

Temporal Trends Reveal an Urban Marine Ecology Research Gap

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Urbanization is altering coastal zones around the world and understanding its effects on terrestrial, freshwater, and marine ecosystems is important for effective management. Previously the Urban Marine Ecology Lab at UWT found that urban ecology studies tended towards terrestrial and freshwater and was based on publication rate while urban marine studies don't seem as studied. We determined whether or not there were temporal trends by computing a log-odds ratio, a measure of how much more or less likely marine studies were to be urban-focused compared to non-marine studies – over time. We hypothesized that we would see a gradually increasing log-odds ratio showing higher publication rates for urban marine ecology. We found instead that marine studies were disproportionately more urban focused than not prior to 2000, with a gradually lowering log-odds ratio after that point. Leave one out analysis showed that no particular journal was unfairly driving the trend. Rather, urban marine studies have become less common over time across multiple journals hinting at a progressively widening gap in scientific literature. This emphasizes the need for research and advancement in the field of urban marine ecology.