

List of Publications and Research Related Activities

David J. PANNELL

Publications

Books, Monographs, Major Reports

1. 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.
2. 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.
3. 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.
4. 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.
5. Pannell, D.J. (1997). *Introduction to Practical Linear Programming*, Wiley Interscience, New York, 333 pp.
6. 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. Sieber, S., Pannell, D.J., Müller, K., Holm-Müller, K., Kreins, P. and Gutsche, V. (2009). A spatial pesticide-risk indicator for evaluation of environmental buffer-zone programmes, *Land Use Policy*, (forthcoming).
2. Llewellyn, R. and Pannell, D.J. (2009). Managing the herbicide resource: an evaluation of extension on management of herbicide-resistant weeds, *AgBioForum* (forthcoming).
3. Pannell, D.J. and Wilkinson, R. (2009). Policy mechanism choice for environmental management by non-commercial “lifestyle” rural landholders. *Ecological Economics* 68: 2679-2687.
4. 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.
5. 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* (forthcoming). (doi:10.1016/j.envsci.2008.12.005)
6. 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)

7. 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.
8. 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.
9. Seymour, E., Pannell, D., Roberts, A., Marsh, S. and Wilkinson, R. (2008). Decision making by catchment management organisations in Australia: current processes and capacity gaps. *Australasian Journal of Environmental Management* 15, 15-25.
10. 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.
11. 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.
12. 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.
13. Pannell, D.J. (2008). Public benefits, private benefits, and policy intervention for land-use change for environmental benefits. *Land Economics* 84(2): 225-240.
14. 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.
15. Pannell, D.J. (2006). Policies and politics: Challenges and opportunities for economists. *Agenda* 13(2): 117-132.
16. 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.
17. 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.
18. 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.
19. Pannell, D.J. and Ewing, M.A. (2006). Managing secondary dryland salinity: Options and challenges. *Agricultural Water Management* 80(1/2/3): 41-56.
20. 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.
21. 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.
22. Pannell, D.J. (2005). Farm, food and resource issues: Politics and dryland salinity. *Australian Journal of Experimental Agriculture* 45: 1471-1480.

23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. 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.
30. Pannell, D.J. (2004). Heathens in the chapel? Application of economics to biodiversity, *Pacific Conservation Biology* 10(2/3): 88-105.
31. 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.
32. 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.
33. Pannell, D.J. (2004). Effectively communicating economics to policy makers. *Australian Journal of Agricultural and Resource Economics* 48(3): 535-555.
34. 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.
35. Marsh, S.P., Pannell, D.J. and Lindner, R.K. (2004). Does extension pay? A case study for a new crop, lupins, in Western Australia. *Agricultural Economics* 30(1): 17-30.
36. 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.
37. 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.
38. Pannell, D.J. (2003). Balancing economics and sustainability in building an integrated agricultural system, *Pacific Conservation Biology* 9(1/2): 23-29.
39. 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.

40. 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.
41. 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.
42. 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.
43. Pannell, D.J. (2002). Prose, psychopaths and persistence: Personal perspectives on publishing, *Canadian Journal of Agricultural Economics*, 50(2): 101-116.
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45. 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.
46. Bathgate, A. and Pannell, D.J. (2002). Economics of deep-rooted perennials in Western Australia, *Agricultural Water Management* 53(1): 117-132.
47. Schilizzi, S. and Pannell, D.J. (2001). The economics of nitrogen fixation, *Agronomie* 21(6/7): 527-538.
48. Pannell, D.J. (2001). Dryland Salinity: Economic, Scientific, Social and Policy Dimensions, *Australian Journal of Agricultural and Resource Economics* 45(4): 517-546.
49. 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.
50. 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.
51. 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>.
52. 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.
53. 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.
54. Vercammen, J. and Pannell, D.J. (2000). The economics of crop hail insurance. *Canadian Journal of Agricultural Economics* 48:87-98.
55. 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.
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57. 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.

