SCIENCE COMMUNICATIONS

No. 48 (January 2021)

Biodiversity and Conservation Science Mission: The provision of up-to-date and scientifically sound information to uphold effective evidence-based conservation of biodiversity and sustainable natural resource management in Western Australia

Science Communications lists titles of publications, reports etc prepared by staff of Biodiversity Science and Conservation. This issue is for the period August 2020-January 2021.

If you require a copy of a **submitted** paper please contact the author. For nearly all other titles a PDF link is included. Any problems with access please contact library@dbca.wa.gov.au

Margaret Byrne Executive Director

Journal Publications

Bieroza M, Dupas R, Glendell M, McGrath G, Mellander P-E (2020). Hydrological and chemical controls on nutrient and contaminant loss to water in agricultural landscapes. Water 12: 3379 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/082132/082132-12.001.pdf

Byrne M, Murphy DJ (2020). The origins and evolutionary history of xerophytic vegetation in Australia. Australian Journal of Botany 68, 195-207 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081594/081594-68.002.pdf

Cowan M, Blythman M, Angus J, Gibson L (2020). Relocation and post-release monitoring of western grey kangaroos (*Macropus fuliginosus*) displaced from an urban development site. *Animals* 10: 1914 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081265/081265-10.003.pdf

Crayn D, Lum M, Cantrill D, Syme A, Byrne M, Simpson L (2020). Genomics for Australian Plants consortium update. Australasian Systematic Botany Society Newsletter 184, 8-9 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081363/081363-184.001.pdf

Cross SL, Craig MD, Tomlinson S, Dixon KW, Bateman PW (2020). Using monitors to monitor ecological restoration: presence may not indicate persistence. Austral Ecology 45, 921-932 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080520/080520-45.001.pdf

Davis RW, Hislop M (2020). Acacia lachnocarpa (Fabaceae), a new, geographically restricted wattle from the Coolgardie bioregion of Western Australia. Nuytsia 31, 213-216 https://library.dbca.wa.gov.au/static/Journals/080057/080057-31.039.pdf

Delnevo N, van Etten EJ, Byrne M, Petraglia A, Carbognani M, Stock WD (2020). Habitat fragmentation restricts insect pollinators and pollen quality in a threatened Proteaceae species. Biological Conservation 252: 108824 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080467/080467-252.001.pdf

Dziminski MA, Carpenter FM, Morris F (2021). Monitoring the abundance of wild and reintroduced bilby populations. *Journal of Wildlife Management* **85**, 240-253 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081019/081019-85.001.pdf

Hickey SM, Radford B, Roelfsema CM, Joyce KE, Wilson SK, Marrable D et al. [Holmes TH, Kendrick AJ, Murray K] (2020). Between a reef and a hard place: capacity to map the next coral reef catastrophe. Frontiers in Marine Science 7: 544290 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081151/081151-07.002.pdf

Ingram BA, McCowan C, Bradley T, Pinder AM (2020). First record of an aquatic oligochaete infesting fish. International Journal for Parasitology: Parasites and Wildlife 13, 248-251 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081290/081290-13.001.pdf

Johansen MP, Child DP, Hotchkis MAC, Johansen A, Thiruvoth S, Whiting SD (2020). Radionuclides in sea turtles at the Montebello Islands former nuclear test sites: current and historical dose rates for adults and embryos. Marine Pollution Bulletin 158: 111390 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080142/080142-158.001.pdf

Jonsen ID, Patterson TA, Costa DP, Doherty PD, Godley BJ, Grecian WJ et al. [Whiting S] (2020). A continuous-time state-space model for rapid quality-control of Argos locations from animal-borne tags. Movement Ecology 8: 31 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081457/081457-08.002.pdf

Kallies A, Edwards ED, Williams AAE (2020). New and little known sun-moth species from Australia (Lepidoptera: Castniidae). Zootaxa 4895, 151-195 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081255/081255-4895.001.pdf

Langille BL, Hyde J, Saint KM, Bradford TM, Stringer DN, Tierney SM et al. (2021). Evidence for speciation underground in diving beetles (Dytiscidae) from a subterranean archipelago. *Evolution* 75, 166-175 https://library.dbca.wa.gov.au/static/5taffOnly/Journals/080087/080087-75.001.pdf

(Continued from page 1)

Mayne B, Tucker AD, Berry O, Jarman S (2020). Lifespan estimation in marine turtles using genomic promoter CpG density. PLoS One 15: e0236888 https://library.dbca.wa.gov.au/static/Journals/080292/080292-15.002.pdf

McKenzie NL, Bullen RD, Pennay M (2020). Echolocation and foraging ecology of the bristle-faced free-tailed bat, *Setirostris eleryi*, in central Australia. *Australian Mammalogy* **42**, 302-311 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080282/080282-42.004.pdf

Millar MA, Mezgebe K, Hagazi N, Cunningham P, Byrne M (2020). Genetic assignment, diversity and divergence of naturalised Acacia saligna (Fabaceae) in Tigray, Ethiopia. Tree Genetics and Genomes 16: 54 https://library.dbca.wa.gov.au/static/5taffOnly/Journals/081675/081675-16.001.pdf

Moir ML, Brennan KEC (2020). Incorporating coextinction in threat assessments and policy will rapidly improve the accuracy of threatened species lists. Biological Conservation 249: 108715 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080467/080467-249.001.pdf

Ottewell K, Thavornkanlapachai R, McArthur S, Spencer PBS, Tedeschi J, Durrant B et al. [Byrne M] (2020). Development and optimisation of molecular assays for microsatellite genotyping and molecular sexing of non-invasive samples of the ghost bat, Macroderma gigas. Molecular Biology Reports 47, 5635-5641 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081541/081541-47.001.pdf

