



School of Agriculture, Biomedicine and Environment



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24 Publications

Refereed Journal Articles – 25

González-Murcia, S., Alvarado-Larios, R., Guerra, J., & Logan, M. (2023). The good and the better, sampling tropical intertidal rock pool fishes: a comparison between visual census vs. rock pool bailing method. *Ciencias Marinas*, 49. <https://doi.org/10.7773/cm.y2023.3404>

Acharya, S., Holland, A., Rees, G., Brooks, A., Coleman, D., Hepplewhite, C., Mika, S., Bond, N. & Silvester, E. (2023). Relevance of tributary inflows for driving molecular composition of dissolved organic matter (DOM) in a regulated river system. *Water Research*, 13.4. <https://doi.org/10.1016/j.watres.2023.119975>

Andrades, R., **González-Murcia, S., Buser, T.J. et al.** (2023). Ecology, evolution and conservation of tidepool fishes of the Americas. *Rev Fish Biol Fisheries* 33, 1263–1290. <https://doi.org/10.1007/s11160-023-09798-z>

Bieroza, M., **Acharya, S., Benisch, J., ter Borg, R.N., Hallberg, L. Negri, C. et al.** (2023). Advances in Catchment Science, Hydrochemistry, and Aquatic Ecology Enabled by High-Frequency Water Quality Measurements. *Environmental Science & Technology* 2023, 57:12, 12pp, 4701-4719. <https://doi.org/10.1021/acs.est.2c07798>

Bovill, W.D., Downes, B.J., **Bond, N.R. et al.** A large-scale field experiment across six rivers illustrates how the effects of resource enrichment are context dependent. *Oecologia* (2023). <https://doi.org/10.1007/s00442-023-05368-z>

Bower, D.S., D.T. McKnight, K. Sullivan, S.L. Macdonald, A. Georges, S. Clulow, R. Mathwin, M.J. Connell, H.V. Nelson, A. Santoro, B. Nordstrom, **J.U. Van Dyke, R.A. Kidman, L.M. Streeting, M.L. Dillon, R.-J. Spencer, M.B. Thompson, and E.J. Nordberg.** 2023. Opportunities for research and conservation of freshwater turtles in Australia. *Austral Ecology*. 48(8): 1483-1491.

Consoli, G., **Siebers, A.R., Bruder, A. & Robinson, C. T.** (2023). Long-term reconstruction of energy fluxes in an alpine river: Effects of flow regulation and restoration. *River Research and Applications*, 1– 12. <https://doi.org/10.1002/rra.4189>

C.T.U., Le, Paul, W.L., Gawne, B. & **Suter, P.** (2023). Integrating simulation models and statistical models using causal modelling principles to predict aquatic macroinvertebrate responses to climate change. *Water Research*. <https://doi.org/10.1016/j.watres.2023.119661>

Ding, C., Sun, J., Huang, M., **Bond, N.**, Ding, L., & Tao, J. (2023). Flow and thermal regimes altered by a dam caused failure of fish recruitment in the upper Mekong River. *Freshwater Biology*, 00, 1– 11. <https://doi.org/10.1111/fwb.14105>

Ding, C., Sun, J., Huang, M., **Bond, N.**, Ding, L. and Tao, J. (2023), Cover Image. *Freshwater Biology*, 68: i-i. <https://doi.org/10.1111/fwb.13941>

Ensberry, M., Legge, S., Jolly, C.J., Garnett, S.T., Gallagher, R.V., Lintermans, M., Nimmo, D.G., Rumpff, L., Scheele, B.C., Whiterod, N.S., Woinarski, J.C.Z., Ahyong, S.T., Blackmore, C.J., Bower, D.S., Burbidge, A.H., Burns, P.A., Butler, G., Catullo, R., Chapple, D.G., Dickman, C.R., Doyle, K.E., Ferris, J., Fisher, D.O., Geyle, H.M., Gillespie, G.R., Greenlees, M.J., Hohnen, R., Conrad, J., Hoskin, C.J., Kennard, M., **King, A.J.**, Kuchinke, D., Law, B., Lawler, I., Lawler, S., Loyn, R., Lunney, D., Lyon, J., MacHunter, J., Mahony, M., Mahony, S., McCormack, R., Melville, J., Menkhorst, P., Michael, D., Mitchell, N., Mulder, E., Newell, D., Pearce, L., Raadik, T.A., Rowley, J.J.L., Sitters, H., Southwell, D.G., Spencer, R., West, M. & Zukowski, S. (2023). Animal population decline and recovery after severe fire: Relating ecological and life history traits with expert estimates of population impacts from the Australian 2019-20 megafires. *Biological Conservation* 283: 110021. <https://doi.org/10.1016/j.biocon.2023.110021>