58. Pannell, D.J. (1999). Social and economic challenges in the development of complex farming systems, *Agroforestry Systems* 45(1-3): 393-409.
59. 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.
60. Abadi Ghadim, A.K. and Pannell, D.J. (1999). A conceptual framework of adoption of an agricultural innovation, *Agricultural Economics* 21: 145-154.
61. Pannell, D.J. (1999). On the estimation of on-farm benefits of agricultural research. *Agricultural Systems* 61(2): 123-134.
62. 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.
63. 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.
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65. 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.
66. 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.
67. 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.
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69. Pannell, D.J. (1996). Lessons from a decade of whole-farm modelling in Western Australia. *Review of Agricultural Economics* 18(3): 373-383.
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72. 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.
73. 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.
74. Pannell, D.J. (1995). Optimal herbicide strategies for weed control under risk aversion. *Review of Agricultural Economics* 17: 337-350.
75. Pannell, D.J. (1995). Economic aspects of legume management and legume research in dryland farming systems of southern Australia. *Agricultural Systems* 49: 217-236.
76. Pannell, D.J. (1995). Optimal herbicide strategies given yield and quality impacts of weeds. *Review of Marketing and Agricultural Economics* 63: 311-317.

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78. 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.
79. Pannell, D.J. (1994). Economic justifications for government involvement in weed management: a catalogue of market failures. *Plant Protection Quarterly* 9(4): 131-137.
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81. 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.
82. 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.
83. 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.
84. 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.
85. Pannell, D.J. (1991). Pests and pesticides, risk and risk aversion, *Agricultural Economics* 5(4): 361-383.
86. 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.
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89. 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.
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91. 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.
92. Pannell, D.J. (1989). An alternative representation of proportionality among nutrients in least cost feed formulation, *British Poultry Science* 30(3): 711-713.
93. Pannell, D.J. (1989). Economics and the law relating to flexibility of chemical rates, *Plant Protection Quarterly* 4(3): 104-6.
94. 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.
95. Pannell, D.J. (1988). Weed management: a review of applied economics research in Australia, *Review of Marketing and Agricultural Economics* 56(3): 255-69.
96. 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.

97. 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.
98. 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.
99. 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, comments and unrefereed articles in journals

100. 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
101. Pannell, D.J. (2006). Seeking more effective NRM policies, *Water, Journal of the Australian Water Association*, August 2006, 7.
102. 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>
103. Pannell, D.J. (2006). Discussion of "Editorial – The peer-review system: prospects and challenges", *Hydrological Sciences Journal* 51(2): 352-353.
104. 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.
105. Ridley, A. and Pannell, D. (2005). An investment framework for managing dryland salinity in Australia, *Farm Policy Journal* 2(4): 39-49.
106. Pannell, D. (2005). Voluntary versus regulatory approaches to protecting the environment in rural areas, *Farm Policy Journal* 2(3): 1-9.
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109. Pannell, D.J. (2001). Salinity policy: A tale of fallacies, misconceptions and hidden assumptions, *Agricultural Science* 14(1): 35-37.
110. 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).
111. 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.
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116. Kingwell, R.S. and Pannell, D.J. (1988). Limits to potential yield, *Agricultural Science* 1(7): 36-8.
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Book chapters

