

## List of Publications

David J. PANNELL

### *Books, Monographs, Major Reports*

1. Pannell, D.J. and Vanclay, F.M. (eds) (2011). *Changing Land Management: Adoption of New Practices by Rural Landholders*, CSIRO Publishing, Canberra.
2. 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.
3. 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.
4. 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.
5. 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>
6. Pannell, D.J. (1997). *Introduction to Practical Linear Programming*, Wiley Interscience, New York, 333 pp.
7. 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. Pannell, D.J. and Gibson, F.L. (2015). The environmental cost of using poor decision metrics to prioritise environmental projects, *Conservation Biology* (forthcoming).
2. 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* (forthcoming).
3. Iftekhar, M.S. and Pannell, D.J. (2015). ‘Biases’ in adaptive natural resource management, *Conservation Letters* (forthcoming).
4. 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.
5. 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. (ERA: A)
6. 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. (ERA A\*)

7. Chalak, M. and Pannell, D.J. (2015). Optimal integrated strategies to control an invasive weed, *Canadian Journal of Agricultural Economics* (forthcoming). (ERA A)
8. 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. (ERA A)
9. 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. <http://dx.doi.org/10.1093/ajae/aau053> (ERA A\*)
10. Barry, L.E., Yao, R.T., Harrison, D.R., Paragahawewa, U.H. and Pannell, D.J. (2014). Enhancing ecosystem services through afforestation: How policy can help, *Land Use Policy* 39, 135-145. <http://dx.doi.org/10.1016/j.landusepol.2014.03.012> (ERA: B)
11. Pannell, D.J., Llewellyn, R.S. and Corbeels, M. (2014). The farm-level economics of conservation agriculture for resource-poor farmers, *Agriculture, Ecosystems and Environment* 187(1), 52-64. (ERA: A)
12. 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. (ERA: B)
13. Pacini, G.C., Gabellini, L., Roberts, A.M., Vazzana, C., Park, G. and Pannell, D.J. (2013). Assessing the potential of INFFER to improve the management of agri-environmental assets in Tuscany, *Italian Journal of Agronomy* 8, e7. DOI: 10.4081/ija.2013.e27
14. 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. (ERA: A)
15. Doole, G., Vigiak, O., Roberts, A.M. and Pannell, D.J. (2013). Cost-effective strategies to mitigate multiple pollutants in an agricultural catchment in North-Central Victoria, Australia, *Australian Journal of Agricultural and Resource Economics* 57(3), 441-460. (ERA: A)
16. Skurray, J., Pandit, R. and Pannell, D.J. (2013). Institutional Impediments to Groundwater Trading: the case of the Gnamagara groundwater system of Western Australia, *Journal of Environmental Planning and Management* 56(7), 1046–1072. (ERA: A)
17. 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> (ERA: B)
18. Polyakov, M., Pandit, R., Tapsuwan, S., Park, G. and Pannell, D.J. (2013). Valuing environmental assets on rural lifestyle properties, *Agricultural and Resource Economics Review* 42(1), 159-175. (ERA: B)
19. 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. (ERA: A)
20. Pannell, D.J., Roberts, A.M., Park, G. and Alexander, J. (2013). Improving environmental decisions: a transaction-costs story, *Ecological Economics* 88, 244-252. (ERA: A)

21. Polyakov, M., Rowles, A.D., Radford, J.Q., Bennett, A.F., Park, G., Roberts, A. and Pannell, D.J. (2013). Using habitat extent and composition to predict the occurrence of woodland birds in fragmented landscapes, *Landscape Ecology* 28(2), 329-341. (ERA: B)
22. 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. (ERA: A)
23. Doole, G.J. and Pannell, D.J. (2013). A process for the development and application of simulation models in applied economics, *Australian Journal of Agricultural and Resource Economics* 57(1), 79-103. (ERA: A)
24. Robertson, M.J., Pannell, D.J. and Chalak, M. (2012). Whole-farm models: a review of recent approaches, *Australian Farm Business Management Journal* 9(2), 13-26. (ERA: C)
25. 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. (ERA: A)
26. 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> (ERA: B)
27. 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. (ERA: A)
28. Pannell, D.J. (2012). Environment protection: challenges for future farming, *Australian Farm Business Management Journal* 8(2), 19-26. (ERA: C)
29. 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. (ERA: A)
30. Chalak, M. and Pannell, D.J. (2012). Optimising control of an agricultural weed in sheep-production pastures, *Agricultural Systems* 109, 1-8. (ERA: A)
31. Vianna, G.M.S., Meekan, M.G., Pannell, D.J., Marsh, S.P. and Meeuwig, J.J. (2012). Socio-economic and community benefits from shark diving by tourists in Palau: a sustainable use of reef shark populations, *Biological Conservation* 145(1), 267-277. (ERA: A)
32. Roberts, A.M. Pannell, D.J. Doole, G. and Vigiak, O. (2012). Agricultural land management strategies to reduce phosphorus loads in the Gippsland Lakes, Australia, *Agricultural Systems* 106(1), 11-22. <http://dx.doi.org/10.1016/j.agry.2011.10.009> (ERA: A)
33. Beltran, J.C., Pannell, D.J. and Doole, G. (2012). Economic implications of herbicide resistance and high labour costs for management of annual barnyardgrass (*Echinochloa crus-galli*) in Philippine rice farming systems, *Crop Protection* 31, 31-39. (ERA: B)
34. 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). (ERA: B)
35. Skurray, J., Roberts, E.J. and Pannell, D.J. (2012). Hydrological challenges to groundwater trading: lessons from south-west Western Australia, *Journal of Hydrology*. 412-413, 256-268. (ERA: A\*)

36. Doole, G. and Pannell, D.J. (2012). Empirical evaluation of nonpoint pollution policies under agent heterogeneity: regulating intensive dairy production in the Waikato region of New Zealand, *Australian Journal of Agricultural and Resource Economics* 56(1), 82-101. (ERA: A)  
<http://www.sciencedirect.com/science/article/pii/S0022169411003520>
37. Seymour, E., Curtis, A., Pannell, D.J., Roberts, A. and Allan, C. (2011). Same river, different values and why it matters, *Ecological Management and Restoration* 12(3), 207-213. (ERA: C)
38. 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. (ERA: A\*)
39. Gandorfer, M., Pannell, D.J. and Meyer-Aurich, A. (2011). Analyzing the Effects of Risk and Uncertainty on Optimal Tillage and Nitrogen Fertilizer Intensity for field crops in Germany, *Agricultural Systems* 104(8), 615-622. (ERA: A)
40. Doole, G. and Pannell, D.J. (2011). Environmental policy evaluation under uncertainty through application of robust nonlinear programming, *Australian Journal of Agricultural and Resource Economics* 55(4), 469-486. (ERA: A)
41. Roberts, A.M., Seymour, E.J. and Pannell, D.J. (2011). The role of regional organisations in managing environmental water in the Murray-Darling Basin, Australia, *Economic Letters* 30(2), 147-156. (ERA: A)
42. Doole, G., Ramilan, T. and Pannell, D.J. (2011). Framework for evaluating management interventions for water quality improvement across multiple agents, *Environmental Modelling and Software* 26(7), 860-872.  
<http://dx.doi.org/10.1016/j.envsoft.2011.02.009> (ERA: A)
43. Seymour, E., Curtis, A., Pannell, D., Allan, C. and Roberts, A. (2010). Understanding the role of assigned values in natural resource management. *Australasian Journal of Environmental Management* 17, 142-153. (ERA: B)
44. Alexander, J. Roberts, A.M. and Pannell, D.J. (2010). Victorian Catchment Management approaches to salinity: learning from the National Action Plan experience, *Australasian Journal of Environmental Management* 17(1), 45-52. (ERA: B)
45. Monjardino, M., Revell, D and Pannell, D.J. (2010). The potential contribution of forage shrubs to economic returns and environmental management in Australian dryland agricultural systems, *Agricultural Systems* 103(4), 187-197. (ERA: A)
46. Pannell, D.J. and Roberts, A.M. (2010). The National Action Plan for Salinity and Water Quality: A retrospective assessment, *Australian Journal of Agricultural and Resource Economics* 54(4), 437-456. (ERA: A)
47. Graham, T., Pannell, D.J. and White, B. (2010). Determining the net-benefits from government intervention for dryland salinity: a breakeven analysis, *Australasian Journal of Environmental Management*, 17(2), 112-124. (ERA: B)
48. Sieber, S., Pannell, D.J., Müller, K., Holm-Müller, K., Kreins, P. and Gutsche, V. (2010). Modelling pesticide risk: A marginal cost-benefit analysis of an environmental buffer-zone programme, *Land Use Policy* 27(2), 653-661. (ERA: B)
49. Llewellyn, R. and Pannell, D.J. (2009). Managing the herbicide resource: an evaluation of extension on management of herbicide-resistant weeds, *AgBioForum* 12(3&4), 358-369. (ERA: C)
50. Pannell, D.J. and Wilkinson, R. (2009). Policy mechanism choice for environmental management by non-commercial "lifestyle" rural landholders. *Ecological Economics* 68, 2679-2687. (ERA: A)