Gionfriddo, C., Soren, A., Wymore, A., Hartnett, S., Podar, M., Parks, J., elias, D. & Gilmore, C. (2023). Transcriptional Control of hgcAB by an ArsR-Like Regulator in *Pseudodesulfovibrio mercurii* ND132. *Applied and Environmental Microbiology*. <https://doi.org/10.1128/aem.01768-22>

Judd, M., Boese, M., Horne, A.C., & **Bond, N.R.** (2023). Perceptions of climate change adaptation barriers in environmental water management. *Ecology and Society*, 28(1):21. <https://doi.org/10.5751/ES-13883-280121>

Judd, M., Horne, A.C. & **Bond, N.** (2023). Perhaps, perhaps, perhaps: Navigating uncertainty in environmental flow management. *Frontiers in Environmental Science*, 11:1074896. <https://doi.org/10.3389/fenvs.2023.1074896>

McInerney, P.J., **Shackleton, M.E.**, **McPhan, L.**, Holland, A. & Rees, G.N. (2023). Can You See the Algae for the Slime? Temporal Patterns of Biofilm Food Quality and Quantity in Lowland Rivers. *Ecosphere* 14(10): e4680. <https://doi.org/10.1002/ecs2.4680>

McKnight, D.T., Ard, K., Auguste, R.J., Barhadiya, G., Benard, M.F., Boban, P., Dillon, M.L., Downs, C.T., DeGregorio, B.A., Glorioso, B.M., Goodman, R.M., Hird, C., Hollender, E.C., Kennedy, M., Kidman, R.A., Massey, A., McGovern, P., Mühlhaupt, M., Ostovar, K., Podgorski, D., Price, C., Reinke, B.A., Streeting, L.M., Venezia, J., Young, J. & Nordberg, E.J. (2023). Nocturnal basking in freshwater turtles: A global assessment. *Global Ecology and Conservation*, Volume 43, June 2023, e02444. ISSN 2351-9894. <https://doi.org/10.1016/j.gecco.2023.e02444>

Moraes, L., Gusso-Choueri, P., Abreu, F., Castro, I., Abessa, D. & Choueri, R. (2023). Multilevel assessment of chorothaloni sediment toxicity to Latin American estuarine biota: Effects on biomarkers, reproduction and survival in different benthic organisms. *Science of the total Environment*, vol. 872. <https://doi.org/10.1016/j.scitotenv.2023.162215>

Morden, R., Horne, A., Nathan, R., **Bond, N.R.** & Olden, J.D. (2023). Monthly flow indicators can be used to infer daily stream flow behaviour across Australia. *Journal of Hydrology*, 617-C, 10pp. <https://doi.org/10.1016/j.jhydrol.2023.129078>

Petrov, K., S. Sutcliffe, H. Truscott, C. Kutay, C.C. Eisemberg, R.-J. Spencer, I. Lawler, D.S Bower, **J.U. Van Dyke**, and A. Georges. 2023. Turtles in trouble. Conservation ecology and priorities for Australian freshwater turtles. *Austral Ecology*. 48(8): 1603-1656.

Skalkos, Z.M.G., **J.U. Van Dyke**, and C.M. Whittington. 2023. Distinguishing between embryonic provisioning strategies in teleost fishes using a threshold value for parentotrophy. *Biomolecules*. 13(1): 166.

Suter, P.J., Mynott, J.H. & Webb, J.M. (2023). The first record of *Caenis* Stephens, 1835 in Australia (Ephemeroptera: Caenidae) with descriptions of two new species. *Zootaxa* 5228:477–488. <https://doi.org/10.11646/zootaxa.5228.4.6>

Suter, P.J., Webb, J.M. & Gattoliat, J.-L. (2023). Skolomystax, a new genus for the Australian species formerly included in *Centroptilum* Eaton (Ephemeroptera: Baetidae). *Memoirs of Museum Victoria*, 82:1–48. <https://doi.org/10.24199/j.mmv.2023.82.01>

Tao, J., **Bond, N.**, Tun, N. & Ding, C. (2023). Keep the Salween River free-flowing. *Science*.
<https://www.science.org/doi/10.1126/science.adl9117>

Terry, R., K.A. Robert, *A. Simms, G. Stockfeld, and **J.U. Van Dyke**. 2023. Ineffectiveness of plastic mesh for protecting artificial freshwater turtle nests from red fox (*Vulpes vulpes*) predation. *Austral Ecology*. 48(8): 1547-1558.

