

## J H Maindonald – Selected Publications: 1984–2007

### Joint Publications

- Boot, H. M. and **Maindonald, J. H.**, in press. New estimates of age- and sex- specific earnings and the male-female earnings gap in the British cotton industry, 1833-1906. *Economic History Review*. Published online 28-Aug-2007 doi: 10.1111/j.1468-0289.2007.00398.x
- Fazey, I., Salisbury, J., Lindenmayer, D.B., Douglas, R. and **Maindonald, J.H.** 2004: “Can conservation learn from medicine about bridging the gap between scientists and practitioners? *Environmental Conservation* 31: 190–198.
- Booth, H., **Maindonald, J.** and Smith, L. 2002. Applying Lee-Carter under conditions of variable mortality decline. *Populations Studies* 56: 325-336.
- Hales, S., de Wet, N., **Maindonald, J.** and Woodward, A. 2002. Potential effect of population and climate changes on global distribution of dengue fever: an empirical model. *The Lancet*. Published online August 6, 2002.
- Maindonald, J.H.**; Waddell, B.C.; Petry, R.J. 2001. Apple cultivar effects on codling moth (Lepidoptera: Tortricidae) egg mortality following fumigation with methyl bromide. *Postharvest Biology and Technology* 22: 99-110.
- Harker, F. R.; **Maindonald, J.H.** 1994. Ripening of nectarine fruit. *Plant Physiology* 106: 165-171.
- Maindonald, J.H.** 1992. Statistical Design, Analysis and Presentation Issues. *N. Z. Journal of Agricultural Research* 35: 121-141.
- Maindonald, J.H.**; Waddell B.C.; Birtles D.B. 1991. Response to Methyl Bromide Fumigation of Codling Moth (Lepidoptera: Tortricidae) on Cherries. *Journal of Economic Entomology* 85: 1222-1230.
- Daley, D.J.; **Maindonald, J.H.** 1989. A unified view of models describing the avoidance of Superparasitism. *IMA Journal of Mathematics Applied in Medicine and Biology*. 6, 161 - 178.
- Maindonald, J.H.**; Markwick N.P. 1986. The avoidance of superparasitism in four species of parasitic wasp — mathematical models and experimental results. *Researches on Population Ecology* 28: 1-16.
- Maindonald, J.H.** and Finch G.R. 1986. Apple Transport in Wooden Bins. *N. Z. Journal of Technology* 2: 171-177.
- Maindonald, J.H.** and Burden, C. J. 2005. Selection bias in plots of microarray or other data that have been sampled from a high-dimensional space. In R. May and A. J. Roberts, eds., *Proceedings of 12th Computational Techniques and Applications Conference CTAC-2004*, volume 46, pp. C59–C74.  
<http://anziamj.austms.org.au/V46/CTAC2004/Main> [March 15, 2005]
- Maindonald, J.** and Richardson, A.E. 2004. This passionate study: a dialogue with Florence Nightingale. *Journal of Statistics Education* 12, Number 1. Published online at  
<http://www.amstat.org/publications/jse/v12n1/maindonald.html>

### Encyclopedia Articles and Book Chapter

- Maindonald, J.H.** 2005. Algorithm. *Encyclopedia of Biostatistics*, 2<sup>nd</sup> edn, 149-154.
- Lawrence, C.J. and **Maindonald, J.H.** 2005. Computer Languages and Programs. *Encyclopedia of Biostatistics*, 2<sup>nd</sup> edn, 1077-1081.
- Maindonald, J.H.** and Stott, H.J. 2005. Confidentiality and Computers. *Encyclopedia of Biostatistics*, 2<sup>nd</sup> edn, 1109-1113.
- Maindonald, J.H.** 2005. Matrix Computations. *Encyclopedia of Biostatistics*, 2<sup>nd</sup> edn:3050-3058. Wiley, Chichester U. K.
- Maindonald, J.**, Pittelkow, Y. and Wilson, S. 2003. Some considerations for the design of microarray experiments. In *Science and Statistics*, ed. D.R. Goldstein, pp.367-390. Institute of mathematical Statistics, Lecture Notes series, volume 40.

### Papers

- Maindonald, J.**, 2006. Data mining methodological weaknesses and suggested fixes. In P. J. Christen; P. J. Kennedy; J. Li; S. J. Simoff; and G. J. Williams, eds., *Fifth Australasian Data Mining Conference (AusDM2006)*, volume 61 of CRPIT, pp. 9–16. ACS, Sydney, Australia.
- Maindonald, J. H.** 2005. Data, science and new computing technology. *New Zealand Journal of Science* 62: 126-128.
- Maindonald, J.H.** 2003. The Role of Models in Predictive Validation (Statistics for Budding Data Miners). Invited Paper, ISI Meeting, Berlin, 2003.
- Maindonald, J.H.** 1990. Avoidance-modified Urn Models and Parasitic Wasps. *The Mathematical Scientist* 15: 128-136.

### Books

- Maindonald, J.H.** and Braun, W.J. 2007. *Data Analysis and Graphics Using R. An Example-Based Approach*. 2<sup>nd</sup> edition, Cambridge University Press, January 2007.  
[see the web page <http://www.maths.anu.edu.au/~johnm/r-book.html>]
- Maindonald, J.H.** 1984. *Statistical Computation*, 370+xviii pp., Wiley. (Translated into Russian, 1988).

## **Book Reviews**

Review of Christopher M. Bishop, “Pattern Recognition and Machine Learning.” (Springer-Verlag 2006).  
Journal of Statistical Software 17, Book Review 5 2007.

Review of Simon N. Wood, “Generalized Additive Models: An Introduction with R.” (Chapman & Hall/CRC 2006).  
Journal of Statistical Software 16, Book Review 3 2006.

## **R Packages**

The following R packages are available from the Comprehensive R Archive Network (CRAN):

**DAAG**: Data and Functions to accompany Data Analysis and Graphics Using R (with John Braun; CUP 2007)

**DAAGxtras**: Data and Functions supplementary to DAAG, intended for use in courses.

**DAAGbio**: Data and Functions supplementary to DAAG, intended for use in courses that focus on expression array and other applications in molecular biology.

**hddplot**: Use known groups in high-dimensional data to derive scores for low-dimensional plots that are unbiased with respect to selection effects

**hwde**: Models and tests for departure from Hardy-Weinberg equilibrium.