Pacioni C, Atkinson A, Wayne AF, Maxwell MA, Ward CG, Spencer PBS (2020). Spatially sensitive harvest design can minimize genetic relatedness and enhance genetic outcomes in translocation programmes. Journal of Zoology 312, 32-42 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080558/080558-312.001.pdf

Paianoa MO, Huisman JM, Cabrera FP, Spalding HL, Kosaki RK, Sherwood AR (2020). Haraldiophyllum hawaiiensis sp. nov. (Delesseriaceae, Rhodophyta): a new mesophotic genus record for the Hawaiian Islands. Algae 35, 337-347 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/082133/082133-35.001.pdf

Penton CE, Woolley L-A, Radford IJ, Murphy BP (2020). Overlapping den tree selection by three declining arboreal mammal species in an Australian tropical savanna. Journal of Mammalogy 101, 1165-1176 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080284/080284-101.001.pdf

Schramm KD, Marnane MJ, Elsdon TS, Jones C, Saunders BJ, Goetze JS et al. (2020). A comparison of stereo-BRUVs and stereo-ROV techniques for sampling shallow water fish communities on and off pipelines. Marine Environmental Research 162: 105198 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081561/081561-162.001.pdf

Sherwood AR, Huisman JM, Paianoa MO, Williams TM, Kosaki RK, Smith CM et al. (2020). Taxonomic determination of the cryptogenic red alga, Chondria tumulosa sp. nov., (Rhodomelaceae, Rhodophyta) from Papahânaumokuâkea Marine National Monument, Hawai'i, USA: a new species displaying invasive characteristics. PLoS One 15: e0234358 https://library.dbca.wa.gov.au/static/Journals/080292/080292-15.001.pdf

Stubbs JL, Marn N, Vanderklift MA, Fossette S, Mitchell NJ (2020). Simulated growth and reproduction of green turtles (*Chelonia mydas*) under climate change and marine heatwave scenarios. *Ecological Modelling* 431: 109185 https://Journals/080419/080419-431.001.pdf

Tan YM, Dalby O, Kendrick GA, Statton J, Sinclair EA, Fraser MW et al. (2020). Seagrass restoration is possible: insights and lessons from Australia and New Zealand. Frontiers in Marine Science 7: 617 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081151/081151-07.001.pdf

Thavornkanlapachai R, Levy E, Li Y, Cooper SJB, Byrne M, Ottewell K (2021). Disentangling the genetic relationships of three closely-related bandicoot species across southern and Western Australia. Diversity 13: 2 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081139/081139-13.001.pdf

Vanderklift MA, Pillans RD, Robson NA, Skrzypek G, Stubbs JL, Tucker AD (2020). Comparisons of stable isotope composition among tissues of green turtles. Rapid Communications in Mass Spectrometry 34: e8839 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081571/081571-34.001.pdf

White DJ, Ottewell K, Spencer PBS, Smith M, Short J, Sims C et al. (2020). Genetic consequences of multiple translocations of the banded hare-wallaby in Western Australia. Diversity 12: 448 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081139/081139-12.001.pdf

Wilson TC, Hislop M (2020). Microcorys elatoides (Lamiaceae), a new species from the Coolgardie bioregion of Western Australia. Nuytsia 31, 243-248 https://library.dbca.wa.gov.au/static/Journals/080057/080057-31.045.pdf

Abstracts

Beca G, Valentine LE, Hopkins AJM, Erickson TE, Power MWP, Beecham BC et al. (2020). The role of woylies as potential agents in restoring degraded landscapes. (ABSTRACT) In Australasian Wildlife Management Society 33rd Annual Conference: 8-10 December 2020, Online Australia: Book of Abstracts p. 21 https://library.dbca.wa.gov.au/static/StaffOnly/072504.002.pdf

(Continued from page 2)

Cowen 5, Smith M, McArthur 5, Ottewell K (2020). Scats all you got? Developing faecal monitoring techniques to evaluate translocation success of trapshy mammal species. (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 12 https://library.dbca.wa.gov.au/static/StaffOnly/072502.002.pdf

Crawford A (2020). Seed conservation in Western Australia. PowerPoint presentation at Morley Wider Visions Club, 30 July 2020. 41 p. https://library.dbca.wa.gov.au/static/FullTextFiles/C20363.pdf

Hernandez-Santin L, Henderson M, Molloy SW, Dunlop JA, Davis RA (2020). Spatial ecology of the northern quoll in the Pilbara. (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 25 https://library.dbca.wa.gov.au/static/ StaffOnly/072502.006.pdf

Hyde J (2020). Using environmental DNA to conduct monitoring of rakali (Hydromys chrysogaster) in the SW of Western Australia. (ABSTRACT) In AFSS 2020 Delegate Handbook, 8-10 December 2020 p. 24 https://library.dbca.wa.gov.au/static/StaffOnly/072503.001.pdf

McGrath G (2020). Predicting flow and quality variability in growing urban drainage. Abstract of presentation at Hydropolis 2020: water sensitive stormwater is business as usual: what is next for WA?, November 10-November 11, Maylands. p. 1 https://library.dbca.wa.gov.au/static/FullTextFiles/C20367.pdf

McGrath G (2020). Predicting flow and quality variability in growing urban drainage for managing impacts on urban ecosystems? PowerPoint presentation at Hydropolis 2020: water sensitive stormwater is business as usual: what is next for WA?, November 10-November 11, Maylands. 24 p. https://library.dbca.wa.gov.au/static/FullTextFiles/C20367.a.pdf

Palmer B, Beca G, Valentine L, Erickson T, Hobbs R (2020). Investigations into the role of Australian omnivorous marsupials as seed dispersers. (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 29 https://library.dbca.wa.gov.au/static/StaffOnly/072502.007.pdf

