoustic monitoring complements visual survey methods for Heaviside's dolphins *Cephalorhynchus heavisidii* in the Namibian Islands marine protected area. *African Journal of Marine Science*, **42(4)**, 495-506. doi: 10.2989/1814232X.2020.1848925.
77. Grotto, C.E., Wolf, T.E., Berkeley, E., Lee, S. & Ganswindt, A. 2020. Physiological measure of animal welfare in relation to semi-captive African Elephant (*Loxodonta africana*) interaction programs. *African Zoology*, **55(3)**, 245-249. doi:10.1080/15627020.2020.1776635.
78. Guignard, Q., Bouwer, M., Slippers, B. & Allison, J. 2020. Biology of a putative male aggregation-sex pheromone in *Sirex noctilio* (Hymenoptera: Siricidae). *PLoS ONE*, **15(12)**, e0244943, 1-20. doi:10.1371/journal.pone.0244943.
79. Haavik, L.J., Slippers, B., Hurley, B.P., Dodds, K.J., Scarr, T., Turgeon, J.J. & Allison J.D. 2020. Influence of the community of associates on *Sirex noctilio* brood production is contextual. *Ecological Entomology*, **45**, 456-465. doi:10.1111/een.12810.

80. Hallermann, J., Ceríaco, L.M.P., Schmitz, A., Ernst, R., Conradie, W., Verburgt, L., Marques, M.P. & Bauer, A.M. 2020. A review of the Angolan house snakes, genus *Boaedon* Duméril, Bibron and Duméril (1854) (Serpentes: Lamprophiidae), with description of three new species in the *Boaedon fuliginosus* (Boie, 1827) species complex. *African Journal of Herpetology*, **69(1)**, 29-78. doi:10.1080/21564574.2020.1777470.
81. Hart, D.W., Alharbi, Y.S., Bennett, N.C., Schoeman, K.S., Amor, N.M., Mohammed, O.B. & Alagaili, A. N. 2020. Shedding light on the role of photoperiod, rainfall and ambient temperature on the breeding physiology of male lesser Egyptian jerboa (*Jaculus jaculus*) from central Saudi Arabia. *Journal of Zoology*, **311(3)**, 217-226. doi:10.1111/jzo.12776.
82. Hart, D.W., Medger, K., van Jaarsveld, B., & Bennett, N.C. 2020. Is the Mahali mole-rat (*Cryptomys hottentotus mahali*) a spontaneous or induced ovulator? *Canadian Journal of Zoology*, **98(5)**. doi:10.1139/cjz-2019-0112.
83. Hartfelder, J., Fletcher, R.J., Reynolds, C., Stanton, R.A., Sibiyi, M.D., Monadjem, A. & McCleery, R.A. 2020. The allometry of movement predicts the connectivity of communities. *Proceedings of the National Academy of Sciences of the USA*, **117(36)**, 22274-22280. doi:10.1073/pnas.2001614117.
84. Haswell, P.M., Kusak, J., Jones, K.A. & Hayward, M.W. 2020. Fear of the dark? A mesopredator mitigates large carnivore risk through nocturnality, but humans moderate the interaction. *Behavioral Ecology and Sociobiology*, **74**, 62, 1-9. doi:10.1007/s00265-020-02831-2.
85. Hassan, Z.M., Manyelo, T.G., Selaledi, L. & Mabelebele, M. 2020. The effects of Tannins in monogastric animals with special reference to alternative feed ingredients. *Molecules*, **25**, 4680, 1-17. doi:10.3390/molecules25204680.
86. Hawkey, J.S., Elwen, S.H., James, B.S., Prinsloo, A.S. & Gridley, T. 2020. First look at humpback whale (*Megaptera novaeangliae*) song structure from western South Africa. *African Zoology*, **55(3)**, 224-232. doi:10.1080/15627020.2020.1796524.
87. Hindell, M.A., Reisinger, R., Ropert-Coudert, Y., Hückstädt, L.A., Trathan, P.N., Bornemann, H., Charrassin, J.B., Chown, S.L., Costa, D.P., Danis, B., Lea, M.A., Thompson, D., Torres, L.G., Van de Putte, A.P., Alderman, R., Andrews-Goff, V., Arthur, B., Ballard, G., Bengtson, J., Bester, M.N., Blix, A.S., Boehme, L., Bost, C.A., Boveng, P., Cleeland, J., Constantine, R., Corney, S., Crawford, R.J.M., Rosa, L.D., de Bruyn, P.J.N., Delord, K., Descamps, S., Double, M., Emmerson, L., Fedak, M., Friedlaender, A., Gales, N., Goebel, M.E., Goetz, K.T., Guinet, C., Goldsworthy, S.D., Harcourt, R., Hinke, J.T., Jerosch, K., Kato, A., Kerry, K.R., Kirkwood, R., Kooyman, G.L., Kovacs, K.M., Lawton, K., Lowther, A.D., Lydersen, C., Lyver, P.O'B., Makhado, A.B., Márquez, M.E.I., McDonald, B.I., McMahon, C.R., Muelbert, M., Nachtsheim, D., Nicholls, K.W., Nordøy, E.S., Olmastroni, S., Phillips, R.A., Pistorius, P., Plötz, J., Pütz, K., Ratcliffe, N., Ryan, P.G., Santos, M., Southwell, C., Staniland, I., Takahashi, A., Tarrow, A., Trivelpiece, W., Wakefield, E., Weimerskirch, H., Wienecke, B., Xavier, J.C., Wotherspoon, S., Jonsen, I.D. & Raymond, B. 2020. Tracking of marine predators to protect Southern Ocean ecosystems. *Nature*, **580** (7801), 87-92. doi:10.1038/s41586-020-2126-y.
88. Hirsch, H., Allsopp, M.H., Canavan, S., Cheek, M., Geerts, S., Geldenhuys, C.J., . . . Hurley, B., . . . Richardson, D.M. 2020. *Eucalyptus camaldulensis* in south Africa—past, present, future. *Transactions of the Royal Society of South Africa*, **75(1)**, 1-22. doi:10.1080/0035919X.2019.1669732.
89. Hoffmann, S., Bennett, N.C., Jansen van Vuuren, B. & Lutermann, H. 2020. Space use and the evolution of social monogamy in eastern rock sengis. *Ethology*, **126(4)**, 393-402. doi:10.1111/eth.12983.
90. Houslay, T.M., Vulllioud, P., Zöttl, M. & Clutton-Brock, T.H. 2020. Benefits of cooperation in captive Damaraland mole-rats. *Behavioral Ecology*, **31(3)**, 711-718. doi:10.1093/beheco/araa015.
91. Huang, J., Kautz, M., Trowbridge, A.M., Hammerbacher, A., Raffa, K.F., Adams, H.D., Goodsman, D.W., Xu, C., Meddens, A.J., Kandasamy, D., Gershenson, J., Seidl, R. & Hartmann, H. 2020. Tree defence

- and bark beetles in a drying world: Carbon partitioning, functioning and modelling. *New Phytologist*, **225(1)**, 26-36. doi:10.1111/nph.16173.
92. Hurley, B.P., Fitza, K.N.E., Wingfield, M.J. & Slippers, B. 2020. Sequence data reflect the introduction pathways of the Sirex woodwasp parasitoid, *Ibalia leucospoides* (Ibaliidae, Hymenoptera). *Agricultural and Forest Entomology*, **22(2)**, 129-135. doi:10.1111/afe.12367.
 93. Ivy, C.M., Sprenger, R.J., Bennett, N.C., van Jaarsveld, B., Hart, D.W., Kirby, A.M., . . . Pamenter, M.E. 2020. The hypoxia tolerance of eight related African mole-rat species rivals that of naked mole-rats, despite divergent ventilatory and metabolic strategies in severe hypoxia. *Acta Physiologica*, **228(4)**, e13436, 1-16. doi:10.1111/apha.13436.
 94. Jackson, M.C., Fourie, H.E., Dalu, T., Woodford, D.J., Wasserman, R.J., Zengeya, T.A., Ellender, B., Kimberg, P., Jordaan, M., Chimimba C. & Weyl, O. 2020. Foodweb properties vary with climate and land use in South African streams. *Functional Ecology*, **34**, 1653–1665. doi:10.1111/1365-2435.13601.
 95. Jackson, J.A., Kennedy, A., Moore, M., Andriolo, A., Bamford, C., Calderan, S., Cheeseman, T., Gittins, G., Groch, K., Kelly, N., Leaper, R., Leslie, M.S., Lurcock, S., Miller, B.S., Richardson, J., Rowntree, V., Smith, P., Stepien, E., Stowasser, G., Trathan, P., Valenzuela, L., Vermeulen, E., Vilches, F., Zerbini, A.N. & Carroll, E.L. 2020. Have whales returned to a historical hotspot of industrial whaling? The pattern of southern right whale (*Eubalaena australis*) recovery at South Georgia. *Endangered Species Research*, **43**, 323-339. doi: 10/3354/esr01072.
 96. Jacobs, P.J., Bennett, N.C. & Oosthuizen, M.K. 2020. Locomotor activity in field captured crepuscular four-striped field mice, *Rhabdomys dilectus* and nocturnal Namaqua rock mice, *Micaelamys namaquensis* during a simulated heat wave. *Journal of Thermal Biology*, **87**, 102479, 1-8. doi:10.1016/j.jtherbio.2019.102479.
 97. Jacobs, P.J., Oosthuizen, M.K., Mitchell, C., Blount, J.D., & Bennett, N.C. 2020. Heat and dehydration induced oxidative damage and antioxidant defenses following incubator heat stress and a simulated heat wave in wild caught four-striped field mice *Rhabdomys dilectus*. *PLoS ONE*, **15(11)**, e0242279, 1-17. doi: 10.1371/journal.pone.0242279.
 98. Janse van Vuuren, A.K., Kemp, L.V. & McKechnie, A.E. 2020. The beak and unfeathered skin as heat radiators in the southern ground-hornbill. *Journal of Avian Biology*, **2020**, e02457, 1-7. doi: 10.1111/jav.02457.
 99. Jarrett, J.D., Bonnell, T., Jorgensen, M.J., Schmitt, C.A., Young, C., Dostie, M., . . . Henzi, S.P. 2020. Modeling variation in the growth of wild and captive juvenile vervet monkeys in relation to diet and resource availability. *American Journal of Physical Anthropology*, **171(1)**, 89-99. doi:10.1002/ajpa.23960.
 100. Jones, C.W., Risi, M.M. & Bester, M.N. 2020. Local extinction imminent for Southern elephant seals *Mirounga leonina* at their northernmost breeding site, Gough Island—South Atlantic Ocean. *Polar Biology*, **43(7)**, 893-897. doi:10.1007/s00300-020-02679-2.
 101. Jordaan, R.K., Somers, M.J., Hall, G. & McIntyre, T. 2020. The diet of spotted-necked otters foraging in trout-stocked waters in Mpumalanga, South Africa. *African Zoology*, **55(2)**, 141-148. doi:10.1080/15627020.2020.1741447.
 102. Jordaan, R.K., Oosthuizen, W.C., Reisinger, R.R. & de Bruyn, P.J.N. 2020. Abundance, survival and population growth of killer whales *Orcinus orca* at Subantarctic Marion Island. *Wildlife Biology*, **2020(4)**, wlb.00732, 1-10. doi:10.2981/wlb.00732.
 103. Kamgang, V., Bennett, N.C., Hart, D.W., van der Goot, A.C. & Ganswindt, A. 2020. Reproductive events and respective faecal androgen metabolite concentrations in captive male roan antelope (*Hippotragus equinus*). *PLoS ONE*, **15(12)**, e0243277, 1-15. <https://doi.org/10.1371/journal.pone.0243277>.

