# **Curriculum Vitae**

## Edward T Game egame@tnc.org

**Nationality:** Australian

**Current Address:** The Nature Conservancy

Level 1, 48 Montague Road South Brisbane, QLD 4101

Australia

**Web:** http://www.nature.org/ourscience/ourscientists/eddie-game.xml

http://blog.nature.org/science/author/egame/

#### Education

02/05-03/08 PhD (Catastrophes, resilience, and the theory of designing marine reserves)

University of Queensland, Australia Supervised by Professor Hugh Possingham

**02/99-10/02** Bachelor of Marine Biology (First Class Honors)

James Cook University, Australia

Minor in Anthropology and Archaeology

### **Employment Summary**

**04/15-Pres.** Lead Scientist, Asia-Pacific, *The Nature Conservancy* 

- Providing leadership on the direction of conservation planning, monitoring and conservation science in TNC, and the staff capacity needed to support this direction.
- Manage project teams from across the organization.
- Work closely with senior leadership to ensure appropriate science support for major organizational decisions.
- Technical support for priority projects.

08/13-04/15 Senior Scientist, Conservation Science Division, The Nature Conservancy

- Providing leadership on the direction of conservation planning, monitoring and conservation science in TNC, and the staff capacity needed to support this direction.
- Manage project teams from across the organization.
- Work closely with senior leadership to ensure appropriate science support for major organizational decisions.
- Technical support for priority projects.

11/09-Pres. Adjunct Senior Lecturer, School of Biological Sciences, University of Queensland

- Undergraduate and graduate program lectures.
- Co-supervision of students.
- Establishing collaborations between university staff and The Nature Conservancy.

**08/08-08/13** Conservation Planning Specialist, Conservation Science Division, *The Nature Conservancy* 

- Provide direct conservation planning support to TNC projects globally.
- Provide leadership on conservation planning methods and tools.
- Conservation planning capacity building and training across the organization (50 US States & >35 Countries).

02/08-08/08 Postdoctoral Fellow, CSIRO Marine and Atmospheric Research

 Responsible for incorporating climate change adaptation into marine conservation planning, focused on spatial management of Australia's northern fisheries.

**08/05-02/08** Educator, Moreton Bay Research Station, University of Queensland

- Ran science camps for undergraduate and senior high-school students, focused on marine
  and coastal ecology. Included design of curriculum and field experiments, preparation of
  materials, teaching and supervision of student groups in lab and field.
- 07/06-11/07 Teaching Assistant, University of Queensland
  - Assisted teaching third year ecology, including running tutorials, organizing field trips, grading papers.
- **06/07-10/07** Consultant, Pacific Marine Analysis and Research Association
  - Researched, wrote and designed a user manual for the conservation planning software, Marxan.
- 03/03-02/05 Research Officer, Australian Fisheries Management Authority
  - Responsible for fisheries data collection and research in Australia's sub-Antarctic territories, including; tag/recapture studies, experimental trawls and equipment tests, identifying and collecting specimens of interest, collecting biological and physical data.
- 04/04-07/04 Volunteer, Help Resources, Wewak Papua New Guinea
  - (volunteer position during enforced down-time after 3 month-long sub-Antarctic research cruise)
  - Assisted with the training of village health workers (*marasin meri*) in HIV/Aids prevention and care in the East Sepik Province.
- 01/03-03/03 Resident Marine Biologist, Heron Island Resort
  - Educated guests about life on coral reefs and in the surrounding seas through interpretive tours and presentations, as well as monitoring the health of coral reefs surrounding Heron Island.
- 06/02-12/02 Research Assistant, Reef Shark Ecology, James Cook University
  - Capture, tagging and observation of reef sharks on the Great Barrier Reef.

#### **Professional Service**

- **05/15-Pres.** Editor-in-Chief at *Conservation Letters*.
- 03/14-05/15 Associate Editor at Conservation Letters.
- **06/13-05/15** Handling Editor at *Conservation Biology*.

Regular reviewer for *Proceedings of the National Academy of Sciences, Trends in Ecology & Evolution, Global Change Biology, Ecology Letters, Frontiers in Ecology and the Environment, Biological Conservation, Coral Reefs.* 

- 06/14-06/17 Society for Conservation Biology Board of Governors, Member at Large
- **07/14-08/15** Co-Chair of the 27<sup>th</sup> International Congress for Conservation Biology

#### **Books**

- Groves, C. R. and **E. T. Game**. 2015. *Conservation Planning: Informed Decisions for a Healthier Planet*. Roberts and Company Publishers. Greenwood Village, CO.
- Bottrill, M. C., **E. T. Game**, and R. L. Pressey. 2015. *Designs for Nature: Regional conservation planning, implementation and management*. International Union for the Conservation of Nature, World Commission on Protected Areas & Species Survival Commission, Gland, Switzerland.

