TIMOTHY STAPLES

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I am a community and quantitative ecologist, with extensive experience in the formation, processing and analysis of large ecological datasets. My research focus is broad, but I am interested in informing how communities form, function and change over time using datasets with wide spatial or temporal replication.

RESEARCH SUMMARY

Publishing	Ten articles published, eight in the last two years. Co-first author publication in *Science*.
Collaboration	Collaborated with international and cross-discipline teams.
Reproducible Science	All first-authored papers have associated data and code housed in public repositories. Contributed data to the TRY Plant Trait Database and AusTraits initiative.

EXPERIENCE

Current	Post-doctoral fellowship	*ARC Centre of Excellence for Coral Reef Studies* & *University of Queensland*
2018	PhD	Designing productive and diverse carbon forests, *University of Queensland*
2013	Honours	Class I, *University of Queensland*
2012	Bachelor of Science	Ecology Major, *University of Queensland*

RESEARCH GRANTS

2020	$537,067	*ARC Discovery Project*: Drivers and consequences of novel marine ecological communities ≫ Named post-doc (not investigator): wrote research proposal worth 65% of total grant assessment
2014	$28,420	UQ-CSIRO Integrated Natural Resource Management PhD Program grant

SELECTED TEACHING & MENTORSHIP

Teaching assistant, School of Biological Sciences, University of Queensland

Marine ecology and conservation	Teaching statistical protocols
Analysis and Communication of Biological Data	R and writing workshops, and marking
Macroecology and Biogeography	R workshops and marking
Biostatistics & Experimental Design	R workshops and marking
Ecology	Practical workshops, group discussions and marking

Informal workshops, School of Biological Sciences, University of Queensland

Iterative and functional programming in R; Code transparency, formatting and version control; Designing and interpreting statistical models in R; Introduction to R programming; Advanced techniques for figure design in R

REVIEW EXPERIENCE

Journal reviews	*Biology Letters* (2021) *Ecography* (2017); *Global Change Biology* (2018, 2019); *Global Ecology and Biogeography* (2018, 2019 x 2, 2020 x 2); *Journal of Applied Ecology* (2018); *Journal of Ecology* (2020); *Oecologica* (2019); *Plants* (2019); Restoration Ecology (2020 x 3); *Science* (2019: joint review)
Other reviews	*Ecological Society of Australia* Wiley Fundamental Ecology Award (value of $5,000: 2019)

PUBLICATIONS

Pandolfi, J. M., **Staples, T .**, L., Kiessling, W. (2020). Increased extinction in the emergence of novel ecological communities. *Science*. 10.1126/science.abb3996
≫ Citations: 1 (Google Scholar) | Altmetrics: 177 (98th percentile for same-age papers)
≫ Equal contribution first author, aided research questions generation, analysed data, created all figures, writing

Hill J., Bourke L., **Horton C., Staples T.L.**, Lovelock C.E. (2020). Limited relationships between mangrove forest structure and hydro-edaphic conditions in subtropical Queensland, Australia. *Estuarine, Coastal and Shelf Science*. 10.1016/j.ecss.2020.106930
≫ Altmetrics: 5 (67th percentile for same-age papers)
≫ Data analysis and figure design

Clarke, L.J., Jones, P.J., Ammitzboll, H., Barmuta, L.A., Breed M.F., Chariton, A., Charleston, M., Dakwa, V., Dewi, F., Eri, R., Fountain-Jones, N.M., Freeman, J., Kendal, D., McDougal, R., Raes E.J., Li San Sow, S., **Staples, T.L.**, Sutcliffe, B., Vemuri, R., Weyrich, L.S., Flies, E.J. (2020). Mainstreaming Microbes across Biomes. *Bioscience*. 10.1093/biosci/biaa057
≫ Contributed some data analysis and figure design

Staples, T.L., Mayfield, M.M, England, J.R., Dwyer, J.M. (2020). Comparing the recovery of richness, structure, and biomass in naturally regrowing and planted reforestation. *Restoration Ecology*. 10.1111/rec.13077
≫ Citations: 2 (Google Scholar) | Altmetrics: 22.9 (90th percentile for same-age papers)
≫ Generated research questions, collected and analysed data, created all figures, primary writer

Ola, A., **Staples, T.L.**, Robinson, N., Lovelock, C.E. (2019). Plasticity in the Above-and Below-Ground Development of Mangrove Seedlings in Response to Variation in Soil Bulk Density. *Coasts and Estuaries*. 10.1007/s12237-019-00660-9
≫ Contributed some data analysis and assistance with figure design

