Mountains To Sea
Conservation Trust
Nga Maunga ki te Moana

National Marine and Freshwater Wānanga Conference Proceedings

2016

Whitireia Marae, Whangara, Gisborne

Run by **In partnership with**

Theme

"Storytelling - Korero Paki" ……..for marine and freshwater conservation action and/or education"

Purpose

An inspirational professional development and networking opportunity for all those involved or interested in freshwater and marine conservation.

Objectives

- provide a forum for marine and freshwater educators to network about education for sustainability initiatives and projects around science communication
- provide professional development opportunities
- provide a forum to discuss the effectiveness of existing and potential partnerships that foster action for marine and freshwater conservation
- ensure strong delivery of the Experiencing Marine Reserves (EMR) and Whitebait Connection (WBC) concepts around New Zealand
- raise the profile and value of conservation storytelling

Pōwhiri – a warm welcome from Ngati Konohi to Whitireia Marae

Watch the video here
https://www.youtube.com/watch?v=I6zFpH2uOSg

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Coordinator Training

Wednesday 27th of April

EMR

Prior to the wānanga we had 2 days of training for EMR coordinators Marine trainees covered the EMR snorkel paperwork and requirements under the Adventure Activity Regulations 2011.

WBC

coordinator field trip training sessions in Waiomoko Stream. Conducted in-stream sessions, talked through logistics of site assessment and H&S plan. Conducted water quality tests and find macro-invertebrates – took some samples back to the marae to help with ID session.

Kim drafted and provided template and site assessment sheet to coordinators for them to complete once on site as part of training. Murray cleared access with Anthea.

Coordinator Training Cont.
Thursday 28th of April

EMR
The second day of training involved practicing how to teach snorkel skills. We also focused on practicing emergency procedures and rescue scenarios. We covered how to run an EMR pool session.

Coordinator Training Cont.
Thursday 28th of April

WBC
Freshwater field trip to Longbush Ecosanctuary - view this amazing restoration project lead by Dame Anne Salmond and her husband. The sanctuary is home to an example of a very healthy local stream after only 4 years of restoration. Identify instream macroinvertebrates in situ with Murray Palmer – local WBC coordinator and Nga Mahi Te Taiao freshwater research consultant who did the study on the freshwater ecosystems at Longbush. Jennie Harre-Hindmarsh represented the Longbush trustees.

We began by doing a round circle of introductions and Murray welcomed everyone to Longbush. Then we walked up to the Welcome Shelter where and Pete and Elle Jarratt talked about their involvement in Longbush and their upcoming Wild Lab session on the koura. Elle and Pete mentioned the short trailer video for Longbush that will give you a better insight into the goal of raising the profile and knowledge of Koura. If you follow the link below and click on the main image on the page it will play the video.
https://www.jarratts.com/wild-lab

Then it was off to the koura pond, where Murray talked about the fresh water restoration work at Longbush, and his koura restoration project Up Pa Hill, to look at the river catchment from that vantage-point.

We then walked down to the Waikereru Stream, where Murray talked about their freshwater work with kids across the region and we got instream and found some macroinvertebrates and sampled water quality.

EMR & WBC Regional Coordinator Meeting
Thursday 28th of April

Objectives of the training:
Ensure delivery around NZ is consistent with MTSCT's best practice.
Ensure our coordinators have the right tools to do the job.
Update and gather training records and police vetting for new coordinators.

Agenda for coordinator meeting:
- Record all present and current coordinator status. Quick updates, including highlights
- Lessons learnt
- Share ideas - hear what's working and what's not.
- Share our vision and strategy – what are we trying to achieve regionally and nationally
- Incident reports review
- Emergency scenario practice Branding Evaluation, strategic and sustainability planning (guiding documents for each region)
- Website use – discuss the capability and the possibilities
- Funding conversation.
- Paperwork sign off

Start of Wānanga

Friday 29th of April

Welcoming Activity

We imagined the room was a map of the world, everyone stands where they were born. We are predominantly kiwi, but from all corners of the globe. Everyone buddies up and tells one another a story of when their interest in the environment was first sparked. The pair then joins up with another couple, and retells their partners story to the new buddy pair.

- Most stories were childhood memories involving our parents. Stories often involved fishing, creating a connection with the Moana, and leading to this role of Kaitiaki.
- Of these fishing stories, many related to the significance of Kai gathering for food, rather than the enjoyment of a days fishing. The balance is hard to find between cultural kai gathering and sustainability. Many places where people had memories are not suitable for fishing anymore due to pollution or overfishing.
- European members of the wānanga don't find this relationship between the sea and the kai.
- In Asia, the sea considered as a dangerous place. Related to forced migration…
- Passing these experiences onto our children are important to us. It gives us motivation in the fight for conservation.
- Marine reserves are important! Lots of regular fishermen still want to show their kids the beauty of marine life in their natural environment.
- Photography can be another way to sustain our 'hunting instinct' Find and shoot (on camera!)

Kim Jones Presentation - See full presentation

Kim tells the story of the origins of the Mountains to Sea Conservation Trust, the involvement of several key people along the way including the fantastic team of trustees.

Vince Kerr was a Tutor at NorthTec with a past in Marine Conservation. Samara Nicholas and Stefan Seitzer were Northtec students. Together they gathered ideas about community engagement and the importance of this type of engagement for conservation and the importance of providing an umbrella organisation for the Whitebait Connection and Experiencing Marine Reserves programmes. The ideas all revolved around building strong connections from the Mountains to the Sea.

Dr Roger Grace came onboard and in 2002, and with only $10, we created the trust. The aim was to bring together science and education, support young people, and work with Government towards conservation.
In the next couple of years, more people got involved including Kim Jones, and Stefan's wife, Ira. DOC also joined as a key foundation sponsor.
In 2005, the trust name of Nga Maunga ki te Moana was changed to Mountains to Sea Conservation Trust. New trustees were recruited, including Sioux Campbell, Hilton Leith and Nicki Wakefield

Some of the highlights of the trust over the years include

- Celebrate the Sea and Pitch Black concert, 2003, Rikoriko cave https://www.youtube.com/watch?v=eldqUZJFfj4
- Innovative Human Chain around marine reserve boundary, 2009, Whangarei Harbour Marine Reserve https://www.youtube.com/watch?v=9GAWmkpLwO8
- The wānanga, 2010, combination of WBC and EMR
- Creation of the nursery, He Kakano, by a local school for WBC at Waitaua awa, site given by Whangarei council for renovation
- When Nicki saw orca with a EMR group at Matauri Bay.

