Student Kaitiaki Projects 2022

Marine Kaitiaki Course Nga Hapu o te Pewhairangi, TriOceans & Carino Wildlife Cruises Backed by Jobs for Nature



Kelp Significance & Restoration

Ko Isabella Toku Ingoa
Ko Rakaumangamanga te Maunga
Ko Ipipiri te Moana
Ko Taumarere te Awa
Ko Ngatokimatawhaorua toku Waka
Tenei taha o toku Papa
Ko Ngapuhi te Iwi
Ko Ngati kuta te Hapu
Tenei taha o toku Mama
Ko Ngatiwai te Iwi
Ko Te Uri O Hikihiki te Hapu
Ko Te Rawhiti te Marae
No Te Rawhiti Toku Kainga

Could we restore kelp beds in the Bay of Islands, through farming and restoration? Through my project, I seek to research and learn about the beneficial impacts of kelp farming and restoration. The overall importance of kelp forest globally. Through surveying areas in the Bay of Islands, by underwater ROV (remotely operated vehicle), freedive/snorkelling, comparing videos/photos. Sharing/educating with communities how a decline of kelp beds within our waters affects us locally. To use the methods and actions that I have learnt to implement in our coastal waters to slow the depletion of kelp beds.

Isabella Rewha Te Rawhiti, Northland

Ocean Acidification

My project is about ocean acidification (OA) and understanding how OA is affecting marine life in the Bay of Islands, New Zealand as well as globally. It is also about solutions, so what the local community can do to help mitigate these impacts. I will be educating people by creating social media pages, creating surveys for people in our community and identifying different groups that I can engage with about this issue. With this, I will be giving ideas of solutions. I would also like to experiment with some shellfish that are known to be one of the most affected from OA and by putting shells in different pH levels to see what future impacts they are facing and present this experiment to the groups I am educating to. I would also like to get in touch with different organisations to see how they are tackling ocean acidification and conducting all of my own research towards this topic. I am hoping to

Gaby Ackers Paihia, Northland

Scallop Monitoring & Regeneration

Ko Rakaumangamanga te maunga

Ko ipipiri te moana

Ko Taumarere te awa

Ko Ngatokimatawhaorua te waka

Ko ngati kuta me patukeha nga hapu

No Te Rawhiti te marae no Te Rawhiti ahau

Ko Tutanekai Titore Paota Heta Kareko toku ingoa



Can we regenerate the scallops population in Te Rawhiti Bay of Islands through aquaculture in a sustainable way? Through my background research I have learnt that we can regenerate the scallop population through aquaculture, as this has already been done in other countries. My project is to understand scallops, aquaculture and scallop monitoring. To do this I will be doing an underwater survey in a certain part of Te Rawhiti using our underwater ROV remotely operated vehicle to get an idea of the local scallop population. I also want to interview some of my hapu members to better understand the history of scallops in our area and the new rahui on scallops.

Tutanekai Kareko Te Rawhiti Kaimarama, Northland

Coastal Shark Species in the Bay of Islands

Kia Orana

Ko Utataki toku enua

Ko Nga Pu Ariki toku vaka

Ko Ngati Tepaki toku ariki

Ko Jasmin Ngaro toku ingoa

My driving force behind my project surrounds the current decline of global shark populations and aspiring to be a voice for these critically important apex predators. I believe it is essential to first understand the presence of sharks in coastal habitats and I will be using a baited underwater camera in several locations throughout the Bay of Islands. This helps determine a rough idea on how healthy the population is in this area, as well as providing a foundation for further research on tracking movement and ultimately protecting the species present.

Meitaki Ma'ata,

Jasmin Ngaro Haruru, Northland

Passion for Paua- Monitoring Paua Populations in Takau Bay





Passion for Pāua focuses on our Pāua habitat and Marine Ecosystem in Takou Bay. With this project I am looking to achieve these goals:

- Complete extensive research on our Pāua habitat.
- Planning of how to maintain a sustainable natural Pāua habitat.
- The possibility of being able to supply kai moana with a thriving environment.
- Extensive research and planning of understanding the Moana in Takou.
- Record, collect and present our own data.
- Having set quota limits for the area and monitoring if quota limits are met or abandoned.
- Being able to educate the importance of protecting our Pāua.
- Respecting values set in place to create a better working environment.
- Identifying all species that inhabit our Marine Ecosystem.
- Implementing health & safety protocols to stay safe on the Moana.
- Build relationships and share knowledge with local hapu, education systems and government agencies.