104. Kamler, J.F., Nicholson, S., Stenkewitz, U., Gharajehdaghipour, T. & Davies-Mostert, H. 2020. Do black-backed jackals exhibit spatial partitioning with African wild dogs and lions? *African Journal of Ecology*, **58(3)**, 552-556. doi:10.1111/aje.12740.
105. Katumannane, A., Malan, A.P., Tiedt, L. R. & Hurley, B.P. 2020. *Steinernema bertusii* n. sp. (Rhabditida: Steinernematidae), a new entomopathogenic nematode from South Africa. *Nematology*, **22(3)**, 343-360. doi:10.1163/15685411-00003309.
106. Keet, J-H., Robertson, M.P. & Richardson D.M. 2020. *Alnus glutinosa* (Betulaceae) in South Africa: Invasive potential and management options. *South African Journal of Botany*, **135**, 280-293. <https://doi.org/10.1016/j.sajb.2020.09.009>.
107. Kelly, L.T., Giljohann, K.M., Duane, A., Aquilué, N., Archibald, S., Batllori, E., Bennett, A.F., Buckland, S.T., Canelles, Q., Clarke, M.F., Fortin, M.-J., Hermoso, V., Herrando, S., Keane, R.E., Lake, F.K., McCarthy, M.A., Morán-Ordóñez, A., Parr, C.L., Pausas, J.G., Penman, T.D., Regos, A., Rumpff, L., Santos, J.L., Smith, A.L., Syphard, A.D., Tingley, M.W. & Brotons, L. 2020. Fire and biodiversity in the anthropocene. *Science*, **370(6519)**, eabb0355, 929-939. doi:10.1126/science.abb0355.
108. Kemp, R., Freeman, M.T., van Jaarsveld, B., Czenze, Z.J., Conradie, S.R. & McKechnie, A.E. 2020. Sublethal fitness costs of chronic exposure to hot weather vary between sexes in a threatened desert lark. *Emu – Austral Ornithology*, **120(3)**, 216-229. doi:10.1080/01584197.2020.1806082.
109. Khumalo, L., Kornelius, G., van Zyl, P. & Hall, G. 2020. An exploratory characterisation of the carbon and stable isotope composition of atmospheric particulate matter from opencast coal mining activities and adjacent communities. *Clean Air Journal*, **30(2)**, 1-8. doi:10.17159/caj/2020/30/2.8564.
110. Kirschel, A.N.G., Nwankwo, E.C., Pierce, D.K., Lukhele, S.M., Moysi, M., Ogolowa, B.O., Hayes, S.C., Monadjem, A. & Brelford, A. 2020. *CYP2J19* mediates carotenoid colour introgression across a natural avian hybrid zone. *Molecular Ecology*, **29(24)**, 4970-4984. doi:10.1111/mec.15691.
111. Klop-Toker, K., Clulow, S., Shuttworth, C. & Hayward, M.W. 2020. Are novel ecosystems the only novelty of rewilding? *Restoration Ecology*, **28(6)**, 1318-1320. doi:10.1111/rec.13241.
112. Kranstauber, B., Gall, G. E. C., Vink, T., Clutton-Brock, T. & Manser, M. 2020. Long-term movements and home-range changes: Rapid territory shifts in meerkats. *Journal of Animal Ecology*, **89(3)**, 772-783. doi:10.1111/1365-2656.13129.
113. Krüger K. & van der Waals J.E. 2020. *Potato virus Y* and *Potato leafroll virus* management under climate change in sub-Saharan Africa. *South African Journal of Science*, **116(11/12)**, Art. #8579, 1-7. <https://doi.org/10.17159/sajs.2020/8579>.
114. LaFlèche, L.J., & Waterman, J.M. 2020. Not playing by the rules: Mixed support of ecogeographic rules in an arid-adapted African ground squirrel. *Journal of Zoology*, **312**, 94-101. doi.org/10.1111/jzo.12810.
115. Laver, P.N., Ganswindt, A., Ganswindt, S.B. & Alexander, K.A. 2020. Effect of food limitation and reproductive activity on fecal glucocorticoid metabolite levels in banded mongooses. *BMC Ecology*, **20(1)**, 12, 1-24. doi:10.1186/s12898-020-00280-z.
116. Law, S.J., Bishop, T.R., Eggleton, P., Griffiths, H., Ashton, L. & Parr, C. 2020. Darker ants dominate the canopy: Testing macroecological hypotheses for patterns in colour along a microclimatic gradient. *Journal of Animal Ecology*, **89(2)**, 347-359. doi:10.1111/1365-2656.13110.
117. Law, S.J. & Parr, C. 2020. Numerically dominant species drive patterns in resource use along a vertical gradient in tropical ant assemblages. *Biotropica*, **52(1)**, 101-112. doi:10.1111/btp.12743.
118. Leitner, M., Davies, A.B., Robertson, M.P., Parr, C.L. & van Rensburg, B.J. 2020. Termite mounds create heterogeneity in invertebrate communities across a savanna rainfall gradient. *Biodiversity and Conservation*, **29(4)**, 1427-1441. doi:10.1007/s10531-020-01943-5.