Samara Nicholas Presentation – Full Presentation Here

EMR has now expanded to 9 NZ regions! The latest being Akaroa and recently EMR has been adopted in South Australia. EMR is excited to have a regional coordinator from each region represented at this wānanga. EMR in the regions have different umbrella host organisations to access funding, even though we are spread out, we continue to deliver the same EMR programme with the support of the National coordinator and through sharing our ideas and experiences at wānanga.

EMR will have its 15th annual trip to Poor Knights this year, the second year to include representatives from all our regions. As well as commending the efforts of art winners across the country, the Bobby Stafford Bush Foundation supports children and parents from the regions to fly and stay at Tutukaka for the event.
Recently EMR has undergone some rebranding, with a new theme-triple fins and nudibranchs in our latest education manual and we have a new website which went live at the start of the season.

Mountains to Sea is currently working on a 'How to' kit to learn about and make a marine reserve proposal.

Samara Nicholas Presentation – Cont.

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1. Install the free PEEKAVU app on your tablet or phone
2. Open the app and point your viewfinder on either of the two photos below
3. Watch as the images come alive as you travel through fished or marine reserve areas!

Download the image below here - print it out and put it on the your wall.

Hone Taumaunu Presentation

Hone spoke about the history of the marae and the two whare nui that stand there today including the significance of carvings, paintings, and artwork that adorn the marae. He also spoke about the area and the build up to the creation of the marine reserve nearby. The orientation of the marae is important. The first whare nui, Waho Terangi had no carvings, only paintings, this was a Ringatu style whare. Originally, the marae was built next to the now marine reserve, as Whangara considered too sacred. However it was then moved to the beach at Whangara in the early 1920's.The second, and larger of the houses Whitireia was originally built on the island. Built by Apirana Ngata, and carved by chief carver Pine Taiapa tohunga whakairo, it was used as a house of learning. Apirana selected young people from all over New Zealand so they go to Rotorua to learn how to carve again, as it was a lost art. These apprentices built this house using stilt chisel, which is very precise. When they decided to build the house, he also helped the ladies to adorn the walls using tukutuku (reed panelling), as it was a lost art too. On the walls are the ancestors that represented the Maori family, on the left and right are true people. Front and back are magical ancestors. In 1939, the house was open. Not a Maori ceremony, an English ceremony, linked to a fire competition.

Kaitiaki is something/one that cares and protects, which was encouraged within the marae. However the talk of a marine reserve was incredibly controversial to start with. At one time it was considered too hard, as there was a conflict of interest around its ownership. After 10years of fighting, marine reserve finally became a reality.

Keynote: Dame Anne Salmond

Distinguished Professor in Maori Studies

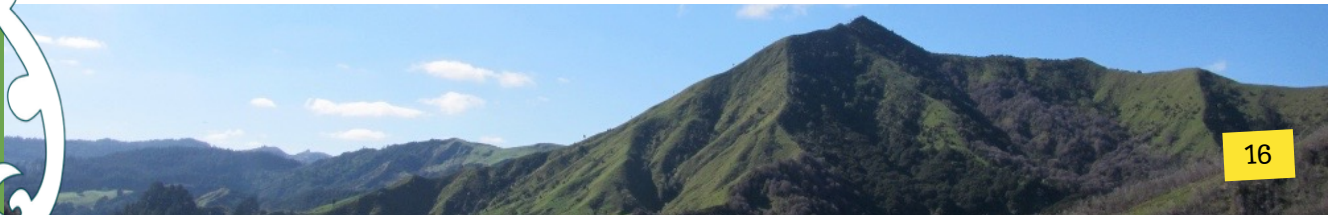
Anne grew up in Gisborne, and although she has travelled many places and currently spends most of her time in Auckland, this is home, which holds a very special place in her heart.

Anne has many fond memories of the region when she was growing up. Most involve her large family. Lovely memories of fires on the beach, cooking sausages, watching mullet schooling in the rivers, and family initiation rituals catching crayfish in the rock pools. When it was really hot, she and her siblings would cycle on their bikes to Longbush (Waikereru), to swim in the river and skip stones. Those days at Longbush became one of her most cherished memories.

In 1999 she and her husband Jeremy visited Longbush, curious to see what had happened to the place after so many years. It was for sale, for forestry or grazing. To save it from being covered in pine trees, they bought the 120 hectare piece of land. It had changed considerably since her childhood. Cows grazed and wandered throughout the bush and streams. But they had big dreams to restore it. They started by fencing off the bush, but of course without cows grazing, the weeds came back quickly. Both fencing and planting was undertaken in order to stop erosion from the hills and river banks. “What we have learnt from Longbush is that the land, sea, birds, and people are all connected. There are no limits. People are a part of the system, until we become one with the system we won’t understand. If the river is sick, I am sick”.

Over the years, many people have become attracted to Longbush, and people helping out with its restoration have come from far and wide. Native robins have been relocated to the bush. Berry bearing trees such as puriri and karaka have been planted for the kereru, who eat the fruit and fly away to plant seeds all over the land. The Orchiston collection of Harakeke (60+ varieties) has been planted and cared for. Since the trust has been set up, other trustees have joined in these efforts. EIT and local schools soon became involved in planting, fencing and building a bridge. The idea of bringing back greyfaced petrel (oi ki karewa) was discussed and became the next challenge. The Trust is working to create an inland colony of oi, after all of these birds had been wiped out from the area.

The next phase for Longbush has been to make it a place of giving and learning. When schools and visitors arrive to learn and to plant they need a place to be welcomed. A Phd student in architecture, Sarosh Mulla designed the Welcome Shelter at Longbush, which has been published all over the world. The build cost them nothing thanks to the generosity of many individuals and businesses giving materials, services, and their time. The latest project is the 1769 Garden, which features the species collected by Dr. Solander and Joseph Banks when they visited the East Coast on the Endeavour in 1769, the first Europeans to land in New Zealand.



Keynote: Dr Debbie Freeman – Full presentation here

The science behind the marine conservation story. Debbie is a marine scientist who has worked with DOC for 15 years in both marine and freshwater ecosystems. She talks about what we have learned from research of marine protected areas (MPA's) over the years.

There are so many questions regarding MPA's in New Zealand. What should our targets be? How many do we need? How big should they be? In terms of managing these MPA's, how, when, and where do we report? What should be reported? How representative are our findings, and where are the gaps?

