

Nau mai!

Please use this presentation (click link below) to introduce your students to Tarapuruhi prior to their trip:

Tarapuruhi Presentation for Teachers

The first half covers New Zealand natural history, while the second focuses on Tarapuruhi, Bushy Park.

Please have a look through and decide what is relevant for you and your students.

Use these notes as you go through your chosen slides:

Slide 1	<u>Tarapuruhi title page with bird sounds</u>
SECTION 1: History	
Slide 2	<u>Title page with bird sounds</u>
Slide 3	<u>Ask the question</u> and move to next slide for visual aid to discussion
Slide 4	<u>Discussion prompts:</u> -Scientists believe modern humans have been moving around our planet for at least 200,000 years. -Our ancient ancestors evolved in Africa, making Europe and Asia some of the next locations we expanded into. -Modern humans have been in Australia for approx. 40,000 years. -The country we are looking for was first settled in around 800 years ago. <u>Once students have shared their thoughts, proceed to next slide for the answer</u>
Slide 5	<u>Answer:</u> Aotearoa, New Zealand <u>Discuss:</u> Why do you think it took humans so long to find this place?
Slide 6	<u>Ask the question</u> and discuss before moving on. Short video on next slide with answers.
Slide 7	<u>Watch Video.</u> Have the students listen carefully and <u>ask the following questions</u> to hit key points before moving on. Q: How long ago did New Zealand break away from the other land masses on earth? A: Approx. 80 million years

	Q: How much of New Zealand was covered in forest and wetlands before human arrival A: Everything between the mountains and the sea Q: How long ago did humans first find New Zealand? A: Approx. 800 years Q: Were there any ground dwelling mammals here 800 years ago? A: No. Our only 'land' mammal is a small bat; the pekapeka. <u>Discuss</u> with the students what a mammal is. There will always be a few you'll need to convince that animals like sheep and a deer were <u>not</u> here before us!
Slide 8	<u>Allow the bird sounds to play in background and encourage students to use their imagination.</u> They are seated in what was probably a dense forest not long ago. A forest roaring with the thunderous sound of thousands of birdcalls, encircling a wetland teeming with life. A family of moa navigates the trees with caution. Only when the Pouākai's (Haast's Eagle) 3m wingspan blocks the sunshine as he hunts for food does the environment become silent and still.
Slide 9	<u>Breakdown of our native species</u> Inform students that we are STILL discovering new species. Example: D.O.C: Two new species of lizards found Even at Tarapuruhi there could be species we have yet to identify. Our native bugs and lizards are experts at hiding from birds. In the right habitats, we would never even know they were there.
Slide 10	<u>Ask question and discuss before continuing</u> <i>Important note before beginning:</i> Preface this section in a way that will allow students to learn without feeling guilt towards their ancestral origins. It is vital to focus this section on the power of humanity rather than individual groups; yes, we can cull a country of its natural resources in a short few hundred years, but that same power can be used to restore and protect (as they will see at Tarapuruhi). People made decisions in the past out of survival and a drive for a better life. Much like we are today. The difference now, is today we have the privilege of knowledge gained over generations, and the drive to do better.

Slide 11	<u>Before humans</u> ; as it has existed for millions of years
Slide 12	<u>Before European Settlement</u> -Polynesian arrival: Approx. 1250. -Land by Moriori/Māori cleared for hunting, resources, building etc. Over a timespan of approx. 600 years.
Slide 13	<u>Modern Day</u> -Land clearing expanded rapidly with European settlement. -People were sold on the life of moving and starting life in farming, forestry, exports, building etc. -We began to fill wetlands (approx. 93% gone across New Zealand) -Many of our forests remaining are now non-native or battling invasive species, we only have about 15% left.
Slide 14	<u>Discuss the question.</u> <i>Note; It is easy to look back on those who came before us and feel negatively towards their actions. While what was done was not always positive, not everything was done with malice and it's important to consider what we need as a society of people.</i> <i>We may be sad the forests were cleared for farms, but the reality is we need farms in our society. How many is another matter.</i> <i>How can we consider setting up our communities in ways that impact the environment less? There are examples in every community of people implementing initiatives to address this very issue.</i> <i>See "Rewilding" for further learning.</i>
Slide 15	<u>Ask question</u> -When we came to New Zealand, humans were not the only living things that came here. What creatures did we bring? See how many the students can list before moving onto next slide
Slide 16	<u>Introduced Animals:</u> Around the outside are our introduced animals They were all brought here for a few specific reasons. Can the group work them out? Answers: Rabbit: Reminder of UK/Europe, For Food, For Fur/Fibre/Skin/Bones Ship & Norway Rats: Stowaway (Accident) Kiore Rat: Stowaway (Accident) or For Food Dog (other species): To Work, As Pets Mouse: Stowaway (Accident) Kurī: To Work, As Pets Tahr: For Recreational Hunting