1. 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.
2. 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.
3. 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.
4. 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*).
5. 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.
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8. Cullen, P. and Pannell, D. (2006). Salinity, In: P. Attiwill and B. Wilson (Eds.) *Ecology: An Australian Perspective*, 2nd edition, Oxford University Press, Melbourne, pp. 161-175.
9. 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.
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11. 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.
12. 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.
13. 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.
14. 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.
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2. 7 December 2005, The Standard (Victoria) article on salinity
3. 27/10/2005 Salinity a changing problem: professor, Farm Weekly, page 8
4. 25/10/2005 Salinity rising in the west, The Australian, page 11.
5. 13 October 2005. 'Salt Tensions Surface', Countryman, page 16. Article about a conference presentation by me.
6. Sep 2004 'Scientist vies for award', Albany Weekender
7. Sep 2004 'Pannell worth his salt', Albany Advertiser
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9. 2002. 'Environment South Australia' Vol 9 no 1, (2002) p. 11, Article describing/summarising Pannell's presentation at the 'Getting it Right' conference in March 2002.
10. June 2002. Focus on Salt, Issue 23, p.6, Article describing/summarising Pannell's presentation at the 'Getting it Right' conference in March 2002.
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23. "Centre to Tackle Salinity Problem", *Great Southern Herald*, 31/1/01 page 8.
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27. "Salinity Policy: A Tale of Fallacies, Misconceptions and Hidden Assumptions", *Agribusiness Decision*, Vol 30, Folio 11, insert. 2000.
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29. "New theory excites landcare pessimist" Full page story on sustainability and salinity in *Great Southern Herald*, 6 December 2000, page 17.
30. "New theory excites landcare pessimist" Full page story on sustainability and salinity in *The Albany Advertiser*, 5 December 2000, page 25.
31. "Crop Doctor" by John Lovett provided an overview of the SEA Project. This was also picked up by a range of rural media, including *The Geraldton Guardian*, 3 Oct 2000, "Australian Agriculture is Facing a Smorgasbord of Challenges", p.14.
32. *Acres Australia* (The National Newspaper of Sustainable Agriculture), August 2000, Vol. 8, No 7, p. 8., "More than talk needed to fight salinity".
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35. "Salinity may come out of local system" by John Lovett, *The Albany Advertiser*, 27 June 2000, page 26.
36. "Salinity may come out of local system" by John Lovett, *The Great Southern Herald*, 28 June 2000, page 20.
37. "Individuals needed to tackle salinity problem" by John Lovett, *Gnowangerup Star*, 8 June 2000, page 3.
38. "Inclusion of Individuals needed in Ongoing fight against salinity", by John Lovett, *The Geraldton Guardian*, Tuesday June 6 2000, page 19.
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41. "Millions wasted fighting salinity, says researcher" *Adelaide Advertiser* 12 May 2000, page 11.
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44. *Land and Water News*, Vol 4, No 3 April 10 2000, p.23. Article on salinity policy, salt levy and externalities.
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66. Pannell, D. (1991). Cost cutting - herbicides, *Agricultural Memo - Dryland Research Institute, Merredin* 16(1): 7.
67. Hossen, S. and Pannell, D. (1991). Cost cutting - farm finance and assets, *Agricultural Memo - Dryland Research Institute, Merredin* 16(1): 7-8.
68. Hossen, S. and Pannell, D. (1991). Personal responses to tight finances, *Agricultural Memo - Dryland Research Institute, Merredin* 16(1): 9-10.
69. Pannell, D. (1991). Preventing herbicide resistance, *Agricultural Memo - Dryland Research Institute, Merredin* 16(1): 10.
70. Pannell, D. (1991). Which wheat price should I budget on? *Merredin District Extension Package 1991*, Department of Agriculture, Western Australia, Merredin, p 2.
71. Pannell, D.J. (1991). 1991 wheat price?, *Agricultural Memo - Dryland Research Institute, Merredin* 16(3): 2.
72. Pannell, D.J. (1991). Limited finance - where to cut back, *Agricultural Memo - Dryland Research Institute, Merredin* 16(3): 2-3.
73. Pannell, D.J. (1991). Rain critical for wheat. *The Wheatbelt Mercury, May 15 1991*. p.10.
74. Pannell, D.J. (1991). Long vs short lupin rotations, *Agricultural Memo - Dryland Research Institute, Merredin* 16(7): 5.
75. Pannell, D.J. (1990). Adjusting the crop program in response to summer rain, *Agricultural Memo - Dryland Research Institute, Merredin* 15(1): 6.
76. Pannell, D.J. (1990). Rain expected to boost wheat yield. *The Wheatbelt Mercury, March 14 1990*. p.29.
77. Morrison, D.A. and Pannell, D.J. (1985). Applying the systems approach, IN *Proceedings, Systems For Profit, Towards Integrated Crop-Stock Farming*, Farm Management Foundation, Perth, pp 105-16.
78. Pannell, D.J. and Kingwell, R.S. (1985). Choosing rotations by computer, IN *Rethinking Rotations*, Kondinin and Districts Farm Improvement Group, Kondinin.
79. Pannell, D.J. and Morrison D.A. (1984). The importance of interdependencies in economic farm planning, IN *How Much Wheat Do Sheep Grow, Proceedings*, Western Australian Department of Agriculture, Perth.