119. [Leonida, S.R.L., Bennett, N.C., Leitch, A.R. & Faulkes C.G.](#) 2020. Patterns of telomere length with age in African mole-rats: New insights from quantitative fluorescence in situ hybridisation (qFISH). *PeerJ*, **8**, e10498, 1-12. Doi:10.7717/peerj.10498.
120. [Lindsey, P., Allan, J., Brehony, P., Dickman, A., Robson, A., Begg, C., Bhammar, H., Blanken, L., Breuer, T., Fitzgerald, K., Flyman, M., Gandiwa, P., Giva, N., Kaelo, D., Nampindo, S., Nyambe, N., Steiner, K., Parker, A., Roe, D., Thomson, P., Trimble, M., Caron, A. & Tyrrell, P.](#) 2020. Conserving Africa's wildlife and wildlands through the COVID-19 crisis and beyond. *Nature Ecology & Evolution*, **4**, 1300-1310. doi:10.1038/s41559-020-1275-6.
121. [Lloyd, K.J., Oosthuizen, W.C., Bester, M.N. & de Bruyn, P.J.N.](#) 2020. Trade-offs between age-related breeding improvement and survival senescence in highly polygynous elephant seals: Dominant males always do better. *Journal of Animal Ecology*, **89(3)**, 897-909. doi:10.1111/1365-2656.13145.
122. [Lloyd, K.J., Oosthuizen, W.C., Fay, R., Bester, M.N. & de Bruyn, P.J.N.](#) 2020. Selective disappearance of frail juveniles: Consequences for understanding social dominance in adult male elephant seals. *Oikos*, **129**: 1566–1578. doi: 10.1111/oik.07434.
123. [Logan, S.M., Szereszewski, K.E., Bennett, N.C., Hart, D.W., van Jaarsveld, B., Pamerter, M.E. & Storey, K. B.](#) 2020. The brains of six African mole-rat species show divergent responses to hypoxia. *Journal of Experimental Biology*, **223(9)**, jeb215905, 1-12. doi:10.1242/jeb.215905.
124. [Lübcker, N., Bloem, L.M., du Toit, T., Swart, P., de Bruyn, P.J.N., Swart, A.C. & Millar, R.P.](#) 2020. What's in a whisker? High-throughput analysis of twenty-eight C19 and C21 steroids in mammalian whiskers by ultra-performance convergence chromatography-tandem mass spectrometry. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **1141**,122028, 1-10. doi:10.1016/j.jchromb.2020.122028.
125. [Lübcker, N., Whiteman, J.P., Millar, R. P., de Bruyn, P.J.N. & Newsome, S.D.](#) 2020. Fasting affects amino acid nitrogen isotope values: A new tool for identifying nitrogen balance of free-ranging mammals. *Oecologia*, **193(1)**, 53-65. doi:10.1007/s00442-020-04645-5.
126. [Lübcker, N., Whiteman, J.P., Newsome, S.D., Millar, R.P. & de Bruyn, P.J.N.](#) 2020. Can the carbon and nitrogen isotope values of offspring be used as a proxy for their mother's diet? Using foetal physiology to interpret bulk tissue and amino acid $\delta^{15}\text{N}$ values. *Conservation Physiology*, **8(1)**, p.coaa060, 1-16. doi:10.1093/conphys/coaa060.
127. [Lubisi, B.A., Ndouvhada, P.N., Neiffer, D., Penrith, M.L., Sibanda, D. & Bastos, A.](#) 2020. Seroprevalence of Rift valley fever in South African domestic and wild suids (1999–2016). *Transboundary and Emerging Diseases*, **67(2)**, 811-821. doi:10.1111/tbed.13402.
128. [Lund, J., Bolopo, D., Thomson, R.L., Elliott, D.L., Arnot, L.F., Kemp, R., Lowney, A.M. & McKechnie, A.E.](#) 2020. Winter thermoregulation in free-ranging pygmy falcons in the Kalahari Desert. *Journal of Ornithology*, **161(2)**, 549-555. doi:10.1007/s10336-020-01755-y.
129. [Majelantle, T.L., Mcintyre, T. & Ganswindt, A.](#) 2020. Monitoring the effects of land transformation on African clawless otters (*Aonyx capensis*) using fecal glucocorticoid metabolite concentrations as a measure of stress. *Integrative Zoology*, **15(4)**, 293-306. doi:10.1111/1749-4877.12428.
130. [Makumbe, L., Moropa, T.P., Manrakhan, A. & Weldon, C.W.](#) 2020. Effect of sex, age and morphological traits on tethered flight of *Bactrocera dorsalis* (Hendel) (Diptera: Tephritidae) at different temperatures. *Physiological Entomology*, **45**, 110-119. doi: 10.1111/phen.12323.
131. [Makunde, P.T., Slippers, B., Burckhardt, D., de Queiroz, D.L., Lawson, S.A. & Hurley, B.P.](#) 2020. Current and potential threat of psyllids (Hemiptera: Psylloidea) on eucalypts. *Southern Forests*, **82(3)**, 233-242. doi: 10.2989/20702620.2020.1813650.
132. [Maligana, N., Julius, R.S., Shivambu, T.C. & Chimimba, C.T.](#) 2020. Genetic identification of freely traded synanthropic invasive murid rodents in pet shops in Gauteng Province, South Africa. *African Zoology*, **55(2)**, 149-154. doi: 10.1080/156270020.2019.1704632.

133. Malige, F., Patris, J., Buchan, S.J., Stafford, K.M., Shabangu, F., Findlay, K., . . . Glotin, H. 2020. Inter-annual decrease in pulse rate and peak frequency of southeast pacific blue whale song types. *Scientific Reports*, **10(1)**, 8121, 1-11. doi:10.1038/s41598-020-64613-0.
134. Malod, K., Archer, C.R., Karsten, M., Cruywagen, R., Howard, A., Nicolson, S.W. & Weldon, C.W. 2020. Exploring the role of host specialisation and oxidative stress in interspecific lifespan variation in subtropical tephritid flies. *Scientific Reports*, **10**, 5601, 1-11. doi:10.1038/s41598-020-62538-2.
135. Malod, K., Roets, P.D., Oosthuizen, C., Blount, J.D., Archer, C.R. & Weldon, C.W. 2020. Selection on age of female reproduction in the marula fruit fly, *Ceratitis cosyra* (Walker) (diptera: Tephritidae), decreases total antioxidant capacity and lipid peroxidation. *Journal of Insect Physiology*, **125**, 104084, 1-7. doi:10.1016/j.jinsphys.2020.104084.
136. Manrakhan, A., Grout, T.G., Grove, T., Daneel, J-H., Stephen, P.R., Weldon, C.W., De Meyer, M., Carstens, E. & Hattingh, V. 2020. A survey of *Ceratitis quinaria* (Bezzi) (Diptera: Tephritidae) in citrus production areas in South Africa. *African Entomology*, **28(1)**, 35-43. doi:10.4001/003.028.0035.
137. Manyelo, T.G, Selaledi, L., Hassan, Z.M. & Mabelebele, M. 2020. Local chicken breeds of Africa: Their description uses and conservation methods. *Animals*, **10**, 2257, 1-18. doi: 10.3390/ani10122257.
138. Maphalala, M.I., Monadjem, A., Bildstein, K.L., McPherson, S., Hoffman, B. & Downs, C.T. 2020. Ranging behaviour of Long-crested Eagles *Lophaelagus occipitalis* in human-modified landscapes of KwaZulu-Natal, South Africa. *Ostrich*, **91(3)**, 221-227. doi:10.2989/00306525.2020.1770888.
139. Mariotti, E., Parrini, F., Louw, C.J., & Marshal, J.P. 2020. What grass characteristics drive large herbivore feeding patch selection? A case study from a South African grassland protected area. *African Journal of Range and Forage Science*, **37(4)**, 286-294. doi:10.2989/10220119.2020.1768146.
140. Mariotti, E., Parrini, F., Louw, C.J. & Marshal, J.P. 2020. Habitat use by a large herbivore guild in a fenced South African protected area. *African Journal of Wildlife Research*, **50**, 86-101. doi:10.3957/056.050.0000.
141. Martin, M.J., Gridley, T., Roux, P-J. & Elwen, S.H. 2020. First abundance estimates of Heaviside's (*Cephalorhynchus heavisidii*) and dusky (*Lagenorhynchus obscurus*) dolphins off Namibia using a novel visual and acoustic line transect survey. *Frontiers in Marine Science*, **7**, 555659, 1-20. doi:10.3389/fmars.2020.555659.
142. Måsviken, J., Dalerum, F. & Cousins, S.A.O. 2020. Contrasting altitudinal variation of alpine plant communities along the Swedish mountains. *Ecology and Evolution*, **10(11)**, 4838-4853. doi:10.1002/ece3.6237.
143. Mathewson, P.D., Porter, W.P., Barrett, L., Fuller, A., Henzi, S.P., Hetem, R.S., Young, C. & McFarland, R. 2020. Field data confirm the ability of a biophysical model to predict wild primate body temperature. *Journal of Thermal Biology*, **94**, 102754, 1-12. doi:10.1016/j.jtherbio.2020.102754.
144. Mbaluto, C.M., Ayelo, P.M., Duffy, A.G., Erdei, A.L., Tallon, A.K., Xia, S., Caballero-Vidal, G., Spitaler, U., Szelényi, M.O., Duarte, G.A., Walker, W.B. & Becher, P.G. 2020. Insect chemical ecology: Chemically mediated interactions and novel applications in agriculture. *Arthropod-Plant Interactions*, **14**, 671-684. doi:10.1007/s11829-020-09791-4.
145. McFarland, R., Barrett, L., Fuller, A., Hetem, R.S., Porter, W.P., Young, C. & Henzi, S. P. 2020. Infrared thermography cannot be used to approximate core body temperature in wild primates. *American Journal of Primatology*, **82(12)**, e23204, 1-11. doi:10.1002/ajp.23204.
146. McGovern, B., Gridley, T., James, B.S. & Elwen, S. 2020. Risky business? A note on repeated live strandings of common bottlenose dolphins (*Tursiops truncatus*) while foraging in a shallow water environment. *Marine Mammal Science*, **36(1)**, 305-314. doi:10.1111/mms.12634.
147. McGowan, N.E., Scantlebury, D.M., Bennett, N.C., Maule, A.G. & Marks, N.J. 2020. Thermoregulatory differences in African mole-rat species from disparate habitats: Responses and limitations. *Journal of Thermal Biology*, **88**, 102495, 1-7. doi:10.1016/j.jtherbio.2019.102495.

