

## Introduction to the Nigel Barlow Symposium



Dr Nigel Barlow died on 4 June 2003 aged 53 in Christchurch, New Zealand.

Nigel completed his PhD at the University of East Anglia in 1977 and emigrated to New Zealand in 1979 where he worked initially at Palmerston North and for the last 12 years for AgResearch at Lincoln. Nigel made an enormous contribution to New Zealand ecological

science through the use of mathematically based models. In particular, he worked on insect pests such as grass grubs and vertebrate pests such as possums and rabbits, producing over 130 papers. Nigel's models of bovine tuberculosis underpinned the current strategies and expenditure of over \$50 million each year on the control of wildlife vectors on this disease. Nigel's capabilities as a scientist were not only in the applied field but also reflected in his ability to win funds with his student John Kean from the prestigious Marsden Fund for basic research on the causes of rarity. He was Editor of the *New Zealand Journal of Ecology* from 1985 to 1990 and of the *Journal of Applied Ecology*. Nigel was awarded the New Zealand Ecological Society Award for his outstanding contribution to applied ecology in 1996 and posthumously in 2003 the Caughley Medal for lifetime contributions to wildlife management and ecology by the Australasian Wildlife Management Society. Nigel was a true polymath and enthusiast about all natural history. He had an interest in bird-winged butterflies and regularly vanished into the jungles of Indonesia and Papua New Guinea to study them. He was fascinated by crocodilians and anacondas, mountain climbing, landscape painting, and malt whisky. At work he was resistant to bureaucratic interference but happy to pass on his abilities and insights to his students and numerous colleagues.

Such a busy scientific life left many projects unfinished at his untimely death. His colleagues at AgResearch and Landcare Research decided to use the funds from several of these uncompleted projects to hold a symposium of invited papers on the general theme of "the practical applications of ecological theory and modelling" in Nigel's memory and to publish some of these as a memorial issue of the *New Zealand Journal of Ecology*. The symposium was held at Queenstown, New Zealand on 15–17 September

2004, when 25 papers were read to an audience of over 50 attendees.

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John Parkes

Symposium convenor

Guest editor, *New Zealand Journal of Ecology* 30(1)  
Landcare Research, Lincoln

### Selected papers

- Barlow, N.D.; Dixon, A.F.G. 1980. *Simulation of lime aphid population dynamics*. PUDOC, Wageningen, The Netherlands, 165 pp.
- Barlow, N.D.; Clout, M.N. 1983. A comparison of 3-parameter, single-species population models, in relation to the management of brushtail possums in New Zealand. *Oecologia* 60: 250-258.
- Barlow, N.D. 1994. Predicting the effect of a novel vertebrate biocontrol agent: a model for viral-vectored immunocontraception of New Zealand possums. *Journal of Applied Ecology* 31: 454-462.
- Barlow, N.D. 1994. Size distributions of butterfly species and the effect of latitude on species sizes. *Oikos* 71: 326-332.
- Barlow, N.D.; Moller, H.; Beggs, J.R. 1996. A model for the effect of *Sphecohyga vesparum vesparum* as a biological control agent of the common wasp in New Zealand. *Journal of Applied Ecology* 33: 31-44.
- Barlow, N.D. 2000. Non-linear transmission and simple models for bovine tuberculosis. *Journal of Animal Ecology* 69: 703-713.
- Barlow, N.D.; Barron, M.C.; Parkes, J. 2002. Rabbit haemorrhagic disease in New Zealand: field test of a disease-host model. *Wildlife Research* 29: 649-653.
- Barlow, N.D.; Kean, J.M. 2004. Resource abundance and invasiveness: a simple model. *Biological Invasions* 6: 261-268.