Van Dyke, J.U., McPhan, L.M., Howard, K., Hamilton, T., Ross, L. & Watts, R.J. (2023) Effects of wetland connectivity on overwintering and movement behaviours of Australian freshwater turtles. *Austral Ecology*, 48, 1681–1699.
<https://doi.org/10.1111/aec.13450>

Scientific, Technical and Consultancy Reports - 11

Bond. N., Drieberg, C. (2023). Waterway Health Monitoring Program review. Report prepared by Streamology for Blacktown City Council, NSW.

Bloink C, Halliday B, Linn M, Walker G, **Lewis S.** (2023). The Living Murray: Gunbower Icon Site Fish Condition Monitoring 2023. Report to North Central CMA, Ecology Australia Pty. Ltd., Fairfield, Victoria.

Crook. D., Duncan. Meaghan., **Lewis. S.**, Keating. J., van der Meulen. D., Dennis. B., Sarwer. G. (2023) Final report: Emergency flood recovery for wildlife and habitat South-East NSW – Australian grayling eDNA surveys. NSW DPI Technical Report to South East Local Land Services.

Liu X, Watts RJ, **Lewis S**, and Duffy D (2023). Edward/Kolety-Wakool Flow Monitoring, Evaluation and Research Project: Monitoring of Commonwealth environmental watering actions from the Edward and Niemur escapes in 2022-23. Report prepared for Commonwealth Environmental Water Holder. Commonwealth of Australia

McPhan L.M., Capon S., **Bond N.R.**, (2023) “Reconnecting River Country – Floodplain Vegetation Condition Predictive Modelling; Part 1: Murray River floodplain”, CFE Publication #274, Prepared for the Department of Planning and Environment NSW

McPhan L.M., Capon S., **Bond N.R.**, (2023) “Reconnecting River Country – Floodplain Vegetation Condition Predictive Modelling; Part 2: Murrumbidgee River floodplain”, CFE Publication #278, Prepared for the Department of Planning and Environment NSW

Shackleton, M.E. (2023) Belvoir Lakes eDNA Survey. Report prepared for City of Wodonga Council. CFE Publication 283.

Shipp, A., Quek, Y., Neal, B., Lang, S., Hart, B., **Bond, N.** & Clarke, H. (2023). [Alluvium and HARC 2023, Type of conditions that could apply to water access for Latrobe Valley mine rehabilitation and associated risks and benefits](#). Report prepared for the Department of Energy, Environment and Climate Action.

Siebers, A.R., Crook, D., Silvester, E. & **Bond, N.** (2023). Production Condition Predictive Modelling. Part 1: River Murray, Hume to Wakool Junction. CFE Publication 281, October 2022, 76pp.

Siebers, A.R., Crook, D., Silvester, E. & **Bond, N.** (2023). Production Condition Predictive Modelling. Part 2: Murrumbidgee River. CFE Publication 282, June 2022, 33pp.

Van Dyke, J.U. 2023. Werai forest turtle monitoring project, MY01508: 2023 final report. Commissioned by *Murray Local Land Services*.

Scientific Conference presentations, guest lectures and seminars.

Beaumont, M., G. Stockfeld, D. McKnight, and **J.U. Van Dyke** (2023). Protecting freshwater turtle nests from foxes: comparing success of fencing and nest meshing on juvenile recruitment. 56th Meeting of the Australian Society of Herpetologists. Townsville, Queensland, Australia. December 2023.

Bond, N., and Lewis, S., (2023) Attended the Flow Monitoring Evaluation Research (Flow-MER) Annual Forum. Sam presented "Seeing through Mud - Using mobile hydroacoustic sonar to monitor environmental water outcomes." Canberra, 15-16 August, 2023.

Bond, N., McPhan, L., Crook, D., Thiem, J., Kennard, M. & Sheldon, F. (2023). Spatial metapopulation modelling of the long-term persistence an Australian freshwater fish (*Maquaria ambigua*) in the intermittent waterholes of an arid floodplain river. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.

Bond, N., McPhan, L., and Shackleton, M., (2023) Attended the Murray-Darling Water Environment Research Program, Annual Symposium 2023 was held in Canberra on 19-23 July, 2023. **Nick**, as part of the (MD-WERP) Science Leadership Team, brought together researchers, Commonwealth partners and end users to discuss this exciting research program. MD-WERP is a 4-year, \$20 million Australian Government initiative to strengthen scientific knowledge of the Murray–Darling Basin through generating new knowledge, innovation, and tools across the themes of climate adaptation: hydrology; environmental outcomes; and social, economic and cultural outcomes. La Trobe is also partnering with Griffith University, Murray Lower Darling Rivers Indigenous Nations (MLDRIN) and Northern Basis Aboriginal Nations (NBAN) as well as working alongside CSIRO and industry partners.

Judd, M., Horne, A.C. & Bond, N. (2023). Embracing uncertainty in environmental flow management - decision making in the absence of knowledge. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.

