

Tom P. Moore

FRESHWATER ECOLOGIST · QUANTITATIVE SCIENTIST

✉ tom.moore.tpm@gmail.com | 🏠 www.mooreecology.com | 🎓 Tom Moore

Philosophy: To use ecological theory to find applied solutions for managing freshwater resources

Skills

R-statistics

Data wrangling, univariate/multivariate (ordination), Generalised Linear Models, piecewise Structural Equation Modelling, Bayesian inference, model-selection, Causal Impact Analysis (time-series), & data visualisation: R-markdown, plots & tables.

Qualifications

First Aid, 4WD training, backpack electrofishing certification, Search & Rescue training.

Education

University of Waikato

Hamilton, NZ

PH.D. BIOLOGICAL SCIENCES

2017–PRESENT

- Thesis: Interactions between freshwater mussels and non-native species. Primary advisor: Kevin Collier, secondary advisors: Ian Duggan & Sue Clearwater.

University of Canterbury

Christchurch, NZ

M.Sc. ECOLOGY (HONOURS)

2012–2014

- Thesis: Nitrate-nitrogen effects on benthic invertebrate communities in streams of the Canterbury Plains. Primary advisor: Jon Harding, secondary advisors: Chris Glover & David Kelly.

B.Sc. ECOLOGY

2009–2011

- Research project: The hidden killer. Nitrate toxicity and its effects on the ecosystem health of Canterbury Streams: Advisor Jon Harding.

Professional Experience

University of Waikato

Hamilton, NZ

TUTOR (DATA ANALYSIS & EXPERIMENTAL DESIGN, APPLIED FRESHWATER ECOLOGY, & PRINCIPLES OF ECOLOGY)

2017–PRESENT

- Teach theory, demonstrate practical skills, proof course material, troubleshoot R-code, mark assignments, & provide student feedback.

RESEARCH ASSISTANT

- Commercial fish survey, fish removal, & proofreading reports.

EOS Ecology

Christchurch, NZ

AQUATIC ECOLOGY TECHNICIAN

Apr. 2015–May 2016

- Conducted field surveys and identified benthic invertebrates according to standard operating procedures.

University of Canterbury

Christchurch, NZ

RESEARCH ASSISTANT

May 2016–Nov. 2016

- Canterbury Waterway Rehabilitation Experiment: Periphyton biomass determination.

Oct. 2014–Apr. 2015

- Experiment: Investigated the application of denitrifying bioreactors for nitrate removal from tile drains on the Canterbury Plains.

Honors & Awards

PRESENTATIONS

2019 **NIWA: Vernon Pickett memorial award**, School of Science Postgraduate Conference

Hamilton, NZ

SCHOLARSHIPS

2017 **Biological Heritage National Science Challenge**, \$75,000.

2013 **Environment Canterbury Postgraduate Scholarship**, \$14,000.

2011 **University of Canterbury Summer Scholarship**, \$5,000.

Extracurricular Activity

Land Search & Rescue New Zealand

ADVANCED OPERATIONAL TEAM MEMBER

Waikato, NZ

Nov. 2017 - PRESENT

- On-call volunteer for rescue operations. Training: search techniques, navigation, tracking, bushcraft, radio operation, & river safety.

NHS Charities Together

FUNDRAISER

Bedfordshire, England

Apr. 2020

- Walked laps of the garden and raised over \$32.8 m during the COVID-19 pandemic (*In honour*).

Pillars Incorporated

MENTOR

Christchurch, NZ

2015 - 2017

- Provided support to a young person whilst a parent was in prison: weekly catch-ups and activities.

Biological Society: BIOSOC

PRESIDENT AND CO-FOUNDER

Christchurch, NZ

2013 - 2014

Publications

PEER-REVIEWED

- 2019 **Interactions between Unionida and non-native species: A global meta-analysis**, *Aquatic Conservation Marine and Freshwater Ecosystems* (Moore, T.P., Collier K. J., & Duggan I. C.).
- 2019 **Non-native fish as glochidial sinks: elucidating disruption pathways for *Echyridella menziesii* recruitment**, *Hydrobiologia* (Moore, T. P. & Clearwater S. J.).

IN-PREPERATION

- 2020 **Context-specific effects of invasive macrophytes on temperature, oxygen, and pH in a hydropeaking reservoir**, (Moore, T.P., Clearwater S. J., Collier K. J., & Duggan, I.C.).
- 2020 **Benthic invertebrate indices show no response to high nitrate-nitrogen in lowland agricultural streams**, (Moore, T. P., McIntosh, A. R., Febria C. M., Warburton H.J., & Harding, J. S.).
- 2020 **Interactions between invasive macrophytes and freshwater mussels in a hydropeaking reservoir**, (Moore, T.P., Clearwater S. J., Collier K. J., & Duggan I.C.).

REPORTS

- 2020 **Removal of perch from Roto Kawau, Zealandia Ecosanctuary**, (Ling, N., Moore, T.P., & Powrie W.S.).
- 2019 **Boat electrofishing and stable isotopes in fish in Lake Karapiro. ERI Report No. 125. Client report prepared for the Department of Conservation**, (Hicks, B.J., Powrie, W.S., Moore, T.P., & Tempero G.W.).
- 2012 **Preliminary investigations on nitrate-nitrogen effects on benthic invertebrate and fish communities in Canterbury streams. Short report prepared for Environment Canterbury**, (Moore, T.P., & Harding, J.S.).