

Curriculum Vitae

David J. PANNELL

Australian Research Council Federation Fellow

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Degrees

B.Sc.(Agric) (H1), University of Western Australia, 1984.

B.Ec., University of Western Australia, 1989.

Ph.D, University of Western Australia, 1991.

Awards and Recognition

- 2012 Included in journal article identifying the 100 most ‘influential authors in the field of environmental and ecological economics (2000-2009)’*
- 2012 Australian Agricultural and Resource Economics Society, Quality of Research Communication award for www.PannellDiscussions.net blog.
- 2011 Distinguished Fellow of the Australian Agricultural and Resource Economics Society
- 2009 ARC Eureka Prize for Excellence in Interdisciplinary Research
- 2009 Australian Agricultural and Resource Economics Society, Quality of Research Discovery award
- 2009 Australian Agricultural and Resource Economics Society, Quality of Research Communication award
- 2008 UWA award: Higher Degree by Research Achievement to student Graeme Doole, for Doole and Pannell (2008) *Journal of Agricultural Economics* 59(1): 188-206.
- 2008 Finalist, Eureka Prize for Environmental Research
- 2007 Australian Research Council Federation Fellowship.
- 2007 Invited by the Gates Foundation to *RoundTable* and a meeting of *HarvestChoice* to advise on analysis for agricultural research priorities for the poor.
- 2007 Australian Agricultural and Resource Economics Society, Best article in *Connections: Farm, Food and Resource Issues*.

* Hoepner, A.G.F., Kant, B., Scholtens, B. and Yu, P.-S. (2012). Environmental and ecological economics in the 21st century: An age adjusted citation analysis of the influential articles, journals, authors and institutions, *Ecological Economics* 77: 193–206.

- 2007 Award of "Distinction" granted by UWA to PhD student Graeme Doole under my supervision.
- 2007 Outstanding journal reviewer for 2006, *Agricultural Systems*
- 2007 Australian Agricultural and Resource Economics Society, Prize for best PhD thesis in Australia or New Zealand awarded to my student, Graeme Doole.
- 2006 Australian Agricultural and Resource Economics Society, AARES Fellowship to attend IAAE 2006 conference.
- 2005 Named as one of 500 "Western Australian Leaders" by the Sunday Times newspaper.
- 2004 National Dryland Salinity Program, W.E. Wood Award for Excellence in Salinity Research and Development.
- 2004 Finalist, Eureka Prize for Research to Improve the Environmental Sustainability of Graingrowing (GRDC).
- 2004 Australian Agricultural and Resource Economics Society, Prize for best PhD thesis in Australia or New Zealand awarded to my student, Rick Llewellyn.
- 2003 Landcare Research Award (Western Australia), awarded by the National Landcare Program.
- 2003 American Agricultural Economics Association, Outstanding Journal Article in the *Review of Agricultural Economics* for 2002, for "Farm-Level Modeling for Bigger Issues," with Alfons Weersink and Scott Jeffrey.
- 2001 Canadian Agricultural Economics Society, outstanding journal article award for 2000, for "The economics of crop hail insurance," with Jim Vercaemmen.
- 1998. Australian Agricultural and Resource Economics Society, Prize for best masters thesis in Australia or New Zealand awarded to my student, Sally Marsh.
- 1997. Australian Agricultural and Resource Economics Society, Best Article in the *Review of Marketing and Agricultural Economics* during 1996: "Debugging mathematical programming models: Principles and practical strategies."
- 1996. University of Western Australia "Excellence in Postgraduate Supervision" (Commendation).
- 1994. University of Western Australia "Excellence in Teaching" award. One of eight awards made by the University for undergraduate teaching.
- 1992. Australian Agricultural Economics Society PhD Thesis Prize, for best PhD thesis in agricultural and resource economics in Australia and New Zealand, 1990-1991.
- 1990. PhD Thesis passed with "special congratulations" (awarded to about 5 percent of successful PhDs at UWA) and with no amendments.
- 1990. Agricultural Economics Society (Britain) Prize Article Competition. "Responses to risk in weed control decisions under expected profit maximisation".