King A., McPhan L.M., Bloink C., Halliday B., Wood D., Collins E., **Lewis S.,** (2023) A Tale of Two Cities [sic]: Long-term Patterns of Fish Communities at Lindsay-Mulcra-Wallpolla and Hattah Lakes, Lower Murray River, Australian Society for Fish Biology. Auckland, New Zealand, 20-24 November, 2023.

Lewis S., (2023) Seeing through Mud - Using mobile hydroacoustic sonar to monitor environmental water outcomes. 11TH Indo-Pacific Fisheries Conference/Australian Society for Fish Biology (IPFC/ASFB) conference , Aukland New Zealand, 22nd November 2023

Maxwell, S., (2023) Presented "Looking back and to the future: science and policy in a changing climate within the Murray Darling Basin." Department of Environment and Genetics seminar, 29 August, 2023.

Maxwell, S. (2023). Role of macro-invertebrates in Ecosystems. Wise Water Ways - Workshop in Rural and Urban Stream Management Principles and Practices, Wise Water Ways, 24 October, 2023.

Maxwell, S. (2023). Skills in Action - Field surveys (level and staff), Macro-invertebrate sampling, Vegetation assessment, Physical condition assessment. Wise Water Ways - Workshop in Rural and Urban Stream Management Principles and Practices, Wise Water Ways, 24 October, 2023.

Maxwell, S., Bond, N., Kennard, M., Sheldon, F., Klunzinger, M., McCasker, N., Capon, S., Grieger, R., Kingsford, R. Hawke, T. & **Lewis, S.** (2023). Looking Back and to the Future: contributing to an 'outlook' for the Murray-Darling Basin. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.

McPhan, L., (2023) Presented "Flow Ecology responses at scale: Testing alternative futures." Department of Environment and Genetics seminar, 15 August, 2023.

McPhan, L. (2023). Integrating Climate Change. Water yield and quality - effects of a changing climate on the aquatic landscape. Wise Water Ways - Workshop in Rural and Urban Stream Management Principles and Practices, Wise Water Ways, 24 October, 2023.

McPhan, L., Bond, N., Dawson, S., Job, T. & Capoon, S. (2023). Validating floodplain forest responses to inundation: Antecedent inundation histories and inundation threshold influence vegetation condition responses. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.

McPhan, L. & Bond, N. (2023). Spatially explicit population models for fish in the Barwon-Darling River system. Murray-Darling Water and Environment Research Program (MD-WERP) Symposium, Canberra, 19-20 July, 2023.

- Shackleton, M.** (2023). Assessing future vulnerability of species and ecological communities. Murray-Darling Water and Environment Research Program (MD-WERP) Symposium, Canberra, 19-20 July, 2023.
- Shackleton, M.** (2023). Ecology of freshwater macroinvertebrates. Talk to the 'Floodplain ecology course', held by Goulburn Murray Landcare, 10 October, 2023.
- Shackleton, M., Siebers, A., Suter, P., Lines, O., Holland, A., Morgan, J. & Silvester, E.** (2023). A little warming goes a long way: predicting changes in alpine stream thermal regimes under future climate change. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.
- Shakya, M., Mika, S., McIntosh, L., Frost, L., Shackleton, M., Siebers, A., Green, S., Silvester, E., Growns, I., Holland, A.** (2023). Dissolved organic matter influence on microbial communities and productivity in the Warrego and Darling Rivers. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.
- Siebers, A., Bond, N., Liu, X., Trethewie, J. & Watts, R.** (2023). Floodplain inundation increases aquatic primary production in a regulated Australian river system. Australian Freshwater Sciences Society (AFSS), Brisbane Australia, 3-7 June, 2023.
- Simms, A., K. Robert, R.-J. Spencer, and **J.U. Van Dyke**. (2023) Effluent to oestrogen, exploring the role of sewage impacts on turtle reproductive physiology, just for shits and giggles. 56th Meeting of the Australian Society of Herpetologists. Townsville, Queensland, Australia. December 2023.
- Terry, R., K. Robert, *A. Simms, and **J.U. Van Dyke**. (2023) Oh for fox sake, pushing the limits of plastic and wire mesh for turtle nest protection. 56th Meeting of the Australian Society of Herpetologists. Townsville, Queensland, Australia. December 2023.
- Van Dyke, J.U.** (2023) Blunting a thousand cuts: integrated approaches to save Australian freshwater turtles. Australian National University Research School of Biology seminar series. Canberra, ACT, Australia. June, 2023.
- Van Dyke, J.U., Howard, K., and Watts, R.** (2023) Limited effectiveness of poison baiting to protect turtle nests from foxes. 56th Meeting of the Australian Society of Herpetologists. Townsville, Queensland, Australia. December 2023.