Adjunct Associate Prof, Gulbali Instute (Agriculture, Water & Environment)

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CAREER OVERVIEW (most recent first)

Adjunct Associate Professor, Gulbali Institute, formerly Graham Centre, (Charles Sturt Uni, Wagga Wagga, NSW) 2014-Present. Teaching roles: 2016, 17, 18 & 19 marking and guest lectures for AGB110 Agricultural Economics, and marking for Agricultural Marketing AGB310-410 2019, 20,21,22, 23; 2018 lecturing and marking for AGB351 Commodity Trade & Prices. Key publications (B.5, B.6, C.22, C.25, C.26, C.27, C.28, C. 29, C30, C.31, D.25, D.27, F.69, PR.1 - PR.3) in list (pages 3-5). I have given farmer financial risk issues my greatest attention recently.

Principal Economist (2011 – March 2016), Economic Analysis; Strategy & Policy Branch, NSW Department of Primary Industries (DPI). Concurrently (from 2003), Senior Research Scientist. Progressed farm financial risk studies in pasture management and farm debt for two AARES 2016 papers. Completed key publications from my "Environmental Service Policy for Salinity and Water" project. Commenced research on farm financial risk in the context of pasture improvement research using whole-farm business process modelling. See key publications (C.17, C.18, C.21, D.22, D.24, D.23).

Research Economist (2007 – 2011), Program Economist, NSW DPI. Adjunct Senior Lecturer, Graham Centre. Principal Investigator on the A\$440K project "Developing Environmental Service Policy for Salinity and Water" supported by RIRDC, Future Farm Industries CRC, NSW DPI, Charles Sturt Uni, Graham Centre, University of Western Australia, Central West CMA (NSW), North central CMA and DPI-Victoria, and the Murray-Darling Basin Authority. Published results from NSW and Victoria collaborative research. See key publications (B.4, C.16, C.15).

Research Economist (April 2002 – 2007), (temporary contracts). Senior Research Scientist classification by NSW Public Service Commission since 2003. Completed publications from Weeds CRC research and commenced new collaborative research with support from the Salinity CRC, completing preparation and negotiations for the project proposal on "Environmental Service Policy for Salinity and Water" mentioned above. Contributed to a study of benefits to Australia from research investments in ICARDA (Int'l Centre for Ag Research in the Dry Areas), my former employer. See key publications (C.11, C12, D.19).

Senior Research Fellow, (Oct 1998 - April 2002) CRC for Australian Weed Management, School of Agriculture, **Charles Sturt University**, Wagga Wagga. Explored economics of strategies for reduced herbicide use on wild oats in wheat and of increased releases of bio-control agents against Paterson's curse in pastures. See key publications (C.5, C7, C.10, C.9, E.40).

The present page provides an overview of my career in Australia from 1998 to the present as an agricultural economist with Charles Sturt University and with NSW DPI. I was fortunate to have served in earlier professional roles for 17 years with the International Center for Agricultural Research in the Dry Areas (ICARDA), based at Aleppo, Syria. I cover that experience and earlier work in my section on EMPLOYMENT HISTORY, below.

QUALIFICATIONS

PhD (1982) following MSc (1972) in Agricultural & Resource Economics

Oregon State University, Corvallis, Oregon 97331, USA

BSc (1969) 'Honors' in Agricultural Management,

California State Polytechnic University, San Luis Obispo 93407, California, USA

Australian Permanent Residence ('Distinguished Talent Visa" 2001), Australian Citizenship (2003)

Current NSW Driver Licence no 13247929

Google Scholar: https://scholar.google.com.au/citations?user=AN7XIKkAAAAJ&hl=en&oi=ao **ORCID ID:** https://orcid.org/0000-0002-9892-5102 (includes my earliest, pre ICARDA work)

PROFESSIONAL DEVELOPMENT

Recognised in the **Senior Research Scientist classification** by NSW PSC from 2003 to March 2016), and as **Adjunct Associate Professor, Gulbali Institute** (Charles Sturt University). I have co-supervised 3 PhD students at CSU in addition to 10 earlier at ICARDA.

