

List of Publications

David J. PANNELL

Books, Monographs, Major Reports

1. Adenle, A.A., Chertow, M.R., Moors, E.H.M. and Pannell, D.J. (eds) (2020). *Science, Technology and Innovation for Sustainable Development Goals: Insights from Agriculture, Health, Environment and Energy*, Oxford University Press (forthcoming).
2. Pannell, D.J. and Vanclay, F.M. (eds) (2011). *Changing Land Management: Adoption of New Practices by Rural Landholders*, CSIRO Publishing, Canberra.
3. Pannell, D.J. and Schilizzi, S. (eds) (2006). *Economics and the Future: Time and Discounting in Private and Public Decision Making*, Edward Elgar, Cheltenham, UK and Northampton, MA, USA.
4. Graham, T., Pannell, D.J. and White, B. (eds) (2004). *Dryland Salinity: Economic Issues at Farm, Catchment and Policy Levels*, Cooperative Research Centre for Plant-Based Management of Dryland Salinity, Perth, 248 pp.
5. Frost, F.M., Hamilton, B., Lloyd, M. and Pannell, D.J. (2001). *Salinity: A New Balance*, The report of the Salinity Taskforce established to review salinity management in Western Australia, Salinity Taskforce, Perth, 78 pp.
6. Marsh, S.P. and Pannell, D.J. (2000). *The New Environment for Agriculture: Fostering the Relationship Between Public and Private Extension*, RIRDC Publication No. 00/149, Rural Industries Research and Development Corporation, Canberra, 117 pp. <https://rirdc.infoservices.com.au/items/00-149>
7. Pannell, D.J. (1997). *Introduction to Practical Linear Programming*, Wiley Interscience, New York, 333 pp.
8. Kingwell, R.S. and Pannell, D.J. (Eds) (1987). *MIDAS, A Bioeconomic Model of a Dryland Farm System*, Pudoc, Wageningen, 207pp.

Refereed journal articles

1. Thamo, T., Pannell, D.J., Robertson, M.J., Addai, D., Kragt, M., Kingwell, R. (2019). Climate change reduces the mitigation obtainable from sequestration in an Australian farming system, *Australian Journal of Agricultural and Resource Economics* (forthcoming).
2. Li, S.-L., Ferrari, M.J., Bjørnstad, O.N., Runge, M.C., Fonnesbeck, C.J., Tildesley, M.J., Pannell, D. and Shea, S., (2019). Concurrent assessment of epidemiological and operational uncertainties for optimal outbreak control: Ebola as a case study, *Proceedings of the Royal Society B* (forthcoming).
3. Florec, V., Burton, M., Pannell, D., Kelso, J. and Milne, G. (2019). Where to prescribe burn: the costs and benefits of prescribed burning close to houses, *International Journal of Wildland Fire* <https://doi.org/10.1071/WF18192>
4. Pannell, D.J., Gandorfer, M. and Weersink, A. (2019). How flat is flat? Measuring payoff functions and the implications for site-specific crop management, *Computers and Electronics in Agriculture* 162, 459-465.