Book reviews

- Pannell, D.J. (2004). Review of 'Climate Change Policy after Kyoto: Blueprint for a Realistic Approach', by Warwick, J. McKibbin and Peter J. Wilcoxon, *Australian Journal of Agricultural and Resource Economics* 48(2): 381-384.
- Pannell, D.J. (2004). Review of 'Taken by Storm: The Troubled Science, Policy and Politics of Global Warming', by Christopher Essex and Ross McKittrick, *Australian Journal of Agricultural and Resource Economics* 48(2): 377-381.
- Pannell, D.J. (2002). Review of 'The Skeptical Environmentalist' by Bjorn Lomborg, *Australian Journal of Agricultural and Resource Economics* 46(3): 476-479.
- Pannell, D.J. (2001). Review of 'Coping With Risk In Agriculture' by J.B. Hardaker, R.B.M. Huirne and J.R. Anderson, *Australian Journal of Agricultural and Resource Economics* 45(1): 155-157.

Pannell, D.J. (1990). Review of 'Optimal Yield Management' by Dan Ryman (ed), *Agriculture, Ecosystems and Environment* 33(1): 91-2.

Theses

Pannell, D.J. (1990). *The Economics of Herbicide Application for Weed Control: Deterministic, Stochastic and Tactical Analyses*, PhD Thesis, School of Agriculture, University of Western Australia.

Pannell, D.J. (1983). *Economic Assessment of the Agriculture Protection Board's Skeleton Weed Eradication Program*, Honours Thesis, Faculty of Agriculture, University of Western Australia.

Invited presentations at conferences/workshops/symposia (no purpose-written paper)

1. "Connecting agricultural economics research to policy", What Makes Agricultural Economics Research Relevant for Policy Advice? National Workshop, Canadian Agricultural Economics Society, Ottawa, 24-25 October 2008.
2. "Role of economics in public policy", Role of Economics in Public Policy: A Symposium, University of Saskatchewan, Saskatoon, Canada, 20 October 2008.
3. "The science-policy interface", International Conference on Impact Assessment, Berlin, April 2008.
4. "Profitable management of salinity: tensions and changing perceptions". Western Australian Natural Resource Management Conference, Denmark, Western Australia, 4-6 October 2005.
5. "Socioeconomic issues in achieving uptake of bioenergy crops into established agricultural systems". International Energy Agency Conference, "Multiple Benefits from Sustainable Bioenergy Systems", Perth, Western Australia, July 31 - August 5, 2005
6. "Surprising truths about Charles Darwin", Centre of Excellence in Natural Resource Management, Albany, 9 May 2003.
7. "Review of Policy and Planning Theme, National Dryland Salinity Program", NDSP Workshop, Adelaide, 28 March 2003.
8. "Personal perspectives on publishing", Department of Agricultural Economics, University of Kiel, Germany, 11 Dec 2002.
9. "Environmental Policy: Rewards vs Penalties", Workshop: Rural Land Management: Challenges for Science and Economics, Imperial College at Wye, 27 November 2002.
10. "Economics and the Environment", ENGREF(Ecole Nationale du Génie Rural des Eaux et Forêts), Economic Policies for Environmental Resources, Paris, 18-22 November 2002.
11. "Land degradation in Australia: The salinity crisis", Department of Land Economy, University of Cambridge, 30 Oct 2002.
12. "Personal perspectives on publishing", Department of Land Economy, University of Cambridge, 16 Oct 2002.
13. "Paying the price for water", Great Southern Water Forum, Albany 13 Aug 2002.
14. "Economic issues affecting the role of trees from paddock to catchment scale", CRC for Plant-Based Management of Dryland Salinity, Perth, 17 June 2002.