51. Roberts, A. and Pannell, D. (2009) Piloting a systematic framework for public investment in regional natural resource management: dryland salinity in Australia, *Land Use Policy* 26(4), 1001-1010. (ERA: B)
52. Pannell, D.J. and Roberts, A.M. (2009). Conducting and delivering integrated research to influence land-use policy: salinity policy in Australia, *Environmental Science and Policy* 12(8), 1088-1099. (doi:10.1016/j.envsci.2008.12.005) (ERA: B)
53. Pannell, D.J. (2009). Technology change as a policy response to promote changes in land management for environmental benefits, *Agricultural Economics* 40(1), 95-102. (doi: 10.1111/j.1574-0862.2008.00362.x) (ERA: A)
54. Doole, G.J., Pannell, D.J. and Revell, C.K. (2009). Economic contribution of French serradella (*Ornithopus sativa* Brot.) pasture to integrated weed management in Western Australian mixed-farming systems: an application of compressed annealing. *Australian Journal of Agricultural and Resource Economics* 53, 231–249. (ERA: A)
55. Doole, G.J., and Pannell, D.J. (2009). Evaluating combined land conservation benefits from perennial pasture: lucerne (*Medicago sativa* L.) in Western Australia for management of dryland salinity and herbicide resistance, *Australian Journal of Agricultural and Resource Economics*, 53, 193–212. (ERA: A)
56. Seymour, E., Pannell, D., Roberts, A., Marsh, S. and Wilkinson, R. (2008). Decision-making by regional bodies for natural resource management in Australia: current processes and capacity gaps, *Australasian Journal of Environmental Management* 15(4), 211-221. (ERA: B)
57. Pannell, D.J., Hailu, G. Weersink, A., and Burt, A. (2008). More reasons why farmers have so little interest in futures markets, *Agricultural Economics* 39(1), 41-50. (ERA: A)
58. Doole, G.J. and Pannell, D.J. (2008). Optimisation of a large, constrained simulation model using compressed annealing, *Journal of Agricultural Economics* 59(1), 188-206. (ERA: A)
59. Doole, G.J. and Pannell, D.J. (2008). Role and value of including lucerne (*Medicago sativa* L.) phases in crop rotations for the management of herbicide-resistant *Lolium rigidum* in Western Australia, *Crop Protection* 27, 497-504. (ERA: B)
60. Pannell, D.J. (2008). Public benefits, private benefits, and policy intervention for land-use change for environmental benefits, *Land Economics* 84(2), 225-240. DOI: 10.3368/le.84.2.225 (ERA: A)
61. Llewellyn, R.S., Lindner, R.K., Pannell D.J. & Powles, S.B. (2007). Herbicide resistance and the adoption of integrated weed management by Western Australian grain growers, *Agricultural Economics* 36(1), 123-130. (ERA: A)
62. Pannell, D.J. (2006). Policies and politics: Challenges and opportunities for economists, *Agenda* 13(2), 117-132. (ERA: C)
63. Pannell, D.J. (2006). Flat-earth economics: The far-reaching consequences of flat payoff functions in economic decision making, *Review of Agricultural Economics* 28(4), 553-566. (ERA: B)
64. Marsh, S.P., Burton, M.P. and Pannell, D.J. (2006). Understanding farmers' monitoring of water tables for salinity management, *Australian Journal of Experimental Agriculture* 46(7), 1113-1122. (ERA: B)
65. Pannell, D.J., Marshall, G.R., Barr, N., Curtis, A., Vanclay, F. and Wilkinson, R. (2006). Understanding and promoting adoption of conservation practices by rural landholders. *Australian Journal of Experimental Agriculture* 46(11), 1407-1424. <http://dx.doi.org/10.1071/EA05037> (ERA: B)

66. Pannell, D.J. and Ewing, M.A. (2006). Managing secondary dryland salinity: Options and challenges, *Agricultural Water Management* 80(1/2/3), 41-56. (ERA: A)
67. Llewellyn, R.S., Lindner, R.K., Pannell D.J. & Powles, S.B. (2005). Targeting key perceptions when planning and evaluating extension, *Australian Journal of Experimental Agriculture* 45, 1627-1633. (ERA: B)
68. Ridley, A., and Pannell, D.J. (2005). The role of plants and plant-based R&D in managing dryland salinity in Australia, *Australian Journal of Experimental Agriculture* 45, 1341-1355. (ERA: B)
69. Pannell, D.J. (2005). Farm, food and resource issues: Politics and dryland salinity, *Australian Journal of Experimental Agriculture* 45, 1471-1480. (ERA: B)
70. Weersink, A., Pannell, D., Fulton, M. and Meyer-Aurich, A. (2005). Agriculture's likely role in meeting Canada's Kyoto commitments, *Canadian Journal of Agricultural Economics* 53, 425-441. (ERA: A)
71. John, M., Pannell, D.J. and Kingwell, R.S. (2005). Climate change and the economics of farm management in the face of land degradation: Dryland salinity in Western Australia, *Canadian Journal of Agricultural Economics* 53, 443-459. (ERA: A)
72. Kingwell, R.S. and Pannell, D.J. (2005). Economic trends and drivers affecting the grainbelt of Western Australia to 2030, *Australian Journal of Agricultural Research* 56(6), 553-561.
73. Weersink, A., Llewellyn, R.S. and Pannell, D.J. (2005). Economics of pre-emptive management to avoid weed resistance to glyphosate in Australia, *Crop Protection* 24, 659-664.
74. Abadi Ghadim, A.K., Pannell, D.J. and Burton, M.P. (2005). Risk, uncertainty and learning in adoption of a crop innovation, *Agricultural Economics* 33, 1-9.
75. Monjardino, M., D.J. Pannell, S. Powles (2005). The economic value of glyphosate-resistant canola in the management of two widespread crop weeds in a WA farming system. *Agricultural Systems* 84(3), 297-315.
76. Monjardino, M., D.J. Pannell, S. Powles (2004). The economic value of haying and green manuring in the integrated management of annual ryegrass and wild radish in a Western Australian farming system, *Australian Journal of Experimental Agriculture* 44(12), 1195- 1203.
77. Pannell, D.J. (2004). Heathens in the chapel? Application of economics to biodiversity, *Pacific Conservation Biology* 10(2/3), 88-105.
78. Llewellyn, R.S., Lindner, R.K., Pannell D.J. and Powles, S.B. (2004). Grain grower perceptions and the use of integrated weed management, *Australian Journal of Experimental Agriculture* 44(10), 993-1001.
79. Monjardino, M., D.J. Pannell, S. Powles (2004). Economic value of pasture phases in the integrated management of annual ryegrass and wild radish in a Western Australian farming system, *Australian Journal of Experimental Agriculture* 44(3), 265-271.
80. Pannell, D.J. (2004). Effectively communicating economics to policy makers. *Australian Journal of Agricultural and Resource Economics* 48(3), 535-555.
81. Pannell, D.J., Stewart, V., Bennett, A., Monjardino, M., Schmidt, C. and Powles, S.B. (2004). RIM: A Bioeconomic Model for Integrated Weed Management of *Lolium rigidum* in Western Australia. *Agricultural Systems* 79(3), 305-325.
82. Marsh, S.P., Pannell, D.J. and Lindner, R.K. (2004). Does agricultural extension pay? A case study for a new crop, lupins, in Western Australia. *Agricultural Economics* 30(1), 17-30.