Palmer B, Valentine L, Lohr C, Hobbs R (2020). Soil disturbance by reintroduced digging mammals increases non-native seedling abundance. (ABSTRACT) In Australasian Wildlife Management Society 33rd Annual Conference: 8-10 December 2020, Online Australia: Book of Abstracts p. 18 https://library.dbca.wa.gov.au/static/StaffOnly/072504.001.pdf

Penton C, von Takach B, Davies H, Radford I, Woolley L-A, Murphy B (2020). The last *Conilurus*: insights into the drastic decline and future of the brushtailed rabbit-rat (*Conilurus pencillatus*). (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 3 https://library.dbca.wa.gov.au/static/ StaffOnly/072502.001.pdf

Rayner K, Sims C, Knox F, Cowen S (2020). The 'coot of the problem: developing an effective method of radio-tracking Shark Bay bandicoots Perameles bougainville. (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 13 https://library.dbca.wa.gov.au/static/StaffOnly/072502.003.pdf

Rick K, Mitchell N, Ottewell K, Travouillon KJ (2020). Understanding patterns of phenotypic and genetic divergence in island mammals to improve conservation outcomes. (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 24 https://library.dbca.wa.gov.au/static/StaffOnly/072502.004.pdf

Thavornkanlapachai R, Armstrong K, Hanrahan N, Ottewell K (2020). A new diagnostic tool for non-invasive genetic monitoring of the ghost bat, Macroderma gigas: custom-designed SNP arrays using the Agena MassArray platform. (ABSTRACT) In Australian Mammal Society Online Conference, Lismore 2020: Book of Abstracts p. 24 https://library.dbca.wa.gov.au/static/StaffOnly/072502.005.pdf

Reports/Chapters

Blythman M, Lohr C, Sims C, Morris K (2020). Translocation of golden bandicoots, Isoodon auratus barrowensis, from a fenced enclosure to unfenced managed land on Matuwa (formally Lorna Glen) in September 2015: final report. Department of Biodiversity, Conservation and Attractions, Woodvale, WA. 43 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072486.pdf

Cale DJ (2020). Little Darkin Swamp aquatic invertebrate survey. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 28 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072488.pdf

Chambers B, Dunlop J, Wayne A (2020). Felixer™ grooming trap non-target safety trial: numbats, July 2020. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 8 p. https://library.dbca.wa.gov.au/static/
FullTextFiles/072482.pdf

Cowen S, Rayner K, Sims C, Friend T, Knox F, Ottewell K et al. [Gibson L] (2020). Dirk Hartog Island National Park Ecological Restoration Project: stage two, year two, translocation and monitoring report. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 64 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072485.pdf

(Continued from page 3)

Dunlop J, Davie H, Nelson J, Read J (2020). Felixer[™] feral cat grooming trap trials in the presence of northern quolls. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 10 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072483.pdf

Keighery B, Keighery G (2020). The vegetation and flora of the Goss Ave Bushland: a report for the City of South Perth. Wildflower Society of Western Australia, Floreat. 29 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072498.pdf

Keighery BJ, Keighery GJ, Gunness AG, Longman VM, Clarke KA (2020). Wildflower Society of Western Australia, Bushland Plant Survey Program, wheatbelt surveys. Wildflower Society of Western Australia, Floreat Park. 95 p. https://library.dbca.wa.gov.au/static/FullTextFiles/631208/

Keighery BJ, Keighery GJ, Longman VM, Clarke KA (2020). Wildflower Society of Western Australia, Bushland Plant Survey Program, Swan Coastal Plain surveys. Wildflower Society of Western Australia, Floreat Park. 94 p. https://library.dbca.wa.gov.au/static/FullTextFiles/631209/

Pinder A, Cale D, Lewis L (2020). Aquatic invertebrate diversity of Lake McLarty in 2019. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 25 p. https://library.dbca.wa.gov.au/static/
FullTextFiles/072489.pdf

Preece N, Eyre T, Sparrow B, Horton B, Foster A, Wills T et al. [van Leeuwen S] (2020). Taking our environmental pulse: a strategy for monitoring ecosystems in Australia. Ecosystem Science Council, Sydney. 42 p. https://library.dbca.wa.gov.au/static/FullTextFiles/926666.pdf

Rutherford J (2020). Petrophysics of peat in the Muir-Byenup wetlands: why they dry, generate acid and burn (part 1). Department of Biodiversity, Conservation and Attractions, Kensington, WA. 104 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072497.pdf

van Dongen R (2020). Dirk Hartog Island National Park Ecological Restoration Project: vegetation restoration: remote sensing monitoring program report, 2019/20. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 90 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072490.pdf

van Dongen R (2020). Vegetation cover change assessment on Yarraloola and Red Hill: remote sensing monitoring program report, 2019. 61 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072487.pdf

van Dongen R, Huntley B, Zdunic K (2020). Bernier and Dorre Islands vegetation cover report, 2019. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 26 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072499.pdf

<u>Popular (Landscope, Newsletters,</u> Letters, etc.)