15. "The Salinity Crisis", UWA Centre, Albany, 20 April 2002.
16. "Managing Salinity with Markets, Plants and Engineering (How do we move policy forward?)", invited presentation to Select Committee on Salinity, Seminar: Investing in solutions to Salinity, At Sydney on Monday 8 April 2002.
17. "Opportunities for plant-based management of dryland salinity." Official Launch, CRC for Plant-Based Management of Dryland Salinity, University of WA, 11 Feb 2002.
18. "Adoption of agroforestry systems", invited presentation, WA Agroforestry Working Group, CALM, Perth, 22 Jan 2002..
19. "Salinity policy", Presentation to NSW Select Committee on Salinity, Albany, 31 October 2001.
20. "Public Funding for Environmental Issues: Where to Now?", invited presentation, Conference: Public Funding for Environmental Issues, Meridian Hotel, Melbourne, 5 October 2001.
21. "Salinity economics and policy", Salinity and Economics Workshop, NSW Agriculture, Orange, 22-23 August 2001.
22. "Farm-Level Economics of Salinity: Evidence and Implications," invited presentation, GRDC Workshop on Salinity R&D Priorities, Canberra, 23 May 2001.
23. "Salinity policy". State Salinity Council, R&D Technical Committee, 15 May 2001.
24. "Salinity policy", Agriculture, Fisheries and Forestry Australia (AFFA), Canberra, to small group of senior bureaucrats involved in salinity policy, 4 May 2001..
25. "Salinity policy". Invited lecture at University House, University of WA, 3 April 2001.
26. "Salinity economics and salinity policy". WA State Treasury, 19 March 2001.
27. "Salinity and the Community: Unfinished Business", invited public lecture to mixed audience of farmers and town residents, Esperance Civic Centre, 13 March 2001.
28. "Are there \$\$ in sustainability?" invited presentation, at Esperance Autumn Updates, Civic Centre, Esperance, 13 March 2001.
29. "Are there \$\$ in sustainability?" invited presentation at GRDC Cropping System Update for Advisors in Wagga Wagga, 7-8 March 2001.
30. "Dryland Salinity: What have we learnt? Where are we going?" at Agriculture, Fisheries and Forestry Australia, Canberra, 6 March 2001.
31. "Dryland Salinity: What have we learnt? Where are we going?" Productivity Commission, Melbourne, 5 March 2001.
32. "Are there \$\$ in sustainability?" invited presentation at GRDC Cropping System Update for Advisors in Adelaide, 1-2 March 2001.
33. "Salinity policy and prioritisation of salinity investments", State Salinity Council Executive, 17 November 2000.
34. "Salinity: latest findings". Jerramungup Landcare District Committee AGM, 24 October 2000.
35. "Economic instruments for dryland salinity. A structured approach to policy development for salinity". Salinity Council of WA. 13 October 2000.
36. "Economics of salinity and the implications for NHT", NHT WA Stakeholders Forum, 12 October 2000.
37. "Sustainable land management". Women in Sustainable Land Management conference, Narrikup, WA, 23 November 2000.
38. "Dryland salinity policy and R&D", National Dryland Salinity Program, National Conference, Bendigo, 15 November 2000.
39. "Dryland Salinity", Valema Farms field day, Corrigin WA, 27 September 2000.

40. “Dryland Salinity: Where to From Here?”, Public Seminar at University of Western Australia, 15 September 2000.
41. “Economics and natural resource management”, Agriculture Western Australia Regional Partnership Group, Cranbrook, 25 August 2000.
42. “Herbicide Resistance”, Agriculture Western Australia Catchment Support Team, South Stirling, 2 August 2000.
43. “Dryland salinity – whose problem is it?”, Agriculture WA/No-Till Farmers Association, Katanning, 31 July 2000.
44. “Salinity – Who’s Problem?”, Australian Association of Agricultural Consultants (WA), Mercure Hotel, Perth, 23 June 2000.
45. “Dryland Salinity – Myths, Mysteries and Myopia”, Rural Media Association of South Australia, Adelaide, lunchtime talk, 11 May 2000.
46. “Dryland Salinity – Economic Issues for Development Officers”. Agriculture Western Australia, High Water Use Development Officers, Porongorups, 4 November 1999.
47. “Dryland Salinity – Where Do We Stand?” Public lecture at Albany for the UWA Sustainable Solutions lecture series, 29 October 1999.
48. “Living with salinity”, AIAST Seminar, Dryland Salinity – Economic Implications and Opportunities, Narrogin, 27 October 1999.
49. “Economics of Land Conservation, for Landcare development officers”, Agriculture Western Australia, Merredin 14 September 1999.
50. “Use of individual-farm models for analysis of resource conservation problems”, NSW Agriculture, Orange, 10 September 1998 (based on SEA Working Paper 98/03).
51. “Challenges to the sustained adoption of sustainable farming systems”, Presidential address, Australian Agricultural and Resource Economics Society, WA Branch, UWA, 24 April 1998.
52. “How do farmers decide whether to invest in sustainable agricultural practices?”, Agriculture Western Australia, Regional Partnership Group, Albany, 5 February 1998.