83. O'Connell, M., Pannell, D.J., and French, R. (2003). Are high lupin seeding rates more risky in the Western Australian wheatbelt? *Australian Journal of Experimental Agriculture* 43(9), 1137-1142.
84. Monjardino, M., Pannell, D.J., and Powles, S.B. (2003). A multi-species bio-economic model for integrated weed management. *Weed Science* 51(5), 798-809.
85. Pannell, D.J. (2003). Balancing economics and sustainability in building an integrated agricultural system, *Pacific Conservation Biology* 9(1/2), 23-29.
86. Pannell, D.J. (2003). What is the value of a sustainability indicator? Economic and social issues in monitoring and management for sustainability. *Australian Journal of Experimental Agriculture* 43(3), 239-243.
87. Kington, E.A. and Pannell, D.J. (2003). Dryland salinity in the upper Kent River catchment of Western Australia: Farmer perceptions and practices, *Australian Journal of Experimental Agriculture* 43(1), 19-28.
88. Marra, M., Pannell, D.J. and Abadi Ghadim, A. (2003). The economics of risk, uncertainty and learning in the adoption of new agricultural technologies: Where are we on the learning curve? *Agricultural Systems*, 75(2/3), 215-234.
89. Llewellyn, R.S., Lindner, R.K., Pannell D.J. and Powles, S.B. (2002). Resistance and the herbicide resource: perceptions of Western Australian grain growers, *Crop Protection* 21, 1067-1075.
90. Pannell, D.J. (2002). Prose, psychopaths and persistence: Personal perspectives on publishing, *Canadian Journal of Agricultural Economics*, 50(2), 101-116.
91. Weersink, A., Jeffrey, S. and Pannell, D. (2002). Farm-level modelling for bigger issues. *Review of Agricultural Economics* 24(1), 123-140.
92. Petersen, E.H., Pannell, D.J., Nordblom T.L. and Shomo, F. (2002). Potential benefits from alternative areas of agricultural research for dryland farming in northern Syria, *Agricultural Systems* 72(2), 93-108.
93. Bathgate, A. and Pannell, D.J. (2002). Economics of deep-rooted perennials in Western Australia, *Agricultural Water Management* 53(1), 117-132.
94. Schilizzi, S. and Pannell, D.J. (2001). The economics of nitrogen fixation, *Agronomie* 21(6/7), 527-538.
95. Pannell, D.J. (2001). Dryland Salinity: Economic, Scientific, Social and Policy Dimensions, *Australian Journal of Agricultural and Resource Economics* 45(4), 517-546.
96. Ferdowsian, R., Pannell, D.J., McCaron, C., Ryder, A. and Crossing, L. (2001). Explaining groundwater hydrographs: Separating atypical rainfall events from time trends, *Australian Journal of Soil Research* 39, 861-875.
97. Pannell, D.J., McFarlane, D.J. and Ferdowsian, R. (2001). Rethinking the externality issue for dryland salinity in Western Australia, *Australian Journal of Agricultural and Resource Economics* 45(3), 459-475.
98. Llewellyn, R., Lindner, R.K, Pannell, D.J. and Powles, S. (2001). Herbicide resistance and the decision to conserve the herbicide resource: review and framework, *Australasian Agribusiness Review* Agribusiness Review <http://www.agrifood.info/review/2001/Llewellyn.html>.
99. Stewart, V., Marsh, S., Kingwell, R., Pannell, D., Abadi, A. and Schilizzi, S. (2000). Computer games and fun in farming systems education? : A case study. *Journal of Agricultural Education and Extension* 7(2), 117-128.
100. Marsh, S.P. and Pannell, D.J. (2000). Agricultural extension policy in Australia: The good, the bad and the misguided. *Australian Journal of Agricultural and Resource Economics* 44(4), 605-627.

101. Vercammen, J. and Pannell, D.J. (2000). The economics of crop hail insurance. *Canadian Journal of Agricultural Economics* 48:87-98.
102. Marsh, S.P., Pannell, D.J. and Lindner R.K. (2000). The impact of agricultural extension on adoption and diffusion of lupins as a new crop in Western Australia. *Australian Journal of Experimental Agriculture* 40(4), 571-583.
103. Pannell, D.J., Malcolm, L.R. and Kingwell, R.S. (2000). Are we risking too much? Perspectives on risk in farm modelling. *Agricultural Economics* 23(1), 69-78.
104. Pannell D.J. and Glenn N.A. (2000). A framework for economic evaluation and selection of sustainability indicators in agriculture, *Ecological Economics* 33(1), 135-149.
105. Pannell, D.J. (1999). Social and economic challenges in the development of complex farming systems, *Agroforestry Systems* 45(1-3), 393-409.
106. Marsh, S.P. and Pannell, D.J. (1999). Agricultural extension policy and practice in Australia: An overview, *Journal of Agricultural Education and Extension* 6(2), 83-92.
107. Abadi Ghadim, A.K. and Pannell, D.J. (1999). A conceptual framework of adoption of an agricultural innovation, *Agricultural Economics* 21, 145-154.
108. Pannell, D.J. (1999). On the estimation of on-farm benefits of agricultural research. *Agricultural Systems* 61(2), 123-134.
109. Pannell, D.J. (1999). Economics, extension and the adoption of land conservation innovations in agriculture, *International Journal of Social Economics (Essays in Honour of Clement Allan Tisdell)* 26(7/8/9), 999-1012.
110. Pannell, D.J. and Schilizzi, S. (1999). Sustainable agriculture: A question of ecology, equity, economic efficiency or expedience? *Journal of Sustainable Agriculture* 13(4), 57-66.
111. Pannell, D.J. (1999). On the balance between strategic-basic and applied agricultural research, *Australian Journal of Agricultural and Resource Economics* 43(1), 91-113.
112. Marsh, S.P. and Pannell, D.J. (1998). The changing relationship between private and public sector agricultural extension in Australia. *Rural Society* 8(2), 133-151.
113. Bennett, A.L. and Pannell, D.J. (1998). Economic evaluation of a weed-activated sprayer for herbicide application to patchy weed populations. *Australian Journal of Agricultural and Resource Economics* 42(4), 389-408.
114. Pannell, D.J. and Nordblom, T.L. (1998). Impact of risk aversion on whole-farm management in Syria. *Australian Journal of Agricultural and Resource Economics* 42(3), 227-247.
115. Pannell, D.J. (1997). Sensitivity analysis of normative economic models: Theoretical framework and practical strategies. *Agricultural Economics* 16(2), 139-152.
116. Pannell, D.J. (1996). Lessons from a decade of whole-farm modelling in Western Australia. *Review of Agricultural Economics* 18(3), 373-383.
117. Schmidt, C. and Pannell, D.J. (1996). Economic issues in management of herbicide resistant weeds. *Review of Marketing and Agricultural Economics* 64, 301-308.
118. Schmidt, C. and Pannell, D.J. (1996). The role and value of herbicide-resistant lupins in Western Australian agriculture. *Crop Protection* 15, 539-548.
119. Gorddard, R.J., Pannell, D.J. and Hertzler, G.L. (1996). Economic evaluation of strategies for management of herbicide resistance. *Agricultural Systems* 51, 281-298.
120. Pannell, D.J., Kingwell, R.S. and Schilizzi, S. (1996). Debugging mathematical programming models: Principles and practical strategies. *Review of Marketing and Agricultural Economics* 64, 86-100.