## **Book Chapters**

- **Game, E.T.** 2013. Identifying conservation priorities using return on investment analysis. In S. Levin, Ed., *Encyclopedia of Biodiversity 2<sup>nd</sup> Edition.* 4:185-198. Academic Press.
- Hobday, A. J., E. T. Game, H. S. Grantham and A. J. Richardson. 2011. Conserving the largest habitat on earth: protected areas in the pelagic ocean. In J. Claudet, Ed., *Marine Protected Areas: Effects, networks and monitoring A multidisciplinary approach*. Cambridge University Press Ecology, Biodiversity and

## **Journal Articles** (citations and metrics can be seen here)

- Anthony, K., P. A. Marshall, A. Abdulla, R. Beeden, C. Bergh, R. Black, C. M. Eakin, E. T. Game, M. Gooch, and N. A. Graham, et. al. 2015. Operationalizing resilience for adaptive coral reef management under global environmental change. *Global Change Biology* 21:48-61
- Moon, K., V. M. Adams, S. R. Januchowski-Hartley, M. Polyakov, M. Mills, D. Biggs, A. T. Knight, **E. T. Game**, and C. M. Raymond. 2014. A multidisciplinary conceptualization of conservation opportunity. *Conservation Biology* 28:1484-1496.
- Adams, V. M., **E. T. Game**, and M. Bode. 2014. Synthesis and review: delivering on conservation promises: the challenges of managing and measuring conservation outcomes. *Environmental Research Letters* 9:085002.
- Ban, N. C., S. M. Maxwell, D. C. Dunn, A. J. Hobday, N. J. Bax, J. Ardron, K. M. Gjerde, E. T. Game, R. Devillers, D. M. Kaplan, P. K. Dunstan, P. N. Halpin, and R. L. Pressey. 2014. Better integration of sectoral planning and management approaches for the interlinked ecology of the open oceans. *Marine Policy* 49:127-136.
- **Game, E. T.**, E. Meijaard, D. Sheil, and E. McDonald-Madden. 2014. Conservation in a Wicked Complex World; Challenges and Solutions. *Conservation Letters* 7:271-277.
- Moray, C., **E. T. Game**, and N. Maxted. 2014. Prioritising in situ conservation of crop resources: A case study of African cowpea (Vigna unguiculata). *Scientific Reports* 4.
- Tear, T. H., B. N. Stratton, E. T. Game, M. A. Brown, C. D. Apse, and R. R. Shirer. 2014. A return-on-investment framework to identify conservation priorities in Africa. *Biological Conservation* 173:42-52.
- Ban, N. C., N. J. Bax, K. M. Gjerde, R. Devillers, D. C. Dunn, P. K. Dunstan, A. J. Hobday, S. M. Maxwell, D. M. Kaplan, R. L. Pressey, J. A. Ardron, **E. T. Game**, and P. N. Halpin. 2014. Systematic Conservation Planning: A Better Recipe for Managing the High Seas for Biodiversity Conservation and Sustainable Use. *Conservation Letters* 7:41-54.
- **Game, E. T.**, J. A. Fitzsimons, G. Lipsett-Moore, and E. McDonald-Madden. 2013. Subjective risk assessment for planning conservation projects. *Environmental Research Letters* 8.
- **Game, E. T.**, P. Kareiva, and H. P. Possingham. 2013. Six common mistakes in conservation priority setting. *Conservation Biology* 27:480-485.
- Caley, M. J., E. Cripps, and **E. T. Game**. 2013. Phenotypic covariance at species' borders. *BMC Evolutionary Biology* 13.
- McLeod, E., A. Green, E. T. Game, K. Anthony, J. Cinner, S. F. Heron, J. Kleypas, C. E. Lovelock, J. M. Pandolfi, R. L. Pressey, R. Salm, S. Schill and C. Woodroffe. 2012. Integrating Climate and Ocean Change Vulnerability into Conservation Planning. *Coastal Management* 40:651-672.
- Bottrill, M.C., M. Mills, R.L. Pressey, **E.T. Game**, C.R. Groves. 2012. Evaluating perceived benefits of ecoregional assessments. *Conservation Biology* 26:851-861.
- Groves, C.R., **E.T. Game**, M.G. Anderson, M. Cross, C. Enquist, Z. Ferdana, E. Girvetz, A. Gondor, K.R. Hall, J. Higgins, R. Marshall, K. Popper, S. Schill and S.L. Shafer. 2012. Incorporating climate change adaptation into systematic conservation planning. *Biodiversity and Conservation* 21:1651-1671.
- Segan, D., E. T. Game, M. Watts, R. Stewart, and H. P. Possingham. 2011. An interoperable decision support tool for conservation planning. *Environmental Modelling and Software* 26:1434-1441.
- **Game E.T.**, G. Lipsett-Moore, E. Saxon, N. Peterson, and S. Sheppard. 2011. Incorporating climate change adaptation into national conservation assessments. *Global Change Biology* 17:3150–316.
- Grantham, H. S., **E. T. Game**, A. T. Lombard, A. J. Hobday, A. J. Richardson, L. E. Beckley, R. L. Pressey, J. A. Huggett, J. C. Coetzee, C. D. van der Lingen, S. L. Petersen, D. Merkle, and H. P. Possingham. 2011. Accommodating dynamic oceanographic processes and pelagic biodiversity in marine conservation planning. *PLoS One* 6:e16552.
- **Game, E.T.**, G. Lipsett-Moore, R. Hamilton, N. Peterson, J. Kereseka, W. Atu, M. Watts, and H. P. Possingham. 2011. Informed opportunism for conservation planning in the Solomon Islands. *Conservation Letters* 4:38-46.
- Lourival, R., M. Drechsler, M. Watts, **E. T. Game**, and H. P. Possingham. 2011. Planning for reserve adequacy in dynamic landscapes; maximizing future representation of vegetation communities under flood disturbance in the Pantanal wetland. *Diversity and Distributions* 17:297-310
- 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
- Klein, C. J., N. C. Ban, M. Beger, **E. T. Game**, H. Grantham, A. L. Green, B. S. Halpern, T. Klein, S. Kininmonth, E. Treml, K. A. Wilson, and H. P. Possingham. 2010. Prioritizing investments to protect coral triangle reefs. *PLoS*