Abbott I (2020). Book review: Saving the Tasmanian Devil: Recovery Through Science-Based Management. Edited by Carolyn Hogg, Samantha Fox, David Pemberton and Katherine Belov 2019. CSIRO Publishing. Pacific Conservation Biology 26 p. 430 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080272/080272-26.007.pdf

Abbott I (2020). Book review: The future of the fringe: the crisis in peri-urban planning by Michael Buxton and Andrew Butt 2020. CSIRO Publishing, 184 pp.. Pacific Conservation Biology 26 p. 315 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080272/080272-26.006.pdf

Brown A (2020). Eremophilas of Western Australia. Australian Plants 30, 298-301 https:// library.dbca.wa.gov.au/static/StaffOnly/ Journals/080221/080221-30.002.pdf

Comer S, Thomas A, Ford S, Hill S (2020).
Department of Biodiversity, Conservation and Attractions (DBCA) western ground parrot spring update. Friends of the Western Ground Parrot Newsletter 87 p. 2 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081088/081088-87.001.pdf

Coote M (2020). Celebrating 30 years of Ramsar wetlands in Perth-Peel. Bushland News 115, 3-4 https://library.dbca.wa.gov.au/static/Journals/080662/080662-115.001.pdf

Cowen S, Sims C, Ottewell K (2020). Monitoring and translocation of banded and rufous hare-wallabies. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets DBCA Information Sheet 96/2020. 2 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-96.pdf

D'Cruz E (2020). Water quality: seawater temperature monitoring in Lalang-garram marine parks. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 2 p. https://library.dbca.wa.gov.au/static/
FullTextFiles/072480.pdf

D'Cruz E (2020). Water quality: seawater temperature monitoring in north Kimberley marine parks. Department of Biodiversity, Conservation and Attractions, Kensington, WA. 2 p. https://library.dbca.wa.gov.au/static/FullTextFiles/072481.pdf

Department of Primary Industries and Regional Development, Western Australia (2020). Freshwater pest: redclaw crayfish, *Cherax quadricarinatus*. (PAMPHLET) DPIRD, South Perth. 6 p. https://library.dbca.wa.gov.au/static/FullTextFiles/PAM04534.pdf

Dodd J, Rippey E, Harvey J (2020). Watching over Wadjemup: Rottnest Island's loyal volunteers. Landscope **36(2)**, 40-45 https://library.dbca.wa.gov.au/static/Journals/080052/080052-36.018.pdf

(Continued on page 5)

(Continued from page 4)

Dziminski M, Carpenter F (2021). Monitoring the abundance of greater bilbies. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets DBCA Information Sheet 102/2021 2 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-102.pdf

Huisman J (2020). Marmion Snorkel Trail. Landscope **36(2)**, 25-27 https://library.dbca.wa.gov.au/static/Journals/080052/080052-36.015.pdf

Huisman J (2020). My shots. *Underwater Photography* **116**, 75-76 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081855/081855-116.001.pdf

Keighery G, Keighery B (2020). Illusive illyarrie. Australasian Systematic Botany Society Newsletter 185, 56-57 https://library.dbca.wa.gov.au/static/ StaffOnly/Journals/081363/081363-185.002.pdf

Lindann K, Williams A (2020). Springtime butterflies around Perth: a photographic record of some urban bushland butterflies. Newsletter of the Western Australian Insect Study Society Oct., 8-10 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/080531/080531-2020.002.pdf

Lohr C, Algar D (2020). Managing feral cats in an arid landscape. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets
DBCA Information Sheet 99/2020 2 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-99.pdf

Maschinski J, Albrecht MA, Fant J, Monks L, Lange J, Coffey E et al. (2020). Rare plant reintroduction and other conservation translocations. Available at: https://academy.saveplants.org/best-practices/rare-plant-reintroduction-and-other-conservation-translocations 59 p. https://library.dbca.wa.gov.au/static/FullTextFiles/C20364.pdf

Miller B, Miller R (2020). Adding fuel to the fire: invasive grass management and fire in urban fragments. Landscope 36(1), 45-49 https://library.dbca.wa.gov.au/static/
Journals/080052/080052-36.009.pdf

Monks L, Coates D (2020). Fire a vital ingredient for the recovery of a critically endangered wattle. Science for Saving Species 16 p. 19 https://library.dbca.wa.gov.au/static/Journals/081085/081085-16.001.pdf

O'Connor K, Fossette-Halot S, Hampson H (2020). Yoshi's journey: one turtle, two countries, thousands of kilometres. Landscope **36(1)**, 19-21 https://library.dbca.wa.gov.au/static/Journals/080052/080052-36.003.pdf

Radford I, Corey B, Carnes K, Fairman R, Woolley LA (2020). Prescribed burning benefits threatened mammals in Kimberley tropical savannas. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets DBCA Information Sheet 98/2020. 3 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-98.pdf

Ritchie A, Svejcar L (2020). Banksia woodlands 30 years in review: research advances and priorities for a threatened ecological community. For People & Plants 111, 34-37 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081999/081999-111.001.pdf

Strydom S, Wilson S, Murray K (2020). Loss of seagrass driven by marine heatwave in Shark Bay Marine Park and world heritage area. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets DBCA Information Sheet 97/2020. 2 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-97.pdf

Svejcar L (2020). Grasses give a helping hand. For People & Plants 111, 38-41 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081999/081999-111.002.pdf

Tangney R, Merritt D, Miller B, Easton S (2020). Not too shallow, not too deep: the Goldilocks zone for seedling emergence in fire-prone ecosystems. For People & Plants 112, 25-28 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081999/081999-112.001.pdf

Trayler K, Hipsey M (2020). Understanding and predicting riparian decline: ecohydrology and hydroclimatological change. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets DBCA Information Sheet 101/2020 2 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-101.pdf

Trayler K, Hyndes G (2020). Investigating habitat values of seagrass, macroalgae and wrack in Swan Canning Riverpark. Available at https://www.dpaw.wa.gov.au/about-us/science-and-research/publications-resources/111-science-division-information-sheets DBCA Information Sheet 100/2020 2 p. https://library.dbca.wa.gov.au/static/Journals/080525/080525-100.pdf

Wege J (2020). A golden year for Nuytsia.