Staples, T.L., Dwyer, J.M., England, J.R., Mayfield, M.M. (2019). Productivity does not correlate with species and functional diversity in Australian reforestation plantings across a wide climate gradient. *Global Ecology and Biogeography*. 10.1111/geb.12962
≫ Citations: 13 (Google Scholar) | Altmetrics: 22.2 (90th percentile for same-age papers)
≫ Generated research questions, collected and analysed data, created all figures, primary writer

Staples, T.L., Dwyer, J.M., Wainwright, C.E., Mayfield, M.M. (2019). Applied ecological research is on the rise but connectivity barriers persist between four major subfields. *Journal of Applied Ecology*. 10.1111/1365-2664.13373
≫ Citations: 5 (Google Scholar) | Altmetrics: 25.5 (90th percentile for same-age papers)
≫ Generated research questions, collected and analysed data, created all figures, primary writer

Gomez Cabrera, M.dC., Young, J.M., Roff, G., **Staples, T.L.**, Ortiz, J.C., Pandolfi J.M., Cooper, A. (2019). Broadening the taxonomic scope of coral reef palaeoecological studies using ancient DNA. *Molecular Ecology*. 10.1111/mec.15038
≫ Citations: 5 (Google Scholar) | Altmetrics: 18 (89th percentile for same-age papers)
≫ Contributed some data analysis and figure creation

Wainwright, C.E., **Staples, T.L.**, Charles, L.S., Flanagan, T.C., Lai, H.R., Loy, X., Reynolds, V.A., Mayfield, M.M. (2018). Links between community ecology theory and ecological restoration are on the rise. *Journal of Applied Ecology*. 10.1111/1365-2664.12975
≫ Citations: 40 (Google Scholar) | Altmetrics: 58.8 (95th percentile for same-age papers)
≫ Contributed review design, some data collection, data analysis and figure creation

Staples, T.L., Dwyer, J.M., Loy, X., Mayfield, M.M. (2016). Potential mechanisms of coexistence in closely related forbs. *Oikos*. 10.1111/oik.03180
≫ Citations: 10 (Google Scholar) | Altmetrics: 14.8 (88th percentile for same-age papers)
≫ Generated research questions, collected and analysed data, created all figures, primary writer

CONFERENCE PRESENTATIONS

Staples T, Pandolfi J & Kiessling W (2020). Contrasting the emergence patterns of past and present novel ecological communities. Geological Society of America Conference, virtual. Contributed oral presentation.

Staples T, Pandolfi J & Kiessling W (2020). Quantifying the "novel ecosystem" concept. International Statistical Ecology Conference, virtual. Speed talk & poster presentation.

Staples T & Pandolfi J (2018). Community dynamics and species co-occurrence over 3,000 years of coral reef development. Ecological Society of Australia, Brisbane, QLD. Contributed oral presentation.

Staples T, Dwyer J, England J, Mayfield M (2017). Acacia and Eucalyptus growth in multi-species reforestation. Ecological Society of Australia, Hunter Valley, NSW. Contributed oral presentation.

Staples T, Dwyer J, England J, Mayfield M (2017). No diversity-productivity relationship in Australian forest plantings. Ecological Society of America, Portland, Oregon. Contributed oral presentation.

Staples T, Dwyer J, England J, Mayfield M (2016). No diversity-productivity relationship in Australian forest plantings. Ecological Society of Australia, Freemantle, WA. Contributed oral presentation.

Staples T, Dwyer J, England J, Mayfield M (2016). Carbon-diversity co-benefits in Australian forest plantings, New Zealand Ecological Society and Society for Ecological Restoration Australasia, Hamilton, NZ. Contributed oral presentation.

Staples T, Dwyer J, England J, Mayfield M (2015). No productivity gain from diverse forest plantings. Ecological Society of Australia, Adelaide, SA. Poster presentation.

INVITED PRESENTATIONS & SYMPOSIA

2018	Ecological Society of Australia	*Symposium organiser & chair*: Marine ecology: new developments & human impacts
2017	Queensland Herbarium	*Invited presentation*: No diversity-productivity relationship in Australian forest plantings

OTHER NOTABLE ACHIEVEMENTS

2019	University of Queensland	Provided data analysis and figure design to the School of Biological Sciences' strategic plan document
2010 - 2011	Australian Taxation Office	Recognition of achievement from Assistant Commissioner Prepared data analysis reports for senior executive staff Developed and maintained procedures for collaborative team

REFERENCES

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