- One 5: e12431.
- Beger, M., S. Linke, **E.T. Game**, I. R. Ball, M. Watts, and H. P. Possingham. 2010. Incorporating asymmetrical connectivity into spatial decision making for conservation. *Conservation Letters* 3:359-368.
- McDonald-Madden, E., P. W. J. Baxter, R. A. Fuller, T. G. Martin, **E. T. Game**, J. Montambault, and H. P. Possingham. 2010. Monitoring doesn't always count. *Trends in Ecology and Evolution* 25:547-550.
- **Game, E.T.**, H. Grantham, A. J. Hobday, R. L. Pressey, A. T. Lombard, L. E. Beckley, K. Gjerde, R. Bustamante, H. P. Possingham, and A. J. Richardson. 2010. Pelagic MPAs: The devil you know. *Trends in Ecology & Evolution* 25:63-64.
- Grantham, H. S., M. Bode, E. McDonald-Madden, E. T. Game, A. T. Knight, and H. P. Possingham. 2010. Effective conservation planning requires learning and adaptation. *Frontiers in Ecology and the Environment* 8:431-437.
- **Game, E.T.**, M. Bode, E. McDonald-Madden, H. Grantham, and H. P. Possingham. 2009. Dynamic marine protected areas can improve the resilience of coral reef systems. *Ecology Letters* 12:1336-1346.
- Bottrill, M. C., L. N. Joseph, J. Carwardine, M. Bode, C. Cook, **E. T. Game**, H. Grantham, S. Kark, S. Linke, E. McDonald-Madden, R. L. Pressey, S. Walker, K. A. Wilson, and H. P. Possingham. 2009. Finite conservation funds mean triage is unavoidable. *Trends in Ecology & Evolution* 24:183-184.
- **Game, E.T.**, H. S. Grantham, A. J. Hobday, R. L. Pressey, A. T. Lombard, L. E. Beckley, K. Gjerde, R. Bustamante, H. P. Possingham, and A. J. Richardson. 2009. Pelagic protected areas: the missing dimension in ocean conservation. *Trends in Ecology and Evolution* 24:360-369.
- McDonald-Madden, E., M. Bode, **E. T. Game**, H. Grantham, and H. P. Possingham. 2008. The need for speed: informed land acquisitions for conservation in a dynamic property market. *Ecology Letters* 11:1169-1177.
- Bottrill, M., L. N. Joseph, J. Carwardine, M. Bode, C. Cook, **E. T. Game**, H. S. Grantham, S. Kark, S. Linke, E. McDonald-Madden, R. L. Pressey, S. Walker, K. A. Wilson, and H. P. Possingham. 2008. Is conservation triage just smart decision-making? *Trends in Ecology & Evolution* 23:649-654.
- **Game, E.T.,** E. McDonald-Madden, M. L. Puotinen, and H. P. Possingham. 2008. Should we protect the strong or the weak? Risk, resilience and the selection of marine protected areas. *Conservation Biology* 22:1619-1629.
- **Game, E.T.,** M. Watts, S. Wooldridge, and H. Possingham. 2008. Planning for persistence in marine reserves: a question of catastrophic importance. *Ecological Applications* 18:670-680.
- Game, E.T. and M. J. Caley. 2006. The stability of P in coral reef fishes. Evolution 60:814-823.