121. Pannell, D.J. (1995). Optimal herbicide strategies for weed control under risk aversion. *Review of Agricultural Economics* 17, 337-350.
122. Pannell, D.J. (1995). Economic aspects of legume management and legume research in dryland farming systems of southern Australia. *Agricultural Systems* 49, 217-236.
123. Pannell, D.J. (1995). Optimal herbicide strategies given yield and quality impacts of weeds. *Review of Marketing and Agricultural Economics* 63, 311-317.
124. Gorddard, R.J., Pannell, D.J. and Hertzler, G.L. (1995). An optimal control model of integrated weed management under herbicide resistance. *Australian Journal of Agricultural Economics* 39, 71-87.
125. Pannell, D.J. (1994). The value of information in herbicide decision making for weed control in Australian wheat crops. *Journal of Agricultural and Resource Economics* 19(2), 366-381.
126. Pannell, D.J. (1994). Economic justifications for government involvement in weed management: a catalogue of market failures. *Plant Protection Quarterly* 9(4), 131-137.
127. Nordblom, T., Pannell, D.J., Christiansen, S., Nersoyan, N. and Bahhady, F. (1994). From weed to wealth? Prospects for medic pastures in Mediterranean farming systems of north-west Syria. *Agricultural Economics* 11(1), 29-42.
128. Pannell, D.J. and Gill, G.S. (1994). Mixtures of wild oats (*avena fatua*) and ryegrass (*lolium rigidum*) in wheat: competition and optimal economic control. *Crop Protection* 13(5), 371-375.
129. Kingwell, R.S., Pannell, D.J. and Robinson S.D. (1993). Tactical responses to seasonal conditions in whole-farm planning in Western Australia. *Agricultural Economics* 8, 211-226.
130. Dorr, G.J. and Pannell, D.J. (1992). Economics of improved spatial distribution of herbicide for weed control in crops. *Crop Protection* 11(4), 385-391.
131. Abadi Ghadim, A.K. and Pannell, D.J. (1991). The economic trade-off between pasture production and crop weed control, *Agricultural Systems* 36(1), 1-15.
132. Pannell, D.J. (1991). Pests and pesticides, risk and risk aversion, *Agricultural Economics* 5(4), 361-383.
133. Abadi Ghadim, A.K., Kingwell, R.S. and Pannell, D.J. (1991). An economic evaluation of deep tillage to reduce soil compaction on crop-livestock farms in Western Australia. *Agricultural Systems* 37(3), 291-307.
134. Pannell, D.J. (1990). A model of wheat yield response to application of diclofop-methyl to control ryegrass (*Lolium rigidum*), *Crop Protection* 9(6), 422-8.
135. Pannell, D.J. (1990). Responses to risk in weed control decisions under expected profit maximisation, *Journal of Agricultural Economics* 41(3), 391-403.
136. Pannell, D.J. (1990). An economic response model of herbicide application for weed control in crops, *Australian Journal of Agricultural Economics* 34(3), 223-241.
137. Pannell, D.J. (1989). An alternative representation of proportionality among nutrients in least cost feed formulation, *British Poultry Science* 30(3), 711-713.
138. Pannell, D.J. (1989). Economics and the law relating to flexibility of chemical rates, *Plant Protection Quarterly* 4(3), 104-6.
139. Pannell, D.J. and Falconer, D.A. (1988). The relative contributions to profit of fixed and applied nitrogen in a crop-livestock farm system, *Agricultural Systems* 26(1), 1-17.
140. Pannell, D.J. (1988). Weed management: a review of applied economics research in Australia, *Review of Marketing and Agricultural Economics* 56(3), 255-69.

141. Patten, L.H., Hardaker, J.B. and Pannell, D.J. (1988). Utility efficient programming for whole-farm planning, *Australian Journal of Agricultural Economics* 32(2/3), 88-97.
142. Pannell, D.J. and Panetta, F.D. (1986). Estimating the on-farm cost of skeleton weed (*Chondrilla juncea*) in Western Australia using a wholefarm programming model, *Agriculture, Ecosystems and Environment* 17(3/4), 213-227.
143. Morrison, D.A., Kingwell, R.S., Pannell, D.J. and Ewing M.A. (1986). A mathematical programming model of a crop-livestock farm system, *Agricultural Systems* 20(4), 243-268.
144. Pannell, D.J. (1984). Using simulation for economic assessment of the skeleton weed eradication programme in Western Australia, *Australian Weeds* 3(4), 146-149.

*Notes, editorials, comments and unrefereed articles in journals*

145. Vianna, G.M.S., Meekan, M.G., Pannell, D.J., Marsh, S.P. and Meeuwig, J.J. (2013). Letter to the Editor: Valuing individual animals through tourism: Science of speculation? - Reply to Catlin et al. (2013), *Biological Conservation* 166, 301-302.
146. Garrick, D., McCann, L., Pannell, D.J. (2013). Transaction costs and environmental policy: Taking stock, looking forward, *Ecological Economics* 88, 182-184.
147. Pannell, D.J. (2010). If I were minister for agriculture ..., *Farm Policy Journal* 7(2), 15-19.
148. Dilly, O. and Pannell, D. (2009). Editorial: Sustainability impact assessment and land-use policies for sensitive regions, *Environmental Science and Policy* 12(8), 1075-1076.
149. Pannell, D.J., Marshall, G.R., Barr, N., Curtis, A., Vanclay, F. and Wilkinson, R. (2006). Adoption of conservation practices by rural landholders, *Connections: Farm, Food and Resource Issues*, [http://www.agrifood.info/connections/2006/Pannell\\_et\\_al.html](http://www.agrifood.info/connections/2006/Pannell_et_al.html)
150. Pannell, D.J. (2006). Seeking more effective NRM policies, *Water, Journal of the Australian Water Association*, August 2006, 7.
151. Pannell, D.J. (2006). Dryland salinity: new knowledge with big implications, *Connections: Farm, Food and Resource Issues*, <http://www.agrifood.info/connections/2006/Pannell.html>
152. Pannell, D.J. (2006). Discussion of "Editorial – The peer-review system: prospects and challenges", *Hydrological Sciences Journal* 51(2), 352-353.
153. Pannell, D., Peterson, D., and Lindner, B. (2006). Special issue on water economics and policy, *Australian Journal of Agricultural and Resource Economics* 50(3), 269-270.
154. Ridley, A. and Pannell, D. (2005). An investment framework for managing dryland salinity in Australia, *Farm Policy Journal* 2(4), 39-49.
155. Pannell, D. (2005). Voluntary versus regulatory approached to protecting the environment in rural areas, *Farm Policy Journal* 2(3), 1-9.
156. Pannell, D.J. (2002). Loving, losing and living with the environment, *Connections: Farm, Food and Resource Issues* 2, 25-36.
157. Pannell, D.J. (2001). Harry Potter and the pendulums of perpetual motion: Economic policy instruments for environmental management, *Connections: Farm, Food and Resource Issues* 1, 3-8. [http://www.agrifood.info/connections/summer\\_2001/Pannell.html](http://www.agrifood.info/connections/summer_2001/Pannell.html)

158. Pannell, D.J. (2001). Salinity policy: A tale of fallacies, misconceptions and hidden assumptions, *Agricultural Science* 14(1), 35-37.
159. Pannell, D.J. (1992). The economics of herbicide application for weed control: Deterministic, stochastic and tactical analyses, *Australian Journal of Agricultural Economics* 36(1), 97. (abstract).
160. Pannell, D.J. (1991). Responses to risk in weed control decisions under expected profit maximisation: Reply, *Journal of Agricultural Economics* 42(3), 407-408.
161. Pannell, D.J. (1991). Economics and the law relating to flexibility of chemical rates: Reply, *Plant Protection Quarterly* 6(3), 154-155.
162. Lindner, R.K. and Pannell, D.J. (1990). Product market distortions and the returns to federal laying-hen research in Canada: Comment, *Canadian Journal of Agricultural Economics* 38, 345-9.
163. Pannell, D.J. (1989). REFLIST: A program to assist in preparation of reference lists in theses and journal articles, *Review of Marketing and Agricultural Economics* 57(1,2,3), 129-33.
164. Falconer, D., Lowe, M., Ewing, M. and Pannell, D. (1988). Benefits and costs of medic establishment in the low rainfall wheatbelt, *Journal of Agriculture, Western Australia* 29(1), 3-7.
165. Pannell, D.J. (1988). An integrated package for linear programming, *Review of Marketing and Agricultural Economics* 56(2), 234-5.
166. Pannell, D.J. (1988). Theory and reality of weed control thresholds: a comment, *Plant Protection Quarterly* 3(1), 43-4.
167. Kingwell, R.S. and Pannell, D.J. (1988). Limits to potential yield, *Agricultural Science* 1(7), 36-8.
168. Pannell, D.J. (1988). The place of expert systems in agricultural economics, *Review of Marketing and Agricultural Economics* 56(2), 206-9.