Australasian Systematic Botany Society Newsletter

185, 46-49 https://library.dbca.wa.gov.au/static/
StaffOnly/Journals/081363/081363-185.001.pdf

Wege J, Shepherd K (2020). A golden year for Nuytsia. Landscope **36(2)**, 18-22 https://library.dbca.wa.gov.au/static/Journals/080052/080052-36.014.pdf

Wege JA, Shepherd KA (2020). A golden year for Nuytsia, the journal of the Western Australian Herbarium. Research Matters: Newsletter of the Australian Flora Foundation 32, 2-8 https://library.dbca.wa.gov.au/static/StaffOnly/Journals/081674/081674-32.001.pdf

<u>Submitted</u>

Ahrens CW, Jordan R, Bragg J, Harrison PA, Hopley T, Bothwell H et al. [Byrne, M] (submitted). Regarding the f-word: the effects of data filtering on inferred genotype-environment associations. Molecular Ecology

(Continued on page 6)

(Continued from page 5)

Algar D, O'Donoghue M, Johnston M, Nickels D (submitted). A delayed-release lethal implant to aid retrieval of individual introduced predators in field studies. Wildlife Research

Anderson H, Richards B, Ross W, Palmer R (submitted). Feral cat (*Felis catus*) predation confirmed for Rothschild's rock-wallaby (*Petrogale rothschildi*) in the Pilbara. *Australian Mammalogy*

Berto B, Erickson TE, Ritchie AL (submitted). Flash flaming improves flow properties of Mediterranean grasses used for direct seeding. *Plants*

Bhandari SK, Veneklaas EJ, McCaw L, Mazanec R, Renton M (submitted). Predicting the effect of neighbour competition on individual tree growth in thinned and unthinned eucalypt forest. Forest Ecology and Management

Bhandari SK, Veneklaas EJ, McCaw L, Mazanec R, Whitford K, Renton M (submitted). Predicting individual tree growth in jarrah (*Eucalyptus marginata*) forest based on size and distance of neighbouring trees in thinned and non-thinned plots. *Ecological Modelling*

Bouchet PJ, Thiele D, Marley SA, Waples K, Weisenberger F, Balanggarra Rangers et al. [Raudino H] (submitted). Regional assessment of the conservation status of snubfin dolphins (*Orcaella heinsohni*) in northern Western Australia. Frontiers in Marine Science

Bougher NL (submitted). An observation of ants harvesting a fruit body of Amanita. Western Australian Naturalist

Braby MF, Williams MR, Douglas F, Beardsell C, Crosby DF (submitted). Long-term changes of a periurban butterfly assemblage over 80 years near Melbourne, Australia. Austral Entomology

Butcher R (submitted). Two new, orange-flowered Tephrosia (Fabaceae: Millettieae) species from the Kimberley region, in Western Australia's monsoon tropics. Australian Systematic Botany

Butcher R, Cowie I (submitted). Redefinition of Tephrosia supina (Fabaceae: Millettiae), a north-west Western Australian endemic, and description of two similar species. Australian Systematic Botany

Cabrera FP, Huisman JM, Spalding HL, Kosaki RK, Sherwood AR (submitted). Diversity of Kallymeniaceae (Gigartinales, Rhodophyta) associated with Hawaiian mesophotic reefs, with the description of Psaromenia laulamaula sp. nov. and Meredithia hawaiiensis sp. nov.. European Journal of Phycology

Chapman J, Zdunic K (submitted). Red Hill annual desktop fire regime monitoring, 2018

Chapman J, Zdunic K (submitted). Yarraloola annual desktop fire regime monitoring, 2019

Clementi GM, Bakker J, Flowers KI, Postaire BD, Babcock EA, Bond ME et al. [Goetze JS] (submitted). Moray eels are more common on coral reefs subject to higher human pressure in the greater Caribbean. iScience

Cochrane A, Barrett S (submitted). Plant regeneration from seeds in the southern Mediterranean regions under a changing climate. In Plant regeneration from seeds: a global warming perspective

Collett S, Crewe T, Radford IJ, Garnett S, Campbell H (submitted). Sympatric granivores adopt different foraging strategies to compensate for resource limitation. Functional Ecology

Cowan M, Dunlop J, Moore H (submitted). Northern quoll (Dasyurus hallucatus) home range synopsis

Cowen S, Payne W (submitted). Working smarter not harder: finding clues in poo. Wirruwana News

Crawford A (submitted). DBCA, Western Australian Seed Centre, Kensington. Australian Seed Bank Partnership annual report 2019-2020

Cvitanovic C, Mackay M, Kelly R, Wilson SK, Waples K, Nash KL et al. [Evans RD, Halford AR, Kendrick AJ, Robbins WD, Tucker AD] (submitted). Thirty critical research needs for managing an ecologically and culturally unique remote marine environment: the Kimberley region of Western Australia. Ocean and Coastal Management

Davis RW, Hammer TA (submitted). A key to the species of Swainsona (Fabaceae) in Western Australia and description of S. katjarra from the Little Sandy Desert region, Western Australia. Swainsona

Dekanová V, Venarsky MP, Bunn SE (submitted). Length-mass relationships of Australian aquatic invertebrates. *Austral Ecology*

Desbiens AA, Roff G, Robbins WD, Taylor BM, Castro-Sanguino C, Dempsey A et al. (submitted). Revisiting the paradigm of shark-driven trophic cascades in coral reef ecosystems. Ecology

Eggertsen M, Chacin DH, van Lier J, Eggertsen L, Fulton CJ, Wilson S et al. (submitted). Seascape configuration and fine-scale habitat complexity shape parrotfish distribution and function across a coral reef lagoon. Diversity

Elliott C, Commander L, Merino-Martin L, Golos P, Stevens J, Miller B (submitted). A multi-disciplinary approach to defining and achieving a vegetation richness and composition target in restoration of a semi-arid threatened plant community. Journal of Applied Ecology

