

Curriculum Vitae—Charlotte M. Jones-Todd



Personal Details

Position: Statistician

NIWA, Gate 10 Silverdale Road, Hillcrest, Hamilton

Phone: +64 (0)210 291 2275

Email: Charlotte.JonesTodd@niwa.co.nz

Online:  github.com/cmjt  [@cmjonestodd](https://twitter.com/cmjonestodd)

Education

- **PhD in statistics** **Scotland, UK**
University of St Andrews 2013–2017
- **MSc in statistics *dissertation distinction*** **Scotland, UK**
University of St Andrews 2012–2013
- **BSc (Hons) in mathematics *first class*** **Wales, UK**
Aberystwyth University 2009–2012

Employment

- **National Institute of Water and Atmospheric Research** **Hamilton, NZ**
Statistician 01/2018–present
- **University of St Andrews** **Scotland, UK**
Consultant, School of Mathematics and Statistics & Sea Mammal Research Unit 02/2017–12/2017
- **University of Auckland** **Auckland, NZ**
Consultant, School of Epidemiology & Biostatistics 02/2017–05/2017
- **University of St Andrews** **Scotland, UK**
Tutor, School of Mathematics and Statistics 2014–2016
- **University of St Andrews** **Scotland, UK**
Tutor, Centre for Academic, Professional and Organisational Development 2014–2016
- **John Downes Veterinary Surgery** **Wales, UK**
Veterinary Assistant, Receptionist 2007–2012

Scholarships and Awards

- **Statistical Excellence Award for Early-Career Writing—Finalist** 2017
Royal Statistical Society
- **RSS 2015 Challenge—Finalist** 2015
Royal Statistical Society
- **School of Mathematics and Statistics PhD Scholarship** 2013–2016
University of St Andrews
- **EPSRC MSc Scholarship** 2012
University of St Andrews
- **Pennington Prize for Pure Mathematics** 2012
Aberystwyth University

Publications

Published

Soriano-Redondo, A., **Jones-Todd, C. M.**, Bearhop, S., Hilton, G. M., Lock, L., Stanbury, A., Votier, S. C., & Illian, J. B. (In press) Estimating species distribution in highly dynamic populations using point process models. *Ecography*.

Jones-Todd, C. M., Caie, P., Illian, J. B., Stevenson, B. C., Savage, A., Harrison D, J., & Bown, J. (In press) Identifying prognostic structural features in tissue sections of colon cancer patients using point pattern analysis. *Statistics in Medicine*, DOI:10.1002/sim.8046.

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blangiardo, M. A Bayesian approach to modelling subnational spatial dynamics of worldwide non-state terrorism, 2010–2016. (2019) *Journal of the Royal Statistical Society, Series A (Statistics in Society)*, 182 (1), 323–344.

Kool, B., Buller, S., Kuriyan, R., **Jones-Todd, C. M.**, Newcombe, D., & Jones, P. (2018) Alcohol and injury among attendees at a busy inner city New Zealand emergency department. *Injury*, 49 (4), 798–805.

Jones-Todd, C. M., Swallow, B., Illian, J. B., & Toms, M. (2018) A spatio-temporal multi-species model of a semi-continuous response. *Journal of the Royal Statistical Society, Series C (Applied Statistics)*, 67 (3), 705–722.

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blangiardo, M. (2016) Explaining the lethality of Boko Haram's terrorist attacks in Nigeria, 2009–2014: A hierarchical Bayesian approach. *Bayesian Statistics in Action: BAYSM 2016*, 231–239.

In preparation

Jones-Todd, C. M., Illian, J. B., & Marques, T. A. Applications of a joint marked point process spatio-temporal model. In preparation for submission to *Spatial Statistics*.

Stevenson, B. C., Borchers, D. L., **Jones-Todd, C. M.**, & Kidney, D. ascr: an R package for the analysis of spatial capture-recapture data. In preparation for submission to *Ecography*.

Jones-Todd, C. M., Pirotta, E., & Thomas, L. Continuous-time discrete-space models of marine mammal exposure to Navy sonar. In preparation for submission to *Ecological Modelling*.

Other reports.....

Reports

Dudley, B., & **Jones-Todd, C. M.** New Zealand coastal water quality assessment update. Ministry for the Environment. May 2018.

Graham, E., **Jones-Todd, C. M.**, Wadhwa, S., & Storey, R. Analysis of stream responses to riparian management on the Taranaki ring plain. Taranaki Regional Council. March 2018.

Magazine Articles

Jones-Todd, C. M. A time to kill: Great British serial killers. *Significance Online*.

Submitted to Significance

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blángiardo, M. The Deadly Facets of Terrorism.

Technical Skills

Advanced user of: R, Git, Bash, \LaTeX , C++, HTML, CSS, Python

Professional Service

- **Manuscript reviewing**
 - *Ecology*.
 - *Journal of the Royal Statistical Society, Series C*.
 - *Ecology and Evolution*.
 - *Ecological Research*.
- **Interview panel member**
Centre for Academic, Professional and Organisational Development (CAPOD).
- **Judge**
Waikato Science and Technology Fair 2018

References

Available on request.