As a member of the **Australasian Agricultural & Resource Economics Society (AARES)** I benefit from open feedback on 30 conference papers in 20 annual conferences, now published at: http://ageconsearch.umn.edu/

EMPLOYMENT HISTORY

International Scientist (1981-1998), ICARDA (International Center for Agricultural Research in the Dry Areas), Aleppo, Syria. I was very fortunate to take the challenge of an international job offered in the Farming Systems Program at ICARDA's Head Office in Aleppo, Syria (when that beautiful country was in peace and order). I served as Ag & Resource Economist and Research Project Manager, under a succession of banners in the 'Farming Systems', 'Pasture, Forage and Livestock' and 'Natural Resource Management' research Programs.

In teamwork with people from national research institutions, and often with graduate students, I modelled the economic decision space of farmers, governments and international institutes. Our focus countries were in four regions: the Nile Valley (Egypt, Sudan, Ethiopia), West Asia (Syria, Lebanon, Turkey, Jordan), North Africa (Tunisia, Algeria, Morocco) and later Central Asia (Uzbekistan, Kazakhstan, Turkmenistan). Our main purpose was to build the capacities of those national institutes and their staff, to better inform their research direction and policy. This job required a rather large amount of travel.

We were able to coordinate our outreach efforts with those of other ICARDA programs: Cereal Improvement, Legume improvement, Seed Management, Training, etc. and were helped by our regional offices in Cairo, Amman, Rabat and Tashkent. At ICARDA I gained wide experience in collaboration on agricultural problems identified with the various national research institutes in each region, and locals teamed up with subject-area technical experts. This succeeded for me in Syria, Egypt, Sudan and elsewhere in North Africa / West and Central Asia. This mode of operation has also served me well here in Australia.

In my time at ICARDA, I supervised the field research of 10 PhD, 10 MSc students and five Post-Doctoral Fellows from ten countries. I led the organisation of 12 international workshops, authored 108 publications, and was a partner in writing approximately A\$13M in external research grants. I was awarded sabbatical leave from ICARDA (1989-90) to the University of New England, Armidale, NSW. That was a wonderful introduction to Australia for me and my family! We returned to ICARDA for eight more years before getting back to Australia to work and live.

PROFESSIONAL MEMBERSHIPS

Agricultural & Applied Economics Association (*American Ag. Econ. Assoc.*) http://www.aaea.org/
Australasian Agricultural & Resource Economics Society (AARES) http://www.aares.org.au/

Graham Centre http://www.csu.edu.au/research/grahamcentre/our-people/profile/members/tom-nordblom

COMMUNITY ACTIVITIES Member, Australian Olive Oil Sensory Panel (AOOSP) since 2005 (the only Australian sensory panel accredited by the International Olive Council)

Swimming (daily); **Fishing** (too rarely); **Flying** (single-engine private, 550+ hours in the distant past)

KEY PUBLICATIONS INDICATED ON PAGE 1 (numbered as in NordblomFullRecord-12 May 2023):

COMMISSIONED REPORTS

- **B.6** Schmidtke, L.M., **Nordblom**, T.L., Robertson, S.M., Wills, B., Manyweathers, J., Bond, J., Hayes, L. and Xie, G. 2023. *Profitability Project Part 1 Desktop Research*. Project CSU2201, Commissioned by Wine Australia.
- **B.5** Penfold, C., Weckert, M., Nordblom, T., Howie, J. & Norton, M. (2018). *Development of a low-input under-vine floor management system which improves profitability without compromising yield or quality: Final Report to Wine Australia*, University of Adelaide. 98 p. https://www.wineaustralia.com/getmedia/fa895fab-efa3-4f86-8072-9c2f20e76f97/UA-1303-Final-Report
- **B.4** Nordblom, T.L. and Hume, I.H. (eds.). 2011. *Developing Environmental Service Policy for Salinity and Water*. RIRDC Pub 10/219 https://www.agrifutures.com.au/wp-content/uploads/publications/10-219.pdf