Elliott C, Commander L, Williams M, Golos P (submitted). Seed movement at small scales impacts measures of vegetation restoration. Ecological Management and Restoration

Falster D, Gallagher R, Wenk E, Wright I, Indiarto D, Baxter C et al. (submitted). AusTraits: a curated plant trait database for the Australian flora. Scientific Data

Farr J, Wills A (submitted). Fire, silviculture, and ground-active macroinvertebrates in jarrah forest. Australian Forestry

(Continued from page 6)

Fleming PA, Crawford HM, Stobo-Wilson AM, Dundas SJ, Dawson SJ, Stuart J-M D et al. [Palmer R] (submitted). Temporal and spatial patterns in red fox diet across Australia. Biological Reviews

Fomichev CI, Macfarlane TD, Valiejo-Roman CM, Samigullin TH, Degtjareva GV, Briggs BG et al. (submitted). Two centuries from species discovery to diagnostic characters: molecular and morphological evidence for a narrower species concept in the widespread SW Australian Anarthria gracilis complex (Restionaceae s.l., Poales). PeerJ

Fossette S, Ferreira LC, Whiting SD, King J, Pendoley K, Shimada T et al. [Tucker AD] (submitted). Quantifying movement and distribution of the critically endangered hawksbill turtle in the eastern Indian Ocean. Global Ecology and Conservation

Fossette S, Loewenthal G, Peel L, Vitenbergs A, Hamel M, Douglas C et al. [Tucker T, Mayer F, Whiting S] (submitted). Using aerial photogrammetry to assess stock-wide marine turtle nesting distribution, abundance, and cumulative exposure to industrial activity. Remote Sensing

French B, Wilson S, Kendrick A, Rule M (submitted). The mesh size effect: counting long thin fish in seagrass. Biological Conservation

Gallagher RV, Allen S, Mackenzie B, Keith DA, Merow C, He K et al. [Gosper C, Yates C] (submitted). Impacts of the 2019-2020 megafire on Australian plant diversity. Diversity and Distributions

Gibbons KL, Dillon SJ (submitted). Paranotis halfordii (Rubiaceae: Spermacoceae), a new species from the Kimberley region of Western Australia, in a recently described Australian genus. Telopea

Gibson Vega A (submitted). Cryptic grasswrens. Wirruwana News

Gibson Vega A, Rayner K (submitted). The secret life of grasswrens. Landscope

Goetze J, Wilson S, Radford B, Fisher R, Langlois T, Monk J et al. [Holmes TH] (submitted). Increased connectivity potential and depth improves the effectiveness of no-take marine reserves. Global Change Biology

Goldsworthy SD, Shaughnessy PD, Mackay AI, Bailleul F, Holman D, Lowther A et al. [Waples K, Raudino H] (submitted). Species-wide assessment of the status and trends in pup abundance of the Australian sea lion, Neophoca cinerea. Endangered Species Research

Harvey ES, McLean DL, Goetze JS, Saunders BJ, Langlois TJ, Monk J et al. [Wilson SK, Holmes TH] (submitted). The BRUVs workshop: an Australia-wide synthesis of baited remote underwater video data to answer broad-scale ecological questions about fish and sharks. Marine Policy

Hopkins A, Tay N, Bryant G, Ruthrof K, Valentine L, Kobryn H et al. (submitted). Urban remnant size alters the diversity of ecologically significant fungi dispersed by a digging mammal. *Oecologia*

Hopley T, Webber BL, Raghu S, Morin L, Byrne M (submitted). Revealing the introduction history and phylogenetic relationships of *Passiflora foetida sensu lato* in Australia. *Frontiers in Plant Science*

Huisman J (submitted). Diamondback squid (Thysanoteuthis rhombus). Landscope

Huisman JM, Dixon RRM, Townsend RA, Belton G (submitted). Diversity and distribution of marine benthic algae and seagrasses in the tropical Kimberley, Western Australia. Records of the Western Australian Museum Supplement

Keighery G (submitted). Lycopus europeus L. (Lamiaceae), a new weed record for Australia. Western Australian Naturalist

Keighery G, Mitchell A (submitted). A new alert weed for the north-west of Australia: mopane (Colophospermum mopane). Western Australian Naturalist

Kestel JH, Phillips RD, Anthony J, Davis RA, Krauss SL (submitted). Unexpectedly low paternal diversity is associated with infrequent pollinator visitation for a bird-pollinated plant. *Oecologia*

Knight KJ, Stephenson SL (submitted). Echinostelium australiense (Echinosteliaceae: Myxomycetes), a new species of slime mould described from Western Australia. Nuytsia

Lavery T, Eldridge M, Legge S, Pearson D, Southwell D, Woinarski J et al. (submitted). Threats to Australia's rock-wallabies (*Petrogale* spp.) with key directions for effective monitoring. *Mammal Review*

Leseberg NP, McAllan IAW, Murphy SA, Burbidge AH, Joseph L, Parker SA et al. (submitted). Using anecdotal reports to ascertain the distribution and status of a near mythical species: Australia's night parrot (Pezoporus occidentalis). Emu: Austral Ornithology

Lester E, Canon T, Arujo G (submitted). Whale sharks (Rhincodon typus) feed on baitfish with other predators at Ningaloo Reef. Journal of Fish Biology

Lohr CA, Dziminski M, Dunlop J, Miller E, Morris K (submitted). The reintroduction of bilbies (*Macrotis lagotis*) to Matuwa, an Indigenous Protected Area in Western Australia. *Conservation Biology*

Lyons MN, Markey A (submitted). Fortescue Valley Dunes PEC, South East Marillana Station: botanical values, condition assessment and approaches to minimize stock impacts

