# **Zachariah Wylde | Evolutionary Ecologist**

www.wyldescience.com

### **Qualifications**

PhD candidate in Evolutionary Ecology (2015-2020) University of New South Wales

Thesis title: The role of the environment in the evolution of reproductive strategies

Master of Science in Biology (MSc First class honours) 2013-2014 at the University of Auckland

Thesis title: The Community Ecology, Behaviour and Biology of New Zealand Carrion Flies.

Postgraduate Diploma (PGDipSci with merit) 2012-2013 at the University of Auckland

Advanced study and specialisation in biological sciences including a dissertation/thesis proposal.

Bachelor of Science (BSc major in biological sciences) 2007-2012 at the University of Auckland

## **Conference Presentations**

Australasian Society for the study of Evolution (2019 Sydney, AUS). "Integration and condition-dependence of genitalic and somatic traits in male and female neriid flies."

**Australasian Society for the Study of Evolution (2018 Tasmania, AUS).** "Self-perceived dominance hierarchy effects on Cuticular hydrocarbon profiles in *Telostylinus angusticollis* (Diptera)."

**Biology of spermatozoa 14 BoS (2017 Sheffield, UK).** Poster presentation: "Male condition and mating sequence effects on ejaculate storage and use in the Neriid fly, *Telostylinus angusticollis*."

The Australasian Society for the study of Animal Behaviour joint conference with Behaviour (2015 Cairns, AUS). "Grandparental effects of breeding age on lifespan in the neriid fly, *T. angusticollis*."

### **Professional Employment**

Tutor/demonstrator at the University of New South Wales (2015-2019):

BIOS1101 Evolution & Functional Biology; BIOS1301 Ecology, Sustainability and Environmental Science; BIOS2011 Evolutionary and Physiological Ecology; BIOS3171 Evolution.

Postdoctoral researcher at the University of New South Wales (current): In Professor Russell Bonduriansky's group I am currently working as a postdoctoral researcher setting up the clonal species of springtail, *Falsomia candida* to examine environmental effects that are passed on nongenetically to offspring to influence the process of ageing. I am also working on a native carrion fly, *Piophila vitrea* that has not been studied in any detail, apart from taxonomic classification.

**Reviewing editor for the** *Journal of Evolutionary Biology*: I have recently been appointed a 4 year position with this society-based journal on the editorial board.

## **Publications**

**Wylde, Z., & Bonduriansky, R.** (2020). Condition dependence of phenotypic integration and the evolvability of genitalic traits in a neriid fly. *Biology Letters* 16: 20200124. <a href="http://dx.doi.org/10.1098/rsbl.2020.0124">http://dx.doi.org/10.1098/rsbl.2020.0124</a>.

Wylde, Z., Spagopoulou, F., Hooper, A.K., Maklakov, A.A., Bonduriansky, R. (2019). Parental breeding age effects on descendants' longevity interact over 2 generations in matrilines and patrilines. *PLoS Biology* 17(11): e3000556. https://doi.org/10.1371/journal.pbio.3000556

**Wylde, Z., Crean, A. and Bonduriansky, R.** (2019). Effects of condition and sperm competition risk on sperm allocation and storage in neriid flies. *Behavioural Ecology,* arz178. <a href="https://doi.org/10.1093/beheco/arz178">https://doi.org/10.1093/beheco/arz178</a>

**Wylde, Z., Adler, L., Crean, A. and Bonduriansky, R.** (2019). Perceived dominance status affects chemical signalling in the neriid fly *Telostylinus angusticollis*. *Animal Behaviour* 158: 161-174. <a href="https://doi.org/10.1016/j.anbehav.2019.10.013">https://doi.org/10.1016/j.anbehav.2019.10.013</a>

**Hooper, A.K., Spagopoulou, F., Wylde, Z., Maklakov, A.A. and Bonduriansky, R.** (2017). Ontogenetic timing as a condition-dependent life history trait: high-condition males develop quickly, peak early and age fast. *Evolution* 71: 671-685. <a href="https://doi.org/10.1111/evo.13172">https://doi.org/10.1111/evo.13172</a>

#### **Outreach**

**Wylde, Z.** Australasian Evolution Society blog; April 11th 2016. "The ties that bind; Grand-parental qualities affect the lifespan of descendants." <a href="https://austevol.wordpress.com/2016/04/11/the-ties-that-bind-grand-parental-qualities-affect-the-lifespan-of-descendants/">https://austevol.wordpress.com/2016/04/11/the-ties-that-bind-grand-parental-qualities-affect-the-lifespan-of-descendants/</a>

## **References**

**Professor Russell Bonduriansky** (PhD supervisor at UNSW).

http://www.bonduriansky.net/index.htm

email: bonduriansky@gmail.com

**Dr Angela Crean** (PhD co-supervisor at UNSW)

https://sydney.edu.au/science/about/our-people/academic-staff/angela-crean.html

Email: angela.crean@sydney.edu.au

**Dr Hayley Bates** (Course coordinator & Senior Lecturer USNW: employer for tutoring work at UNSW (see courses above))

https://www.bees.unsw.edu.au/hayley-bates

Email: h.bates@unsw.edu.au

# **Memberships**

ASSAB- Australasian Society for the Study of Animal Behaviour

**ESEB- European Society of Evolutionary Biology** 

SSE- Society for the Study of Evolution

**RZS NSW- Royal Zoological Society of New South Wales** 

**AES- Australasian Evolution Society**