

# The Murray-Darling Freshwater Research Centre Publications | 2017



## Refereed Journal Articles (published)

- Dabrowski J, Baldwin DS, Dabrowski JM, Hill L, Shadung (2017) Impact of temporary desiccation on mobility of nutrients and metals from sediments of Loskop Reservoir, Olifants River. *Water SA* **Vol.43** No. 1 <http://dx.doi.org/10.4314/wsa.v43i1.02>
- Deane DC, Nichol JM, Gehrig SL, Harding C, Aldridge KT, Goodman AM, Brookes JD (2017) Hydrological-niche models predict water plant functional group distributions in diverse wetland types. *Ecological Applications* **27** (4) 1351-1364
- Freestone FL, Brown P, Campbell CJ, Wood DB, Nielsen DL, Henderson MW (2017) Return of the lignum dead: Resilience of an arid floodplain shrub to drought. *Journal of Arid Environments* **138** 9-17 <http://dx.doi.org/10.1016/j.jaridenv.2016.11.011>
- Harris JH, Kingsford RT, Peirson W, Baumgartner L (2017) Mitigating the effects of barriers to freshwater fish migrations: the Australian experience. *Marine and Freshwater Research* **68**, 614-628 <http://dx.doi.org/10.1071/MF15284>
- Holland A, Wood CM, Smith DS, Correia TG, Val AL (2017) Nickel toxicity to cardinal tetra (*Paracheirodon axerodi*) differs seasonally and among the black, white and clear river waters of the Amazon basin. *Water Research* **123**: 21-29 <https://doi.org/10.1016/j.watres.2017.06.044>
- McInerney PJ, Rees GN (2017) Co-invasion hypothesis explains microbial community structure changes in upland streams affected by riparian invader. *Freshwater Science* **36** (2) 297-306 DOI: 10.1086/692068
- Portinho JL, Nielsen DL, Ning N, Paul W, Nogueira M (2017) Spatial variability of aquatic plant and microfaunal seed and egg bank communities within a forested floodplain system of a temperate Australian river. *Aquatic Sciences* **79** 515-527 DOI 10.1007/s00027-016-0514-z
- Stoffels RJ, Weatherman KE, Allen-Ankins S (2017) Heat and hypoxia give a global invader, *Gambusia holbrooki*, the edge over a threatened endemic fish on Australian floodplains. *Biological Invasions* **19**: 2477-2489
- Watkins SC, Baldwin DS, Waudby HP, Ning SEMA (2017) Managing rain-filled wetlands for carbon sequestration: a synthesis. *The Rangeland Journal* **39**, 145-152 <http://dx.doi.org/10.1071/RJ16077>

## Refereed Journal Articles (in press)

- Carew ME, Nichols SJ, Batovskam J, St Clair R, Murphy NP, Blackett MJ, Shakleton ME (Mar 2017) A DNA barcode database of Australia's freshwater macroinvertebrate fauna. *Marine and Freshwater Research* <https://doi.org/10.1071/MF16304>
- Kopf KR, Nimmo DG, Humphries P, Baumgartner LJ, Bode, M, Bond NR, Byrom AE, Cucherousset J, Keller RP, King AJ, McGuinness HM, Moyle PB, Olden JD (2017) Confronting the risks of large-scale invasive species control. *Nature Ecology & Evolution*. Vol 1, 0172 DOI: 10.1038/s41559-017-0172
- Wolfedden BJ, Wassens SM, Jenkins KM, Baldwin DS, Kobayashi T, Maguire J (May 2017) Adaptive management of return flows: Lessons from a case study in environmental water delivery for a floodplain river. *Environmental Management* DOI 10.1007/s00267-017-0861-0
- Yen A, Bilney C, Shackleton M, Lawler S (Mar 2017) Current issues involved with the identification and nutritional value of wood grubs consumed by Australian Aborigines. *Insect Science*. DOI 10.1111/1744-7917.12430