Nga mihi,

Ko au te Moana, Ko Moana te au! Kia tū tika ai te whare tapu o Ngapuhi!

Freedan Rameka Takau Bay, Northland

Oyster Solutions to Waterway Pollution

Ko Whakataha te maunga

Ko Te Kerei Mangonui te moana

Ko Mataatua te waka

Ko Whitiora me Hiruharama hou nga marae

Ko Ngati Rehia te hapu

Ko Ngapuhi te iwi

Ko Mariata Kemp toku ingoa he uri ahau no Ngati Rehia, Ngati Hine me Ngati Whawhakia.

My project is about the benefits oysters can bring to our estuaries. Oysters can help clean our New Zealand estuaries because they are filter feeders that help remove excess nitrogen from waters by incorporating it into their shells and tissue as they grow.

I hope to show this through a fish tank demonstration on how quickly they can clean the water in a tank and use this to educate my community. I will also be using water quality testing kits to survey the health of local waterways and hope to create a video media component for my project educating about the importance of healthy oyster populations.

I have found that many other countries have been working with different filter

feeders as solutions to clean waterways. My hope with this project is to create more applications of this in Aotearoa, particularly Northland.

Mariata Kemp Te Tii, Kerikeri



LongTerm Impacts of Whaling in Northland

Kia ora koutou,

Ko Shanice toku ingoa

No Nga Puhi Te iwi

Ko Ngati Torehina te hapu

Ko mataka toku maunga

Ko kerikeri toku awa

Ko Wharengaere te turangawaewae

Ko Pareata toku tupuna

How has the Maori involvement during the late 1820's whaling era in New Zealand affected the present whale population?

With my project I'm looking into the connection and the involvement between Maori and whales, in 1820. How the Maori involvement affected the present population. The reason I'm looking into the connection and the involvement is when I was going through some research I came across that Maori played a major role in shore whaling, many going on to become streeres and headsmen, or set up their own station. In Hawke's Bay, the stations depended heavily on Maori labour, making the relationship between Maori and pakeha whalers one of mutual respect and equality. For me, personally, finding out this information, I'd like to find out that if the whaling ship didn't have any Maori present on the ship, would the abundance today be so low?

Thank you Moana for taking the time to read what I have learnt so far with my project. My next step is to go out and do some research at our local museums, gather any knowledge they would have revolving around whaling and my question.

Shanice Rhiana Rihari Seddon Kaeo, Northland

Traditional Maori Fishing Techniques

Ko Tuhipa rao ko Te Ramaroa-a-Kupe ngā Maunga

Ko Ngapuhi-Nui-Tonu te lwi

Ko Ngāti Hine, Ngāti Kopaki, Ngāti Korokoro, Ngāti Wharara ngā Hapu

Ko Tumatauenga rao ko Maraeroa ngā Marae

Ko Taumarere rao ko Pokonui ngā Awa

Ko Ngatokimatawhaorua te Waka

Ko Orauta ko Pakanae ngā Papa Kainga

No te whanau Brown ahau

My chosen research topic is about traditional Maori fishing techniques, more specifically I'm wanting to find out whether traditional fishing techniques are still used today and what benefits could come from keeping these practices alive. I've started off my research project with the goal of interviewing as many fishermen both recreational, commercial and now customary who are willing to have a conversation with me. With my end action being to hopefully learn a traditional Maori fishing practice or method to present to and possibly teach to hapori spaces (my action being subject to change at

this point, if I'm unable to find someone to learn from). Any support or connections that you can help me make in regards to this research would be greatly appreciated.

Kirihi Brown Pakanae, Hokianga