148. McIntyre, T., Majelantle, T.L., Slip, D.J. & Harcourt, R.G. 2020. Quantifying imperfect camera-trap detection probabilities: Implications for density modelling. *Wildlife Research*, **47(2)**, 177-185. doi:10.1071/WR19040.
149. McKnight, D.T., Nordine, J., Jerrett, B., Murray, M., Murray, P., Moss, R., Northey, M., Simard, N., Alford, R.A. & Schwarzkopf, L. 2020. Do morphological adaptations for gliding in frogs influence clinging and jumping? *Journal of Zoology*, **310**, 55-63. doi: 10.1111/jzo.12725.
150. Measey, J., Wagener, C., Mohanty, N.P., Baxter-Gilbert, J. & Pienaar, E.F. 2020. The cost complexity of assessing impact. *Neobiota*, **62**, 279-299. doi:10.3897/neobiota.62.52261.
151. Medger, K., Bennett, N.C., Prins, A., Lutermann, H. & Ganswindt, A. 2020. Sex and dose-dependent responses of urinary and faecal glucocorticoid metabolite concentrations following an ACTH challenge in eastern rock sengis (*elephantulus myurus*). *Comparative Biochemistry and Physiology -Part A: Molecular and Integrative Physiology*, **245**, 110696, 1-9. doi:10.1016/j.cbpa.2020.110696.
152. Mekonnen, B., Haran, J., Copeland, R.S., Pirk, C.W.W., Yusuf A.A. & Deletre, E.M. 2020. First report of a gall midge as a parasitoid of weaver ants. *Entomologia Generalis*, **40(4)**, 437-441. doi:10.1127/entomologia/2020/0908.
153. Mendonça, R., Vulliod, P., Katlein, N., Vallat, A., Glauser, G., Bennett, N.C. & Helfenstein, F. 2020. Oxidative costs of cooperation in cooperatively breeding Damaraland mole-rats. *Proceedings of the Royal Society B: Biological Sciences*, **287(1934)**, 20201023, 1-8. doi:10.1098/rspb.2020.1023rspb20201023.
154. Milupi, I.D., Somers, M.J. & Ferguson, W. 2020. Inadequate community engagement hamstrings sustainable wildlife resource management in Zambia. *African Journal of Ecology*, **58(1)**, 112-122. doi:10.1111/aje.12685.
155. Mitchell, S., Sole, C. & Lyle, R. 2020. Teratological cases of the ocular patterns in the South African endemic trapdoor spider genus *Stasimopus* Simon (1892) (Araneae, Mygalomorphae, Stasimopidae). *African Zoology*, **55(4)**, 363-367. doi:10.1080/15627020.2020.1842241.
156. Moleón, M., Cortés-Avizanda, A., Pérez-García, J.M., Bautista, J., Geoghegan, C., Carrete, M., Amar, A., Sánchez-Zapata, J.A. & Donázar, J.A. 2020. Distribution of avian scavengers inside and outside of protected areas: Contrasting patterns between two areas of Spain and South Africa. *Biodiversity and Conservation*, **29**, 3349-3368. doi:10.1007/s10531-020-02027-0.
157. Moleón, M., Sánchez-Zapata, J.A., Donázar, J.A., Revilla, E., Martín-López, B., Gutiérrez-Cánovas, C., . . . Hayward, M.W., . . . Tockner, K. 2020. Rethinking megafauna. *Proceedings of the Royal Society B: Biological Sciences*, **287**, 20192643, 1-10. doi:10.1098/rspb.2019.2643.
158. Moshobane, M.C., Nelufule, T., Shivambu, T. C. & Shivambu, N. 2020. Occurrence record of and possible invasion by scarlet sage (*Salvia coccinea* Buc'hoz ex Etl.) in South Africa. *Russian Journal of Biological Invasions*, **11(4)**, 393-398. doi:10.1134/S2075111720040098.
159. Monadjem, A., Shapiro, J.T., Richards, L.R., Karabulut, H., Crawley, W., Nielsen, I.B., Hansen, A., Bohmann, K. & Mourier, T. 2019. Systematics of West African *Miniopterus* with the description of a new species. *Acta Chiropterologica*, **21(2)**, 237-256. doi:10.3161/15081109ACC2019.21.2.001.
160. Monadjem, A., Guyton, J., Naskrecki, P., Richards, Kropff, A.S. & Dalton, D.L. 2020. Cryptic diversity in the genus *Miniopterus* with the description of a new species from southern Africa. *Acta Chiropterologica*, **22(1)**, 1-19. doi:10.3161/15081109ACC2020.22.1.001.
161. Montgomery, R.A., Macdonald, D.W. & Hayward, M.W. 2020. The inducible defences of large mammals to human lethality. *Functional Ecology*, **34**, 2426-2441. doi:10.1111/1365-2435.13685.
162. Moseley, M., Naidoo, K., Bastos, A., Retief, L., Frean, J., Telfer, S. & Rossouw, J. 2020. Multi-locus sequence analyses reveal a clonal *L. borgpetersenii* genotype in a heterogeneous invasive *Rattus* spp. community across the City of Johannesburg, South Africa. *Parasites and Vectors*, **13**, 570, 1-9. doi:10.1186/s13071-020-04444-0.

163. Muteka, S.P., Chimimba, C.T., Bastos, A.D. & Bennett, N.C. 2020. Photoperiodic effects on the male gonads of the Namibian gerbil, *Gerbilliscus cf. leucogaster* from central Namibia. *Mammalian Biology*, **100**, 165-171. doi:10.1007/s42991-020-00008-y.
164. Mutitu, E.K., Hoareau, T.B., Hurley, B.P., Garnas, J.R., Wingfield, M. J. & Slippers, B. 2020. Reconstructing early routes of invasion of the bronze bug *Thaumastocoris peregrinus* (hemiptera: Thaumastocoridae): Cities as bridgeheads for global pest invasions. *Biological Invasions*, **22(7)**, 2325-2338. doi:10.1007/s10530-020-02258-w.
165. Mynhardt, S., Bennett, N.C. & Bloomer, P. 2020. New insights from RADseq data on differentiation in the Hottentot golden mole species complex from South Africa. *Molecular Phylogenetics and Evolution*, **143**, 106667, 1-9. doi:10.1016/j.ympev.2019.106667.
166. Natusch, D.J.D., Aust, P.W., Khadiejah, S., Ithnin, H., Isa, A., Zamzuri CK, Ganswindt, A. & DeNardo, D.F. 2020. Behavioral and corticosterone responses to carbon dioxide exposure in reptiles. *PLoS ONE*, **15(10)**, e0240176, 1-14. doi:10.1371/journal.pone.0240176.
167. Ndlovu, S., Williamson, A.-L., Malesa, R., van Heerden, J., Boshoff, C.I., Bastos, A.D.S., Heath, L. & Carulei, O. 2020. Genome sequences of three African swine fever viruses of genotypes I, III, and XXII from South Africa and Zambia, isolated from *Ornithodoros* soft ticks. *Microbiology Resource Announcements*, **9(10)**, e01376-19, 1-3. doi:10.1128/MRA.01376-19.
168. Nelufule, T., Robertson, M.P., Wilson, J.R.U., Faulkner, K.T., Sole, C. & Kumschick, S. 2020. The threats posed by the pet trade in alien terrestrial invertebrates in South Africa. *Journal for Nature Conservation*, **55**, 125831, 1-9. doi:10.1016/j.jnc.2020.125831.
169. Nemesio-Gorritz, M., Menezes, R.C., Paetz, C., Hammerbacher, A., Steenackers, M., Schamp, K., Höfte, M., Svatoš, A., Gershenzon, J. & Douglas, G.C. 2020. Candidate metabolites for ash dieback tolerance in *Fraxinus excelsior*. *Journal of Experimental Botany*, **71(19)**, 6074-6083. doi:10.1093/jxb/eraa306.
170. Netshirovha, T.R., Umesiobi, D.O., Matabane, M.B., Mphaphathi, M.L., Pilane, C.M., Thomas, S.R., Sebothoma, P., Kanengoni, A.T. & Nedambale, T.L. 2020. Improvement of Kolbroek boar growth performance and carcass quality through dietary crude protein supplementation. *Open Journal of Animal Sciences*, **10**, 502-513. doi:10.4236/ojas.2020.103031.
171. Nicholson, S.K., Marneweck, D.G., Lindsey, P.A., Manewick, K. & Davies-Mostert, H.T. 2020. A 20-year review of the status and distribution of African wild dogs (*Lycaon pictus*) in South Africa. *African Journal of Wildlife Research*, **50**, 8–19. doi:10.3957/056.050.0008.
172. Noakes, M.J. & McKechnie, A.E. 2020. Seasonal metabolic acclimatization varies in direction and magnitude among years in two arid-zone passerines. *Physiological and Biochemical Zoology*, **93(2)**, 140-152. doi: 10.1086/707679.
173. Noakes, M.J., Karasov, W.H. & McKechnie, A.E. 2020. Seasonal variation in body composition in an Afrotropical passerine bird: Increases in pectoral muscle mass are, unexpectedly, associated with lower thermogenic capacity. *Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology*, **190(3)**, 371-380. doi:10.1007/s00360-020-01273-6.
174. Noakes, M.J. & McKechnie, A.E. 2020. Phenotypic flexibility of metabolic rate and evaporative water loss does not vary across a climatic gradient in an Afrotropical passerine bird. *Journal of Experimental Biology*, **223(7)**, jeb220137, 1-9. doi:10.1242/jeb.220137.
175. Noeth, K.P., Verleur, P.M., Bouwer, M.C., Crous, J.W., Roux, J., Hurley, B.P. & Slippers, B. 2020. Mass trapping of *Coryphodema tristis* (Lepidoptera: Cossidae) using a sex pheromone in *Eucalyptus nitens* compartments in Mpumalanga, South Africa. *Southern Forests*, **82**, 271-279. doi:10.2989/20702620.2020.1813648.
176. Noonan, M.J., Fleming, C.H., Tucker, M.A., Kays, R., Harrison, A.-L., Crofoot, M.C., Abrahms, B., Alberts, S.C., Ali, A.H., Altmann, J., Antunes, P.C., Attias, N., Belant, J.L., Beyer, D.E., Jr., Bidner, L.R., Blaum, N., Boone, R.B., Caillaud, D., de Paula, R.C., de la Torre, J.A., Dekker, J., DePerno, C.S., Farhadinia,