#### **Book Reviews**

McDonald-Madden, E. and E. T. Game. 2013. Infusing structure into environmental management decisions. *Trends in Ecology & Evolution* 28:258-259

## **Software Manuals**

**Game, E. T.** and H. S. Grantham. 2008. *Marxan user manual; for Marxan version 1.8.10*. The University of Queensland and Pacific Marine Analysis and Research Association, Brisbane. 135 pp.

### Reports

- Game, E. T., C. R. Groves, S. Benitez, G. Crichton, R. Cox, A. Diederichsen, P. Ericson, K. Evans, Z. Ferdana, R. Hagenstein, L. Hanners, J. Hardesty, E. Meijaard, H. Tallis, A. Soles. 2011. *Planning for tomorrow's challenges: Recommendations of the Planning Evolution Team*. The Nature Conservancy, Arlington, Virginia. 41 pp.
- Lipsett-Moore, G., E. Game, N. Peterson, E. Saxon, S. Sheppard, A. Allison, J. Michael, R. Singadan, J. Sabi, G. Kula and R. Gwaibo. 2010. *Interim National Terrestrial Conservation Assessment for Papua New Guinea:*Protecting Biodiversity in a changing Climate. The Nature Conservancy, Brisbane, Australia. 92 pp.
- Ardron J, Ban N, Field J, **Game E**, Pressey R, Sørensen T, and Vestergaard O. 2010. *Adaptive marine spatial planning (aMSP)*. *Paper 1: Context and future directions*. Technical Report, United Nations Environment Programme, Nairobi, Kenya. 50 pp.
- Game, E. T., C. R. Groves, M. Andersen, M. Cross, C. A. F. Enquist, Z. Ferdana, E. H. Girvetz, A. Gondor, K. Hall, J. Higgins, R. Marshall, K. Popper, and S. L. Shafer. 2010. *Incorporating climate change adaptation into regional conservation assessments*. The Nature Conservancy, Arlington, Virginia. 56 pp.

- Ervin, J., J. Mulongoy, K. Lawrence, **E. T. Game**, D. Sheppard, P. Bridgewater, G. Bennet, S. Gidda, and P. Bos. 2009. *Making Protected Areas Relevant: A guide to integrating protected areas within wider landscapes, seascapes and sectoral plans and strategies*. CBD Technical Series No. 44 Secretariat of the Convention on Biological Diversity, Montreal. 94 pp.
- Game, E. T., J. Carwardine, K. A. Wilson, M. Watts, C. Klein, and H. P. Possingham. 2007. How to integrate cost, threat, and multiple actions into conservation planning for reserves and stewardship. In M. Taylor and P. Figgis, Ed. *Protected areas: buffering nature against climate change*. Proceedings of a WWF and IUCN World Commission on Protected Areas symposium, June 2007, Canberra. WWF Australia, Sydney.