#### *Book chapters*

1. Jakeman, A., Kelly (nee Letcher), R., Ticehurst, J., Blakers, R., Croke, B., Curtis, A., Fu, B., El Sawah, S., Gardner, A., Guillaume, J., Hartley, M., Holley, C., Hutchings, P., Pannell, D., Ross, A., Sharp, E., Sinclair, D., and Wilson, A. (2014). Modelling for managing the complex issue of catchment-scale surface and groundwater allocation, In: Mohammad S. Obaidat, Joaquim Filipe, Janusz Kacprzyk, and Nuno Pina (eds), *Simulation and Modeling Methodologies, Technologies and Applications*, Springer, Cham, pp 25-41.
2. Beltran, J.C., Pannell, D.J., and Doole, G.J. (2013). 'Rice farming systems and weed management in the Philippines', Chapter 5 in Raza, A. (ed.), *Agricultural systems in the 21st century*, Nova Science Publishers, Hauppauge, pp. 113-130.
3. Pannell, D.J. (2012). The Murray Darling Basin Plan: Economic and community perspectives (poem), In: Quiggin, J., Mallawaarachchi, T. and Chambers, S. (eds.), *Water Policy Reform, Lessons in Sustainability from the Murray Darling Basin*, Edward Elgar, Cheltenham UK and Northampton MA USA, pp. 198-199.
4. Marsh, S.P., Pannell, D.J. and Llewellyn, R.S. (2011). Economics and extension, In: Jennings, J., Packham, R. and Woodside, D., *Shaping Change: Natural Resource Management, Agriculture, and the Role of Extension*, Australia-Pacific Extension Network, Australia, pp. 182-189.
5. Pannell, D.J., Marshall, G.R., Barr, N., Curtis, A., Vanclay, F. and Wilkinson, R. (2011). Adoption of conservation practices by rural landholders, In: Jennings, J.,

- Packham, R. and Woodside, D., *Shaping Change: Natural Resource Management, Agriculture, and the Role of Extension*, Australia-Pacific Extension Network, Australia, pp. 72-77.
6. Pannell, D.J. and Vanclay, F.M. (2011). Changing land management: multiple perspectives on a multifaceted issue, In Pannell, D.J. and Vanclay, F.M. (eds) (2011). *Changing Land Management: Adoption of New Practices by Rural Landholders*, CSIRO Publishing, Canberra.
  7. Pannell, D.J., Marshall, G.R., Barr, N., Curtis, A., Vanclay, F. and Wilkinson, R. (2011). Understanding and promoting adoption of conservation practices by rural landholders, In Pannell, D.J. and Vanclay, F.M. (eds) (2011). *Changing Land Management: Adoption of New Practices by Rural Landholders*, CSIRO Publishing, Canberra.
  8. Pannell, D.J. (2011). Policy perspectives on changing land management, In Pannell, D.J. and Vanclay, F.M. (eds) (2011). *Changing Land Management: Adoption of New Practices by Rural Landholders*, CSIRO Publishing, Canberra.
  9. Pannell, D.J. (2009). Enhancing the environmental benefits of agroforestry through government policy mechanisms. In: I. Nuberg, B. George and R. Reid (eds.) *Agroforestry for Natural Resource Management*, CSIRO, Melbourne , pp. 309-321.
  10. Doole, G.J. and Pannell, D.J. (2009). On the economic analysis of crop rotations, In: *Crop Rotation: Economics, Management and Impact*, Chapter 3, Nova Science, Hauppauge, New York, pp. 71–106.
  11. Pannell, D.J. (2008). Experiences with alternative land, water and biodiversity policy approaches in Australia, In: Chapter 14 of *Breath of Fresh Air*, The Fraser Institute, Canada, pp. 203-214.
  12. Pannell, D.J. (2007). Dryland salinity: new knowledge with big implications, *Dryland Economy: Realizing the Potential*, Institute of Chartered Financial Analysts of India, (forthcoming) (reprinted from *Connections*).
  13. Pannell, D.J. and Schilizzi, S. (2006). Time and discounting in economic decision making. In: Pannell, D.J. and Schilizzi, S. (eds). *Economics and the Future: Time and Discounting in Private and Public Decision Making*, Edward Elgar, Cheltenham, UK and Northampton, MA, USA, pp. 1-11.
  14. Pannell, D.J. (2006). Avoiding simplistic assumptions in discounting cash flows for private decisions. In: Pannell, D.J. and Schilizzi (eds). *Economics and the Future: Time and Discounting in Private and Public Decision Making*, Edward Elgar, Cheltenham, UK and Northampton, MA, USA, pp. 25-35.
  15. Schilizzi, S. and Pannell, D.J. (2006). Time will tell: Pending questions on discounting. In: Pannell, D.J. and Schilizzi, S. (eds). *Economics and the Future: Time and Discounting in Private and Public Decision Making*, Edward Elgar, Cheltenham, UK and Northampton, MA, USA, pp. 169-176.
  16. Cullen, P. and Pannell, D. (2006). Salinity, In: P. Attiwill and B. Wilson (Eds.) *Ecology: An Australian Perspective*, 2<sup>nd</sup> edition, Oxford University Press, Melbourne, pp. 161-175.
  17. Weersink, A., Jeffrey, S. and Pannell, D. (2004). Modeling Farming System Linkages. in G. Filson, (ed.) *Farming Systems Analysis of Intensive Agriculture: Following the Linkages to Sustainability*. UBC Press, Vancouver, pp. 117-138.
  18. Pannell, D.J., Ewing, M.A. and Ridley, A.M. (2004). Dryland salinity in Australia: Overview and prospects, In: Graham, T., Pannell, D.J. and White, B. (eds) *Dryland Salinity: Economic Issues at Farm, Catchment and Policy Levels*, Cooperative Research Centre for Plant-Based Management of Dryland Salinity, Perth, pp. 3-18.

19. Graham, T., White, B. and Pannell, D.J. (2004). Metamodelling for the hydrology component of dryland salinity, In: Graham, T., Pannell, D.J. and White, B. (eds) *Dryland Salinity: Economic Issues at Farm, Catchment and Policy Levels*, Cooperative Research Centre for Plant-Based Management of Dryland Salinity, Perth, pp. 71-80.
20. Pannell, D.J. (2003). Uncertainty and adoption of sustainable farming systems. in B.A. Babcock, R.W. Fraser and J.N. Lekakis (eds), *Risk Management and the Environment: Agriculture in Perspective*, Kluwer, Dordrecht, pp. 67-81.
21. Abadi Ghadim, A.K., Pannell, D.J. (2003). Risk attitudes and risk perceptions of crop producers in Western Australia, in B.A. Babcock, R.W. Fraser and J.N. Lekakis (eds), *Risk Management and the Environment: Agriculture in Perspective*, Kluwer, Dordrecht, pp. 113-133.
22. Pannell, D.J. and Zilberman, D. (2001). Economic and sociological factors affecting growers' decision making on herbicide resistance. In: D.L. Shaner and S.B. Powles (eds.) *Herbicide Resistance and World Grains*, CRC Press, Boca Raton, pp. 251-277.
23. Pannell, D.J. (2001). Explaining non-adoption of practices to prevent dryland salinity in Western Australia: Implications for policy. In: A. Conacher (ed.), *Land Degradation*, Kluwer, Dordrecht, 335-346.
24. Marsh, S.P., Burton, M.P. and Pannell, D.J. (2001). Understanding farmer monitoring of a 'sustainability indicator': Depth to saline groundwater in Western Australia. In: A. Conacher (ed.), *Land Degradation*, Kluwer, Dordrecht, pp. 207-222.
25. Pannell, D.J. (1999). Social and Economic Challenges in the Development of Complex Farming Systems, In: Lefroy EC, Hobbs RJ, O'Connor MH and Pate JS (eds) *Agriculture as a Mimic of Natural Ecosystems*, Kluwer, Dordrecht, pp. 449-465.
26. Pannell, D.J. and Bennett, A.L. (1999). Economic feasibility of precision weed management: Is it worth the investment? In: R.W. Medd and J.E. Pratley (eds), *Precision Weed Management in Crops and Pastures*, CRC for Weed Management Systems, Adelaide, pp. 138-148.
27. Pannell, D.J. (1998). Economic assessment of the role and value of lupins in the farming system. In: J.S. Gladstones, C. Atkins and J. Hamblin (eds.), *Lupins as Crop Plant: Biology, Production and Utilization*, CAB International, Wallingford, pp. 339-351.
28. Shomo, F., Nordblom, T., Nasser, S., Malki, G., Bahhady, F., Christiansen, S., Pannell, D. and Redman, E. (1997). Preliminary economic analysis of medic pasture and other dryland crops in two-year rotation with wheat in northeast Syria. In: N. Haddad, R. Tutwiler and E. Thomson, *Improvement of Crop-Livestock Integration Systems in West Asia and North Africa*, International Center for Agricultural Research in the Dry Areas, Aleppo, Syria, pp. 85-94.
29. Pannell, D.J. (1993). Optimising herbicide application rates. In: J. Dodd, R.J. Martin and K.M. Howes (eds), *Management of Agricultural Weeds in Western Australia*. Department of Agriculture, Western Australian: Perth, Bulletin 4243, pp. 92-94.
30. Gill, G.S. and Pannell, D.J. (1993). Delaying herbicide resistance in ryegrass. In: J. Dodd, R.J. Martin and K.M. Howes (eds), *Management of Agricultural Weeds in Western Australia*. Department of Agriculture, Western Australian: Perth, Bulletin 4243, pp. 187-190.