- M., Fennessy, J., Fichtel, C., Fischer, C., Ford, A., Goheen, J.R., Havmøller, R.W., Hirsch, B.T., Hurtado, C., Isbell, L.A., Janssen, R., Jeltsch, F., Kaczensky, P., Kaneko, Y., Kappeler, P., Katna, A., Kauffman, M., Koch, F., Kulkarni, A., LaPoint, S., Leimgruber, P., Macdonald, D.W., Markham, A.C., McMahon, L., Mertes, K., Moorman, C.E., Morato, R.G., Moßbrucker, A.M., Mourão, G., O'Connor, D., Oliveira-Santos, L.G.R., Pastorini, J., Patterson, B.D., Rachlow, J., Ranglack, D.H., Reid, N., Scantlebury, D.M., Scott, D.M., Selva, N., Sergiel, A., Songer, M., Songsasen, N., Stabach, J.A., Stacy-Dawes, J., Swingen, M.B., Thompson, J.J., Ullmann, W., Vanak, A.T., Thaker, M., Wilson, J.W., Yamazaki, K., Yarnell, R.W., Zieba, F., Zwijsacz-Kozica, T., Fagan, W.F., Mueller, T. & Calabrese, J.M. 2020. Effects of body size on estimation of mammalian area requirements. *Conservation Biology*, **34(4)**, 1017-1028. doi:10.1111/cobi.13495.
177. Noriega, J.A., Floate, K. D., Génier, F., Reid, C.A.M., Kohlmann, B., Horgan, F.G., Davis, A.L.V., Forgie, S.A., Aguilar, C., Ibarra, M.G., Vaz-de-Mello, F., Ziani, S. & Lobo, J.M. 2020. Global distribution patterns provide evidence of niche shift by the introduced African dung beetle *Digitonthophagus gazella*. *Entomologia Experimentalis Et Applicata*, **168(10)**, 766-782. doi:10.1111/eea.12961.
178. O'Neill, H.A., Einkamerer, O.B., Elago, B.T. & Ganswindt, A. 2020. Concentrations of faecal glucocorticoid metabolites in South African Mutton Merino sheep fed various sources of roughage. *South African Journal of Animal Science*, **50(4)**, 501-506. doi:10.4314/sajas.v50i4.2.
179. Oosthuizen, M.K. 2020. Exploratory behaviour, memory and neurogenesis in the social damaraland mole-rat (*Fukomys damarensis*). *The Journal of Experimental Biology*, **223**, jeb221093, 1-9. doi:10.1242/jeb.221093.
180. Oosthuizen, M.K. 2020. Temporal flexibility in activity rhythms of a diurnal rodent, the ice rat (*Otomys sloggetti*). *Chronobiology International*, **37(6)**, 824-835. doi:10.1080/07420528.2020.1782931.
181. Oosthuizen, W.C., Krüger, L., Jouanneau, W. & Lowther, A.D. 2020. Unmanned aerial vehicle (UAV) survey of the Antarctic shag (*Leucocarbo bransfieldensis*) breeding colony at Harmony Point, Nelson Island, South Shetland Islands. *Polar Biology*, **43(2)**, 187-191. doi:10.1007/s00300-019-02616-y.
182. Pajmans, A.J., Stoffel, M.A., Bester, M.N., Cleary, A.C., De Bruyn, P.J.N., Forcada, J., Goebel, M.E., Goldsworthy, S.D., Guinet, C., Lydersen, C., Kovacs, K.M., Lowther, A. & Hoffman, J.I. 2020. The genetic legacy of extreme exploitation in a polar vertebrate. *Scientific Reports*, **10**, 5089, 1-12. doi:10.1038/s41598-020-61560-8.
183. Pandraud, A., Shrader, A.M., Sholto-Douglas, C. & Chamaillé-Jammes, S. 2020. Factors driving the discovery and utilization of a newly available area by African elephants. *Journal of Tropical Ecology*, **36**, 150-158. doi:10.1017/S0266467420000097.
184. Parry, N.J., Pieterse, E. & Weldon, C.W. 2020. Stocking rate and organic waste type affect development of three *Chrysomya* species and *Lucilia sericata* (Diptera: Calliphoridae): Implications for bioconversion. *Journal of Applied Entomology*, **144(1-2)**, 94-108. doi:10.1111/jen.12712.
185. Patin, R., Etienne, M-P., Lebarbier, E., Chamaillé-Jammes, S. & Benhamou, S. 2020. Identifying stationary phases in multivariate time series for highlighting behavioural modes and home range settlements. *Journal of Animal Ecology*, **89(1)**, 44-56. doi:10.1111/1365-2656.13105.
186. Pattinson, N.B., Thompson, M.L., Griego, M., Russell, G., Mitchell, N., Martin, R.O., Wolf, B.O., Smit, B., Cunningham, S.J., McKechnie, A.E. & Hockey, P.A.R. 2020. Heat dissipation behaviour of birds in seasonally hot, arid zones: are there global patterns? *Journal of Avian Biology*, **51(2)**, e02350, 1-11. doi: 10.1111/jav.02350.
187. Penteriani, V., Zarzo-Arias, A., Delgado, M.M., Dalerum, F., Gurarie, E., Peón Torre, P., Sánchez Corominas, T., Vázquez, V.M., Vázquez García, P. & Ordiz A. 2020. Female brown bears use areas with infanticide risk in a spatially confined population. *Ursus*, **31**, e2, 1-9. doi:10.2192/URSUS-D-18-00019R4.

188. Pessato, A., McKechnie, A.E., Buchanan, K.L. & Mariette, M.M. 2020. Vocal panting: A novel thermoregulatory mechanism for enhancing heat tolerance in a desert-adapted bird. *Scientific Reports*, **10**, 18914, 1-11. doi: 10.1038/s41598-020-75909-6.
189. Pretorius, M., Broders, H., Seamark, E. & Keith, M. 2020. Climatic correlates of migrant Natal long-fingered bat (*Miniopterus natalensis*) phenology in north-eastern South Africa. *Wildlife Research*, **47(5)**, 404-414. doi:10.1071/WR19165.
190. Pretorius, M., Broders, H. & Keith, M. 2020. Threat analysis of modelled potential migratory routes for *Miniopterus natalensis* in South Africa. *Austral Ecology*, **45**, 1110-1122. doi.org/10.1111/aec.12940.
191. Pretorius, M., Van Cakenberghe, V., Broders, H. & Keith, M. 2020. Temperature explains variation in seasonal temporal activity of *Miniopterus natalensis* more than moonlight or humidity. *Mammal research*, **65**, 755-765. doi.org/10.1007/s13364-020-00531-w.
192. Purdon, J., Shabangu, F., Pienaar, M., Somers, M. J. & Findlay, K. P. 2020. South Africa's newly approved marine protected areas have increased the protected modelled habitat of nine odontocete species. *Marine Ecology Progress Series*, **633**, 1-21. doi:10.3354/meps13190.
193. Purdon, J., Shabangu, F., Pienaar, M., Somers, M. J. & Findlay, K.P 2020. Cetacean species richness in relation to anthropogenic impacts and areas of protection in South Africa's mainland Exclusive Economic Zone. *Ocean and Coastal Management*, **197**, 105292, 1-14. doi:10.1016/j.ocecoaman.2020.105292.
194. Purdon, J., Shabangu, F., Yemane, D., Pienaar, M., Somers, M.J. & Findlay, K. 2020. Species distribution modelling of Bryde's whales, humpback whales, southern right whales, and sperm whales in the southern African region to inform their conservation in expanding economies. *PeerJ*, **8**, e9997, 1-25. doi: 10.7717/peerj.9997.
195. Rat, M., Mathe-Hubert, H., McKechnie, A.E., Sueur, C. & Cunningham, S.J. 2020. Extreme and environmental temperatures are linked to social network breakdown in a highly social passerine, the sociable weaver. *Oikos*, **129**, 1597–1610. doi: 10.1111/oik.07463.
196. Rauber, R., Kranstauber, B. & Manser, M.B. 2020. Call order within vocal sequences of meerkats contains temporary contextual and individual information. *BMC biology*, **18(1)**, 119, 1-11. doi:10.1186/s12915-020-00847-8.
197. Reisinger, R. R., Penfold, M., Bester, M. N. & Steenkamp, G. 2020. Seal bites at sub-Antarctic Marion Island: Incidence, outcomes and treatment recommendations. *Journal of the South African Veterinary Association*, **91**, a1720, 1-6. doi:10.4102/jsava.v91i0.1720.
198. Requena, S., Opper, S., Bond, A. L., Hall, J., Cleland, J., Crawford, R. J. M., Davies, D., Dilley, B. J., Glass, T., Makhado, A., Ratcliffe, N., Reid, T. A., Ronconi, R. A., Schofield, A., Steinfurth, A., Wege, M., Bester, M. N. & Ryan, P. G. 2020. Marine hotspots of activity inform protection of a threatened community of pelagic species in a large oceanic jurisdiction. *Animal Conservation*, **23(5)**, 585-596. doi:10.1111/acv.12572.
199. Rifkin, R.F., Vikram, S., Ramond, J-B., Rey-Iglesia, A., Brand, T.B., Porraz, G., . . . Hall, G., Woodborne, S., . . . Hansen, A.J. 2020. Multi-proxy analyses of a mid-15th century middle iron age bantu-speaker palaeo-faecal specimen elucidates the configuration of the 'ancestral' sub-Saharan African intestinal microbiome. *Microbiome*, **8(1)**, 62, 1-23. doi:10.1186/s40168-020-00832-x.
200. Robinson, T.B., Martin, N., Loureriro, T.G., Matikinca, P. & Robertson, M.P. 2020. Double trouble: The implications of climate change for biological invasions. *NeoBiota*, **62**, 463–487. doi:10.3897/neobiota.62.55729.
201. Ropert-Coudert, Y., Van de Putte, A.P., Reisinger, R.R., Bornemann, H., Charrassin, J.B., Costa, D.P., Danis, B., Hückstädt, L.A., Jonsen, I.D., Lea, M.A., Thompson, D., Torres, L.G., Trathan, P.N., Wotherspoon, S., Ainley, D.G., Alderman, R., Andrews-Gof, V., Arthur, B., Ballard, G., Bengtson, J., Bester, M.N., Blix, A.S., Boehme, L., Bost, C.A., Boveng, P., Cleland, J., Constantine, R., Crawford,

