

Dr. Hugh Philip Possingham

The Chief Scientist, The Nature Conservancy +61 434079061

EDUCATION

- 1980 - 83 University of Adelaide, Australia. Majors: Biochemistry and Applied Mathematics
B.Sc. (Hons.) 1st class, Applied Mathematics (supervisor **Dr W. Henderson**)
1984 - 87 D.Phil., Oxford University, UK (supervisor **Dr Michael Bulmer**). St Johns College

ACADEMIC EMPLOYMENT

- 1987 - 88 Post-doctoral Fellow with Prof J Roughgarden, Stanford University, USA.
1989 Post-doctoral Fellow with Prof Ian Noble, Australian National University.
1989 Visiting Fellow in Biological Sciences, University of New South Wales.
1990 ARC QEII Fellow in Ecosystem Dynamics Group, RSBS, Australian National University.
1991 - 93 Lecturer in Applied Mathematics, The University of Adelaide.
1994 - 95 Senior Lecturer in Applied Mathematics, The University of Adelaide.
1995 - 98 Professor/Foundation Chair/Head, Environmental Science, The University of Adelaide.
1999 - 00 Professor and Deputy Head, Applied and Molecular Ecology, The University of Adelaide.
2000 - Professor of Mathematics and Professor of Zoology, The University of Queensland
2001 - 11 Director of The Ecology Centre
2003 - 06 Australian Research Council Professorial Fellow
2006 - 11 Australian Research Council [Federation Fellow](#)
2006 - 10 Director of [Applied Environmental Decision Analysis Research Centre](#),
2011 - 18 Director of The Australian Research Council Centre of Excellence for Environmental
Decisions – CEED (\$2.5M per annum)
2011 - 15 Director of a National Environmental Research Program hub (\$3.3M per annum)
2012 - 13 Vice-chancellor's Senior Research Fellow (VCSRF)
2014 - 19 Australian Research Council Laureate Fellow, The University of Queensland
2014 - 16 Chair in Conservation Decisions, Imperial College London (20%)
2015 - 16 Director of a National Environmental Science Programme – Threatened Species Recovery
Hub (\$10M per annum)
2016 - The Chief Scientist, The Nature Conservancy

MAJOR PRIZES AND AWARDS (SELECTED)

- 1984 Rhodes Scholarship, Australia-at-large**
1999 POL Eureka Prize for Environmental Research (with David Lindenmayer)
2000 Inaugural Fenner Medal for Plant and Animal Science (Aust Academy Science)
2001 Australian Mathematics Society Medal
2003 Modelling and Simulation Society of Australia, General Systems Medal
2005 University of Queensland Supervision Excellence award (one of three)
2005 Elected Fellow of The Australian Academy of Science
2009 Sherman Eureka Prize for Environmental Research (with Ian Ball and Matt Watts)
2013 Edward P. Bass Distinguished Visiting Environmental Scholar, Yale University
2015 Doctor of Science (Honorary), The University of British Columbia
2017 Elected Fellow of The US National Academy of Sciences
2019 Doctor of Science (Honorary), The University of Adelaide

PUBLICATION SUMMARY

Google Scholar (April 2019): 51,000+ citations, h-index 120 (includes books, book chapters etc.)
Web of Science (April 2019): 607 publications, h-index 87; 32 publications in Science or Nature,

Some significant papers

1. Possingham, H. P. *et al.* (2002) Limits to the use of threatened species lists. *Trends in Ecology and Evolution* 17:503-507.
2. Wilson, K. A., M. McBride, M. Bode & H. P. Possingham (2006) Prioritising global conservation efforts. *Nature* 440:337-340.
3. Bode M., Wilson K.A., Brooks T.M., Turner W.R., Mittermeier R.A., McBride M.F., Underwood E.C. & Possingham H.P. (2008). Cost-effective global conservation spending is robust to taxonomic group. *Proceedings of the National Academy of Sciences of the United States of America* 105:6498-6501.
4. Chades I., E. McDonald-Madden, M.A. McCarthy, B. Wintle, M. Linkie & H. P. Possingham (2008) When to stop managing or surveying cryptic threatened species. *Proceedings of the National Academy of Sciences of the United States of America* 105:13936-13940.
5. Joseph, L. N., R. F. Maloney, and H. P. Possingham. (2009). Optimal Allocation of Resources among Threatened Species: a Project Prioritization Protocol. *Conservation Biology* 23:328-338.
6. Fuller, R. A., E. McDonald-Madden, K. A. Wilson, J. Carwardine, H. S. Grantham, J. E. M. Watson, C. J. Klein, D. C. Green, and H. P. Possingham. (2010). Replacing underperforming protected areas achieves better conservation outcomes. *Nature* 466:365-367.
7. McDonald-Madden, E., P. W. J. Baxter, R. A. Fuller, T. G. Martin, E. T. Game, J. Montambault, and H. P. Possingham. 2011. Should we implement monitoring or research for conservation? *Trends in Ecology & Evolution* 26:108-109
8. Butt, N., H. L. Beyer, J. R. Bennett, D. Biggs, R. Maggini, M. Mills, A. R. Renwick, L. M. Seabrook, and H. P. Possingham. 2013. Biodiversity Risks from Fossil Fuel Extraction. *Science* 342:425-426.

Examples of service to the community and science

The Wentworth Group, Council of The Australian Academy of Science, Various Australian Academy of Science selection committees, Queensland Smart State Council, Advisor to Thomas Foundation, Advisor to Myer Foundation, science advisor to WWF, National Geographic grant assessor, Birds Australia and The Wilderness Society in Australia. Chairing Commonwealth committees: Biological Diversity Advisory Committee, Ministerial Advisory Committee of Biodiversity Hotspots, Market-based Instruments trial committee. ARC College of Experts, Assessor for many ARC grants, past and present. Founding Co-Chief Editor of Conservation Letters. Editorial boards of Ecology Letters, The American Naturalist, Animal Conservation, Oryx and Conservation Biology. 40+ reviews per year for international journals including regular reviews for Science and Nature. Member of local community groups and frequent speaker in public venues (about 15 per annum). Co-organiser of many conferences; most recently: Student Conference for Conservation Science (2013, 15, 19), INTECOLL (2009) Resource Modelling Association Conference (2012).

Impact examples

Hugh Possingham and Dr Barry Traill wrote “The Brigalow Declaration”, used by Premier Beattie to stop land clearing in Queensland thereby securing at least 2 billion tonnes of CO₂ and saving an area the size of Portugal from conversion into farmland. The Possingham lab developed the most widely used conservation planning software in the world. Marxan www.ecology.uq.edu.au/marxan.htm was used to underpin the rezoning of the Great Barrier Reef and is currently used in over 150 countries by over 6000 users – from the UK and USA to Madagascar and Brazil – to build the world’s marine and terrestrial landscape plans. Most recently Marxan was used to develop the biggest marine reserve system in the world – Australia’s federal marine reserve system – see <http://www.nature.com/news/australia-s-plans-for-sea-havens-flawed-1.12587>. Hugh coauthored two scientific consensus statements that lead to Australia’s marine reserve system. Many governments and Environmental NGOs use his lab’s work for the allocation of funding to threatened species recovery and solving other conservation conundrums. About 20-50 media interviews each year.

SUPERVISION – 1990 TO PRESENT:

42 Post Doctoral Fellows, 83 PhD Students, 3 Masters Students, 61 Honours Students