# 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

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

# Publications

*Published*

Soranio-Redondo, A., **Jones-Todd, C. M.**, Bearhop, S., Hilton, G. M., Lock, L., Stanbury, A., Votier, S. C., & Illian, J. B. (In press) Understanding species distribution in dynamic populations: a new approach using spatio-temporal 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.**, & Blángiardo, 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.**, & Blángiardo, 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.