## Scientific, Technical and Consultancy Reports

- Stewardson MJ, Guarino F (2017) 2015–16 Basin-scale evaluation of Commonwealth environmental water — Hydrology. Final Report prepared for the Commonwealth Environmental Water Office by The Murray–Darling Freshwater Research Centre, MDFRC Publication 142/2017, May, 50pp plus annexes.
- Grace M (2017) 2015–16 Basin-scale evaluation of Commonwealth environmental water — Stream Metabolism and Water Quality. Report prepared for the Commonwealth Environmental Water Office by The Murray–Darling Freshwater Research Centre, MDFRC Publication 143/2017, July, 63pp.
- Brooks S (2017) 2015–16 Basin-scale evaluation of Commonwealth environmental water – Ecosystem Diversity. Final Report prepared for the Commonwealth Environmental Water Office by The Murray–Darling Freshwater Research Centre, MDFRC Publication 144/2017, March, 42pp.
- Capon S, Campbell C (2017) 2015–16 Basin-scale evaluation of Commonwealth environmental water - Vegetation Diversity. Draft Report prepared for the Commonwealth Environmental Water Office by The Murray–Darling Freshwater Research Centre, MDFRC Publication 145/2017, April, 87pp.
- Stoffels RJ, Bond NR, Guarino E (2017) 2015–16 Basin-scale evaluation of Commonwealth environmental water – Fish. Draft Report prepared for the Commonwealth Environmental Water Office by The Murray–Darling Freshwater Research Centre, MDFRC Publication 146/2017, May, 68pp.
- Hale J (2017) 2015–16 Basin-scale evaluation of Commonwealth environmental water – Generic Diversity. Draft Report prepared for the Commonwealth Environmental Water Office by The Murray–Darling Freshwater Research Centre, MDFRC Publication 147/2017, July, 59pp.
- Murray–Darling Freshwater Research Centre (2017) Murray Darling Basin Environmental Knowledge and Research Project: Mid-Year Progress Report: July 2015 - December 2015. Final Report prepared for the Department of Environment by The Murray–Darling Freshwater Research Centre, MDFRC Publication 148/2017, February 2017.
- The Murray–Darling Freshwater Research Centre (2017) Murray–Darling Basin Environmental Water Knowledge and Research Project Annual Research Plan 2017–18. Draft Report prepared for the Department of the Environment and Energy by The Murray–Darling Freshwater Research Centre, MDFRC Publication 153/2017, June 2017, 55pp
- MDFRC (2017) Murray–Darling Basin Environmental Water Knowledge and Research Project: Multi-Year Research Plan 2016–2019 – Addendum 2017/18. Final Report prepared for the Department of the Environment and Energy by The Murray–Darling Freshwater Research Centre, MDFRC Publication 152/2017, June, 20 pp.
- Riddle M, Busuttill R (2017) MDFRC Communication Strategy – Internal use only. Draft Report prepared for the Murray–Darling Freshwater Research Centre by The Murray–Darling Freshwater Research Centre, MDFRC Publication 149/2017, April, 16pp.
- Freestone F, Campbell C, Healy S (2017) The response of lignum to environmental flows at Bottle Bend. Final report prepared for the NSW Office of Environment and Heritage by The Murray–Darling Freshwater Research Centre, MDFRC Publication 154/2017, May, 38pp.
- Wood D (2017) Murray hardyhead monitoring program 2016–17. Final Report prepared for the Mallee Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 155/2017, May, 21 pp.

## Thesis

- Kidziak S (2017) The ability of PCR-Based methods and next generation sequencing to detect secondary predation in the gut contents of aquatic, macroinvertebrates. Honours Thesis. La Trobe University, Department of Ecology, Environment and Evolution. May 2017. 54pp.
- Davis NS (2017) The effect of waterhole permanency and hydrological connectivity on fish community composition in a dryland river. Honours Thesis. La Trobe University, Department of Ecology, Environment and Evolution. May 2017. 65pp.

## Summer Cadetship Student Reports

- Brown P, Freestone F, Wood D, Lampard B, Gehrig S and Campbell C (2017) The Living Murray Condition Monitoring at Lindsay, Mulcra and Wallpolla Islands 2016–17; Part A – Main Report. Draft Report prepared for the Mallee Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 162/2017, July, 80 pp.

- Brown P, Wood D, Freestone F, Gehrig S, Campbell C and Lampard B (2017) The Living Murray Condition Monitoring at Hattah Lakes 2016–17 Part A – Main Report. Draft Report prepared for the Mallee Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 163/2017, July, 82 pp.
- Dunn M, Baldwin D, McGinness H (2017). Ibis nestling energy requirements Draft Report prepared by The Murray–Darling Freshwater Research Centre, MDFRC Publication 2017, February.
- Galanakis A (2017) Predicting the ability of aquatic and riparian plants to disperse. Final Report prepared for a Summer Cadetship Project, The Murray–Darling Freshwater Research Centre, MDFRC Publication 150/2017, February, 11 pp. Not for distribution for internal use only
- McInerney P, Davey C (2017) River Murray Biological Monitoring Project Annual Report 2016. Draft report prepared for the Murray–Darling Basin Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 167/2017, 65 pp.
- O'Keefe Rebecca (2017). Habitat selection by the Southern Pygmy Perch in the presence or absence of Redfin Perch Final Report prepared by The Murray–Darling Freshwater Research Centre, MDFRC Publication 161/2017, February, 29pp. Not for distribution for internal use only
- Shackleton M (2017) MDFRC Review of the WWO Pilot Study. Final Report prepared for the name of client by The Murray–Darling Freshwater Research Centre, MDFRC Publication 166/2017, August, 5pp.
- Talarico J (2017) The Effect of Freshwater Seed Morphology on Dispersal and Establishment in the Murray–Darling Basin. Final Report prepared by The Murray–Darling Freshwater Research Centre, MDFRC Publication 151/2017, February, 17pp Not for distribution for internal use only