Consultancies

2002. Department of Environment, Fisheries and Rural Affairs, UK. Preparation of report: “Review of Economics of Alternative Arable Cropping Systems”.
2001. Treasury. Preparation of report: “Economic Tools to Tackle Dryland Salinity in Western Australia”.
2001. Government of Western Australia, member of “Salinity Task Force”, reviewing government policy on salinity.
2001. National Land and Water Resources Audit. Review of farm-level economics of salinity prevention measures in Western Australia.
2001. Agriculture Western Australia, Rural Towns Project. Reviews of economic analysis of engineering works for salinity mitigation in six rural towns.
2000. Water and Rivers Commission. Report on cost sharing and market based economic instruments for salinity mitigation in water resource catchments.
2000. Agriculture Western Australia, Rural Towns Project. Review of economic analysis of engineering works for salinity mitigation in Merredin townsite.

1997. Twice visited the Philippines for a week to review two different projects for the Australian Centre for International Agricultural Research. "Socio-economic evaluation of soil conservation technologies for upland farming systems in the Philippines" and "Improving Small Holder Farming Systems in Imperata Grassland Areas of Southeast Asia".
1993. Eighteen day visit to the International Centre for Dryland Agriculture in Dry Areas (ICARDA), Aleppo, Syria to develop three linear programming models of Syrian farming systems and install them in my computer package, MARG. Conduct analyses of the role of risk in Syrian farming systems and evaluation of medic pastures.
1992. Consultant on statistical and economic issues relating to Department of Conservation and Land Management's Forest Management Strategy. Responsible to Judge Tos Barnett, Environmental Protection Act Appeals Committee.
1991. Two week visit to the International Centre for Dryland Agriculture in Dry Areas (ICARDA), Aleppo, Syria to (a) advise on whole-farm modelling using linear programming, (b) to install and provide training on my computer package, MARG, and (c) conduct analyses of economics of medic pastures.
1990. Microcomputer programming for Department of Water Resources, Victoria.

Research Funding

- Australian Research Council, Federation Fellowship, 'Integrating economics and science for land, water and biodiversity policy', \$1,606,210 from the ARC, \$1,472,817 cash from UWA, total \$3,079,027, over five years, 2007-2012.
- Commonwealth Environmental Research Fund, Department of Environment and Water Resources, 'INFFER: Investment Framework for Environmental Resources', \$1,300,844 over three years, 2007-2010.
- Future Farm Industries CRC, Farm-level economic modelling of future farming options - transitional project, \$40,000, 2007-08.
- South West Catchment Council, Support role for a pilot project to investigate the applicability of the SIF3 (Salinity Investment Framework) model to the South West NRM Region, \$20,000.
- Australian Centre for International Agricultural Research, Project ASEM/2003/011, 'Herbicide use strategies and weed management options in Filipino and Australian cropping', \$510,000 over 4 years, 2004-2008.
- Rural Industries Research and Development Corporation, 'Enhancing and targeting the roles for capacity building in regional NRM', \$149,000 over 2 years, 2005-2007.
- CRC for Plant-Based Management of Dryland Salinity, 'Comprehensive analysis of dryland salinity to guide regional investment planning and national policy', \$290,000 over 2 years, 2005-2007.
- CRC for Plant-Based Management of Dryland Salinity, 'Monitoring and evaluation of the impacts of CRC Salinity', \$146,000 over 2 years, 2005-2006.
- CRC for Plant-Based Management of Dryland Salinity, 'Farm-level economic assessment of current and potential plant-based systems for salinity management', \$1,003,000 over seven years, 2002-2008.