Research

Affiliations

National Centre for Groundwater Research and Training
ARC Centre of Excellence for Environmental Decisions
National Environmental Research Program – Environmental Decisions Hub
National Environmental Research Program – Marine Biodiversity Hub
Future Farm Industries CRC
CRC for Water-Sensitive Cities

Research areas

- (a) Resource and environmental economics and policy. Topics included policy design, policy evaluation, project prioritisation, policy mechanism selection, bio-economic modelling of management options, and economics of monitoring sustainability indicators. Issues covered include dryland salinity, biodiversity, water quality, groundwater, environmental pests, herbicide resistance, climate change.
- (b) Whole-farm bioeconomic modelling. Played leading role in development of MIDAS whole-farm model based on wheat-sheep farming systems of Western Australia.
- (c) Economics of weed management. Three times invited to present reviews at international conferences and three times to the Australian Weed Science Society.
- (d) Risk and uncertainty. Tactical responses to risk, risk in weed management, risk and uncertainty in farmer's adoption decisions, uncertainty in sustainable farming systems.
- (e) Extension and communication. Economic evaluation of a major extension program, review of agricultural extension policy in Australia, impacts of extension on adoption, extension for land conservation practices.
- (f) Adoption and diffusion of innovations. Impacts of risk and uncertainty on adoption, impacts of extension on adoption.
- (g) Evaluation and prioritisation of research. The balance between basic and applied agricultural research, estimation of farm-level benefits of research, the value of information generated in research.
- (h) Farming systems economics. Rotation selection, farm modelling, legumes in the farming system, economics of perennials.
- (i) Linear programming. Published book, "Introduction to Practical Linear Programming". Also journal articles on methods and practical application of LP.

Publications

Books, monographs, major reports	7
Articles and notes in journals	141
Book chapters	33
Invited conference papers	33
Contributed conference papers: published	34
Contributed conference papers: unpublished	66
Working Papers	14
Extension articles	92
Book reviews	6
Other	38

Citations

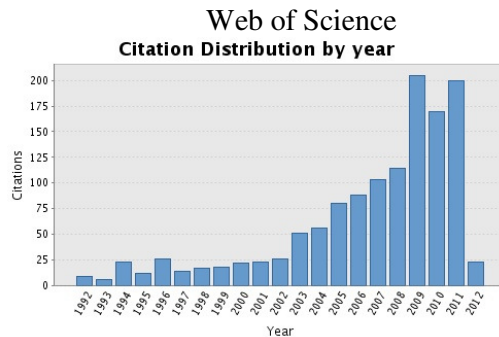
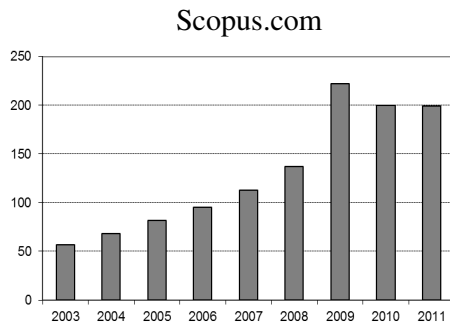
- Scopus.com, based on 104 of my publications, records 1413 citations, h index = 20 (as of 08/05/12).
- Web of Science, based on 105 of my publications, 1306 citations, h index = 21 (as of 12/03/12).
- Google Scholar (as of 27 Feb 2012) <http://scholar.google.com/citations?user=616eii8AAAAJ&h>

	All	Since 2007
Citations	4005	2203
h index	36	23
i10-index (items with at least 10 citations)	84	56

Most-cited papers in particular journals (based on Scopus.com)