### **Seminar / Other Presentations**

- Campbell C (2017) Vegetation outcomes of flow regimes across the Murray–Darling Basin: consideration of scale and level of organisation. La Trobe University EEE Seminar Series. Bundoora Victoria. 10 May
- Campbell C (2017) Making a big splash: Informing environmental flow management at the Basin-scale. La Trobe University Mildura Research Seminar Series. La Trobe University, Mildura Victoria. 28 February
- Davis N (2017) The effect of waterhole permanency and hydrological connectivity on fish community composition in a dryland river. Final Honours Seminar Department of Ecology, Environment and Evolution, La Trobe University, Wodonga, Victoria. 7 July
- Dunn M (2017) Ibis nestling energy requirements. A Summer Industry Cadetship Seminar. La Trobe University, Wodonga Victoria. 10 February
- Durant R (2017) Seed dispersal from the Murray River to Floodplain Wetlands via temporary pumping infrastructure and regulator structures. Mallee Catchment Management Authority Seminar. Mildura Victoria. 23 May
- Galanakis A (2017) Predicting the ability of aquatic and riparian plants to disperse. A Summer Industry Cadetship Seminar. La Trobe University, Wodonga Victoria. 10 February
- Gehrig S (2017) Flows, floodplains and functions. La Trobe University EEE Seminar Series. Bundoora Victoria. 10 May
- Gehrig S (2017) Watering floodplains in the absence of flooding. La Trobe University, Mildura Victoria. 25 July
- Hatami R (2017) Development protocols for environmental impact studies using causal modelling, with special reference to wastewater discharges to freshwater systems. Final Seminar PhD. La Trobe University, Wodonga. 8 June
- Kidziak S (2017) Secondary predation: Who eats who? Final Honours Seminar Department of Ecology, Environment and Evolution, La Trobe University, Wodonga, Victoria. June
- Nielsen D (2017) Seed bank & dynamics in response to environmental watering. La Trobe University EEE Seminar Series. Bundoora Victoria. 10 May
- O'Dwyer (2017) the impact of habitat stability and instability on stress tolerance in populations of *Coxiella striata* in Western Victorian Salt lakes. Honours Introductory Seminar. La Trobe University, Bundoora Victoria. 10 March
- Rees GN, Stoffels R, Shackleton M, McInerney P, Nielsen D, Dwyer G (2017) Native fish: are they getting the nutrition they need? Murray Darling Basin Authority Seminar Series. Canberra ACT. 24 May
- Rees G (2017) Fish deaths, Azolla and water quality: History and prospects for the Broken Creek. Seminar presentation to the International River Management Course tour. La Trobe University Wodonga, 6 July
- Talarico J (2017) The Effect of Freshwater Seed Morphology on Dispersal and Establishment in the Murray–Darling Basin. A Summer Industry Cadetship Seminar. La Trobe University, Mildura Victoria. 10 February

## Fact Sheets | Discussion Papers | Information Sheets

MDFRC (2017) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) Project - Overview Fact Sheet #1 (December 2016)

MDFRC (2017) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) Project - Theme Overview Fact Sheet #2 (December 2016)

<http://www.mdfr.org.au/projects/ewkr/useful-links/images/465-EWKR-Fact-Sheet-5-201216.pdf>

MDFRC (2017) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) Project - Vegetation Theme Work Summary Fact Sheet #6 (December 2016)

MDFRC (2017) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) Project - Foodweb theme Work Summary Fact Sheet #8 (February 2017)

MDFRC (2017) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) Project - Waterbird Theme Background and Work Program Fact Sheet #7 (December 2016)

MDFRC (2017) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) Project - Fish Theme Project Update Fact Sheet #9 (February 2017)

## Newsletters

Wetlands Australia, Commonwealth of Australia 2017. Protecting Hattah Lakes during drought and beyond. PP49-50 Fisheries Research & Development Corporation FRDC (2017) FISH magazine. 'Fish hotels' help river residents to reconnect. Page 31. March 2017

ARRC (2017) eNewsletter - Spot the scientist! Veg surveys underway in the Murray-Darling Basin in challenging conditions. Posted 12 May 2017

## The Murray–Darling Freshwater Research Centre is a Joint Venture between La Trobe University and CSIRO



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