- R.J.M., Rosa, L.D., de Bruyn, P.J.N., Delord, K., Descamps, S., Double, M., Emmerson, L., Fedak, M., Friedlaender, A., Gales, N., Goebel, M., Goetz, K.T., Guinet, C., Goldsworthy, S.D., Harcourt, R., Hinke, J.T., Jerosch, K., Kato, A., Kerry, K.R., Kirkwood, R., Kooyman, G.L., Kovacs, K.M., Lawton, K., Lowther, A.D., Lydersen, C., Lyver, P.O'B., Makhado, A.B., Márquez, M.E.I., McDonald, B.I., McMahon, C.R., Muelbert, M., Nachtsheim, D., Nicholls, K.W., Nordøy, E.S., Olmastroni, S., Phillips, R.A., Pistorius, P., Plötz, J., Pütz, K., Ratcliffe, N., Ryan, P.G., Santos, M., Southwell, C., Staniland, I., Takahashi, A., Tarroux, A., Trivelpiece, W., Wakefeld, E., Weimerskirch, H., Wienecke, B., Xavier, J.C., Raymond, B. & Hindell, M.A. 2020. The retrospective analysis of Antarctic tracking data project. *Scientific Data*, **7(1)**, 94, 1-11. doi:10.1038/s41597-020-0406-x.
202. Rumiano, F., Wielgus, E., Miguel, E., Chamaillé-Jammes, S., Valls-Fox, H., Cornélis, D., de Garine-Wichatitsky, M., Fritz, H., Caron, A. & Tran, A. 2020. Remote sensing of environmental drivers influencing the movement ecology of sympatric wild and domestic ungulates in semi-arid savannas, a review. *Remote Sensing*, **12**, 3218, 1-37. doi:10.3390/rs12193218.
203. Sahd, L., Bennett, N.C. & Kotzé, S.H. 2020. Hind foot drumming: Morphofunctional analysis of the hind limb osteology in three species of African mole-rats (Bathyergidae). *Journal of Morphology*, **281(4-5)**, 438-449. doi:10.1002/jmor.21110.
204. Saleh, F., Kitau, J., Konradsen, F., Kampango, A., Abassi, R. & Schiøler, K.L. 2020. Epidemic risk of arboviral diseases: Determining the habitats, spatial-temporal distribution, and abundance of immature *Aedes aegypti* in the urban and rural areas of Zanzibar, Tanzania. *PLoS Neglected Tropical Diseases*, **14(12)**, e0008949, 1-20. doi:10.1371/journal.pntd.0008949.
205. Sarkar, A., Harty, S., Johnson, K.V. -, Moeller, A.H., Archie, E.A., Schell, L.D., Carmody, R.N., Clutton-Brock, T.H., Dunbar, R.I.M. & Burnet, P.W.J. 2020. Microbial transmission in animal social networks and the social microbiome. *Nature Ecology and Evolution*, **4(8)**, 1020-1035. doi:10.1038/s41559-020-1220-8.
206. Scheepers, L-M., Allison, J.D., Bouwer, M.C., Rohwer, E.R. & Slippers, B. 2020. Pheromones as management tools for non-Scolytinae Curculionidae: Development and implementation considerations. *Southern Forests*, **82(3)**, 202-214. doi:10.2989/20702620.2020.1858204.
207. Scheun, J., Geiser, F., Ganswindt, A. & Nowack, J. 2020. Non-invasive evaluation of stress hormone responses in a captive population of sugar gliders (*Petaurus breviceps*). *Australian Mammalogy*, **42(2)**, 176-184. doi:10.1071/AM18044.
208. Scheun, J., Gulson, J. & Ganswindt, A. 2020. Monitoring glucocorticoid metabolite concentrations as a proxy of environmental stress across important life-history stages in captive African penguins. *General and Comparative Endocrinology*, **296**, 113539, 1-7. doi:10.1016/j.ygcen.2020.113539.
209. Scheun, J., Tordiffe, A.S.W., Wimberger, K. & Ganswindt, A. 2020. Validating a non-invasive technique for monitoring physiological stress in the samango monkey. *Onderstepoort Journal of Veterinary Research*, **87(1)**, a1720, 1-8. doi:10.4102/ojvr.v87i1.1720.
210. Schmidt, C.M., Arbi, S. & Bennett, N.C. 2020. Ovulation mitigates fatty liver associated with reproductive suppression and oxidative stress in Damaraland mole-rats (*Fukomys damarensis*). *Reproduction, Fertility and Development*, **32(10)**, 923-928. doi:10.1071/RD20049.
211. Schmitt, M.H., Shuttleworth, A, Shrader, A.M. & Ward, D. 2020. The role of volatile plant secondary metabolites as pre-ingestive cues and potential toxins dictating diet selection by African elephants. *Oikos*, **129**, 24-34. doi: 10.1111/oik.06665.
212. Schmitt, M.H., Ward, D. & Shrader, A.M. 2020. Salivary tannin-binding proteins: A foraging advantage for goats? *Livestock Science*, **234**, 103974, 1-6. doi:10.1016/j.livsci.2020.103974.
213. Schmitt, M.H., Shrader, A.M. & Ward, D. 2020. Megaherbivore browsers vs. tannins: Is being big enough? *Oecologia*, **194**, 383-390. doi.org/10.1007/s00442-020-04784-9.

214. Schröder, M.L., Slippers, B., Wingfield, M.J. & Hurley, B.P. 2020. Invasion history and management of eucalyptus snout beetles in the *Gonipterus scutellatus* species complex. *Journal of Pest Science*, **93(1)**, 11-25. doi:10.1007/s10340-019-01156-y.
215. Selaledi, L., Mbajjorgu, C.A. & Mabelebele, M. 2020. The use of yellow mealworm (*T. molitor*) as alternative source of protein in poultry diets: a review. *Tropical Animal Health and Production*, **52(1)**, 7-16. doi:10.1007/s11250-019-02033-7.
216. Selaledi, L.A., Hassan, Z.M., Manyelo, T.G. & Mabelebele, M. 2020. The current status of the alternative use to antibiotics in poultry production: An African perspective. *Antibiotics*, **9**, 594, 1-18. doi:10.3390/antibiotics9090594.
217. Seymour, C.L., Gillson, L., Child, M.F., Tolley, K.A., Curie, J.C., da Silva, J.M., . . . Veldtman, R. 2020. Horizon scanning for South African biodiversity: A need for social engagement as well as science. *Ambio*, **49(6)**, 1211-1221. doi:10.1007/s13280-019-01252-4.
218. Shabangu, F.W., Findlay, K. & Stafford, K.M. 2020. Seasonal acoustic occurrence, diel-vocalizing patterns and bioduck call-type composition of Antarctic minke whales off the west coast of South Africa and the Maud Rise, Antarctica. *Marine Mammal Science*, **36(2)**, 658-675. doi:10.1111/mms.12669.
219. Shabangu, F.W., Andrew, R.K., Yemane, D. & Findlay, K.P. 2020. Acoustic seasonality, behaviour and detection ranges of Antarctic blue and fin whales under different sea ice conditions off Antarctica. *Endangered Species Research*, **43**, 21-37. doi: 10.3354/esr01050.
220. Shabangu, F.W. & Andrew, R.K. 2020. Clicking throughout the year: Sperm whale clicks in relation to environmental conditions off the west coast of South Africa. *Endangered Species Research*, **43**, 475-494. doi: 10.3354/esr01089.
221. Shapiro, J.T., Monadjem, A., Röder, T. & McCleery, R.A. 2020. Response of bat activity to land cover and land use in savannas is scale-, season-, and guild-specific. *Biological Conservation*, **241**, 108245, 1-11. doi:10.1016/j.biocon.2019.108245.
222. Shapiro, J.T., Sovie, A.R., Faller, C.R., Monadjem, A., Fletcher, R. J. & McCleery, R. A. 2020. Ebola spillover correlates with bat diversity. *European Journal of Wildlife Research*, **66(1)**, 12, 1-12. doi:10.1007/s10344-019-1346-7.
223. Shi, L., Nicolson, S.W., Yang, Y., Wu, J., Yan, S. & Wu, Z. 2020. Drinking made easier: Honey bee tongues dip faster into warmer and/or less viscous artificial nectar. *Journal of Experimental Biology*, **223**, jeb229799, 1-6. doi:10.1242/jeb.229799.
224. Shivambu, C. T., Shivambu, N., Nelufule, T., Moshobane, M. C., Zungu, M. M. & Downs, C. T. 2020. Numbers of invasive house sparrows *Passer domesticus* in a rural landscape of Limpopo Province, South Africa. *Ostrich*, **91(3)**, 252-259. doi:10.2989/00306525.2020.1789771.
225. Shivambu, C.T., Shivambu, N., Lyle, R., Jacobs A., Kumschick, S., Foord, S.H. & Robertson, M.P. 2020. Tarantulas (Araneae: Theraphosidae) in the pet trade in South Africa. *African Zoology*, **55(4)**, 323–336. doi:10.1080/15627020.2020.1823879.
226. Siozios, S., Massa, A., Parr, C. L., Verspoor, R. L. & Hurst, G. D. D. 2020. DNA barcoding reveals incorrect labelling of insects sold as food in the UK. *PeerJ*, **8**, e8496, 1-12. doi:10.7717/peerj.8496.
227. Sitters, J., Wubs, E.R.J., Bakker, E.S., Crowther, T.W., Adler, P.B., Bagchi, S., Bakker, J.D., Biederman, L., Borer, E.T., Cleland, E.E., Eisenbauer, N., Firn, J., Gherardi, L., Hagenah, N., Hautier, Y., Hobbie, S. E., Knops, J.M.H., MacDougall, A.S., McCulley, R.L., Moore, J.L., Mortensen, B., Peri, P.L., Prober, S.M., Riggs, C., Risch, A.C., Schuetz, M., Seabloom, E.W., Siebert, J., Stevens, C.J. & Veen, G.F. 2020. Nutrient availability controls the impact of mammalian herbivores on soil carbon and nitrogen pools in grasslands. *Global Change Biology*, **26(4)**, 2060-2071. doi:10.1111/gcb.15023.
228. Skorupskaitė, K., George, J.T., Veldhuis, J.D., Millar, R.P. & Anderson, R.A. 2020. Kisspeptin and neurokinin B interactions in modulating gonadotropin secretion in women with polycystic ovary