31. Pannell, D.J. and Falconer, D.A. (1987). Solution, interpretation and revision of MIDAS, In: R.S. Kingwell and D.J. Pannell (Eds). *MIDAS, A Bioeconomic Model of a Dryland Farm System*, Pudoc, Wageningen, 55-63.
32. Pannell, D.J. (1987). Crop-livestock interactions and rotation selection, In: R.S. Kingwell and D.J. Pannell (Eds). *MIDAS, A Bioeconomic Model of a Dryland Farm System*, Pudoc, Wageningen, 64-73.
33. Ewing, M.A., Pannell, D.J. and James, P.K. (1987). The profitability of lupin:cereal rotations, In: R.S. Kingwell and D.J. Pannell (Eds). *MIDAS, A Bioeconomic Model of a Dryland Farm System*, Pudoc, Wageningen, 82-90.
34. Pannell, D.J. and Bennett, D. (1987). Costs and benefits of alkaline treatment of cereal residues, In: R.S. Kingwell and D.J. Pannell (Eds). *MIDAS, A Bioeconomic Model of a Dryland Farm System*, Pudoc, Wageningen, 99-103.
35. Pannell, D.J. and Falconer, D.A. (1987). The value of Nitrogen in a crop-livestock farm system: a bioeconomic modelling approach, In: P.E. Bacon, J. Evans, R.R. Storrier and A.C. Taylor. *Nitrogen Cycling in Agricultural Systems of Temperate Australia*, Australian Soil Science Society, Wagga Wagga, pp. 449-66.
36. Ewing, M.A. and Pannell, D.J. (1987). Development of regional pasture research priorities using mathematical programming, In: J.L. Wheeler, C.J. Pearson and G.E. Robards (Eds) *Temperate Pastures: Their Production, Use and Management*, Australian Wool Corporation/CSIRO, Melbourne, pp. 583-5.

*Invited conference papers*

1. Jakeman, A., Kelly, R., Ticehurst, J., Blakers, R., Croke, B., Curtis, A., Fu, B., Gardner, A., Guillaume, J., Hartley, M., Holley, C., Hutchings, P., Pannell, D., Powell, S., Ross, A., Sharp, E., Sinclair, D. and Wilson, A. (2012). Modelling for the complex issue of groundwater management, SIMULTECH 2012 - 2nd International Conference on Simulation and Modeling Methodologies, Technologies and Applications, Rome, Italy, 28-31 July 2012. Pages IS25-IS35
2. Pannell, D.J. (2010). Economic, social and policy dimensions of dryland salinity in Australia, In: Ahmed, M. and Al-Rawahy, S.A. (eds), *Proceedings of the International Conference on Soils and Groundwater Salinization in Arid Regions, Volume 1, Keynote Papers and Abstracts*, January 11-14 2010, Sultan Qaboos University, Muscat, Sultanate of Oman, pp. 15-21.
3. Roberts, A.M. and Pannell, D.J. (2009). Science tools to inform regional investment decisions – more than ‘toys for the boys’? In: Anderssen, R.S., R.D. Braddock and L.T.H. Newham (eds), 18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand and International Association for Mathematics and Computers in Simulation, July 2009, pp. 2377-2383. ISBN: 978-0-9758400-7-8. <http://www.mssanz.org.au/modsim09/Keynote/roberts.pdf>
4. Pannell, D.J. (2009). Making the most of 'Caring for our Country', Outlook 2009 conference, Canberra 3-4 March 2009, [http://www.abareconomics.com/outlook/\\_files/nrm\\_Pannell.pdf](http://www.abareconomics.com/outlook/_files/nrm_Pannell.pdf)
5. Pannell, D.J. (2009). Environmental policy for environmental outcomes, in *Promoting Better Environmental Outcomes*, Roundtable Proceedings, Canberra, 19-20 August 2008, Productivity Commission, Canberra.
6. Pannell, D.J. (2009). Systems analysis informing policy, in Van Ittersum, M.K., Wolf, J. and Van Laar, H.H., *Proceedings, Integrated Assessment of Agriculture and*

- Sustainable Development, Setting the Agenda for Science and Policy (AgSAP 2009), 10-12 March 2009, Egmond aan Zee, The Netherlands, Wageningen University and Research Centre, Wageningen, pp. 470-471.*
7. Pannell, D.J. (2009). Australian environmental and natural resource policy – from the Natural Heritage Trust to Caring for our Country, Invited Paper presented at the 53<sup>rd</sup> Annual Conference of the Australian Agricultural and Resource Economics Society, Cairns, 10-13 February 2009.
  8. Pannell, D.J. and Ridley, A.M. (2008). Lessons from dryland salinity policy experience in Australia, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).
  9. Clayton, H. and Pannell, D.J. (2006). Balancing production, conservation and NRM: socioeconomic considerations in policy design, Fenner Conference on the Environment, 8-9 November 2006, Canberra, Australia.
  10. Byrne, F., Pannell, D.J. (2006). Integrating physical, biological, social and economic sciences for dryland salinity management and policy, *Proceedings, Australian Earth Sciences Convention*, 2-6 July 2006, Melbourne, Geological Society of Australia, Sydney, and the Australian Society of Exploration Geophysicists, Perth. <http://www.earth2006.org.au/papers/extendedpdf/Pannell%20David.pdf>
  11. Pannell, D.J. (2005). Policies and politics: Challenges and opportunities for agricultural and resource economists, Keynote paper presented at New Zealand Agricultural and Resource Economics Society Conference, Nelson, New Zealand, 26-27 August 2005.
  12. Pannell, D.J. (2005). Economic and Social Dimensions of Dryland Salinity in Australia, *International Salinity Forum: Managing Saline Soils and Water: Science, Technology, and Social Issues*, Riverside, California, April 25-27 2005.
  13. Pannell, D.J. and Ewing, M.A. (2004). Managing secondary dryland salinity: Options and challenges, *New directions for a diverse planet: Proceedings of the 4th International Crop Science Congress, Brisbane, Australia, 26 Sep - 1 Oct 2004*. [www.cropscience.org.au](http://www.cropsscience.org.au) (refereed).
  14. Pannell, D.J. (2004). Politics and dryland salinity, In: *Proceedings of the Conference "Salinity Solutions: Working with Science and Society"*, 2-5 August 2004, Bendigo, Victoria, Eds: Ridley, A., Feikema, P., Bennet, S., Rogers, M.J., Wilkinson, R. and Hirth, J. (Cooperative Research Centre for Plant-Based Management of Dryland Salinity: Perth). CD-ROM
  15. Ridley, A.M., Pannell, D.J., Ewing, M.A. and Lefroy, E. (2004). The role of plants and plant-based R&D in managing dryland salinity in Australia. In: *Proceedings of the Conference "Salinity Solutions: Working with Science and Society"*, 2-5 August 2004, Bendigo, Victoria, Eds: Ridley, A., Feikema, P., Bennet, S., Rogers, M.J., Wilkinson, R. and Hirth, J. (Cooperative Research Centre for Plant-Based Management of Dryland Salinity: Perth). CD-ROM
  16. Pannell, D.J., Ewing, M.A. and Ridley, A.M. (2003). Cursed by too much water in a dry place: implications of dryland salinity for farm management, policy and research in Australia, *Proceedings, 14<sup>th</sup> International Farm Management Congress 10-15 August 2003, Perth, Western Australia*, CD-ROM.
  17. Pannell, D.J. (2003). Effectively communicating economics to policy makers, Invited keynote paper presented at the 47<sup>th</sup> Annual Conference of the Australian Agricultural and Resource Economics Society, Fremantle, Western Australia, 12-14 February 2003.