Between 1975 and 2010 there have been 100's of publications around NZ marine life, including on no take areas. Studies were varied and involved snapper tracking at Goat Islands or monitoring the recovery of previously harvested species. The most harvested species usually responded very well to MPA's, but not always. Blue cod tended to get bigger within some reserves.

Spill over of species from marine reserves may be caught outside of a reserve, but depending on the size of the marine reserve and objectives of the particular reserve, spill over might not be desirable.

Study of crayfish in Te Tapuwae o Rongokako Marine reserve in Gisborne showed a lot of movement near the northern boundary, but also large population of crayfish stayed within the boundaries. This allowed protection of most of the population while allowing some to be caught in waters nearby.

Pupu larvae produced by adults within the marine reserve spreads all over the coast, and supplement waters all around. They found similar results with Kina and Paua larvae. However, when we study sharks and larger mammals we find that they can migrate all over the world, and therefore species that migrate long distances cannot be protected by MPA's alone, particularly if they are not part of a wider MPA network. With the help of these studies we can better understand food webs, cascades, and how the recovery of larger predators is linked to important changes in reefs and other habitats.

Research and monitoring has therefore enhanced New Zealand's marine research by helping to understand patterns, and balancing the negative effects of humans on the ocean.

But MPA's cannot protect against everything, for example, some negative effects not due to fishing, such as pollution, cannot be solved by creating more marine reserves, but MPAs are a core component of protection of marine biodiversity.

Keynote: Dr Mike Hickford – Full Presentation Here

Inanga Spawning Site Identification and Restoration

Mike is a fish biologist as well as whitebaiter who wants to ensure continuity of the fishery for generations

Inanga is a shared treasure between pākehā and Māori. They are found the whole way around the southern hemisphere. They are diadromous which means that they use both fresh and saltwater habitats during their life cycle. These habitat movements can be traced in the otoliths (ear bones) of the fish.

Adults live in freshwater and migrate to estuaries during autumn to spawn. They spawn right up in the grassy banks during spring tides; preferably beneath a canopy of vegetation to keep the eggs cool and shaded. The eggs sink to the base of the vegetation and remain above the high tide till the next spring tide. The embryos inside the eggs need oxygen, so they need to stay sheltered under moist vegetation with lots of stems and roots to protect them from frost, sun and predators such as mice. The eggs are very prone to UV radiation, after 20-30 min exposure most eggs will die. Therefore, when counting eggs at spawning sites an umbrella is an essential tool! Eggs hatch when covered by the next spring tide, the larvae are flushed out to sea as the tide falls, drifting at mercy of currents. Most (99.9%) of the inanga larvae going out to sea die. Most of them go to the wrong places, don't find food, or starve to death. Therefore, there is an oversupply of eggs to ensure that some will survive. The inanga develop at sea for six months, before sensing the plume of freshwater offshore from a river mouth to swim back upstream.

Keynote: Dr Mike Hickford – Cont.

Most inanga spawn at 1 year old then die. As spawning areas are so specific, and most spawning takes place within 100m of the saltwater wedge, the small area used for spawning can be extremely vulnerable. Habitat degradation from urbanisation sedimentation, impoundment, and livestock grazing can all decrease the likelihood that the eggs will survive or that the fish will choose to spawn at all.

Finding the eggs can be tricky when you don't know what you are looking for. The first thing to do is identify the saltwater wedge, using either a salinity probe, conductivity meter, or natural cues. Crab holes on the banks, and plants such as bachelor's button can indicate an area is too salty, while watercress indicates true freshwater. The eggs are a tiny 1.2 mm in diameter, they are clear and can look like drops of water which can make them hard to find after rain. The eggs tend to lie in a 10cm band along the banks where the high tide reaches.

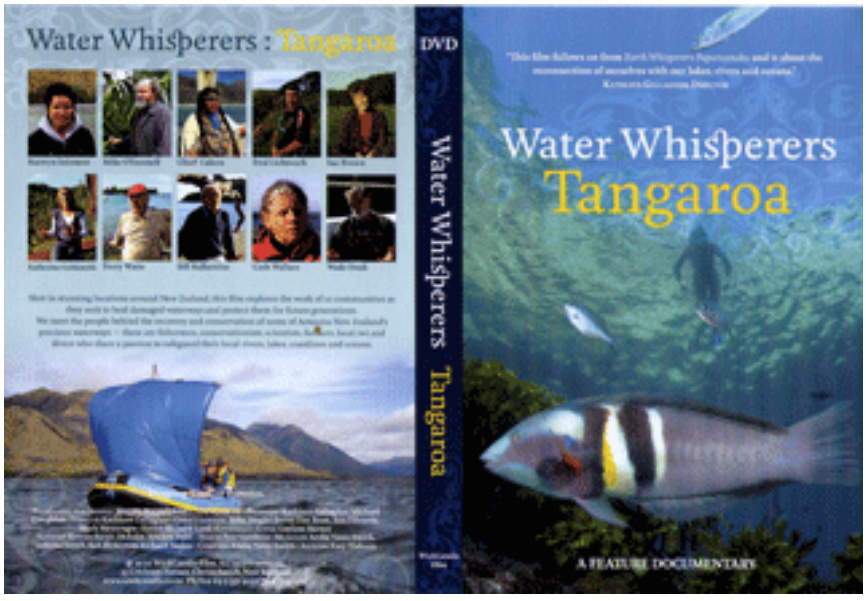
How to quantify spawning site: Go along the bank, to find the horizontal and vertical extent being used for spawning. Random placement of 10 x 10cm quadrats within the band, and count density within the quadrat. Calculate the average concentration of eggs along bank. It is also important to note down GPS coordinates as well as a description of the habitat, including species composition, stem density and root mat depth.

Hay bales have been found to act as great habitat for inanga eggs, particularly if a site is damaged by grazing. However, they are expensive; don't last for long, and really only act as a temporary Band-Aid, and a way to measure productivity rather than a permanent solution.

Spot lighting the Waiomoko Rivermouth
Friday night – 27th of April

After a brisk walk along the beach with our torches and glow sticks we arrived at the Waiomoko River mouth and were greeted by an enormous flock of Canadian Geese! Then we peered into the water and saw juvenile Mullet and Kahawai! As we walked further up the rivermouth we started to see Flounder and Estuarine Triplefins. Further on we were treated to some Eel sightings too! We walked back across the farmland.

We are grateful for the support from Kathleen Gallagher; Water Whisperers Tangaroa features marine conservation stories from throughout NZ and is a perfect complement to our wānanga theme. All participants received a copy of 'Water Whisperers Tangaroa' by WickCandle Film, with the hope that more people and educators would utilize the valuable stories told in the film.