REFEREED SCIENTIFIC JOURNAL ARTICLES

- **C.31 Nordblom**, T.; Gurusinghe, S.; Erbacher, A.; Weston, L.A. 2023. Opportunities and Challenges for Cover Cropping in Sustainable Agriculture Systems in Southern Australia. *Agriculture* 2023, 13, 688. https://doi.org/10.3390/agriculture13030688
- **C.30** Godfrey, Sosheel S.; **Nordblom**, Thomas L.; Anwar, Muhuddin R.; Ip, Ryan, H.L.; Luckett, David J.; Bange, Michael P. (2023). Untangling the complex mix of agronomic and economic uncertainties inherent in decisions on rainfed cotton." *Crop & Pasture Science, CSIRO* https://www.publish.csiro.au/cp/pdf/CP22145
- **C.29** Godfrey, S.S., Ip, R.H.L. & **Nordblom**, T.L. 2021. Risk Analysis of Australia's Victorian Dairy Farms Using Multivariate Copulae. *Journal of Agricultural and Applied Economics*. https://doi.org/10.1017/aae.2021.23
- **C.28** Godfrey SS, **Nordblom** T, Ip RHL, Robertson S, Hutchings T, Behrendt K. 2021. Drought Shocks and Gearing Impacts on the Profitability of Sheep Farming. **Agriculture.**11(4):366. https://doi.org/10.3390/agriculture11040366
- **C.27 Nordblom**, T.L., Hutchings, T.R., Godfrey, S.S., Schefe, C.R. (2021). Precision variable rate nitrogen for dryland farming on waterlogging Riverine Plains of Southeast Australia? *Agricultural Systems*, https://doi.org/10.1016/j.agsy.2020.102962
- **C.26 Nordblom**, T.L., Penfold, C., Whitelaw-Weckert, M., Norton, M., Howie, J., Hutchings, T.R. (2021). Financial comparisons of under-vine management systems in four South Australian vineyard districts. *Australian Journal of Agricultural & Resource Economics*. http://dx.doi.org/10.1111/1467-8489.12411

