

Categorising shore skink (*Oligosoma smithi*) colour patterns at Tawharanui Regional Park

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Crypsis is very common in reptiles, where the colouration and pattern of animals blend with their habitat thus reducing detection by predators. Most New Zealand reptiles are well camouflaged, particularly in shore skinks (*Oligosoma smithi*), where their colouration varies extensively within and between habitats. Anecdotal observations also indicate that the shade of colouration in shore skinks is variable with time, changing as quickly as a few hours. This study aims to categorise existing colour patterns of shore skinks from coastal sand dunes and boulder beaches at Tawharanui Regional Park over time. Patterns of the shore skinks will be compared to the site of capture to determine level of compatibility. The colour association between skinks and their habitat may have an important consideration when planning translocations, especially if the ability of skinks to adapt to the potential release sites may be limited to the rate and level of colour change in the source population. A population of shore skinks from the Tawharanui coastal sand dunes will be translocated to three sites; 1) a boulder beach at Tiritiri Matangi Island, 2) a sandy beach at Motuora Island and 3) a mix of boulder and sand environment in captivity. All three translocated skink populations will be monitored over time to look at level of colour changes in each population, as well as record colouration in their offspring. This study is part of a larger project, which will be looking at the natural and sexual selection in the shore skink based on colouration.