### Conferences and Symposia Presentations (\*invited speaker with all costs covered)

- 11/2014 World Parks Congress, Sydney, Australia.
- **08/2014** North America Congress for Conservation Biology, Missoula, USA.
- \*Considering the Future of Conservation, British Ecological Society and Durrell Institute of Conservation Ecology joint symposium, Canterbury, UK.
- **05/2013** \*Stanford Law School Symposium: Emerging Perspectives on the Law, Science, and Policy of Dynamic Marine Conservation, Stanford University, USA
- **06/2012** \*Climate Adaptation in Action Conference, Melbourne, Australia.
- 12/2011 25<sup>th</sup> International Congress for Conservation Biology. Auckland, New Zealand.
- **05/2011** 2<sup>nd</sup> International Marine Conservation Congress. Victoria, Canada.
- **10/2010** \*Frontiers of Science Marine Science. The Royal Society & Australian Academy of Science. Perth, Australia.
- 11/2009 \*Protected Areas and Climate Change Summit. IUCN WCPA. Granada, Spain.
- **07/2008** *22<sup>nd</sup> Annual Meeting of the Society for Conservation Biology.* Chattanooga, USA.
- **07/2008** *11*<sup>th</sup> *International Coral Reef Symposium*. Fort Lauderdale, USA.
- 03/2008 Cambridge Student Conference on Conservation Science, Cambridge, UK. Awarded Best Talk prize.
- 11/2007 In hot water: preparing for climate change in Australia's coastal and marine systems. CSIRO Climate Adaptation Flagship. Brisbane, Australia.
- 09/2007 European symposium on MPAs as a tool for fisheries management & ecosystem conservation. Murcia, Spain.
- 07/2007 21st Annual meeting of the Society for Conservation Biology. Port Elizabeth, South Africa.
- **06/2007** \*Protected areas: buffering nature against climate change. WWF & IUCN. Canberra, Australia.
- **08/2006** 91<sup>st</sup> Annual meeting of the Ecological Society of America. Memphis, USA.

### Advisory

- **2013-Present** Secretariat to the *Convention on Biological Diversity & United Nations Development Programme*, expert resource group for National Biodiversity Strategy and Action Plans (NBSAPs)
- 2010-2012 United Nations Environment Programme & International Union for the Conservation of Nature (IUCN) joint expert group on Integrating Resilience and Vulnerability to Climate Change into Marine Spatial Planning.
- **2009-2010** *United Nations Environment Programme* technical advisory group on Adaptive Marine Spatial Planning.
- 2009 Secretariat to the *Convention on Biological Diversity* technical expert group on Making Protected Areas Relevant: Integrating Protected Areas within Wider Landscapes, Seascapes and Sectoral Plans and Strategies.

### Professional Awards (post higher degree)

- 2013 European Commission Erasmus Mundus Fellow in Sustainable Forest and Nature Management.
- 2011 Australian Academy of Science Theo Murphy High Flyer.
- Great Barrier Reef Foundation, Bommies Award for innovative concepts to preserve the Great Barrier Reef in the face of climate change (together with Dr. N. Ban).

#### **Student Awards**

2007	University of Queensland, Graduate School Research Excellence Award
2006	University of Queensland, School of Integrative Biology Postgraduate Award

2005-2008 CSIRO 'Wealth from Oceans' Postgraduate Award

2005-2008 Australian Postgraduate Award

2002 James Cook University, School of Marine Biology & Aquaculture Prize for Best BSc Honours Student

1999-2002 James Cook University, Dean's Scholarship in Science and Engineering

1999-2000 James Cook University, John Flynn College Academic Bursary

### **Popular Press**

Game, E. 2012 Crossing Kyrgyzstan by Bike. Pages 10-16 Adventure Cyclist, Dec/Jan 2012.

Game, E. 2010 Floating in an icy wonderland. Pages 76-82 Australian Geographic Outdoor, July/Aug 2010.

Game, E. 2008 Tian Shan Rising. Pages 78-87 Adventure Travel, Mar/April 2008.

Game, E. 2008 Sustainable reef tourism. Page 20 Outdoor Australia, Jan/Feb 2008.

**Game, E.** 2007 Kyrgyzstan. An off-road bike adventure across the Tian Shan, a hidden gem in the heart of Asia. Pages 56-62 *Outdoor Australia*, Sept/Oct 2007.

Game, E. 2005 Plumbing the depths of man and fish. Page 17 The Guardian Weekly, July 15-21.

#### Other Qualifications

Certificate I in Maritime Operations, TAFE Queensland Rescue Diver Certification, P.A.D.I Senior First Aid Certification, St. Johns Ambulance Oxygen Provider Certification, Divers Alert Network