	Goat: For Food, For Fur/Fibre/Skin/Bones, To Work Chamois: For Recreational Hunting Deer: For Recreational Hunting Hare: For Food, For Recreational Hunting Ferret: To Control Rabbits Stoat: To Control Rabbits Wallaby: For Recreational Hunting Possum: For Fur/Fibre/Skin/Bones Weasel: To Control Rabbits Hedgehog: Reminder of UK/Europe Cow: For Food, To Work Pig: For Food Sheep: For Food Cat: As Pets Horse: To Work
Slide 17	<u>What's on my Plate?</u> Discuss the impact of these introduced animals on our ecosystem. What damage do they cause?
Slide 18	<u>Damage by roaming large mammals e.g. Pigs and Deer</u> The damage done to the landscape by grazing mammals is not talked about as much as our smaller pests/predators, yet they can change the landscape drastically. To the point our native creatures cannot find their homes and continue to live. What damage can the students identify?
Slide 19	<u>Short D.O.C Video on why it is important we act against our introduced animals.</u> Important to note that we do not do this work because we want to 'kill the cute critters'. We understand it is not their fault they were brought here, and they are wonderful animals in their original eco systems where they belong. We have the unfortunate job of having to choose between our native eco-system, and our introduced creatures. And while it is not always nice, the choice is a simple one.
Slide 20	<u>Consequences</u> <u>Read the question;</u> we will be looking at some extinct bird species on the next slide
Slide 21	<u>Why do we not see these birds anymore?</u> Moa: Approx. 9 species of moa roamed New Zealand. Perfectly adapted to moving through the dense bush using their long legs for stepping over plant

	life, and their sharp beaks for snipping vines. A herbivore that became a main food source for humans. They were hunted to extinction within 200 years. Haast's Eagle (Pouākai): A fearsome giant eagle who was Aotearoa's most dangerous predator. With a 3m wingspan they would have been capable of picking up a human. Their main food source was the moa. When the moa numbers were depleted by humans and the food chain was broken, the Pouākai ceased to exist. Huia: One of Aotearoa's most treasured Taonga for hundreds of years. Māori revered these birds and prized their tail feathers of black with a white tip; they were reserved for the highest and most respected people of a tribe, with rāhui placed over their collection during breeding seasons. One of the only species of bird to evolve with different shaped beaks for different genders. The female with a long-curved beak, and the male short and sharp. In 1901, The Duke of York, Heir to the British Throne, visited Aotearoa and was gifted a Huia feather in his hat by a Māori wahine. When he returned to Britian, a trend began, and by 1906 no Huia was ever seen again.
Slide 22	<u>We ARE learning</u> As the impact of our actions became quickly apparent in the early 1900's, a shift in the perception of our natural world began to take place. A nationwide focus on protecting and looking out for our species began, and it hasn't stopped since. Through ups and downs, our community is filled with people who have the desire to help and use their human power for good. Takahe: Believed to have gone extinct by the early 1900's it was rediscovered in the South Island in 1948. Since it's rediscovery a nationwide effort to protect and repopulate has been established. While it is a slow process, we are making progress with the population now over 500. South Island Kōkako: A possibly extinct bird that has a chance of being found. Still in 2025 we have the chance to rediscover one of our Native Birds. Check out the sightings map: South Island Kōkako Map Sound from the North Island Kōkako on the next slide
Slide 23	<u>The sound of the North Island Kōkako.</u> The South Island Kōkako could have a similar sound. This noise is very unique and should be documented and reported if heard in the South Island.
Slide 24	<u>The Tieke success story</u> This is a slightly longer video but highlights Tarapuruhi's involvement in saving our endangered species. In short if you do not have time;

