



MARINE BIOSECURITY TOOLBOX

Kia tiro tiro mangōpare, arā ko ngā tai e whā
Look through the eyes of the mangōpare,
observing in all directions

EXPLORE

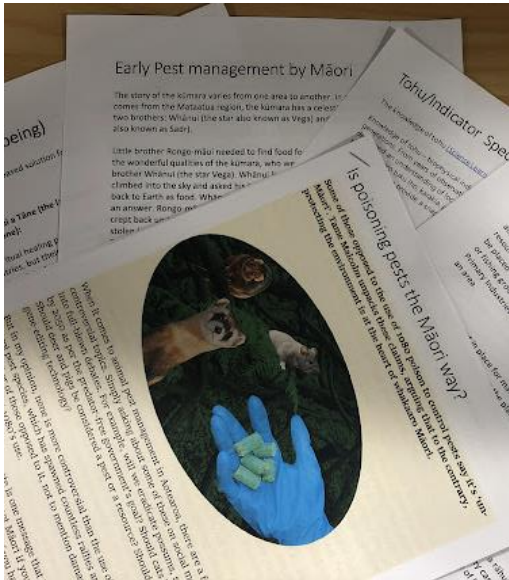
DISCOVER

SHARE



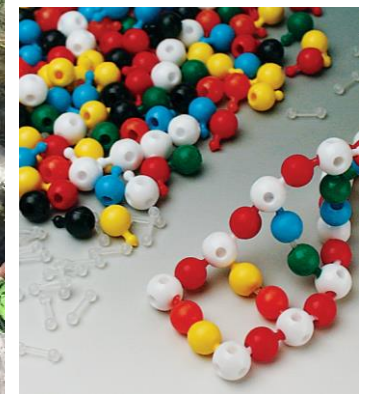


From Cawthron
Research Institute
into the classroom



cicada

I am a cicada. My full name is *Amphipsalta zelandica*. I am related to all the Cicadidae in the world. I can trace my lineage back through Cicadoidea, Cicadomorpha, Auchenorrhyncha and Hemiptera to Insecta. This means that I am an insect and that I am related to all the other insects. Going back further, I am also a part of the Arthropoda phylum, which means I have jointed feet and I am related to other animals like spiders and crabs. I am also related to all the animals that roam the Earth, but only very distantly. I was found in my back garden in Auckland on a pōhutukawa tree. My home is in the area of the stream that they call Lucas Creek. My land is that of the



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Feedback



- **High engagement**
- **Critical questions**
- **Great buy-in** from some of our more disengaged learners
- Students knew **why** they were there and **what** they were doing, and they could see how the activities were **relevant** to what they had been learning about in class

Communicating in Science

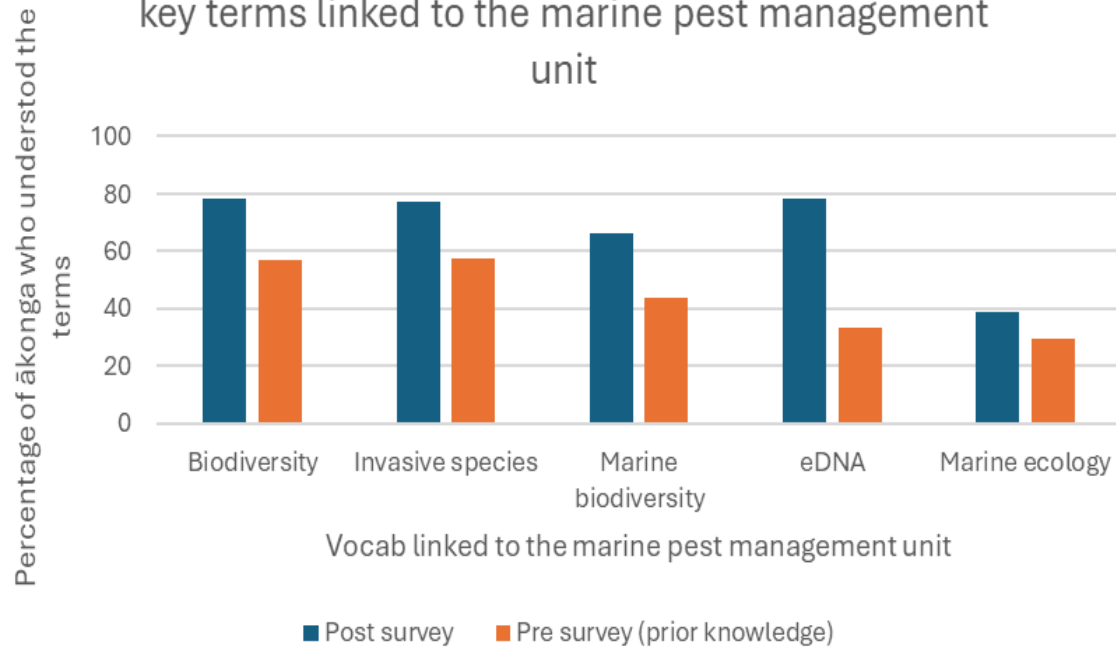
Are marine pests really that bad for our moana?



Is using eDNA a better method of pest detection?



Pre and post survey about students' understand of key terms linked to the marine pest management unit



Teaching unit freely available from April

SCIENCE LEARNING HUB
POKAPŪ AKORANGA PŪTAIAO
sciencelearn.org.nz

Kaitiakitanga o te moana – planning pathways

Introduction

Learn about
kaitiakitanga

Learn about ecology
and biodiversity

Learn about
classification

Learn about DNA and
inheritance

Learn about biosecurity

Learn about eDNA and
pest management

Taking action



Thank you!

Te manu kai miro,
nona te ngahere;
te manu kai
Mātauranga,
nona te ao.

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