Ranking	Journal	Published-in time-frame	Out of # papers*	Paper	# of citations	As of
Most cited	<i>Land Economics</i>	2007-2012	221	Pannell (2008)	31	27/02/12
Most cited	<i>Australian Journal of Experimental Agriculture</i>	Ever (1990-2008)	2,348	Pannell et al. (2006)	144	12/03/12
4 th most cited	<i>Australian Journal of Agricultural and Resource Economics</i>	Ever (1997-2012)	414	Pannell (2001)	49	31/12/11
9 th most cited	<i>Review of Agricultural Economics</i>	Ever (2004-2009)	329	Pannell (2006)	32	31/12/11
14 th most cited	<i>Agricultural Economics</i>	2000-2011	1082	Pannell et al. (2000)	43	31/12/11
24 th most cited	<i>Agricultural Economics</i>	Ever (1986-2011)	1222	Pannell (1997)	44	08/08/11
27 th most cited	<i>Canadian Journal of Agricultural Economics</i>	Ever (1989-2011)	571	John et al. (2005)	12	08/08/11
40 th most cited	<i>Agricultural Systems</i>	Ever (1976-2011)	2204	Marra et al. (2003)	56	08/08/11

*Total number of papers published in that journal over the time-frame.



Internet downloads

- 81,000 page downloads from my home page in 2011.
- Over 10,000 hits on INFFER web pages in 2009

- 20,000 downloads for a single paper in 2011: Pannell, D.J. (1997). Sensitivity analysis of normative economic models: Theoretical framework and practical strategies, *Agricultural Economics* 16: 139-152.
- All-time most downloaded paper in *Australian Journal of Experimental Agriculture* out of 2348 published by the journal (have been no. 1 since May 2008 to present): Pannell, Marshall, Barr, Curtis, Vanclay and Wilkinson (2006).
- 12th most downloaded paper of all time in *Australian Journal of Experimental Agriculture* (as of 14 Feb 2010): Ridley and Pannell (2005).
- Most downloaded paper in *Australian Journal of Experimental Agriculture* over past 12 months (was at no. 1 continuously from Nov 2006 to July 2008 and again from May 2009 to December 2009): Pannell, Marshall, Barr, Curtis, Vanclay and Wilkinson (2006).
- 2nd most downloaded paper in *Australian Journal of Experimental Agriculture* over past 12 months (as of Oct 2006): Ridley and Pannell (2005).
- 12th most downloaded paper in *Australian Journal of Experimental Agriculture* over past 12 months (as of August 2007): Marsh, Burton and Pannell (2006).
- 19th most downloaded paper in *Animal Production Science (formerly Australian Journal of Experimental Agriculture)* over past 12 months (as of 3 May 2010): Pannell 2005, "Politics and dryland salinity".
- 6th most downloaded paper in *Agricultural Economics* for 2000: Pannell, Malcolm and Kingwell (2000)
- 6th most downloaded paper in *Canadian Journal of Agricultural Economics* (as of 10 July 2007), John, Pannell and Kingwell (2005).
- 9th most downloaded paper in *Land Economics* (June 2008): Pannell (2008) Public: private benefits framework.
- 12th most downloaded paper in *Australian Journal of Agricultural and Resource Economics* (as of Dec 2006): Pannell (2001). Dryland salinity ...
- 16th most downloaded paper in *Agricultural Systems* (as of Dec 2010): Marra et al. (2003).
- 25th most downloaded paper in *Agricultural Systems* (as of Dec 2010): Monjardino et al. (2010).

Editorial duties

- Co-editor of *Australian Journal of Agricultural and Resource Economics* (2004-2007).
- Special issue co-editor for *Environmental Science and Policy* (2008-2009).
- Special issue co-editor for *Ecological Economics* (2012)
- Editorial board member for *Applied Economic Perspectives and Policy* (since 2009).
- Editorial board member for *Journal of Agricultural and Applied Economics* (since 2010).
- Editorial board member for *Agricultural Systems* (since 2003).
- Editorial board member for *Canadian Journal of Agricultural Economics* (since 2004).
- Editorial board member for *Land Use Policy* (since 2010).
- Editorial board member for *Australian Journal of Agricultural and Resource Economics* (2003-2004).