	North Island Tīeke numbers reduced to below 500 in the 1970's. In 2025 we now have over 7000 across the country, with a population of over 700 at Tarapuruhi, Bushy Park. We CAN save our birds.
Slide 25	<u>Discuss question</u> Let students know that Tarapuruhi is a remnant forest. Meaning it was NEVER cut or burned down. What exists today is the ancient forest, that has been growing for hundreds of thousands of years. Image of Tarapuruhi on next slide
Slide 26	<u>Image of Tarapuruhi in 2024 to aid discussion</u> We see here Tarapuruhi surrounded by the land changed into farms. Why did Tarapuruhi not become a farm as well?
Slide 27	<u>Extra visual and audio to go in background of discussion</u>
Slide 28	<u>Tarapuruhi Key Players</u> The Moore family arrived from Scotland and bought the land at Bushy Park in 1865, establishing a horse and cattle farm. Their original intention was to clear the forest and expand the farm. G. F. Moore (has a street named after him in Springvale Park and attended Whanganui Collegiate) was the last remaining member of the Moore Family. Ngaa Rauru Kiitahi (One of our local iwi who had lived on this land for hundreds of years) came and met with Mr. Moore as they witnessed the growing devastation to the landscape. They arrived not with the intention to fight, but to communicate, teach, and connect. Together they sat underneath Rātānui (The largest and oldest tree in the forest, growing since before human arrival). Ngaa Rauru sought to introduce Mr. Moore to the taonga surrounding him; to show him where they had provided for generations before them, and how it had provided for countless creatures for much longer. <i>Mr. Moore listened</i> From that day on he dedicated himself to protecting what remained of the forest until his death in 1962. George Francis “Frank” Moore left his homestead and the remaining property to Forest & Bird in his will, ensuring it would be protected by future generations.

	Today, in partnership with Forest and Bird, the Whanganui community contributes over 500 hours of volunteering every month, continuing the legacy of protecting our taonga, and restoring what once was.
SECTION 2: Tarapuruhi	
Slide 29	<u>Transition Page</u>
Slide 30	<u>Title Page</u>
Slide 31	<u>Tarapuruhi Introduction Video</u>
Slide 32	<u>Image of Tarapuruhi from the air</u> <u>Discuss</u> the landscape differences seen
Slide 33	<u>Image of Tarapuruhi from the air</u> <u>Discuss</u> the fence seen -This fence is 5km long and surrounds all Tarapuruhi. It is specially designed to keep out pests and predators.
Slide 34	<u>Images from above and within the forest</u>
Slide 35	<u>Image of the Wetlands</u>
Slide 36	<u>Image of paddocks cleared by the Moore family for cows and horses.</u> The restoration process has begun. In 2024 over 4,500 native plants were planted, and this is set to continue in 2025.
Slide 37	<u>Tarapuruhi Gates.</u> <u>Ask the question</u> shown and <u>discuss</u> .
Slide 38	<u>Birds Title Page</u>
Slide 39	<u>A selection of native birds found at Tarapuruhi</u> See how many the students can name in English and Te Reo Māori Tūi Tauhou/Wax eye Hihi/Stitchbird Kārearea/NZ Falcon Korimako/Bellbird Kōtare/Kingfisher Pōpokotea/Whitehead Ruru/Owl Pipīwharau/roa/Shining-Cuckoo Miromiro/Tomtit Titipounamu/Rifleman Riroriro/Grey Warbler