Markey A, Comer S, Burbidge A (submitted). Botanical surveys of western ground parrot habitat to inform translocation site selection: summary report, October 2020

Maron M, Evans M, Walsh J, Leseberg N, Burbidge A, Murphy S et al. [van Leeuwen S] (submitted). Better offsets for the night parrot. In factsheet to be published by NESP TSR Hub

Mawson PR, Saunders DA, Dawson R (submitted). Effects of two unseasonal extreme weather events on the breeding performance of Carnaby's cockatoo Calyptorhynchus latirostris. Birds

(Continued on page 8)

(Continued from page 7)

McCaw L (submitted). Understanding the changing fire environment of south-west Western Australia. PowerPoint presentation at Workshop on Climate Change Adaptation, Shire of Manjimup, 3/09/2020

McCaw L, Tunsell V (comps) (submitted). FORESTCHECK: report of progress, jarrah south ecosystem, 2020

McClanahan TR, Darling ES, Maina JM, Muthiga NA, D'agata S, Leblonde J et al. [Wilson SK] (submitted). Large geographic variability in the resistance of corals to thermal stress. Global Ecology and Biogeography

Millar MA, Coates DJ, Byrne M, Krauss SL, Jonson J, Hopper SD (submitted). Evaluating restoration outcomes through assessment of pollen dispersal, mating system and genetic diversity. Restoration Ecology

Monks L (submitted). Banksia cuneata (matchstick banksia) case study. In Australian Guidelines for Germplasm Conservation

Monks L, Standish R, McArthur S, Dillon R, Byrne M, Coates D (submitted). Genetic and mating system assessment of translocation success of the long-lived perennial shrub Lambertia orbifolia (Proteaceae). Restoration Ecology

Novak P, Fairfield C, Miloshis M, Knight Z, Lindsay R, King A (submitted). Bank erosion in a macrotidal tropical river: exploring the relative impact of boat wash on riverbank erosion. River Research and Applications

O'Donnell AJ, McCaw WL, Cook ER, Grierson PF (submitted). Megadroughts and pluvials in southwest Australia: 1350-2017 CE. Climate Dynamics

Palmer BJ, Valentine LE, Lohr CA, Daskalova GN, Hobbs RJ (submitted). Burrowing by translocated boodies (*Bettongia lesueur*) alters soils but has limited effects on vegetation. *Ecology and Evolution*

Pearson D, Thomson-Dans C, Wardell-Johnson G (submitted). Frogs of Western Australia

Peddle SD, Borrett RJ, Liddicoat C, Bullock P, Gardner M, Breed MF et al. [Krauss SL] (submitted). Changes to soil bacterial communities following postmining rehabilitation in the Western Australian jarrah forest. Restoration Ecology

Penton CE, Davies HF, Radford IJ, Woolley L-A, Tiwi Land Rangers, Murphy BP (submitted). Terrestrial, not arboreal factors, determine abundance patterns of threatened arboreal mammals in island savannas. Wildlife Research

Percy-Bower JM, Parker CM (submitted). Updates to Western Australia's vascular plant census for 2020. Nuytsia

Peterson K, Barnes MD, Jeynes-Smith C, Cowen S, Gibson L, Sims C et al. (submitted). Reconstructing lost ecosystems: a risk analysis framework for planning multispecies reintroductions under severe uncertainty. Journal of Applied Ecology

Price BA, Harvey ES, Mangubhai S, Saunders BJ, Puotinen M, Goetze JS (submitted). Impacts and

responses of habitat and fish to severe tropical cyclone Winston in Fiji. Coral Reefs

Prober SM, Hodgson J, Cook G, Gosper CR, Yates CJ, Richards AE (submitted). The Australian ecosystem models framework: eucalypt woodlands. In CSIRO website

Rayner K, Sullivan M, Sims C, Cowen S (submitted). A pain in the neck: weak links are not a reliable release mechanism for radio-tracking collars. Australian Mammalogy

Ruscalleda-Alvarez J, Moro D, van Dongen R (submitted). A multi-scale assessment of fire scars in the Great Victoria Desert of Western Australia using Landsat imagery: validation and management applications. Journal of Applied Ecology

Saccò M, Blyth AJ, Venarsky M, Humphreys WF (submitted). Trophic interactions in subterranean environments

Samaniego A, Kappes P, Broome K, Cranwell S, Griffiths R, Harper G et al. [Palmer R] (submitted). Factors leading to successful island rodent eradications following initial failure. Conservation Biology

Saunders BJ, Galaiduk R, Inostroza K, Myers EMV, Goetze JS, Westera M et al. (submitted). Quantifying patterns in fish assemblages and habitat use along a deep submarine canyon-valley feature using a remotely operated vehicle. Frontiers in Marine Science

Saunders D, Nguyen H, Cowen S, Marsh K, Bell S, Magrath M et al. (submitted). Radio-tracking wildlife with drones: a viewshed analysis quantifying spatial benefits across diverse landscapes. Wildlife Research

Seidlitz A, Bryant KA, Armstrong NJ, Wayne AF (submitted). Animal detections increase by using a wide-angle camera trap model but not by periodically repositioning camera traps within study sites. Methods in Ecology and Evolution

Shackelford N, Paterno GB, Winkler DE, Erickson TE, Leger EA, Svejcar LN et al. (submitted). Dryland restoration successes and failures: a global synthesis. Nature

Stobo-Wilson AM, Murphy BP, Crawford HM, Dawson SJ, Dickman CR, Doherty TS et al. [Palmer R] (submitted). Sharing meals: predation on Australian mammals by the introduced European red fox compounds and complements predation by feral cats. Biological Conservation