5. Van Grieken, M., Webster, A., Whitten, S., Poggio, M., Roebeling, P., Bohnet, I. and Pannell, D. (2019). Adoption of agricultural management for Great Barrier Reef water quality improvement in heterogeneous farming communities, *Agricultural Systems* 170, 1-8.
6. Legge, S., Woinarski, J.C.Z., Burbidge, A.A., Palmer, R., Ringma, J., Radford, J.Q., Mitchell, N., Bode, M., Wintle, B., Baseler, M., Bentley, J., Copley, P., Dexter, N., Dickman, C.R., Gillespie, G.R., Hill, B., Johnson, C.N., Latch, P., Letnic, M., Manning, A., McCreless, E.E., Menkhorst, P., Morris, K., Moseby, K., Page, M., Pannell, D. Tuft, K. (2018). Havens for threatened Australian mammals: the contributions of fenced areas and offshore islands to the protection of mammal species susceptible to introduced predators, *Wildlife Research* 45(7), 627-644. doi.org/10.1071/WR17172
7. Zimmerhackel, J.S., Rogers, A.A., Meekan, M.G., Ali, K., Pannell, D.J. and Kragt, M.E. (2018). How shark conservation in the Maldives affects demand for dive tourism, *Tourism Management* 69, 263-271.
8. Pannell, D.J., Alston, J.M., Jeffrey, S., Buckley, Y.M., Vesk, P., Rhode, J.R., McDonald-Madden, E., Nally, S., Gouche, G. and Thamo, T. (2018). Policy-oriented environmental research: What is it worth? *Environmental Science and Policy* 86, 64-71.
9. Weersink, A., Fraser, E., Pannell, D., Duncan, E. and Rotz, S. (2018). Opportunities and challenges for big data in agricultural and environmental analysis, *Annual Review of Resource Economics* 10: 19-37. <https://doi.org/10.1146/annurev-resource-100516-053654>
10. Kuehne, G., Llewellyn, R., Pannell, D.J., Wilkinson, R., Dolling, P., Ouzman, J. and Ewing, M. (2017). Predicting farmer uptake of new agricultural practices: a tool for research, extension and policy, *Agricultural Systems* 156, 115-125.
11. Huveneers, C., Meekan, M. Apps, K., Ferreira, L., Pannell, D. and Vianna, G. (2017). The economic value of shark-diving tourism in Australia, *Reviews in Fish Biology and Fisheries* 27 665–680. DOI: 10.1007/s11160-017-9486-x
12. Tschakert, P., Barnett, J., Ellis, N., Lawrence, C., Tuana, N., New, M., Elrick-Barr, C., Pandit, R. and Pannell, D. (2017). Climate change and loss, as if people mattered: values, places, and experiences, *WIREs Climate Change* 8:e476 <https://doi.org/10.1002/wcc.476>.
13. Pannell, D.J. (2017). Economic perspectives on nitrogen in farming systems: managing trade-offs between production, risk and the environment, *Soil Research* 55, 473-478.
14. Davis, K., Kragt, M., Burton, M., Schilizzi, S., Gelcich, S. and Pannell, D.J. (2017). Why are fishers not enforcing their marine user rights? *Environmental and Resource Economics* 67(4), 661-681.
15. Thamo, T., Pannell, D., Kragt, M., Robertson, M. and Polyakov, M. (2017). Dynamics and the Economics of Carbon Sequestration: Common Oversights and their Implications, *Mitigation and Adaptation Strategies for Global Change* 22(7): 1095-1111.
16. Gibson, F.L., Rogers, A.A., Smith, A.D.M., Roberts, A., Possingham, H., McCarthy, M. and Pannell, D.J., (2017). Factors influencing the use of decision support tools in the development and design of conservation policy, *Environmental Science and Policy* 70(1): 1-8.
17. Thamo, T., Addai, D., Pannell, D.J., Robertson, M.J., Thomas, D.T. and Young, J.M. (2017). Climate change impacts and farm-level adaptation: economic analysis of a mixed cropping-livestock system, *Agricultural Systems* 150, 99-108.

