QUINN ASENA

Post-doctoral research associate developing and applying new statistical methods to palaeoecological data to understand ecosystem responses to environmental change. Working with Jack Williams and Tony Ives on data across North America on an NSF funded project: Abrupt Change in Ecosystems. I also like to get hands on in the field and lab.

🎓 EDUCATION

2021 | 2017

PhD, University of Auckland
School of Environment   📍 Auckland, NZ

- PhD explored virtual ecological methods for generating pseudoproxy data to assess statistical inferences under data uncertainty.
- Supervised by George Perry and Janet Wilmshurst

2016 | 2012

MEnv. Environmental Science
University of York   📍 York, UK

- 1st class integrated masters degree in environmental science. Master's researched involved environmental monitoring using sensor networks and robotics.

Certified Carpentries instructor
Global digital skills community   📍 Virtual

- Certified to host and assist in running workshops from The Carpentries organisation

📖 SELECTED POSITIONS

Present | 2022

Post-doctoral research associate
University or Wisconsin-Madison   📍 Madison, WI

- NSF grant, developing state-space modelling methods to analyse palaeoeological records
- Abrupt change in ecosystems project lead by Jack Williams and Anthony Ives

2022 | 2021

Research Assistant
University of Auckland   📍 Auckland, NZ

- Conducting a bibliometric analysis on the topic of climate justice

2022 | 2021

Engagement Specialist
Centre for e-Research   📍 Auckland, NZ

- Engaging with researchers to provide advice and resources for their research compute needs
- Includes technical skills for virtual machines (Linux, Bash, Slurm), high performance computing, and version control

♟ ARTICLES AND PUBLICATIONS

2019

Guidelines for Reporting and Archiving 210Pb Sediment Chronologies to Improve Fidelity and Extend Data Lifecycle
Quaternary Geochronology

- Courtney-Mustaphi et al.

CONTACT

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- 🐦 QuinnAsena
- ⓞ github.com/QuinnAsena
- 📞 ` +1 (608) 598 8345

ONLINE RESOURCES

Workshop: Quarto for Colaboration

`fisheR`: R package for calculating Fisher's Information on time-series. Available at github.

`app`: Population growth

`app`: Population growth for lecture

Lecture: Ecological modelling

REFERENCES

Professor Jack Williams

jwwilliams1@wisc.edu

Professor George Perry

george.perry@auckland.ac.nz

2018 ● **Peatland carbon stocks and burn history: Blanket bog peat core evidence highlights charcoal impacts on peat physical properties and long-term carbon storage**

GEO: Geography and Environment

· Heinemeyer et al.

2018 ● **Population viability analyses in New Zealand: a review**

New Zealand Journal of Ecology

· Simpkins et al.

2018 ● **Assessing the links between resilience, disturbance and functional traits in paleoecological datasets**

Past Global Changes Magazine, vol. 26(2), 87

· Hamilton et al.

🤖 PACKAGES, APPS AND RESOURCES

2023 | 2022 ● **Authoring collaborative research projects in Quarto**

Workshop

· Workshop resources for hosting collaborative research projects using Git andGitHub
· Hosted on GitHub for ResBaz 2022-2023

2019 ● **fisheR**

R package

· Translation of python script for calculating Fisher's Information on time-series data
· Code available on GitHub

2019 ● **Population growth app**

Shiny app

· Population growth app exploring different population growth equations for educational purposes

2019 ● **Population growth lecture aid app**

Shiny app

· App to accompany population growth lecture and help students through population growth calculations

📖 SELECTED WORKSHOPS AND CONFERENCES

2022 ● **BES: Palaeo in R**

British Ecological Society   📍 Virtual

· Speaker on virtual ecological methods to assessing uncertainty in palaeoecological data using pseudoproxies

2022 ● **AGU**

American Geophysical Union   📍 Chicago, IL

· Speaker on virtual ecological methods for assessing uncertainty in palaeoecological data using pseudoproxies

2022 ● **AMQUA**

American Quaternary Association   📍 Madison, WI

· Poster session on virtual ecological methods to assessing uncertainty in palaeoecological data using pseudoproxies

George Perry Lab

Interested in the lab group? Visit George Perry's lab group: Spatial Ecology Group

Williams Lab

Check out the Williams lab

Ives Lab

See what the Ives Lab group do