Research funding and research leadership

- \$17 million of external funding in 46 projects since 1983.
- Chief Investigator on successful proposal for ARC Centre of Excellence for Environmental Decisions, \$11.9 million over 7 years, 2011-17.
- Chief Investigator on successful proposal for NERP Hub for Environmental Decisions, \$11 million over 3.5 years, 2011-2014
- Established and led Centre for Environmental Economics and Policy at UWA, 2008-
- Co-developed the successful proposal for \$34 million for the Future Farm Industries Cooperative Research Centre, 2007-2014.
- Co-developed the successful proposal for \$25 million for the Cooperative Research Centre for Plant-Based Management of Dryland Salinity, 2001-2007 and the successful “Supplementary Bid” for \$5 million expansion of the CRC in 2003-2006.
- Leader of the Economic Modelling program of CLIMA (Cooperative Research Centre for Legumes in Mediterranean Agriculture), 1992-1997.
- Obtained a large grant from GRDC for project “Sustainability and Economics in Agriculture” (SEA), 1997-2002. Built and led a team of 5 core researchers in the project, with numerous external collaborators.

Collaboration

Collaboration with economists at the University of Western Australia, CLIMA, Agriculture Western Australian (AgWA), ICARDA (Syria), INRA-LECSA (France), New South Wales Agriculture, University of Melbourne, University of Sydney, University of Saskatchewan, University of British Columbia, University of California Berkeley, University of Guelph, North Carolina State University and University of Cambridge. Work closely with a number of non-economists, including biological scientists, hydrologists and social scientists. Have had links with scientists at CLIMA, ICARDA, CSIRO (Perth, Canberra, Brisbane, Toowoomba), Agriculture WA, University of Adelaide, Department of Primary Industries Victoria.

Teaching

Undergraduate teaching in the Faculty of Agriculture at the University of Western Australia in the areas of agricultural policy, farm management, mathematical programming, farming systems, environmental economics, resource economics, extension and communication.

University of W.A. "Excellence in Teaching" award (1994).

Nominated for the UWA “Excellence in Postgraduate Supervision” award (1996).

Research students: 21 undergraduate student projects, 2 Postgraduate Diplomas, 2 Masters of Science in Natural Resource Management, 3 Masters of Science and 8 PhDs.

Service

Within the University

CRC for Plant-Based Management of Dryland Salinity, 2001-2007.

- Member of Management Committee
- Chair of Research Evaluation Committee
- Program Leader, People, Land and Water
- Sub-program Leader, Economic and Social Assessment

Member of Management Committee and Sub-program Leader, CLIMA, 1993-1997.

Future Farm Industries CRC, 2007-2010.

- Program Leader 2007-2008
- Chair of Project Evaluation Committee

Outside the University

Established web-based newsletter *SEA News* (<http://welcome.to/seanews>) as a communication vehicle to industry, the community and other researchers. Nineteen issues distributed 1998-2006. 1000 subscribers. Over 50,000 hits per year.

Since 2004 I have written regular “Pannell Discussions” – brief articles on issues and ideas in economics, science, the environment, natural resource management, politics, people, and agriculture – similar to a blog. 185 articles published on line. Around 600 subscribers and around 75,000 web site hits per year.

Served on 15 government committees and boards related to natural resource management.

Contributor to a number of research funding bodies and R&D Corporations nationally, most notably through being a Director on the Board of Land and Water Australia, 2002-2005. Also have contributed to the National Dryland Salinity Program, the Joint Venture Agroforestry Program, the Social and Institutional Research Program of LWA, Rural Industries Research and Development Corporation, and Grains Research and Development Corporation, providing advice on the economics of research and on technology transfer/adoption of innovations.

Served on organising committees for two international conferences, four national conferences, an international workshop, and six national symposia and workshops.

Contribution to the Australian Agricultural and Resource Economics Society (AARES) through the following roles.

- President-Elect, President, Past-President, 1999-2001.
- Member of National Council, representing WA, 1993-1998.
- President, AARES (WA), 1996-98.
- Secretary, AARES (WA), 1992-4.
- Treasurer, AARES (WA), 2009.
- Chair of Masters Thesis Prize assessment Committee, 1998 and 1999.

