

Twenty years of restoration on Motuora; has it delivered for invertebrates?

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Eligible for student prize

Island restoration has become increasingly important in New Zealand conservation. In recent years several large-scale re-vegetation projects have aimed to restore native ecosystems on highly modified nearshore islands, such as Motuora Island, Hauraki Gulf. Mostly, such projects assume that controlling weeds and re-planting native vegetation will be enough to restore other components of native ecosystems, such as invertebrates. However, there have been few explicit tests of these restoration assumptions or assessments of restoration success. We assessed invertebrate communities on Motuora Island 10 years ago, and found that most of the beetle species (63%) and almost half of the individual beetles (48%) in 10-year old planted areas were native. Multivariate analyses also showed that the beetle assemblages of planted and unmanaged forest areas consistently grouped together and were clearly different from pasture assemblages. Other taxa such as Amphipoda and Isopoda indicated that restoration had not been as successful in creating a community similar to more mature native forest. This present study re-measures the invertebrate communities at the same locations on Motuora (now 20-years old) to evaluate whether the restoration trajectory has continued to improve for invertebrates.