Show & Tell - We have taken these notes as best we could during the time of the Wānanga , we apologise if there are any inaccuracies.

Saturday 28th of April

Lorna Doogan – Auckland & Deputy National Coordinator for EMR
Lorna is creating a new region in the Canterbury region to utilise the Akaroa and Pohatu marine reserves. Earlier this year she went down for a recce of their reserves and have great 4m visibility with seals. She showed a video of the trip and the marine reserve's occupants.
Watch the video here.

Natalie Robertson
Natalie is working as a student for Anne, she spoke of the connections between nature and culture, and how the species around us are an important part of our history and ability to tell stories.
Turn to the Whare, there are stories everywhere. Stories of conservation, stories of art, stories of the land and sea. Take a moment to look at weaving, carvings, animals. There is much more here than just wood and paint. Species that make up this very marae include harakeke, kakaho and pingao.
There are a million stems of Kakaho, but very few stems left in the wild. How do we address problems that diminish the ability to tell stories in our own special way?
How can these metaphors of art be told? When our Mauri is down it is not usually the impulse of a community to say let's create art! But it is exactly what is needed. These art and stories can help invigorate.

Graeme
Many of these plants such as kakaho and pingao which are so important to our history are now rare, or on their way out. We have a legacy of slashing and burning, but are only now realising the consequences of our actions on the environment. One of these consequences has occurred in the Waipu river. The river has dealt with a huge sediment load as a result of development of the land. The his sense of place there is important. If the locals won't help then who will?

Show & Tell – Cont.

Ruth Zee - Full presentation here

The Great Barrier Reef is a precious and iconic marine habitat. Yet many of those living closest to it never visit it. Ruth works as a teacher at James Cook University (JCU) and involved with helping children experience the reef for themselves. Marie Taylor, the tour operator of Reef Magic, has helped to change that. Marie helped to set up a programme giving school children the opportunity to visit the reef with organised day trips. Children got to experience the reef for themselves, and at the same time learn valuable snorkelling skills and knowledge about the reef. Most students targeted are underprivileged and would not be able to afford a trip on the pricey tourist boats. However, Reef Magic subsidies these groups from $150 to $70 per student, and the rest is often fundraised within school to allow all children to take part. Marie does classroom session, then takes groups out for reef experience with support from Ruth. Often 3rd and 4th year students from JCU help to guide snorkelers too. They will often see turtles, sharks, stingrays, and lots of corals. With older students, they encourage participation of the citizen science reef monitoring project Coral Watch.

Kirsty Brennan & Shelly McMurtrie - **Full presentation here**

Kirsty and Shelly are from EOS Ecology in Canterbury and have set up the 'We love whitebait' project, Whaka Inaka causing whitebait programme.

Canterbury has always been an important habitat for inanga but recently it has been realised that the quality spawning habitats are in decline. Earthquakes in 2010 and 2011 didn't help matters, causing liquefaction, changes in vegetation, and large sediment loads in the rivers. Alterations of the estuaries also caused a change in location of the saltwater wedge.

Mike Hickford from the University of Canterbury collaborated with PhD student Shane Orchard working on spawning, along with iwi and EOS Ecology. They used hay bales as artificial spawning habitat. Bales were placed along the the river to see where they were spawning and improve spawning numbers.

Bales were to be placed in Lake Kate Sheppard, the Heathcote river, and Seymour stream. The team promoted the project by installing signage about the bale project and requests for volunteers which was very successful, at least 50 people turned up to help install bales at Seymour stream. After lots of media and social media regarding the project they continued to draw volunteers from the community including iwi and schools to help with ongoing monitoring, and counting eggs each month. Being able to show helpers thousands of eggs when you open up the bail made all the hard work worth it. Universities helped with the collection and analysis of data. Identifying the preferred area of spawning means they can try to improve the habitat. Schools were also able to help out with pest monitoring, which was another great opportunity to bring local schools in. Not all pests eat the eggs but can decrease egg numbers. Pest detector cards are placed near each bail to work out each what pests are around. Schools go out and check the cards. Kids are engaging in science, connecting with other schools and each other. Data and their project stories are being communicated through social media and class blogs.

Show & Tell – Cont.

Helen Kettles - Full presentation here
Helen works for DOC in Wellington as part of the marine ecosystems team Estuaries are home to many species, yet on make up a tiny part of global area. Four years ago, an increasing focus on the importance of estuaries led to the push for DOC to start a programme and a new website specific to estuaries. The website is based around 3 interactive maps with the head, heart and hands approach. The first map about restoring, 50 community groups have contributed to the restoration of coastal wetlands, and over 30 focusing on water sheds. Website allows connectivity, and encourages collaborations through various groups. Since the website went live, there has been lots of activity with other organisations, one of DOCs focusses. The website is also a place where you can find teacher resources, and kayak trails etc. It includes values of estuaries and connects to social media and Nature Space. There is also a section for iwi and Te reo Maori resources. Helen is becoming more involved in social media, especially twitter, #ourestuaries. The next step is GIS portal including all data on one resource.

Soozee McIntyre - Full presentation here
Soozee has a passion for plants and a love for plant restoration around rivers. Riparian planting is usually carried out as part of School programme involvement in WBC programme, or streamside planting days with the community. Lots of the plants can be raised in He Kakano, the trusts own nursery, which Soozee spends a lot of time looking after, sometimes with the help of volunteers or school groups. It is a long process to raise the plants in the nursery. After several lessons learned, the key is being organised and methodical.
Quite often seeds are collected by hand. It can be difficult to collect seeds, and sometimes you need to get creative, eg Kauri trees are very high so nets are installed under them to collect the seeds. Pest management can be a challenge too! Identification of seeds is another big part; occasionally what you thought you planted might grow into something else entirely! Another lesson is to always label seed trays. Also find ways to protect it from threats such as birds and floods. The nursery is currently running well, but the current challenge is how to engage people. Once people are engaged they can learn about the reasons for protecting the streams, and the importance of planting to conserve them. The plants finally making it into the ground is NOT the end point. After care is always necessary to ensure the plants survival. Hopefully trying to make those waters swimmable again!!

Show & Tell – Cont.

Jamie Foxley - Full presentation here

Jamie works for DOC here in Gisborne and is currently focusing on identifying and protecting key inanga spawning areas in Tairawhiti.

