

Life's a beach then you cry: spiders on marine strandlines (and the pros and cons of intensive sampling)

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Marine strandlines - consisting of deposits of seaweed, driftwood and general flotsam - form a familiar component of shoreline ecosystems. Strandlines provide a habitat for crustaceans, numerous Diptera (including their larvae), Coleoptera and associated predators and parasitoids. Spiders are a frequent, if not abundant, occupant of marine strandlines, though (with the exception of the slater-eating *Dysdera crocata*) little seems to be known of what they actually do there. In an initial attempt to address this knowledge gap, this study examined the relative frequency and seasonal activity of spiders on the sandy beach at New Brighton, Christchurch. Spiders were sampled by hand-searching and sieving of strandline material, with species being recorded as present or absent on each occasion. Although over 300 visits were made to the study site, only 20 species, belonging to ten families, were recorded in total. The spider assemblage was, unsurprisingly, more diverse in the summer months compared to winter and, although the number of species recorded was low, the intensive sampling regime allowed detailed analyses to be performed regarding monthly 'abundance'. Clear relationships between spider occurrence and weather conditions were found when considering monthly average values, but the patterns found using daily data were much more diffuse. The most common species recorded in the survey was the endemic shoreline specialist *Anoteropsis litoralis* (Lycosidae), whereas the second most common was the introduced generalist species *Tenuiphantes tenuis* (Linyphiidae). The invasive 'false katipo', *Steatoda capensis*, was the third most recorded species, whereas no actual katipo, *Latrodectus katipo*, were recorded.