18. Pannell, D.J. (2002). National economic and policy issues in the productive use of salinised resources, In: *PUR\$! 2002, Wake Up Australia! Saltland Opportunities: Profit for our Community and the Environment, 8th National Conference and Workshop on the Productive Use and Rehabilitation of Saline Land (PUR\$!), Fremantle-Kojonup-Katanning, Western Australia, 16-20 September 2002, Conference Proceedings*, (no editor), Promaco Conventions: Perth, pp. 211-221.
19. Pannell, D.J. (2002). Human dimensions of integrated weed management, In: H. Spafford Jacob, J. Dodd and J.H. Moore, *13th Australian Weeds Conference, Papers and Proceedings, 8-13 September 2002, Perth, Western Australia*, Plant Protection Society of WA, Perth, pp. 8-15.
20. Pannell, D.J. (2002). 'Loving, losing and living with our environment', invited presentation, *Getting it Right*, 11-12 March 2002, Adelaide.
21. Pannell, D.J. (2002). Economic Aspects of Salinity in Wheatbelt Valleys of Western Australia, *Dealing with Salinity in Wheatbelt Valleys: Processes, Prospects and Practical Options. Papers, Proceedings and Outcomes of the Field Tour/Conference/Workshop, July 31-August 1 2001, Merredin, Western Australia*, CD-ROM, Water and Rivers Commission, Perth.
22. Pannell, D.J. (2001). Economic Dimensions of Landcare, *State Landcare Conference 2001, 11-14 September 2001, Mandurah Western Australia*, pp. 131-144.
23. Pannell, D.J. (2001). Decision Support for Integrated Weed Management. *Proceedings of the Third International Weed Science Congress, 6-11 June 2000, Foz do Iguacu, Brazil*, Manuscript number 148, 14 pp., CD-ROM. Available from International Weed Science Congress, Oxford, MS, USA.
24. Pannell, D.J. (2001). Return to Investment in R&D: Imperatives and Challenges. Invited presentation to *Cooperative Research Centre Association, Annual Conference*, 16 May 2001, Perth.
25. Pannell, D.J. (2001). Dryland salinity: Inevitable, inequitable, intractable? Presidential Address, 45<sup>th</sup> Annual Conference of the Australian Agricultural and Resource Economics Society, Adelaide, January 23-25 2001.
26. Pannell, D.J. (2000). 'What is the Value of a Sustainability Indicator? Economic and Social Issues in Monitoring and Management for Sustainability' Invited paper presented at two-day workshop, 'Application of sustainability indicators to the management of soil and catchment health in the northern grains region of New South Wales.' UNE, Armidale, NSW, 1. 11-12 July 2000.
27. Pannell, D.J. (1999). Paying for weeds: Economics and policies for weeds in extensive land systems, In: D. Eldridge and D. Freudenberger (eds.), *People and Rangelands, Building the Future, Proceedings of the VI International Rangelands Congress, Townsville, Queensland, Australia July 19-23 1999, Volume 2*, Published by VI International Rangeland Congress, Inc., Aitkenvale, Queensland, pp. 571-576.
28. Pannell, D.J. (1998). Landcare and the adoption of sustainable farming systems, *Profitable and Sustainable Farming Systems - Where are the \$?*, Proceedings from the Seminar, 2-3 July 1998, Geelong, Victoria, Rural Resources Group, Geelong, pp. 90-107.
29. Pannell, D.J. (1997). Social and economic challenges to the development of complex farming systems, Workshop on Agriculture as a Mimic of Natural Ecosystems, Perth, Western Australia, 2-6 Sept. 1997.
30. Schmidt, C.P. and Pannell, D.J. (1995). The role and value of herbicide-resistant lupins in Western Australian agriculture, In: G.D. McLean and G.Evans (eds.), *Herbicide-Resistant Crops and Pastures in Australian Farming Systems*.



- Proceedings of a GRDC, CRDC, British Council, RIRDC, and BRS Workshop, Canberra, 15-16 March 1995. Bureau of Resource Sciences: Canberra, pp. 163-173.
31. Pannell, D.J. and Ewing, M.A. (1990). The economics of pastures in wheat-sheep farming, *Proceedings, Profitable Pastures for the 90's, July 12-13, Muresk Institute of Agriculture, Northam*, Monsanto Australia Limited.
  32. Martin, R.J. and Pannell, D.J. (1990). Improving the efficiency of weed control in agronomic crops, *Proceedings of the Ninth Australian Weeds Conference, Adelaide, 6-10 August 1990*, pp. 1-9.
  33. Pannell, D.J. (1987). Weed control economics research in Australia, *Proceedings of the Eighth Australian Weeds Conference, Sydney, 21-25 September 1987*, pp. 1-15.
  34. Ewing, M.A., Pannell, D.J. and Morrison D.A. (1986). The place of lupins in the farm rotation: A whole-farm modelling approach, *Proceedings of 4th International Lupin Conference, Geraldton, Western Australia, August 15-22, 1986*, pp 152-60.

*Proceedings - contributed papers*

1. Gibson, F.L. and Pannell, D.J. (2012). Integrated economic assessment of management actions to reduce fire risk to Naseby, New Zealand. In: R.P. Thornton and L.J. Wright (eds), *Proceedings of the Bushfire CRC and AFAC 2012 Conference Research Forum, Perth, 28 August 2012*, Bushfire CRC, Melbourne. [Link](#)
2. Gandorfer, M., Pannell, D.J. and Meyer-Aurich, A. (2010). Whole Farm Modeling of the Effect of Risk On Optimal Tillage and Nitrogen Fertilizer Intensity. Selected Presentation at the 2010 AAEA, CAES, & WAEA Joint Annual Meeting in Denver, July 25–July 27. [Link](#)
3. White, B., Doole, G., Byrd, D. and Pannell, D. (2009). An economic analysis of environmental bonds in the Western Australian mineral sands industry, in Fourie, A.B. and Tibbett, M. (eds.), *Mine Closure 2009, Proceedings of the Fourth International Conference on Mine Closure, 9-11 September 2009, Perth Australia*, Australian Centre for Geomechanics, Nedlands, pp.167-174.
4. Ferdowsian, R. and Pannell, D.J. (2009). Explaining long-term trends in hydrographs. In Anderssen, R.S., R.D. Braddock and L.T.H. Newham (eds), *18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand and International Association for Mathematics and Computers in Simulation, July 2009*, pp. 2377-2383. ISBN: 978-0-9758400-7-8. [Link](#)
5. Ridley, A. and Pannell, D. (2008) Piloting a systematic framework (SIF3) for public investment in regional natural resource management in dryland salinity in Australia, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).
6. Alexander, J., Ridley, A. and Pannell, D. (2008). Victorian Catchment Management approaches to salinity investment, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).
7. Park, G., Alexander, J., Ridley, A. and Pannell, D. (2008). Transforming Planning and Practice for Regional Natural Resource Management: Lessons from SIF3 in North Central Victoria, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).