Jamie has involvement with council, local communities, and volunteers. Council funding goes towards planting, and monitoring around local streams. First, tidal streams are noted, then saltwater wedge is identified, usually about 750m up the stream. Points are mapped on GPS, and monitoring of those sites is then carried out regularly. Some streams are challenging to work on, with lots of erosion, slumping, and rainfall. All the more reason to restore them! Sometimes temporary fences are installed on private lands to protect the spawning area. The past summer has been very successful and volunteer help has been very important.

Pat Swanson - Full presentation here

Pat is the lead coordinator of EMR Taranaki and initiator of Project Hotspot, funded by 'A Nation of Curious Minds'. Project Hotspot is a citizen science project aimed at involving kids very early on. The project focusses on four threatened species in Taranaki; Orca, Reef heron, Blue penguins, and NZ fur seals. The aim is to find where those species hotspots occur in the Taranaki region. Kids participation is initiated through local schools. Kids go out and survey their surroundings, involving family, and friends. Local Iwi, surf clubs, and other community groups can also be involved.

Steps: PLANNING. Students very involved in this stage.
WHERE are the hotspots?
WHY are the hotspots located where they are? What threats are there?
HOW can we make a difference?

So far this year the project has over 100 sightings of orca, more than 40 sightings of heron, at least 150 sightings of blue penguin and over 300 sightings of NZ fur seal. Nature Watch helped to pin point Orca sightings, and blue penguins are fairly common – but are very vulnerable to dogs. NZ Fur seals are on the increase in Taranaki, and there is becoming more awareness on how to behave around them.

Show & Tell – Cont.

Candace Loy - Full presentation here
Candace is a PhD student at the University of Auckland and currently working out of Leigh Marine Lab. Candace is a lover of art, and wants to use art as a way to spread awareness of the Marine environment as well as the written work produced by her studies.
Adult colouring has become very popular recently and Candace has created colouring images to help people to connect with their "happy place". Ocean in a drop was one of her first colouring in drawings and was tested on fellow marine biologist friends. Participants found it tough at the start, not quite understanding the point of the exercise. But after getting 'lost' in the colouring it was very successful. The ocean in a drop colouring has been getting lots of positive feedback, with lots of adults colouring with their children, at Love your Harbour day. See http://Oceaninadrop.net to find the colourings..

Te Atarangi Sayers – Full presentation here
Te Atarangi is part of Nga Hapu o Motiti, the community of Motiti Island. The Motiti Rohemoana Trust wants to save Astrolabe reef by creating a Rahui area of 92km^2 encompassing the Rena wreck to create a real 'Basket in the Bay'. The area around the Rena has been an exclusion zone for fishing for the last four years, and as a result the marine life has thrived. The Motiti Rohemoana Trust wants that to continue. If the marine life is allowed another two years of protection, we have time to discuss the best long term plans for the site. There has been such significant decline in fisheries in the Bay of Plenty including the decline of taonga species, we have the opportunity to preserve some of it.
Current challenges involve how to connect effectively with stakeholders and the wider community. The need to focus on effective partnership, collaborating with empathy and compassion with other stakeholders, and building trust.
It is important to understand the core priorities for each stakeholder:

Environmental organisations: Protection
Maori organisations: Preservation
Recreational fishers: Abundance
Commercial fishers: Sustainability and security
"Think globally, act locally"

Show & Tell – Cont.

Murray Palmer
Murray is a WBC coordinator in Gisborne region, and has also delivered Globe Project and National Waterways Projects. One of the Schools Murray has had a lot to do with over the years is Whangara School.
Whangara School has a very healthy outdoor curriculum. Students have taken on large environmental projects and have even mapped the whole catchment, noting landuse impacts, tracking downstream sediment, and assessing the coastal environment (history, middens). Several Royal Society Fellowships have been won by Whangara staff over the years, and great continuation of incorporating environment and creativity is seen in the school's curriculum.

Marty Taylor - **Full presentation here**
Marty established Papa Taiao Earthcare, a values based inquiry learning enterprise.The idea for Papa Taiao came from his own experience growing up. Marty had a challenging childhood and was often bullied, but overcame it in time and began to ace those situations. As a result, he grew up with real empathy for underperforming kids.
Papa Taiao aims to encourage those underperforming kids to succeed by offering hands on learning and gaining real skills, all taught with sustainability in mind. Courses offered cover a wide range of practical skills from chain sawing and fencing, to pest control and plant propagation. Courses come under the wider programmes of Wai restoration, Whenua restoration, Moana Restoration, and Rangi Restoration.

Heidi Karo – Full presentation here
Heidi became involved with Experiencing Marine Sanctuaries (EMS) in South Australia over the last summer and tells of the success of EMS's first season. Heidi is also is a Primary school teacher who loves exploring creative thinking through art.
EMS is a non-profit NGO based on New Zealand's EMR programme. It became evident that not many people were aware of what South Australia's marine environment had to offer. After the creation of marine sanctuaries, it was very important to get public support for them. Therefore, EMS was created to foster education, promote understanding, create experience, and stimulate awareness, for the marine environment. Samara visited South Australia to introduce the programme. EMS has had an extremely busy and successful first season, hosting 11 community guided snorkel days with a total of 630 participants. Heidi has watched people transition from no experience snorkelling, to experiencing and enjoying. And has loved fostering kids' personal connection with environment. EMS has had great feedback so far with participants learning to snorkel for the first time, kids excited to learn about biodiversity, and others addressing their fear of sharks.
EMS is connecting with lots of other organisations and community, and learning more about integrated learning approach to apply to EMS. EMS is currently getting a huge amount of support and funding from the government.

Show & Tell – Cont.

Jude Heath
Jude is the new regional coordinator for EMR in Nelson and comes from Motueka. She grew up running wild, using river rapids as commute to see friends.

EMR is enabling teachers to take kids out snorkelling.
Today Jude introduced the new book Rusty the Dusky Dolphin
Written & illustrated by Rosa Friend as a way to introduce educating and action inspiration to future kaitiaki.

The seabed is home to many sea creatures, including Rusty the Dusky dolphin. Join Rusty as he attempts to protect his friends and their treasure from two evil sea witches, Flotsam and Jetsam.