- Nominations Committee (for Distinguished Fellowships, and President-Elect), 2000-01.

Contributions to Policy for the Environment and Natural Resource Management

Based on integration of latest science and economics, my research has provided a strong and influential critique of existing policies on land degradation, particularly by dryland salinity, and a constructive diagnosis of new policy needs. The findings have been influential at the national level and in all states. The peak national policy committee in this area has recently prepared recommendations to ministers for policy changes that are based on my research. The following quotes from policy makers (from the final report for my project "Sustainability and Economics in Agriculture" (SEA) indicate the degree of influence achieved.

- “Your research provided the sound economic and social principles that underpin the State's Salinity Investment Framework, that has recently been endorsed by Cabinet. ... Your articulate and powerful presentations to the State Salinity Council were instrumental in achieving the necessary shift in policy thinking that will enable more strategic, cost-effective investment.” Dr Paul Vogel, Director, Environmental Policy Unit, Dept Premier and Cabinet, WA.
- “You provided the committee with a big-picture view of the issues which was challenging but at the same time easily understood. ... Your input will be a significant contribution to the Committee’s parliamentary report.” Hon. Pam Allen MP, Chairman, NSW Parliamentary Select Committee, Salinity.
- “The work was influential at the highest levels of policy as well as with natural resource managers in the field. Overall, the SEA Project was one of the most successful that I have ever known.” Dr Don McFarlane, Director, Resource Management, Water and Rivers Commission, WA.
- “New South Wales Treasury has found the work published under this project, by yourself and others, extremely valuable in developing our thinking on natural resource management issues. The SEA Project has injected much needed objectivity, practicality and realism into the discussion. The project has been particularly successful in conveying the available scientific, economic and social information on these issues together with associated policy implications in a manner that is readily accessible to decision makers.” Mr Kevin Cosgriff, Executive Director, Resource Allocation, NSW Treasury.
- “Your wise counsel while participating in innovative policy development committees and inquiries for Government and community action will have a long-term impact on salinity management and Natural Resource Management in Western Australia.” Mr Garry English, WA Farmers Federation (also State Salinity Council, NRM Council).
- “I have no doubt that your group, through the SEA Project, has influenced not only industry attitudes towards sustainability, but also national policy agendas, particularly in respect to dryland salinity.” Mr Richard Price, National Manager, National Dryland Salinity Program.

More recently, I have developed SIF3 (Salinity Investment Framework III), which was used by several Catchment Management Bodies in WA and Victoria. SIF3 was of considerable interest to policy makers. In March 2006, the Australian Government's Senate

Committee Report on "Living with salinity" stated that "The Committee was particularly impressed by SIF3, which appears to offer a sound framework for making informed, objective and transparent investment decisions in a systematic way." (p. 205). "The Committee recommends that the Australian Government in cooperation with the states and territories keep a watching brief on the development of the Salinity Investment Framework 3, with a view to potentially implementing it around the country." (p. 229).

Work History

- 2007-2012 Australian Research Council Federation Fellow, UWA.
- 2002-2007 Associate Professor (Professor from May 2004), School of Agricultural and Resource Economics, UWA and Program Leader: People, Land and Water Program, CRC for Plant-Based Management of Dryland Salinity.
- 2002. Visiting Professor, Department of Land Economy, University of Cambridge, On leave from UWA, Oct-Dec.
- 1997-2002 Associate Professor, and Principal Research Fellow, Faculty of Agriculture, University of Western Australia. Research and supervision of postgraduate research students (and a little teaching).
- 1995. Visiting Professor, Department of Agricultural Economics, University of Saskatchewan, Canada. On study leave from UWA, June-December.
- 1991-97. Senior Lecturer, Faculty of Agriculture, University of Western Australia. Leader, Economic Modelling Program, Centre for Legumes in Mediterranean Agriculture.
- 1990-91. Research economist with the Western Australian Department of Agriculture at Merredin.
- 1986-89. PhD research: Economics of tactical decision making for weed control.
- 1983-86. Research officer, Western Australian Department of Agriculture.