- syndrome. *Human Reproduction (Oxford, England)*, **35(6)**, 1421-1431. doi:10.1093/humrep/deaa104.
229. Slippers, B, Hurley, B.P. & Allison, J. 2020. Harnessing the potential of Precision Pest Management in plantation forests. *Southern Forests*, **82(3)**, 197-201. doi:10.2989/20702620.2020.1813651.
 230. Somers, M.J., Walters, M., Measey, J., Maartin Strauss, W., Turner, A.A., Venter, J.A., . . . Moodley, Y. 2020. The implications of the reclassification of South African wildlife species as farm animals. *South African Journal of Science*, **116(1/2)**, 1-2. doi:10.17159/sajs.2020/7724.
 231. Sota, T., Hori, M., Scholtz, C., Karagyan, G., Liang, H-B., Ikeda, H. & Takami, Y. 2020. The origin of the giant ground beetle *Aplothorax burchelli* on St Helena Island. *Biological Journal of the Linnean Society*, **131(1)**, 50-60. doi:10.1093/biolinnean/blaa093/5879564.
 232. Stainback, G.A, Lai, J.H., Pienaar, E.F., Adam, D.C., Wiederholt, R. & Vorseth, C. 2020. Public preferences for ecological indicators used in everglades restoration. *PLoS ONE*, **15(6)**, e0234051, 1-23. doi:10.1371/journal.pone.0234051.
 233. Stalmans, M., Botha, A., Scott, T., Kaltenecker, G., & Monadjem, A. 2020. Marabou stork *Leptoptilos crumenifer* breeding in the greater Gorongosa landscape, Mozambique. *Ostrich*, **91(4)**, 338-342. doi:10.2989/00306525.2020.1831641.
 234. Stears, K., Schmitt, M.H., Wilmers, C.C. & Shrader, A.M. 2020. Mixed-species herding levels the landscape of fear. *Proceedings of the Royal Society B: Biological Sciences*, **287**, 20192555, 1-9. doi:10.1098/rspb.2019.2555.
 235. Stears, K. & Shrader, A.M. 2020. Coexistence between wildlife and livestock is contingent on cattle density and season but not differences in body size. *PLoS ONE*, **15**, e0236895, 1-17. doi:10.1371/journal.pone.0236895.
 236. Strampelli, P., Andresen, L., Everatt, K.T., Somers, M.J. & Rowcliffe, J.M. 2020. Leopard *Panthera pardus* density in southern Mozambique: Evidence from spatially explicit capture-recapture in Xonghile Game Reserve. *Oryx*, **54(3)**, 405-411. doi:10.1017/S0030605318000121.
 237. Strandburg-Peshkin, A., Clutton-Brock, T. & Manser, M.B. 2020. Burrow usage patterns and decision-making in meerkat groups. *Behavioral Ecology*, **31(2)**, 292–302. doi:10.1093/beheco/arz190.
 238. Sweeney, J., Hughes, C., Webster, V., Kostanowicz, C., Webster, R., Mayo, P. & Allison, J.D. 2020. Impact of horizontal edge–interior and vertical canopy–understory gradients on the abundance and diversity of bark and woodboring beetles in survey traps. *Insects*, **11(9)**, 573, 1-23. doi:10.3390/insects11090573.
 239. Szentiványi, T., Markotter, W., Dietrich, M., Clément, L., Ançay, L., Brun, L., Genzoni, E., Kearney, T., Seamark, E., Estók, P. & Christe, P. 2020. Host conservation through their parasites: Molecular surveillance of vector-borne microorganisms in bats using ectoparasitic bat flies. *Parasite*, **27**, 72, 1-10. doi:10.1051/parasite/2020069.
 240. Szott, I.D., Pretorius, Y., Ganswindt, A. & Koyama, N.F. 2020. Physiological stress response of African elephants to wildlife tourism in Madikwe Game Reserve, South Africa. *Wildlife Research*, **47(1)**, 34-43. doi:10.1071/WR19045.
 241. Szott, I.D., Pretorius, Y., Ganswindt, A. & Koyama, N.F. 2020. Normalized difference vegetation index, temperature and age affect faecal thyroid hormone concentrations in free-ranging African elephants. *Conservation Physiology*, **8(1)**, 1-13. doi:10.1093/conphys/coaa010.
 242. Taylor, W.A., Lindsey, P.A., Nicholson, S.K., Relton, C., & Davies-Mostert, H.T. 2020. Jobs, game meat and profits: The benefits of wildlife ranching on marginal lands in South Africa. *Biological Conservation*, **245**, 108561, 1-11. doi:10.1016/j.biocon.2020.108561.
 243. Thorley, J., Duncan, C., Sharp, S. P., Gaynor, D., Manser, M. B., & Clutton-Brock, T. (2020). Sex-independent senescence in a cooperatively breeding mammal. *Journal of Animal Ecology*, **89(4)**, 1080-1093. doi:10.1111/1365-2656.13173.

244. Thornley, R., Spencer, M., Zitzer, H. R. & Parr, C.L. 2020. Woody vegetation damage by the African elephant during severe drought at Pongola Game Reserve, South Africa. *African Journal of Ecology*, **58(4)**, 658-673. doi:10.1111/aje.12736.
245. Toni, P., Gall, G.E.C., Clutton-Brock, T.H. & Manser, M. B. 2020. Signalling adjustments to direct and indirect environmental effects on signal perception in meerkats. *PLoS ONE*, **15(8)**, e0238313, 1-14. doi:10.1371/journal.pone.0238313.
246. Toukem, N.K., Yusuf, A.A., Dubois, T., Abdel-Rahman, E.M., Adan, M.S. & Mohamed, S.A. 2020. Landscape vegetation productivity influences population dynamics of key pests in small avocado farms in Kenya. *Insects*, **11**, 424, 1-14. doi:10.3390/insects11070424.
247. Usman, H.S. & Yusuf, A.A. 2020. Legislation and legal framework for sustainable edible insects use in Nigeria. *International Journal of Tropical Insect Science-Special Issue on Edible Insects*, **2020**. doi:10.1007/s42690-020-00291-9
248. Van de Ven, T.M.F.N., Fuller, A. & Clutton-Brock, T.H. 2020. Effects of climate change on pup growth and survival in a cooperative mammal, the meerkat. *Functional Ecology*, **34(1)**, 194-202. doi:10.1111/1365-2435.13468.
249. van de Ven, T.M.F.N., McKechnie, A.E., Er, S. & Cunningham, S.J. 2020. High temperatures are associated with substantial reductions in breeding success and offspring quality in an arid-zone bird. *Oecologia*, **193(1)**, 225-235. doi:10.1007/s00442-020-04644-6.
250. Van der Merwe, H., Van Rooyen, N., Bezuidenhout, H., Bothma, J.duP. & Van Rooyen, M.W. 2020. Woody vegetation change over more than 30 years in the interior duneveld of the Kalahari Gemsbok National Park. *Bothalia*, **50(1)**, a2, 1-9. doi:10.38201/btha.abc.v50.i1.2.
251. Van der Waals, J.E. & Krüger K. 2020. Emerging potato pathogens affecting food security in southern Africa: Recent research. *South African Journal of Science*, **116(11/12)**, Art. #8055, 1-7. doi:10.17159/sajs.2020/8055.
252. van Velden, J.L., Wilson, K., Lindsey, P.A., McCallum, H., Moyo, B.H.Z. & Biggs, D. 2020. Bushmeat hunting and consumption is a pervasive issue in African savannahs: Insights from four protected areas in Malawi. *Biodiversity and Conservation*, **29(4)**, 1443-1464. doi:10.1007/s10531-020-01944-4.
253. Vargas-Fonseca, O.A., Kirkman, S.P., Oosthuizen, C.W., Bouveroux, T., Cockcroft, V., Conry, D.S. & Pistorius, P.A. 2020. Abundance of indo-pacific bottlenose dolphins (*Tursiops aduncus*) along the south coast of South Africa. *PLoS ONE*, **15(10)**, e0227085, 1-18. doi:10.1371/journal.pone.0227085.
254. Verspoor, R.L., Soglo, M., Adeoti, R., Djouaka, R., Edwards, S., Fristedt, R., Langton, M., Moriana, R., Osborne, M., Parr, C.L., Powell, K., Hurst, G.D.D. & Landberg, R. 2020. Mineral analysis reveals extreme manganese concentrations in wild harvested and commercially available edible termites. *Scientific Reports*, **10(1)**, 6146, 1-9. doi:10.1038/s41598-020-63157-7.
255. Vitet, C., Duncan, P., Gimenez, O., Mabika, C. & Chamaillé-Jammes, S. 2020. Plains zebras bring evidence that dilution and detection effects may not always matter behaviorally and demographically. *Ecosphere*, **11(11)**, e03288, 1-15. doi:10.1002/ecs2.3288.
256. Walters, A., Hindell, M., Goebel, M.E., Bester, M.N., Trathan, P.N., Oosthuizen, W.C. & Lea, M. 2020. Southern Ocean isoscapes derived from a wide-ranging circumpolar marine predator, the Antarctic fur seal. *Ecological Indicators*, **118**, 106694, 1-10. doi:10.1016/j.ecolind.2020.106694.
257. Wondafrash, M., Slippers, B., Nambazimana, A., Kayumba. I., Nibouche, S., van der Lingen, S., Asfaw, B.A., Jenya, H., Mutitu, E.K., Makowe, I.A., Chungu, D., Kiwuso, P., Kulimushi, E., Razafindrakotomamonjy, A., Bosu, P.P., Sookar, P. & Hurley BP. 2020. Distribution and genetic diversity of five invasive pests of *Eucalyptus* in sub-Saharan Africa. *Biological Invasions*, **22**, 2205–2221. doi.org/10.1007/s10530-020-02250-4.