An Educational resource unit to support this environmental book is available free on the Silver Fern Press website.
http://www.silverfernpress.co.nz/rusty-the-dusky-dolphin.html
EMR has a partnership with Abel Tasman Eco Tours – here is a clip on the marine reserve. https://www.youtube.com/watch?v=9kcQfJ2XPfM

History of Whitebait Connection by Kim Jones - Full presentation here

Kim joined the MTSCT team in 2005 with delivery of the EMR programme before deciding to work her way up stream into the freshwater, in 2009 to take over the national coordination of the Whitebait Connection programme (WBC).
The WBC concept is to get community out into the environment, encourage them to be kaitiaki and to take action.
Whitebait is made up of five different species; banded kokopu, koaro, giant kokopu, shortjaw kokopu, and inanga .Kokopu and koaro lay eggs up stream, whereas inanga spawn on a high tide near the salt water wedge. The WBC programme teaches kids about the whitebait lifecycle in the classroom through presentations and games, before going out on the field where the real discovery happens.
Once WBC programme participants have been provided information and hands-on experience, they are supported and inspired to take part in an action project. The projects vary, from rubbish collections, letters to council, hooking up with local restoration projects, encouraging others to get people involved with planting, and getting involved with inanga spawning projects. WBC tries to get involved in lots of different projects in many different regions.
Currently WBC has a well established team and toolbox, so the future is bright! WBC plans to keep going in this direction and affirming in the areas already there, while trying to expand the program. There are plans for new website and a big project for next year's wānanga in Leigh.

Freshwater Field Trip – Inanga Spawning in the Waiomoko River
Saturday 30th of April

A field trip to the Waiomoko River to search for Inanga spawning activity and eggs in the saltwater wedge with expert Dr, Mike Hickford and experienced WBC Inanga project manager and field consultant, Kim Jones. Mike has run several of these workshops around the country. They are based at a grass roots level, sharing expert knowledge and hands on field skills.

The idea is to transfer knowledge to tangata whenua, community groups and organisations working on the ground who will in turn teach others that they are involved with. The workshop involves a presentation on Inanga life cycle and some more specific information on spawning habitat, survey techniques etc. followed by in situ visit to a potential new local spawning site, locating eggs and describing the spawning sites.

Freshwater Field Trip – Cont.

We started the field trip at the whare nui and heard from Mike Hickford – he spoke about the technique for locating the saltwater wedge and some more of the technical side of it. We were guided straight to the location of the eggs on the Waiomoko River mouth thanks to Kurt from GDC who had kayaked up the river a week prior locating the saltwater wedge and found the eggs. The egg site was extensive – we searched at least 100 m of streambank and the eggs were found all along that true left bank. Everyone was very excited to see the eggs (for many it was their first time) and to see so many. We discussed locating the saltwater wedge, the use of straw bales, restoration options and community engagement opportunities. We also walked upstream and located the gee minnow traps Kim and Mike had set earlier that day and found an Inanga to look at.

Marine Field Trip
Saturday 30th April

To start our field trip, we walked up to the historic Pa site overlooking the marine reserve. Jay Love from Whangara explained the history of the naming of the reserve 'Te Tapuwae O Rongokako', which is the story of Rongokako, an ancestor of East Coast tradition. Rongokako was a giant of great athletic prowess and dexterity, who could stride long distances.
There are many stories, but one in particular; Rongokako was sent by Kiwa to investigate the late arrival of the Horouta waka to Turanganui-a-Kiwa. There was that a dispute that arose between Rongokako and Paoa over a beautiful wahine and so the competition was on. Paoa chased Rongokako down the East Coast shoreline. To help overtake Rongokako, he set a large rat trap to snare the giant's pet, an enormous kiwi. But Rongokako saw the danger and sprang the trap, which flew inland forming Mount Arowhana. The site of the trap became Tawhiti, an area between Te Puia and Tokomaru Bay.

Rongokako left footprints in the flat rocks as he strode down the eastern seaboard of the North Island. The first of these tapuwae (footprints) is at Wharekahika (Hick's Bay). The second is at Kaiora, south of Whangara mai tawhiti, from which is derived the name of this marine reserve, Te Tapuwae o Rongokako. The next footprint is located at Turanga, another at Nukutaurua, on the Mahia Peninsula. Rongokako then stepped over to Te Matau-a-Maui (Cape Kidnappers), then to the shores of Raukawa (Cook Strait). He crossed the Strait and was gone.

Kaiora, the settlement that overlooks the marine reserve, was a well populated kainga (village). The famous East Coast chief, Porourangi, lived near here as well under the mana of Ngai Tamahenga of Whāngārā, his Pā was called Wharemapou. He also died here and is buried close by.

Marine Field Trip – Cont.

One way of recognizing and providing for kaitiakitanga, is the majority representation of Ngati Konohi on the marine reserve management committee. Many marine reserves are established on the expectation they will continue indefinitely, however as part of this application by Ngati Konohi and DOC, the process included a 'generational review' of 25years to allow future generations of Ngati Konohi to assess the appropriateness of the marine reserve mechanism. The Ngati Konohi vision for marine conservation in their rohe moana is wider than the marine reserve alone.

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Marine Field Trip – Cont.

Their vision is 'To honour and sustain the bounty of Tangaroa for present and future generations. Ngati Konohi promotes the 'Tangaroa Suite'. This is a suite of marine protection tools, from the marine reserve (a nursery/kohanga for kaimoana), to the Mataitai (surrounding the reserve, whereby no commercial fishing is allowed and non-commercial fishing is managed by Ngati Konohi) and a Taiapure (wider say in the management of all fishing in the area) covering the entire rohe moana.

Konohi and the Department of Conservation.The marine reserve protects 2,450 hectares of coastline. It contains eight marine habitat types that are representative of the area between East Cape and Mahia Peninsula, including inshore reef, rocky intertidal platforms and sediment flats. On the day of our field trip, we had a strong South Easterly, we were unsure we would be able to snorkel, but by the time the tide was close to low, amazingly the rocky reef intertidal platform was protected from the swell coming from the sea. Participants were able to safely observe crayfish in very shallow water. We also observed sea anemone, cooks turban, triple fins spotties and a variety of seaweeds

Many thanks to Jay Love and Amy from the the EMR Gisborne team from **Nga Mahi Te Taiao** for assisting with the delivery of the marine field trip.

Wānanga Group Activity
Saturday 30th of April

Sunset tour with Dive Tatapouri (Reef Ecology Tour including handfeeding Stingrays **)** followed by gourmet beach dinner.

We were blown away once again by the catering from the Gisborne Deli and had beautiful entertainment from the talented Eru Tamanui AKA: Pauanation.