8. Marsh, S., Seymour, E., Pannell, D., Ridley, A. and Wilkinson (2008) Capacity needs for effective NRM at the regional level: a case study of two catchment organizations, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).
9. Seymour, E., Pannell, D., Ridley, A., Marsh, S. and Wilkinson, R. (2008). Understanding the capacity of catchment organisations to make decisions about natural resource management in Australia, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).
10. Beverly, C., Ridley, A., Hocking, M. and Pannell, D. (2008). Protecting high-value assets from salinity in the Avon Richardson catchment, Australia, *Proceedings, 2<sup>nd</sup> International Salinity Forum: Salinity, Water and Society – Global Issues, Local Action*, 31 March – 3 April 2008, Adelaide (CD-ROM).
11. Marsh, S.P., Llewellyn, R.S. and Pannell, D.J. (2006). Weed and pollen mobility and social costs of herbicide resistance, in Preston, C., Watts, J.H. and Crossman, N.D. (Eds) *Proceedings of the 15th Australian Weeds Conference*, Weed Management Society of South Australia, Adelaide, pp. 495-498.
12. Pannell, D.J. (2006). Using incentives to buy land-use change in agriculture for environmental benefits, *Proceedings, 26<sup>th</sup> Conference of the International Association of Agricultural Economists*, 12-16 August 2006, Gold Coast, Australia [CD-ROM]. <http://agecon.lib.umn.edu/cgi-bin/detailview.pl?paperid=22374>
13. John, M., Pannell, D.J., and Kingwell, R.S. (2006). Climate change and the economics of farm management in the face of land degradation: Dryland salinity in Western Australia, *Proceedings, 26<sup>th</sup> Conference of the International Association of Agricultural Economists*, 12-16 August 2006, Gold Coast, Australia [CD-ROM]. <http://agecon.lib.umn.edu/cgi-bin/detailview.pl?paperid=22705>
14. Sounness, M., Pannell, D.J. and Schilizzi, S. (2004). Innovative grazing systems for Western Australia: meeting the perennial challenge "*Salinity Solutions: Working with Science and Society*", 2-5 August 2004, Bendigo, Victoria, Eds: Ridley, A., Feikema, P., Bennet, S., Rogers, M.J., Wilkinson, R. and Hirth, J. (Cooperative Research Centre for Plant-Based Management of Dryland Salinity: Perth). CD-ROM
15. Doole, G. J., Pannell, D. J., Revell, C. K., Abadi, A. (2004). How profitable are perennial pasture phases in Western Australian cropping systems?, In: Sindel, B.M. and Johnson, S.B. (eds), *Proceedings of the 14th Australian Weeds Conference "Weed Management: Balancing People, Planet, Profit"*, 6-9 Sept 2004, Wagga Wagga, NSW, Weed Society of New South Wales, Sydney, pp.82-87.
16. Llewellyn, R.S. and Pannell D.J. (2003). Identifying key farmer perceptions for planning and evaluation of extension, *Proceedings, Australian Farming Systems Conference, Toowoomba, Queensland, 7-10 September 2003*. CD-ROM (refereed) <http://afsa.asn.au/pdfs/llewellynrick.pdf>
17. Ferdowsian, R. and Pannell, D.J. (2001). Explaining trends in groundwater depths: Distinguishing between atypical rainfall events, time trends, and the impacts of treatments, *MODSIM 2001, International Congress on Modelling and Simulation, The Australian National University, Canberra, Australia, Proceedings, Volume 2: Natural Systems (Part Two)*, Editors: Fereidoun Ghassemi, Peter Whetton, Richard Little and Mark Littleboy, Publisher: Modelling and Simulation Society of Australia and New Zealand, Canberra, pp. 549-554.
18. Monjardino, M., Pannell, D.J. and Powles, S. (2001). A multi-species bio-economic model for the management of *Lolium rigidum* and *Raphanus raphanistrum* in

- Australian dryland agriculture. Proceedings of the Third International Weed Science Congress, 6-11 June 2000, Foz do Iguacu, Brazil, Manuscript number 62, 17 pp., CD-ROM. Available from International Weed Science Congress, Oxford, MS, USA.
19. Monjardino, M., Pannell, D. and Powles, S. (2000) The value of green manuring in integrated management of ryegrass. In: V. Stewart (ed.) *Crop Updates, 2000 Weed Updates – Western Australia, Presented at Rendezvous Observations City, Western Australia, 16-17 February 2000*, Bulletin 4402, Agriculture Western Australia, Perth, pp. 29-30.
  20. Marsh, S.P., Burton, M. and Pannell, D. (1999). “Changes in Groundwater Monitoring by Farmers: A Preliminary Analysis”. In *WA BankWest Landcare Conference “Where Community Counts”*, Proceedings, Esperance WA, 8-10 Sept 1999.
  21. Pannell, D.J. and MacAulay, T.G. (1998). Practical and economic issues in multidisciplinary research. *Proceedings of the Bioeconomics Workshop*, Post-Australian Agricultural and Resource Economics Society, 22 January, Armidale, New South Wales, ABARE, Canberra, pp. 1-12.
  22. Abadi, A. and Pannell, D.J. (1998). Bioeconomic modelling with end users in mind: the MIDAS experience in Western Australia. *Proceedings of the Bioeconomics Workshop*, Post-Australian Agricultural and Resource Economics Society, 22 January, Armidale, New South Wales, ABARE, Canberra, pp. 27-33.
  23. Marsh, S.P. and Pannell, D.J. (1997). The Changing Relationship Between Private and Public Sector Agricultural Extension in Australia, in Proceedings of the 2nd Australasia Pacific Extension Conference, *Managing Change - Building Knowledge and Skills*, Albury, NSW 18-21 Nov 1997, Vol II, pp. 350-356.
  24. Marsh, S.P. and Pannell, D.J. (1997). What we think we know about extension, and why it’s not enough for Landcare. Paper presented at RGC Mineral Sands Limited State Landcare Conference 1997, Queens Park Theatre, Geraldton, 1-4 September 1997. (Accidentally omitted from proceedings).
  25. Pannell, D.J. (1996). Toward a balance between strategic-basic and applied agricultural research. *Proceedings, Global Agricultural Science Policy for the Twenty First Century, Contributed Papers, 26-28 August 1996, Melbourne, Australia*, pp. 457-484.
  26. Abadi Ghadim, A.K., Pannell, D.J., Bennett, A. and Stewart, V. (1996). Farmers' risk perspective on adoption of legume crops. In: M. Asghar (ed.), *Proceedings of the 8<sup>th</sup> Australian Agronomy Conference 1996, Toowoomba, Queensland, 30 January - 2 February, 1996*, Australian Society of Agronomy, Carlton, Victoria, pp. 56-59.
  27. Shomo, F., Nordblom, T., Nasser, S., Malkei, G., Bahhady, F., Christiansen, S., Pannell, D. and Redman, E. (1995). Preliminary economic analysis of medic pasture and other dryland crops in two-year rotations with wheat in northeast Syria, *Proceedings, Regional Symposium on Integrated Crop-Livestock Systems in the Dry Areas of West Asia and North Africa, 6-8 November 1995, Amman, Jordan*.
  28. Marsh, S.P., Pannell, D.J. and Lindner, R.K. (1994). Extension and adoption of lupins in Western Australia. In: *Proceedings of the First Australian Lupin Technical Symposium, Perth, Western Australia, 17-21 October 1994*, pp. 191-211.
  29. Abadi, A., Pannell, D. and Gorrard, R. (1993). Integration of chemical and non-chemical weed control under herbicide resistance in continuous cropping: an economic analysis, *Proceedings, 10th Australian and 14th Asian-Pacific Weed Conference, Brisbane, September 1993*, pp. 475-479.

30. Bathgate, A.D., Schmidt, C., and Pannell, D. (1993). Economics of changing rotation to combat herbicide resistance, *Proceedings, 10th Australian and 14th Asian-Pacific Weed Conference, Brisbane, September 1993*, pp. 480-484.
31. Bajalinov, E.B. and Pannell, D.J. (1993). GULF: A general, user-friendly linear and linear-fractional programming package, *Symposium on Applied Mathematical Programming and Modeling, APMOD93, Volume of Extended Abstracts, Budapest, Hungary, January 6-8, 1993*. pp. 21-23.
32. Pannell, D.J. (1992). Economics of Herbicide Resistance. *Papers and Resolutions of the National Herbicide Resistance Extension Workshop, Charles Hawker Conference Centre, 21 October 1992*. pp. 97-98.
33. Pannell, D.J. (1990). Do herbicides reduce income variability from agronomic crops? *Proceedings of the Ninth Australian Weeds Conference, Adelaide, 6-10 August 1990*, pp. 10-14.
34. Martin, R.J., Pannell, D.J. and Cullis, B.R. (1990). A model for estimating the optimal economic rate of tralkoxydim for control of wild oats (*Avena* spp.) in wheat. *Proceedings of the EWRS Symposium on Integrated Weed Management in Cereals, 1990*, pp. 305-313.
35. Ewing, M.A., Pannell, D.J. and Morrison, D.A. (1989). Pastures and profit in an Australian ley farming system, *Proceedings of the XVI International Grasslands Congress, Nice, France*.