



Tiakina Taiao Biosecurity Programme



Tiakina Taiao is a one-day environmental and biosecurity education programme for tamariki aged 8–12, by Tauranga Moana Biosecurity Capital and supported by Manaaki te Awanui Research Trust at Pilot Bay. The programme engages schools from across the Bay of Plenty.

Tiakina Taiao supports tamariki to understand their role as kaitiaki of te taiao, while building awareness of marine and terrestrial biosecurity. Learning is hands-on, place-based and designed to make biosecurity concepts accessible and engaging for young learners.

Alongside mātauranga Māori, contemporary science and biosecurity tools are used to explore marine and terrestrial biosecurity risks, the impacts of incursions, and practical actions to protect taonga species and ecosystems.

This integrated approach supports holistic learning that connects cultural knowledge with modern environmental practice.

Tiakina Taiao contributes to long-term environmental outcomes by growing knowledge, awareness and responsibility at a young age.



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Programme Structure and Delivery

Tiakina Taiao is a one-day, interactive and fun, environmental and biosecurity education programme for tamariki aged 8–12. The programme is designed to engage learners through hands-on, place-based activities that combine mātauranga Māori and contemporary science.

To support participation and effective learning, the class is divided into two smaller groups. Groups rotate through the Tangaroa and Taiao sessions before coming together for the final Hīkoi i te Taiao session.

Session One: Tangaroa – Marine Biosecurity

This interactive and fun session introduces tamariki to marine biosecurity and the ecosystems of Tauranga Harbour. Through discussion, visual resources and hands-on learning activities, students explore the species that live within the harbour, from native taonga species to invasive marine pests.

Key learning includes:

- An introduction to Tauranga Harbour and its ecological significance
- Native marine species and their roles within the ecosystem
- How invasive species arrive in Aotearoa and impact marine environments
- A focused case study on the Asian paddle crab and other marine biosecurity threats
- Exploration of the great white shark, including migration patterns and harbour presence

The session is framed through Tangaroa, reinforcing connections between people and the moana, and encouraging active kaitiakitanga.

Session Two: Taiao – Environmental Biosecurity and Conservation

This interactive and fun session focuses on environmental biosecurity and conservation, encouraging tamariki to ask questions, problem-solve and think critically about threats to native ecosystems.

Key learning includes:

- What biosecurity is and why it is important
- Invasive species that threaten Aotearoa's environment, including:
 - Myrtle rust
 - Kauri dieback
 - Brown marmorated stink bug
- How these threats spread and affect native species
- Practical actions tamariki and communities can take to reduce biosecurity risks

Mātauranga Māori is incorporated throughout, reinforcing care for te taiao and shared responsibility for its protection.

Session Three: Hīkoi i te Taiao – Walk in Nature

The final session brings all students together for an interactive and fun guided hīkoi through the local environment. Learning is reinforced through storytelling, observation and active participation.

During the hīkoi, tamariki:

- Hear local pūrākau and stories connected to the area
- Identify native plants and trees in their natural setting
- Learn cultural uses of species such as harakeke, kawakawa and pōhutukawa
- Strengthen connections to whenua and te taiao.

This session supports conservation in real-world contexts and encourages tamariki to see themselves as confident kaitiaki of their environment.