Tribute to Bill Ballantine by Samara Nicholas
Bill Ballantine was one of my heros and a great supporter of EMR, sadly Bill passed away in November 2015. Samara shared some great quotes and stories from Bill's book Marine Reserves for New Zealand such as What's the point of food you can't eat? http://www.marine-reserves.org.nz/questions/food.html
and also shared one of Bill's great papers http://www.marine-reserves.org.nz/papers/BioCons176.pdf

Wānanga Group Activity – Cont.

At every wānanga there is some disappointment about choosing either the marine or freshwater field trip option, unfortunately time and numbers do not allow for everyone to attend both, so as a compromise, each field trip must deliver a skit to explain the learnings and experiences on the field trip to those that did not attend.

We also sung happy birthday to EMR/WBC coordinator Liz Gibson!
https://www.youtube.com/watch?v=I6zFpH2uOSg

Special mention for Jacques' impressive kingfish bite

Work Shop with Moya Sayer-Jones
Story branding and writing stories for impact
Sunday 1st of May

Moya Sayer-Jones is regarded as one of Australasia's leading experts on story. She works with government, NFPs and corporate organisations helping them to ignite the power of story to share the value of what they do. Moya began working with Australian NFP's and Government 20 years ago and now works with New Zealand organisations as well. Her work can be seen at www.onlyhuman.com.au.

Do you want to get more people to join you, and understand what you want to tell them? Volunteers, teachers, students. We can use the power of creative thinking to change a conversation. By setting conversation as opposed to reacting to it, we can shift conversations back to our direction. The success of the story is in direct proportion to the listener.

3 minute video clip https://vimeo.com/35758683
In the clip, fearmongering was used to encourage peoples vote choice. Who doesn't have a FEAR of taxes? BUT the opposition had LOVE of books. They swung the conversation from FEAR, into a values conversation about our love of books, using reverse psychology. We have to connect to the kids we are teaching, how can we relate? What experiences would they have had previously that we can associate with? "We are our stories"

Think of all the people who it takes to get the programmes out there. Teachers want-value, no accidents and a great inspirational environment for the kids. We want to get as many people involved as possible. We need to have an attention grabbing way to show the teachers 'you could have this'. Stories are powerful but only if we tell them.

Work Shop with Moya Sayer-Jones – Cont.

Stories in social media

Facebook can be a great tool but so many posts on newsfeeds get lost in a stream. We need to be strategic and creative to get things across. “Get LOST in the stream!”.

What do we want people to do by reading our facebook posts/pages? More volunteers? Connect with business? Getting more kids? What’s the point of the page?? The 21st century is about story telling due to our online experiences. For example, to find a hotel room, we don’t go to their website, we go to booking.com or trip advisor and read reviews! We are suspicious of organisations. We make up our mind through other people telling their stories.

Workshop: create a dating profile for your organization to make it appealing

In this experience, all groups tried to make the organisation sound more sexy or humorous. Long term commitment came back as a sought after quality in almost every group. Missing qualities: unique, safe, beliefs, vision. How can we incorporate these into our online organization profiles?

Media communication can be a great way to transfer these values. I-phone videos to ask those volunteers why they do what they do. Clips need to stay VERY short, attention spans are even shorter!

Telling a story: start with a time and place, followed by characters, drama, and emotions. With each of those elements we are taken on a journey, we are drawn in, something **happens.**

Work Shop with Moya Sayer-Jones – Cont.

Workshop: Tell a story when you made a difference, or you've been proud of what you do.
There can be a lot of anxiety when someone asks us to tell a story, we really want it to be interesting. You would need to put the person at ease. Self-censoring is a big thing; people don't think you'll be interested in what they have to say. Kiwis especially find it difficult to talk about themselves, and to praise themselves. Don't say "tell me a story", it tends to freak people out, instead, turn the question in a way where you don't shine the light on the person you're talking to.

'Circle of conversation' is a good way to tell stories. Start with throwing a theme (eg: fishing). Everyone listens, no one is allowed to comment. When everyone has told their stories, change the theme. 6-8 people works best, 40 minutes. Stories stay very short as you don't encourage them to wish they had added something. Knowing that you're not going to be interrupted leads to very interesting and refreshing speech. It changes the way a person tells the story. People get better and better at telling the story. Always record those stories.

"Then and now" is a great story technique to measure success in organisations like EMR/WBC. It can show our experience, and raise the seriousness of the issues. It is perfect for stream regeneration for example. Show people how far you have come, and how important and valued our volunteers are.

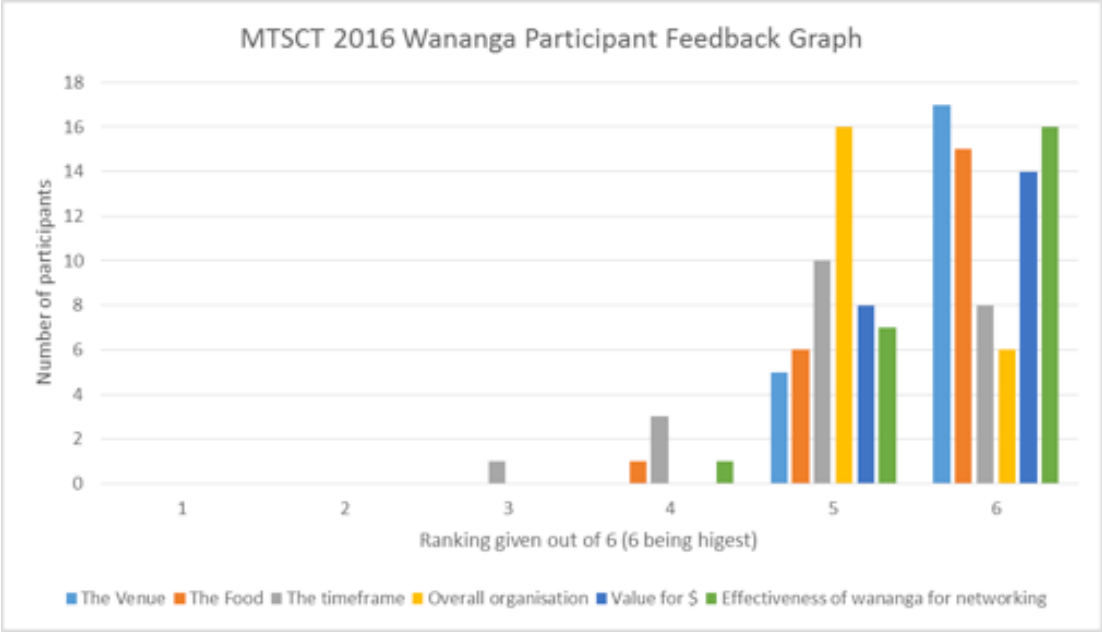
Exercise, tell the story that you have been told in front of the audience, hand on the shoulder of the original teller and speaking in the first person
Importance of the hand on the shoulder to create connection. If we are reluctant to talk about ourselves, it is important to get the someone else to talk about us. Emotions must be present in a story, it is what helps us to connect with people.