- CRC for Plant-Based Management of Dryland Salinity, 'Economic analysis of alternative plant-based salinity management practices at the catchment level', \$520,000 over six years, 2003-2008.
- CRC for Plant-Based Management of Dryland Salinity, 'Public policies for effective salinity management: design, testing and targeting', \$238,000 over three years, 2002-2005.
- ARC, SPIRT grant, 'Long term economics of lucerne production for salinity management in southern Western Australia', \$47,180 over two years, 2002-2004.
- Grains Research and Development Corporation. 'Economic Instruments and Market-Based Policy Mechanisms for Salinity Management in Western Australia'. PhD Scholarship for Tennille Graham. \$90,000 over three years, 2002-2004.
- National Land and Water Audit, 'Salt Scenarios 2020'. In collaboration with CSIRO and Agriculture WA. Economics component \$60,000, 1999-2000.
- Grains Research and Development Corporation. 'Sustainability and economics in wheatbelt farming: Achieving an integrated balance'. With Steven Schilizzi, UWA. \$585,000 over five years, 1997-2002.
- Rural Industries Research and Development Corporation. 'Fostering the links between private and public sector agricultural extension'. \$60,000, 1996-1997.
- Grains Research and Development Corporation. 'Maximising farm profit by optimising management of rotations and new grain legumes to increase wheat quality.' with A. Bathgate, Western Australian Department of Agriculture, \$150,000 over three years, 1995-1998.
- Rural Industries Research and Development Corporation. 'Adoption of grain legumes: The importance of risk'. with Amir Abadi, Western Australian Department of Agriculture, and Steven Schilizzi, INRA-LECSA, France, \$154,000 over three years, 1994-1997.
- Grains Research and Development Corporation. 'Optimising the application rate and timing of herbicides with respect to environmental interactions'. with R. Cousens and J. Moore, Western Australian Department of Agriculture, \$180,000 over three years, 1994-1997.
- Grains Research and Development Corporation. 'Economic analysis to influence and help set directions of legume and nitrogen RD&E'. with D.A. Morrison, and W. Bowden, Western Australian Department of Agriculture, \$205,000 over 3 years, 1993-1995.
- Grains Research and Development Corporation. 'Economics of marketing Australian grain legumes and cereals'. with R.K. Lindner, University of Western Australia, \$15,000, 1993.
- Wool Research and Development Corporation. 'Bioeconomic Modelling for Pest and Wildlife Management'. with R.K. Lindner and G. Hertzler, University of Western Australia, \$5,000, 1993.
- Rural Industries Research and Development Corporation. 'Bioeconomic Modelling for Pest and Wildlife Management'. with R.K. Lindner and G. Hertzler, University of Western Australia, \$5,000, 1993.
- Cooperative Research Centre for Legumes in Mediterranean Agriculture (CLIMA), Economic Modelling Sub Program, approximately \$450,000 over July 1993-Dec 1996.
- Rural Industries Research and Development Corporation. 'The impact of extension on adoption of lupins in Western Australia'. with Bob Lindner and Bryan Gorddard. \$150,000 over 3.5 years, 1992-1995.

- Australian Research Council. 'Bio-economic modelling for pest and wildlife management', with R.K. Lindner and G.L. Hertzler, University of Western Australia, \$135,000 over 3 years, 1992-94.
- Grains Research and Development Corporation. 'Economic evaluation of alternative strategies for integrated management of herbicide resistance', University of Western Australia, jointly with D.A. Morrison, Western Australian Department of Agriculture, \$103,000 over 3 years, 1992-95.
- Wheat Research Council. 'Farm systems modelling for tactical wheat management under risk', Western Australian Department of Agriculture, \$122,000 over 3 years, 1990-93.
- Wheat Research Council. Travel funding to attend Nineth Australian Weeds Conference, Adelaide, 1987. Contributed paper presented and joint author of invited paper.
- Wheat Research Council. 'Making the MIDAS model more accessible to extension staff, consultants and farmers', with D.A. Morrison and R.S. Kingwell, Western Australian Department of Agriculture, \$36,800, 1989-90.
- Wheat Industry Research Committee of W.A. Travel funding to present contributed paper on weed economics to 32nd Annual Conference of the Australian Agricultural Economics Society, Melbourne, 1988.
- Wheat Research Council. Travel funding to present invited paper on weed economics to Eighth Australian Weeds Conference, Sydney 1987.
- Wheat Industry Research Committee of W.A., 'Linear Programming for Crop/Livestock Farms'. with D.A. Morrison and R.S. Kingwell, Western Australian Department of Agriculture, \$25,000, 1984-85.
- Wheat Industry Research Committee of W.A., 'Wheatbelt Linear Programming'. with D.A. Morrison and R.S. Kingwell, Western Australian Department of Agriculture, \$22,000, 1983-84.