Stobo-Wilson AM, Murphy BP, Legge SM, Chapple DG, Crawford HM, Dawson SJ et al. [Palmer R] (submitted). Reptiles as food: predation of Australian reptiles by introduced red foxes compounds and complements predation by cats. Biological Conservation

Thomas WJW, Anthony JM, Dobrowolski MP, Krauss SL (submitted). Optimising the conservation of genetic diversity of the last remaining population of a critically endangered shrub. AoB Plants

(Continued from page 8)

Treloar S, Davis R, Hopkins A, Lohr C (submitted). Potential for resource competition between co-existing threatened mammals in a fenced reserve in Western Australia. (ABSTRACT) In 2020 Conference of the Ecological Society of Australia (ESAus20), Wollongong, New South Wales, 29 November-4 December 2020

Tufta K, Legge S, Frank ASK, James AI, May T, Page E et al. [Radford IJ] (submitted). Cats are a key threatening factor to the survival of local populations of native small mammals in Australia's tropical savannas: evidence from translocation trials with Rattus tunneyi. Wildlife Research

von Takach B, Penton CE, Hill B, Radford IJ, Hill B, Murphy BP et al. (submitted). Informing conservation management of a severely declining tropical rodent through the use of population genomic data. Ecology and Evolution

Walden LL, Fontaine JB, Ruthrof KX, Matusick G, Harper RJ (submitted). The legacy of hotter drought persists through high severity wildfire in a resprouting forest. Global Change Biology

Webster CL, Kilminster KL, Alarcón MS, Bennett K, Strydom S, McNamara S et al. (submitted). Rainfall as an extreme event in estuaries: population-specific resilience of Halophila ovalis seagrass habitat. Journal of Ecology

Wege J (submitted). A botanical tribute to Stephen van Leeuwen. Yarning Time

West KM, Adam AAS, White N, Robbins W, Barrow D, Lane A et al. (submitted). The applicability of eDNA metabarcoding approaches for sessile benthic surveying in the Kimberley region, north-western Australia. Environmental DNA

West K, Heydenrych M, Lines R, Tucker T, Fossette S, Whiting S et al. (submitted). Development of a 16S metabarcoding assay for the environmental DNA (eDNA) detection of aquatic reptiles across northern Australia. Marine and Freshwater Research

White DJ, Ottewell K (submitted). Genetic management and population modelling of translocated fauna: banded hare-wallaby (Lagostrophus fasciatus)

Williams AAE, Williams MR, Bishop CL, Gamblin T, Fissioli J, Coppen RAM (submitted). Notes on the biology, ecology, life history and conservation of the graceful sun-moth Synemon gratiosa Westwood 1877 (Lepidoptera: Castniidae). Australian Entomologist

Williams MR, Lamont BB, He T (submitted). A new randomization test of the biological versus statistical significance of correlations between derived variables. *Biometrics*

Wills A, Ward B (submitted). Flowering seasonality in jarrah forest in the context of pre-colonial and current burning. Australian Journal of Botany

Wilson S, Holmes T, Goetze J (submitted). Research and monitoring by the Marine Science Program, Department of Biodiversity, Conservation and Attractions. Lateral Lines: Australian Society for Fish Biology Newsletter

Woinarski JCZ, Stobo-Wilson AM, Crawford HM, Dawson SJ, Dickman CR, Doherty TS et al. [Palmer R] (submitted). Compounding and complementary carnivores: Australian bird species eaten by introduced European red foxes and domestic cats. Biological Conservation

Young E, Buller N, Bannister J, Vaughan-Higgins R, Stephens N, Whiting S et al. (submitted). Streptococcus iniae associated mass marine fish kill off Western Australia, and first report in sea turtles and snakes. Diseases of Aquatic Organisms

Contacts:

Senior Policy Officer

Carli Telfer

carli.telfer@dbca.wa.gov.au

Ph: 9219 9916

Decision Scientist Megan Barnes

megan.barnes@dbca.wa.gov.au

9219 9043

Biodiversity Information Office

Brent Wise

brent.wise@dbca.wa.gov.au

0409 116 100

Animal Science Lesley Gibson

lesley.gibson@dbca.wa.gov.au Ph: 9405 5159

Ecosystem Science Adrian Pinder

adrian.pinder@dbca.wa.gov.au

9219 9868 Ph:

Ecoinformatics Julian Tonti-Filippini

<u>julian.tonti-filippini@dbca.wa.gov.au</u>

9219 9067

Fire Science Ben Miller

ben.miller@dbca.wa.gov.au

9480 3637

Kings Park Science

Jason Stevens jason.stevens@dbca.wa.gov.au

9480 3639

Marine Science Alan Kendrick

alan.kendrick@dbca.wa.gov.au Ph: 9219 9793

Perth Zoo Science Peter Mawson

peter.mawson@dbca.wa.gov.au

Ph: 9474 0311

Plant Science & Herbarium Colin Yates colin.yates@dbca.wa.gov.au

9219 9079

Remote Sensing and Spatial Analysis

Katherine Zdunic katherine.zdunic@dbca.wa.gov.au

9219 9584

Rivers & Estuaries Science

Kerry Trayler

kerry.trayler@dbca.wa.gov.au Ph: 9278 0955

Species & Communities

Ruth Harvey ruth.harvey@dbca.wa.gov.au Ph: 9219 9512

Western Australian Herbarium Curator

John Huisman

john.huisman@dbca.wa.gov.au

Ph: 9219 9137

Library Contacts:

General enquiries & requests: library@db'ca.wa.gov.au

9219 9058

Lisa Wright

lisa.wright@dbca.wa.gov.au

Ph: 9219 9091

Nicole Wreford

nicole.wreford@dbca.wa.gov.au Ph: 9219 9058