	Pūkeko/Swamp Hen Tieke/Saddleback Kererū/Wood Pidgeon Pīwakawaka/Fantail Toutouwai/Robin The next slides will cover 3 endangered birds only found in sanctuaries (Tieke, Hihi, Toutouwai) And 3 birds we still see in our backyards (Kererū, Tūī, Pīwakawaka)
Slide 40	<u>Tieke image and sound</u> -currently over 700 at Bushy Park
Slide 41	<u>Tieke video from Tarapuruhi</u>
Slide 42	<u>Hihi image and sound</u> -currently 58 at Bushy Park
Slide 43	<u>Hihi Video from Tarapuruhi</u>
Slide 44	<u>Toutouwai image and sound</u> -currently over 600 at Bushy Park
Slide 45	<u>Toutouwai videos from Tarapuruhi</u>
Slide 46	<u>Kererū videos from Tarapuruhi</u>
Slide 47	<u>Try count the Kererū!</u> Before humans started hunting kererū for food they would hang out in groups of up 300. At Tarapuruhi we are starting to see larger groups like the one shown, 55 at once is my highest count. This shows our efforts of maintaining a pest/predator free environment is working.
Slide 48	<u>The Tūī; Image from Tarapuruhi and video from bird rehab centre in Northland</u> With 2 voice boxes the Tūī is one of the most remarkable mimics in the world. Before European arrival, Māori Rangatira would sometimes have a pet Tūī, trained to speak in their voice, reciting speeches at pōwhiri and hui for them.
Slide 49	<u>Pīwakawaka Video</u>
Slide 50	<u>Question to discuss</u> before revealing answer on next slide

Slide 51	<u>Importance of Mātauranga Māori</u> Before human arrival the animals and plants of Aotearoa had their own balanced relationships with the world around them. <i>When we arrived, this world changed; new relationships and understandings were developed.</i> Mātauranga Māori (Māori Knowledge) holds many of the secrets of our native world, formed within a culture that spent 800 years observing, utilising, and cultivating what the land had to offer. These unique plants and creatures, never before seen by humans, are what Te Reo Māori was created around. Many different names for birds, plants etc. hold knowledge that tell us more about location, gender, size, time of year, weather, behaviour, and still holds many secrets for us to uncover.
Slide 52	<u>Forest Title page</u>
Slide 53	<u>The Cloak of Tāne Mahuta</u> The Native NZ Forest creates a thick canopy, often blocking direct sunlight. There are rumours that before the removal of the forest, there were parts so dark, nocturnal creatures operated at different hours.
Slide 54	<u>Parts of the Forest</u> Everything in New Zealand evolved to find it's perfect place within the ecosystem. From the Kārearea holding its place up high, to the Toutouwai foraging only on the ground, everything has its role and place.
Slide 55	<u>Answer: Kawakawa</u> More than 200 plants were used by Tohunga as rongoā to heal people from illnesses When Europeans came, they brought diseases. Tohunga could not cure these new illnesses, so some people lost faith in them. In 1907 a law was passed to ban the use of traditional Māori medicine. Today there is new interest in many parts of Māori culture – including rongoā. People have turned to these traditional techniques to get help with difficult illnesses.

Slide 56	Answer: All Images of Nīkau Palm on next slide if students do not know what tree this is Leaves; thatch houses, wrapping food for cooking, clothing, mats Ends of fronds; water container, bowls, sled Food; berries, bulbs behind fronds Medicine; Sap to aid with childbirth (loose ligaments) Hardened berries could be made in jewellery
Slide 57	<u>Nīkau palm image</u>
Slide 58	<u>Horoeka/Lancewood</u> An interesting tree that changes its leaf shape as it grows. From long and spikey, to softer and bushy as it gets taller. Scientists think this may have been a protection against the grazing moa. As when the plant is shorter, the leaves are too spikey to eat. Māori would twist and tie a knot in a growing Horoeka, later cutting it to create a tokotoko (staff)
Slide 59	<u>Kareao/Supplejack</u> Another plant that may have evolved to protect itself from the moa. While it twists and turns, growing up to 5cm a day, the leaves and berries only grow well above our heads, out of reach for the grazing moa. Māori would make traps and baskets from the vines. The new vine shoots can be eaten, and it holds a lot of moisture in times of dehydration. A medicine can be made from the plant to treat bowel problems, fever, and skin diseases.
Slide 60	<u>Rangiora</u> Can be used as a bandage but is toxic if eaten (Time to stress knowledge of plants, and never to consume without a knowledgeable adult identifying) Can be written on like paper Can be used as trail marker as the underside is bright white (much like a silver fern can be used in the same way)
Slide 61	<u>Northern Rātā</u> A massive tree that starts from a seed the size of an eyelash. The seed needs to blow in the wind, landing on top of an older, sturdy tree, poking out of the forest canopy.