258. Ward, D., Schmitt, M.H., & Shrader, A.M. 2020. Are there phylogenetic differences in salivary tannin-binding proteins between browsers and grazers, and ruminants and hind-gut fermenters? *Ecology and Evolution*, **10**, 10426-10439. doi:10.1002/ece3.6698.
259. Waterman, J.M. & Mai, M. 2020. Eavesdropping of an African ground squirrel on the heterospecific alarm calls of a noisy ground-nesting bird. *Ethology*, **126**, 1122-1130. doi:10.1111/eth.13092.
260. Wei, W., He, Y., Zheng, Q., He, Y. & Oosthuizen M.K. 2020. A comparison of density estimation methods in plateau pika populations in an alpine meadow ecosystem. *Journal of Mammalogy*, **101**, 1091-1096. doi:10.1093/jmammal/gyaa049.
261. Wei, W., Zheng, Q., Tang, Z. & Oosthuizen, M.K. 2020. Risk assessment in the plateau pika (*Ochotona curzoniae*): intensity of behavioral response differs with predator species. *BMC Ecology*, **20(1)**, 41, 1-8. doi:10.1186/s12898-020-00309-3.
262. Weier, S.M., Keith, M., Neef, G.G., Parker, D.M. & Taylor, P.J. 2020. Bat species richness and community composition along a mega-transect in the Okavango River Basin. *Diversity*, **12(5)**, 188, 1-15. doi:10.3390/D12050188.
263. Weise, F.J., Tomeletso, M., Stein, A.B., Somers, M.J. & Hayward, M.W. 2020. Lions *Panthera leo* prefer killing certain cattle *Bos taurus* types. *Animals*, **10(4)**, 692, 1-12. doi:10.3390/ani10040692.
264. Wernecke, B., Millar, D.A., Walters, M., Ganswindt, A., Dziba, L. & Wright, C.Y. 2020. 'Preventing the next pandemic' - A 2020 UNEP Frontiers Series Report on zoonotic diseases with reflections for South Africa. *South African Journal of Science*, **116(7/8)**, 1-4. doi:10.17159/sajs.2020/8531.
265. Westbury, M.V., Hartmann, S., Barlow, A., Preick, M., Ridush, B., Nagel, D., . . . Wiesel, I. ... Hofreiter, M. 2020. Hyena paleogenomes reveal a complex evolutionary history of cross-continental gene flow between spotted and cave hyena. *Science Advances*, **6(11)**, eaay0456, 1-11. doi:10.1126/sciadv.aay0456.
266. Wielgus, E., Cornélis, D., de Garine-Wichatitsky, M., Cain, B., Fritz, H., Miguel, E., Valls-Fox, H., Caron, A., & Chamaillé-Jammes, S. 2020. Are fission-fusion dynamics consistent among populations? A large-scale study with Cape buffalo. *Ecology & Evolution*, **10**, 9240-9256. doi:10.1002/ece3.6608.
267. Wigley, B.J., Charles-Dominique, T., Hempson, G.P., Stevens, N., Tebeest, M., Archibald, S., Bond, W.J., Bunney, K., Coetsee, C., Donaldson, J., Fidelis, A., Gao, X., Gignoux, J., Lehmann, C., Massad, T.J., Midgley, J.J., Millan, M., Schwilk, D., Siebert, F., Solofondranohatra, C., Staver, A.C., Zhou, Y. & Kruger, L.M. 2020. A handbook for the standardised sampling of plant functional traits in disturbance-prone ecosystems, with a focus on open ecosystems. *Australian Journal of Botany*, **68(8)**, 473-531. doi:10.1071/BT20048.
268. Wilson, J.R.U., Bacher S., Daehler C.C., Groom, Q.J., Kumschick, S., Lockwood, J.L., Robinson, T.B., Zengeya, T.A., Richardson, D.M. 2020. Frameworks used in invasion science: Progress and prospects. *NeoBiota*, **62**, 1–30. doi:10.3897/neobiota.62.58738.
269. Wilson, J.R.U., Datta, A., Hirsch, H., Keet, J-H., Mbobo, T., Nkuna, K.V., Nsikani, M.M., Pyšek, P., Richardson, D.M., Zengeya, T.A. & Kumschick, S. 2020. Is invasion science moving towards agreed standards? The influence of selected frameworks. *NeoBiota*, **62**, 569–589. doi:10.3897/neobiota.62.53243.
270. Wilson, R.P., Williams, H.J., Holton, M.D., di Virgilio, A., Börger, L., Potts, J.R., Gunner, R., Arkwright, A., Fahlman, A., Bennett, N.C., Alagaili, A., Cole, N.C., Duarte, C.M. & Scantlebury, D.M. 2020. An “orientation sphere” visualization for examining animal head movements. *Ecology and Evolution*, **10(10)**, 4291-4302. doi:10.1002/ece3.6197.
271. Wingfield, M.J., Hurley, B., Wingfield, B. & Slippers, B. 2020. Tree health in South Africa: Retrospect and prospect. *South African Journal of Science*, **116(11/12)**, Art. #8038, 1-8. doi:10.17159/sajs.2020/8038.

272. Winterton, D.J., Van Wilgen, N.J., & Venter, J.A. 2020. Investigating the effects of management practice on mammalian co-occurrence along the West Coast of South Africa. *PeerJ*, **8**, e8184, 1-27. doi:10.7717/peerj.8184.
273. Wolf, B.O., McKechnie, A.E., Schmitt, C.J., Czenze, Z.J., Johnson, A.B. and Witt, C.C. 2020. Extreme and variable torpor among high-elevation Andean hummingbird species. *Biology Letters*, **16**, 20200428, 1-5. doi: 10.1098/rsbl.2020.0428.
274. Wolf, T.E., Lazarus, D.D., Opperman, P., Heath, L., Ganswindt, A. & Fosgate, G. T. 2020. Impact of foot-and-mouth-disease on goat behaviour after experimental infection with serotype SAT1 virus. *Preventive Veterinary Medicine*, **176**, 104912, 1-8. doi:10.1016/j.prevetmed.2020.104912.
275. Wolf, T.E., Mangwiro, N., Fasina, F.O. & Ganswindt, A. 2020. Non-invasive monitoring of adrenocortical function in female domestic pigs using saliva and faeces as sample matrices. *PLoS ONE*, **15(6)**, e0234971, 1-12. doi:10.1371/journal.pone.0234971.
276. Wondafrash, M., Slippers, B., Nambazimana, A., Kayumba, I., Nibouche, S., van der Lingen, S., . . . Hurley, B.P. 2020. Distribution and genetic diversity of five invasive pests of *Eucalyptus* in sub-Saharan Africa. *Biological Invasions*, **22(7)**, 2205-2221. doi:10.1007/s10530-020-02250-4.
277. Young, C., Fritz, H., Smithwick, E.A.H., & Venter, J.A. 2020. Patch-scale selection patterns of grazing herbivores in the central basalt plains of Kruger National Park. *African Journal of Range and Forage Science*, **37(3)**, 199-213. doi:10.2989/10220119.2020.1733084.
278. Young, C., Fritz, H., Smithwick, E.A.H., & Venter, J.A. 2020. The landscape-scale drivers of herbivore assemblage distribution on the central basalt plains of Kruger National Park. *Journal of Tropical Ecology*, **36(1)**, 13-28. doi:10.1017/S0266467419000312.
279. Young, M.M.I., Winters, S., Young, C., Weiß, B.M., Troscianko, J., Ganswindt, A., . . . Widdig, A. 2020. Male characteristics as predictors of genital color and display variation in vervet monkeys. *Behavioral Ecology and Sociobiology*, **74(2)**, 14, 1-14. doi:10.1007/s00265-019-2787-4.
280. Yusuf, A.A., Frank, E.T., Fombong, A.T., Pirk, C.W.W., Crewe, R.M., Schmitt, T., Strube-Bloss, M., Gordon, I. & Torto, B. 2020. Odor-Mediated Group Organization and Coordination in the termite-raiding ant *Megaponera analis* (Mayr). *Chemical Senses*, **45**, 635-644. doi:10.1093/chemse/bjaa058.