18. Polyakov, M., Fogarty, J., Zhang, F., Pandit, R. and Pannell, D. (2017). The value of restoring urban drains to living streams, *Water Resources and Economics* 17: 42-55.
19. Chalak, M., Polyakov, M. and Pannell, D. (2017). Economics of controlling invasive species: a stochastic optimization model for a spatial-dynamic process, *American Journal of Agricultural Economics* 99(1), 123-139.
20. Polyakov, M., Gibson, F.L. and Pannell, D.J. (2016). Antipodean agricultural and resource economics at 60: Trends in topics, authorship and collaboration, *Australian Journal of Agricultural and Resource Economics* 60, 506-515.
21. Pannell, D.J., Tillie, P., Rodriguez-Cerezo, E., Ervin, D. and Frisvold, G.B. (2016). Herbicide resistance: economic and environmental challenges, *AgBioForum* 19(2), 136-155.
22. Pannell, D., Doole, G. and Cheung, J. (2016). Antipodean agricultural and resource economics at 60: natural resource management, *Australian Journal of Agricultural and Resource Economics* 60(5), 651-667.
23. Kragt, M.E., Pannell, D.K., McVittie, A., Stott, A.W., Ahmadi, B.V. and Wilson, P. (2016). Improving interdisciplinary collaboration in bio-economic modelling for agricultural systems, *Agricultural Systems* 143, 217-224.
24. Pannell, D.J. and Gibson, F.L. (2016). The environmental cost of using poor decision metrics to prioritise environmental projects, *Conservation Biology* 30(2), 382-391.
25. Thamo, T. and Pannell, D.J. (2016). Challenges in developing effective policy for soil carbon sequestration: perspectives on additionality, leakage, and permanence, *Climate Policy* 16, 973–992. DOI:10.1080/14693062.2015.1075372
26. Nordblom, T.L., Hume, I.H., Finlayson, J.D., Pannell, D.J., Holland, J.E. and McClintock, A.J. (2015). Distributional consequences of upstream tree plantations on downstream water users in a public-private benefit framework, *Agricultural Systems* 139, 271-281.
27. Iftekhar, M.S. and Pannell, D.J. (2015). ‘Biases’ in adaptive natural resource management, *Conservation Letters* 8(6), 388-396.
28. Zhang, F., Polyakov, M., Fogarty, J. and Pannell, D. (2015). The capitalized value of rainwater tanks in the property market of Perth, Australia, *Journal of Hydrology* 522, 317-325.
29. Rogers, A.A., Kragt, M.E., Gibson, F.L., Burton, M.P., Petersen, E.H. and Pannell, D.J. (2015). Non-market valuation: usage and impacts in environmental policy and management in Australia, *Australian Journal of Agricultural and Resource Economics* 59(1), 1-15.
30. Davis, K., Kragt, M., Gelcich, S., Schilizzi, S. and Pannell, D.J. (2015). Accounting for enforcement costs in the spatial allocation of marine zones, *Conservation Biology* 29(1), 226-237.
31. Chalak, M. and Pannell, D.J. (2015). Optimal integrated strategies to control an invasive weed, *Canadian Journal of Agricultural Economics* 63(3), 381-407.
32. Polyakov, M., Pannell, D.J., Chalak, M., Park, G., Roberts, A., and Rowles, A. (2015). Restoring native vegetation in an agricultural landscape: spatial optimization for woodland birds, *Land Economics* 91(2), 252-271.
33. Polyakov, M., Pannell, D.J., Pandit, R., Tapsuwan, S. and Park, G. (2015). Capitalized amenity value of native vegetation in a multifunctional rural landscape, *American Journal of Agricultural Economics* 97(1):299–314.
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36. Park, G., Roberts, A., Alexander, J., McNamara, L. and Pannell, D. (2013). The quality of resource condition targets in regional natural resource management in Australia, *Australasian Journal of Environmental Management* 20(4), 285-301.
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38. Asseng, S. and Pannell, D.J. (2013). Adapting dryland agriculture to climate change: farming implications and research and development needs in Western Australia, *Climatic Change* 118(2), 167-181.
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40. Skurray, J., Pandit, R. and Pannell, D.J. (2013). Institutional Impediments to Groundwater Trading: the case of the Gnangara groundwater system of Western Australia, *Journal of Environmental Planning and Management* 56(7), 1046–1072.
41. Pannell, D.J., Roberts, A.M., Park, G. and Alexander, J. (2013). Designing a practical and rigorous framework for comprehensive evaluation and prioritisation of environmental projects, *Wildlife Research* 40(2), 126-133. <http://dx.doi.org/10.1071/WR12072>
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43. Thamo, T., Pannell, D.J., Kingwell, R.S. (2013). Measurement of greenhouse gas emissions from agriculture: economic implications for policy and agricultural producers, *Australian Journal of Agricultural and Resource Economics* 57(2), 234-252.
44. Pannell, D.J., Roberts, A.M., Park, G. and Alexander, J. (2013). Improving environmental decisions: a transaction-costs story, *Ecological Economics* 88, 244-252.
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46. Beltran, J.C., White, B., Burton, M.P., Doole, G. and Pannell, D.J. (2013). Determinants of herbicide use in rice production in the Philippines, *Agricultural Economics* 44(1), 45-55.
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49. Kragt, M.E., Pannell, D.J., Robertson, M.J. and Thamo, T. (2012). Assessing costs of soil carbon sequestration by crop-livestock farmers in Western Australia, *Agricultural Systems* 112(1), 27–37.
50. Skurray, J. and Pannell, D.J. (2012). Potential approaches to the management of third-party impacts from groundwater transfers, *Hydrogeology Journal* 20(5), 879-891. <http://dx.doi.org/10.1007/s10040-012-0868-9>
51. Beltran, J.C., Pannell, D.J., Doole, G.J. and White, B. (2012). A bioeconomic model for analysis of integrated weed management strategies for annual barnyardgrass (*Echinochloa crus-galli* complex) in Philippine rice farming systems, *Agricultural Systems* 112(1), 1–10.
52. Pannell, D.J. (2012). Environment protection: challenges for future farming, *Australian Farm Business Management Journal* 8(2), 19-26.
53. White, B., Doole, G.J. Pannell, D.J. and Florec, V. (2012). Optimal environmental policy design for mine rehabilitation and pollution with a risk of non-compliance owing to firm insolvency, *Australian Journal of Agricultural and Resource Economics*, 56, 280-301.
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58. Pannell, D.J., Roberts, A.M., Park, G., Alexander, J., Curatolo, A. and Marsh, S. (2012). Integrated assessment of public investment in land-use change to protect environmental assets in Australia, *Land Use Policy* 29(2), 377-387. [doi:10.1016/j.landusepol.2011.08.002](https://doi.org/10.1016/j.landusepol.2011.08.002).
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62. Beverly, C., Roberts, A., Hocking, M., Pannell, D. and Dyson, P. (2011). Using linked surface-groundwater catchment modelling to assess protection options for environmental assets threatened by dryland salinity in southern-eastern Australia, *Journal of Hydrology* 410, 13-30.

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