	This plant then sends down vines from the top, reaching the ground to turn into roots. Over hundreds of years the Northern Rātā with twist and turn, sending down enough vines to create it's own tree trunk. Eventually taking over the host tree. You will see many of these in all stages of growth at Tarapuruhi.
Slide 62	<u>Fungi</u> We have almost 6000 types of fungi only found in Aotearoa! Keep your eyes peeled, take photos but don't touch! What we see above the ground is just small part of the mycelium network connected everywhere underground. Fungi came before plants, and the more we learn about their "roots" or the mycelium network, the more we understand the vital role they play in what grows around them. Fungi are closer to being an animal than a plant.
Slide 63	<u>Invertebrates and Reptiles!</u> We're FULL of them! But you won't see them without a keen eye. All the bugs, lizards, frogs etc. that live in our forest had to learn how to hide from their biggest predator; THE BIRDS. They have spent millions of years becoming expert hidiers, and it is a privilege when you get to witness them.
Slide 64	<u>Spider Webs</u> You'll see them EVERYWHERE. But once again, if you're not a fan of spiders, don't worry, they're experts at keeping away from your two eyes that remind them of the birds. Every type of spider creates a unique web fit for their purpose. Here we see a nursery web (filled with babies of the nursery web spider), a sticky web for catching prey by an orb weaver, and a flat non-sticky sheet made by a sheet-web spider (who is waiting patiently for something to walk on the dinner plate she laid outside her front door)
Slide 65	<u>The Wetlands!</u> One of the most misunderstood landscapes on planet earth. In the past 300 years humans have destroyed over 80% of the wetlands around planet earth. In NZ we are pushing over 90%. In Manawatu, we are at almost 97% gone. Wetlands are not just a home for countless creatures and a food basket that keeps a living food cycle in place;

	They are a Carbon Sink, A Water Filter, A Flood Preventor, and a Drought Reprieve As we as humans are only beginning to grasp the importance of these landscapes, we work to correct some of the damage done. The wetlands at Tarapuruhi are a restored landscape. Currently it is being monitored for the invertebrate population which is naturally occurring. There are currently no fish, but there are frogs. To make sure this restored environment can be successful the lower food chain must be well established and sustainable.
Slide 66	<u>Example of life found in the water at Tarapuruhi.</u> Native water snails, native leeches, native bloodworms (midges), native damselfly and dragonfly larvae and more. See video on next slide.
Slide 67	<u>Wetland life video</u>
Slide 68	<u>Question:</u> What is our role as people here today?
Slide 69	<u>The Fence</u> We maintain the fence. It is our primary form of protection. Without it, pests and predators will invade the space and remove progress made.
Slide 70	<u>The Fence</u> The full 5km is checked every week by volunteers for holes, damage, animal activity etc.
Slide 71	<u>Tracking and Trapping</u> We track and trap pests/predators on surrounding properties; expanding the safe zone for our native creatures to explore.
Slide 72	<u>Planting</u> We have a nursery on site where we look after plants from seed until they are ready to go into the ground and become a part of the forest. We hope to plant almost 5000 trees this year.
Slide 73	<u>Our community.</u> When we come together to protect something we love we inspire others to do the same.

	What the Whanganui community has done for Tarapurahi is a golden example to anyone hoping to do similar
Slide 74	<u>Education!</u> And that's YOU! Without introducing people to this place, the love for it cannot continue to the next generation. This project is not something one person can achieve in their lifetime. This is a communal effort that education is the backbone of. We cannot love what we don't understand, and we cannot protect that which we don't love. Thank you for introducing your students to the wonder of our native world, and thank you for bringing them to visit Tarapurahi. Ngā mihi nui ki a koe .
Slide 75	End Title Page