

Aquatic Ecosystem Function

Publications and reports (as of July 2009)

1. Kelleway, J., Mazumder, D. & Kobayashi, Y., Wilson, G.G., Saintilan, N., Knowles, L. & Kobayashi, Y. (in press) Variation in the trophic structure of benthic resources, crustaceans and fish across a floodplain river wetland. *Marine and Freshwater Research*
2. Ladd, B., Bonser, S.P., Peri, P., Larsen, J., Laffan, S.W., Pepper, D.A. & Cendón, D.I. (2009, in press). Towards a physical description of habitat: a stable isotope approach to quantifying environmental adversity in temperate forest and woodland ecosystems. *Journal of Ecology*.
3. Kelleway, J., Mazumder, D. & Kobayashi, Y. (2009, in press) Using isotopic techniques to assess relationships between flow and trophic structure in northern Murray Darling Basin wetlands MDB wetlands. *Ecosystem Response Modelling in the Murray Darling Basin* (CSIRO Publishing).
4. Kobayashi, Y., Kelleway, J., Mazumder, D. & Saintilan N. (2009). Final report on the trophic dynamics and ecosystem function project. NSW Wetland Recovery Program. Department of Environment and Climate Change (DECC) and Australian Nuclear Science and Technology Organisation (ANSTO) 139pp.
5. Twining, J., Creighton, N., Hollins, S. & Szymczak, R. (2008) Probabilistic risk assessment and risk mapping of sediment metals in Sydney Harbour embayments. *Human & Ecological Risk Assessments*, 14, 1202-1225.
6. Alquezar, R. Markich, S. & Twining, J. (2008) Comparative accumulation of ^{109}Cd and ^{75}Se from water and food by an estuarine fish (*Tetractenos glaber*). *Journal of Environmental Radioactivity* 99 167-180
7. Mazumder, D., Williams, R., Dennies, R., Saintilan, N. & Szymczak, R. (2008) Variability of stable isotope ratios of glassfish (*Ambassis jacksoniensis*) from mangrove/saltmarsh environments in southeast Australia and implications for ecosystem studies. *Environmental Bioindicators* 3, 114-123. *Nominated as Best Paper overall by the journal in 2008*
8. Szymczak, R. & Mazumder, D. (2007). A Report to Sydney Water on determination of the relative contribution of STP nutrient discharges to excess macrophyte growth in the Hawkesbury-Nepean River using nitrogen stable isotope ratios ($\delta^{15}\text{N}$) - Pilot Study - Nitrogen Stable Isotope Analysis, ANSTO/ C-959.
9. Mazumder, D., Saintilan, N. & Williams, R. (2008). Zooplankton inputs and outputs in the saltmarsh at Towra Point, Australia, *Wetlands Ecology and Management*. DOI 10.1007/s11273-008-9102-x
10. Saintilan, N., Mazumder, D. & Cranney, C. (2008). Changes to fish assemblages visiting estuarine wetlands following the closures of commercial fishing in Botany Bay, Australia., *Aquatic Ecosystem Health and Management* 11(4): 441-449
11. Alquezar, R., Markich, S. & Twining, J. (2007) Uptake and loss of dissolved ^{109}Cd and ^{75}Se in estuarine macroinvertebrates. *Chemosphere* 67 (6) 1202-1210

12. Saintilan, N., Hossain K. & Mazumder D. (2007). Linkages between seagrass, mangrove and saltmarsh as fish habitat in the Botany Bay estuary, New South Wales. *Wetland Ecology and Management* 15:277-286.
13. Alquezar, R., Markich, S. & Twining, J. (2007) Kinetics of ^{109}Cd and ^{75}Se in estuarine macroinvertebrates: Potential trophic transfer to higher order predators. *Journal of Environmental Radioactivity*.
14. Twining, J.R., Stone, D., Tadros, C., Henderson-Sellers, A. & Williams, A. (2006) Moisture Isotopes in the Biosphere and Atmosphere (MIBA) in Australia: the Tumbarumba Field Campaign. *Global and Planetary Change* 51 (2006) 59–72
15. Mazumder, D., Saintilan, N. & Williams, R.J. (2006). Trophic relationships between itinerant fish and crab larvae in temperate Australian saltmarsh. *Journal of Marine and Freshwater Research* 57: 193-199.
16. Hughes, C., Mazumder, D., Gibson, J., Szymczak, R., Dioni, I., Cendon, D.I., Hollins, S. & Waring, C. (2006). Use of stable isotopes in Sydney catchment process and water quality studies. In, CD Proceedings of the Enviro '06 Conference, Melbourne, ISBN 0-9775223-0-X – paper # e6266.
17. Szymczak, R., Twining, J., Hollins, S., Mazumder, D. & Creighton, N. (2006). A combined multidisciplinary kinetic modeling approach for determination of coastal ecosystem contaminant fluxes. In, CD-ROM Proceedings of the 16th Annual Goldschmidt Conference (Melbourne, Aug-Sept '06), S11-5-2.
18. Szymczak, R., Twining, J., Hollins, S., Hughes, C. Mazumder, D. & Alquezar, R. (2006). Nuclear and isotopic techniques underpinning probabilistic ecological risk analysis in coastal marine systems. In, CD-ROM Proceedings of the 15th Pacific Basin Nuclear Conference (Sydney, Oct '06), ISBN 1 877040 58 4, pp.6.
19. Twining, J.R., Gibson, J., Fischer, M., Stone, D., Stuart-Williams, H. & Keitel, C. (2006) Patterns of water isotope fractionation in soil, stems and leaves across diurnal periods in a Eucalypt forest in south-eastern Australia. Pp 193-196 in *International Workshop on Isotopic Effects in Evaporation: Revisiting the Craig-Gordon Model Four Decades after its Formulation*. Pisa, Italy, May 2006