- **C.22 Nordblom**, T.L., Hutchings, T.R, Hayes, R.C., Li, G.D., Finlayson, J.D. (2017). Does establishing lucerne under a cover crop increase farm financial risk? *Crop & Pasture Science* 68 (12): 1149–1157 https://doi.org/10.1071/CP16379
- **C.21 Nordblom**, T.L., Hume, I.H., Finlayson, J.D., Pannell, D.J., Holland, J.E., McClintock, A.J. (2015). Distributional consequences of upstream tree plantations on downstream water users in a public-private benefit framework. *Agricultural Systems* 139: 271–281. http://dx.doi.org/10.1016/j.agsy.2015.07.008
- **C.18 Nordblom**, T.L., Finlayson, J.D., Hume, I.H. 2012. Upstream demand for water use by new tree plantations imposes externalities on downstream irrigated agriculture and wetlands. *The Australian Journal of Agricultural and Resource Economics* 56 (4): 455-474 http://dx.doi.org/10.1111/j.1467-8489.2012.00593.x
- **C.17** Hutchings, T.R. and **Nordblom**, T.L. 2011. A financial analysis of the effect of the mix of crop and sheep enterprises on the risk profile of dryland farms in south-eastern Australia. **AFBM (Australian Farm Business Management) Journal**. 8 (1): 19-42. http://dx.doi.org/10.22004/ag.econ.101405
- **C.16 Nordblom**, T.L., Reeson, A., Finlayson, J., Hume, I., Whitten, S., Kelly, J. 2011. Price discovery and distribution of water rights linking upstream tree plantations to downstream water markets: experimental results. *Water Policy* 13: 810-827. http://dx.doi.org/10.2166/wp.2011.085
- **C.15 Nordblom**, T.L., Christy, B., Finlayson, J., Roberts, A., Kelly, J. 2010. Least-cost land use changes for targeted salt-load and water-yield impacts in south-eastern Australia. *Agricultural Water Management*. 97 (6): 811-823. http://dx.doi.org/10.1016/j.agwat.2009.12.015
- **C.12 Nordblom**, T., Hume, I., Bathgate, A., Reynolds, M. 2006. Mathematical optimisation of drainage and economic land-use for target water and salt yields. *Australian Journal of Agricultural and Resource Economics*, 50 (3): 381-402. http://dx.doi.org/10.1111/j.1467-8489.2006.00356.x
- **C.11** Brennan, J.P., Aw-Hassan, A., **Nordblom**, T.L. 2003. Influence of spillovers to Australia on impacts of the International Center for Agricultural Research in the Dry Areas. *Food Policy* 28 (5-6): 471-485. http://dx.doi.org/10.1016/j.foodpol.2003.08.001
- **C.10 Nordblom**, T.L., Jones, R.E., Medd, R.W. 2003. Economics of factor-adjusted herbicide doses: a simulation analysis of best efficacy-targeting strategies (BETS). *Agricultural Systems*, 76 (3): 863-882. http://dx.doi.org/10.1016/S0308-521X(02)00036-7
- **C.9 Nordblom**, T., Smyth, M., Swirepik, A., Sheppard, A., Briese, D. 2002. Spatial economics of biological control: investing in new releases of insects for earlier limitation of Paterson's curse in Australia. *Agricultural Economics*, 27 (3): 403-424. http://dx.doi.org/10.1111/j.1574-0862.2002.tb00128.x
- **C.7** Medd, R.W., Van de Ven, R., Pickering, D.I., **Nordblom**, T.L. 2001. Determination of environment-specific dose response relationships for clodinafop-propargyl on *Avena* spp. *Weed Research*, 41 (4):351-368. https://doi.org/10.1046/j.1365-3180.2001.00243.x
- **C.5** Pannell, D.J., **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. https://doi.org/10.1111/1467-8489.00048

REFEREED RESEARCH BULLETINS

D.27 Nordblom, T. Hutchings, T., Godfrey, S., Schefe, C. 2019. *Precision N rates for dryland farming? Financial analysis of variable-rate Nitrogen (VRN) in the Riverine Plains Region*. Selected Paper, 63rd AARES Annual Conf 2019, Melbourne Victoria. 12-15 Feb 2019.

