

QUALIFICATIONS

BSc University of Canterbury. 1985

MSc Zoology. University of Auckland. 1988

ROLE AT CAWTHRON

Cultured shellfish programme leader and senior aquaculture scientist, specialising in hatchery technology and selective breeding for bivalve shellfish.

SPECIAL INTERESTS & ACHIEVEMENTS

Nick's knowledge and experience span a variety of fields, from shellfish larval biology and marine ecotoxicology through to tree breeding and industrial automation systems.

He applies his biological skills to better understand and improve the hatchery production and farming of bivalve shellfish, especially in the context of genetic improvement. Nick's experience at the 'business' end of a major tree breeding programme (*Pinus radiata*) is invaluable in the innovative Greenshell™ mussel and Pacific oyster breeding programmes underway at Cawthron.

By combining biology with industrial automation, Nick is in a unique position to devise and improve systems for large-scale hatchery production of bivalve shellfish. These improvements range from high density larval tank design through to entire hatchery monitoring and control systems.

SELECTED PUBLICATIONS

- Ragg NLC, King N, Watts E, Morrish J 2010. Optimising the delivery of the key dietary diatom *Chaetoceros calcitrans* to intensively cultured Greenshell™ mussel larvae, *Perna canaliculus*. Aquaculture.
- King N, Ragg NLC, Morrish J, Watts E 2010. Finding the Limits for Continuous-Flow High-Density Bivalve Larviculture Systems. Proceedings World Aquaculture Society, San Deigo.
- King N, Janke AR, Kaspar HF, Foster S. 2005. An Intensive High-Density Larval Rearing System for the Large-Scale Simultaneous Production of Families of the Pacific oyster *Crassostrea gigas*. Proceedings Larvi05 – Fish and Larviculture Symposium: 236-237, European Aqua Soc, Special Pub 36, Oostende, Belgium.



- Dungey HS, Carson MJ, Low CB, King NG 2004. Potential niches for inter-specific hybrids with *Pinus radiata* in New Zealand. New Zealand Journal of Forestry Science 33: 295-318.
- Hsu L, Chauhan SS, Lindström H, King NG 2003. Modulus of elasticity of stem vs branch wood in 7-year old *Pinus radiata* families. New Zealand Journal of Forestry Science 33: 35-46.
- Janke A, Kaspar H, King N, Roberts R, Seager V, Fraser B, Morrish J, Elliot A, Watts E, Webb S 2002. Selective breeding programmes for shellfish aquaculture in New Zealand. NZ Marine Sciences Society Conference 2002, Abstract.
- Carran P, King NG 1999. Frost protection for *Radiata Pine* seed orchards-orchard frost protection trials 1998. Report to Seed Orchard Research Group. Lincoln Environmental.
- King NG, Miller MC, de Mora SJ 1989. Tributyltin levels for sea water, sediment, and selected marine species in coastal Northland and Auckland, New Zealand. New Zealand Journal of Marine and Freshwater Research 23: 287-294.
- de Mora SJ, King NG, Miller MC 1989. Tributyltin and total tin in marine sediments; profiles and apparent rate of degradation. Environmental Technology Letters 10:901-908.