Sonicapps is a great app to create short slide shows with pictures and voice over. A fantastic way to tell a quick story.

Be creative with how to tell your stories. **Always**, make space for them.

Wānanga Feedback – Full document here

Please rate the following things out of 6



Your comments

The Venue:

- ➢ First time on a marae!
- ➢ Beautiful and nice to be away from everything- offers a real thinking space.

The Food:

- ➢ happy belly = happy mind

Effectiveness of wānanga for networking :

- ➢ It is great knowing what so many others are doing and allows me to show many pathways for my students.
- ➢ has been an excellent chance to meet people from all over the country and Aus and learn about what is happening.
- ➢ Best part of it! Making connections across the country. Good spread of areas.
- ➢ Reinforces old relationships and expands into new ones.
- ➢ Awesome with a whole range of people doing different things that canal be combined.
- ➢ You create an environment that encourages connections and attracts people who seek value exchanges. It's the best!
- ➢ Great related yet professional atmosphere. People from many different regions and organisations.
- ➢ I felt a bit like an outsider to begin with (tourism) but through conversation and presentations I learnt that partnerships with conservation and tourism is totally achievable and an important way for the future.
- ➢ Great opportunity to meet like-minded people and to share stories and experiences.

Wānanga Feedback – Cont.

Ah-Hah! Moments and/or highlights

- Ah-Ha! Story workshop. Highlight – Food! Location!
- Hone and Prof Ann's speech. Kingi's. Food.
- We need to create space for stories!
- Inanga!! Eggs. Saltwater wedge.
- Storytelling session were fantastic to get a snapshot.
- Overall it was all a highlight but definitely Saturday day and night – perfect way to end on a high! ☺
- Highlights – stingray feeding – I am in love!! And getting bitten by a Kingi – my brother will be proud!! ☺ Also enjoyed being part of something really special. Thank You.
- I also thought the numbers were good, not too many people means we can get a good understanding of what people are achieving in their work and how they came to doing it – relate to what we are doing.
- Te Reo course – new project for next year. Whole wānanga was amazing!
- Stingray feeding! Food. Annes story was very inspiring.
- Use of media to portray stories.
- So many, just watching everyone light up talking about what they love.
- The snorkels were always great. Presentation speakers, Tatapouri – feeding the Kingis and Rays and the food.
- Feeling the support and like-mindedness of everyone and getting everyone's tips on how to be a coordinator before I even start – so helpful!!
- Ah—Hah! This is awesome! So many amazing caring people out there! Thank you!
- Prof Ann's korero – very inspiring!
- Food
- Evening – Stingray feeding, dinner venue, musicians and skits.
- Becoming very clear about importance of connections and relationships when it comes to positive change! Seeing one big whale with baby in my face in the marae in m idle of night!
- So many questions to take back and figuring out how to fit it all in without losing the story.
- The potential lay in the way in which we share our stories.
- Storytelling. Freshie experience!
- Food. Stingray feeding. Field trip to find Inanga eggs. * Storytelling workshop on last day!!!!!!!
- Listening to what awesome achievable conservation work is happening. Stingray feeding.
- Finding the eggs. Listening to all the different presentations.
- Gaining knowledge on many different aspects. Meeting and greeting. New area.

Wānanga Feedback

Actions:

- Drains to Harbour Facebook page! To share the Drains to Harbour story and brand.
- Another year of volunteering in marine conservation before hopefully getting back to academics in order to keep pushing the fight for marine conservation with hopefully the same success as you guys!
- To finish resource for Samara over winter to be the most planned start to being a coordinator record stories I hear!
- Find saltwater wedge. Find eggs. Restore vegetation. Cath whitebait. Eat whitebait.
- explore opportunities for citizen science locally.
- Proceed with setting up podcast and forums (?) for sharing stories of people and water.
- Incorporating project work and storytelling into new outreach programme.
- To take the energy and information gained from this wānanga back to Otago and put it into our EMR and share it with more of our community.
- Roll out Google drive.
- So many! Tell the stories of the people we are working with to encourage more people (and funders) to come on board.
- Building relationships within the community to progress marine protection.
- I've been gathering a few…lots actually. I will be contacting a man who holds the laurna language (aboriginal local language). He is a starting point to develop relationship so that EMS maintains integrity of EMR. I will be initiating story capturing (already have when I saw theme). Thanks for the keys!
- Story circles
- One commitment to take this (EMR) back to Akaroa and make this work! I've got an opportunity to be a part of something awesome – I want to get this happening.
- Distribute MTS programs to other/another country.
- To investigate/implement Whitebait Connection. To find funds for a coordinator for Taranaki.
- Building relationships with more schools across the Tasman District to deliver in school snorkel programmes.
- I will try to capture more of the stories participants bring to our programme and communicate those stories effectively.
- Arrange a DOC video conference with colleagues across country – storytelling (virtual) circle.
- Extra training in other programmes.
- To try help get that Inanga spawning site on Waiomoko registered, protected.
- Be a fulltime EMR coordinator in the summer season and post more content on social media about conservation, restoration and more about this program.

Acknowledgments

Thank you to the Tindall Foundation and DOC Community Fund, without the funding support, the wānanga would not be achievable.

Huge thanks to the people of Ngati Konohi for hosting us and Paikea Whitireia Trust for the use of your beautiful marae.

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Thank you to Candace Loy for her beautiful artwork.

Many thanks to the wānanga co-organisers Samara Nicholas and Kim Jones.

Darryn and the team from the Gisborne Deli – the food was so delicious!

Thank you to Murray Palmer and Amy-Rose Hardy from Nga Mahi Te Taiao for your support in the overall organization.

Many thanks to Jay Love and Amy from the the EMR Gisborne with **Nga Mahi Te Taiao** for assisting with the delivery of the marine field trip.

Eru Tamanui – your entertainment was awesome!

Thank you to Longbush for the fantastic tour.

Thank you to Moya Sayer-Jones for the wealth of the story space.

Thanks to our note takers, editors and publishers!

Nga mihi aroha he kaitiaki taiao
Loving thanks Guardians of the environment