https://ageconsearch.umn.edu/record/285048

- **F.69 Nordblom**, T., Penfold, C., Weckert, M., Norton, M., Howie, J. & Hutchings, T. (2018). *Economic and financial risks in under-vine management alternatives to herbicide in four South Australian wine-grape districts, 2016 & 2017.* Paper presented 9 Feb 2018, Australasian Agricultural & Resource Economics Society Annual Conf 2018, Adelaide. 28 p. http://ageconsearch.umn.edu/record/273525
- **D.25** Nordblom, T., Penfold, C., Weckert, M., Norton, M. (2017). *Straw and living mulches compared with herbicide for under-vine weed control in a Public-Private Benefit Framework*. Selected Paper, 61st Annual AARES Conf, Brisbane, Qld 8-10 Feb, 2017. http://ageconsearch.umn.edu/record/258677
- **D.24** Nordblom, T.L., Hutchings, T.R., Hayes, R.C., Li, G.D. 2015. *A Framework for Modelling Whole-Farm Financial Risk*. Selected Paper, Australian Agricultural & Resource Economics Society, 59th Annual Conference, February 10-13, 2015, Rotorua, New Zealand. http://purl.umn.edu/202581 (paper); http://purl.umn.edu/202986 (slides)
- **D.22** Nordblom, T., Finlayson, J., Hume, I. and Kelly, J., 2009. *Supply and demand for water use by new forest plantations: a market to balance increasing upstream water use with downstream community, industry and environmental use?* Economic Research Report No 43, NSW DPI, Wagga Wagga. Future Farm Industries CRC. 58pp. ISSN 1442-9764, ISBN 978 0 7347 1977 5 http://archive.dpi.nsw.gov.au/content/science-and-research/economic-reports/economic-research-reports/43
- **D.19** Brennan, J.P., Aw-Hassan, A., Quade, K.J., **Nordblom**, T.L. 2002. *Impact of ICARDA Research on Australian Agriculture*, Economic Research Report No. 11, NSW Agriculture, Wagga Wagga. 96 pp. Full text is posted as ERR 11 at: http://archive.dpi.nsw.gov.au/content/science-and-research/economic-reports/economic-research-reports/err11
- **D.4** Brokken, R.F., O'Connor, C.W., **Nordblom**, T.L. 1980. *Costs of Reducing Grain Feeding of Beef Cattle*. Agricultural Economic Report 459. Economics, Statistics and Cooperatives Service, USDA, Washington, D.C. https://naldc.nal.usda.gov/download/CAT87202120/PDF
- **D.2** Radtke, H.D., **Nordblom**, T.L. 1976. *Economics of Small Rural Hospitals in Nevada*. Cooperative Extension Service Circular C-178. University of Nevada, Reno. December 1976. 12 pp. https://static.wixstatic.com/ugd/54e21a_7e512ca157784560aabd2ec900ae8c89.pdf
- **D.1** Radtke, H.D., **Nordblom**, T.L. 1975. *Economics of a Small Rural Physician Practice in Nevada*. Cooperative Extension Service Circular C-167. Univ. of Nevada, Reno. Oct. 1975. 13 pp. https://static.wixstatic.com/ugd/54e21a_0e9d5d17da554de7ae812fd3a1e550e0.pdf

BOOK CHAPTER

E.40 Nordblom, T. 2003. Putting biological reality into economic assessments of biocontrol. In: Spafford-Jacob, H., Briese, D. (eds). 2003. *Improving the selection, testing and evaluation of weed biocontrol agents*. Proc., Biological Control of Weeds Symposium and Workshop, Univ. of WA, Perth, 13 Sept 2002. CRC for Australian Weed Mgmt., Tech Series No. 7. pp. 75-85. http://pandora.nla.gov.au/pan/64168/20080620-0000/www.weeds.crc.org.au/documents/tech_series_7.pdf

RECENT PRESS RELEASES

- PR.1 Penfold, C. & Howie, J. *Under-vine cover cropping*. Wine Australia Factsheet, May 2019. https://www.wineaustralia.com/getmedia/384c2ac3-b0b1-4c7b-9c7c-a8904090a69b/CORD_Factsheets_CoverCropsUndervine_V2.pdf
- PR.2 Crunching the numbers on precision variable rate nitrogen Graham Centre Newsletter, Winter 2019 https://www.csu.edu.au/research/grahamcentre/news/newsletters/2019/winter-2019/crunching-the-numbers-on-precision-variable-rate-nitrogen
- PR.3 Godfrey, S., Nordblom, T.L., Ip, H.L., Anwar, M., Behrendt, K. (2020). Water use and dollar values of irrigated crops in the Murrumbidgee catchment Graham Centre News-letter, Summer 2020 https://www.csu.edu.au/research/grahamcentre/news/newsletters/2020/summer-2020/water-use-and-dollar-values-of-irrigated-crops-in-the-murrumbidgee-catchment

WANT MORE INFORMATION?

My **Full Record** (publication, training, grant-writing & outreach), is available on request in: **NordblomFullRecord-12 May 2023**